VITAL & HEALTH STATISTICS

Plan and Operation of the Hispanic Health and Nutrition Examination Survey 1982–84

This report describes the plan and operation of the Hispanic Health and Nutrition Examination Survey (HHANES). The population for this study consisted of Mexican-Americans living in the five Southwestern States, Cuban-Americans living in Dade County, Florida, and Puerto Ricans living in portions of the States of New York, Connecticut, and New Jersey. Persons 6 months–74 years of age were included in the study.

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Acknowledgments

The design and execution of a large study such as the Hispanic Health and Nutrition Examination Survey (HHANES) could not have been accomplished without the participation of a large number of people. In addition to the many members of the staff at the National Center for Health Statistics who dedicated several years to the development of HHANES, nearly 150 others, listed in appendix I, were consulted during the planning of the survey. Even the best planned study is only as good as the staff that collects, monitors, and prepares the data. More than 100 people were involved in these aspects of the study. Lastly, without the support of the surveyed communities and the participation of the sample persons, the study could not have been successfully completed.

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Plan and Operation of the Hispanic Health and Nutrition Examination Survey

Introduction

by Kurt R. Maurer

The Hispanic Health and Nutrition Examination Survey (HHANES) is one of the many surveys that have been conducted by the National Center for Health Statistics (NCHS) since the 1950's. The NCHS health survey programs have as their foundation the National Health Survey Act of 1956, which has been updated periodically since its original passage by the U.S. Congress. A portion of the 1956 act states as follows:

> The Congress hereby finds and declares—(1) that the latest information on the number and relevant characteristics of persons in the country suffering from heart disease, cancer, diabetes, arthritis and rheumatism, and other diseases, injuries, and handicapping conditions is now seriously out of date; and (2) that periodic inventories providing reasonably current information on these matters are urgently needed for purposes such as (A) appraisal of the true state of health of our population (including both adults and children), (B) adequate planning of any programs to improve their health, (C) research in the field of chronic diseases, and (D) measurement of the numbers of persons in the working ages so disabled as to be unable to perform gainful work.[1]

Subsequent to the passage of the National Health Survey Act, work began under the authority of the Surgeon General of the U.S. Public Health Service to meet the requirements of the act by establishing the National Health Survey. Three approaches to collecting data by means of the National Health Survey were proposed. The first was to be a continuing nationwide National Health Interview Survey (NHIS), through which data would be collected directly from household respondents by interviewers. Whereas NHIS can provide information on illnesses known to persons, as well as impairments, accidents, injuries, use of health services, and other health topics, it cannot supply information on the prevalence of undiagnosed and nonmanifest disease. In addition, the data are subject to other response and interviewing biases. Hence, two supplementary data collection systems were planned: Periodic record surveys of hospital discharges, physicians' offices, and nursing homes; and a continuing survey using health examination procedures. Additional discussion on the origin and plans of the National Health Survey has recently been published marking the 25th anniversary of the 1956 act.[2]

Beginning in 1960, data from household interviews and extensive physical examinations were collected through the National Health Examination Survey. Since 1970, when a nutrition component was added, the survey has been called the National Health and Nutrition Examination Survey (NHANES). Five surveys using health-examination procedures have been completed since 1960; the most recent, NHANES II, was completed in 1980. Numerous topics have been addressed in these surveys.[3-8] An examination by a physician has been done in each of the surveys, and an examination by a dentist has sometimes also been included. In addition to various physiological measurements, such as blood pressure and electrocardiogram, a substantial number of blood and urine laboratory tests have also been performed. The results of these surveys have been published in nearly 200 reports,[9] and computer microdata tapes have been released to the public.[10]

After the field work for NHANES II began in 1976, the staff at NCHS began the process of evaluating the National Health and Nutrition Examination Survey. In 1977, a contract was signed with the National Academy of Public Administration (NAPA) to evaluate NHANES, with specific attention to its utility in answering questions about nutrition-related public health problems. An expert panel was assembled by the Academy to address these issues. The panel recognized a need for "...information about the health and nutritional status both of the entire population and of many groups within it." One recommendation made by the NAPA panel was that rather than beginning another national HANES immediately after completion of NHANES II, NCHS should conduct a study of the health and nutritional status of a subpopulation group instead. Several groups were considered, and the final recommendation was to conduct a study of the Hispanic population in the United States.[11]

Throughout the history of the National Health Survey, the mandate of the 1956 Congressional Act had been fulfilled for the general U.S. population with the provision of data on a wide range of health status measures. However, there was a notable lack of comparable data for the Hispanic population. Previous NHANES samples, although composed of approximately 20,000 examined persons each, included insufficient numbers of Hispanics to enable an adequate estimation of health characteristics separately for Mexican-Americans, Cuban-Americans, or Puerto Ricans, or even for the

groups combined. Thus, the goal of the Hispanic Health and Nutrition Examination Survey (HHANES) was to produce, for the three major Hispanic subgroups, estimates of health and nutritional status that are comparable to estimates available for the general population.

Following the recommendation to conduct HHANES, a group was assembled by the NAPA panel to make recommendations regarding the plan and operation of HHANES (a list of panel members is included in appendix I). This group met for four days in the spring of 1979 and discussed some of the broad problems that needed to be addressed by the survey design staff. These included questionnaires, community and sample person cooperation, dietary intake measurement, degree of acculturation, and staffing characteristics. Also, major substantive components of the survey were suggested. The recommendations of the NAPA panel and the advisory group were found to be invaluable by the staff at NCHS and were used as a general basis for the design of HHANES.

The planning of the specific content of the HHANES followed the guidelines used in the development of the earlier NHANES efforts, namely:

1. Stating the purpose of the proposed information.
2. Specifying what data are needed to achieve the stated purpose.
3. Ascertaining the best method or methods of obtaining those data.
4. Determining whether a health examination survey is an appropriate mechanism for collecting those data.
5. Demonstrating that the expected prevalence level is consonant with the ability of the survey to determine it within reasonable confidence limits.
6. Determining whether the data collection process can be adequately standardized.
7. Specifying the costs related to equipment, laboratory work, personnel, and other aspects of data collection and analysis.
8. Ranking the proposed topics according to priority.[12]

An additional criterion was considered: The proposed survey component should allow comparisons with the general population, requiring such components to be very similar to those included in NHANES I (1971–73) or NHANES II (1976–80). These nine criteria were meant to serve as guidelines; exceptions were occasionally made for topics thought to be particularly relevant to the study population (such as detailed questions on health services utilization, which might be more appropriate for a household interview study). A few new topics were also included because recent advances in technology enabled study of certain conditions in a population setting. For example, gallbladder ultrasonography and impedance audiometry were included in HHANES, although their inclusion in previous studies had been impractical.

This report is intended to be of use to persons with various interests in HHANES. Those who plan to use published reports of survey results will find the information on the design and operation of the studies helpful for proper interpretation of the published results. Users of microdata tapes from the study may require a greater technical understanding of the survey so that the selection of specific research topics and analytic methods will be consonant with the research methods employed in the study. In addition, researchers who plan to conduct their own community studies may be interested in replicating some of the procedures used in HHANES.

To fulfill the needs of each of these groups, this report presents the rationale for the study and documentation of the survey content and methods. It also documents the data preparation procedures and the measures that were taken to assure the quality of the data collection. The main body of the report is divided into three major sections: Survey Planning and Development, Survey Operations, and Survey Analysis. Additional information is contained in the appendixes, beginning with the names of many of the nearly 150 persons from outside NCHS who contributed to the design and operation of this complex survey. They are listed in appendix I. Appendixes II and III contain a summary of the data collection methods used in HHANES and, for quick reference, an outline of the examination components by age group. Appendixes IV through XI are described in the relevant chapters. Examples of the data collection forms used in the survey are contained in appendix XII.

Although many of the concepts and topics covered by the report could be included in more than one chapter, a decision was made to limit detailed discussion of a particular procedure or target condition to only one—sometimes arbitrarily chosen—chapter. For example, there is considerable overlap between the chapters on health status assessment and nutritional status assessment, but to avoid repetition or fragmentation, the various issues are discussed in only one of the chapters, with references to the detailed discussion included wherever pertinent.

Survey Planning
and Development

Chapter 1
Cross-cultural aspects

by Fernando M. Treviño, Ph.D.

The major design features incorporated to increase the cultural sensitivity, validity, and reliability of the Hispanic Health and Nutrition Examination Survey (HHANES) are discussed in this chapter. Several obstacles to the development and implementation of HHANES were immediately encountered. First, the National Center for Health Statistics (NCHS) had never conducted a survey on a specific ethnic population before. Second, NCHS had few Hispanic or Spanish-speaking staff members and few staff members who were familiar with Hispanic cultures. Third, existing NCHS survey instruments had never been translated into Spanish; thus, there were no Spanish-language questionnaires that could serve as models for HHANES instrument development. No other agency or institution had ever conducted a survey of such magnitude across the three major Hispanic national origin groups. Because such a cross-cultural effort had never been attempted, there was little experience from which NCHS could benefit.

To address these issues and to involve as many Hispanic researchers as possible in the planning of the HHANES, four task forces, consisting of experts in the areas of Hispanic health and nutrition, were convened in the summer of 1980. (See appendix I for a list of members of each of the task forces.) The Health Services Task Force made recommendations regarding how best to assess Hispanics' use of and need for health services and their perceived barriers to care. The Dietary Task Force made recommendations to NCHS on how best to tailor the dietary component of the survey to assess the Hispanic diets. The Translation Task Force developed and monitored the extensive translation process required in the development of the HHANES Spanish language instruments. The Outreach Task Force developed a community outreach plan to inform local communities and leaders of data collection efforts in their communities in hopes of securing a maximum response rate in the survey. With the input received from the task forces, NCHS staff members developed an initial set of questionnaires and examination protocols.

Translation

Many researchers questioned whether a single set of Spanish-language instruments could effectively be used with Mexican-Americans, Puerto Ricans, and Cuban-Americans, given their dialectical differences. For HHANES it was decided that the goal of the translation process would be to produce a single Spanish-language version of the questionnaires that would be conceptually equivalent to the English

and equally understandable to persons in each Hispanic subgroup. In order to accomplish this task, all forms were to be translated independently by translators from each of the three groups and differences in usage would later be reconciled. A description of the method devised by the Translation Task Force follows.

Before beginning the translation process, all instruments were first developed in English. The resulting questionnaires were then subjected to a rigorous forward-back translation methodology. (For a detailed discussion of translation issues in cross-cultural research see reference 13.) All items to be translated (more than a thousand sets of question and answer categories) were sent for forward translation to three independent translators—a Mexican-American, a Puerto Rican, and a Cuban-American. Translators were instructed to translate the instruments into idiomatic Spanish appropriate for their group. The ensuing three Spanish translations were sent to three other translators of the same Hispanic groups who, without having seen the original English-language documents, were asked to translate the Spanish instruments back into English.

NCHS staff members then compared the original English-language source documents to the back-translated English-language questionnaires, evaluating the conceptual and structural equivalence of each item. Conceptual equivalence was defined as the absence of differences in meaning or content between the two versions. Structural equivalence referred to equivalence in vocabulary, syntax, spelling, and punctuation. Conceptual and structural equivalence were viewed as being inde-

Figure 1. Translation equivalence rating model

Conceptual equivalence

		+	−
Structural	+	1	3
equivalence	−	2	4

Code 1 = Unit versions are equivalent in both dimensions:
    No major structural differences; *and*
    no essential differences in meaning or content.

Code 2 = Unit versions are mostly equivalent:
    Some structural differences; *but*
    no essential differences in meaning or content.

Code 3 = Unit versions are mostly unequivalent:
    No structural differences; *but*
    differences in meaning or content.

Code 4 = Unit versions are not equivalent in either dimension:
    Some structural differences; *and*
    differences in meaning or content.

pendent measures (that is, the two versions could be conceptually equivalent without being structurally equivalent, and vice versa). The equivalence rating model is depicted in figure 1.

Concurrently, the three Spanish translations were sent to three independent reviewers: a Mexican-American, a Puerto Rican, and a Cuban-American. The reviewers rated each item of "their" language version for equivalence (using the equivalence rating model) with the same item from the other two Spanish versions. For example, the Puerto Rican reviewer compared the translation done by the Puerto Rican translator with those of the Cuban- and Mexican-American translators. In addition to scoring the translations for conceptual and structural equivalence, each reviewer was asked to specify which translator had achieved the best translation for that item.

The results of the English to English and Spanish to Spanish comparisons were reviewed and reconciled by the Translation Task Force. It was as yet uncertain whether one Spanish translation could be conceptually equivalent for the three major Hispanic groups. However, in the interest of research comparability and operational simplicity, it was decided to proceed with developing and testing a single Spanish language set of instruments. The Task Force members were therefore instructed to develop a single translation of each item, after reviewing subgroup language differences.

There were two predominant problems that arose in the development of a single Spanish translation. First, certain words were understood by the members of each of the three subgroups but had different meanings for them. For example, the word "almuerzo" is understood by Puerto Ricans and Cubans to mean "lunch." Among Mexican-Americans, however, "almuerzo" commonly refers to "breakfast." To rectify this type of conceptual unequivalence, it was decided to use a descriptive phrase that would be conceptually equivalent for the three subgroups, yet might not reflect their common language usage or their preferred word choice. In this example, in the questions referring to "lunch," the word "almuerzo" was replaced with the phrase "la comida de mediodía," which literally means "the midday meal." The second type of problem in achieving a single translation revolved around certain concepts or things for which the subgroups use different words. For example, in the development of the questions on smoking, the word "cigar" became problematic because each subgroup has a different word for cigar. Puerto Ricans call a cigar a "cigarro," whereas Cubans use the word "tabaco," and Mexican-Americans use "puro." This type of dilemma was resolved using an alternate word structure within the question. The item, "About how many cigars a day do you smoke?" was translated as "Cuántos (puros/tabacos/cigarros) fuma por día más o menos?" In such an alternate word situation, interviewers were trained to use the word appropriate to the subgroup of the respondent when phrasing the question.

The English and Spanish questionnaires were then tested in the Bronx, New York; Miami, Florida; and El Paso, Texas. (See chapter 7 for a description of the pilot testing process.) Translation problems were identified during the pilot tests through interview observation, interviewer debriefing, and questionnaire edits. These translation problems were resolved by a team of bilingual Hispanic researchers who were familiar with the English questionnaires and were knowledgeable regarding the conceptual intent of each question. The resulting HHANES instruments were subjected to a final test (the "dress rehearsal") in San Antonio, Texas. However, the translations continued evolving as minor problems were discovered during the first few months of data collection.

In both the household interview and the examination, respondents were given the choice of participating in either English or Spanish. In a few instances, respondents started the interview in one language but decided to switch to the other language in the course of participating in the survey. The vast majority of sample persons who stated they wanted to be interviewed in one language participated throughout the survey in that language.

Survey content

As discussed earlier, one goal of HHANES was to produce estimates of health characteristics of Hispanics that could be compared with similarly obtained data on the general population. But in determining the exact content of the survey, it was recognized that an approach of merely repeating the NHANES II survey components in translation would not adequately address many important issues of interest to Hispanic health researchers.

To identify some of the health issues of particular importance to Hispanics, and with the intent of making HHANES as culturally sensitive as possible, a literature review was conducted. Not surprisingly, the review yielded few investigations of Hispanic health and nutritional status. Results of local area studies, for example, suggested that some portions of the Mexican-American population may experience a greater prevalence of adult onset diabetes[14] and gallstones[15] than that of the general population. By including measures of these conditions for a wider population of Hispanics, the HHANES could produce normative data to compare with data from the Mexican-American studies and the general population.

In the past, the health examination surveys relied heavily on the examination component and the biochemical and anthropometric measurements in their data collection. However, because one focus of HHANES was health care needs assessment (in general and relative to particular diseases), more emphasis had to be given to the interview portion of the survey than was traditional. For reasons of data comparability, questions from NHIS or other national surveys were used whenever possible rather than developing new, noncomparable questions. However, for several areas of inquiry, appropriate existing questions were not available from any major survey. In these instances, NCHS planners developed new questions with the assistance of the Health Services and Dietary Task Forces or other consultants in the appropriate field.

Several questionnaire components were developed in an effort to measure special characteristics and needs of the Hispanic population. Because studies have indicated differential patterns of health services utilization among Hispanics,[16,17] HHANES included a series of questions to meas-

ure various aspects of utilization, including information on usual source of care, waiting time, travel time, satisfaction with care received, and barriers encountered in receiving care. Pilot testing revealed that the use of folk healers seemed to be too sensitive a topic to be measured in any detail in this survey. Hence, only one question was included dealing with consultation with a curandero, sobador, herbalist, or spiritualist.

Many researchers believed that some measure of acculturation was essential for the analysis of health care utilization and other data. Several acculturation scales were considered for inclusion in HHANES. All of these scales were limited by the fact that they had been specifically developed for one of the subgroups and had been validated for only that group. In the final analysis, the acculturation scale developed by Cuellar, Harris, and Jasso[18] for use in a Mexican-American clinical population was selected because it was deemed to be an effective and concise instrument. The scale was modified at NCHS to make it applicable to all three Hispanic subgroups included in the survey. When pilot testing revealed the need to reduce the length of all survey components, the acculturation section was shortened to include only those items that, as reported by the authors, accounted for most of the variance in acculturation score. The shortened acculturation section included questions on the respondent's language usage and preference and on the ethnic identification and nativity of the respondent and of his or her parents.

Operational aspects

For purposes of sample selection, persons were separated into eligible and ineligible categories defined by self-reported ethnicity or "national origin." Eligible families were those in which at least one member was identified as being Mexican, Mexican-American, Chicano, or "Hispano" in the Southwest; Cuban or Cuban-American in Dade County, Florida; and Puerto Rican or Boricuan in the New York City area. After a family was designated as being "eligible" based on these criteria, a differential age subsampling scheme was applied in order to select certain family members to receive the extended interview and examination. These persons are referred to as "sample persons." (For more detail on the sampling procedures, see chapter 5.) The sample design for HHANES led to the selection of more sample persons per family than in previous NHANES, often with entire families being selected. (However, it should be noted that, because of the definition of family eligibility, occasionally non-Hispanic family members were selected.) The greater number of sample persons per eligible family allows greater analysis of familial aggregation of disease prevalence and assessments of similarities in health behavior and service utilization at the individual level within the family.

Eligible sample persons could only be selected if they were living in their usual place of residence at the time of the HHANES interview. In order to maximize the inclusion of migrant farm workers in the sample, HHANES planners purposely sequenced the stand locations so as to collect data during the months from October to April at local survey sites that serve as homebase to large numbers of migrant agricultural workers. This time period corresponds to the time when migrant workers are most likely to be at their usual place of residence.

In an effort to encourage sample person participation in the survey and to ensure the cross-cultural validity of the data, several procedures were incorporated into the operation of HHANES. All HHANES personnel expected to have significant interactions with sample persons were bilingual in English and Spanish and almost all were Hispanic. These personnel included the household interviewers, dietary interviewers, examining physicians, and dentists, as well as the interviewers and receptionists in the mobile examination centers. Efforts were made to fill other positions such as laboratory technologists and radiologic technicians with bilingual staff. When this was not possible, the non-Spanish-speaking staff members were provided with basic instruction in conversational Spanish so that they could establish at least minimal dialogue with monolingual, Spanish-speaking sample persons.

A central concern in the planning process for HHANES was securing the participation of selected sample persons who were undocumented workers because, in communities in which they represented a large proportion of the population, their health status and utilization patterns would affect the entire population. No attempt was made to identify respondents as being documented or undocumented because such an attempt would likely have an adverse effect on the public perception of HHANES and would certainly frighten away a substantial portion of the sample in some locations. Instead, undocumented persons were merely included as they fell into the sample. Given that almost all household interviewers were of Hispanic origin, undocumented workers who were asked to participate were often quite candid with the interviewer about their legal status and their fear of being apprehended. Interviewers reassured them that all information would be collected solely for statistical purposes and that, by law, HHANES staff were forbidden to disclose any identifying information to any individual or agency (including other Government agencies) without the sample person's consent (Section 308(d) of the Public Health Service Act (42 USC 242 m).) Because questions regarding legal status were not asked, there are no data on the response rate among undocumented workers. However, anecdotal evidence indicated a favorable response rate among these persons.

Finally, a major public affairs effort was initiated and continued throughout the survey to inform the various communities of the purpose and methods of HHANES and to solicit their cooperation and support. These outreach efforts, which were specifically tailored to each of the three major Hispanic subgroups, included distribution of informational materials in English and Spanish, briefings with community representatives, extensive use of the media, and solicitation of support from Hispanic organizations, schools, and churches. Throughout the survey, interest and active support were generated, resulting in increased ease of operations and improved survey response.

Chapter 2
Health status assessment

by Claudia Scala Moy, Fernando M. Treviño, Ph.D., and
Kurt R. Maurer

The National Health Examination Surveys (NHES) and the National Health and Nutrition Examination Surveys (NHANES) conducted by the National Center for Health Statistics (NCHS) have long served as an important part of the nation's health monitoring systems. Traditionally, these surveys have been designed to establish the normative distributions for certain population parameters such as height, weight, blood pressure, and blood nutrient levels. In addition, these surveys have been instrumental in ascertaining the prevalence of certain chronic diseases as well as the prevalence of risk factors for given conditions. In the latter capacity, examination surveys help identify populations at high risk so that risk modification programs may be targeted in a more efficacious manner. Data from the national examination surveys have been used to investigate risk factors found in other studies. The health examination surveys have also been useful in identifying health care needs.

The Hispanic Health and Nutrition Examination Survey (HHANES) was the first special population survey ever undertaken by NCHS. Given the language barrier faced by many Hispanics, and given their lower income and educational attainment relative to the general population, there were reasons to suspect that the Hispanic population may not have had adequate access to health care resources in this country.[19,20] In view of the potentially large reservoir of previously undiagnosed health problems among Hispanics, and because interview surveys can only provide measures of previously diagnosed or recognized conditions, the advantages of collecting data primarily through examinations rather than solely by interview are obvious. The design for HHANES placed an emphasis on identifying the unmet health care needs of Mexican-Americans, Puerto Ricans, and Cuban-Americans.

HHANES relied on five principal data collection methodologies—physical examinations, diagnostic testing, anthropometry, laboratory analyses, and personal interviews. (Samples of all of the data collection forms are contained in appendix XII.) Care was taken to incorporate questions and procedures from other national surveys so that the information collected on Hispanics could be compared with that collected for the general population through NHANES, the National Health Interview Survey (NHIS), the National Survey of Family Growth (NSFG), and other federally sponsored surveys.

The laboratory analyses, diagnostic tests, and medical and dental examinations were designed to provide an objective assessment of unmet health care needs relative to specific target conditions. The HHANES household interview component was greatly enlarged over those used in the previous national examination surveys to provide data on perceived health care needs relative to the target conditions as well as to provide data on general patterns of health care utilization, health practices, barriers to the use of care, health insurance coverage, and other such factors that may relate to the health status of the Hispanic population. Questions concerning participation in governmental health and nutrition programs were also included so that the health outcomes of these programs may be better evaluated.

For each examined person, the physician recorded diagnostic impressions of any suspected conditions that were believed to be life threatening, on a downward course, or causing a functional limitation. For each suspected condition, the basis of the physician's clinical judgment (medical history, physical examination, or both) was indicated, as were the confidence with which this assessment was made, the severity of the suspected condition, and whether or not the sample person had consulted a physician regarding the condition during the past year. The examining physician also rated the level of health (excellent, very good, good, fair, or poor) of each examined person. This rating was recorded so that a physician's assessment of an individual's health status could be compared with the person's own perceived health status and also with objective indicators of health status.

There are limitations to the ability to assess health care needs by means of HHANES because of several factors inherent in the survey design. First, diagnostic impressions and health care needs assessments are based on a limited physical examination at a single point in time with no diagnostic followup for persons with abnormal findings. Second, the physical examination, of necessity, focused on certain selected chronic conditions; it was not designed to provide a comprehensive determination of health status or total need for care.

The remainder of this chapter consists of a discussion of each major target condition or component, delineating the precedent for the data collection, the developmental background, and the methodology employed to study the condition in the Hispanic population. (Nutritional aspects of several of the components are discussed in chapter 3.) For some of the target conditions, sufficient data were collected to allow the differentiation of persons with positive findings into at least three categories related to need for health care:

1. Persons with positive findings who were unaware of the presence of their condition (previously undiagnosed and/or asymptomatic).
2. Persons who were aware of their condition (diagnosed and/or symptomatic) but were not being treated for it.
3. Persons who were aware of the condition and were under treatment for it.

For hypertension it may be possible to designate a fourth category, consisting of persons whose condition is determined to be "under control" based on previous diagnosis, treatment history, and survey findings. Hence, persons in the first two categories could be said to have an "unmet health care need" relative to that condition, whereas persons in the latter two categories have received care.

Diabetes

Although the exact prevalence of diabetes among persons of Hispanic origin is unknown, it is generally believed to be one of the major health problems of that population. Several studies have indicated that diabetes is more prevalent among persons of Mexican ancestry (that is, of American Indian and European admixture) than among the white population of the United States.[14] Data from NHANES II[21] and NHIS[22] indicate that the overall prevalence in the United States of diagnosed diabetes is about 3 percent, with wide variation by age and sex. The prevalence of previously undiagnosed diabetes estimated from NHANES II was equally high.[21] If, as has been shown by surveys such as NHIS,[17] some Hispanic groups utilize preventive or routine health services with less frequency than the general population, then they may have a higher level of previously undiagnosed diabetes.

Thus, to establish the prevalence of diabetes and impaired glucose tolerance for Hispanics, and to assess the need for health care related to this condition, diabetes was selected as a major component for HHANES. The National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIADDK) sponsored a 75-gram, 2-hour oral glucose tolerance test, which was conducted on a random half-sample of examinees 20–74 years of age. As was done in NHANES II, the test was administered in the morning following an overnight fast of 10–16 hours. This procedure, endorsed by the American Diabetes Association and the World Health Organization, has been recommended to provide uniform international criteria for the diagnosis of diabetes and impaired glucose tolerance.[23]

The results of the laboratory component for diabetes, the physician's diagnostic impressions and statement of health care needs, and an extensive medical history interview enable both the determination of the prevalence of the disease among Hispanics and the evaluation of the level of unmet health care needs pertaining to diabetes. Several factors associated with diabetes, such as obesity and dietary intake (discussed in chapter 3), were measured in HHANES. In addition, several possible sequelae of diabetes were examined in the survey, including kidney and cardiovascular diseases, retinal changes, and limitation of activity. Analysis of the results of the oral glucose tolerance test in relation to HHANES

examination and interview data for risk factors, related conditions, and complications or outcomes, will contribute significantly to the knowledge of the epidemiology of diabetes for the Hispanic population. The interview and examination provide data that enable classification of diabetic individuals into the three health care needs categories described earlier. Responses to questions on previous diagnosis and basis of the diagnosis, utilization of medical care for diabetes, and prescribed treatments, including compliance with drug treatments (ascertained via the questions on medicine and vitamin use), together with the physician's impressions, allow the determination of health care needs.

Hypertension

Hypertension affects millions of persons in the United States, leading to high levels of morbidity and mortality. In the past, there has been considerable research related to the epidemiology of hypertension, focusing on risk factors and comparing the prevalence among white and black population groups. Very little is known about hypertension among Hispanics in this country. It has been hypothesized that Mexican-Americans in the Southwest, due to their relatively low socioeconomic status and underutilization of the health care system, may be a particularly high risk group for undiagnosed hypertension.[24,25]

A great deal of money and effort have been spent in recent years to educate the public about the prevalence and dangers of hypertension, which is both a disease in itself and a risk factor for cardiovascular and kidney diseases. Yet, because of the persistence of misinformation and inadequate health care, there is still thought to be a high level of undiagnosed and untreated hypertension.[26] This level has been estimated for the general population of the United States using data from NHANES II, and with an expanded hypertension component in HHANES, the analytical potential for the Hispanic population is enhanced.

As in NHANES, blood pressure was measured for all examined persons 6 years of age or older. Measurements were taken at two different times during the physician's examination according to a standardized protocol that required 5 minutes of relative immobility in a sitting position immediately before the blood pressure was taken.[27] Because of the survey objective of assessing health care needs in relation to diagnosed conditions, additional information was ascertained through a detailed medical history interview. The National Heart, Lung, and Blood Institute recommended modifications to NHANES II and NHIS questions so that hypertensive individuals may be classified into four control status categories, which are an elaboration of the three levels described earlier:

1. Previously undiagnosed.
2. Diagnosed, but not currently under treatment (including persons not complying with prescribed treatment regimens).
3. Diagnosed and currently under treatment, but not under control.
4. Diagnosed, under treatment, and currently under control.

Differentiation of hypertensives into these categories was made possible through questions on screening and diagnosis, treatment modalities, compliance with treatment, and health care visits for monitoring blood pressure. Other parts of the medical history interview, the dietary interview, and the examination and laboratory assessments provide information on related conditions, risk factors, and sequelae of hypertension.

Heart disease

Heart disease is acknowledged as the single most important health problem in the United States today. Its contribution to mortality and morbidity in the U.S. population is well documented. More deaths are due to heart disease than to any other cause,[28] and it is the most frequent cause of limitation of activity.[29] Moreover, diseases of the heart place a heavy burden on the health care system, with about 11 million outpatient visits each year attributable to these conditions.[30] Considerable research on the epidemiology of coronary heart disease has led to an understanding of many of the factors related to its development. Through examination procedures and interviews, data were collected by means of NHANES I and II to establish the prevalence of coronary heart disease and some of its risk factors in the general population. Similar data for Hispanics were collected in HHANES. For diagnostic purposes, standard 12-lead and Frank lead electrocardiograms were recorded for all persons 20–74 years of age. Posterior-anterior chest X-rays were taken for the same age group, and lateral chest X-rays were taken for persons 45–74 years of age for the diagnosis of lung pathology and left ventricular hypertrophy, and for assessment of lung volume. (No chest X-rays were taken for women who suspected that they were pregnant.)

The medical history interview included a series of questions developed by Rose to screen for angina pectoris and myocardial infarction. This questionnaire has been used widely in the past 20 years for estimating the prevalence of angina pectoris and myocardial infarction in populations.[31,32] The questions were designed so that the degree of severity of symptoms could be measured and compared with results of the electrocardiogram and other tests. A subset of the Rose questions was included in NHANES II and may be useful for comparison with HHANES. Other survey components assessed coronary heart disease risk factors and other related information. Levels of serum cholesterol, triglycerides, and high density lipoproteins were measured. Determinations of body weight, blood pressure, and resting heart rate were also made. Dietary intake information, smoking history, and reported use of birth control pills were collected as well.

Gallstones

Despite high incidence and prevalence in the United States of persons with gallstones, very little work has been done to determine the epidemiology of the disease. Data from the 1975 NHIS showed the incidence of gallbladder disease to be nearly 400,000 new cases per year.[33] However, considering the inability of an interview survey to identify asymptomatic or undiagnosed "cases," it is likely that the actual magnitude of gallbladder disease in the United States may be much higher. Estimates as high as 1 million new cases of gallstones per year[34] or prevalence of persons with undiagnosed ("silent") gallstones around 10 million[35] have been suggested. Whatever the actual number of persons with gallstones in the total U.S. population, an even higher prevalence is suspected among Mexican-American adults.[15] The cost of gallstones and gallbladder disease is high, both in terms of dollars spent directly for health care and in terms of associated disability and resultant economic loss. Cholecystectomy is one of the most common operations in this country,[36] costing an estimated $5 billion annually.[35] Gallbladder disease can lead to a considerable degree of disability. Data from NHIS show that a large proportion of persons with gallbladder conditions (20.8 percent in 1975) reported eight or more bed days resulting from that condition in the year prior to interview.[33]

In its 1979 report to the U.S. Congress, the National Commission on Digestive Diseases recommended collaboration between NIADDK and NCHS to collect data on the prevalence of digestive diseases, specifically gallstones.[37] As a result, NIADDK supported and funded the inclusion of a gallstones component in HHANES. Through examinations, tests, and interviews, data were collected to meet the following objectives:

- To estimate the prevalence of persons with undiagnosed gallstones and of persons surgically treated for gallstones according to age, sex, and other demographic factors.
- To investigate risk factors thought to be associated with the occurrence of gallstones.
- To study the association of various symptoms with the presence of gallstones.

The objective of estimating the prevalence of persons with gallstones is best met through an examination survey such as HHANES, because a large proportion of all gallstone cases—perhaps 50 percent or more—are asymptomatic, or are symptomatic but undiagnosed. To establish diagnoses, HHANES included a real-time diagnostic ultrasound procedure that took approximately 20 minutes to complete; was noninvasive, highly sensitive, and highly specific; and involved no known risk to examinees.[38] The examination was administered to a random half-sample of examinees 20–74 years of age—the same group designated for the oral glucose tolerance test. Participants were required to fast for at least 6 hours before the ultrasound examination.

Numerous other survey components will be helpful to researchers examining the relationship between gallbladder disease and related conditions and possible risk factors. Previous pregnancy or use of oral contraceptives may be associated with gallstones among women. The Dietary Questionnaire, the anthropometric data, the extensive medical history interviews, the physician's examination, and other tests and procedures provide information that can be used in studying these associations among current gallstone cases as well as among persons who have been surgically treated.

To study the association of reported symptomatology with gallstones, a history of symptoms related to gallstones was included. This history included questions on previous diagnosis of gallstones, gallbladder X-rays, and surgery for gallstones or gallbladder disease. Further questions ascertained occurrence, frequency, and descriptive information on various symptoms, including nausea, vomiting, pain in the abdomen or lower chest, and specific types of distress following eating. These questions were designed to constitute a standardized interview that could recreate the same type of information normally obtained by a physician during a clinical medical history.

Dental disease

Data from NHIS have shown that Hispanics in all age groups tend to receive dental care less frequently than the general population.[39] The absence of care or the delay in seeking needed care poses a serious threat to the future dental health of children; poor dental health status can lead to poor nutritional status. So that the prevalence of dental disease and related health care needs among Hispanics could be assessed, a dental examination and interview were included in HHANES.

In NHANES I, a comprehensive dental examination was performed for the general population. The aim in HHANES was to replicate, as much as possible, the same procedures used in NHANES I and in the National Dental Caries Prevalence Survey conducted by the National Institute of Dental Research (NIDR) on school-age children. The measures of dental health and disease,[40,41] to be developed in collaboration with NIDR based on findings from HHANES are as follows:

- A decayed, missing, filled (DMF) surface index so that differences in disease experience can be studied among different population groups.
- A dental restorative treatment needs index, which can be used to estimate the number and types of dental services and personnel required to provide comprehensive dental care for the Hispanic population.
- A simplified oral hygiene index, which measures the amount of debris and calculus on selected surfaces for six predesignated teeth that are present.
- A periodontal index, which permits comparison of the prevalence of periodontal disease for Hispanics with the general population.
- For edentulous persons, a determination as to whether a full denture is absent or present, and if present, whether it is defective.
- A clinical assessment by the examining dentist of "severe" malocclusion, with notation of present or past orthodontic treatment.

As in the physical examination, no treatment was offered to sample persons in need of care, but they were provided with a report of significant findings.

The dental care sections of the Adult and Child Sample Person Questionnaires complemented the dental examination in measuring perceived dental health status, utilization of services, and dental habits. Data from these interviews allow classification into the health care needs categories and provide a focus for public health information programs. Information on the use of fluoride and data on nutritional practices from the Dietary Questionnaire will provide additional insight into risk factors and outcomes of dental disease.

Otitis media and hearing problems

Otitis media, or middle ear disease, is the most frequent pediatric diagnosis made in the United States. Studies have estimated overall prevalence to be in the 15- to 20-percent range; more than two-thirds of preschool children experience at least one bout of the disease at some time in their lives, and a substantial number of those children have recurrent attacks. Otitis media may involve acute symptoms, such as earache, fever, temporary hearing loss, and effusion. Chronic otitis media, characterized by effusion and limited tympanic compliance, may often be asymptomatic and undiagnosed.[42] If the Hispanic population is a medically underserved group, then there may be a higher prevalence rate for chronic otitis media with resulting hearing loss among Hispanics than has been observed among the general population. A genetic role in predisposition to middle ear disease has been suggested.[43] HHANES data may show whether Hispanic children have prevalence rates of chronic otitis media different from rates for other population groups when differences in health services utilization are taken into account.

The HANES programs present a unique opportunity to contribute to the knowledge of the prevalence and impact of otitis media. Beginning with HHANES, screening for possible middle ear disease was accomplished through a combination of physician's examination findings and tympanometric data. Taken by itself, otoscopic examination of the eardrum is very subjective and fraught with difficulties. It is not unusual for the ear canal to be obstructed by wax so that the eardrum is obscured. (HHANES physicians did not attempt to remove wax.) Even if the tympanic membrane can be seen, signs of disease may be very subtle and hence subject to interobserver variability.[44] Therefore, to enhance the physician's diagnostic capabilities, the relatively new procedure of impedance tympanometry was included in HHANES. This procedure involves placing in the external ear canal a small hand-held probe through which a tone of fixed frequency is directed. The mobility of the eardrum in response to the tone is simultaneously recorded electronically while the pressure in the ear canal is varied. This simple, inexpensive, rapid, sensitive, and objective technique is useful for detecting middle ear effusion as well as for identifying noneffusive middle ear disease.[42,45,46] Tympanometry was performed on all examinees in HHANES.

In addition to the tympanometry, hearing levels for persons 6–74 years of age were measured by puretone audiometry. Although of limited value in detecting otitis media, the audiometry findings enable the study of associations between hearing loss and history of middle ear disease and may be useful in establishing functional impairment. The relationship between the physician's observations and results of the tympanometry and audiometry will be examined in conjunction with information on past or current treatment by tympanostomy tubes or ear surgery, as reported in the interview.

The National Academy of Sciences has stated that the presence of otitis media in an individual is an excellent indicator of the lack of medical care utilization.[47] Results from the various HHANES examination components and tests, as well as responses to questionnaire items on previous occurrence and treatment of infections and hearing problems, allow classification of individuals according to health care needs. Additional questionnaire data on visits for routine or sick care will be useful for evaluating the importance of otitis media as a health care needs issue.

Immunization

Beginning in 1977, the Department of Health and Human Services (DHHS) began efforts to increase parental awareness about the importance of immunization against childhood diseases. At that time it became apparent that little was known about the level of protection among children in the U.S. population. Data from the United States Immunization Surveys, sponsored by the Centers for Disease Control, and from the 1978–79 National Health Interview Survey were collected solely by interview; the addition of serological testing in HHANES provides important information to verify reported immunization history.

With the objectives of estimating the level of protection among Hispanic children and the number of immunized children, measuring the relationship between immunizations and level of protection, and measuring access to preventive medical care and continuity of care, the Bureau of Health Care Delivery Assistance of the Health Resources and Services Administration sponsored an immunization history and serum assays. The only immunization assessment included was for the DPT shot (diphtheria, pertussis, tetanus) because DPT shots are routinely given by primary care physicians on first encounters, and it can generally be assumed that children who have not begun a DPT series have not received any other routine immunizations. Because the immunizations for diphtheria, pertussis, and tetanus are all given together in one DPT shot, serum antibody levels were measured for only one disease. Tetanus was chosen for the following two reasons:

● Tetanus antitoxin antibodies are found only in individuals who have received at least 1 or 2 shots (representing at least 1 or 2 contacts with the medical care system). Tetanus immunity is gained by immunization and rarely by natural means because it is a rare disease that often leads to death instead of increased antibody levels, and immunity is not passed among persons. Diphtheria im-

munity, on the other hand, may be acquired naturally because the disease is still common in some parts of the world.

● Tetanus assay is technically feasible for HHANES. Unlike assay methods for pertussis, those for tetanus are standardized and suitable for this survey; for example, the serum may be frozen without any alteration of the antibodies.

Because some people who have not received routine DPT immunizations could still prove to be immune to tetanus, questions on receiving tetanus shots without the diphtheria and pertussis components and reasons for having the shots administered were included.

Tuberculosis

Although the prevalence of tuberculosis (TB) in the United States has been declining over the past few decades, recent data show that the overall prevalence rate for Hispanics is twice that for non-Hispanics.[48] Of particular concern is the contribution to the TB pool by foreign-born residents—specifically legal Hispanic immigrants who may have been infected but showed no evidence of active disease on entry to the United States, and illegal immigrants with TB infection or active disease.[49] The recent surge in Cuban immigration and the constant stream of immigrants across the Mexican border, in combination with such predisposing social conditions as overcrowding and low income and education levels, indicate that TB is likely to remain a serious public health problem among some Hispanic groups.

As a result of local support and interest in the California survey sites and in Dade County, Fla., HHANES included a special study in those areas to estimate levels of exposure to tubercle bacilli. The study included a skin test involving the injection of 5 tuberculin units of purified protein derivative (PPD). The PPD was injected by a nurse in the mobile examination center at the time of the physical examination. Test results were read and recorded by a nurse 48–72 hours later, either in the respondent's home or at the examination center. Persons infected with TB react to the PPD, producing induration and swelling around the injection site. Swelling of 10 or more millimeters was considered a positive reaction in HHANES. The TB skin test was done on all examinees 6 months through 74 years of age, beginning with the twelfth Southwest location (Los Angeles) and continuing through the Dade County phase of HHANES. Also, the household interview included questions on history of having tuberculosis and any exposure to persons with active disease. These data will be useful for comparing TB exposure levels among Hispanics with findings for the general population from NHANES I. In addition, chest X-rays for all nonpregnant examinees 20 years of age or over may allow estimation of the level of radiographically apparent tuberculosis in the Hispanic population. Although in this survey no data on immigration status or length of residency in the United States were collected, information on country of birth and level of acculturation may be useful in analysis of the TB data.

Vision

As part of the effort to measure the general level of unmet health care needs among Hispanics, a vision component was included in HHANES. Refractive errors constitute the most common source of impaired visual acuity in the U.S. population. The prevalence of those common, correctable disorders that are in excess among Hispanics compared with the general U.S. population may be an indication of the lack of access to the medical care system by this population group. Inadequate correction, or no correction, of impaired visual acuity that is correctable can be interpreted as "unmet need."

The vision assessment consisted of three main components: A vision screening, a routine physical examination of the eyes, and a questionnaire section on history of vision problems and use of corrective lenses. The vision screening included tests of near vision, binocularity of vision, and distance vision. The tests were administered in the order listed above to minimize the changes in lighting to which the eyes had to adjust. The tests were given by the dentist, who was trained in vision testing methods, to all sample persons 6–19 years of age and to a random half-sample of those 20–74 years of age. The tests were administered in the dental examining room immediately following completion of the dental examination. The conditions of the vision screening tests adhered largely to the procedures outlined in the report of the National Academy of Sciences-National Research Council Committee on Vision.[50]

The near vision test determined visual acuity at up to four fixed distances from 30 to 60 centimeters (cm). A test card consisting of Sloan letters or, for illiterate examinees, Landolt Rings, was positioned at 40 cm from the eyes, using a bar with a chin rest on one end and a metal frame that held the card and could be moved to pre-marked distance settings. This procedure provided a means for conducting the near vision test at standard distances. Persons who were unable to read the 20/20 line at 40 cm were also tested at 60 cm, 50 cm, and 30 cm. Examinees who wore glasses for near vision and remembered to bring them to the examination center were tested first without correction and then with correction. Contact lens wearers were tested only with correction to avoid the problem of having to remove and reinsert the lenses. For persons who forgot their glasses or contact lenses, this information was recorded, but obviously only uncorrected vision could be tested. The examiners were not always able to ascertain the reason that glasses were prescribed (near or distance vision), so beginning in the Dade County phase, examinees' glasses were analyzed by a lensometer to determine the correction.

Binocularity was assessed using the Random Dot E (RDE) test, which is valuable for determining the presence of amblyopia and for producing conservative estimates of stereoacuity thresholds. The test, developed primarily for use with young children, is simple, accurate, and quick, and makes minimal demands on the subject.[51] In HHANES, examinees were given polarized glasses to be worn during the test (the glasses were used over any corrective lenses); they were then shown an RDE test card and a stereo blank card and asked to identify the RDE card. The two cards look identical to persons with impaired binocularity, whereas those with normal vision can easily distinguish the outline of an apparently recessed "E" on the test card. The test was conducted first at 50 cm and again at 100 cm. To minimize the problem of guessing, the test was repeated four times at each distance. A passing score depended on choosing the correct card all four times.

Distance vision was tested using a chart with Sloan Letters or Landolt Rings. The basic test distance was 4 meters. However, because of space limitations in the examination center, this distance was simulated by placing the chart with reversed Sloan letters on an illuminated box on one wall of the examination room and situating a mirror of high optical quality on the opposite wall. The examinees then read the reflection in the mirror. This procedure allowed the determination of distance visual acuity as poor as 20/200+. To investigate the validity of this procedure, up to four randomly selected sample persons each day were retested using an actual 4-meter test distance in another part of the examination center.

Distance vision was measured for each eye separately and for both eyes together. Persons who wore glasses for distance vision were tested with uncorrected vision for both eyes first, followed by tests with correction for the left and right eyes separately, and then both eyes. Contact lens wearers were tested, with corrected vision only, first for each eye separately and then for both eyes. Examinees who had no corrective lenses, and those who forgot to bring them to the examination center, had their uncorrected vision tested, each eye separately, and then both eyes together. To control bias resulting from memorization of the chart, the examiner alternated the eye to be tested first—sample persons with even numbers had the right eye tested first, and odd-numbered sample persons began with the left eye.

Of course, visual acuity measurement as part of a screening test cannot by itself differentiate losses of acuity caused by errors of refraction from those attributable to eye diseases or injuries. Routine physical examination of the eye, performed by the physician (not an ophthalmologist) permitted the identification of various eye conditions that may contribute to impaired visual acuity. Ophthalmoscopic examination can also provide a basis for assessing health care needs related to eye conditions. For instance, the presence of florid cataracts in the central visual axis, a condition usually corrected by surgical removal of the lens, may indicate a lack of access to surgical care. The eye examination also could identify diabetic and hypertensive retinopathy. Although many of the observable changes to the retina occur despite the treatment of these diseases, lack of treatment and progression of these diseases to more serious stages can be determined through the ophthalmoscopic examination in conjunction with findings from the physical examination, laboratory serum assays, and medical interview. The routine physical inspection of the eye also determined the prevalence of scleritis and other visible inflammations of the eyeball. Pupil reactivity and other neurologic and ophthalmologic conditions were noted as well. Because neither an ophthalmologist nor more sophisticated equipment were employed for HHANES, other common pathologic conditions of the eye, such as astigmatism, macular

degeneration, and noncentral cataracts, could not be identified. The household medical history questionnaires contained sections on history of vision trouble and use of corrective lenses for adults and children.

Kidney disease

Estimates of the prevalence of kidney disease and normative data relative to kidney disease do not exist for the Hispanic population. The effect of serious renal disease on the individual and the medical care system suggests a need for data that are not available from any other source. Assessment of kidney disease is particularly suitable for HHANES because of the hypothesized underutilization of health services among Hispanics, which means that many cases of kidney disease may be undiagnosed. Lack of treatment can lead to severe kidney damage later in life.

The examination phase of the kidney assessment was similar to the component used in NHANES II. It consisted of a number of urine assessments to determine urine protein, specific gravity, glucose, and ketones. Urine sediment was examined microscopically for red cells, white cells, epithelial cells, casts, and crystals. Other biochemical assessments related to kidney disease were serum creatinine and urea nitrogen. Several other survey components are useful for interpreting these laboratory data. A brief history of kidney problems and urinary infections was obtained during the household interview. The relationship between kidney disease and diabetes, hypertension, and cardiovascular disease can be studied using data from both the interview and examination.

Liver disease

By means of NHANES II, information on the prevalence of liver disease was collected for the general population. The intent of the liver component of HHANES was not merely to produce comparable prevalence estimates for the Hispanic population. Rather, it was included so that the association of liver disease with pesticide exposure and with level of alcohol consumption could be investigated. In conjunction with its alcohol consumption interview component, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) sponsored a standard battery of liver function tests (including bilirubin, SGOT, and SGPT). Other survey data, including liver disease history as reported in the household interview, and physicians' observations of the signs and symptoms of liver disease, are of value in the analysis of the laboratory assessments.

Alcohol consumption

Although for a number of years national and other large-scale surveys have produced data related to drinking patterns for the U.S. population, no such data for a representative sample of Hispanics have been available until now. As part of the Hispanic Initiative announced by the Department of Health and Human Services in 1979, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) was requested to document the nature and extent of alcohol problems within this population group. With the support and collaboration of NIAAA, an alcohol consumption component was included in HHANES. NIAAA's objectives addressed by this survey component were:

- To characterize drinking patterns and practices for the three major Hispanic subgroups.
- To compare data on drinking patterns and practices among Hispanics with national survey data and with data on other ethnic population subgroups.
- To relate the quantity, frequency, and variability of alcohol consumption with health parameters and health conditions found in the survey.

The HHANES alcohol consumption component consisted of a set of questions designed to measure the quantity, frequency, and variability of drinking. It was administered by an interviewer to all examinees 12–74 years of age in the examination center, which provided a private setting. These questions were developed by NIAAA and NCHS staff, who were advised by a group of outside experts knowledgeable in the area of alcohol survey methodology. The questions were designed to describe in detail the respondent's pattern of drinking over the 4 weeks preceding the interview and, in a separate series, over the previous 12 months. Detail on the types of beverages consumed, typical amounts, frequency of consumption of each, and maximum amounts consumed was obtained. Similar questions were asked of former drinkers, referring to the period immediately preceding the last drink. Although it is not possible to diagnose "alcoholism" on an individual basis from these data, it is expected that the data obtained will permit ranking of respondents according to relative level of consumption as heavy, moderate, or light drinkers, or as abstainers. The procedures in this component replicate those from earlier NIAAA surveys, thus allowing comparisons of patterns of alcohol use in Hispanic populations with consumption patterns for other groups. A similar set of questions was included in the 1983 NHIS, with the obvious benefit of providing parallel data for the general population during the same time period that HHANES was operational. Other measures of alcohol intake used for HHANES, as in previous NHANES data collection efforts, included reports in the 24-hour dietary recall and food frequency questions. Data collected by the different methodologies used within HHANES will be compared.

Analysis of data from such sources as NHANES I, the NCHS Hospital Discharge Survey, and mortality statistics has implicated alcohol as an important risk factor for many diseases.[52] Although these data relate to the general U.S. population, there is some evidence from small, community-based surveys that the health of the Hispanic population may be at even greater risk from the effects of alcohol because of greater overall intake and larger proportions of heavy drinkers.[53] Data collected by means of HHANES provide the opportunity to relate levels of alcohol consumption to measures of health status for individuals in the Hispanic population. These data may in turn be compared with similar data for the general U.S. population collected in previous national surveys. The basis for these analyses includes biochemical assessments of liver function as well as reports

of health status, depressive symptomatology, and other diseases suspected to be related to alcohol intake, such as kidney problems and heart disease. Also of interest in this survey is the possible interaction of dietary intake and alcohol consumption for the three Hispanic subgroups, which may be compared to that of the general U.S. population.

Drug abuse

The use of illicit drugs and the abuse of licit drugs constitute a major threat to the health of certain portions of the U.S. population. Studies have linked the use of psychotropic drugs with numerous diseases, including mental illness, cardiovascular effects, and pulmonary conditions. The 1979 Surgeon General's Report on Health Promotion and Disease Prevention included drug use on its list of major risk factors contributing to most of the premature morbidity and mortality in the United States. Data from the 1977 National Survey on Drug Abuse[54] indicated that the prevalence of drug abuse was increasing in the general population. For example, the prevalence of marijuana use for adolescents (12–17 years of age) was 16.1 percent, and among adults (18 years of age and over) was 8.2 percent. These figures represent significant increases over the previous year. The National Survey on Drug Abuse has been the major source of national estimates of drug abuse prevalence in the untreated population. Although Hispanics have been included as they came into the sample, their numbers were insufficient to allow the generation of prevalence estimates. However, other data sources, such as ethnographic studies and clinical studies, have suggested that the prevalence rate of drug use among Hispanics may be different from that of the general population. For certain substances, such as marijuana and inhalants, the prevalence rates may be significantly higher among Hispanics than among others.[55]

To address this issue in a direct manner, as well as to do its part in helping ADAMHA carry out the Hispanic Initiative, the National Institute on Drug Abuse (NIDA) supported the inclusion of a drug abuse component in HHANES. Specifically, NIDA wished to estimate the lifetime and current prevalence of illicit marijuana, cocaine, inhalant, and sedative use in the Hispanic population.

The HHANES drug component consisted solely of a short series of questions geared to the assessment of duration and frequency of use of marijuana, cocaine, and inhalants and the lifetime prevalence of use of sedatives for "nonmedical reasons." These questions were included in the Adult Sample Person Supplement, which was interviewer-administered in a private room in the examination center. It was hoped that the private setting and assurances of confidentiality would encourage respondents to answer truthfully these sensitive questions on illicit behavior. All examinees 12–74 years of age were asked about sedative and marijuana use. Only persons 12–44 years of age were asked about inhalants and cocaine.

Depression

Psychiatric epidemiology has long been a subject of interest to researchers and to those who plan mental health services

and programs. However, a lack of reliable data on the incidence and prevalence of mental illness among Hispanics and other population groups limits the ability to study etiological factors or to understand and address the needs of the underserved population. In the past, numerous studies designed to measure the level of psychiatric symptoms and diagnoses have been undertaken on clinical and general population groups, using a variety of methodologies and producing diverse results. Few attempts to assess prevalence of psychiatric disorder among Hispanics have been made, and most of those concerned Mexican-Americans only. Those studies that have been published produced conflicting results. Reviews of admissions for psychiatric treatment show that Mexican-Americans are underrepresented in treatment facilities relative to their representation within the community population.[56] However, results from community-based general population surveys diverge, some indicating that the prevalence rate of psychological problems among Mexican-Americans is higher than for the general population and some leading to the opposite conclusion.[56] The hypothesis that Mexican-American underrepresentation in treatment facilities reflects barriers to mental health services and is not a relevant indicator of need for care has been supported by researchers.[57,58] Nevertheless, regardless of the reason for their lower rates of treatment for mental illness, the Hispanic population is likely to have an increased prevalence, relative to the general population, of demographic factors associated with mental illness, such as low socioeconomic, educational and employment status, and cultural and language barriers.

To address the Hispanic Initiative goal of gathering information on the epidemiology of mental disorders among Hispanics, the National Institute of Mental Health (NIMH) developed a component for HHANES. The primary objective of this component was to obtain prevalence rates of mental illness among the three Hispanic subgroups so that comparisons could be made with rates obtained for the general population and to assess levels of need for care. This information is important for planning mental health facilities and programs for Hispanics. Additional objectives were to study aspects of the association between physical and mental health and to assess the extent to which epidemiological research results obtained in the general population could be generalized. Because sample persons were clustered within families, it is also possible to study the family configuration of certain psychiatric symptoms and diagnoses. This is important because of the growing interest in the effects of heredity on the occurrence of mental disorders.

As a result of time constraints and other logistical considerations, the mental health component was limited to depression, which constitutes the most common psychiatric disorder in the general population. NIMH sponsored the administration of two survey instruments, the Center for Epidemiological Studies Depression Scale (CES-D) and a portion of the Diagnostic Interview Schedule (DIS). They were administered by an interviewer in a private room in the examination center to all examinees 20–74 years of age. The CES-D is a short (20-item) scale that measures current general depressive symptomatology.[59,60] It has been used extensively both in

general population studies and in surveys of Hispanic groups.[61,62] Comparison of data for Hispanics from HHANES with earlier data for the general population is possible because the NHANES I Augmentation Survey also included the CES-D, administered in a similar setting and context. A portion of the DIS was included in HHANES to produce interval-level measurement of depressive symptomatology as well as to yield diagnoses of depression for this population. The DIS, which was developed for the assessment of current and lifetime prevalence of psychiatric disorders in the general population, is a revision of earlier diagnostic questionnaires. Through a highly structured interview that includes specified probes to ascertain symptom severity, interviewers with no clinical training in psychiatry may obtain sufficient information for diagnoses of certain disorders. Only rarely should the judgment of an expert be required for the classification of "borderline" cases. Several articles discussing the development and validity of the DIS and of the Spanish version are available.[63-65] The results of the HHANES data collection effort will be compared with the results of other NIMH-sponsored applications of the DIS that were undertaken during the same period.[66] Additional sections of HHANES should provide insight for the analysis of the depression data. Level of alcohol consumption, illicit drug use, and degree of acculturation may relate to the etiology of depression for this population. At the very least, data from this survey may indicate new directions for future research.

Chapter 3
Nutritional status assessment

by Dale C. Hitchcock, Ronette Russell-Briefel, Dr.P.H.,
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Central to the National Health and Nutrition Examination Survey (NHANES) programs have been the assessment of the nutritional status of the U.S. population and the measurement of changes in that status over time. Nutritional status assessment is the comprehensive measurement and description of factors or parameters that affect nutritional status at a given time. Nutritional monitoring, then, is the measurement of changes over time, requiring repetition of comparable measurements at regular intervals.[11,67] Traditionally, these broadly specified goals have been accomplished through the NHANES programs by using an approach that involves the collection of data from a dietary interview, a medical history, laboratory tests, body measurements, and a physician's examination.

The Hispanic Health and Nutrition Examination Survey (HHANES) was designed to provide baseline health and nutrition information comparable to that available from the earlier surveys. Nutrition-related findings, including distributions of nutrient intake, height, weight, and biochemical values, have been published for the general U.S. population from the earlier surveys.[68-70] Although these findings have usually been reported for both white and black persons, the National Center for Health Statistics (NCHS) has never been able to report similar findings for the Hispanic population.

In addition to collecting data for the publication of normative distributions of population parameters, NCHS has increased efforts over the years to expand the type and use of the data collected in NHANES to address research questions regarding relationships between nutrition and the health conditions targeted in the surveys. Analyses of data from the present study may generate new issues specific to the nutritional status of Mexican-Americans, Cuban-Americans, and Puerto Ricans.

The objectives of this chapter are first to outline the different data collection methodologies used in HHANES and then to discuss how the data may be analyzed in association with the survey's target conditions and other major nutrition issues. These issues encompass associations between diet, nutritional status, and health, as well as concerns in the area of public health nutrition. Research topics that may be investigated using HHANES data include diseases and conditions such as anemia, obesity, cardiovascular disease, hypertension, diabetes, digestive disorders, and dental caries. Public health nutrition issues that may be addressed include the adequacy of dietary intake, the need for food fortification, the use of vitamin and mineral supplements, participation in food programs, infant feeding practices, and the growth of Hispanic children. Even though much of this analysis of course focuses on the Hispanic population, many of the topics and issues involved are not limited by ethnicity or culture.

Methodology

Dietary questionnaire

In the two previous NHANES programs, the 24-hour recall and a 3-month food frequency questionnaire were utilized to collect data on dietary intake and food consumption patterns. To maintain comparability with the earlier surveys, the same dietary methods were used for HHANES. The actual data collection instrument used (see appendix XII) was developed with the assistance of the Dietary Task Force, whose members were knowledgeable about the dietary practices of Mexican-Americans, Cuban-Americans, and Puerto Ricans (see appendix I). The Dietary Questionnaire combined an English and a Spanish version on the same form and was administered by trained bilingual interviewers.

The 24-hour recall was included in HHANES to provide information on the dietary intake of the target populations, the contribution of selected foods and food groups to total nutrient intake, the frequency of consumption of food items, and the relationship of dietary intake to other dietary practices, including vitamin and mineral usage, frequency of meals and snacks, and typical sources of meals. As in previous NHANES programs, the dietary recall data were collected with the aid of abstract food models. Following the dietary interview, each food item reported was assigned a numerical food code, which was in turn linked to a nutrient data base. Further description of the food models, the food code manual used by the interviewers, and the nutrient data bank used for analysis of the data may be found in appendix IV.

The food frequency section of the Dietary Questionnaire was designed to indicate qualitative aspects and patterns of typical foods or food-group consumption among Hispanics. The food items used as examples to represent foods from broader groups were selected with the help of the Dietary Task Force. These examples were changed in some instances as a result of pilot testing. The food frequency section also estimated an individual's typical food pattern, which may be associated with measures of health status. In addition, the Dietary Questionnaire contained questions on the uses and types of special diets, the use of table salt, and other dietary practices.

Medical history data

The sample person questionnaires, administered to children and adults, included questions designed to collect nutrition-related information and history relevant to the target conditions of the survey. These questionnaires also contained detailed sections focusing on the use of vitamin and mineral dietary supplements and questions about participation in food programs, such as school lunch and the Supplemental Food Program for Women, Infants, and Children (WIC).

Laboratory determinations

Biochemical, hematological, and urinary assessments were included to provide objective evidence of the health and nutritional status of individuals with respect to anemias and other blood cell disorders, vitamin deficiencies, toxic levels of substances, and the risk or likelihood of disease. Many of the assessments included in NHANES II were also included in this survey to allow comparison of various blood nutrient levels for Hispanics with those obtained for the general U.S population, and to provide baseline estimates of these values for the Hispanic population. Other tests, although not performed in earlier surveys, have standardized laboratory procedures and are likely to be repeated in future national surveys. A complete list of laboratory determinations included in the survey, and the laboratories at which they were performed, may be found in appendixes V and VI.

Anthropometry

The major purposes of HHANES body measurements were to assist in the determination of normal growth patterns for Hispanic children, to develop normative distributions of height and weight, and to estimate the prevalence of obesity in the Hispanic population. Similar measures have been collected in the past for the general population. Height, weight, skinfold, and other anthropometric measurements were collected by trained technicians using standardized equipment and multiple measurements. Body frame size was assessed by measuring bitrochanteric (hip) breadth and elbow breadth, as in NHANES II, as well as biacromial (shoulders) breadth and biiliac crest breadth, which were added for this survey.

Clinical signs

In NHANES I and II, many items indicating either clinical or subclinical signs of malnutrition were included as part of the physician's examination. In the review of unpublished data from these surveys, an advisory group found that there was a high degree of variability among physicians reporting these clinical signs and that most of the signs were infrequently reported, nonspecific in nature, and of uncertain diagnosis. As a result of this review, only a few clinical signs relating primarily to vitamin deficiencies were included in the HHANES physician's examination. These were limited to observed conditions of the eye and skin such as xerophthalmia, keratomalacia, follicular hyperkeratosis, petechiae, pellagrous dermatitis, and ecchymoses.

Nutrition-related conditions

Although HHANES was not designed to test specific hypotheses regarding the relationship of nutrition to chronic conditions, the survey does provide a unique set of nutrition- and health-related population data that may be utilized to investigate or to formulate general hypotheses on the associations between dietary intake, nutritional status, and health. Many prevalent diseases or conditions, such as diabetes, hypertension, and obesity, and their treatment, are related to nutritional practices and dietary intake. Several of these nutrition-related chronic diseases and conditions are discussed in terms of the analytical opportunities that HHANES data afford.

Iron status and anemia

It is generally agreed that the most common single nutritional deficiency in the majority of countries is iron deficiency,[71] which may be due to nutritional causes, blood loss, impaired iron absorption, or other reasons. Dietary intake inadequate to meet normal physiological needs is often cited as the major source of iron deficiency. Hematological and biochemical measurements related to iron status included in both NHANES I and NHANES II have been used to assess the iron status of the general population.[72,73] The Expert Scientific Working Group, convened by the Federation of American Societies for Experimental Biology as part of a contract for the Food and Drug Administration (FDA), established to assess the iron nutritional status of the U.S. population based on NHANES II data, concluded that no single biochemical indicator is diagnostic of iron deficiency.[73] The combined use of several indicators of iron status provides a much better measure of iron status.

As indicators of iron status, hemoglobin, hematocrit, red and white cell counts, protoporphyrin, serum iron, total iron binding capacity and serum ferritin were determined in HHANES. Percent transferrin saturation, mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), and mean corpuscular hemoglobin concentration (MCHC) were also calculated. Additional tests (serum folate, red cell folate, and differential leukocyte count) were performed on a special subsample of the HHANES population. The criteria for inclusion in this subsample are outlined in appendix VII and were based on high or low hematological values and the selection of a control group.

This hematological and biochemical information may be analyzed in conjunction with data on symptoms, signs, and treatment of anemias collected during the physician's examination, the dietary interview, the reproductive history questions, and other related questionnaire sections. Using models defined in previous analyses of NHANES II data,[73] the iron status of the Hispanic population may be compared with that of the white and the black populations.

Overweight and obesity

Overweight (defined as excess body weight for height) and obesity (defined as excess body fat or adipose tissue)[74,75] have been strongly associated with the development of certain chronic diseases, including adult-onset diabetes and hypertension.[76] Obesity has also been implicated as an independent risk factor in the development of coronary heart disease.[77,78] In addition, gallbladder disease is more common in the obese.[15,79] Estimation of the prevalence of overweight and obesity in childhood is equally important because it has been related to an increased likelihood of overweight and obesity in adulthood.[76]

Besides the increased physical health risks, overweight and obesity affect psychological and emotional health.[76] Data on behavioral aspects of eating, such as food patterns, snacking, and whether breakfast is typically eaten, were collected by means of HHANES. Responses to questions about changes in appetite and weight were also gathered as part of the Diagnostic Interview Schedule's depression section. Information on the use and type of special diets, the use of prescription and nonprescription diet pills, and food frequency data provide additional information for investigating factors related to overweight and obesity.

Prevalence estimates of overweight and obesity in children and adults from HHANES can provide important information about the Hispanic population, which can be compared with estimates for the white and black populations from previous NHANES. In addition, associations between overweight and obesity and nutrient intake, dietary practices, demographic variables, and health characteristics may be studied. Data on self-perception of weight status were collected for sample persons 6 years of age and older. For each sample person under 12 years of age, information on the parent's attitude concerning the child's weight was obtained. This attitudinal data may provide insight into dietary habits and behavioral aspects of overweight and obesity.

Coronary heart disease

The prevalence of coronary heart disease risk factors among U.S. Hispanics is generally unknown. Coronary heart disease (CHD), the leading cause of death for adults in the United States, is one of the target conditions included in HHANES, as discussed in chapter 2. The major risk factors for CHD—elevated serum cholesterol, hypertension, cigarette smoking, and obesity—were all measured in the survey.[78,80-82] Each of these risk factors is related to dietary intake. For example, high blood pressure has been linked with obesity and dietary variables such as the consumption of salt, sodium, potassium, and alcohol.[80,82-85] Cigarette smoking has also been associated with different dietary patterns.[86] In addition, diabetes, another target condition, is related to increased risk of peripheral vascular disease.[78]

Hypertension

Hypertension, a major risk factor in the development of stroke and heart disease,[80,82,83] is another target condition measured in HHANES. Relatively little information is available on the relationship of known risk factors to blood pressure

levels in Hispanics. HHANES nutrition data relevant to hypertension include caloric, calcium, sodium, and potassium intakes, alcohol consumption, salt use, and overweight and obesity.[85] The nutrition data, in combination with the medical history, blood pressure, biochemical data (serum calcium, potassium, and sodium), and clinical data, may be utilized to study associations between diet and the prevalence and treatment of hypertension in Hispanics. Compliance with suggested dietary treatment can be investigated using the medical history information and the dietary recall and food frequency data for known hypertensives.

Diabetes

Diabetes, particularly the adult-onset type, is one of the target conditions believed to be more prevalent in Hispanics than in the general population.[14,87] Diabetes and impaired glucose tolerance are related to obesity and other health and medical factors, such as parity and oral contraceptive use.[88] HHANES will provide useful data that may allow researchers to study the association between environmental or nutritional factors and diabetes. For example, a pertinent research question might be as follows: If Hispanics are a group at high risk of developing diabetes, are there nutrition habits or nutrients that are related to diabetes that are independent of, or additive to, other factors such as obesity? Additionally, dietary habits and compliance with recommended treatment could be investigated in individuals with known diabetes.

Digestive diseases

A diet that includes a variety of foods has been recommended as a means of consuming sufficient quantities of essential nutrients, yet many persons experience difficulty digesting certain food items. A series of questions about problems with digestion, primarily for use in conjunction with the gallbladder disease component of the survey, was included in the Adult Sample Person Questionnaire. These questions concern the occurrence of symptoms of digestive problems and the types of foods that may initiate digestive distress.

A number of digestive diseases, such as gallbladder disease and ulcers, may be related to nutritional factors. In addition, dietary treatment is commonly used to reduce dietary symptoms. Increased prevalence of gallstones has been linked to various nutritional factors, including increased food consumption, obesity, consumption of relatively small proportions of vegetable protein, high consumption of unsaturated fats, and low consumption of vegetables and fruit.[89,90] The study of the association of dietary factors to digestive disease would include the use of nutrition data on dietary intake, food habits, and the use of special diets in combination with the disease history and medical findings.

Alcohol consumption

Data on alcohol consumption provide cultural as well as health and nutritional information. The diets of persons consuming large quantities of alcohol (beer, wine, or hard liquor) may lack nutrients that are obtainable from a diet

composed of a variety of foods, the absence of which may lead to a deficiency in those particular nutrients.[91,92] Alcohol consumption can also decrease the ability to utilize nutrients; thus, nutritional status may be altered. From a nutritional standpoint, alcohol is also important because of the relative amount of empty calories it supplies in the diet. Alcohol can affect blood chemistries such as lipids (cholesterol, triglycerides), lipoproteins (HDL-cholesterol), blood glucose, and liver enzymes (for example, SGOT).[91,92] The contribution of alcohol consumption to overall nutrient intake should be considered in research relating dietary intake to such diseases as cardiovascular disease, liver disease, and hypertension.

Dental health

Dental care services are utilized less frequently by Hispanics than by the general population.[39] Dental health may relate to availability of services, cost, education, and dietary intake. Certain food items and food groups, particularly those high in sugar, have been shown to be associated with the development of dental caries.[93] Data from HHANES may be used to investigate other issues, including the relationship between decayed, missing, and filled (DMF) surface index and the calcium to phosphorus dietary intake ratio; dietary patterns and nutritional adequacy of edentulous adults or persons whose teeth are indicated for extraction; and associations between vitamin C intake and dental health.

Risk factors for cancer and osteoporosis

While HHANES was not designed to investigate the causal nature or relationship of nutrition to cancer and osteoporosis, data on the prevalence of risk factors and dietary intake patterns that may be related to these diseases were collected. Various health and research agencies are interested in population data on dietary intake and risk factors that can be compared between particular groups.

Certain dietary patterns and nutrients have been associated with a risk of developing certain types of cancer. It has been suggested that the consumption of vitamins A and C, carotene, fat, alcohol, and fiber, and blood levels of certain nutrients (for example, blood retinol), may be related to the risk of developing certain types of cancer.[94,95] Data on food patterns, nutrient intake, and serum retinol were collected by means of HHANES and may provide data for comparison to other population groups.

Although HHANES did not include a component designed to diagnose osteoporosis—a condition that is currently of great nutrition research interest primarily in women—data on suspected risk factors, such as age at menopause, smoking, body mass index, and calcium and protein intake were collected. Among the possible etiologies of primary osteoporosis, current data point to two probable causes: Deficiency of estrogen and deficiency of calcium intake.[96] HHANES is the first large-scale study to describe the calcium intake and dietary pattern of Hispanic women, and questions are included about reproductive history and use of estrogens.

Public health nutrition issues

Dietary adequacy

Data from the 24-hour dietary recall may be used to estimate the total food and nutrient consumption within population groups. These estimates of average intake can be used to describe the nutritional adequacy of the diets of Hispanic groups and subgroups. This is often accomplished by comparison to a standard, such as the Recommended Dietary Allowance.[97]

The U.S. Dietary Guidelines contain recommendations concerning consumption of fat, cholesterol, sodium, sugar, alcohol, and fiber, as well as maintenance of ideal body weight and consumption of a variety of foods.[98] The survey's dietary data may be used to monitor changes in the intake of these nutrients and changes in food patterns over time. Analysis of survey data may indicate the need for further education on nutrition to meet these dietary guidelines.

The many types of clinical data collected by means of the survey provide objective evidence to be used in conjunction with the dietary data to assess the health and nutritional status of individuals and groups with respect to anemias, blood disorders, and vitamin and mineral deficiencies and toxicities. For example, vitamin A status assessment was continued for HHANES because of the FDA requirement for further information on the prevalence of vitamin A deficiency and toxicity in the population. Vitamin A deficiency has been suspected as a significant nutritional problem among Hispanics, especially in children and people in the low income group.[99] In addition, vitamin A is of research interest both because of epidemiologic evidence linking it to the prevention of cancer and because of the potential for toxicity by self-treatment with vitamin A supplements. The FDA has identified the need for additional information on the vitamin A status of the population. Vitamin A data from past NHANES programs and from HHANES may be used to determine the prevalence of deficiency and toxicity and to identify population groups at risk in order to develop appropriate policy.

Food fortification

Monitoring changes in nutritional status and other factors can lead to modifications in fortification policy for specific nutrients.[100] Before the FDA will alter current food fortification policy, four criteria must be met:

1. There must be adequate biochemical or other physiological evidence that a nutritional problem or deficiency exists within a population group.
2. The level of intake of the nutrient in question must be low within the targeted group.
3. The proposed level of fortification must not be harmful or lead to toxicity.
4. The food items proposed for fortification must be consumed in adequate amounts by the targeted population.[101]

NHANES programs constitute the primary source of evidence of nutrient deficiencies or toxicities in the population, and NHANES data supplemented with other data, such as information obtained during the Department of Agriculture's food consumption surveys, may be used to review food fortification policy.[100] The FDA has allocated substantial resources to study iron, zinc, and folate fortification issues using indicators available from NHANES II.[73,102,103] HHANES will provide similar data for Mexican-American, Cuban-American, and Puerto Rican population subgroups.

Vitamin and mineral supplement use

Measurement of the use of vitamin and mineral supplements is important information for determining the level of intake and for interpreting biochemical data for nutrition assessment. As part of the sections on use of medicines and vitamins contained in the sample person questionnaires, each individual was asked about the use of vitamin and mineral supplements during the previous two weeks. If the answer was positive, the interviewer asked to see the relevant containers, and then recorded the brand name, the quantity of each vitamin or mineral taken, and the frequency of use. This questionnaire was more detailed than that used in the previous NHANES and may provide benchmark data for subsequent NHANES programs.

The comparison of data on dietary intake and laboratory measures of nutritional status for supplement users and nonusers may indicate whether those who take vitamin or mineral supplements require them for nutritional adequacy. In addition, data on the prevalence of supplement use in the Hispanic population can be compared with estimates for the general population. The use of certain supplements, such as vitamin A, is also of concern because of the potential toxicity related to chronic use.

Participation in food programs

One of the goals of the National Nutrition Monitoring System[67] is to provide the kind of surveillance system that would enable Congress and other groups to evaluate the effectiveness and adequacy of various food programs. Although HHANES was not designed to permit detailed evaluation of the efficacy of federally funded food programs in the U.S. Hispanic population, several issues may be addressed. In addition to providing information about the proportion of the Hispanic population participating in these programs, HHANES data may be used to draw comparisons between food program participants and nonparticipants regarding many of the nutrition-related measurements obtained in the survey; for example, iron status in children or dietary adequacy in older adults. These data may also suggest the need for education about the availability of food programs.

The questions concerning food program participation were asked as part of the Family Questionnaire and the sample person questionnaires. Information about participation in the WIC program was collected for children under 12 years of age; school-age persons were asked about participation in school breakfast and school lunch programs; and all sample persons over age 60 were asked about home delivery of meals or group meals served through government programs, volunteer organizations, and churches.

Infant feeding practices and growth

Questions on infant feeding practices included in HHANES were based on those used in NHANES II and in the 1981 NHIS. These questions dealt with breastfeeding, the use of infant formula, and the introduction of solid food. This information will be useful for assessing infant feeding practices, which bear on the nutritional status and growth of children. These data for Hispanics may be compared with data collected in NHANES II and NHIS for white and black persons and may suggest important cultural differences concerning infant feeding practices.

Infant feeding practices have direct influence on the nutritional status and growth of children. Body weight and height (or length) are important indicators of the nutritional status of infants and children and have been used in the previous NHANES and NHES surveys to produce growth charts for distribution to pediatricians and researchers around the world.[104] Growth patterns for Mexican-American, Cuban-American, and Puerto Rican children will provide data that may be compared with the standard growth charts produced from the earlier surveys. Moreover, Tanner staging was performed during the physician's examination to estimate the maturational stage of youths 10–17 years of age.[105]

Chapter 4
Assessment of environmental exposure to selected toxic chemicals

by Trena M. Ezzati and Claudia Scala Moy

In the earlier National Health and Nutrition Examination Surveys, NHANES I and II, the National Center for Health Statistics (NCHS) collected data from the general population on elements in water and body burdens of lead, pesticides, carbon monoxide, and cadmium. In the Hispanic Health and Nutrition Examination Survey (HHANES), the Environmental Protection Agency (EPA) and the Centers for Disease Control (CDC) sponsored an environmental health component designed to provide data on the Hispanic population's exposure to lead as well as exposure to, and body burden of, selected pesticides.

Statistics relating exposure and body burden levels to occupation, geographic region, employment status, age, sex, ethnic group, socioeconomic status, place of residence, and selected health and nutritional factors may be useful to environmental health researchers, regulators, and public health program planners. Data on type and extent of exposure to pesticides as reported in personal interviews, as well as actual measures of concentration of selected residues in body fluids, will enable the comparison of the exposure to environmental pollutants within the Hispanic population to that in the general U.S. population as determined in the earlier surveys. Additional components included in HHANES may provide information on health effects associated with exposure to these substances. A questionnaire section for women on reproductive history, including information on children born with congenital birth defects, is an example of such a component. Other interview and examination sections will provide additional information for the study of health effects associated with exposure to these pollutants.

Pesticide exposure

As part of a cooperative agreement with NCHS, the National Human Monitoring Program of EPA participated in the assessment of the Hispanic population's exposure to selected pesticides by evaluating the amount and type of exposure as reported by respondents and by measuring the concentrations of specific residues and metabolites in blood and urine specimens collected from a subsample of study participants. (Appendix VIII contains a list of the target compounds in both serum and urine.) The pesticide subsample consisted of a half-sample of persons 12–19 years of age and the group 20–74 years of age who had not been scheduled for the glucose tolerance test. One blood and one urine specimen from each subsample person were shipped to the EPA Toxicant Analysis Center (TAC) for chemical analysis.

Field controls, consisting of field blanks and field-spiked specimens, were supplied by TAC to the collection site to monitor specimen degradation and contamination occurring in the field.

So that the relationship between pesticide body burdens and direct pesticide contact in the home or workplace can be examined, questions on type and frequency of exposure were included, with the major emphasis being on agricultural contact with pesticides. Many of the chemicals included in this study are known to accumulate in the body over time. Therefore, a brief history of experience with farm work or pesticide processing or application was obtained to aid in the examination of the origins of pesticides in the body, and to determine the relationship between length of exposure and body burden. Questions on agricultural jobs performed and crops worked with were included as an indirect measure of the classes of pesticides used. Data on contact with pesticides through ingestion of water or food at risk of contamination and direct accidental contact with pesticides also were collected. In addition to the occupational exposure, pesticide exposure in the home or other environments was also measured. Questions were included on household and other use of pesticides during the 12 months preceding the household interview, and again for the 7 days prior to the examination.

Certain signs or symptoms suspected to be associated with exposure to pesticides or industrial compounds were assessed in the physical examination. These measures included superficial examination of the eyeball (conjunctival injection), observation of acute dermatologic conditions (for example, contact dermatitis and chloracne), report of nausea, and acute and subacute neurologic findings. Because HHANES is a cross-sectional survey, there are limitations regarding the ability to determine relationships between environmental pollutants, signs and symptoms of disease, and disease itself. Furthermore, it may take several years before a health effect is manifested as a result of acute or chronic exposure to chemical environmental agents. Nevertheless, HHANES pesticide data may be important in determining the exposure prevalence for the Hispanic population by geographic location and occupation, and the survey will provide comparative data for the statistics collected on body burdens of pesticides for the national probability sample in NHANES II.

Lead exposure

Lead exposure is another major environmental public health concern. The common sources of human exposure

to lead in the environment include gasoline, old paint, and food. Other sources of lead exposure include dust, soil, water, glazed ceramic vessels, and pewter containers.

Three systems within the human body appear to be especially sensitive to the effects of high levels of lead: The blood forming systems, the nervous system, and the renal system. Furthermore, the potential damage to health as a result of lead exposure is greatest for infants and very young children (5 years of age or less) for the following reasons:

● The health effects of lead occur at lower threshold levels in children.

● Children have a greater tendency than adults to ingest items other than food (pica behavior) that contain lead; for example, soil, paint chips, plaster, or newsprint.

● Children tend to absorb greater proportions of lead than do adults at comparable levels of intake.

● The high lead levels in children primarily affect the central nervous system whereas in adults the effect is primarily on the peripheral nervous system.[106]

The importance of reducing human exposure to lead has been clearly recognized by public health officials. Less lead is now used in food cans than in the past, and public concerns over lead-base paints have helped to eliminate their use. EPA initially began limiting the amount of lead in gasoline because it attacks catalytic converters. Subsequently, EPA began monitoring the amount of lead-containing gasoline produced. A lead phasedown process was implemented in 1976, and by 1980, lead used in gasoline was reduced to 86,500 tons—less than one-third the amount used in 1970.[106] During this same time period, from 1976 to 1980, data from NHANES II showed a decline in the blood lead levels for the U.S. civilian noninstitutionalized population.[107]

To provide comparable data for the Hispanic population, blood lead determinations were performed for all HHANES participants by the Center for Environmental Health at the Centers for Disease Control. Quality control of the laboratory analysis included independent duplicate assessments within the same analytic run.

These laboratory determinations, as well as the interview data on place of residence (that is, whether urban or rural and size of place) can be used to relate the distribution of blood lead levels and the prevalence of abnormal levels to the individual's place of residence. Selected demographic, socioeconomic, and other health and nutritional data will provide data for statistical analysis.

Chapter 5
Sample design and estimation procedures

by Joe Fred Gonzalez, Jr., Trena M. Ezzati, Andrew A. White, Ph.D., James T. Massey, Ph.D., Josefina Lago, and Joseph Waksberg

Introduction

The general structure of the HHANES sample design was similar to that of the previous National Health and Nutrition Examination Surveys. All of these studies have used complex, multistage, stratified, clustered samples of defined populations. The major difference between HHANES and the previous surveys is that HHANES was a survey of three special subgroups of the population in selected areas of the United States rather than a national probability sample. The four stages of selection were primary sampling units or PSU's (counties or small groups of contiguous counties), segments (clusters of households), households, and eligible persons. This chapter describes the broad design specifications, the definition and construction of the universes of PSU's, the stratification and selection methods that were used at each stage of the design, and the basic framework for constructing estimates for the survey.

Design specifications

The planning phase and survey objectives for HHANES have been discussed in previous chapters. The survey specifications that directly affected the sample design were as follows:

- HHANES should be a probability sample survey whose target population consists of civilian noninstitutionalized "eligible" Hispanics; that is, Mexican-Americans in the Southwest; Puerto Ricans in the New York City area (defined as selected counties in New York, New Jersey, and Connecticut); and Cuban-Americans in Dade County (Miami), Fla.
- The eligible Hispanics 6 months–19 years of age and 45–74 years of age should be oversampled to improve the reliability of estimates of their health characteristics and nutritional status.
- The total sample size selected for HHANES should result in approximately 12,000 examined persons.
- An average of two to three sample persons should be selected from each sample household.
- The number of sample persons selected at each survey location within each PSU should be approximately equal.
- The data collection mechanism used for NHANES II should be used for HHANES, with appropriate modifications (as a result of different or new health and laboratory tests). At any time during the survey period, two of

the three medical examination centers should be operating in different locations while the third is being serviced or relocated.

- The total data collection period should be about 2½ years.
- The average length of an individual examination should be between 2 and 3 hours, with variations depending on the age of the examinee. The time required to examine a preschooler should be less than 1 hour, and the time for an adult should not exceed 2½ to 3 hours.
- Based on experience from previous surveys, the PSU's should be composed of single counties, or small groups of contiguous counties.

Definition of the universe and primary sampling units

Ideally, the target population for HHANES should be all households with at least one member of Hispanic origin. However, the United States includes States and counties with very small numbers or proportions of Hispanics. If sampled, the costs of screening enough households to locate a reasonable sample size in these areas would be quite high. Consequently, HHANES was restricted to those counties in the three target areas of the country that had a sufficient number or proportion of Hispanics to render it economically feasible to screen households and to operate an examination center over a 4- to 7-week time period.

Using 1980 Census data, counties from the three target survey areas were distributed into cells according to the percent and number of Hispanics in the respective county.[108] Counties were identified for inclusion in one of the three sampling frames if they satisfied any one of the four following criteria, based on a combination of the county's total number of Hispanics and the proportion of the total 1980 county population that was of Hispanic (Mexican, Puerto Rican, Cuban, and "other" Hispanic) origin:

1. The county Hispanic-origin population was greater than or equal to 30,000.
2. The county Hispanic-origin population was greater than or equal to 10,000 and less than 30,000, and it constituted at least 5 percent of the total county population.
3. The county Hispanic-origin population was greater than or equal to 5,000 and less than 10,000, and it constituted at least 10 percent of the total county population.

4. The county Hispanic-origin population was less than 5,000, and it constituted at least 15 percent of the total county population.

As a result of the above criteria, 229 counties were identified and grouped into 210 PSU's, each PSU defined as a single county or a small group of contiguous counties with a 1980 Hispanic population of at least 1,000. The HHANES Mexican-origin universe for the Southwest consisted of 193 PSU's (figure 2); the HHANES Puerto Rican-origin universe for the New York City area consisted of 16 PSU's (figure 3); and the HHANES Cuban-origin universe consisted of only 1 PSU, Dade County (Miami), Fla.

The HHANES Mexican-origin universe of first-stage units (193 PSU's) included about 84 percent of the 1980 Mexican-origin population in the United States and about 97 percent of the 1980 Mexican-origin population in the 5 southwestern States. As a means of reducing screening costs (the screening procedure will be described later), a small proportion—usually less than 10 percent—of the Mexican-origin population in low Hispanic density areas within each sample PSU was not covered. That is, those block groups (BG's) or enumeration

districts (ED's) as defined by the U.S. Bureau of the Census that did not contain a minimum number (between 50 and 100) of eligible Hispanics were excluded. A BG is a combination of numbered census blocks, a subdivision of census tracts, or a block numbering area as defined in areas for which there are block statistics. In areas where census blocks were not established, ED's—geographic areas containing approximately 300 housing units—were used. The count of eligible Hispanics within a given BG or ED was defined as the number of Mexican-origin persons plus a certain (PSU-specific) proportion of persons of "other Spanish" origin who were assumed to be of Mexican origin. (This is discussed in more detail in a later section of this chapter.) Hence, with the exclusion of the noncovered counties and the out-of-scope BG's and ED's, the net coverage rate of the 1980 Mexican-origin population in the five southwestern States was approximately 87 percent (.97 x .90).

The HHANES Cuban-origin universe, which consisted of only one PSU, Dade County (Miami), Fla., included about 57 percent of the 1980 Cuban-origin population of the United States and about 96 percent of the Cuban-origin

Legend:

Nonuniverse

PSU universe

Sample PSU's

Primary sampling units

Figure 2.   HHANES Mexican-origin universe

Figure 3. HHANES Puerto Rican-origin universe

population of Dade County itself after the exclusion of low Hispanic density BG's.[a]

The HHANES Puerto Rican-origin universe of first-stage units (16 PSU's) included about 59 percent of the 1980 Puerto Rican-origin population in the United States and about 90 percent of the Puerto Rican-origin population in the defined universe for the New York City area after the exclusion of BG's and ED's with low Hispanic density.

Even though HHANES was not designed as a national Hispanic survey, and no national estimates for Hispanics can be made, the three HHANES universes included approximately 76 percent of the 1980 Hispanic-origin population in the United States.

Because three separate universes were created, direct statistical inferences may be made for the Mexican-origin population residing in the defined universe for the five southwestern States, for the Puerto Rican-origin population residing in the defined universe for the New York City area, and for the Cuban-origin population residing in Dade County (Miami), Fla.

Stratification of primary sampling units

Stratification of units prior to sample selection is a technique that is widely used in scientific sampling. The goal of stratification is to reduce the variance of the survey estimates by forming strata that are composed of homogeneous units. For a multistage design, this can be accomplished in part by partitioning the universe of PSU's into optimally homogeneous strata. Based on sampling theory,[109] PSU's should be stratified according to the survey variables of interest; however, estimates of survey variables are generally

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[a]Because the official date of the 1980 Census was April 1, 1980, the Cubans who came to the United States in the period immediately following April 1 were not included in the 1980 Census count. It is generally believed that at the time of the survey most of them were in Dade County. As a result, the proportion of the Cuban-origin population in Dade County covered by the survey was probably greater than 96 percent.

unknown prior to the conduct of a particular survey. In addition, it is impossible to select a small subset of survey variables for stratification of a multipurpose survey designed to yield estimates of a large number of variables. Therefore, stratification is usually based on the sociodemographic characteristics that are believed to be correlated with the survey variables. The following discussion of stratification in HHANES is extracted from a paper by Gonzales and White, presented at the 1982 annual meeting of the American Statistical Association.[110]

The 1980 Census information for the Mexican-origin population in the southwestern PSU's was unavailable prior to stratification; therefore, information based on Hispanics of all origins was used for the stratification process. The characteristics of the PSU's in the five southwestern States that were used as stratification variables were:

1. Number of Hispanics.
2. Percent Hispanic.
3. Ratio of the 1980 to the 1970 Hispanic population.
4. Median income.
5. Percent urban.

For the New York City area component of HHANES, the corresponding stratification variables were in terms of the number of Puerto Ricans. Stratification was not required for the Miami-area component of HHANES because only one PSU, Dade County, was sampled.

A critical sample design requirement for HHANES was that each stratum in the Southwest be of approximately equal Hispanic population size, and that each New York City-area stratum consist of approximately equal Puerto Rican population size. This was a requirement because equal-size strata generally minimize sampling variances, at the same time permitting roughly the same number of sample interviews and examinations at each survey location. This requirement was satisfied by forming equal size strata (clusters), and then applying the same sampling fraction to each stratum.

The Statistical Analysis System (SAS) routine PROC CLUSTER, which is described in the SAS User's Guide,[111] was used to stratify the HHANES PSU's in the Southwest and the New York City area. The SAS PROC CLUSTER routine employs a hierarchical algorithm[112] to identify clusters of elements having similar attributes. There are various types of distance criteria to measure the closeness (similarity) between elements or clusters of elements. This SAS procedure used complete linkage as the distance criterion. Each PSU, which had five stratification characteristics, was treated as a multivariate element—that is, as a vector observation. Complete linkage measured the similarity between two clusters, that is, the largest pairwise distance between a vector observation in one cluster and a vector observation in the other cluster. One major drawback of the algorithm is its inability to impose constraints on the cluster sizes. Nevertheless, iterative application of the SAS procedure controlled the clustering process to yield strata of approximately equal size. The cluster analysis was performed separately for the Southwest and the New York City area universes.

As mentioned earlier, PSU's were characterized as vector observations in 5-dimensional vector space because there were five stratification variables. As a consequence of the form of distance measure used—Euclidean (linear)— the variables or elements of the vector observations with the largest absolute magnitude dominate the distance measure (for example, population totals versus percents or ratios). To resolve this inequitable contribution from each stratification variable to the distance measure, equalization was achieved by ranking on the same scale. This method also ensured that equal importance was assigned to each variable by transforming the vectors of observed PSU values to vectors of rank values.

Operational, cost, and time considerations, as well as desired precision of survey estimates, dictated that HHANES be conducted at 14 different locations (counties) in the Southwest, seven counties in the New York City area, and one in Florida (Dade County). Because one PSU per stratum was to be drawn, it was necessary to form 14 strata in the Southwest and seven strata in the New York City area.

Because of their sizable Hispanic populations, the counties of Los Angeles, Calif. and Bexar (San Antonio), Tex., were identified as self-representing (certainty) PSU's; that is, they were selected with probability equal to 1. In the New York City area, the counties of the Bronx, Kings, and New York, with their large numbers of Puerto Ricans, were identified as certainty PSU's.

After removing the certainty PSU's from the universe, each noncertainty stratum was successively identified and withdrawn from the universe without replacement. Then a new stratum cutoff size was computed by dividing the remaining Hispanic population in the universe by the number of strata yet to be formed. In practice, it was impossible to achieve exactly the same size for each stratum; therefore, a tolerance level of plus or minus 10 percent from the cutoff value was allowed for the noncertainty strata. Prior to invoking the SAS clustering algorithm on each successive run, the SAS PROC RANK routine was used to re-rank the raw variables of the remaining PSU's in the universe. The above procedures were repeated until all of the PSU's were stratified.

Part of the SAS PROC CLUSTER output included a cluster map. This map was vital for the formation of the strata (clusters) because it graphically illustrated the hierarchical path followed in producing the desired clusters. Figure 4 demonstrates a fictitious example of a cluster map. Each full column of asterisks on the map represents a PSU. Down the far left side of the map, the number of clusters appears for each hierarchical level of clustering. The uppermost row

Figure 4. Example of a cluster map

Number of clusters	PSU Hispanic population									
	N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8	N_9	N_{10}
10	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	****	*	
8	*	*	****	*	*	*	****	*	
7	*	*******	****	*	*	*	****	*	
6	*	*******	****	****	*	****	*	
5	*	*******	****	*******	****	*	
4	*** *******	****	*******	****	*	
3	*** *******	****	*** *******	
2	*** *** *** *******	*** *******	
1	*** *** *** *** *** *** *** *** ****	

NOTE: N_i ($i = 1,...,10$) denotes the Hispanic population of the ith PSU.

on the map shows the initial hierarchical level of clustering, in which each PSU's vector of ranks is treated as a single cluster. The lowest row on the map represents one cluster of all the PSU's remaining in the universe. As the cluster map is read downward and across, one can see how adjacent columns (PSU's) collapsed hierarchically to form clusters.

Candidate clusters were screened and the cluster that amalgamated the earliest (that is, had smallest distance measures or was "closest" together) and achieved plus or minus 10 percent of the current stratum cutoff size was selected. If all of the constrained clusters had populations that were too large, the subcluster that formed first within the size constraint was selected as a stratum.

Selection of primary sampling units

As previously mentioned, for the Miami area, Dade County was the only PSU selected; and for the New York City area, one PSU per stratum was selected with probability proportional to size (PPS). The Southwest and the New York City area universes of PSU's were stratified according to the five demographic characteristics discussed earlier. Moreover, it was deemed desirable to maximize the probability that the proportion of sample PSU's in each of the five southwestern States would correspond to the proportion of the eligible population in each State. Therefore, during PSU selection for the Southwest, a slightly modified version of

a procedure introduced by Goodman and Kish[113] and summarized in Kish[114] was employed to obtain a balanced sample with respect to State while retaining a true probability sample design. A detailed description of this controlled selection process and its application to health examination surveys is given in other NCHS reports.[8,115]

The goal of controlled selection was to introduce controls beyond stratification into the sampling process. As applied in past health examination surveys, the first step involved defining a set of admissible patterns to ensure that sampling according to any pattern would result in the desired distribution of PSU's across the control classes. A pattern was ascertained admissible when, for each control class within the pattern, the number of PSU's was within 1 of the number expected if a sample of the same number of PSU's were to be drawn strictly at random from the universe with probabilities proportional to PSU size. The total set of patterns was formed such that the probability of selecting any given PSU in the universe was proportional to its population. Each pattern within the set was usually assigned a probability of selection based on the accumulated size of the sample PSU's within the pattern. The sum of the probabilities of selection over all patterns was held equal to 1. A pattern was then picked at random.

For the southwestern States, having State as the single control variable during selection allowed the procedure to

Table A. Primary sampling units, by number and percent Hispanic population and target number of sample persons: Hispanic Health and Nutrition Examination Survey, 1982–84

Primary sampling unit within survey area	Survey location	Total 1980 Hispanic population[1]	Percent Hispanic[2]	1980 Hispanic population in stratum[3]	Target number of sample persons
Southwest area					
All primary sampling units					10,000
Los Angeles, Calif.[4]	Los Angeles, Calif.	2,065,727	27.6	2,065,727	2,435
Bexar, Tex.[4]	San Antonio, Tex.	460,911	46.6	460,911	543
Harris, Tex.	Houston, Tex.	369,075	15.3	479,816	565
El Paso, Tex.	El Paso, Tex.	297,001	61.9	493,459	582
San Diego, Calif.	San Diego, Calif.	275,176	14.8	561,507	662
Cameron, Tex.	Harlingen, Tex.	161,632	77.1	532,890	628
Santa Clara, Calif.	San Jose, Calif.	226,611	17.5	425,610	502
Pima, Ariz.	Tucson, Ariz.	111,418	21.0	514,450	606
Contra Costa, Calif.	Concord, Calif.	55,977	8.5	457,644	539
Glasscock-Midland, Tex.	Midland, Tex.	12,699	15.1	545,812	643
Alameda, Calif.	Oakland, Calif.	129,962	11.8	489,476	577
Weld, Colo.	Greeley, Colo.	21,017	17.0	544,237	641
Quay, N.Mex.	Tucumcari, N.Mex.	3,753	35.5	454,839	536
Bee, Tex.	Beeville, Tex.	11,914	45.8	458,653	541
New York City area					
All primary sampling unit					3,913
Bronx, N.Y.[4]	Bronx, N.Y.	320,098	27.4	320,098	1,062
Kings, N.Y.[4]	Brooklyn, N.Y.	279,646	12.5	279,646	928
New York, N.Y.[4]	Manhattan, N.Y.	166,328	11.6	166,328	552
Fairfield, Conn.	Bridgeport, Conn.	29,527	3.7	101,796	338
Hudson, N.J.	North Bergen, N.J.	55,828	10.0	101,332	336
Nassau, N.Y.	Carle Place, N.Y.	13,984	1.1	108,817	361
Queens, N.Y.	Queens, N.Y.	83,425	4.4	101,206	336
Miami area					
Dade County, Fla.	Miami, Fla.	407,253	25.1	407,253	2,266

[1]For the New York City area this column represents the total 1980 Puerto Rican population and for the Miami area the total 1980 Cuban population
[2]For the New York City area this column represents the percent Puerto Rican population and for the Miami area the percent Cuban population
[3]For the New York City area this column represents the total 1980 Puerto Rican population in the stratum and for the Miami area the 1980 Cuban population in the stratum.
[4]Because of their large Hispanic populations, these counties were identified as self-representing, or certainty (probability equal to 1), PSU's.

be modified to some extent for simplicity. The goal was to preserve the representation of the five southwestern States, and at the same time to select the final sample of 14 PSU's (selecting one PSU per stratum) with probability proportional to their Hispanic population. Thus, for the Southwest, 100 equally probable patterns were defined so that each pattern detailed for each stratum which State (of those represented in the stratum) should contribute the single PSU to represent that stratum in a potential sample based on that pattern. These patterns were defined so that the number of patterns that would include any given PSU in a final sample was proportional to its Hispanic population.

The actual procedure used differed from the usual practice in Goodman and Kish's controlled selection[113] in that some of the 100 patterns were duplicates. As applied previously, patterns were not usually assigned equal probabilities, and indeed the duplicate patterns could have been collapsed and assigned proportionally higher selection probabilities. Nevertheless, by allowing duplicates, pattern construction was made somewhat more straightforward, and the same goal was accomplished. One of the 100 admissible patterns was then selected by simple random sampling. The State representation having thus been set for each stratum, the final PSU's were selected using PPS sampling from among the PSU's dictated by the selected pattern for each stratum. Table A shows the sample PSU's selected for the three phases of HHANES and the target number of sample persons for each PSU.

Selection of segments and households

The within-PSU sampling procedures were designed to achieve the target number of sample persons, as shown in table A, and to yield an approximate self-weighting sample of households such that every household would have about the same probability of selection. Within the PSU's selected at the first stage of sampling, the in-scope population consisted of all households and residents of group quarters (noninstitutional) containing one or more eligible Hispanics. Certain types of living quarters—institutions, Indian reservations, and military installations—were considered out of scope for the survey.

Further, block groups (BG's) and enumeration districts (ED's) with low eligible Hispanic density were excluded from each of the three universes to reduce the costs of the household screening procedures. The overall goal was to attain a minimum of 90-percent coverage of the eligible Hispanic population within each sample PSU, although this

Table B. Expected coverage of the eligible Hispanic population within the Southwest primary sampling units (PSU's): Hispanic Health and Nutrition Examination Survey, 1982–84

Southwest PSU's	Percent "other Spanish" included as eligible	Minimum number of eligible Hispanics per BG or ED[1]	Expected percent coverage	Percent BG's or Ed's in PSU excluded[1]
Los Angeles, Calif.	50	100	93.9	41
Bexar, Tex.	75	100	97.6	33
Harris, Tex.	40	100	89.1	65
El Paso, Tex.	80	100	99.2	9
San Diego, Calif.	70	90	90.0	46
Cameron, Tex.	75	100	98.7	20
Santa Clara, Calif.	60	100	90.1	55
Pima, Ariz.	75	100	90.5	47
Contra Costa, Calif.	75	50	85.7	52
Glasscock-Midland, Tex.	75	50	90.0	50
Alameda, Calif.	75	50	88.8	46
Weld, Colo.	100	90	89.8	51
Quay, N.Mex.	100	100	97.7	40
Bee, Tex.	100	100	99.0	18

[1]BG = block group; ED = enumeration district.

NOTE: For the purpose of estimating the expected coverage for HHANES in the Southwest, "eligible Hispanics" were classified as all Mexican-Americans and a proportion of "other Spanish" assumed to be "Hispanos," as estimated from 1970 Census data as shown in the first column.

Table C. Expected coverage of the eligible Hispanic population within the Dade County and New York City area primary sampling units (PSU's): Hispanic Health and Nutrition Examination Survey, 1982–84

Miami and New York City area PSU's	Minimum number of eligible Hispanics per BG or ED[1]	Expected percent coverage	Percent BG's or Ed's in PSU excluded[1]
Dade, Fla.	100 Cuban-Americans	96.2	49
Bronx, N.Y.	100 Puerto Ricans	96.4	34
Kings, N.Y.	50 Puerto Ricans	93.3	54
New York, N.Y.	100 Puerto Ricans	91.9	61
Queens, N.Y.	25 Puerto Ricans	90.0	50
Nassau, N.Y.	6 Puerto Ricans	90.0	6
Fairfield, Conn.	35 Puerto Ricans	90.0	80
Hudson, N.J.	80 Puerto Ricans	90.2	56

[1]BG = block groups; ED = enumeration district.

goal had to be slightly relaxed in a few PSU's. The minimum number of eligible Hispanics per BG or ED varied between 50 and 100 persons in the Southwest (table B), and between 6 and 100 persons in the New York City area (table C). In the Miami area, there was a minimum of about 100 eligible Hispanics per BG or ED (table C).

After eliminating BG's and ED's that were out of scope, the remaining BG's and ED's were sorted by two stratification variables: An economic index and Hispanic density. The economic index was based on contract rent in areas where rental housing dominated and on home value in areas of predominantly owned homes. More specifically, within each survey site, BG's and ED's were sorted in the following way:

- Primary Sort. Percent of population in BG or ED that was eligible Hispanic. Three groups—less than 30 percent, 30–59.9 percent, and 60 percent or more.
- Secondary Sort. Owner versus renter, classification based on which one was more than 50 percent of the occupied housing in the BG or ED.
- Final Sort. Alternating ascending and descending order of median value of home in owner areas and median rent in rental areas.

This sequencing sort automatically had the effect of stratification when a systematic sample of segments was selected.

The Secondary Sampling Units (SSU's) were "segments." In urban blocked areas, a segment was defined as a block or group of neighboring blocks (generally contiguous). In Quay, N. Mex., which was a nonblocked PSU, the selection of segments was a two-step process. ED's were selected first, and then segments were manually mapped and selected from the sampled ED's. The frame used for the sampling of blocks and ED's was the STF-1B tape from the 1980 Census. In order to determine a probability of selection for each segment within a PSU, a measure of size (MOS) was established for each segment based on these 1980 Census data. The MOS was calculated by multiplying the estimated number of eligible Hispanics in a segment by the age-specific household sampling rates. The MOS established for each segment in the Southwest and in the New York City area corresponded to the number of sample persons expected from the segment. It included only eligible Hispanics and was approximately equal to the sum of three-fourths of the estimated number of persons 6 months–19 years of age, plus one-half of those 20–44 years of age, plus all of those 45–74 years of age living in the segment. In the Miami area (Dade County), the MOS for each segment was approximately equal to the sum of all of those 6 months–19 years of age, plus two-thirds of those 20–44 years of age, plus all of those 45–74 years of age living in the segment.

The age-specific rates that were used to compute the MOS of segments were also used to select sample persons within sampled households (to be described in detail later). The age-specific sampling rates were established to ensure sufficient sample sizes in the desired estimation cells. These sampling rates were therefore used to compute the MOS of segments because they reflected the number of expected sample persons somewhat better than total population or total households, and thus provided greater control of segment size.

One of the sampling goals for HHANES was to design the within-PSU sampling procedures to yield a desired six sample households (approximately 18 sample persons) per segment. In order to achieve this goal it was necessary to inflate the target of 18 sample persons to a minimum of 27 sample persons per segment. Therefore, a minimum MOS of 27 was established. This minimum MOS included a sufficient number of households to achieve the target sample size and a reserve to allow for important changes in the age distributions or in the total population of the area since 1980. An MOS was calculated for each block and ED. If the block MOS was less than 27, the block was combined with as many of the subsequent blocks from the sorted list as necessary to reach the minimum of 27. However, the combinations were kept within a BG. If the combination of blocks reached the end of the BG without reaching 27, the combination was added to the immediately preceding block or blocks. The individual blocks, combinations of blocks, or area segments within ED's were the actual sampling units (segments).

In selecting the sample of segments, a skip interval was determined by dividing the total PSU measure of size by the number of segments required to yield the target number of sample persons for the PSU. Using a random start between 0 and the skip interval, a systematic sample of segments was selected with probability proportional to size (PPS). That is, the probability of selection depended on the MOS for each segment. After selecting the sample segments, households were listed within each segment. The sample was designed so that every household would have approximately the same probability of selection; therefore, a systematic sample of households was selected based upon the segment MOS. For example, if the segment MOS was 54, then a systematic sample of .5 (27 divided by 54) of the households within the segment was selected.

A modified Perkin's Stop Rule,[116] a sequential sampling procedure, was employed in order to achieve, as closely as possible, the target number of sample persons in each PSU. The maximum sample of households within each segment consisted of a basic sample of households plus several groups of reserve households. Each group of reserve households was a random subsample of households sampled within the segments selected in the PSU's. As the household sampling was being accomplished within a PSU, progress in connection with achievement of the target sample size was closely monitored. If it appeared that enumeration of sample persons within households was less than that predicted based on the MOS, reserve households were added to the basic sample in groups until the target sample was achieved. In certain PSU's, it was necessary to remove some households from the sample because of greater numbers of sample persons than anticipated. The households to be removed were randomly designated to reduce any potential biases resulting from the procedure.

Selection of sample persons

After the sample households had been identified, the composition of the household was determined by interviewers using the Household Screener Questionnaire (appendix XII). The main purpose of the screening interview was to identify eligible Hispanic families and to select sample persons from these families to be interviewed and examined. Beginning with a household reference person, who was the person or one of the persons who owned or rented the dwelling unit, the names of all household members were listed on the questionnaire, ordered by family. (For this survey, a "family" consisted of all household members who were related by blood, marriage, or adoption.) To ensure that the sample person selection procedure could be applied in a standardized manner, household members were listed in a prescribed order. Family 1 included the reference person and his or her spouse, followed by the remaining members of the reference person's family, listed according to age, from oldest to youngest. All other household members who were unrelated to the reference person were considered to be part of separate families. Within these secondary families, a similar order for listing members was followed; that is, family head, spouse, and other members in order of age.

For each individual household member, relationship to the reference person (or family head, in the case of secondary families within the household) was ascertained, and national origin or ancestry was obtained using a precoded list of categories. (See Household Screener Questionnaire and Flashcard S1 in appendix XII.) Eligibility for the survey was determined by family unit. A family was considered eligible if at least one family member's reported national origin or ancestry met the criteria for eligibility appropriate to the survey location. These criteria were as follows:

Survey location	National origin or ancestry
Southwestern PSU's	Mexican or Mexicano, Mexican-American Chicano, Hispano, Spanish-American or Spanish (when no other country of origin was mentioned)
New York, New Jersey, and Connecticut PSU's	Puerto Rican and Boricuan
Dade County, Fla., PSU	Cuban and Cuban-American

In cases of multiple origins reported for an individual, the person was considered eligible if any one of the reported origins met these criteria.

If a family was eligible for the survey, all members of that family were eligible to be selected for the extended interview and examination. To ensure sufficient sample size in desired estimation cells, sample persons were selected according to the sampling rates shown in figure 5. Each family member's age was obtained, and the interviewer classified each household member between the ages of 6 months and 74 years into one of three age categories: 6 months–19 years, 20–44 years, and 45–74 years. The particular sampling patterns to be used for selection of sample persons within the three age groups were indicated on each Household Screener Questionnaire before it was assigned to an interviewer.

Figure 5. Within-household sampling rates, by survey area and age: Hispanic Health and Nutrition Examination Survey, 1982–84

Survey area and age	Sampling rate
Southwest and New York City area	
6 months–19 years	3/4
20–44 years	1/2
45–74 years	1
Miami (Dade County)	
6 months–19 years	1
20–44 years	2/3
45–74 years	1

The hypothetical example in figure 6 illustrates how the sampling rates were applied in the Southwest. The information in figure 6 shows that there are two families in one household. In Family 1, two of the members are reported as being of non-Mexican descent; however, because at least one of the members is of Mexican descent, all of the members are eligible for the Southwestern phase of the survey. Family 2 in this household is not eligible. Amada and Rosa Perez are both classified as being of "Other Latin American" descent (category 9 on card S1), with "Nicaraguan" specified. Therefore, Family 2 is not considered eligible, and no sample persons would be selected from that family.

Patterns "B," "F," and "K" are specified on the sample person selection table for this household. For the eligible family of four, there are three adults (ages 47, 50, and 33) and one child (age 18). The number of persons in each of the three age groups is 1, 1, and 2, respectively. The sample person selection table indicates that pattern B is to be followed for the age category "6 months-19 years," requiring that the second, third, fourth, sixth (and so on) person listed in that age group be selected as a sample person. This means that Luis may not be selected as a sample person because he is the first person in that age group, and pattern B starts with the second person. Therefore, there is no sample person for that age group. In the sample person selection table for the age category 20–44 years, pattern F is circled. Pattern F requires that the first, second, fifth (and so on) person in the category 20–44 years of age be selected. Because Margaret is the first and only person in that age category, she is selected as a sample person. In the third and final category, persons 45–74 years, there is only one sampling pattern, and that is pattern K. The instruction for pattern K is to include all persons between the ages of 45 and 74 years. In the example, there are two persons within this age group, Mary and Juan, both of whom are sample persons.

(107) FAMILY #1

2a. NAME FIRST, MIDDLE, LAST (124)	2b. IF NOT COMPLETED ASK: What is —'s relationship to (REF. PERSON)? (125)	2c. HAND CARD S1. Please give me the number of the group or groups that represents —'s national origin or ancestry. (126)	2e. What is —'s date of birth? MO (128)	DAY (129)	YR (130)	2f. AGE: USE CHT. (131)	2g. MARK ONE 6 MOS.-19 YRS. (132)	20-44 YRS. (133)	45-74 YRS. (134)	2h. SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY) (135)	2i. NCHS # (101)
Mary Jimenez	REF PERSON	0	01 *Irish-American* 12	35	47			⊗			
Juan Jimenez	husband	2	12	05	31	50			⊗		
Margaret Osborn	niece	0	03 *Irish-American* 22	49	33	⊗					
Luis Jimenez	son	2	12	21	63	18	X				

2d. ELIGIBLE FAMILY? (127) 1 ☒ Yes (2e)   2 ☐ No (NEXT FAMILY OR Q.3)

(107) FAMILY #2

2a. NAME FIRST, MIDDLE, LAST (124)	2b. IF NOT COMPLETED ASK: What is —'s relationship to (HEAD)? (125)	2c. HAND CARD S1. Please give me the number of the group or groups that represents —'s national origin or ancestry. (126)	2e. What is —'s date of birth? MO (128)	DAY (129)	YR (130)	2f. AGE: USE CHT. (131)	2g. MARK ONE 6 MOS.-19 YRS. (132)	20-44 YRS. (133)	45-74 YRS. (134)	2h. SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY) (135)	2i. NCHS # (101)
Amada Perez	HEAD	9	Nicaraguan								
Rosa ——	daughter	9	Nicaraguan								

2d. ELIGIBLE FAMILY? (127) 1 ☐ Yes (2e)   2 ☒ No (NEXT FAMILY OR Q.3)

SAMPLE PERSON SELECTION TABLE

PERSONS 6 months – 19 years	PERSONS 20 years – 44 years	PERSONS 45 years – 74 years
A 1st, 2nd, 3rd, 5th, 6th, 7th, 9th, 10th, 11th	(F) 1st, 2nd, 5th, 6th, 9th, 10th	(K) All
(B) 2nd, 3rd 4th, 6th, 7th, 8th, 10th, 11th, 12th	G 3rd, 4th, 7th, 8th, 11th, 12th	
C 1st, 3rd, 4th, 5th, 7th, 8th, 9th, 11th, 12th	H 1st, 2nd, 4th, 5th, 7th, 8th, 10th, 11th	
D 1st, 2nd, 4th, 5th, 6th, 8th, 9th, 10th, 12th	I 2nd, 3rd, 5th, 6th, 8th, 9th, 11th, 12th	
E All	J 1st, 3rd, 4th, 6th, 7th, 9th, 10th, 12th	

Figure 6. Example of household composition table and sample person selection table used in the Hispanic Health and Nutrition Examination Survey, 1982–84

Estimation procedures

HHANES was designed so that estimates could be produced for the three separate target populations. The estimates were derived through a multistage estimation procedure that was designed to yield statistics that come close to minimizing the mean square errors of desired estimates. The procedure consisted of four basic components:

1. Inflation of sample person observations by the product of the reciprocals of the probabilities of selection at each stage of the design (PSU, segment, household and sample person).

2. Adjustment for nonresponse within homogeneous sociodemographic cells to reduce the potential bias attributable to nonresponse, under the assumption that within cells the characteristics of the respondents are similar to those of the nonrespondents.

3. Adjustment for noncoverage within the PSU to reduce the potential bias due to the exclusion of BG's and ED's with few Hispanic residents.

4. Poststratified ratio adjustment by age and sex to make the final sample estimates of the population correspond to Bureau of the Census estimates of the civilian noninstitutionalized target population.

Chapter 6
Informed consent, safety, and referral process

by Dale C. Hitchcock

Early in the development of the Hispanic Health and Nutrition Examination Survey (HHANES), the planners decided that the National Center for Health Statistics (NCHS) had an obligation to the sample persons to maximize the benefits of their participation. The need to fulfill this obligation stemmed in part from the public's growing sophistication, which has resulted in people wanting to know what personal benefits, if any, may be gained from participation in such surveys. The survey planners' obligation stemmed also from their growing awareness of the Hispanic population's low level of utilization of health care services, for whatever the reasons might be. As an example of the latter point, the examination phase of the survey was seen to be the first extensive physical examination that many participants in the survey had ever received. In addition, the various Hispanic advisory groups involved in the planning of the survey warned the planners that more had to be done in this survey in terms of benefits to the sample persons than in previous surveys if HHANES was to gain the widespread community support necessary for its success. Changing Federal regulations regarding informed consent procedures and human subject safety requirements also necessitated changes in many procedures that had been employed in earlier NHANES surveys.

This chapter discusses those procedural changes implemented in HHANES for the purpose of improving the benefit to the sample people, in the overall context of confidentiality, human subject safety, informed consent, and reporting of findings.

Confidentiality

As in all NCHS surveys, sample persons for HHANES were guaranteed that their participation would be kept confidential. In accordance with Section 308(d) of the Public Health Service Act, NCHS assured each respondent that the confidentiality of all responses to this survey would be maintained and that any information from questionnaires or other records that identified individuals would not be disclosed without securing prior written consent from the respondent. A discussion of the confidentiality regulations applying to NCHS programs is available.[117] Certain of these regulations are important to users of data collected by means of HHANES, particularly to those researchers wishing to use the public use data tapes generated from the survey. Obviously the names and addresses of sample persons are not included on these data tapes; nor are certain other identifying variables.

Furthermore, to reduce the risk of disclosing the identification of individuals, it is NCHS policy to withhold from data tapes information that identifies a survey location (primary sampling unit) populated by fewer than 100,000 persons. For users of HHANES data, this means that although NCHS will be able to provide aggregate statistics for highly populated counties such as Bexar County, Tex., similar information for less populated counties such as Bee County, Tex., cannot be provided.

Human subject safety and informed consent

Human subjects in research are also protected by the National Research Act, Public Law 93–348. Related requirements are listed in the Code of Federal Regulations, Title 45, Part 46. The purpose of the regulations is to safeguard both the rights and the welfare of subjects involved in human research. To assure compliance with these regulations, it was the responsibility of the sponsoring agency, NCHS, to convene an institutional review board (IRB). For HHANES, the IRB had two major responsibilities: (1) to assure that legally effective informed consent would be obtained from each sample person; and (2) to determine if there were any risks involved in participation in the survey, and if so, to certify that any risks to the subjects would be outweighed by the benefits. Balanced impartiality was a major consideration in the selection of members for the IRB. The members included experts in areas such as the delivery of health care and included both men and women, Hispanics and non-Hispanics.

Four examination components were identified for presentation to the IRB to be considered for human subject safety concerns. Presentations were made by NCHS staff and consultants to the IRB concerning the equipment and procedures used in the electrocardiogram, X-ray, tuberculin test, and ultrasound portions of the medical examination. In addition, questionnaires thought to cover potentially sensitive areas, such as reproductive history, alcohol consumption, mental health, and use of drugs, were reviewed. Although the members of the IRB were satisfied that the risk to a sample person participating in the survey appeared minimal, the consensus was that the proposed method of obtaining informed consent could be improved. Thus, the IRB initially voted to withhold certification until NCHS revised the necessary operational procedures.

Consequently, certain modifications were made to the informative materials developed to communicate the nature of the survey to the sample people, and new procedures were developed to obtain informed consent. The approved procedures used in HHANES were as follows. Each household falling into the screening sample was sent a letter briefly describing the survey and explaining that an interviewer would call on that family shortly. After administering the household questionnaires for an eligible family, the interviewer discussed the examination phase of the survey with each sample person and gave the family a brochure. This brochure was developed to convey the contents of the examination, the voluntary nature of participation in every phase of the survey, the purpose of the study, and the confidentiality with which any information collected would be treated. After the sample person had a chance to review the brochure and ask any questions, the interviewer presented him or her with the Consent to Examination and Request to Furnish Results form. Sample persons were asked to read and sign this form as an indication of their willingness to participate in the study. All sample persons 12 years of age or older were asked to sign the consent form. For children under 18 years old, the signature of the parent or guardian was also obtained. The consent forms used in HHANES are shown in appendix IX.

The consent form, which was available in both English and Spanish, discussed the research nature of the program, the content of the examination, and the length of time a sample person might expect to be in the examination center. The form also pointed out that slight discomfort might be experienced during certain procedures. The interviewer was instructed to allow ample time for the sample persons, their guardians, or representatives to read the material contained in the consent form. An effort was made to have the form signed in the home, but sample persons could, at their option, either bring the signed form with them when they came to the examination center, or have additional questions answered at the examination center before they signed. Upon completing the form, which also was used to secure permission to forward the results of the examination to the sample person's own physician or clinic, sample persons were given a copy. A signed consent form was required before the examination was given to any person.

Members of the IRB also felt that the survey placed a considerable time burden on the sample persons, and that NCHS should strive to see that participants were compensated for their time to the extent possible, particularly because the survey was designed as a research vehicle and could not offer treatment to the participants. In previous NHANES surveys, each sample person received remuneration in appreciation for participating in the examination; each person's travel expenses to the Mobile Examination Center were covered; child care arrangements were made; and results of the examination were forwarded to each sample person's physician or clinic. With these considerations as a foundation, NCHS staff developed new procedures designed primarily to ensure that the benefits that sample persons would obtain from their participation in the examination would, to the extent possible, have the maximum benefit to their personal health.

Report of findings

The new system required a thorough effort by NCHS outreach coordinators to provide opportunities for those sample persons who did not have a usual source of health care to choose a clinic or doctor's office to which reports of findings from their examination could be sent to ensure appropriate interpretations. The NCHS outreach coordinators contacted county health officials and other community sources in each area to obtain a list of clinics that were expected to be both acceptable and accessible to sample persons with no usual source of care; payment information was also included on this list. The same approach was used for sources of dental care.

Basically, there were three circumstances in which communication between NCHS and a sample person's source of health care were made, based on the severity of the findings. This discussion refers to each of these circumstances as "levels." Level I was used to identify those situations in which a medical emergency was discovered by a member of the HHANES examination team and verified by the staff physician, who further determined that the medical findings required immediate attention by a health care provider. An emergency medical kit was kept in each examination center so that emergency treatment could be given when absolutely necessary. However, the preferred manner of handling the medical emergencies was to contact local rescue squads, ambulance services, and hospital emergency rooms, the telephone numbers of which were kept posted in the examination center. A Level I contact with a health care provider on behalf of a sample person was rare.

A more frequent occurrence was a Level II contact. This occurred when the examination staff determined that there were major medical findings that could be expected to cause adverse effects within 30 days, and the findings had not been previously diagnosed, attended, manifested, or communicated to the examinee by his or her health care provider. When such a condition was identified upon review of the examination and questionnaire information, the staff physician explained his or her concern to the person and urged that an appointment with a medical care provider be made in the next 2 or 3 weeks. The physician checked to see that the sample person had indicated a health care provider on the consent form and then sent a letter to that provider indicating the findings from the examination and stating that the sample person had been advised to contact that doctor or clinic. The same procedure was used by the staff dentists. Positive ultrasonography results indicating gallstones required the physician to mail a special letter explaining why the test was done, indicating the findings, and reminding the provider that surgery for the removal of asymptomatic gallstones may not be necessary.

Level III contacts provided routine findings from the survey to the sample person's source of health care. As in previous NHES and NHANES programs, a report of findings was mailed to each sample person's health care provider upon the compilation of the data needed for this report. Where in the past only one letter was used to communicate findings, two letters were used in HHANES. (Examples of

the letters are in appendix X.) The first report contained the findings from the examination that were readily available and dependent only upon the staff and equipment in the examination center. These included findings from the physician's examination; some laboratory results, such as hematocrit, hemoglobin, cell counts and urinalysis; and copies of the chest X-rays and ECG tracings for sample persons receiving those tests. The report was designed to be similar to the laboratory report of findings obtained by physicians in private practice, with an explanation that the findings came from a screening examination and that no attempt was made by the staff physician to integrate the findings into a diagnosis.

Routine reports of dental findings were also mailed directly from the examination center to each sample person's source of dental care.

A second report of findings was sent after NCHS received the results of urine and blood analyses performed under contract by outside laboratories. Efforts were made in all laboratory contracts and interagency agreements to ensure that findings would be reported more quickly than had been possible in earlier NHANES programs. Abnormally high or low laboratory values were communicated as soon as possible by telephone to NCHS so that special communications could be made to the health care provider involved.

Chapter 7
Pilot testing

by Kurt R. Maurer and Dale C. Hitchcock

After the plans for the survey had been developed, thoughts and efforts turned to assessing the adequacy and feasibility of these plans. As in the previous examination surveys,[6,8] detailed pilot tests were planned; however, because of the cross-cultural nature of the Hispanic Health and Nutrition Examination Survey (HHANES), it was necessary to expand the pilot test format. In addition to the usual need to test and to refine questionnaire design and construction, examination procedures, sample design, and sample person selection procedures, emphasis had to be directed to testing the translation of the documents, the proposed outreach methodology, and the cultural acceptability of the various components and the survey as a whole.

To achieve these basic objectives, three communities, each predominantly composed of one of the target groups, were selected for pilot testing. The primary objective of the first two tests, held in the Bronx, N.Y. (September 28 through October 27, 1981, with 185 sample persons), and Miami, Fla. (November 16 through December 11, 1981, with 240 sample persons) was to evaluate the adequacy of the questionnaires in both English and Spanish. Were the concepts to be measured adequately conveyed to the sample person? Were the response categories appropriate? Were the terms well chosen with regard to the educational level of the population to be surveyed? Did the respondents have the information required to answer the questions, and would they be willing to give the interviewer the requested information? Which questions might be better asked in the Mobile Examination Center as they were too sensitive to ask in the household? It was necessary also to evaluate the Spanish translation to determine whether it was conceptually equivalent to the English and whether the single translation would be equally understandable to persons in each of the three groups to be included in the study; that is, Mexican-Americans, Cuban-Americans, and Puerto Ricans.

The third pilot test was held in El Paso, Texas, between January 4 and March 19, 1982, and included 462 sample persons. In addition to testing the questionnaires and translations, a physical examination was incorporated. This El Paso pilot study was the first attempt to test the procedures of the main survey under the then current plans.

In addition to questionnaire construction (and translation) and examination protocols, many other survey features needed to be developed and tested before the survey went into the "field." Sample design and sample person selection procedures were among these. Response rates are of perennial concern when typically about 25 percent of those selected for the survey do not participate in the examination. To keep response rates as high as possible, the survey design staff knew that trust and understanding must be engendered in the overall Hispanic community, in the local communities, and, most importantly, among those individuals selected for participation in the study. To encourage this trust and understanding, outreach procedures were developed, and staff was hired to implement these procedures. (See chapter 8 for a description of the outreach efforts.) These activities, part of a public affairs initiative, were also tested in each of the pilot studies.

Three methods were available for reviewing the pilot tests: Observation, forms review, and debriefings. It was known that traditional observation of interviews would be difficult because many of the NCHS staff members were not bilingual or bicultural. Hence, it was decided that allowing staff members to observe interviews would be unwise because of the effect that they might have on the rapport between the bilingual and bicultural interviewers and the sample persons. However, the few bilingual NCHS staff members, along with several of the contractors' supervisory staff, were involved in observing as many interviews as was practical. With this somewhat limited opportunity for observation of interviews, added emphasis was given to interviewer debriefing and forms review for the identification of sample selection and questionnaire design problems. In the El Paso pilot test, where attention turned primarily to evaluating the examination procedures, sample persons were observed (with discretion) undergoing the examination. Many of the survey design staff also underwent the examination. The number of persons being examined daily was kept low in the beginning to allow the operations staff to become more experienced with the new protocols and to allow adequate time to resolve equipment problems and deficiencies in the protocols. As a result, debriefing of the staff was a constant, intensive process throughout the pilot test. The survey design staff reviewed many of the examination forms for evidence of recording errors, inconsistencies, and lack of adherence to procedures. Weekly staff meetings were held to give the operations staff opportunities to air their concerns and problems. The design staff then could review these problems and discuss potential solutions with the operations staff.

After the three pilot studies were completed, a period of 2 months was allocated to complete re-evaluation of the survey procedures and materials. With such ambitious plans for pilot testing, the need for systematic approaches to the

analysis of the testing results became apparent. The results of each pilot test, including observations, forms review, and debriefing, were compiled in rather extensive internal evaluation reports. These reports served as a means of communicating among the many people working on the survey as well as those in policymaking positions at NCHS. Because the evaluation reports included results, problems, and proposed solutions, they also served as a means of focusing the attention of the staff and those in policymaking positions to bring about better solutions.

Following the review of the pilot test results and subsequent revisions, the procedures and materials were subjected to a final test. This last test, referred to as the "dress rehearsal," was mounted in San Antonio, Texas (July 9-August 7, 1982, including 384 sample persons). By that time, the survey was thought to be ready and final preparations had been made. The intent of the dress rehearsal was not so much to evaluate the procedures that had already been extensively tested; rather, it was an opportunity to refine these procedures and to attain more experience and proficiency in administering the survey before initiating actual data collection. In addition, in the San Antonio dress rehearsal, the quality control and data processing systems that had been developed were tested. Following the completion of the dress rehearsal, a few minor changes were made, and the survey was finally ready. However, some minor modifications were made in the survey data collection forms and procedures as late as the eighth location to be surveyed.

Survey Operation

Chapter 8
Data collection

by David L. Larson, Jean S. Findlay, John E. Mounts, and
Sandra S. Smith

Introduction

The provision of standardized data is a major goal in
the planning and operation of a health survey such as the
Hispanic Health and Nutrition Examination Survey
(HHANES). The objective of standardization of data collection
is the production of data of uniform quality throughout the
entire survey period, from person to person and location
to location. This requires standardization of the setting and
equipment as well as of the individual procedures. In
HHANES, as in the previous National Health and Nutrition
Examination Surveys, a standardized setting was provided
by the use of mobile examination centers housed in trailers
that traveled from site to site. Detailed protocols were de-
veloped for each data collection technique; frequent extensive
training and retraining and a wide variety of quality control
measures (discussed in chapter 9) were instituted to ensure
the standardization of the survey procedures and equipment.

For the first time in a HANES, NCHS contracted with
a private company (Westat, Inc.) to provide members of
the field team and to assume responsibility for several aspects
of the data collection, including many of the day-to-day
functions of the field offices and examination centers. At
the same time, NCHS field staff, including supervisors and
technical personnel, as well as the headquarters staff, actively
participated in the data collection and monitoring of the
contractor's work.

This chapter contains a description of the operation of
HHANES, focusing primarily on the logistics of running
this complex survey. The operation at each survey location
involved a number of different activities, which are outlined
in figure 7. Preliminary activities included selection of a
primary sampling unit or PSU (see chapter 5 for a description
of the sample design and selection), scheduling of the survey
at the selected location, establishing community contacts to
publicize the survey, and selection and preparation of the
specific sites for the setup of the examination center and
the field office, where all survey operations were coordinated
and documented. The data collection phase at each survey
location consisted of two main components: the household

interview (which encompassed identification of the sample
and the administration of several questionnaires) and the
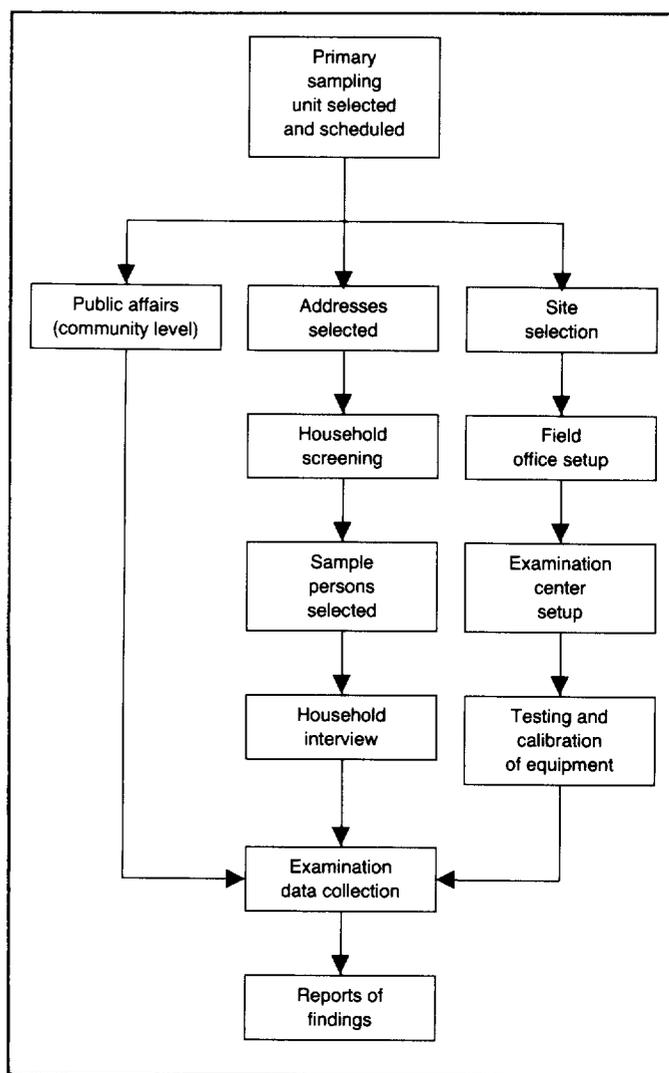examination.

Figure 7. Flow chart of activities at a survey location

Sequencing and scheduling of survey locations

The HHANES was conducted over a 2½ year period, from July 1982 until December 1984. During that time, data were collected in 31 survey locations. The locations were sequenced depending on several logistic considerations: Avoiding the North in the winter months and the South in the summer, surveying migrant workers when residing in their wintertime homes, and increasing operating and cost efficiency. The planners decided to survey the Mexican-American population first because it was the largest of the three Hispanic groups being studied. Previous experience showed that it would take about 18 months to survey the 10,000 sample persons representing this population. The plan for the Southwest was to start in Texas, move west through Colorado, New Mexico, and Arizona, and complete the region by moving through California from south to north. Following the close of the Southwest phase in December 1983 the survey moved to Dade County, Fla., for 14 weeks. Data collection then progressed to the New York City area, beginning in May 1984 and ending in December 1984.

In the Southwest each survey location had a target sample size of between 536 and 662 sample persons. There were 17 locations: six in Texas, one in Colorado, one in Arizona, one in New Mexico, and eight in California, all combining to form the Mexican-American part of the survey. For maximum operating and cost efficiency, the locations were paired so that travel time between the paired locations operating concurrently was reduced to a minimum. The pairs then were placed in such a pattern that travel time between the sets of pairs was as short as possible. Because operationally the optimum number of sample persons per location was approximately 500, the Dade County, Fla., PSU was split arbitrarily into four sites of 566 sample persons each, all operating from the same field office, so movement of the examination centers was not necessary. For the Puerto Rican part of the survey, the seven PSU's were divided into nine sites, seven in New York, one in New Jersey, and one in Connecticut.

To assign estimated dates for the various activities related to the operation of a survey location, it was necessary to consider the time required to move trailers and personnel between the locations; to do household screening and interviewing; to set up the examination center, including calibration and testing of all equipment and procedures; to conduct examinations; and to allow for staff vacation time. Estimates for these times were developed using NCHS past experience, the contractor's experience, and the projected ratio for each location of eligible households to households screened.

Public affairs

As mentioned in chapter 1, an Outreach Task Force was formed to evaluate the special conditions that would surround and influence a survey of Hispanics. Recognizing that major cultural and language barriers existed in the Hispanic communities, the task force articulated some concepts and approaches for the development of an outreach plan intended to promote participation in HHANES. To interpret and carry out the guidelines provided by the Outreach Task Force, a HHANES Public Affairs Task Force was established. The Public Affairs Task Force designed, developed, implemented, and coordinated a public affairs initiative, which was an integral part of the survey operations. The objectives of the public affairs effort were to inform national and local audiences about the survey, to help overcome cultural barriers, to elicit community support and cooperation, and thereby to increase survey response by those selected to participate in the survey. This public affairs initiative was designed to encompass national, regional, and local approaches, and to use both community and media contacts. At the national and regional levels the objective was to inform target audiences (national and local Hispanic groups, health and other professional organizations, data users, decision makers, and the general public) of the purpose, usefulness, and projected outcome of the survey. At the local level the objectives focused on increasing community acceptance of the survey as well as on increasing participation.

The HHANES opened in San Antonio, Tex., in July 1982 with a major briefing for the media, government officials, and representatives from major national Hispanic and health organizations. Other major national briefings and presentations were given at various points during the survey to announce general entry into another area of the country. These events, which usually involved the news media and Hispanic health, political, educational, religious, civic, business, and grass roots community organizations, were geared toward providing validity to and recognition of the presence of the survey in the region; toward informing the general public of the survey's purpose, location, and schedule in an area; and toward soliciting general support from regional, State, and local officials, Hispanic organizations, and the public. In addition to the initial briefing in San Antonio, regional briefings were held in Los Angeles and San Jose, Calif.; in Miami, Fla.; and in New York City.

Prior to beginning survey operations in each new location, advance visits were made to the survey areas to inform officials and Hispanic leaders of the schedule, to solicit their support, to develop a list of key contacts and organizations, and to determine the area's unique characteristics and any specific problems or needs. Such visits were also made to inform leaders and the general public about the purpose, scope, procedures, and eventual outcome of the survey.

In addition to the briefings and community contacts, a wide range of promotional materials was developed to explain both to the target Hispanic audiences and to the general public the purposes and operation of the survey. This effort also was designed to generate acceptance of the survey in general and cooperation with interviewers and medical staff in the examination trailers at each site. Many of these promotional materials, produced in both English and Spanish, were designed for use throughout the survey in all locations. Other special materials were developed to fit the requirements of each community. For example, Fernando Valenzuela, pitcher for the Los Angeles Dodgers baseball

team, was featured in a television public service announcement (PSA) and posters used in the Southwest. Luis Oquendo and Velia Martinez, members of the cast of the Public Broadcasting Service series, "Qué Pasa, USA?", and Miami television host Rolando Barral, were used in radio PSA's in the Miami area, and Oquendo and Martinez also were used in posters. Actress Rita Moreno was featured in radio PSA's, posters, and a letter of endorsement used in the New York City area. Special fliers, news releases, and other printed materials were generated for local use in each location. A question and answer sheet covering commonly asked questions about the survey was prepared for staff use.

Household interviewing

Data collection in HHANES began with a household interview. Before the opening of the examination center in a survey location, and continuing during its operation, the sample persons were identified, detailed questionnaires were administered, and appointments were made for the examination. The sample person selection and the assignment of particular questionnaires and examination components for each sample person depended on the age at the time of the screening interview. The elapsed time between the interview and the examination appointment was quite variable, with a number of sample persons having a birthday during that period. Because the examination was administered according to the age at interview, it is important for users of the data to be aware of the lag time; the date of interview, date of examination, and date of birth are all available for each examined person.

Interviewing staff

Hired by Westat and its subcontractor, Development Associates, the household interviewing staff consisted of about 25 bilingual persons, most of whom were also bicultural and of the background appropriate to the area being surveyed. Within a data collection phase, the corps of interviewers remained fairly constant. In the Southwest, for example, it seemed more efficient to have the interviewers travel from location to location rather than to attempt to hire and train a new group of interviewers every few months. Not only did this save time and money, but because the interviewers naturally became increasingly proficient as time went on, they were more effective at convincing sample persons of the importance of the health examination. In addition to the main household interviewers, special screening interviewers were hired in some areas that had a small proportion of Hispanics relative to the out-of-scope population. These interviewers were not necessarily bilingual because much of their time had to be spent identifying and "screening out" non-Hispanic residents of the survey area. When an eligible household was found, one of the regular interviewers was sent back to complete the household interview.

Before the opening of each of the three major HHANES phases, and occasionally at other times when new interviewers were hired, Westat conducted week-long interviewer training sessions. These sessions, which were often observed and monitored by NCHS design staff, consisted of lectures, films illustrating listing procedures and interviewing techniques, mock interviews, written exercises, and practice interviews with materials prepared in advance by the trainers. In the first few days following training, new interviewers were often observed conducting household interviews, and their work was checked closely. Retraining was provided at any time throughout the survey that it became necessary.

The household interview

In the household interview, several questionnaires were administered in order to screen the household for eligibility and to obtain the necessary demographic and health information from selected sample persons. The questionnaires used in the household were as follows:

- *The Household Screener Questionnaire*, administered once at each selected address, for determining household composition and eligibility and for selecting sample persons.
- *The Family Questionnaire*, administered once for each family containing sample persons, which included sections on family relationships, basic demographic information, Medicare and health insurance coverage, participation in income assistance programs, and housing characteristics.
- *The Child Sample Person Questionnaire*, for sample persons 6 months through 11 years of age, which included sections on a number of health status issues, health care utilization, infant feeding practices, participation in meal programs, school attendance, and language use.
- *The Adult Sample Person Questionnaire*, for sample persons 12–74 years of age, which included sections on health status measures, health services utilization, meal program participation, and acculturation level. (Samples of the actual questionnaires are contained in appendix XII.)

An important concept in the household interview phase was that of "eligible respondent," which varied depending on the specific questionnaire being administered. Household composition, ethnicity, and age of household members could be reported by any knowledgeable household member who was at least 18 years old *or* who had been married. Since a household might contain more than one family, an eligible respondent for the Family Questionnaire was a member of that family who was at least 18 years old and who lived in the household. (If there was no family member 18 years old or older, the head of the family or any member who had ever been married was acceptable as the respondent.) For the sample person questionnaires, in which detailed personal information was obtained for each sample person, the respondent rules varied according to age. Persons at least 18 years old had to respond for themselves, unless they were physically or mentally unable to be interviewed. For sample persons 12–17 years of age, either self- or proxy-response was acceptable. For sample persons under the age of 12, proxy respondents were required, except for a few questions addressed directly to children 6–11 years of age. An acceptable proxy respondent was a family member at least 18 years of age, preferably a parent or guardian of the sample person.
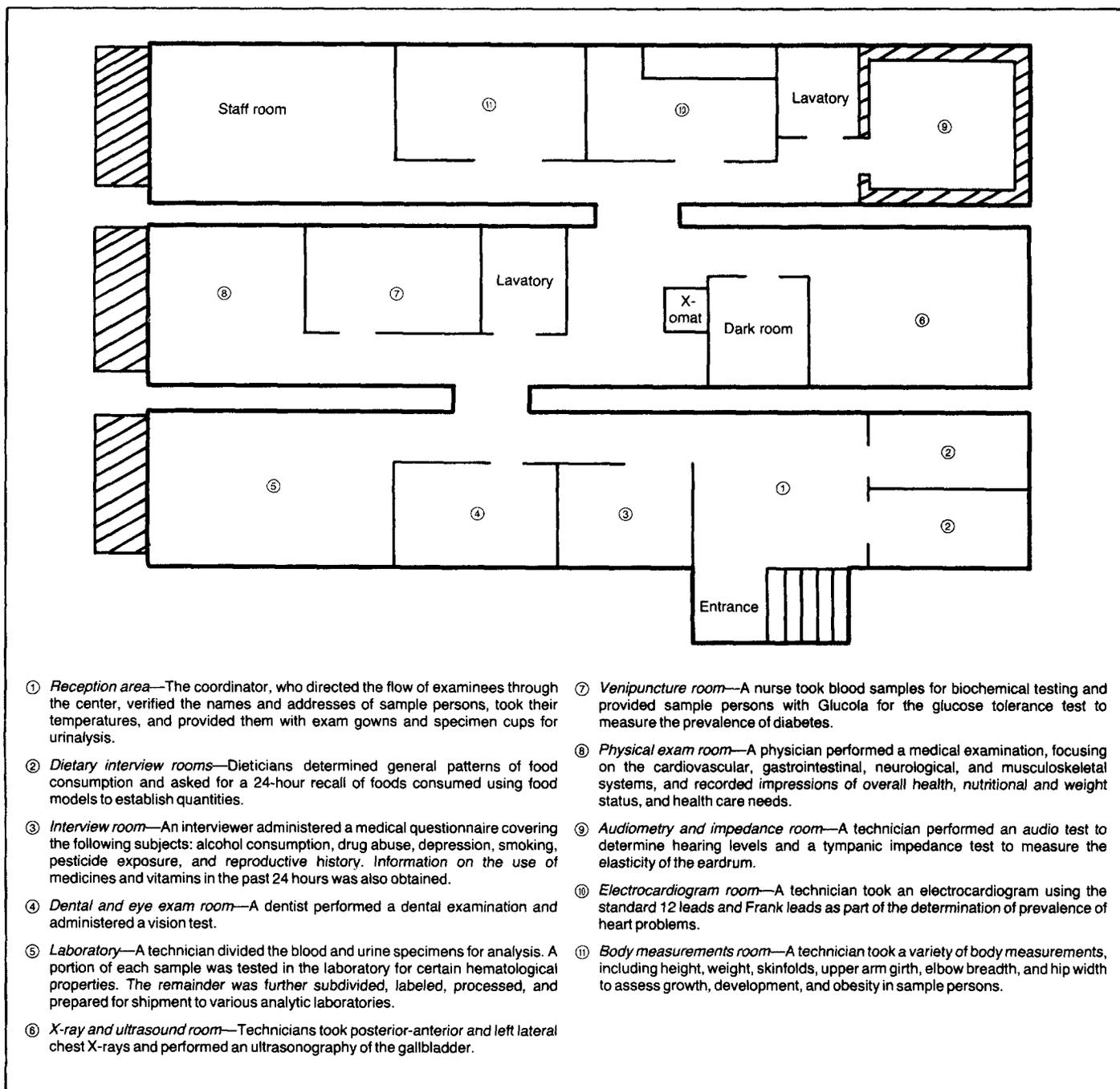
① *Reception area*—The coordinator, who directed the flow of examinees through the center, verified the names and addresses of sample persons, took their temperatures, and provided them with exam gowns and specimen cups for urinalysis.

② *Dietary interview rooms*—Dieticians determined general patterns of food consumption and asked for a 24-hour recall of foods consumed using food models to establish quantities.

③ *Interview room*—An interviewer administered a medical questionnaire covering the following subjects: alcohol consumption, drug abuse, depression, smoking, pesticide exposure, and reproductive history. Information on the use of medicines and vitamins in the past 24 hours was also obtained.

④ *Dental and eye exam room*—A dentist performed a dental examination and administered a vision test.

⑤ *Laboratory*—A technician divided the blood and urine specimens for analysis. A portion of each sample was tested in the laboratory for certain hematological properties. The remainder was further subdivided, labeled, processed, and prepared for shipment to various analytic laboratories.

⑥ *X-ray and ultrasound room*—Technicians took posterior-anterior and left lateral chest X-rays and performed an ultrasonography of the gallbladder.

⑦ *Venipuncture room*—A nurse took blood samples for biochemical testing and provided sample persons with Glucola for the glucose tolerance test to measure the prevalence of diabetes.

⑧ *Physical exam room*—A physician performed a medical examination, focusing on the cardiovascular, gastrointestinal, neurological, and musculoskeletal systems, and recorded impressions of overall health, nutritional and weight status, and health care needs.

⑨ *Audiometry and impedance room*—A technician performed an audio test to determine hearing levels and a tympanic impedance test to measure the elasticity of the eardrum.

⑩ *Electrocardiogram room*—A technician took an electrocardiogram using the standard 12 leads and Frank leads as part of the determination of prevalence of heart problems.

⑪ *Body measurements room*—A technician took a variety of body measurements, including height, weight, skinfolds, upper arm girth, elbow breadth, and hip width to assess growth, development, and obesity in sample persons.

Figure 8.   Floor plan and functions of the mobile examination center

In the initial contact with a selected household, the interviewer determined "eligibility," that is, whether any household members were of the Hispanic background appropriate to the survey location (Mexican-American in the Southwest, Cuban-American in Dade County, or Puerto Rican in the New York City area). If, after three attempts, the interviewer was unable to talk with a household member, information on household composition and ethnic origin of the household members was obtained from at least two neighbors so that the eligibility of the nonrespondent household could be determined.

If one or more eligible families lived in the household, a preselected sampling pattern was followed to choose specific family members to participate in the extended interview and examination. The interviewer then explained the survey and administered the sample person questionnaires and the Family Questionnaire. Then, the interviewer called the field office to make an appointment for each sample person to have the examination. At that time, a six-digit sample number was assigned according to the sample person's age and whether or not the sample person was in the fasting or nonfasting sample. An examination appointment was then scheduled at the sample person's convenience; the major restriction on appointment scheduling was that persons in the fasting half-sample, who were designated to receive the glucose tolerance test and gallbladder ultrasound examination, had to be scheduled in the morning since the glucose tolerance test required an overnight fast of 10 to 16 hours. (Persons

in the fasting group who were unable to make a morning appointment were given the ultrasound examination in the afternoon or evening if they had fasted at least 6 hours, but the glucose tolerance test was only given in the morning.) Before leaving the household, the interviewer informed the sample persons that each would be given $20.00 as a token of appreciation after receiving the examination, as well as either taxi fare or mileage costs of driving to and from the examination center. Then the interviewer obtained from the sample persons written consent to be examined and to allow NCHS to release the examination findings to a physician or clinic of their choosing (specified on the consent form).

After the interviewer completed all aspects of the household interview, the field office was responsible for continuing contact with the sample persons. One week before the scheduled examination, a reminder letter was sent. Included in this letter were any special instructions, such as a reminder to bring glasses for the eye examination, and, for those in the fasting group, a reminder not to eat the morning of the examination. Two days before the scheduled examination, a person from the field office contacted the sample person by telephone or, if the household had no telephone, by personal visit as an additional reminder. If an appointment was cancelled or the sample person failed to appear for the scheduled appointment, the contractor staff made further efforts to persuade the person to come. An immediate attempt to contact the person was made in order to emphasize the importance of the individual's participation, and followup contacts were continued until another appointment was made, or it became abundantly clear that the sample person wished never to hear about the survey again.

The examination

The examination center

As mentioned earlier, examinations were conducted in mobile examination centers. These facilities consisted of sets of three trailers arranged side by side with connecting passageways. As in the previous NHANES, there were three complete examination centers, two operating simultaneously and the third in transit. The use of the examination centers provided a standardized setting for all the examination components in all of the survey areas. Figure 8 contains a diagram and description of the floor plan and functions of the examination center. The layout and flow of the examination centers were similar to those in NHANES II, although the facilities had to be renovated to accommodate the examination components new for HHANES.

The design of the examination center and the characteristics of the equipment used for data collection in HHANES were determined according to several criteria:

- Could off-the-shelf equipment be operated reliably in the mobile examination centers without extensive modification?
- Could the equipment be calibrated?
- Could the staff be taught to operate the equipment so that the results were accurate and reproducible?

- Could the equipment fit into the available space?
- Could the equipment produce data that would be accepted by the scientific community?
- Could the equipment be maintained?

Occasionally equipment had to be designed and crafted especially for HHANES. This was done only if the test was essential to the survey, and the mobile examination center environment would not permit the standard method to be used or the equipment normally used in a clinical setting was unable to provide reliable statistical data for survey purposes.

Logistics

The movement of the field personnel, equipment, and supplies from location to location or from headquarters to field was a task quite often taken for granted, but one that required a great deal of effort. As mentioned earlier, the schedule for each survey location was developed taking into consideration the time required to set up the trailers and ship the supplies. The trailer travel time was absorbed in the schedule because, with three trailer systems and only two examination teams, one set of trailers was always available to "leap-frog" to a future location while examinations were still being conducted at another site. To complicate the moving schedules, twice a year the two examination teams were mixed up to try to prevent them from developing what is known as "drift in technique," a phenomenon that often happens during long surveys such as HHANES.

The supplies had to be sent to each location before examination center setup. The supply system was based on accurate inventories produced at the close of each survey location and sent to the headquarters. Many of the supplies were shipped directly from the individual suppliers to each site, but the rest were sent from headquarters stock. The decision as to what would be stored by headquarters was based on the availability and shelf life of the item and on any shipping hazards. The Centers for Disease Control shipped supplies that needed special clearances or that were related to the laboratory quality control program. All shipping arrangements were made well in advance of the time the trailers and staff arrived at the new location.

Before examinations started at a survey location, the field office and examination center had to be set up. The office setup process started with advance arrangements, including securing contracts for the office space, furniture, and telephones. The examination center was set up in two steps. The first step, usually requiring 1 day unless there were complications, included the parking and leveling of the trailers, the deployment of the passageways to form the examination center, and the connection of the electrical and plumbing systems. The second step consisted of unpacking and setting up the equipment and instruments, calibrating them, unpacking the supplies, and testing the equipment and procedures during a practice examination session.

Examination staff

Selecting, hiring, training, and keeping personnel for any project is difficult; staffing for HHANES was especially

difficult because of the requirement that many staff be bilingual, the constraints of holding medical examinations in trailers, and the requirement that staff be on continuous travel status.

Because examinations were always being conducted in two examination centers simultaneously, there were two complete examination teams, each of which included both government and contractor employees. The positions of medical doctor, dentist, dietary interviewer, and interviewer were filled by the contractor since they necessitated a great deal of communication with sample persons and, therefore, required fluency in both Spanish and English. Members of the NCHS examination staff included health and laboratory technicians, nurses, examination coordinators, and dietary coordinators. After the staff members were hired, they were trained by expert consultants in each of the data collection areas. These training sessions were held before the pretests, before the dress rehearsal, and after the survey started. During the survey, each consultant visited the examination sites in the field at least four times a year to monitor the data quality and to retrain if necessary.

Examination center operation

At the examination center the staff was prepared to examine 20 sample persons per day, 5 days a week, ordinarily Tuesday through Saturday. There were two examination sessions per day, held during the morning, afternoon, or evening for the convenience of the sample persons. Occasionally it was necessary to hold Sunday sessions. The examination required about 2 to 3½ hours, depending on the ages and the number of persons being examined at a session.

At the examination center, a coordinator directed examinees through the various examination procedures according to a flow system. The purposes of the flow system were to keep to a minimum the time examinees were in the examination center and to use examination staff efficiently. Because the time required for the various exam components varied and because all examinees did not receive the same components, the flow system had to be flexible and dependent on which examiner was available and which examinee had been waiting the longest. Another consideration was the possible interaction between examination components. Since the glucose challenge (Glucola) could have an effect on the urinalysis, electrocardiogram (ECG), and gallbladder ultrasound results, a urine specimen was collected and the ECG and ultrasound procedures were done before the glucose tolerance test was begun. Descriptions of the various tests and examination procedures are contained in other chapters of this report.

Under certain circumstances (described in chapter 6), major medical findings expected to lead to complications within 1 month of the examination were immediately forwarded to the physician specified by the affected sample person. In general, though, results of the various examination components were sent to each examinee's physician about 4 weeks after the close of a survey location.

Chapter 9
Quality control

by Jean S. Findlay and Trena M. Ezzati

Introduction

Two sources of error may enter into survey data collection activities. The first type is sampling error, the error that occurs because data were collected from only a sample of the total population of interest. The other source is nonsampling error, the error that arises at various stages of the data collection from such sources as measurement and recording errors in the examination and errors in the interview attributable to interviewer mistakes, recall problems, poor questionnaire design, or problems with the translations. This chapter describes the various HHANES data collection procedures with respect to their potential sources of error and the steps taken to reduce that error. The procedures for measuring nonsampling error are also described so that data users may have a basic overview of its effect on the survey results.

Quality control of the sampling procedures and process

Sampling error arises at all stages of sampling, from selection of the primary sampling units (PSU's) to identification of individual sample persons. Errors in the sampling process can result in noncoverage or incorrect coverage of persons and places. The ability to use survey data to describe the universe population (that is, Mexican-Americans in selected areas of the Southwest, Cuban-Americans in Miami, and Puerto Ricans in the New York City area) depends on controlling or adjusting for errors in the sample design or selection process.

Primary sampling unit selection

Although there were rules by which the primary sampling units (PSU's) were defined and stratified (see chapter 5 for a description of the sample design), some of the procedures were subjective; however, because these decisions were made before sample selection, there was no bias in the selection process. The stratification was reviewed to detect any grossly incorrect procedure, and, to ensure that no PSU was included in more than one stratum or omitted entirely, the stratum populations were totaled and compared with the total published counts for the States. There was no formal quality control procedure in relation to the selection of the sample PSU's. However, various verification checks were made to ensure that the procedures were performed correctly.

Household listing

The quality of the household listing process was checked in three ways. First, household interviewers checked for structures completely missed as well as for missing dwelling units within buildings that had had at least one dwelling unit already listed. The interviewers did these checks on a subsample of the addresses. Any new dwelling units found were added to the sample in such a way that the probabilities of selection of the dwelling units were known. Second, a supervisor replicated each lister's work just after training was completed and compared the two listings. If the lister's work was acceptable, more work was assigned. Third, the supervisor accompanied each lister at least once during the field listing period at each survey location to observe and provide instruction if necessary.

Sample selection

Selection of the survey sample was accomplished in two steps. The first was to screen listed households to identify the eligible households, those containing at least one member who belonged to the Hispanic group eligible in the area being studied. The second step was to draw a sample of the members of those families containing at least one eligible Hispanic. This final stage of sample selection, which was done by applying predetermined probabilities based on age to each family member, resulted in the selection of persons to receive the extended interview and examination. (A discussion of within-household sample selection is contained in chapter 5.) The screening and sample selection procedures were verified at several points. In the field, two supervisors independently verified that all households and families had been correctly categorized as eligible or ineligible and also ensured that the within-household sampling pattern had been applied correctly. Any errors found were corrected before the survey location closed so all identified sample persons had the chance to be examined. After the close of a location, the Household Screener Questionnaires from households with sample persons were checked during data processing a third time for correct sampling procedure. Likewise, the questionnaires from nonsampled households were checked for errors. Adjustments to the sample were made as required.

Quality control of nonsampling error

Response rates and efforts to reduce nonresponse

One type of error occurring in perhaps all surveys, especially those in which participation is voluntary, is that due to nonresponse. If there is a large proportion of nonrespondents whose characteristics differ from the respondents with respect to the measurements being made, the ability to generalize from survey data may be compromised just as if persons were erroneously left out of the sample. The potential effect of any nonresponse bias is greater when response rates are low. Therefore, a major effort was made in HHANES, as in all previous NCHS health examination surveys, to reduce the magnitude of nonresponse.

Even though the full effect of nonresponse bias never can be really known, rough estimates of bias can be made for an interview and examination survey such as HHANES by comparing household interview data from sample persons who were examined with interview data from those who were not examined. Because the interview response rate is substantially higher than the examination response rate, nonresponse bias with respect to selected health characteristics may be estimated from the large amount of medical history data available on nonexamined sample persons.

The following is an illustration of how bias due to nonresponse can be evaluated, using estimated data from the Southwest phase of HHANES. Of the total sample, 100 percent of the households were successfully screened and classified as eligible or ineligible based on ethnic origin. For approximately 90 percent of the sample persons selected from the eligible households, information on demographic characteristics, including educational level, occupation, and income, was collected. Approximately 85 percent of the sample persons completed the Sample Person Questionnaire containing the medical history information. Finally, about 75 percent of the sample persons in the Southwest received the examination. Since the examination is the most important analytic component of any HANES, a survey "respondent" was one who completed the examination as well as all interview components. A "nonrespondent," then, was a sample person who was not examined, regardless of whether or not any interview data had been obtained. The 25 percent of the sample persons who did not complete the examination can be divided into three groups:

1. Those for whom medical and demographic interview data were collected.
2. Those for whom demographic information only is available.
3. Those about whom nothing is known.

A comparison of the interview data from these first two groups and the examined group may provide some understanding of the extent of bias due to nonresponse to the examination. The group for whom no data are available accounts for roughly 10 percent of the original sample and remains a potential source of unmeasurable error. It is possible that these persons differ substantially from those who were located and agreed to participate. The issues of nonresponse

bias[118-120] and factors related to participation [120-125] in health examination surveys are discussed in several reports.

Before the start of data collection at a survey location, efforts were made to inform the selected community of the purpose and methods of HHANES in order to gain general acceptance of the survey and to increase response (this public affairs program is discussed in Chapter 8). However, because a considerable loss of respondents occurs between the interview and examination phases of data collection, most efforts at increasing response to HHANES were directed at making the examination experience more appealing. Some methods used in HHANES included adapting the schedule of examining sessions to suit the needs of each particular locality; scheduling examination appointments at the convenience of the sample persons; scheduling whole families together for the examination; using bilingual, mostly Hispanic interviewers and exam staff members; printing the questionnaires in both Spanish and English; locating the examination centers in convenient and socially acceptable places; providing free transportation to and from the examination center; providing for baby sitting; obtaining permission from the schools for student examinees to miss classes; sending the examination results to the examinee's personal health care provider; and giving each examined person $20 as a token of appreciation. Also, an extensive follow-up system was used to help sway sample persons who refused the examination or broke their appointments.

Two adaptations to the traditional HANES sample design were made primarily to improve response rates. The number of sample persons selected per family was increased over what it had been in past surveys, and the geographic size of the PSU's was again reduced (as it was in NHANES II) so the travel distance between the segments and the examination center was as short as possible.

Quality control of household interviews

Assuring the quality of the household interview data was a long, thorough process. First, the efforts of many people combined to develop and pretest the questionnaires in both Spanish and English and to ensure that the two versions were equivalent. Precise definitions of questionnaire terms were written and incorporated into detailed instruction manuals. Then, to administer the household interview, the HHANES contractor recruited and hired interviewers who were not only fluent in both Spanish and English but who were for the most part of the specific Hispanic cultural heritage eligible for selection in the area where the survey was being conducted at the time. Before the interviewers went into the field, they went through an intensive training program specific to the survey and its questionnaires. Later retraining sessions were conducted as necessary.

Verification of completed questionnaires with respondents is a procedure often used in interview surveys to be sure the questionnaires have not been falsified. For HHANES, however, a verification procedure for completed questionnaires was not used because all interviewed sample persons either were given the examination or were contacted again after the initial interview as a followup to a broken examination appointment or a refusal. The expectation was that during

the examination or the followup contacts, any falsification of the questionnaires would be discovered. Therefore, since the only cases that seemed subject to falsification were those classified as either vacant or not dwelling units, 10 percent of those cases were verified to assure the validity of the sample. If anyone discovered that an interviewer had falsified questionnaires, the interviewer was immediately removed from the job, and all work done by this person was verified or redone to the extent necessary to assure the validity of the data.

One of the most direct methods of monitoring used in all NCHS health examination surveys is observation of the interviews by NCHS and contractor staff. In HHANES, however, the amount of interview observation was somewhat limited by the scarcity of bilingual staff. Still, observation of the household interviews helped identify a number of problems that would have otherwise remained undetected.

Field edits were a very important part of quality control. Interviewer supervisors edited completely the first 25 questionnaires done by each interviewer. If these were satisfactory, then key item edits were substituted for complete edits until the supervisor was convinced that the interviewer's work was of consistent, high quality. But, if the complete edits indicated the interviewer's work did not meet standards, the supervisor worked with the interviewer to help improve the quality of that person's work. Then if the complete edits showed the work had improved sufficiently, only key item edits were done for a period of time. However, if unable to meet the standards of quality required, the interviewer was released.

Also, throughout the survey NCHS field staff edited all questionnaires completely and informed the interviewer supervisors of any error patterns existing so interviewers could be corrected. Whenever possible NCHS field personnel sent each questionnaire containing errors to the mobile examination center on the day of the sample person's examination so the correct information could be retrieved directly from the examinee. Members of the NCHS and contractor's headquarters staff also made frequent field visits to edit forms. These processes led to the discovery of problems, either interviewer errors or questionnaire deficiencies, that needed attention.

Quality control of the examination

Quality control of the health examination had the two goals of reducing systematic and random measurement error for each examination component and of quantifying what error remained wherever possible. Among the quality control measures that applied to the examination taken as a whole were the standardized environment provided by the three identical sets of mobile examination centers, detailed written instructions available for all procedures, specialized training of examiners before they collected data, periodic retraining of examiners to reduce the "drift" in technique inherent in long surveys, formal transmittal procedures to account for and to send the data from the field to the processing center, documentation of any unusual occurrences that may have affected the data, review of all examination forms before examinees left the examination center, and a practice examina-

tion session conducted on nonstudy persons the day before regular examinations began at each location to be sure all the equipment and staff were functioning properly.

Other elements of the field quality control program applied individually to the various components of the examination. For example, the technicians calibrated the equipment and instruments used for ultrasonography, electrocardiography (ECG), audiometry, tympanometry, X-rays, body measurements, and the laboratory procedures. These calibrations were done at various intervals depending on the instrument, some as often as before each examination, others once per survey location, weekly, daily, or twice daily. The survey also employed a biomedical engineer whose responsibility it was to ensure that the equipment always functioned at the high-performance levels required.

For the two examination components that were actually interviews, the Dietary Questionnaire and the Adult Sample Person Supplement, the dietary coordinator at each location edited a sample of each interviewer's work and discussed the results of the edits with the interviewer, pointing out any problems revealed.

As with the household interview component of HHANES, observation of the data collection was an important quality control measure. Various staff persons from both NCHS and the contractor periodically visited the field to observe specific components of the examination. For many of the examination components, expert consultants visited the field at least four times a year to observe the procedures under their respective jurisdictions. Following a visit, the consultant's findings were discussed with the appropriate examiner, who was retrained in the proper technique if necessary. The examinations for which this quality control procedure was used were the physician's and dental examinations, the vision test, audiometry, tympanometry, body measurements, ultrasonography, and the laboratory procedures. A variation on this was to tape record interviews that could not be easily observed, such as the dietary interview. For these the consultant listened to the tapes to verify that the interviews were being conducted properly and retrained the interviewers if necessary. For all these examination components the consultants' written reports documented the quality of the data gathered at the times of the observations.

Certain examination components, such as ECG, tympanometry, X-rays, and ultrasonography, yielded hard documents. The films and tracings produced by these components had to meet a number of standards of quality to be acceptable. If they did not meet the standards according to the technicians' self-evaluation, the technicians repeated them. The supervisory and chief technicians regularly evaluated the films and tracings and retrained the technicians when necessary. Furthermore, the ECG's were recorded not only on paper as tracings but also on tapes that were analyzed by computer. Any abnormal ECG's detected by the computer were read by experts to ensure that the computer diagnoses were correct or to adjust them if necessary.

For two examination components, assistants recorded the findings on the examination form in order to free the hands of the examiner to do the procedure. This process was used

to reduce the chance of recording error for body measurements and the dental examination. Because the recorder for body measurements was one of the health technicians, the examiner's measurement technique was checked as the measurements were recorded.

Another quality control measure used for audiometry and body measurements was the comparison over time of the mean or median measurements taken by the health technicians at each location. If any abnormal variability appeared, the supervisory technician and the appropriate consultant checked the measurement techniques and corrected the technicians when warranted.

Replicate data

Even though many methods were used to keep measurement error to a minimum, some degree of measurement error may be left in the data. Therefore, another objective of the quality control program was to determine the extent of this error. To do this, the survey collected replicate data, either by rereading hard documents produced by the procedures, such as X-rays, ECG's, and photographs of height measurements, or by repeating procedures exactly as they had been done originally. The scope and frequency of collection of replicate data varied greatly. For example, on the one hand, the technicians replicated readings for hematocrit and hemoglobin as often as on every examinee. On the other hand, complete replicate examinations (except for X-rays) were performed on a small sample of examinees who volunteered to participate a second time. The purposes of the different sets of replicate data varied as well. Many replicates were done to enable supervisors or consultants to monitor the quality of the data regularly, so problems could be detected and corrective measures taken before quality was adversely affected. Other replicates were collected for use at the end of the survey to describe the measurement error contained in certain sets of data.

The group of examinees who would receive a second complete examination consisted of volunteers rather than a statistical subsample of examinees because the nonresponse problems associated with a statistical subsample would have been enormous. The possible bias resulting from the use of a nonstatistical sample was not of prime importance because the main interest was not with the values of the measurements themselves but rather with the errors in the measurements. In addition to quantifying measurement errors, the complete replicates would allow the assessment of real intraindividual variation over a 2- to 3-week period. This real variation can be of great concern also, especially for such data collection techniques as the body measurements.

During the first few weeks at a survey location most sample persons were asked after their examinations if they were willing to return 2 to 3 weeks later for a second full examination. Generally, about 12 volunteers at each survey location were scheduled for re-examination. Whenever possible, the components of the replicate examination were done by an examiner other than the one who did the original. Operationally, there were problems getting the desired number of complete replicate examinations, often because few examinees volunteered, even fewer showed up, or the examination slots were needed for original examinations.

Although the full-scale replicate examinations were the single most ambitious undertaking of replicate data gathering in HHANES, other replicate measurements were periodically performed for the purposes of monitoring and evaluating inter- and intra-examiner variability. For example, replicate data were gathered by consultants or supervisors designated as "standards" who went to the field periodically and replicated such examination components as the dental examination, vision test, blood pressure, and body measurements. These replicates were mainly used as a basis for monitoring the measurement process and retraining the examiners in the proper techniques if necessary. Additionally, for body measurements and ultrasonography, intertechnician replicates were regularly collected, providing at the end of the survey a large pool of replicate data from which to describe the measurement error in these two examination components.

Sometimes, instead of replicating a procedure, an expert reread the hard document produced by the procedure. This was done for ultrasonography, tympanometry, X-rays, and body measurements. For instance, to evaluate the readability of the ultrasound films and to evaluate the technicians' determinations of normal or abnormal gallbladder, a sample of films was sent to the Johns Hopkins University to be independently evaluated by two expert radiologists. The sample consisted of all films of abnormal gallbladders and of about 10 percent of the films of normal gallbladders. Any disagreements between the evaluations of the two experts were reconciled by a third radiologist from the National Institutes of Health. After comparing the diagnoses of the experts with those of the technicians, analysts produced measures of agreement. Also, for much of HHANES, the technicians recorded each ultrasound examination on videotape. Then experts evaluated these tapes for correct procedures and diagnoses.

Two procedures were used for the quality control of the tympanometry. All abnormal tracings were reread by an expert from the National Institutes of Health, and corrections to the data were made when indicated. In addition, in order to assess the quality of the tympanograms and the extent of measurement error, a sample of 10 percent of all of the tracings was reread so that the expert's independent evaluation of the findings could be compared with the technicians' determination of normal or abnormal impedance.

As mentioned earlier, a recorder entered the body measurement values as the technician took the measurements. As a safeguard against recording error in the essential measurements of standing height and weight, extra quality control devices were implemented. For body weight, the scale automatically printed the weight in kilograms on the body measurement recording form. For height, the technician took an instant photograph of the height scale setting for each standing height measurement and read the measurement to be recorded from the photograph, not directly from the scale. The camera was perpendicular to the height scale so that the picture taken of the measurement was devoid of any parallax that might have occurred if technicians of different heights had read the measurements directly from the scale. Then later,

all the height photographs and weight printouts were compared with the hand-recorded entries on the forms. The data were corrected when recording errors were found.

For the X-ray examination component, two experts independently interpreted all the posterior-anterior and lateral chest X-rays. They later discussed their findings and resolved any differences between interpretations. Both the individual and combined findings were available to analysts of the X-ray data.

Quality control of laboratory processing

Various laboratory assessments were made in the mobile examination center laboratory the same day the blood and urine specimens were obtained; numerous other tests were performed under contract by outside laboratories. Different systems were developed to monitor the quality of both levels of analysis.

Mobile examination center laboratory

A significant amount of instrument quality control took place in the analysis of examinees' blood samples; for example, control specimens were used to check the Coulter Cell Counter daily. As discussed earlier, the various instruments were also checked and calibrated at the beginning of each survey location, and preventive maintenance was performed as scheduled with results recorded in an instrument log book. The laboratory technicians did all hematocrit and hemoglobin determinations in duplicate. In order to assure quality in hematology, each technician participated in the Centers for Disease Control Proficiency Testing Program at least 4 times a year.

The Clini-Tek instrument used for urinalysis automatically read the reagent strips. Therefore, variability in lighting, visual acuity and color matching, and technician timing and technique, was virtually eliminated. In addition, the machine automatically recalibrated itself, thus removing the need for calibration by the laboratory technicians. Instrument performance checks were produced daily and proficiency testing was done 4 times a year.

Contract laboratories

At the practice examination session for each location, the technicians split the blood drawn from examinees and sent pairs of tubes to the various laboratories performing HHANES laboratory analyses. Each split duplicate was sent to the laboratory in the same shipment with the original but with a different identifying number.

In addition to the blind-split duplicates, the various laboratories participating in HHANES routinely performed their own replicate and quality control determinations. Whenever differences larger than predetermined tolerances occurred, the analyses were repeated. Generally two types of quality control systems were used by the chemical laboratories: "bench" quality control pools inserted by the analyst in each analytical run to monitor the day-to-day analysis, and "blind" quality control samples placed in vials, labeled, and processed so as to be indistinguishable from regular HHANES samples.

Quality control of the data processing

Another major survey operation, that of data processing, included the data input, editing, and imputation procedures. Processing of the data was an integral part of the HHANES operation. Quality control of the data processing began from the time the data collection forms were received at the NCHS data processing center in Research Triangle Park (RTP), North Carolina, and continued through the data editing process. Although a thorough discussion of this process is presented in chapter 10, a brief description of the HHANES data processing program and the associated quality control measures is presented below.

In HHANES, as in previous DHES surveys, some data, such as ECG's, were recorded directly on magnetic tape for immediate computer use. Other data, such as X-rays, ultrasonograms, tympanograms, height photos, and weight printouts, were recorded in the form of hard documents. But the majority of HHANES data were collected by interviewers and examiners checking boxes and making written entries with numbers or words in appropriate spaces on standard forms, thus requiring computer processing of the data collected.

The objectives of the HHANES data processing program were to detect and correct field collection errors, control the processing operation, and provide data, ready for analysis, in a timely fashion. Although clerical edits to detect missing and inconsistent data were performed in the field, the actual processing of data began after the data collection forms arrived at RTP. There the processing started with an accounting of all the interview and examination forms for each survey participant. One quality control measure was implemented to make it easier to catch errors in the recording of the basic five-digit number assigned to each sample person. During the final stage of sample selection, a single computer-generated check digit was added to the sample number. Then, during data processing, if a computer edit found that the check digit disagreed with the sample number on a particular record, the record was rejected and either the sample number or the check digit corrected. After all identification numbers and basic demographic variables were verified, the majority of the interview and examination data collection forms were then subjected to clerical edits of some nature to determine whether or not the forms had been properly completed and to correct as many errors as possible. Following the completion of the clerical editing, the records were keyed with 100-percent verification. Computer edits were then performed for each field on each form, and a computer printout was produced for all records containing inconsistencies. The corrected records were edited again, and this process continued until there were no edit failures. Frequency counts for the various data sets were produced and the results sent to DHES for review. Finally a structure check was completed for each sampled household to determine inconsistencies between forms. After RTP made the data tapes available to DHES for processing, internal quality control tabulations were generated and evaluated. One facet of this internal quality control was the comparison of means, medians, and percentiles for

various examination data with those from previous HANES programs or with other data published in the literature. In addition, the laboratory data were monitored for trends which might indicate internal laboratory drift, or problems with the laboratory quality control or methodology.

Chapter 10
Data processing

by Sandra T. Rothwell and Marie Leahy

The data processing portion of the Hispanic Health and Nutrition Examination Survey (HHANES) operation was a large and critical element. Through this system, field-collected data in the form of questionnaires, examination forms, laboratory reports, X-rays, and electrocardiogram recordings were translated into machine-readable electronic information suitable for analysis. This chapter presents an overview of several aspects of the data processing of these various types of data, including the flow of data from the field to NCHS, preliminary editing and coding, quality control of coding and keyboarding, and substantive review and re-editing of the data.

Flow of data

As described in previous chapters of this report, a number of different types of data were collected by means of HHANES. The four basic data collection categories, each of which involved a distinct system for collecting and preparing the data, were questionnaires and examination forms, X-rays, electrocardiogram recordings, and blood and urine specimens for biochemical analysis. A brief description of the flow of each data type, from collection through editing and transmittal of data to NCHS for processing, follows.

Questionnaires and examination forms

Questionnaires that were administered in the household were collected and logged-in at the field office each day, where they were edited for omissions and other errors. The Sample Person Questionnaires (containing the medical history information) for those who scheduled examination appointments were sent to the examination center; thus, any missing information could be collected, and the physician could refer to the medical history information during the examination. Following the examination, these questionnaires were returned to the field office, where they were combined with the other household questionnaires and prepared for transmittal to the NCHS data processing center. The Dietary Questionnaire and the Adult Sample Person Supplement, which were administered in the examination center, were edited in the field office and then boxed for shipment with the other questionnaires. Examination forms remained in the

examination center until they were edited and prepared for shipment. Transmittal of all of the questionnaires and examination forms occurred in stages throughout each survey location, but, in general, all materials pertaining to an individual sample person were transmitted at the same time.

X-rays

During the examination, two chest X-rays were produced for diagnosis of various cardiovascular, lung, and chest conditions and for measurement of heart size. Two sets of copies of the X-rays were made, one of which was included in the routine reports of findings sent to each sample person's physician. The second set was analyzed under contract by two radiologists who interpreted the X-rays independently, compared their findings and resolved any differences in interpretation. The results then were keyed to tape and sent to NCHS for further processing.

Electrocardiogram recordings

In the examination center, electrocardiographic signals were digitized and recorded on cassette tape. The cassette tapes then were copied to 9-track tape and sent to Dalhousie University in Nova Scotia for measurement and interpretation of the recordings. The electrocardiogram findings were keyed to tape and sent to NCHS. A separate list of persons with abnormal findings also was sent to ensure the inclusion of the information in the physician's report of findings.

Laboratory data

Blood and urine specimens were collected and subjected to an extensive battery of analyses, some of which were performed by laboratory technicians in the examination center; others were analyzed under contract by various laboratories. The diagram in figure 9 is a simplified flow diagram of the laboratory data production process, showing the various paths followed for different types of specimens or analyses.

Detailed information on tests performed, descriptions of applicable subgroups, and a list of responsible contract laboratories are included in appendixes V-VII.
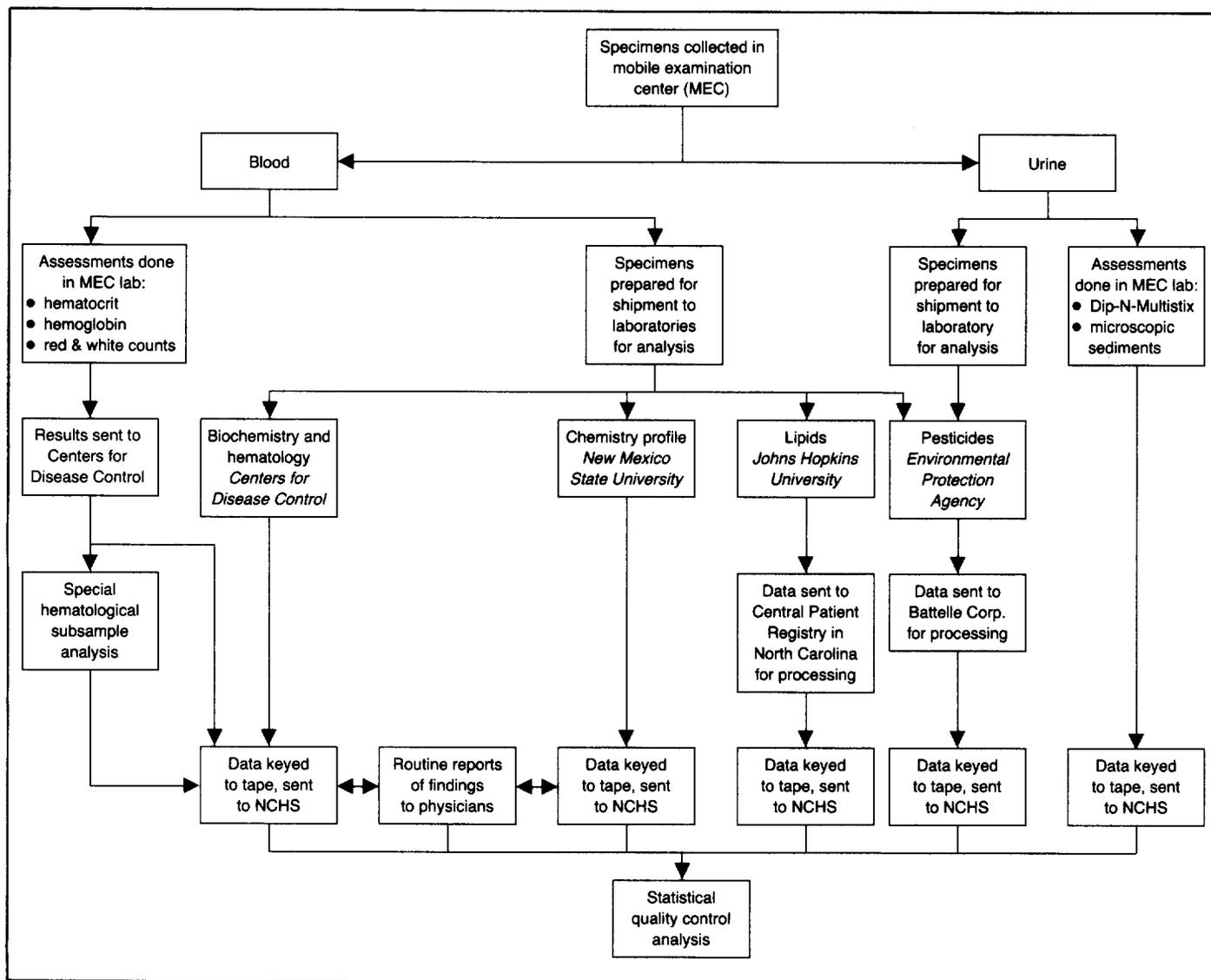
Specimens collected in mobile examination center (MEC)

Blood

Urine

Assessments done in MEC lab:
● hematocrit
● hemoglobin
● red & white counts

Specimens prepared for shipment to laboratories for analysis

Specimens prepared for shipment to laboratory for analysis

Assessments done in MEC lab:
● Dip-N-Multistix
● microscopic sediments

Results sent to Centers for Disease Control

Biochemistry and hematology
Centers for Disease Control

Chemistry profile
New Mexico State University

Lipids
Johns Hopkins University

Pesticides
Environmental Protection Agency

Special hematological subsample analysis

Data sent to Central Patient Registry in North Carolina for processing

Data sent to Battelle Corp. for processing

Data keyed to tape, sent to NCHS

Routine reports of findings to physicians

Data keyed to tape, sent to NCHS

Data keyed to tape, sent to NCHS

Data keyed to tape, sent to NCHS

Data keyed to tape, sent to NCHS

Statistical quality control analysis

Figure 9. Summary of laboratory data flow

Preparation of preliminary data tapes

Most of the data processing performed by NCHS involved the preparation of interview and examination data. Unlike the other types of data previously discussed, which were sent to NCHS in the form of data tapes, the questionnaires and examination forms contained handwritten entries that required several preliminary steps before the final data tapes could be produced.

Forms accounting

The first step in the system was to account for all the forms received from the field offices. Included in this initial step was the validation of critical data fields—age, sex, and identification number. Reports on interview and examination status and response rates were generated based on this process of forms accounting.

Clerical editing and keyboarding

After all accounting was completed for a survey location, each questionnaire and examination form was read by a clerical editor. This system provided a means of detecting before data entry any instances in which the data on the forms appeared to be inconsistent. It was preferable to correct these situations early in the cycle rather than to keyboard obviously incorrect information that inevitably would be rejected. In addition, the clerical editor looked for the types of items that cannot be checked easily with a computer. For instance, the editor would read comments written in the margins of the collection form or review the comments in residual categories. Such otherwise unusable information frequently enabled manual backcoding into the specified precoded categories; in other instances, it facilitated interpretation of unclear entries. The clerical editors also

checked for skip pattern errors, read most of the check items on the forms, looked at a few consistency problems (although most of these were left to the computer edits), and completed the industry and occupation coding according to U.S. Bureau of the Census coding specifications.

All of the clerical editing was performed twice, both to verify the editing and to check the validity of the industry and occupation codes. A record was kept of all clerical editing errors and decisions for purposes of continued monitoring and training of the clerical staff.

Keying and verification occurred after clerical edits were completed. For HHANES, cluster type key-to-disk data entry equipment was used because it was capable of handling large data entry jobs, could be programmed to perform some tests of validity and consistency, allowed data entry operators to change jobs with ease, and was equipped with communications for the submission of jobs. In addition to being programmed to detect range and validity errors on individual fields, the data entry formats also controlled most of the skip patterns so that in many cases it was virtually impossible to enter data that should have been skipped. These functions provided an additional level of verification of entries and clerical editing.

All data were keyed twice. This 100-percent verification not only ensured the best possible quality in the data conversion, but also obviated the need for another subsystem for sample quality control.

Review and re-editing of data

The final step in production of data tapes ready for release to the public included re-editing and statistical quality control analysis. Substantive editing of the interview and examination data was accomplished in several stages. Edit programs for each data set were designed to check for proper format, range, and basic internal consistency. After these edits had been run, preliminary tabulations were reviewed by statisticians, analysts, and subject matter experts for editing accuracy, completeness, and adherence to interview and examination protocol. This review, as well as a statistical analysis of the data to compare means, medians, and distributions of some of the laboratory and examination findings with data from earlier HANES and other sources, revealed occasional deficiencies in the edit specifications or programs and problems in the data collection. Reviewers' recommendations in some cases resulted in changes in data collection or laboratory analysis procedures.

As a result of this review stage, numerous additional within- or across-form consistency edits were incorporated. All data were again read by the revised edit programs, with records containing inconsistent entries rejected and verified by comparing keyed values with the entries on the original data collection forms. The cycle of editing, rejecting, reviewing, and correcting errors was repeated until it was determined that no additional corrections could be made. In many cases, apparently inconsistent or unlikely values were left unchanged on the data tapes if they had been coded and keyed correctly and could not be reconciled with other available data. Depending on the particular data collection document or the specific health topic involved, missing values were sometimes imputed. All imputed values have been flagged on the data tapes so that researchers can distinguish between reported data and imputed data. This entire process of editing and imputing resulted in data tapes that were essentially "clean" and ready for analysis.

Survey Analysis

Chapter 11
Approaches for the analysis of data

by Mary Grace Kovar, Dr.P.H.

Introduction to the problem

The sample design and estimation procedures that were described in chapter 5 mean that special procedures should be used to analyze data from the Hispanic Health and Nutrition Examination Survey (HHANES). The theory and a design-based analytic approach to data from surveys such as HHANES were presented in a monograph designed to aid users of data from the first National Health and Nutrition Examination Survey (NHANES I).[126] The purpose of this chapter is not to repeat the theory given in that monograph but to provide users of HHANES data with some examples of what happens under different approaches and to provide some guidance to help them make their own decisions.

This is a design-based approach; that is, the sample design is taken into account in the analysis. There are other, model-based, approaches. The reader who is interested in investigating them might start with the Hansen, Madow, and Tepping paper, the comments on that paper and the references given by those commenting.[127] The design-based approach is suggested here, not because it is the best or only approach for all possible analyses, but because it is a pragmatic approach that appears to yield reasonable results.

There are two aspects of the HHANES design that must be taken into account in analysis. One is the sample weights; the other is the complex sample design. Weights are needed to estimate means, medians, and other descriptive statistics. Weights and the strata and primary sampling units (PSU's) from the sample design are needed to estimate variances and test for statistical significance.

Each person in the sample represents a large number of people in the U.S. population. If each sample person represented the same number of people in the population, that is, if they had equal probabilities of selection, the data could be used without weights to study relationships. Because they do not, the sample weights, which incorporate the selection probabilities, a nonresponse adjustment, and poststratification, must be used to produce the correct population estimates. The weights are on HHANES data tapes and instructions for using them are in the tape documentation. Most widely available software packages have an option for incorporating weights in the analysis. The information needed for computing the variances is also on the data tapes. The need for incorporating the sample design is not as readily apparent as the need for incorporating weights. Furthermore, the instructions are not as straightforward, and very few of the widely available software packages have this as an option.

Most of the methods of statistical analysis taught in classes and most of the software currently available for data analysis depend on the assumption of simple random sampling. In surveys with complex sample designs, the assumption of simple random sampling is seldom appropriate. It usually leads to estimating smaller variances than those estimated taking the complex sample design into account. The smaller variances lead to finding more differences statistically significant than would be found using the complex sample design.

The design effect, defined as the ratio of the variance of a statistic from a complex sample to the variance of the same statistic from a simple random sample of the same size, that is,

$$\text{Design effect} = \frac{\text{Variance}_{Complex\ sample}}{\text{Variance}_{Simple\ random\ sample}}$$

is often used to show the impact of the complex sample design on variances. If the design effect is near 1, the complex sample design has little effect on the variances and one could consider assuming simple random sampling for the analysis.

However, design effects in NHANES I and II were rarely near 1 and their size was inconsistent. Table D shows selected design effects for NHANES I. One might expect that in smaller population groups the people would be more homogeneous and the design effect would be reduced. That was often the case for age groups in which the variable under consideration was correlated with age, but even in that instance the design effect was not negligible. For population groups defined by other measures, such as drinking and smoking categories, the design effects were highly inconsistent, and were sometimes less than one.

Note also that equal sample sizes do not necessarily mean that the design effects are equal. There were 195 current smokers who did not drink and 165 who were heavy drinkers. Yet the design effect for the first group was 0.723 and for the second group it was 1.742 for the same response variable (mean periodontal index).

In the NHANES, there was usually only one person selected from each household. However, in HHANES there is clustering within households with an expected average

Table D. Selected design effects from the first National Health and Nutrition Examination Survey

Variable	Sample size	Design effect
Decayed, missing, and filled teeth		
1–74 years of age	20,749	4.648
1–17 years of age	7,104	2.108
18–24 years of age	2,297	3.287
Systolic blood pressure		
6–74 years of age	17,658	5.963
35–44 years of age	2,317	2.696
55–64 years of age	1,255	1.476
Calories		
1–74 years of age	20,749	7.431
25–34 years of age	2,694	2.117
65–74 years of age	3,466	3.283
Mean periodontal index (PI)		
Does not drink—never smoked	417	1.823
Does not drink—current smoker	195	0.723
Moderate drinker—never smoked	178	2.190
Moderate drinker—current smoker	483	1.932
Heavy drinker—current smoker	165	1.742
White—current smoker	851	2.756
Black—current smoker	230	1.488

NOTE: Design effect = $\dfrac{\text{Variance}_{Complex\ sample}}{\text{Variance}_{Simple\ random\ sample}}$

SOURCE: National Center for Health Statistics, J.R. Landis, J.M. Lepkowski, S.A. Eklund, and S.A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. *Vital and Health Statistics.* Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

of three persons per family and there is great interest in measures, such as use of medical care, where family members may tend to behave like one another. For example, children in the same family may be much more like one another in receiving immunizations than they are like children in a neighboring family. We might expect the design effects to be larger in that case.

Because there was no family clustering in NHANES, there are no data from that survey to estimate its impact on the design effects. However, all family members are included in the National Health Interview Survey (NHIS); data from that survey can be used to show the possible impact of family clustering.

The overall design effect for whether children had received medical care within an interval deemed adequate for preventive care was 2.76 (table E). Family clustering obviously had an impact on the design effects. The smallest value was in families of fewer than four people. The largest was in families of six or more people. If simple random sampling is assumed, the standard error in families with six or more people was 8 percent higher than in families with three or fewer people. It was 88 percent higher when the complex sample design is incorporated.[128]

It is interesting to note that there is relatively little variation in the design effects when the children were classified by a geographic variable compared with the variation when they were classified by a family characteristic. Also, as in NHANES, equal sample sizes did not result in equal design effects.

Some examples from NHANES I and NHIS will illustrate the importance of incorporating the weights and the sample design in analyses. The examples from NHANES I illustrate three possible strategies (shown in figure 10 below): Using the sample counts and assuming simple random sampling (option 1), incorporating the weights and assuming simple random sampling (option 2), and incorporating both the weights and the complex sample design (option 3). In the NHIS example only options 2 and 3 are illustrated because NHIS is essentially a self-weighting sample; the probabilities of selection are equal in the basic design. Incorporating the weights makes very little change in the estimates.

Figure 10. Strategies for analysis of complex sample data

Option	Inclusion of	
	Sample weights	Complex sample design
1	No	No
2	Yes	No
3	Yes	Yes

Data in table F illustrate the effect of the three strategies on means. The sampling probabilities in NHANES I were based on age. Therefore, incorporating the weights should have relatively little effect on the estimated means when the people are classified by age. As can be seen, the means under option 1 do not differ greatly from the means under option 2. Nor do the standard errors of the means differ very much. Since both options 2 and 3 are based on weighted data, the means are precisely the same. However, the standard errors under option 3, which incorporates the complex sample design, are very much larger than the standard errors under option 2, which assumes simple random sampling.

Data in table G illustrate the effect of the three strategies on proportions when adults are classified by race and smoking status. Sampling probabilities were not based on these variables, and incorporating the weights should have more effect on the estimated proportions within subcategories than when age was the control variable. As can be seen by comparing the proportions under option 1 with those under option 2, it does. The estimated proportions under option 2 and 3 are precisely the same and are not shown for option 3. Only the standard errors are shown to illustrate the effect of incorporating the complex sample design.

Data in tables H, J, and K illustrate the effects of the three strategies on test statistics. Table H illustrates a multiple regression model. (Some of the basic data were shown in table F.) Incorporation of the weights changes both the regression coefficients and the t-statistics somewhat. Incorporation of the complex sample design results in larger standard errors of the coefficients and, consequently, smaller t-statistics. The effect on race was especially pronounced; the t-statistic was 7.42 under option 2 but 3.50 under option 3. In contrast, the t-statistic for sweets, which was 7.17 under option 2, was 6.43 under option 3.

Table J illustrates hypothesis tests for the data in table G. The Q statistic for the effect of race was so large that, even though incorporating the weights and the complex sample design in the analysis reduced it, it remained significant

Table E. Estimates of standard errors and design effects for whether children have received care within an interval adequate for preventive care for specified subpopulations of children and youths under 18 years of age, National Health Interview Survey, 1975–76 annual average

Variable	Number of children in thousands	Proportion with adequate interval	Standard Error Simple random sample	Standard Error Complex sample	Design effect
Total	73,234	0.8566	0.001295	0.002152	2.76
MDMA[1]					
Yes	56,563	0.8829	0.001352	0.001933	2.04
No	11,249	0.7315	0.004178	0.006855	2.69
PHONE[2]					
Yes	65,061	0.8671	0.001331	0.001948	2.14
No	7,852	0.7705	0.004746	0.008343	3.09
FAMSIZE[3]					
1-3	12,789	0.9090	0.002543	0.002693	1.12
4	21,063	0.8963	0.002101	0.002687	1.64
5	17,081	0.8598	0.002656	0.003170	1.42
6 or more	22,301	0.7864	0.002744	0.005067	3.41
EDHEAD[4]					
0-11	24,771	0.7953	0.002563	0.004240	2.74
12	25,888	0.8678	0.002105	0.002960	1.98
13 or more	21,874	0.9161	0.001875	0.002383	1.62
Residence[5]					
SMSA	53,324	0.8701	0.001456	0.002415	2.75
Non-SMSA	19,910	0.8204	0.002720	0.004562	2.81
Outpatient department in the county of residence					
Yes	49,782	0.8718	0.001498	0.002514	2.82
No	23,452	0.8242	0.002486	0.004182	2.83

[1]Mother has had contact for medical care within year.
[2]Telephone in the household.
[3]Family size (number of persons).
[4]Education of the family head (completed years).
[5]Residence in standard metropolitan statistical area (SMSA) or outside SMSA.

NOTE: Design effect = $\dfrac{\text{Variance}_{Complex\ sample}}{\text{Variance}_{Simple\ random\ sample}}$

SOURCE: M.G. Kovar: A methodological study of factors associated with whether children receive adequate medical care. *Institute of Statistics Mimeo Series.* No. 1428. Chapel Hill, N.C. Department of Biostatistics, University of North Carolina, 1982.

Table F. Number of examined persons, estimated means, estimated standard errors of the mean, and design effects for the number of decayed, missing, and filled (DMF) teeth from the first National Health and Nutrition Examination Survey: United States, 1971–74

Age	Number of examined persons	Option 1 Mean DMF	Option 1 Standard error of mean	Option 2 Mean DMF	Option 2 Standard error of mean	Option 3 Mean DMF	Option 3 Standard error of mean	Design effect
1–74 years	20,749	14.935	0.0793	14.723	0.0748	14.723	0.1613	4.648
1–17 years	7,104	3.338	0.0457	3.965	0.0484	3.965	0.0703	2.108
18–24 years	2,297	12.050	0.1339	11.924	0.1305	11.924	0.2367	3.287
25–34 years	2,694	16.872	0.1434	16.918	0.1397	16.918	0.2618	3.512
35–44 years	2,327	21.271	0.1595	21.436	0.1523	21.436	0.2481	2.654
45–54 years	1,599	22.515	0.1993	22.826	0.1893	22.826	0.2320	1.503
55-64 years	1,262	25.234	0.2280	25.744	0.2140	25.744	0.2790	1.700
65–74 years	3,466	27.608	0.1202	27.727	0.1151	27.727	0.1536	1.780

SOURCE: National Center for Health Statistics, J.R. Landis, J.M. Lepkowski, S.A. Eklund, and S.A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. *Vital and Health Statistics.* Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

at the 0.05 level. However, the effect of smoking and the interaction term, which were significant at the 0.05 level under the simple random sampling assumption, were no longer significant when the complex sample design was incorporated.

In general, using the weights changed the estimates; using the complex sample design changed the standard errors and therefore changed the test statistics. In both examples, the standard errors were larger when the complex sample design was incorporated and the test statistics were smaller. In some cases, the conclusions would not be affected, but in others they would be.

A final example from the National Health Interview Survey data that were given in table E confirms this observation (table K). Whether a proportion or a logit was used for

Table G. Number of examined persons, proportion of persons with periodontal index (PI) greater than zero, estimated standard errors of the proportions, and design effects, by race and whether current cigarette smoker from the first National Health and Nutrition Examination Survey detailed sample: United States, 1971–74

| | | | Unweighted | | | Weighted | | | |
| | | | Option 1 | | | Option 2 | | Option 3 | |
Race	Current cigarette smoker	Number of examined persons	Proportion PI greater than zero	Standard error	Population estimate of examined persons (in thousands)	Proportion PI greater than zero	Standard error	Standard error	Design effect
White	Yes	851	0.588	0.0169	1,076	0.574	0.0151	0.0250	2.756
White	No	1,574	0.478	0.0126	1,727	0.449	0.0120	0.0225	3.534
Black	Yes	230	0.748	0.0286	171	0.697	0.0351	0.0427	1.488
Black	No	264	0.758	0.0264	163	0.705	0.0357	0.0547	2.341

SOURCE: National Center for Health Statistics, J.R. Landis, J.M. Lepkowski, S.A. Eklund, and S.A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. *Vital and Health Statistics*. Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

Table H. Summary of multiple regression models for the number of decayed, missing, and filled (DMF) teeth on age, race, sex, and sweets for 6,349 examined persons ages 11–30 from the first National Health and Nutrition Examination Survey: United States, 1971–74

Variable	Regression coefficient	Standard error of coefficient	t-statistic	Design effect
	Unweighted simple random sample design (option 1)			
Age	0.685	0.0130	52.42	...
Race	0.875	0.0899	9.73	...
Sex	−0.491	0.0752	−6.52	...
Sweets	0.057	0.0070	8.21	...
	Weighted simple random sample design (option 2)			
Age	0.705	0.0125	56.29	...
Race	0.795	0.1072	7.42	...
Sex	−0.465	0.0698	−6.65	...
Sweets	0.049	0.0068	7.17	...
	Weighted complex sample design (option 3)			
Age	0.705	0.0209	33.67	2.789
Race	0.795	0.2277	3.50	4.494
Sex	−0.465	0.0928	−5.01	1.769
Sweets	0.049	0.0077	6.43	1.254

NOTE: ... = category not applicable.

SOURCE: National Center for Health Statistics, J.R. Landis, J.M. Lepkowski, S.A. Eklund, and S.A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. *Vital and Health Statistics*. Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

Table J. Hypothesis tests for variation in the proportion of persons with periodontal index (PI) greater than zero, by race and smoking status from the first National Health and Nutrition Examination Survey detailed sample: United States, 1971–74

| | | Chi-square test criteria and significance levels | | | | | | |
| Source of variation | Degrees of freedom | Unweighted simple random sample design | | Weighted simple random sample design | | Weighted complex design | | Design effect |
		Q	p–value	Q	p–value	Q	p–value	
Race	1	98.59	0.00	50.20	0.00	26.02	<0.01	1.932
Smoking	1	5.04	0.02	4.78	0.03	2.27	0.13	2.103
Race x smoking	1	7.22	0.01	6.11	0.01	2.92	0.09	2.103

SOURCE: National Center for Health Statistics, J.R. Landis, J.M. Lepkowski, S.A. Eklund, and S.A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. *Vital and Health Statistics*. Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

Table K. Comparison of Q statistics for adequacy of medical care, by selected variables, simple-random sample (SRS), and complex sample designs, and of proportion and logit models from the National Health Interview Survey: United States, 1975–76

Source of variation	Degrees of freedom	Proportion model		Logit model	
		SRS	Complex	SRS	Complex
		Q–statistic			
Error	4	3.63	3.78	1.51	0.79
Variable					
MDMA[1]	1	428.45	276.37	674.41	498.61
PHONE[2]	1	181.40	87.67	235.64	122.10
FAMSIZE[3]	3	340.93	187.86	401.57	232.79
MDMAxPHONE	1	16.87	12.17	0.78	0.99
MDMAxFAMSIZE	3	6.10	3.96	25.31	18.53
PHONExFAMSIZE	3	36.11	17.62	13.07	9.34

[1]Mother has had contact for medical care within year.
[2]Telephone in the household.
[3]Family size (number of persons).

SOURCE: M.G. Kovar: A methodological study of factors associated with whether children receive adequate medical care. *Institute of Statistics Mimeo Series.* No. 1428. Chapel Hill, N.C. Department of Biostatistics, University of North Carolina, 1982.

the analysis, the Q statistics were smaller when the complex sample design was incorporated.

Strategies

The data analyst with the public use data tape can use any of the three options. However, option 1 can lead to incorrect estimates and variances, while option 2 should lead to correct estimates but inappropriate variances. Option 3 should lead to both correct estimates and appropriate variances, but option 3 requires more statistical expertise and more computer time than the other options.

An approach that is sometimes used for data from surveys with complex sample designs is to compute an overall design effect and then use it as a multiplier. That is, the analysis is done assuming simple random sampling; then each variance is multiplied by a constant design effect. A standard error is multiplied by the square root of the design effect. The problem with this approach is that, as was shown earlier in this chapter, there is seldom an overall design effect that applies to all dependent variables or to all control variables. However, the use of an overall design effect is better than assuming simple random sampling.

Another strategy that is sometimes used is to compute variances for a set of selected statistics. The set is chosen so that (a) the entire range of sample sizes from the smallest to the largest subgroup is included; and (b) "like" statistics, that is, those with similar distributions, are included in the same set. A regression line is then fitted to the estimated variances and the values read from the regression line are used in analysis. This is the approach that is used for the National Health Interview Survey. The curves from the regression equation are included in all Vital and Health Statistics Series 10 publications[9], and the user reads the values from the published curves. This approach has occasionally been used for the presentation of NHANES data. It is a useful approach for presentation when a large number of statistics are being presented and when showing all of the standard errors would vastly increase the size or number of tables. However, it is based on the size of the population subgroup, and clustering and interclass correlations vary widely among subgroups of the same size.

As a practical matter, the best strategy seems to be to explore hypotheses and eliminate inconsequential variables under option 2. To avoid eliminating variables that might be significant in the final analysis, the p-value should be *higher* than the value that will be used for the final inferences. Setting the p-value higher, say 0.10 or 0.15 rather than 0.05, will protect the analyst from incorrectly eliminating a variable if the design effect is less than 1, or if further analysis will reveal new relationships.

Relationships found to be statistically or substantively important under options 1 or 2 can then be investigated under option 3. The sample weights and the estimated variance-covariance matrix for the estimates can be incorporated in all final models and used for inferential conclusions.

A variant of option 3 is the only approach available to users of the published data. It is impossible to publish the full variance-covariance matrix because of the space it would take. Only variances, standard errors, or relative standard errors are presented in NCHS publications. Users of the published data can only use these variances and assume that the covariances are zero.

There will be some loss of precision because the covariances are seldom zero; the subpopulations being compared are not usually from independent samples. However, the variances alone will work very well for many purposes.

The effect of using only the estimated variances and assuming that the covariances are zero has been investigated in some studies.[129,130] The data are too extensive to show here, but the covariance terms were rarely zero, and they were negative in about one-third of the elements in all of the variance-covariance matrixes calculated. Such deviations from the assumption of zero covariances will obviously affect the results to some extent. Therefore, the full matrix should be used if at all possible.

Implementation

The analyst is always limited to the variables that are available on the data set, can be constructed from those on the data set, or can be linked from another data set. Within those limitations, a decision about which variables are important needs to be made. The selection should be made on substantive and theoretical grounds, with the decision based on research and the literature. There is a risk, however, in limiting oneself to the variables that have been used in the past. The previous research may also have been based on limited data that did not include all of the important variables. In addition, knowledge and conditions may have changed since the original research was done. This may be especially important for social and policy research.

Therefore, it is desirable to have a method of examining all of the available variables, ranking them in importance according to some criterion, and selecting the most important. In a large data set, a rational method of selecting variables is crucial. Computational methods for simultaneously examining all of the information while incorporating the complex sample design are not available.

All of the widely available software packages have programs that can be used for screening. The analysis in the Series 2 report referred to earlier[126] used OSIRIS IV[131] for the examples. Two examples using SAS[132] are in appendix XI.

Regression techniques are often used to screen variables. They are particularly useful for continuous variables. Step-wise regression programs are widely available. The "all possible regression" programs are extremely useful, because many variables can be screened simultaneously with very little computer time.

The analyst using regression for screening should remember that most regression programs are fitting linear regressions, and in exploratory data analysis there may not be any reason to assume that the relationships are linear. The continuous variable of interest can be transformed, of course, and it may be necessary to make a transformation before using a regression technique. It may also be useful to include interaction terms, at least for the variables that appear to be important. Finally, in using regression for screening, it is advisable to make separate cross-tabulations to be certain that the numbers in the cells are really sufficient for analysis.

Procedures for screening categorical variables have not been used as frequently as regression techniques and are not as widely available or known. Higgens and Koch[133] proposed a procedure for categorical variables that is analogous to step-wise regression and can be used to obtain a reasonable subset. The only commercially available software to implement this approach is PARCAT.[134] However, the procedure can be approximated by successive subdivisions of frequency tables.

Following are some final caveats about screening. First, set the p-value high enough that borderline variables are not excluded. Second, if there is prior knowledge that one variable is highly associated with the response variable, screen within each category of that variable. Third, check in advance for outliers that will distort relationships. If there are any, make decisions about how to treat them.

Implementation of option 3 requires the ability to weight the data to the population estimates and to incorporate the sample design in estimating the variances. The information needed to do both is on HHANES public use data tapes.

To produce population estimates, use the weight that is appropriate for the variable under investigation. There is a weight for the interviewed sample, the examined sample, and for each subsample. In SAS, the weight is incorporated by a WEIGHT statement (PROC FREQ) or a FREQ statement (PROC UNIVARIATE and PROC TABULATE). Incorporating the weights will produce the correct population estimates; it will *not* produce the correct variance estimates or test statistics.

To produce variance estimates it is necessary to assume that the sample was selected with more than one primary sampling unit (PSU) in each stratum. The HHANES sample was selected with one PSU in each stratum (see chapter 5). The PSU's have been paired to produce pseudostrata, each with two PSU's, numbered 1 and 2, on the public use data tapes. These pseudostrata are used to compute the variances.

Obtaining a consistent variance-covariance matrix from a survey with a complex sample design is not always simple. The development of computer programs to produce estimates of the variance-covariance matrixes from surveys with such designs has been slow and are still not in wide use. There are three approaches that have been developed of which only two, the balanced half-sample replication and the Taylor series approximation, currently have software packages that are commercially available for analytic use. The BRR program of the National Center for Health Statistics[135] and the OSIRIS package of the University of Michigan[131] depend on a balanced half-sample replication method. The SURREGR program of the Research Triangle Institute[136] and the SUPER CARP program of the Iowa State University[137] depend on a Taylor series approximation. If the sample size is sufficiently large and there are sample persons in each PSU, they all give approximately the same estimates of the variances and covariances.[138–140]

It should be noted that, if the sample size is small or if the sample size in many strata or primary sampling units is zero, the variance programs will not give the same estimates. The estimates produced by the different programs may vary by a factor of two or more.[141] Before beginning the analysis, the analyst should examine the distribution of the sample by PSU's and, if necessary, create different pairings of the PSU's. For example, if many pairs have observations in only one of the PSU's, PSU's could be combined with one another so that all PSU's have at least one observation (the number of PSU's and strata will be smaller). The method of pairing apparently had little influence on the variance estimates for NHANES I.[142] Whether or not this holds true for other surveys has not been examined.

Incorporation of the complex sample design into regression analyses requires only a regression program that takes

the sample design into account.

SURREGR is a regression program that runs under SAS, which computes regression statistics and their sampling errors for data from clustered sample designs using a Taylor series approximation.[136] It was used for analyses of the lead data from NHANES II.[143] The control file for that analysis is given as example 1 in appendix XI.

Categorical data analysis requires an appropriate program that permits the incorporation of the variance-covariance matrix from the complex sample into the analysis. At present, the only approach to categorical data analysis that does so is the Grizzle-Starmer-Koch linearized model.[144] There are theoretical considerations (and the practical consideration of having sample persons in most, if not all, of the PSU's), but given a consistent estimate of the variance-covariance matrix, the approach is practical and reasonable. Fortunately, a computer program to implement this weighted least squares approach, GENCAT, is available.[145]

The vector of proportions, together with their variances and covariances, can be computed within SAS using SUR-REGR. Any other computing algorithm designed to compute a vector and a consistent estimate of its covariance structure could be used instead. The vector of sample proportions and its covariance matrix is then entered directly into the weighted least squares program.

Using this approach, the goodness of fit of models can be evaluated using the Wald statistic

$$Q = (F\text{-}Xb)' \, V^{-1} \, (F\text{-}Xb)$$

When the model fits and and the data are derived from a simple random sample, Q asymptotically follows the chi-square distribution. Even when the covariance matrix is estimated from a sample with a complex design, the same result should hold for large samples. (See, for example, Shuster and Downing.[146])

The weighted least squares estimator for the parameter vector, B, can be obtained from the survey data as

$$B = (X'V^{-1}X)^{-1}X' \, V^{-1}F$$

When the fit of the model is adequate by the Wald statistic criteria, it is possible to examine the individual parameters to reduce the model. This test statistic is also asymptotically distributed as a chi-square random variable when the null hypothesis is true. The predicted values will adequately describe the statistically important sources of variation in the data and will have smaller sampling errors than the observed estimates. The smaller sampling errors result from using the entire sample to estimate the variances for the predicted functions, and the errors for the observed values are estimated from the sample in each subclass.

The control file for the last column of table K is given as example 2 in appendix XI. That control file includes the transformation of the variable of interest, a proportion, to a logit. This transformation is especially useful if the proportion is near 0 or near 1.[147] A discussion of the analysis is in Kovar.[128]

The control files for the NHANES I analyses in the tables using OSIRIS IV & PSALMS are in Series 2 No. 92.[126]

References

[1] Public Health Service: *Origin and program of the U.S. National Health Survey*. PHS Pub. No. 584–A1. Washington. U.S. Government Printing Office, May 1958.

[2] Twenty-fifth anniversary of the National Health Survey—a special section. *Public Health Rep.* 96(3):195–237, May-June 1981.

[3] National Center for Health Statistics: Plan and initial program of the Health Examination Survey. *Vital and Health Statistics*. Series 1, No. 4. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

[4] National Center for Health Statistics: Plan, operation, and response results of a program of children's examinations. *Vital and Health Statistics*. Series 1, No. 5. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1967.

[5] National Center for Health Statistics: Plan and operation of a health examination survey of U.S. youths 12–17 years of age. *Vital and Health Statistics*. Series 1, No. 8. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1969.

[6] National Center for Health Statistics, H. W. Miller: Plan and operation of the Health and Nutrition Examination Survey, United States, 1971–73. *Vital and Health Statistics*. Series 1, Nos. 10a and 10b. DHEW Pub. No. HSM 73–1310. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Feb. 1973.

[7] National Center for Health Statistics, A. Engel, R. S. Murphy, K. Maurer, and E. Collins: Plan and operation of the HANES I Augmentation Survey of Adults 25–74 Years, United States, 1974–75. *Vital and Health Statistics*. Series 1, No. 14. DHEW Pub. No. (PHS)78–1314. Public Health Service. Washington. U.S. Government Printing Office, June 1978.

[8] National Center for Health Statistics, A. McDowell, A. Engel, J. T. Massey, and K. Maurer: Plan and operation of the Second National Health and Nutrition Examination Survey, 1976–80. *Vital and Health Statistics*. Series 1, No. 15. DHHS Pub. No. (PHS) 81–1317. Public Health Service. Washington. U.S. Government Printing Office, July 1981.

[9] National Center for Health Statistics: Current listing and topical index to the Vital and Health Statistics Series, 1962–78. DHEW Pub. No. (PHS)79–1301. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1979.

[10] National Center for Health Statistics: Catalog of public use data tapes from the National Center for Health Statistics. DHHS Pub. No. (PHS)81–1213. Public Health Service. Hyattsville, Md., Nov. 1980.

[11] National Center for Health Statistics: Improving the Health and Nutrition Examination Survey. An evaluation by a panel of the National Academy of Public Administration. Hyattsville, Md., June 1981.

[12] A. J. McDowell: Health examination surveys—in theory and application, in P. Armitage, ed., *National Health Survey Systems in the European Economic Community*. Proceedings of the Conference on National Health Survey Systems in the European Economic Community, Oct. 6–8, 1975. Commission of the European Communities. Luxembourg, 1977.

[13] R. Brislin, W. J. Lonner, and R. M. Thorndike: *Cross-Cultural Research Methods*. New York. John Wiley and Sons, 1973, pp. 32–54.

[14] M. P. Stern, S. P. Gaskill, C. R. Allen, et al.: Cardiovascular risk factors in Mexican Americans in Laredo, Texas. I. Prevalence of overweight and diabetes and distributions of serum lipids. *Am. J. Epidemiol.* 113(5):546–555, 1981.

[15] A. K. Diehl, M. P. Stern, V. S. Ostrower, and P. C. Friedman: Prevalence of clinical gallbladder disease in Mexican-American, Anglo, and Black women. *South. Med. J.* 73(4):438–441, 1980.

[16] National Center for Health Services Research: Hispanic health services research. *Research Proceedings Series*. DHHS Pub. No. (PHS)80–3288. Public Health Service. Hyattsville, Md., Sept. 1980.

[17] National Center for Health Statistics, F. M. Trevino and A. J. Moss: Health insurance coverage and physician visits among Hispanic and non-Hispanic people. *Health, United States, 1983*. DHHS Pub. No. (PHS)84–1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1983. pp. 45–48.

[18] I. Cuellar, L. C. Harris, and R. Jasso: An acculturation scale for Mexican American normal and clinical populations. *Hispanic J. Behav. Sci.* 2(3):199–217, 1980.

[19] R. Andersen, S. Z. Lewis, A. L. Giachello, et al.: Access to medical care among the Hispanic population of the southwestern United States. *J. Health Soc. Behav.* 22(1):78–89, 1981.

[20] A. P. Chesney, J. A. Chavira, R. P. Hall, and H. E. Gary Jr.: Barriers to medical care of Mexican-Americans: The role of social class, acculturation, and social isolation. *Med. Care.* 20(9): 883–891, 1982.

[21] National Center for Health Statistics, W. C. Hadden and M. I. Harris: The prevalence of diagnosed diabetes, undiagnosed diabetes, and impaired glucose tolerance in the U.S., 1976–80. *Vital and Health Statistics*. Series 11. Public Health Service, DHHS, Hyattsville, Md. To be published.

[22] National Center for Health Statistics, M. I. Harris: Unpublished data from the 1976 National Health Interview Survey.

[23] National Diabetes Data Group: Classification and diagnosis of diabetes mellitus and other categories of glucose intolerance. *Diabetes.* 28(12):1039–1057, 1979.

[24] R. M. Salcido: Needed: Hypertension research for Mexican-Americans. *Public Health Rep.* 94(4):372–375, 1979.

[25] M. P. Stern, S. P. Gaskill, C. R. Allen Jr., et al.: Cardiovascular risk factors in Mexican Americans in Laredo, Texas. II. Prevalence and control of hypertension. *Am. J. Epidemiol.* 113(5):556–562, 1981.

[26]National Center for Health Statistics: Prevention profile, P. M. Golden, R. W. Wilson, and J. Kavet. *Health, United States, 1983*. DHHS Pub. No. (PHS)84–1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1983. pp. 246–247.

[27]American Heart Association: Recommendations for human blood pressure determination by sphygmomanometers. 1980.

[28]National Center for Health Statistics, M. Rowland, R. Fulwood, and J. C. Kleinman: Changes in heart disease risk factors. *Health, United States, 1983*. DHHS Pub. No. (PHS)84–1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1983. pp. 13–17.

[29]National Center for Health Statistics, C. S. Wilder: Limitation of activity due to chronic conditions, United States, 1974. *Vital and Health Statistics*. Series 10, No. 111. DHEW Pub. No. (HRA)77–1537. Health Resources Administration. Washington. U.S. Government Printing Office, June 1977.

[30]National Center for Health Statistics, R. O. Gagnon, J. E. De-Lozier, and T. McLemore: The National Ambulatory Medical Care Survey, United States, 1979 summary. *Vital and Health Statistics*. Series 13, No. 66. DHHS Pub. No. (PHS) 82–1727. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

[31]G. A. Rose: The diagnosis of ischaemic heart pain and intermittent claudication in field surveys. *Bull WHO*. 27:645–658, 1962.

[32]G. A. Rose: Chest pain questionnaire. *Milbank Mem. Fund Q.* 40(2):32–39, 1965.

[33]National Center for Health Statistics, T. F. Drury and L. J. Howie: Prevalence of selected chronic digestive conditions, United States, 1975. *Vital and Health Statistics*. Series 10, No. 123. DHEW Pub. No. (PHS) 79–1558. Public Health Service. Washington. U.S. Government Printing Office, July 1979.

[34]L. J. Schoenfield and J. M. Lachin: Chenodiol (chenodeoxycholic acid) for dissolution of gallstones: The National Cooperative Gallstone Study. A controlled trial of efficacy and safety. *Ann. Intern. Med.* 95(3):257–282, 1981.

[35]W. A. Gracie and D. T. Ransohoff: The silent gallstone: requiescat in pace, in J. P. Delaney and R. L. Varco, eds., *Controversies in Surgery II*. Philadelphia. W.B. Saunders, 1983.

[36]National Center for Health Statistics, A. L. Ranofsky: Surgical operations in short-stay hospitals, United States, 1975. *Vital and Health Statistics*. Series 13, No. 34. DHEW Pub. No. (PHS) 78–1785. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1978.

[37]National Commission on Digestive Diseases: Digestive diseases: Neglected problems—exciting opportunities. Vol. 1, *Report to the Congress of the United States of the National Commission on Digestive Diseases*. DHEW Pub. No. (NIH)79–1878. National Institutes of Health. Washington. U.S. Government Printing Office, Jan. 31, 1979.

[38]P. L. Cooperberg and H. J. Burhenne: Real-time ultrasonography, diagnostic technique of choice in calculous gallbladder disease. *N. Engl. J. Med.* 302(23):1277–1279, 1980.

[39]National Center for Health Statistics, F. M. Treviño and A. J. Moss: Health indicators for Hispanic, black, and white Americans. *Vital and Health Statistics*. Series 10, No. 148. DHHS Pub. No. (PHS)84–1576. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1984.

[40]National Institute for Dental Research: Dental treatment needs of United States children, 1979–1980. *The National Dental Caries Prevalence Survey*. NIH Pub. No. 83–2246. National Institutes of Health. Washington. Dec. 1982.

[41]National Institute for Dental Research: The prevalence of dental caries in United States children. 1979–1980. *The National Dental Caries Prevalence Survey*. NIH Pub. No. 82–2245. National Institutes of Health. Washington. Dec. 1981.

[42]C. D. Bluestone: Otitis media in children: To treat or not to treat? *N. Engl. J. Med.*. 306(23):1399–1404, 1982.

[43]R. D. Feigin: Otitis media: Closing the information gap (editorial). *N. Engl. J. Med.* 306(23):1417–1418, 1982.

[44]J. L. Paradise: Testing for otitis media: Diagnosis *ex machina* (editorial). *N. Engl. J. Med.* 296(8):445–448, 1977.

[45]J. L. Paradise: Editorial retrospective: Tympanometry (editorial). *N. Engl. J. Med.* 307(17):1074–1076, 1982.

[46]P. A. Shurin, S. I. Pelton, and J. Finkelstein: Tympanometry in the diagnosis of middle ear effusion. *N. Engl. J. Med.* 296(8):412–417, 1977.

[47]D. M. Kessner and C. E. Kalk. *A Strategy for Evaluating Health Services*. Institute of Medicine. National Academy of Sciences. Washington. 1973. pp. 48–62.

[48]Department of Health and Human Services: Tuberculosis among Hispanics in the United States, 1980. *Morbidity and Mortality Weekly Report*. Vol. 31, No. 18. Public Health Service. Washington. May 14, 1982.

[49]L. B. Reichman, C. P. Felton, J. F. Hammarsten, et al.: Tuberculosis in the foreign born. *Am. Rev. Respir. Dis.* 116(3):561–564, 1977.

[50]NAS-NRC Committee on Vision, Working Group 39: Recommended standard procedures for the clinical measurement and specification of visual acuity. *Adv. Ophthalmol.* 41:103–148, 1980.

[51]R. D. Reinecke and K. Simons: A new stereoscopic test for amblyopia screening. *Am. J. Ophthalmol.* 78(4):714–721, 1974.

[52]J. J. Malin and N. E. Munch: *Implicated Alcohol and Disease Entities— Alcohol as a Risk Factor in the Nation's Health*. Contract No. ADM 281–79–0012. Rockville, Md. Laboratory of Epidemiology and Population Studies. National Institute on Alcohol Abuse and Alcoholism. 1980.

[53]R. Caetano: Drinking patterns and alcohol problems among Hispanics in the U.S.: A review. *Drug Alcohol Depend.* 12(1):37–59, 1983.

[54]H. A. Abelson, P. Fishburne, and I. H. Cisin: *The National Survey on Drug Abuse, 1977*. Stock No. 017–24–00702–2. Washington. U.S. Government Printing Office, 1977.

[55]R. Perez, A. M. Padilla, A. Ramirez, et al.: Correlates and changes over time in drug and alcohol use within a Barrio population. *Am. J. Community Psychol.* 8(6):621–636, 1980.

[56]R. E. Roberts: Prevalence of psychological distress among Mexican Americans. *J. Health Soc. Behav.* 21(2):134–145, 1980.

[57]F. M. Treviño, J. G. Bruhn, and H. Bunce: Utilization of community mental health services in a Texas-Mexico border city. *Soc. Sci. Med.* 13A(3):331–334, 1979.

[58]S. W. Vernon and R. E. Roberts: Prevalence of treated and untreated psychiatric disorders in three ethnic groups. *Soc. Sci. Med.* 16(17):1575–1582, 1982.

[59]L. S. Radloff: The CES-D Scale: A self-report depression scale for research in the general population. *Appl. Psychol. Measur.* 1:385–401, 1977.

[60]M. M. Weissman, D. Sholomskas, M. Pottenger, et al.: Assessing depressive symptoms in five psychiatric populations: A validation study. *Am. J. Epidemiol.* 106(3):203–214, 1977.

[61]R. E. Roberts: Reliability of the CES-D Scale in different ethnic contexts. *Psychiatry Res.* 2(2):125–134, 1980.

[62]R. E. Roberts and S. W. Vernon: The Center for Epidemiologic Studies Depression Scale: its use in a community sample. *Am. J. Psychiatry.* 140(1):41–46, 1983.

[63]L. N. Robins, J. E. Helzer, J. Croughan, and K. S. Ratcliff: The National Institute of Mental Health Diagnostic Interview Schedule. Its history, characteristics and validity. *Arch. Gen. Psychiatry.* 38(4):381–389, 1981.

[64]M. A. Burnam, M. Karno, R. L. Hough, et al.: The Spanish Diagnostic Interview Schedule. Reliability and comparison with clinical diagnoses. *Arch. Gen. Psychiatry.* 40(11):1189–1196, 1983.

[65]M. Karno, A. Burnam, J. I. Escobar, et al.: Development of the Spanish-language version of the National Institute of Mental Health Diagnostic Interview Schedule. *Arch. Gen. Psychiatry.* 40(11):1183–1188, 1983.

[66]W. W. Eaton, D. A. Regier, B. Z. Locke, and C. A. Taube: The NIMH Epidemiologic Catchment Area Program, in: J. K. Wing, P. Bebbington, and L. N. Robins, eds., *What is a Case? The Problem of Definition in Psychiatric Community Surveys.* London. Grant McIntyre Ltd., London. 1981.

[67]G. L. Ostenso: National Nutrition Monitoring System: A historical perspective. *J. Am. Diet. Assoc.* 84(10):1181–1185, 1984.

[68]National Center for Health Statistics, M. D. Carroll, S. Abraham, and C. M. Dresser: Dietary intake source data, United States, 1976–80. *Vital and Health Statistics.* Series 11, No. 231. DHHS Pub. No. (PHS)83–1681. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1983.

[69]National Center for Health Statistics, S. Abraham, C. L. Johnson, and M. F. Najjar: Weight and height of adults 18–74 years of age, United States, 1971–74. *Vital and Health Statistics.* Series 11, No. 211. DHEW Pub. No. (PHS)79–1659. Public Health Service. Washington. U.S. Government Printing Office, May 1977.

[70]National Center for Health Statistics, R. Fulwood, C. L. Johnson, J. D. Bryner, et al.: Hematological and nutritional biochemistry reference data for persons 6 months-74 years of age, United States, 1976–80. *Vital and Health Statistics.* Series 11, No. 232. DHHS Pub. No. (PHS)83–1682. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1982.

[71]J. D. Cook and C. A. Finch: Assessing iron status of a population. *Am. J. Clin. Nutr.* 32:2115–2119. 1979.

[72]National Center for Health Statistics, J. D. Singer, P. Granahan, N. N. Goodrich, et al.: Diet and iron status, a study of relationships, United States, 1971–74. *Vital and Health Statistics.* Series 11, No. 229. DHHS Pub. No. (PHS)83–1679. Public Health Service. Washington. U.S. Government Printing Office. Dec. 1982.

[73]Life Sciences Research Office, S. M. Pilch and F. R. Senti, eds.: *Assessment of the Iron Nutritional Status of the U.S. Population Based on Data Collected in the Second National Health and Nutrition Examination Survey, 1976–1980.* Contract No. (FDA) 233–83–2384. Federation of American Societies for Experimental Biology. Bethesda, Md., Aug. 1984.

[74]National Center for Health Statistics, S. Abraham, M. D. Carroll, M. F. Najjar, and R. Fulwood: Obese and overweight adults in the United States. *Vital and Health Statistics.* Series 11, No. 230. DHHS Pub. No. 83–1680. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1983.

[75]G. A. Bray: Definition and measurement of obesity, in N. M. Kaplan and J. Stamler, eds., *Prevention of Coronary Heart Disease.* Philadelphia. W.B. Saunders Co., 1983.

[76]A. A. Rimm and P. L. White: Obesity: Its risks and hazards. in G. A. Bray, ed., *Obesity in America.* NIH Pub. No. 79–359. National Institutes of Health. Washington. U.S. Government Printing Office, Nov. 1979.

[77]R. J. Garrison, M. Feinleib, W. P. Castelli, and P. M. McNamara: Cigarette smoking as a confounder of the relationship between relative weight and long-term mortality. The Framingham Heart Study. *JAMA.* 249(16):2199–2203, 1983.

[78]W. B. Kannel: An overview of the risk factors for cardiovascular disease, in N. M. Kaplan and J. Stamler, eds.: *Prevention of Coronary Heart Disease.* Philadelphia. W.B. Saunders Co., 1983.

[79]G. D. Friedman, W. B. Kannel, and T. R. Dawber: The epidemiology of gallbladder disease: Observations in the Framingham study. *J. Chronic Dis.* 19:273–292, 1966.

[80]J. Stamler: Lifestyles, major risk factors, proof and public policy. *Circulation.* 58(1):3–19, 1978.

[81]A. B. Keys: Overweight, obesity, coronary heart disease, and mortality. *Nutr. Today.* July-Aug:16–22, 1980.

[82]L. H. Kuller: Epidemiology of coronary heart disease, in E. G. Perkins and W. J. Visek, eds., *Dietary Facts and Health.* Champaign, Illinois. American Oil Chemists Society, 1983. p. 466–495.

[83]Hypertension Detection and Follow-up Program Cooperative Group: Five-year findings of the Hypertension Detection and Follow-up Program. I. Reduction in mortality of persons with high blood pressure, including mild hypertension. *JAMA.* 242(23):2562–2571, 1979.

[84]Hypertension Detection and Follow-up Program Cooperative Group: Five-year findings of the Hypertension Detection and Follow-up Program. II. Mortality by race-sex and age. *JAMA.* 242(23): 2572–2577, 1979.

[85]The Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure: The 1984 report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. *Arch. Intern. Med.* 144:1045–1057, 1984.

[86]J. T. Wack and J. Rodin: Smoking and its effects on body weight and the systems of caloric regulation. *Am. J. Clin. Nutr.* 35(2):366–380, 1982.

[87]C. L. Hanis, R. E. Ferrell, S. A. Barton, et al.: Diabetes among Mexican Americans in Starr County, Texas. *Am. J. Epidemiol.* 118(5):659–672, 1983.

[88]R. Russell-Briefel, T. Ezzati, and J. Perlman: The effect of oral contraceptives on glucose tolerance (abstract). *Federation Proceedings.* 43(3):666, 1984.

[89]R. K. Scragg, A. J. McMichael, and P. A. Baghurst: Diet, alcohol, and relative weight in gallstone disease. A case control study. *Br. Med. J.* [Clin. Res.] 288(6424):1113–1119, 1984.

[90]D. A. Smith and M. I. Gee: A dietary survey to determine the relationship between diet and cholelithiasis. *Am. J. Clin. Nutr.* 32(7):1519–1526, 1979.

[91]C. Gastineau: Nutritional implications of alcohol, in *Present Knowledge in Nutrition.* Fifth Edition. Washington. Nutrition Foundation, Inc. 1984.

[92]C. S. Lieber: Alcohol, malnutrition and liver disease. *J. Fla. Med. Assoc.* 66(4):463–465, 1979.

[93]National Center for Health Statistics, B. A. Burt, S. A. Eklund, J. R. Landis, et al.: Diet and dental health, a study of relationships, United States, 1971–74. *Vital and Health Statistics.* Series 11, No. 225. DHHS Pub. No. (PHS)82–1675. Public Health Service. Washington. U.S. Government Printing Office, Jan. 1982.

[94]National Research Council Committee on Diet, Nutrition, and Cancer: *Diet, Nutrition and Cancer.* Washington. National Academy Press, 1982.

[95]T. Hirayama: Diet and cancer. *Nutrition and Cancer.* 1(3):67–81. 1979.

[96]National Institutes of Health: Osteoporosis. NIH Consensus Development Conference Statement. 5(1), April 1984.

[97]The National Research Council: *Recommended Dietary Allowance.* Ninth edition. National Academy of Sciences. Washington, 1980.

[98]Department of Agriculture: *Nutrition and your health. Dietary guidelines for Americans.* Home and Garden Bulletin No. 232. Department of Agriculture and U.S. Department of Health and Human Services. Washington. Feb. 1980.

[99]Centers for Disease Control: *Ten-State Nutrition Survey, 1968–1970.* Vol. V, Dietary. DHEW Pub. No. (HSM) 72–8133. Health Services and Mental Health Administration. Atlanta, 1972.

[100]A. L. Forbes and M. G. Stephenson: National Nutrition Monitoring System: Implications for public health policy at FDA. *J. Am. Diet. Assoc.* 84(10):1189–1193. 1984.

[101]Food and Drug Administration: Nutritional quality of foods; addition of nutrients. *Federal Register.* 45(18):6314–6324. Jan. 25, 1980.

[102]Life Sciences Research Office, F. R. Senti and S. M. Pilch, eds.: *Assessment of the Folate Nutritional Status of the U.S. Population Based on Data Collected in the Second National Health and Nutrition Examination Survey, 1976–1980.* Contract no. (FDA) 233–83–2384. Federation of American Societies for Experimental Biology. Bethesda, Md. Oct. 1984.

[103]Life Sciences Research Office, S. M. Pilch and F. R. Senti, eds.: *Assessment of the Zinc Nutritional Status of the U.S. Population Based on Data Collected in the Second National Health and Nutrition Examination Survey, 1976–1980.* Contract no. (FDA)233–83–2384. Federation of American Societies for Experimental Biology. Bethesda, Md. June 1984.

[104]National Center for Health Statistics, P. V. V. Hamill, T. A. Drizd, C. L. Johnson, et al.: NCHS growth curves for children, birth-18 years, United States. *Vital and Health Statistics.* Series 11, No.165. DHEW Pub. No. (PHS)78–1650. Public Health Service. Washington. U.S. Government Printing Office, Nov. 1977.

[105]J. M. Tanner: *Growth at Adolescence.* Second edition. Oxford. Blackwell Scientific Publication, 1962.

[106]A. W. Hansen: Lead in our environment. *The Professional Nutritionist.* Spring, 1983.

[107]National Center for Health Statistics, J. L. Annest and K. Mahaffey: Blood lead levels for persons 6 months–74 years of age, United States, 1976–80. *Vital and Health Statistics.* Series 11, No. 233. DHHS Pub. No. (PHS) 84–1683. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1984.

[108]J. T. Massey and T. M. Ezzati: HHANES universe and estimated coverage. Unpublished memorandum. National Center for Health Statistics, Aug. 7, 1981.

[109]W. G. Cochran: *Sampling Techniques.* New York. John Wiley and Sons, Inc., 1977.

[110]J. F. Gonzalez and A. A. White: Stratifying primary sampling units with the SAS cluster procedure. *Proceedings of the Social Statistics Section,* American Statistical Association, Aug. 1982.

[111]SAS Institute, Inc.: *SAS Users' Guide,* 1979 edition. Raleigh, N.C.

[112]S. C. Johnson: Hierarchical clustering schemes. *Psychometrica.* XXXII:241–254, 1967.

[113]R. Goodman and L. Kish: Controlled selection—a technique in probability sampling. *J. Am. Statis. A.* 45:350–372, 1950.

[114]L. Kish: *Survey Sampling.* New York. John Wiley and Sons, Inc., 1965.

[115]National Center for Health Statistics, E. E. Bryant, J. T. Baird, and H. W. Miller: Sample design and estimation procedures for a national health examination survey of children. *Vital and Health Statistics.* Series 2, No. 43. DHEW Pub. No. (HSM)72–1005. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Aug. 1971.

[116]U.S. Bureau of the Census: Technical Note No. 3. Washington. 1970.

[117]National Center for Health Statistics: *Staff Manual on Confidentiality.* DHEW Pub. No. (PHS)80–1244. Public Health Service. Hyattsville, Md., Apr. 1980.

[118]National Center for Health Statistics: *The HANES Study Final Report.* Institute for Survey Research. Contract no. HSM–110–73–376. Philadelphia, Temple University, Apr. 1975.

[119]National Center for Health Statistics: *A Comparison and Analysis of Examined and Unexamined Persons on Medical History Characteristics for the First Round of the Health and Nutrition Examination Study.* Contract no. HSM–110–73–371. Rockville, Md., Westat Inc., Jan. 24, 1974.

[120]National Center for Health Statistics, H. W. Miller and P. Williams: Factors related to response in a health examination survey, United States, 1960–62. *Vital and Health Statistics.* Series 2, No. 36. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1969.

[121]U.S. National Health Survey: Attitudes towards cooperation in a health examination survey. *Health Statistics.* Series D, No. 6. PHS Pub. No. 584. Public Health Service. Washington. U.S. Government Printing Office, July 1961.

[122]National Center for Health Statistics: Cooperation in health examination surveys. *Vital and Health Statistics.* Series 2, No. 9. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

[123]National Center for Health Statistics, W. L. Schaible: Quality control in a national health examination survey. *Vital and Health Statistics.* Series 2, No. 44. DHEW Pub. No. (HSM) 72–1023. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Feb. 1972.

[124]National Center for Health Statistics, E. E. Bryant, M. G. Kovar, and H. Miller: A study of the effect of remuneration upon response in the Health and Nutrition Examination Survey, United States. *Vital and Health Statistics.* Series 2, No. 67. DHEW Pub. No. (HRA) 76–1341. Health Resources Administration. Washington. U.S. Government Printing Office, Oct. 1975.

[125]J. S. Findlay and W. L. Schaible: A Study of the Effect of Increased Remuneration on Response in a Health and Nutrition Examination Survey. Paper presented at the American Statistical Association Meeting, Survey Research Methods Section. Houston, Aug. 1980.

[126]National Center for Health Statistics: J. R. Landis, J. M. Lepkowski, S. A. Eklund, and S. A. Stehouwer: A statistical methodology for analyzing data from a complex survey, the First National Health and Nutrition Examination Survey. *Vital and Health Statistics.* Series 2, No. 92. DHHS Pub. No. (PHS) 82–1366. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.

[127]M. H. Hansen, M. G. Madow, and B. J. Tepping: An evaluation of model-dependent and probability-sampling inferences in sample surveys. *J. Am. Statis. A.* 78(384):776–807, 1983.

[128]M. G. Kovar: A methodological study of factors associated with whether children receive adequate medical care. *Institute of Statistics Mimeo Series.* No. 1428. Chapel Hill, N.C. Department of Biostatistics, University of North Carolina, 1982.

[129] D. H. Freeman and D. B. Brock: The role of covariance matrix estimation in the analysis of complex sample survey data, in N. Krishnan Namboodiri, ed.: *Survey Sampling and Measurement*. Symposium on Survey Sampling, 2d, University of North Carolina, New York, Academic press, 1978.

[130] L. A. Jordan, S. A. Hanes, K. M. Maurer, and J. Wellisch: Design Effects for a National Study of School Children. Paper presented at the Annual Meeting of the American Educational Research Association. March 20, 1982.

[131] Survey Research Center Computer Support Group: *OSIRIS IV User's Manual*, Institute for Social Research. University of Michigan, Ann Arbor, 1979.

[132] J. T. Helnig and K. A. Council, eds.: *SAS Users Guide*, 1982 edition. SAS Institute, Inc. Raleigh, N.C.

[133] J. E. Higgens and G. G. Koch: Variable selection and generalized chi-square analysis of categorical data applied to a large cross-sectional occupational health survey. *Int. Stat. Rev.* 45(1):51–62, 1977.

[134] J. R. Landis, M. M. Cooper, T. Kennedy, and G. Koch: A computer program for testing average partial association in three-way contingency tables (PARCAT). *Biostatistics Technical Report No. 18*. University of Michigan, May 1978.

[135] National Center for Health Statistics, P. J. McCarthy: Replication, an approach to the analysis of data from complex surveys. *Vital and Health Statistics*. Series 2, No. 14. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1966.

[136] M. M. Holt: *SURREGR: Standard Errors of Regression Coefficients from Sample Survey Data*. Research Triangle Park, N.C., Research Triangle Institute, 1977. (Revised April 1982 by B.V. Shah)

[137] M. A. Hidiroglou, W. A. Fuller, and R. D. Hickman: *Super Carp.*, Sixth edition. Survey Section, Statistical Laboratory. Iowa State University. Ames, Oct. 1980.

[138] K. Maurer, G. Jones, and E. Bryant: Relative computational efficiency of the linearized and balanced repeated replication procedures for computing sampling variances. *Proceedings of the Survey Research Methodology Section*. American Statistical Association, 1978.

[139] D. H. Freeman, J. L. Freeman, D. B. Brock, and G. G. Koch: Strategies in the multivariate analysis of data from complex surveys II: An application to the United States National Health Interview Survey. *Int. Stat. Rev.* 44(3):317–330, 1976.

[140] J. W. Choi: A further study on the analysis of categorical data from weighted cluster sample surveys. *Proceedings of the Social Statistics Section*. American Statistical Association, 1981.

[141] S. Lemeshow and A. M. Stoddard: A comparison of alternative variance estimation strategies for estimating the slope of a linear regression in sample surveys. *Commun. Statist.—Simula. Computa.* 13(2):153–168, 1984.

[142] E. J. Stanek and S. Lemeshow: The behavior of balanced half-sample variance estimates for linear and combined ration estimates when strata are paired to form pseudo-strata. *Estadistica*. XXXII (119):71–79, Nov. 1978.

[143] J. L. Annest, J. L. Pirkle, D. Makuc, et al.: Chronological trend in blood lead levels between 1976 and 1980. *N. Engl. J. Med.* 308(23):1373–1377, 1983.

[144] J. E. Grizzle, C. F. Starmer, and G. G. Koch: Analysis of categorical data by linear models. *Biometrics*. 25(3):489–504, 1969.

[145] J. R. Landis, W. M. Stanish, J. L. Freeman, et al.: A computer program for the generalized chi-square analysis of categorical data using weighted least squares (GENCAT). *Comput. Programs Biomed.* 6:196–231, 1976.

[146] J. J. Shuster and D. J. Downing: Two-way contingency tables for complex sampling schemes. *Biometrika*. 63(2):271–276, 1976.

[147] R. N. Forthofer and R. G. Lehnen: *Public Program Analysis: A New Categorical Data Approach*. Belmont, Calif. Lifetime Learning Publications, 1981.

[148] M. C. Moore, B. C. Judlin, and P. Kennemun: Using graduated food models in taking dietary histories. *J. Am. Diet. Assoc.* 51:447–453, 1967.

[149] Consumer and Food Economics Institute: *Manual of Food Codes and Conversions of Measures to Gram-Weight for Use With Individual Food Intake Data From 1977–78 Nationwide Food Consumption Survey*. USDA, Science and Education Administration. Working copy. Hyattsville, Md., Nov. 1, 1979.

[150] Agricultural Research Service, Consumer and Food Economics Institute: Expansion of data published in Nutritive Values of American Foods in Common Units. *Agriculture Handbook No. 456*, Data Sets 456–1, 456–2. U.S. Department of Agriculture. Hyattsville, Md., May 1977.

Appendixes

Contents

Appendix I
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NOTE: This appendix shows organizational affiliation as of the time of the survey.

Appendix II
Summary of data collection instruments and procedures

Questionnaires administered in the household

Household Screener Questionnaire

This questionnaire was used in each household to determine household composition and eligibility (that is, appropriate Hispanic ethnicity) and for the selection of sample persons.

Family Questionnaire

This form was administered to each eligible family and contained 5 sections: a) a family relationship chart which determined kinship for sample persons under 20 years of age; b) a family characteristics section, which obtained for heads of families and all sample persons basic demographic information, such as race, education, place of birth, occupation, and marital status; c) a section on Medicare and health insurance coverage; d) questions on participation in income assistance programs; and e) selected housing characteristics, family income, and participation in food stamp programs.

Child Sample Person Questionnaire

This questionnaire, for persons 6 months through 11 years of age, included sections on birth characteristics, congenital and other chronic conditions, infant feeding, functional impairment, weight status, pesticide exposure, school attendance, language use, participation in meal programs, and medicine and vitamin usage. Detailed data relating to health status assessment and health care needs were collected in sections on health services utilization, dental care, anemia, vision, hearing, TB exposure, and immunization status. A few questions obtaining self-reports of ability to see and hear at school and perceived weight status were included for children 6–11 years of age.

Adult Sample Person Questionnaire

For sample persons 12–74 years of age, this questionnaire included items on health habits, tuberculosis, anemia, smoking, weight status, functional impairment, chronic conditions, pesticide exposure, acculturation, meal programs, and medicine and vitamin usage. To address the issues of health care needs and health status assessment, detailed sections on health services, dental care, diabetes, vision, hearing, hypertension, digestive disease, and cardiovascular conditions were included. Finally, the full name, father's name, and social security number were obtained to facilitate linkage with the National Death Index.

Questionnaires administered in the mobile examination center

Dietary Questionnaire

For each sample person, a trained dietary interviewer recorded the quantity of every item of food or drink consumed during the previous day, thus enabling estimates to be made of calories, protein, carbohydrates, fat, unsaturated fats, cholesterol, and specific vitamins and minerals consumed during the recall period. A food frequency section ascertained usual patterns of food consumption measured by daily and/or weekly frequency of consumption of foods within a number of groupings, including milk, meat, fish, eggs, fats and oils, legumes and nuts, cereals, fruits, vegetables, and alcoholic beverages. Additional questions on special diets and dietary practices were included in this questionnaire.

Adult Sample Person Supplement

This questionnaire was administered to examined persons 12–74 years of age. It contained sections on recent pesticide exposure, cigarette smoking for persons 12–19 years of age, reproductive history for females, alcohol consumption, drug abuse, and, for persons 20–74 years of age, depression.

Examination by physician

A physician performed and recorded a medical examination giving special attention to specified findings related to hearing, vision, gallbladder disease, and the cardiovascular, neurological, and musculoskeletal systems. The physician also assessed overall health status, nutritional status, and weight status and noted diagnostic impressions and related health care needs.

Special clinical procedures and tests

Ultrasound examination of the gallbladder

For the purpose of estimating the prevalence of gallstones, an ultrasound examination was conducted on a specified subsample of examinees 20–74 years of age.

Dental examination

All examined persons received an examination that included the following measures of dental health: 1) a decayed, missing, filled (DMF) surface index, 2) a dental restorative

treatment needs index, 3) a simplified oral hygiene index, 4) a periodontal index, 5) an assessment of need for and quality of full dentures, and 6) an assessment of malocclusion.

Vision screening

Examined persons 6–74 years of age were tested for visual acuity. The near vision and distance vision tests involved reading test cards with Sloan letters or Landolt rings set at standard distances from the eyes. Binocularity of vision was tested by using the Random Dot E (RDE) test.

Tympanic impedance

For the purpose of assessing levels of effusive and noneffusive middle ear disease, impedance tympanometry was performed on all examined persons. In this procedure, the mobility of the tympanic membrane is induced and recorded electronically under varied air pressures in the ear canal.

Puretone audiometry

This test, conducted on examined persons between the ages of 6 and 74, permitted determination of threshold levels of hearing for frequencies of 500, 1000, 2000, and 4000 hertz for each ear.

Electrocardiograms

Electrocardiographic signals, for examined persons 20–74 years of age, were digitized and recorded on magnetic tape. This provided normative data on amplitude, duration, interval and axis measurements, and permitted interpretations of heart disease according to the Minnesota classification code.

Body measurements

Measurements were made on all examinees and included standing height and/or recumbent length, depending on age; body weight; triceps and subscapular skinfolds; and various other measurements.

Hair collection

A small sample of hair was collected from each examined person 12–74 years of age and analyzed for selected trace elements. These data, which were collected for the Centers for Disease Control for methodological purposes, can be related to body burdens or stores of the elements and to overall nutritional and health status.

Tuberculin skin test

In the California and Dade County, Fla. PSU's, examinees were injected with 5 tuberculin units of purified protein derivative (PPD) to test for exposure to tuberculosis. Examinees were examined at the examination center or at home 2 to 3 days later by a trained nurse who read and recorded the test results.

X-rays

Two chest X-rays were made, as follows:

Posterior-anterior (PA)

This X-ray of persons 20–74 years of age was used for the determination of heart size and diagnosis of cardiovascular conditions, lung and chest conditions, and structural deformities.

Lateral

Taken of persons 45–74 years of age, this X-ray provided an additional parameter for the determination of heart size.

No X-rays were taken of pregnant women.

Urine tests

The following tests were performed on casual samples of urine:

N-Multistix tests

These urinary dipstick tests for qualitative protein, glucose, ketones, bilirubin, blood, urobilinogen, pH, and bacteriuria (nitrite test) were done for examined persons 6–74 years of age.

Urinary sediments

Sediments including red cells, white cells, and casts were measured for persons 6–74 years of age.

Analysis for pesticide levels

Urine samples from a half-sample of examined persons 12–74 years of age were tested for the presence of alkyl phosphate residues and metabolites, carbamate residues, phenolic compound residues, and malathion metabolites. Appendix VIII contains a complete listing of the pesticide residues and metabolites that were determined.

Tests on blood samples

Tests on blood samples provide a broad range of information related to health and nutrition. The particular tests performed varied with the specific target condition and age group (see chapter 2 for discussions of target conditions and appendix V for a summary of tests performed by age group).

Oral glucose tolerance test (OGTT)

This test involved the collection of blood specimens from examined persons while they were in a fasting state as well as at 1 and 2 hours after the glucose challenge. The test was performed on a specified half sample of examined adults 20–74 years of age to provide estimates of the prevalence of diabetes and impaired glucose tolerance.

Liver function tests

Biochemical liver tests, performed on examined persons 20–74 years of age, included bilirubin, SGOT, SGPT, and alkaline phosphatase.

Anemia-related laboratory tests

For the diagnosis of anemia, tests on blood samples included protoporphyrin, iron, total iron-binding capacity, red cell folates, serum folates, serum ferritin, and abnormal hematological indices.

Other biochemical nutritional tests

These tests included albumin and vitamin A.

Serum lipids

Because of their relevance to cardiovascular disease, determinations were made of serum cholesterol, triglycerides, and high density lipoprotein (HDL).

Biochemical tests for body burden from environmental exposures

Levels of lead (all persons) and organochlorine pesticide residues and metabolites (half-sample of persons 12–74 years of age) were determined. Tests for carboxyhemoglobin and thiocyanate were performed on a half sample of persons 3–74 years of age for the first 12 examination sites only.

Hematology

The hematological determinations included hemoglobin, hematocrit, red blood cell count, white blood cell count and differential analysis, and red blood cell morphology.

Kidney function

The serum creatinine test for kidney function was performed on blood samples.

Syphilis serology

The serology determinations for syphilis for examined persons 12–74 years of age included qualitative and quantitative ART, a FTA-ABS, and MHA-TP.

Appendix III
Examination components by age groups

6 months–5 years	6–11 years	12–19 years	20–74 years (nonfasting)	20–74 years (fasting)
Physician exam	Physician exam	Physician exam	Physician exam	Physician exam
Dental exam	Dental exam	Dental exam	Dental exam	Dental exam
Dietary interview	Dietary interview	Dietary interview	Dietary interview	Dietary interview
Body measurements	Body measurements	Body measurements	Body measurements	Body measurements
TB skin test[1]	TB skin test[1]	TB skin test[1]	TB skin test[1]	TB skin test[1]
Tympanic impedance	Tympanic impedance	Tympanic impedance	Tympanic impedance	Tympanic impedance
...	Audiometry	Audiometry	Audiometry	...
...	Vision test	Vision test	Vision test	...
Venipuncture[2]	Venipuncture	Venipuncture	Venipuncture	Venipuncture
...	Urine	Urine	Urine	Urine
...	...	Hair collection	...	Hair collection
...	...	...	Posterior-anterior chest X-ray	Posterior-anterior chest X-ray
...	...	...	Lateral chest X-ray[3]	Lateral chest X-ray[3]
...	...	...	Electrocardiogram	Electrocardiogram
...	...	...	...	Oral glucose tolerance test
...	...	...	...	Ultrasound examination

[1]Conducted under special arrangements in the California and Dade County, Florida sites.
[2]Fingerstick only for 6 months–3 years of age.
[3]For persons 45–74 years of age.

NOTE: ... = category not applicable.

Appendix IV
Description of food models, food coding manual, and nutrient data base

Food models

The data collection tools used by the HHANES dietary field staff included those used in the previous NHANES programs: A revised set of abstract food models similar to those developed at Tulane University[148] and a food coding manual developed by the NCHS staff. The abstract models offered advantages of minimal cost, minimal display and storage space requirements, and, compared with the models used in the previous NHANES surveys, reduced bias in the reporting of types of food eaten and improved accuracy of food quantification.

A major shortcoming of the food models used in the previous NHANES programs was that they were not designed to be used interchangeably. For example, dietary interviewers observed that if a respondent could not equate the food container with a food model selection, he or she had difficulty in reporting amounts of foods consumed. In the revised food model system, each model used in the interview had universal application across foods. Respondents were able, for example, to quantify the amount of string beans they had consumed using a model representing a coffee cup, if this model seemed best to represent the actual amount of that food. The model set included abstract mounds, squares, discs, spheres, wedges, and thickness sticks, as well as the typically used plastic serving utensils and dishes. Accurate volume measurement was determined for each model and all models were labeled with unique identifiers. The food model changes simplified coding procedures during the 24-hour recall interview, minimized the need for interviewers to perform calculations, and expedited data processing.

Food code manual

A great deal of emphasis was placed on developing and pretesting the food code manual for HHANES. There was much discussion between NCHS staff members, the Dietary Task Force, the data collection contractor's staff, and others concerning the specificity of the food coding manual. Both the detail with which a respondent could be expected to describe a food and the practicality of attempting to maintain accurate brand name nutrient data over the course of a long survey were issues considered during the discussion of the manual. It was finally decided to use a condensed and reorganized version of the coding manual developed by the U.S. Department of Agriculture (USDA) for its 1977–78 Nationwide Food Consumption Survey (NFCS).[149] The HHANES coding manual began with a core of food items and, as new items were reported, was updated using codes and verbatim descriptions from the USDA manual. A small number of codes for food items came from other sources as identified in the following section.

Nutrient data base

The nutrient data base consisted of foods corresponding to those in the food code manual, with nutrient levels expressed in 100-gram edible portions. The nutrient composition data were obtained from the following sources: The USDA's 1977–78 NFCS nutrient data base, the special data base developed by USDA for use in Puerto Rico as part of the 1977–78 survey; nutrient composition from USDA's *Handbook 456*[150]; commercial data obtained during NHANES II; and data derived from recipe calculations. This almost total reliance on the USDA data bank will provide comparability between the HHANES and NFCS programs.

NOTE: A list of references follows the text.

Appendix V
Blood and urine assessments by specimen types and age groups

Test			Age		
	6 months–5 years[1]	6–11 years	12–19 years	20–74 years (nonfasting)	20–74 years (fasting)
Whole blood					
Lead	X	X	X	X	X
Protoporphyrin	X	X	X	X	X
Red blood cell folate[2]	X	X	X	X	X
Complete blood counts (CBC)[3]	X	X	X	X	X
Serum					
Iron	[4]X	X	X	X	X
Total iron binding capacity	[4]X	X	X	X	X
Ferritin	[4]X	X	X	X	X
Folate[2]	[4]X	X	X	X	X
Differential count[2]	[4]X	X	X	X	X
Vitamins A and E	[4]X	X	X	X	X
Glucose	...	...	...	X	X
Cholesterol	...	...	...	X	X
Triglycerides	...	...	...	...	X
High density lipoprotein	...	...	...	X	X
Pesticides (organic)	...	...	X	X	...
Syphilis serology	...	...	X	X	X
Albumin	...	...	...	X	X
Total protein	...	...	...	X	...
Alkaline phosphatase	...	...	...	X	X
LDH	...	...	...	X	X
SGOT	...	...	...	X	X
Phosphorus	...	...	...	X	X
Uric acid	...	...	...	X	X
Total bilirubin	...	...	...	X	X
Calcium	...	...	...	X	X
Urea Nitrogen	...	...	...	X	X
Creatinine	...	...	...	X	X
Total CO_2	...	...	...	X	X
Chloride	...	...	...	X	X
Sodium	...	...	...	X	X
Potassium	...	...	...	X	X
SGPT	...	...	...	X	X
Tetanus	[4]X	X	...	...	...
Serum and hair samples					
Selected trace metals[5]	...	...	X	...	X
Plasma					
Oral glucose tolerance test	...	...	...	...	X
Urine					
N-Multistix	...	X	X	X	X
Pesticides	...	...	X	X	...

[1]Fingerstick only for persons 6 months–3 years of age.
[2]Special hematological subsample only (See appendix VII for explanation of the inclusion criteria).
[3]Includes hematocrit, hemoglobin, red and white cell counts, mean corpuscular volume, mean corpuscular hemoglobin, and mean corpuscular hemoglobin concentration.
[4]4–5 years of age.
[5]Performed on a subset of the samples collected as a pilot test only.

NOTE: X = category applicable.

NOTE: ... = category not applicable.

Appendix VI
Laboratories for blood and urine assessments

Laboratory component	Laboratory
Biochemistry and hematology[1]	Center for Environmental Health and Center for Infectious Disease, Centers for Disease Control, Atlanta, Ga.
Chemistry profile[2]	Primate Research Institute, New Mexico State University, Holloman AFB, N.Mex.
Cholesterol, triglycerides, and HDL	Lipid Research Center, Johns Hopkins University, Baltimore, Md.
Pesticides	Toxicant Analysis Center, Environmental Protection Agency, Bay Saint Louis, Miss.
Trace metals (hair)	Center for Environmental Health, Centers for Disease Control, Atlanta, Ga.

[1]Protoporphyrin, RBC folate, serum folate, lead, oral glucose tolerance, vitamin A, vitamin E, iron, total iron binding capacity, syphilis, tetanus, ferritin.
[2]Tests performed on the Centrifichem 500: Albumin, total protein, alkaline phosphatase, cholesterol, LDH, SGOT, uric acid, total bilirubin, creatinine, glucose, calcium, urea nitrogen, total carbon dioxide, chloride, SGPT, inorganic phosphorus.
Tests performed on the IL 343 Flame Photometer: Sodium, potassium.

Appendix VII
Criteria for inclusion in the
special hematological subsample

[On the basis of these hematological indices, a sample person was selected for the special hematological subsample, for which serum and red cell folate and differential smear analyses were performed. A control group consisted of those normal sample persons whose identification numbers ended in 8. In addition, all females 18-44 years of age were included]

Assessment according to sex and age	Value	
	Less than	Greater than
White cell count (number x 10^9 per liter)	3.5	13.0
Red cell count (number x 10^{12} per liter)		
Males, 16 years of age and over	4.0	6.0
Females, 16 years of age and over	3.8	6.0
Both sexes, under 16 years of age	3.8	6.0
Hemoglobin (g/dL — grams per deciliter)		
Males, 16 years of age and over	13.5	18.5
Females, 16 years of age and over	11.5	16.5
Both sexes, under 16 years of age .	11.0	(^{1})
Hematocrit (percent)		
Males, 16 years of age and over	38.0	56.0
Females, 16 years of age and over	32.0	50.0
Both sexes, under 16 years of age	31.0	(^{1})
Mean corpuscular volume (fl—femtoliter)		
Both sexes, 16 years of age and over	79.5	105.0
Both sexes, under 16 years of age	74.5	100.0

[1] Upper value not specified.

Appendix VIII
Pesticide target compounds

Serum	Urine
Aldrin	Carbofuranphenol
alpha-BHC	2,4-D
beta-BHC	Dicamba
gamma-BHC	Isopropoxyphenol
delta-BHC	3-Ketocarbofuran
op'-DDD	Malathion Dicarboxylic Acid
pp'-DDD	Malathion Monocarboxylic Acid
op'-DDE	*alpha*-Naphthol
pp'-DDE	*para*-Nitrophenol
op'-DDT	Pentachlorophenol
pp'-DDT	Silvex
Dieldrin	2,4,5-T
Endrin	2,4,5-Trichlorophenol
Heptachlor Epoxide	3,5,6-Trichloro-2-pyridinol
Heptachlor	
Hexachlorobenzene	
Mirex	
Oxychlordane	
PCB's	
trans-Nonachlor	

Appendix IX
Consent forms

OMB No.: 0937-0078
Approval Expires: 2/85

PHS # 6219
9/81   CONSENT TO EXAMINATION AND REQUEST TO FURNISH RESULTS

Please read the following information and sign your name to indicate that you have read and understand this important information about the examination procedures used in our survey.

You can expect to be in the Examination Center about 3 hours. You will receive a medical examination by a physician and a dental examination by a dentist. We will measure your height and weight. A nutritionist will ask you about the food you eat. We will also take blood and urine specimens for laboratory tests and give you a test for tuberculosis. Depending on your age, we may give you a chest x-ray, an electrocardiogram, tests for hearing, vision, diabetes, gallstones, venereal disease, and liver disease. In addition, you will be asked questions about your mental well-being and use of alcohol and other drugs.

We use standard medical procedures administered by doctors, dentists, nurses and trained technicians. We would like to point out that as during any similar physical examination, there may be some discomfort or soreness resulting from the collection of a blood specimen or from the administration of the tuberculin skin test. If you are chosen to receive a chest x-ray, this will add to your total lifetime exposure to x-rays.

The intent of the survey is to provide a picture of the health and nutritional status of the Hispanic population. We will not be able to provide any medical treatment or medication to you. However, in the course of our examination, we will determine important health information about you and with your permission we will provide this information to your doctor or clinic. The medical information and other personal data obtained in this survey are kept in the strictest of confidence. The individual findings collected on each person in the survey are combined and used only for research and statistical purposes. By law, the information you provide cannot be used for any other purpose without your written permission.

If you have any questions about the survey or your participation in it, or have any problems as a result of the examination, you should contact either our staff at the Mobile Examination Center or at our headquarters in the Washington, D.C. area. The Mobile Examination Center will be in your area from _____ to _____ . The office is open from 9 a.m. to 5 p.m., Tuesday through Saturday. You may also call Mr. David L. Larson at our headquarters at (301) 436-8267 after the Mobile Examination Center has left your area.

Remember, your participation in this survey and any part of the examination is completely voluntary. There is no penalty if you refuse to take part in the survey or in any of the procedures involved in the examination.

I HAVE READ AND UNDERSTAND THE INFORMATION PRESENTED AND CONSENT TO PARTICIPATE
IN THE EXAMINATION.

_____
PRINT FIRST, MIDDLE, AND LAST NAME OF SAMPLE PERSON

_____   _____
Signature of sample person if   Date
12 years of age or over

PARENT OR GUARDIAN MUST ALSO SIGN IF SAMPLE PERSON IS UNDER 18 YEARS OF AGE.

_____   _____
Signature of parent or guardian   Date

_____ _____   _____ _____
Interviewer   Date   Witness(if required)   Date

I WOULD LIKE THE SUMMARY OF MY EXAMINATION RESULTS TO BE SENT TO THE ADDRESSES
BELOW:

_____   _____
Name of Physician or Clinic   Name of Dentist or Dental Clinic

_____   _____
Street Address   Street Address

_____ _____ _____   _____ _____ _____
City   State Zip Code   City   State   Zip Code

PHS No. 6219
9/81

OMB No.: 0937-0078
Approval Expires: 2/85

CONSENTIMIENTO PARA EL EXAMEN Y SOLICITUD PARA PROVEER LOS RESULTADOS

Por favor lea la información siguiente y firme su nombre para indicar que usted ha leído y entiende esta información importante sobre los procedimientos del examen que se usan en nuestro estudio.

Usted puede contar con estar en el Centro de Examen alrededor de 3 horas. Un médico le hará un examen médico y un dentista le hará un examen dental. Mediremos su altura y peso. Una nutricionista le hará preguntas sobre la comida que usted come. También tomaremos muestras de sangre y orina para hacer pruebas del laboratorio y le haremos una prueba para la tuberculosis. Según su edad, puede ser que le harán una radiografía del pecho, un electrocardiograma, pruebas de oído y visión, la diabetes, el cálculo biliar, enfermedad venérea, y enfermedad del hígado. Además, le harán preguntas sobre su estado mental y su uso de alcohol y otras drogas.

Usamos procedimientos médicos corrientes administrados por médicos, dentistas, enfermeras y técnicos entrenados. Quisiéramos advertirle que así como en cualquier examen físico, puede ser que haya un poco de malestar como resultado de la colección de la muestra de sangre. Si usted es escogido para recibir un rayo X del pecho, ésto se le agregará a su exposición total de vida a las radiografías.

El propósito de este estudio es presentar un cuadro del estado de la salud y nutrición de la población hispana. No podremos facilitarle ningún medicamento o tratamiento médico. Sin embargo, en el curso de nuestro examen, determinaremos importante información de salud sobre usted y con su permiso facilitaremos esta información a su médico o clínica. La información médica y otros datos personales obtenida en este estudio serán guardados estrictamente confidencial. Los resultados individuales recopilados sobre cada persona en la encuesta se combinaran y se usaran sólo para propósitos de estudios y estadísticas de salud. Por ley no podemos entregar la información que usted nos dé a nadie sin su permiso escrito.

Si necesita más información sobre la encuesta o su participación en ella, o si usted tiene algunos problemas como resultado del examen médico, por favor comuniquese con nuestro personal en el Centro de Examen Móvil o en nuestra oficina principal en Washington, D.C. El Centro de Examen Móvil estará en su área el _____ al _____ . La oficina está abierta de 9 a.m. a 5 p.m., martes a sábado. También puede llamar al Señor David L. Larson en nuestra oficina principal al teléfono (301) 436-8267 después de que se haya ido el Centro de Examen Móvil de su área.

Recuérdese que su participación en esta encuesta y cualquier parte del examen es completamente voluntaria. No hay ninguna obligación si no quiere participar en la encuesta o en cualquier procedimiento del examen.

YO HE LEÍDO Y ENTIENDO LA INFORMACIÓN PRESENTADA Y CONSIENTO PARA PARTICIPAR EN EL EXAMEN.

PRIMER Y SEGUNDO NOMBRE Y APELLIDO DE PERSONA MUESTRA

_____   _____
Firma de la persona muestra si   Fecha
12 años de edad o más

PADRE, MADRE, O GUARDIÁN TAMBIÉN TIENE QUE FIRMAR SI LA PERSONA MUESTRA TIENE MENOS DE 18 AÑOS DE EDAD.

_____   _____
Firma del padre, madre o guardián   Fecha

_____   _____   _____   _____
Entrevistador   Fecha   Testigo (si se requiere) Fecha

QUIERO QUE UN SUMARIO DE LOS RESULTADOS DE MI EXAMEN SEA MANDADO A LA DIRECCIÓN SIGUIENTE:

_____   _____
Nombre del Médico o Clínica   Nombre del Dentista o Clínica Dental

_____   _____
Dirección   Dirección

_____   _____
Ciudad   Estado Zona Postal   Ciudad   Estado Zona Postal

Appendix X
Reports of findings

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics
Hyattsville, MD 20782

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

REPORT OF FINDINGS I

Doctor's
Name
and _____
Address _____

_____

Dear Doctor:

Recently the person named on the enclosed page was a sample person who voluntarily participated as an examinee in the Hispanic Health and Nutrition Examination Survey conducted at special facilities of the U.S. Public Health Service. The objectives of the Survey are to obtain information on the health and nutrition status of the U.S. Hispanic population, 6 months to 74 years of age. The examination is not, and was not intended to be, a substitute for a visit to the examinee's physician, nor was it intended to be a complete examination. No attempt has been made by our staff physician to diagnose those conditions dependent on a thorough review of findings from the various components of the examination. At the request of the examinee, however, we do send a report of findings from certain selected procedures to the physician he or she indicates.

Enclosed is a report which notes any physical findings which our physician thought were significant and should be brought to your attention (i.e., for which no treatment had been sought or no history given). Also reported are some test results and laboratory data, and a copy of a chest X-ray and an ECG tracing are enclosed. Although we are not engaged in follow-up treatment of our findings, we appreciate the cooperation of our examinees and hope that we can contribute to their medical care by making this information available to you.

In addition to the blood and urine analyses performed on all survey participants, certain examinees are selected to receive other tests, such as serum levels of cholesterol, trace elements, and certain pesticide compounds. Some of these tests require more time than others to process. If any of these tests were performed for this person, findings will be forwarded as soon as they are available.

Sincerely yours,

Arnold Engel

Arnold Engel, M.D.
Medical Advisor

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

NOTES ON TESTS AND PROCEDURES

Medical examination—A physician examined each sample person. The physician's examination included the head and neck, chest (cardiopulmonary), abdomen, and extremities (musculoskeletal and neurological); however, a rectal examination was excluded. X-Rays and EKG—A 12-lead EKG and A – P chest X-ray (unless contraindicated) were done for examinees 25-74 years.

HEMATOLOGY—SCREENING LIMITS—***

	Determination			
Age group	Micro-hematocrit Vol. %	Cyanmet-hemoglobin Hgb Gm%	Coulter counter RBC/cc	Coulter counter WBC/cc
Age 1	31	10.0	3.8-5 2 mill.	7.0-16.0 thou.
Ages 2-11	34	11.0	3.8-5.2 mill.	6.0-15.0 thou.**
Males 12-16 years*	39	13.0	4.5-5.5 mill.	4.5-10.0 thou.
Females 12-16	36	11.5	4.2-5.2 mill.	4.5-10.0 thou.
Adult Males	41-52	14.0-16.5	4.6-6.2 mill.	4.3-10.0 thou.
Adult Females	36-48	12.0-14.5	4.2-5.4 mill.	4.3-10.0 thou.
Pregnant Females	33-42	10.5-14.0	3.7-4.9 mill.	5.0-12.0 thou.

*Marked variation with age for hematocrit, hemoglobin, and red blood cells for males in puberty.
**Marked variation with age for white blood cells in age group 2-11.
***Results outside the screening limits are considered to warrant further investigation of the examinee.

Urinalysis - Dip and read method using the Ames Clini-Tek. A standard microscopic procedure was also used.

Audiometry - Air conduction readings are reported in decibels with respect to audiometric zero (ANSI), which is considered normal.

ROUGH GUIDELINES FOR dB REPORT AT 500-2000 cps.

25 dB or less – Hearing normal or more acute
30-40 dB – Near normal (difficulty with faint speech)
45-55 dB – Mild (difficulty with normal speech)

60-70 dB – Moderate (difficulty with loud speech)
75-100 dB – Severe (hears only amplified speech)
105 or more – Profound (usually cannot understand amplified speech)

BLOOD PRESSURE

First reading ____/_____   Second reading ____/_____   □ Not done

IMPEDANCE AUDIOMETRY SCREENING TEST

□ Positive   □ Negative   □ Not done
(See attached letter for indication of positive results.)

URINE □ Not done

Albumin □ Neg   □ 30 mg/dl
□ 100mg/dl   □ ≥300mg/dl

Sugar   □ Neg   □ Trace   □ .25g/dl
□ .5g/dl   □ ≥1.0g/dl

Nitrite (Bacteriuria)   □ Pos   □ Neg

Blood □ Pos   □ Neg

AUDIOGRAM – Decibels

CPS	500	1000	2000	4000
Right				
Left				

□ Not done

HEMATOLOGY   □ Not done

Hematocrit _____ vol%
Hemoglobin _____ gm%

RBC count _____ mill/cc
WBC count _____ thou/cc

VISION

Distance Vision		Near Vision
R Eye	L Eye	20/____

20/____   20/____   Acuity at 40cm

□ Without correction
□ With correction

Worse than 20/333   □

□ Not done   □ Not done

CHEST X-RAY
□ Enclosed   □ Not done

ECG
□ Enclosed   □ Not done

TUBERCULIN TEST
____mm   □ Negative
□ Not done   □ Not read

OTHER CLINICAL FINDINGS

EXAMINEE'S NAME AND ADDRESS _____	DATE OF EXAMINATION	AGE	HEIGHT (cm)
		SEX	WEIGHT (kg)

REPORT OF FINDINGS II

Doctor's
Name and _____

Address _____

_____

Dear Doctor:

Earlier we forwarded to you a report of clinical findings obtained during the Hispanic Health and Nutrition Examination Survey on the examinee named below. At that time we explained that results from certain other tests would take longer to obtain and would be sent when available. The enclosed findings report contains these results.

Please be reminded that the objectives of the Survey are to obtain information on the health and nutrition status of the U.S. Hispanic population, 6 months to 74 years of age. The examination is not, and was not intended to be, a substitute for a visit to the examinee's physician, nor was it intended to be a complete examination. At the request of the examinee, however, we do send a report of certain selected procedures to his or her physician.

Sincerely yours,

Arnold Engel

Arnold Engel, M.D.
Medical Advisor

EXAMINEE'S NAME & ADDRESS

_____

_____

Date of Examination _____

TEST	RESULT	NORMAL LIMITS
GLUCOSE TOLERANCE TEST		
FASTING	mg%	<115
1 HOUR	mg%	<200
2 HOUR	mg%	<140
IRON (SERUM)	ug%	50-175
IRON BINDING CAPACITY (IBC) (SERUM)	ug%	290-500
PROTOPORPHYRIN (WHOLE BLOOD)	ug%	33-90
LEAD (WHOLE BLOOD)	ug%	<30
VITAMIN A (SERUM)	ug%	20-80 - Adults 20-50 - Children
CHOLESTEROL (SERUM)	mg%	<300
TRIGLYCERIDES (SERUM)	mg%	<300
A VALUE OF XXX IN THE RESULTS FIELD INDICATES THAT THE TEST WAS NOT DONE FOR THIS PERSON. OTHER LABORATORY FINDINGS ARE ATTACHED WHEN APPLICABLE.		
OTHER SIGNIFICANT BLOOD AND URINE RESULTS	OTHER SIGNIFICANT EXAMINATION FINDINGS	

Form PHS 6214-12 (1/83)

__ __ __ __ __-__
NCHS sample number

85

Confidentiality has been assured examinees as set forth in 22 F.R. 1687

Department of Health and Human Services
Public Health Service
National Center for Health Statistics
Hyattsville, MD 20782

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

REPORT OF DENTAL FINDINGS

Dentist's
Name and _____

Address   _____

           _____

Dear Doctor:

Recently the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service.

The dental examination of the Hispanic Health and Nutrition Examination Survey is not, and is not intended to be, a substitute for the examination usually given to persons seeking care from their own dentist. Neither a dental history nor X-rays are taken, and therefore the findings are solely the result of what can be seen at the time of the examination. The examinee named in this report requested that it be sent to you.

If you have any questions about the Survey, please write.

Sincerely,

(Examining Dentist)

Examinee's name and address	Age	Date of examination
_____		
_____	_____	_____

THE INDEX ASSESSMENTS USED IN THE SURVEY REVEAL:

☐ No conditions which suggest that the examinee should be seen by you before the next regular appointment.

☐ One or more of the following conditions that suggest a clinical examination is desirable to determine whether or not treatment is needed before the next regular appointment.

    ☐ Decayed teeth   ☐ Oral debris and/or calculus

    ☐ Gingivitis and/or periodontal disease   ☐ Malocclusion

    ☐ Other conditions — Specify _____

    _____

    _____

Appendix XI
Examples of analytic approaches

Example one

Definition of the model

In the blood lead trend analysis, a mixed model was used to compute the predicted percent reduction in average blood lead levels from the beginning (February 1976) to the end (February 1980) of NHANES II. SURREGR was used for this model with a continuous dependent variable and both categorical and continuous independent variables.

SURREGR was also useful for obtaining age-adjusted means by regressing the response variable on the continuous variable "age."

Definition of population subgroups of interest (control variables)

In the blood lead trend analysis, population groups of interest were all persons 6 months through 74 years of age, males, females, whites, blacks, preschool-aged children (6 months through 5 years), children aged 6–17 years, and adults aged 18–74 years.

Selection of demographic covariates (main effects)

Prior information about the distribution of the dependent variable was used to define categories. The magnitude of the association to account for with the dependent variable and the sample sizes were both taken into account.

Determination of the complete model used for regression

Prescreening using ordinary least squares, SAS PROC STEPWISE, OPTIONS/MXR, STEPWISE, FORWARD, BACKWARD (attachment A)

- In the blood lead analysis, the objective was to obtain a model with all of the main effects and the most important first-order interaction terms.
- Using this prescreening process reduced the number of

variables and gave a model that was manageable using SURREGR. It also circumvented some of the problem of having insufficient observations in each of the paired pseudo-PSU's.

Additional screening using Taylor Linearization, SAS PROC SURREGR, OPTION/TAYWLS (attachment B).

- Each variable in the model obtained from the prescreening process was initially checked to make sure there were enough observations in pairs of pseudo-PSU's.
- In the blood lead analysis, the model obtained from the prescreening process was used as a starting point to eliminate additional variables deemed as making no significant contribution to the overall variability in blood lead levels. In this process, the criterion used was that the F-statistic of the main effect or first-order interaction term had to be significant at $p = 0.10$ to remain in the model.

Determination of the reduced model used for computing predicted values

The complete model obtained through the screening process using SURREGR was then used as a starting point for determining the reduced model within each of the population subgroups.

- In the blood lead trend analysis, main effects and first-order interactions were eliminated from the model if the F-statistic was not statistically significant at $p = 0.05$. However, main effects were left in the model if they were involved in a significant interaction term regardless of the significance level of their F-statistics. Also the variables set up to define the downward trend (ORDER and ORDER1) always remained in the model.
- After the reduced model had been determined, the intercept, mean values, and regression coefficients from the SURREGR output were used to compute the predicted values.

```
 1.     //  JOB AND SETUP CARDS
10.     //SYSIN DD ;
11.     DATA;
12.     INFILE IN;
13.     INPUT SAMNUM 1-5 STAND 1-2 URBAN 11 SMSA 12 PSU 13-15
14.         SEGMENT 16-19 EXAMINED 36 AGEMO 45-46 AGEYR 47-48
15.         SEX 55 RACE 56 EDUC 62-63 WORK 65 INDUST 73-75
16.         OCCUP 76-78 INCOME 107-108 MO 184-185 DA 186-187 YR 188-189
17.         INTRVWED 208 REGION 209 STRATUM 324-325 PAIR 326
18.         WEIGHT 300-305 SAMPLE 397 LEAD 701-703
19.         LEADDATA 704;
20.     * RECODES ARE AS FOLLOWS;
21.     IF LEAD = 0 OR LEAD GE 70 OR SAMPLE = 1 OR LEADDATA = 0
22.         THEN LEAD = .;
23.     AGE1 = .;
24.     IF AGEYR GE 0 AND AGEYR LE 5 THEN AGE1 = 1;
25.     IF AGEYR GE 6 AND AGEYR LE 17 THEN AGE1 = 2;
26.     IF AGEYR GE 18 AND AGEYR LE 74 THEN AGE1 = 3;
27.     CHILD = 0;
28.     IF AGE1 = 1 THEN CHILD = 1;
29.     TEEN = 0;
30.     IF AGE1 = 2 THEN TEEN = 1;
31.     SEX1 = 0;
32.     IF SEX = 1 THEN SEX1 = 1;
33.     IF URBAN LE 2 THEN URBAN = 1;
34.     IF URBAN GE 3 AND URBAN LE 7 THEN URBAN = 2;
35.     IF URBAN = 8 THEN URBAN = 3;
36.     RURAL = 0;
37.     IF URBAN = 2 OR URBAN = 3 THEN RURAL = 1;
38.     IF INCOME GE 11 AND INCOME LE 18 THEN INCOME = 1;
39.     IF INCOME GE 19 AND INCOME LE 22 THEN INCOME = 2;
40.     IF INCOME = 88 THEN INCOME = .;
41.     INC1 = 0;
42.     IF INCOME = 2 THEN INC1 = 1;
43.     IF INCOME = . THEN INC1 = .;
44.     SOUTH = 0;
45.     IF REGION = 3 OR REGION = 4 THEN SOUTH = 1;
46.     IF MOD(MO,3)=0 AND DA GE 21 THEN MON=MOD(MO+1,12);
47.     ELSE MON=MO;
48.     SEASON = INT((MON-1)/3);
49.     IF SEASON = . THEN SEASON1 = 1;
50.     ELSE SEASON1 = SEASON + 1;
51.     WINTER = 0;
52.     IF SEASON1 = 1 OR SEASON1 = 2 THEN WINTER = 1;
53.     ORDER = (MDY(MO,DA,YR)-MDY(2,20,76))/28;
54.     IF ORDER LE 34 THEN ORDER1 = 0;
55.     ELSE  ORDER1 = ORDER-34;
```

```
55.1      RACE1 = 0;
55.2      IF RACE = 2 THEN RACE1 = 1;
56.       AS1 = CHILD*SEX1;
57.       AS2 = TEEN*SEX1;
57.01     AR1 = CHILD*RACE1;
57.02     AR2 = TEEN*RACE1;
57.03     AU1 = CHILD*RURAL;
57.04     AU2 = TEEN*RURAL;
57.05     AI1 = CHILD*INC1;
57.06     AI2 = TEEN*INC1;
57.07     AW1 = CHILD*WINTER;
57.08     AW2 = TEEN*WINTER;
57.09     AN1 = CHILD*SOUTH;
57.1      AN2 = TEEN*SOUTH;
57.11     SR1 = SEX1*RACE1;
57.12     SU1 = SEX1*RURAL;
57.13     SI1 = SEX1*INC1;
57.14     SW1 = SEX1*WINTER;
57.15     SN1 = SEX1*SOUTH;
57.16     RI1 = RACE1*INC1;
57.17     RU1 = RACE1*RURAL;
57.18     RW1 = RACE1*WINTER;
57.19     RN1 = RACE1*SOUTH;
57.2      UI1 = RURAL*INC1;
57.21     UW1 = RURAL*WINTER;
57.22     UN1 = RURAL*SOUTH;
57.23     WN1 = WINTER*SOUTH;
60.       LNLEAD = LOG(LEAD);
61.       IF LEAD = .  THEN LNLEAD = .;
62.       KEEP ORDER ORDER1 LEAD WINTER SEX1 CHILD TEEN
63.            RURAL INC1 SOUTH RACE1 LNLEAD AS1 AS2 AR1 AR2
64.            AUI AU2 AI1 AI2 AW1 AW2 AN1 AN2 SR1 SU1 SI1 SW1
65.            SN1 RI1 RU1 RW1 RN1 UI1 UW1 UN1 WN1
66.       PROC STEPWISE;
67.       MODEL LNLEAD=ORDER ORDER1 CHILD TEEN SEX1 RACE1 RURAL INC1
68.            WINTER SOUTH AS1 AS2 AR1 AI1 AI2 RU1 RW1 UN1/MAXR;
69.       //
```

```
 1.      //  JOB AND SETUP CARDS
10.      //SYSIN DD ;
11.      DATA;
12.      INFILE IN;
13.      INPUT SAMNUM 1-5 STAND 1-2 URBAN 11 SMSA 12 PSU 13-15
14.          SEGMENT 16-19 EXAMINED 36 AGEMO 45-46 AGEYR 47-48
15.          SEX 55 RACE 56 EDUC 62-63 WORK 65 INDUST 73-75
16.          OCCUP 76-78 INCOME 107-108 MO 184-185 DA 186-187 YR 188-189
17.          INTRVWED 208 REGION 209 STRATUM 324-325 PAIR 326
18.          WEIGHT 300-305 SAMPLE 397 LEAD 701-703
19.          LEADDATA 704;
20.      * RECODES ARE AS FOLLOWS;
21.      IF LEAD = 0 OR LEAD GE 70 OR SAMPLE = 1 OR LEADDATA = 0
22.          THEN LEAD = .;
23.      AGE1 = .;
24.      IF AGEYR GE 0 AND AGEYR LE 5 THEN AGE1 = 1;
25.      IF AGEYR GE 6 AND AGEYR LE 17 THEN AGE1 = 2;
26.      IF AGEYR GE 18 AND AGEYR LE 74 THEN AGE1 = 3;
27.      CHILD = 0;
28.      IF AGE1 = 1 THEN CHILD = 1;
29.      TEEN = 0;
30.      IF AGE1 = 2 THEN TEEN = 1;
31.      SEX1 = 0;
32.      IF SEX = 1 THEN SEX1 = 1;
33.      IF URBAN LE 2 THEN URBAN = 1;
34.      IF URBAN GE 3 AND URBAN LE 7 THEN URBAN = 2;
35.      IF URBAN = 8 THEN URBAN = 3;
36.      RURAL = 0;
37.      IF URBAN = 2 OR URBAN = 3 THEN RURAL = 1;
38.      IF INCOME GE 11 AND INCOME LE 18 THEN INCOME = 1;
39.      IF INCOME GE 19 AND INCOME LE 22 THEN INCOME = 2;
40.      IF INCOME = 88 THEN INCOME = .;
41.      INC1 = 0;
42.      IF INCOME = 2 THEN INC1 = 1;
43.      IF INCOME = . THEN INC1 = .;
44.      SOUTH = 0;
45.      IF REGION = 3 OR REGION = 4 THEN SOUTH = 1;
46.      IF MOD(MO,3)=0 AND DA GE 21 THEN MON=MOD(MO+1,12);
47.      ELSE MON=MO;
48.      SEASON = INT((MON-1)/3);
49.      IF SEASON = . THEN SEASON1 = 1;
50.      ELSE SEASON1 = SEASON + 1;
51.      WINTER = 0;
52.      IF SEASON1 = 1 OR SEASON1 = 2 THEN WINTER = 1;
53.      ORDER = (MDY(MO,DA,YR)-MDY(2,20,76))/28;
54.      IF ORDER LE 34 THEN ORDER1 = 0;
55.      ELSE  ORDER1 = ORDER-34;
```

```
55.1     RACE1 = 0;
55.2     IF RACE = 2 THEN RACE1 = 1;
56.      AS1 = CHILD*SEX1;
57.      AS2 = TEEN*SEX1;
57.01    AR1 = CHILD*RACE1;
57.05    AI1 = CHILD*INC1;
57.06    AI2 = TEEN*INC1;
57.17    RU1 = RACE1*RURAL;
57.18    RW1 = RACE1*WINTER;
57.22    UN1 = RURAL*SOUTH;
60.      LNLEAD = LOG(LEAD);
61.      IF LEAD = . THEN LNLEAD = .;
62.      KEEP ORDER ORDER1 LEAD WINTER SEX1 CHILD TEEN
63.          RURAL INC1 SOUTH AS1 AS2 RACE1 LNLEAD STRATUM PAIR WEIGHT
64.          AR1 AI1 AI2 RU1 RW1 UN1;
65.      * FOR WEIGHTED HANES II DATA ANALYSIS, ONE MUST FIRST
66.        SORT BY STRATUM AND PSEUDO-PSU;
66.1     PROC SORT; BY STRATUM PAIR;
67.      * THEN PROCEED WITH SURREGR TO OBTAIN REGRESSION COEFFICIENTS
68.        AND STANDARD ERRORS;
69.      PROC SURREGR MISSPSU BETA TAYWLS;
70.      MODEL LNLEAD=ORDER ORDER1 CHILD TEEN SEX1 RACE1 RURAL INC1
71.          WINTER SOUTH AS1 AS2 AR1 AI1 AI2 RU1 RW1 UN1;
72.      STRATUM STRATUM1;
73.      PSU PAIR;
74.      WEIGHT WEIGHT;
75.      //
```

Example two

```
YES MDMA YES PHONE LOGIT
SATURATED NESTED MODEL
//  JOB card(s)   TIME=15,REGION=1008K
//STEP1 EXEC SAS,TIME.SAS=30,REGION.SAS=300K
//SAS.WORK   DD UNIT=3350,SPACE=(TRK,(480,160),RLSE)
//CHILD DD DSN=STUDY,UNIT=3400-6,DISP=(OLD,KEEP),
// VOL=SER=000000
//VAROUT DD DSN=WYL.ACCT.XXX,DISP=(NEW,CATLG),UNIT=3350,
//SPACE=(TRK,(15,5),RLSE),DCB=RECFM=FB
//SYSIN DD *
  DATA;
  SET CHILD.STUDY;
  KEEP MDADEQ PHONE UNIT FAMSIZE MDMA EDHEAD MDPA T21316
     STRATUM PSEUDO;
* ALL UNKNOWNS CHANGED TO UNIT UNKNOWN AND
  KEPT FOR VARIANCE COMPUTATIONS;
* DEFINE POPULATION;
* YES MDMA VISIT YES PHONE;
  IF MDMA GE 2 THEN UNIT=.;
  IF PHONE GE 2 THEN UNIT=.;
* DEFINE STRATA;
  STRATUM=PSEUDO/2 + .5;
  STRATUM=INT(STRATUM);
* SORT BY STRATUM AND PSU IF TAPE NOT IN SORT;
  PROC SORT;
     BY STRATUM PSEUDO;
* CALCULATE VARIANCE-COVARIANCE MATRIX;
  PROC SURREGR MISSPSU BETA DATAOUT;
  CLASSES UNIT FAMSIZE EDHEAD MDPA;
  LEVELS 1  4  5  3;
  MODEL MDADEQ=UNIT*FAMSIZE*EDHEAD*MDPA/NOINT;
  STRATUM STRATUM;
  PSU PSEUDO; WEIGHT
  T21316;
  DATA _NULL_;
  SET DUMMYMO1;
  FILE VAROUT;
  PUT (B001-B060) (4*E15.8/);
//STEP2 EXEC LARGEN,TIME=2
//FT05F001  DD DSN=WYL.ACCT.XXX.MATRIX,DISP=(OLD,KEEP)
//SYSIN  DD
    5     3     5        1     0   YES MDMA,YES PHONE,SATURATED
   60    60     1                  (4E15.8)
    1                              (4E15.8)
    1     2   120     2     1      (2F2.0)
  1
-1
    4                     1        (60F1.0/60F1.0)
```

```
010101010101010101010101010101010101010101010101010101010101
010101010101010101010101010101010101010101010101010101010101
      2                      1
      1      2    60    1    1       (2F2.0)
   1-1
           7      2    60    15   1    0  (15F2.0)    11 Saturated FAMSIZE
   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
   1 1 1 0 0 0 0 0 0 0 0 0-1-1-1
   0 0 0 1 1 1 0 0 0 0 0 0-1-1-1
   0 0 0 0 0 0 1 1 1 0 0 0-1-1-1
   0 0 0 0 0 0 0 0 0 1 1 1-1-1-1
   1 0-1 1 0-1 1 0-1 1 0-1 1 0-1
   0 1-1 0 1-1 0 1-1 0 1-1 0 1-1
   1 0-1 0 0 0 0 0 0 0 0 0-1 0 1
   0 0 0 1 0-1 0 0 0 0 0 0-1 0 1
   0 0 0 0 0 0 1 0-1 0 0 0-1 0 1
   0 0 0 0 0 0 0 0 0 1 0-1-1 0 1
   0 1-1 0 0 0 0 0 0 0 0 0 0-1 1
   0 0 0 0 1-1 0 0 0 0 0 0 0-1 1
   0 0 0 0 0 0 0 1-1 0 0 0 0-1 1
   0 0 0 0 0 0 0 0 0 0 1-1 0-1 1
           8    1    4                (60F1.0)      FAMSIZE
   1
   0000000000000001
   000000000000000000000000000001
   000000000000000000000000000000000000000000000001
           8    1    16               (60F1.0)      EDHEAD
   01
   001
   0001
   00001
   00000000000000001
   000000000000000001
   0000000000000000001
   00000000000000000001
   00000000000000000000000000000001
   000000000000000000000000000000001
   0000000000000000000000000000000001
   00000000000000000000000000000000001
   000000000000000000000000000000000000000000000001
   0000000000000000000000000000000000000000000000001
   00000000000000000000000000000000000000000000000001
   000000000000000000000000000000000000000000000000001
           8    1    8                (60F1.0)      MDPA
   000001
   0000001
   0000000000000000000001
   00000000000000000000001
   0000000000000000000000000000000000000001
   00000000000000000000000000000000000000001
   00000000000000000000000000000000000000000000000000001
   000000000000000000000000000000000000000000000000000001
```

```
      8    1    8                    (60F1.0)     INTERACTION 1
00000001
000000001
0000000001
00000000001
000000000001
0000000000001
00000000000001
000000000000001
      8    1    8                    (60F1.0)     INTERACTION 2
00000000000000000000001
000000000000000000000001
0000000000000000000000001
00000000000000000000000001
000000000000000000000000001
0000000000000000000000000001
00000000000000000000000000001
000000000000000000000000000001
      8    1    8                    (60F1.0)     INTERACTION 3
00000000000000000000000000000000000001
000000000000000000000000000000000000001
0000000000000000000000000000000000000001
00000000000000000000000000000000000000001
000000000000000000000000000000000000000001
0000000000000000000000000000000000000000001
00000000000000000000000000000000000000000001
000000000000000000000000000000000000000000001
      8    1    8                    (60F1.0)     INTERACTION 4
000000000000000000000000000000000000000000000000001
0000000000000000000000000000000000000000000000000001
00000000000000000000000000000000000000000000000000001
000000000000000000000000000000000000000000000000000001
0000000000000000000000000000000000000000000000000000001
00000000000000000000000000000000000000000000000000000001
000000000000000000000000000000000000000000000000000000001
0000000000000000000000000000000000000000000000000000000001
//
```

For reanalysis of the data when the variance-covariance matrix is
on disk, the first lines are the following;

```
//  JOB card(s)    TIME=2,REGION=1008K
/*SETUP PROGRAMMER,2,,,INP=NONE
//  EXEC LARGEN,TIME=1
//FT05F0001    DD DSN=WYL.DHES.XXX.MATRIX,DISP=(OLD,KEEP)
```

Appendix XII
Data collection forms for the Hispanic Health and Nutrition Examination Survey

Contents

Book _____ of _____ books.

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics and Technology
National Center for Health Statistics

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

HOUSEHOLD SCREENER QUESTIONNAIRE (528)

LANGUAGE OF INTERVIEW

(106) 1 ☒ English

2 ☐ Spanish

(102)-(103) TIME BEGAN __ __ : __ __   1 ☐ am   2 ☐ pm

(104)-(105) TIME ENDED __ __ : __ __   1 ☐ am   2 ☐ pm

(100)

STAND _____   SEGMENT _____   SERIAL _____

(108)

ADDRESS: _____

_____

INTRODUCTION: Hello, I'm _____ and we are conducting a survey for the U.S. Public Health Service (SHOW ID CARD). A letter was sent to you recently explaining the survey, which is called the Health and Nutrition Examination Survey and is about your family's health. [IF RESIDENT DOES NOT REMEMBER LETTER, HAND NEW COPY.] All the information that you give us will be kept in the strictest confidence. Your name will not be attached to any of your answers without your specific permission.

a. Before we begin I would like to verify your address. (INCLUDE HOUSE NO., APT. NO., OR OTHER IDENTIFI-CATION AND ZIP CODE.)

(109)

City	State	Zip Code

b. Is this also your mailing address?   (110)   1 ☐ same as a.
(MARK BOX OR SPECIFY IF
DIFFERENT. INCLUDE ZIP CODE.)

(111)

City	State	Zip Code

(112)
Interviewer Name: _____ No. _____

(113)
Reviewer's Name: _____ No. _____

1a. **To begin, how many people live in this household?** (114) _____
                                                                        Number

b. **What is the name of the person or one of the persons who owns or rents this home?**
    (ENTER NAME ON FIRST LINE OF FAMILY TABLE 1.)

IF ONLY ONE PERSON LIVES IN HOUSEHOLD, GO TO 1f.

OTHERWISE CONTINUE.

---

c. **What is the name of** (REF. PERSON)**'s spouse, if any, who lives in this household?**
    (ENTER NAME ON SECOND LINE OF FAMILY TABLE 1.)

d. **And the other members of this household who are related to** (REF. PERSON): **What are their names? Let's begin with
    the oldest.** (ENTER NAME(S) IN AGE ORDER IN FAMILY TABLE 1.)

e. **Are there any other persons not related to** (REF. PERSON) **living in this household?**

                                        (115) 1 ☐ Yes   2 ☐ No

    (IF YES: ENTER NAMES IN ADDITIONAL FAMILY TABLES, ESTABLISHING A HEAD OF HOUSEHOLD
    AND ORDERING EACH FAMILY BY SPOUSE AND THEN FAMILY MEMBERS IN AGE ORDER.)

f. I have listed (<u>READ ALL NAMES</u>). Have I missed: Yes*   No

      Any babies or small children? . . . . (116) 1 ☐   2 ☐

      Any lodgers, boarders, or persons in your employ who live here? . . . . . . (117) 1 ☐   2 ☐

      Anyone who <u>usually</u> lives here but is now away from home? . . . . (118) 1 ☐   2 ☐

      Anyone else staying here? . . . . (119) 1 ☐   2 ☐

g. Do any of the persons in this household have a home anywhere else? . . . . (120) 1 ☐   2 ☐

*APPLY HOUSEHOLD MEMBERSHIP RULES. PROBE IF NECESSARY:
Where does —— usually live and sleep; here or somewhere else?

h. Are any of the persons in this household now on full-time active duty with the Armed Forces of the
United States?

                    1 ☐ Yes (GO TO 1i)   (121) 2 ☐ No (GO TO PAGE 3)

i. Who is this? Anyone Else? (DELETE PERSON FROM FAMILY TABLE BY DRAWING LINE THROUGH NAME.)

j. FOR EACH PERSON IN ARMED FORCES, ASK: Where does —— usually live and sleep; here or somewhere else?
(SPECIFY "Living at home" OR "Not living at home" IN PERSON'S LINE.)

IF SCREENER REFUSAL, ASK:

i) What is the national origin or ancestry of the persons living in this household?

      (122) ——————————————————————————————
                                      specify

ii) (IF "DK" OR REFUSED IN i): Is the national origin or ancestry of any of the persons
living in this household (Mexican/Puerto Rican/Cuban)?

                (123) 1 ☐ Yes   2 ☐ No   9 ☐ Don't Know

HOUSEHOLD COMPOSITION TABLE

STEPS:
1. After listing household, ask Questions 2b and 2c as appropriate for (first/next) family listed.
2. Determine if eligible Hispanic household member in family unit, and mark 2d.
3. If eligible family unit, complete 2e, f and g. Complete 2h after Sample Person Selection.
4. **Repeat Steps 2 and 3 for second family in household; if three or more families, use additional Household Screener Questionnaires.**
5. If any eligible family unit in household, proceed to Sample Person Selection on page 4. If no eligible family in household, go to Question 3 on page 4.
6. Complete 2i after exam appointment has been made.

(107) **FAMILY =1**

2a. NAME FIRST, MIDDLE, LAST (124)	2b. IF NOT COMPLETED ASK: What is ——'s relationship to (REF. PERSON)? (125)	2c. (126)	2c. HAND CARD S1. Please give me the number of the group or groups that represents ——'s national origin or ancestry. 2d. ELIGIBLE FAMILY? (127) 1 ☐ Yes (2e) 2 ☐ No (NEXT FAMILY OR Q.3)								
			2e. What is ——'s date of birth?			2f. AGE: USE CHT.	2g. MARK ONE 6 MOS.-			2h. SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY)	
			MO (:28)	DAY (129)	YR (:30)	(:31)	19 YRS. (132)	20-44 YRS. (133)	45-74 YRS. (134)	(135)	2i. NCHS # (101)
	REF. PERSON										

2a. NAME FIRST, MIDDLE, LAST (124)	2b. IF NOT COMPLETED ASK: What is —'s relationship to (HEAD)? (125)	2c. ↓ (126)	2e. What is —'s date of birth?			2f. AGE: USE CHT.	2g. MARK ONE			2h. ↓ (135)	SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY)

2c. HAND CARD S1. Please give me the number of the group or groups that represents —'s national origin or ancestry.

2d. ELIGIBLE FAMILY? (127) 1 ☐ Yes (2e)   2 ☐ No (NEXT FAMILY OR Q.3)

2a. NAME	2b.	2c. (126)	MO (128)	DAY (129)	YR (130)	2f. (131)	6 MOS. 19 YRS. (132)	20-44 YRS. (133)	45-74 YRS. (134)	2h. (135)	2i. NCHS # (101)
	HEAD										

SAMPLE PERSON SELECTION GUIDE

- Using the table below select Sample Person(s) following the pattern circled for each age category.

- For each Sample Person selected, circle mark in column 2g and complete column 2h on page 3.

SAMPLE PERSON SELECTION TABLE

PERSONS 6 months — 19 years	PERSONS 20 years — 44 years	PERSONS 45 years — 74 years
A 1st, 2nd, 3rd, 5th, 6th, 7th, 9th, 10th, 11th	F 1st, 2nd, 5th, 6th, 9th, 10th	K All
B 2nd, 3rd, 4th, 6th, 7th, 8th, 10th, 11th, 12th	G 3rd, 4th, 7th, 8th, 11th, 12th	
C 1st, 3rd, 4th, 5th, 7th, 8th, 9th, 11th, 12th	H 1st, 2nd, 4th, 5th, 7th, 8th, 10th, 11th	
D 1st, 2nd, 4th, 5th, 6th, 8th, 9th, 10th, 12th	I 2nd, 3rd, 5th, 6th, 8th, 9th, 11th, 12th	
E All	J 1st, 3rd, 4th, 6th, 7th, 9th, 10th, 12th	

NOTE:
- Sample selection patterns E, H, I and J are to be used only in Dade County, Florida.
- Sample selection patterns A, B, C, D, F and G are to be used only outside of Dade County, Florida.
- Sample selection pattern K is to be used in all locations.

ASK EVERYONE:

3. **Would you give me your telephone number in case my office wants to check my work?**

(136) **Telephone No.**   (   ) _____
                                                Area Code

(137)   1 ☐ **No telephone**

          7 ☐ **Refused**

(138)   (139)   (140)

4. DATE OF INTERVIEW: |___|___| |___|___| |___|___|
                               MONTH   DAY   YEAR

5. CHECK ONE:

(141)   1 ☐ No eligible families. THANK RESPONDENT AND TERMINATE INTERVIEW.

       2 ☐ Eligible family(ies), no Sample Person(s). THANK RESPONDENT AND
           TERMINATE INTERVIEW.

       3 ☐ Eligible family(ies), with Sample Person(s). COMPLETE SAMPLE PERSON
           QUESTIONNAIRE(S) FOR EACH SAMPLE CHILD (AGE 6 MONTHS –
           11 YEARS) AND EACH AVAILABLE SAMPLE ADULT (AGE 12 – 74
           YEARS); THEN COMPLETE APPROPRIATE FAMILY QUESTIONNAIRES(S).

Book _____ of _____ books.

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics and Technology
National Center for Health Statistics

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

HOUSEHOLD SCREENER QUESTIONNAIRE (528)

LANGUAGE OF INTERVIEW

(106) 1 ☐ English

2 ☒ Spanish

(102)-(103) TIME BEGAN __ __ : __ __   1 ☐ am 2 ☐ pm

(104)-(105) TIME ENDED __ __ : __ __   1 ☐ am 2 ☐ pm

(100)

_____   _____   _____
STAND   SEGMENT   SERIAL

(108)

ADDRESS: _____

_____

NOTICE: La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recogida con la garantía que será mantenida en la más estricta confidencialidad, será usada sólo para los propósitos establecidos para este estudio, y no será divulgada o entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con la Sección 308(d) de la Ley del Servicio de Salud Pública – Public Health Service Act (42 USC 242m).

INTRODUCTION: Hola, soy _____ y estamos haciendo una encuesta para el Servicio de Salud Pública de los EE.UU.A (SHOW ID CARD). Recientemente se le mandó una carta explicándole la encuesta, parte del Estudio de Salud y Nutrición y que se trata sobre la salud de su familia. (IF RESIDENT DOES NOT REMEMBER LETTER, HAND NEW COPY.) Toda la información que usted nos dé será mantenida en la más estricta confidencialidad. Su nombre no será juntado con ninguna de sus respuestas sin su expreso permiso.

a. Antes de comenzar quisiera verificar su dirección. (INCLUDE HOUSE NO., APT. NO., OR OTHER IDENTIFICA-TION AND ZIP CODE.)

(109)

City	State	Zip Code

b. ¿Es ésta también su dirección postal? (110) 1 ☐ same as a.
    (MARK BOX OR SPECIFY IF DIFFERENT.
    INCLUDE ZIP CODE.)

(111)

City	State	Zip Code

Interviewer Name:_____ (112) No._____

Reviewer's Name:_____ (113) No._____

1a. Para comenzar, ¿cuántas personas viven en esta casa?   (114)   _____

                                                                               number

b. ¿Cómo se llama la persona o una de las personas que es dueño o que (renta/alquila) esta casa?
(ENTER NAME ON FIRST LINE OF FAMILY TABLE 1.)

IF ONLY ONE PERSON LIVES IN HOUSEHOLD, GO TO 1f.

OTHERWISE CONTINUE.

---

c. ¿Cómo se llama el esposo(a) de (REF. PERSON), si tiene esposo(a), que vive en esta casa?
(ENTER NAME ON SECOND LINE OF FAMILY TABLE 1.)

d. ¿Cómo se llaman los otros miembros de esta casa que son parientes de (REF. PERSON)? Vamos a empezar con el mayor. (ENTER NAME(S) IN AGE ORDER IN FAMILY TABLE 1.)

e. ¿Hay algunas personas que no son parientes de (REF. PERSON) pero que viven en esta casa?

                                                (115)   1 ☐ Sí   2 ☐ No

(IF YES: ENTER NAMES IN ADDITIONAL FAMILY TABLES, ESTABLISHING A HEAD OF HOUSEHOLD AND ORDERING EACH FAMILY BY SPOUSE AND THEN FAMILY MEMBERS IN AGE ORDER.)

f. Yo he puesto en la lista (READ ALL NAMES). ¿He dejado: Sí*   No

Algún bebé o niños pequeños? .... (116) 1 ☐   2 ☐

Algunos huéspedes, alojados o personas en su empleo que viven aquí? ... (117) 1 ☐   2 ☐

Alguien que vive aquí <u>usualmente</u> pero está fuera de la casa ahora?   .... (118) 1 ☐   2 ☐

Algún otro que se queda aquí?   .... (119) 1 ☐   2 ☐

g.   ¿Tienen algunas de las personas en este hogar un hogar en cualquier otro lugar? (120) 1 ☐   2 ☐ ,

*APPLY HOUSEHOLD MEMBERSHIP RULES. PROBE IF NECESSARY:
¿Dónde vive y duerme —— usualmente; aquí o en otro lugar?

h.   ¿Están algunas de las personas en este hogar en servicio activo de las Fuerzas Armadas de los Estatos Unidos a horario completo?

(121)   1 ☐ Sí (GO TO 1i)   2 ☐ No (GO TO PAGE 3)

i.   ¿Quién es? ¿Algún otro? (DELETE PERSON FROM FAMILY TABLE BY DRAWING LINE THROUGH NAME.)

j.   FOR EACH PERSON IN ARMED FORCES, ASK: ¿Dónde vive y duerme —— usualmente; aquí o en otro lugar?
(SPECIFY "Living at home" OR "not living at home" IN PERSON'S LINE.)

IF SCREENER REFUSAL, ASK:

i)   ¿Cuál es el origen nacional o ascendencia de las personas que viven en este hogar?

(122) _____
                                    specify

ii)   IF "DK" OR REFUSED IN i): ¿Es el origen nacional o ascendencia de cualquiera de las personas que viven en este hogar (mexicano/puertorriqueño/cubano)?

(123)   1 ☐ Sí   2 ☐ No   9 ☐ No Sabe

HOUSEHOLD COMPOSITION TABLE

STEPS:
1. After listing household, ask Questions 2b and 2c as appropriate for (first/next) family listed.
2. Determine if eligible Hispanic household member in family unit, and mark 2d.
3. If eligible family unit, complete 2e, f and g. Complete 2h after Sample Person Selection.
4. Repeat Steps 2 and 3 for second family in household; it three or more persons, use additional Household Screener Questionnaires.
5. If any eligible family unit in household, proceed to Sample Person Selection on page 4. If no eligible family in household, go to Question 3 on page 4.
6. Complete 2i after exam appointment has been made.

(107) FAMILY #1											
2a. NAME FIRST, MIDDLE, LAST (124)	**2b. IF NOT COMPLETED ASK:** ¿Cuál es el parentesco entre —— y (REF. PERSON)? (125)	**2c.** HAND CARD S1. **Por favor, déme el número del grupo o grupos que representa (n) el origen nacional o ascendencia de ——.**									
		(126)	**2d. ELIGIBLE FAMILY?** (127) 1 ☐ Yes (2e) 2 ☐ No (NEXT FAMILY OR Q.3)								
			2e. ¿Cuál es la fecha de nacimiento de ——?			**2f.** AGE: USE CHT.	**2g.** MARK ONE			**2h.** SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY)	**2i.** NCHS #
			MO (128)	DAY (129)	YR (130)	(131)	6 MOS.-19 YRS. (132)	20-44 YRS. (133)	45-74 YRS. (134)	(135)	(101)
	REF. PERSON										

(107) **FAMILY #2**

2a. NAME	2b. IF NOT COMPLETED ASK: ¿Cuál es el parentesco entre —— y (HEAD)?	2c. HAND CARD S1. Por favor, déme el número del grupo o grupos que representa (n) el origen nacional o ascendencia de ——.									
		2d. ELIGIBLE FAMILY? (127) 1 ☐ Yes (2e) 2 ☐ No (NEXT FAMILY OR Q.3)									
			2e. ¿Cuál es la fecha de nacimiento de ——?			2f. AGE: USE CHT.	2g. MARK ONE			2h. SAMPLE PERSON #: (NUMBER ALL SP's SEQUENTIALLY WITHIN FAMILY)	
							6 MOS.-19 YRS.	20-44 YRS.	45-74 YRS.		
FIRST, MIDDLE, LAST			MO	DAY	YR						2i. NCHS #
(124)	(125)	(126)	(128)	(129)	(130)	(131)	(132)	(133)	(134)	(135)	(101)
	HEAD										

SAMPLE PERSON SELECTION GUIDE

- Using the table below select Sample Person(s) following the pattern circled for each age category.

- For each Sample Person selected, circle mark in column 2g and complete column 2h on page 3.

SAMPLE PERSON SELECTION TABLE

PERSONS 6 months — 19 years	PERSONS 20 years — 44 years	PERSONS 45 years — 74 years
A 1st, 2nd, 3rd, 5th, 6th, 7th, 9th, 10th, 11th	F 1st, 2nd, 5th, 6th, 9th, 10th	K All
B 2nd, 3rd, 4th, 6th, 7th, 8th, 10th, 11th, 12th	G 3rd, 4th, 7th, 8th, 11th, 12th	
C 1st, 3rd, 4th, 5th, 7th, 8th, 9th, 11th, 12th	H 1st, 2nd, 4th, 5th, 7th, 8th, 10th, 11th	
D 1st, 2nd, 4th, 5th, 6th, 8th, 9th, 10th, 12th	I 2nd, 3rd, 5th, 6th, 8th, 9th, 11th, 12th	
E All	J 1st, 3rd, 4th, 6th, 7th, 9th, 10th, 12th	

NOTE:
- Sample selection patterns E, H, I and J are to be used only in Dade County, Florida.
- Sample selection patterns A, B, C, D, F and G are to be used only outside of Dade County, Florida.
- Sample selection pattern K is to be used in all locations.

ASK EVERYONE:

3. ¿Podría darme su número de teléfono en caso de que mi oficina quisiera verificar mi trabajo?

(136) Número de teléfono

(_____) _____
Cifra de área

(137) 1 ☐ No hay teléfono

7 ☐ No quiso darlo

(138)   (139)   (140)

4. DATE OF INTERVIEW: |___|___| |___|___| |___|___|
                                 MONTH   DAY   YEAR

5. CHECK ONE:

(141) 1 ☐ No eligible families. THANK RESPONDENT AND TERMINATE INTERVIEW.

2 ☐ Eligible family(ies), no Sample Person(s). THANK RESPONDENT AND TERMINATE INTERVIEW.

3 ☐ Eligible family(ies), with Sample Person(s). COMPLETE SAMPLE PERSON QUESTIONNAIRE(S) FOR EACH SAMPLE CHILD (AGE 6 MONTHS – 11 YEARS) AND EACH AVAILABLE SAMPLE ADULT (AGE 12 – 74 YEARS); THEN COMPLETE APPROPRIATE FAMILY QUESTIONNAIRES(S).

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics and Technology
National Center for Health Statistics

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

FAMILY QUESTIONNAIRE (520)

WESTAT
ID #:

(100)

STAND # SEGMENT # SERIAL #

(107)

FAMILY #

(108)

ADDRESS:

Apt. No.	City	
State		Zip Code

INTERVIEWER NAME:	NO: (109)

REVIEWER NAME:	NO: (110)

LANGUAGE OF INTERVIEW
(106)

☒ English

☐ Spanish

(102)-(103)
TIME BEGAN ___ ___ — 1☐ am 2☐ pm

(104)-(105)
TIME ENDED ___ ___ — 1☐ am 2☐ pm

A. FAMILY RELATIONSHIPS

A-1. ENTER SP # AND FIRST NAME OF EACH SP IN FAMILY AGED 19 OR UNDER. IF NO SUCH SP's, GO TO A-2.

(111) _____ / _____
  SP #   FIRST NAME

(112) _____ / _____
  SP #   FIRST NAME

(113) _____ / _____
  SP #   FIRST NAME

A-2. CHECK ITEM:
(121) 1 ☐ No SP's aged 19 or under (B-1)
2 ☐ Two or more children in A-1 (A-5)
3 ☐ One child in A-1 (A-3)

A-3. Does ——'s natural father live in this household? (IF YES, SPECIFY WHICH PERSON)
(122)-(123) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-4. Does ——'s natural mother live in this household? (IF YES, SPECIFY WHICH PERSON)
(124)-(125) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____ ⎫
3 ☐ HH member, not a SP ⎭ (B-1)

A-5. Do (Names in A-1) (all) have the same natural father?
(126)
1 ☐ Y (A-6)   2 ☐ N (A-7)

ASK FOR EACH CHILD BEFORE GOING TO A-11.
A-10. Does ——'s natural father live in this household? (IF YES, SPECIFY WHICH PERSON) (PROBE IF NECESSARY: Is this the same as for ——?)
(133)-(134) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

(135)-(137) 0 ☐ Same as other child — CHILD's SP #____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

(138)-(140) 0 ☐ Same as other child — CHILD's SP #____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

A-6. Does their natural father live in this household? (IF YES, SPECIFY WHICH PERSON)
(127)-(128) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

A-7. Do (Names in A-1) (all) have the same natural mother?
(129)
1 ☐ Y   2 ☐ N (A-9)

A-8. Does their natural mother live in this household? (IF YES, SPECIFY WHICH PERSON)
(130)-(131) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-9. CHECK ITEM:
(132) 1 ☐ "Y" in A-5 and A-7 (B-1)
2 ☐ "Y" in A-5 and "N" in A-7 (A-11)
3 ☐ "N" in A-5 (A-10)

IF "Y" IN A-7, GO TO B-1.

A-11. Does ——'s natural mother live in this household? (IF YES, SPECIFY WHICH PERSON) (PROBE IF NECESSARY: Is this the same as for ——?)
(162)-(163) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

(164)-(166) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

(167)-(169) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #____
3 ☐ HH member, not a SP

(114) _____ / _____
SP #　　　FIRST NAME

(141)-(143) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(170)-(172) 0 ☐ Same as other child — CHILD's SP # _____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(115) _____ / _____
SP #　　　FIRST NAME

(144)-(146) 0 ☐ Same as other child — CHILD's SP # _____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(173)-(175) 0 ☐ Same as other child -- CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(116) _____ / _____
SP #　　　FIRST NAME

(147)-(149) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(176)-(178) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(117) _____ / _____
SP #　　　FIRST NAME

(150)-(152) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(179)-(181) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(118) _____ / _____
SP #　　　FIRST NAME

(153)-(155) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(182)-(184) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP.

(119) _____ / _____
SP #　　　FIRST NAME

(156)-(158) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(185)-(187) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(120) _____ / _____
SP #　　　FIRST NAME

(159)-(161) 0☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

(188)-(190) 0 ☐ Same as other child — CHILD's SP #_____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP #_____
3 ☐ HH member, not a SP

B. FAMILY CHARACTERISTICS

		NCHS USE ONLY

FILL FIRST COLUMN FOR HEAD OF FAMILY, THEN COMPLETE REMAINING COLUMN(S) FOR (OTHER) SAMPLE PERSON(S) IN FAMILY.

⑩① NCHS USE ONLY

B-1. Name (TRANSCRIBE FROM PAGE 3 OF SCREENER)	B-1	
B-2. SP number (TRANSCRIBE FROM PAGE 3 OF SCREENER; USE 99 FOR HEAD, IF NOT SP)	B-2	⑲①_____ (HEAD OF FAMILY)
B-3. Age (TRANSCRIBE FROM PAGE 3 OF SCREENER)	B-3	⑲② MONTHS ⑲③ YEARS
B-4. Sex	B-4	⑲④ 1 ☐ Male 2 ☐ Female
B-5. ENTER OBSERVED RACE FOR EACH PERSON WHOM YOU ARE ABLE TO OBSERVE.	B-5	⑲⑤ 1 ☐ W 2 ☐ B 3 ☐ O 9 ☐ Not obs.
B-6. In what state or foreign country was —— born? (ENTER THE NAME OF THE STATE OR FOREIGN COUNTRY)	B-6	⑲⑥ ☐☐☐ State or foreign country
IF UNDER 5 YEARS OLD, MARK "NEVER ATTENDED." **B-7.** What is the highest grade or year of regular school —— has ever attended? (CIRCLE APPROPRIATE NUMBER)	B-7	⑲⑦ 00 ☐ Never attended or Kindergarten only (B-9) Elem. . . . . 1 2 3 4 5 6 7 8 High . . . . . 9 10 11 12 College . . . 1 2 3 4 5+
B-8. Did —— finish (number in B-7) (grade/year)?	B-8	⑲⑧ 1 ☐ Yes 2 ☐ No
B-9. IF UNDER 14, MARK FIRST BOX AND GO TO B-10. OTHERWISE ASK: Is —— now married, widowed, divorced, separated or has —— never been married? (IF MARRIED, REFER TO HOUSEHOLD COMPOSITION AND MARK ACCORDINGLY.)	B-9	⑲⑨ 0 ☐ Under 14 1 ☐ Married — spouse in HH 2 ☐ Married — spouse not in HH 3 ☐ Widowed 4 ☐ Divorced 5 ☐ Separated 6 ☐ Never married
B-10. CHECK ITEM	B-10	⑳⓪ 1 ☐ under 17 yrs. old (NEXT SP) 2 ☐ 17+ yrs. old (B-11)
B-11. Did —— ever serve in the Armed Forces of the United States?	B-11	⑳① 1 ☐ Yes 2 ☐ No

B-12. During the past 2 weeks, did —— work at any time at a job or business, not counting work around the house? (INCLUDE UNPAID WORK IN THE FAMILY (FARM/BUSINESS).)	B-12	(202) 1 ☐ Yes (B-17) 2 ☐ No
B-13. Even though —— did not work during those 2 weeks, did —— have a job or business?	B-13	(203) 1 ☐ Yes 2 ☐ No
B-14. Was —— looking for work or on layoff from a job?	B-14	(204) 1 ☐ Yes 2 ☐ No (B-16)
B15. Which, looking for work or on layoff from a job?	B-15	(205) 1 ☐ Looking (B-18) 2 ☐ Layoff (B-17) 3 ☐ Both (B-17)
B-16. CHECK ITEM: MARK A BOX ONLY IF "NO" IN B-14.	B-16	(206) 1 ☐ "Yes" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)
B-17. For whom did —— work? ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER. B-18 For whom did —— work at —— last full-time civilian job or business lasting 2 consecutive weeks or more? ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER.	B-17 & B-18	Employer
B-19. What kind of business or industry is this? (For example, TV and radio manufacturing, retail shoe store, State Labor Department, farm.)	B-19	Industry (207)
B-20. What kind of work was —— doing? (For example, electrical engineer, stock clerk, typist, farmer.)	B-20	Occupation (208)
B-21. What were ——'s most important activities or duties at that job? (For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete.)	B-21	Duties
COMPLETE FROM ENTRIES IN B-17 THRU B-21; IF NOT CLEAR ASK: B-22. Was —— an employee of a private company, business or individual for wages, salary or commission?. . . . . P —— a Federal government employee? . . . F —— a State government employee?. . . . . S —— a local government employee? . . . . . L —— self-employed in own business, professional practice, or farm? IF NOT FARM, ASK: Is the business incorporated? Yes. . . . . I No . . . . SE —— working without pay in family business or farm?. . . . . WP —— never worked or never worked at a full-time civilian job lasting 2 weeks or more . . . . NEV	B-22	(209) Class of worker 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV

B-3	(192) MONTHS	(193) YEARS	B-3	(192) MONTHS	(193) YEARS	B-3	(192) MONTHS	(193) YEARS
B-4	(194) 1 □ Male	2 □ Female	B-4	(194) 1 □ Male	2 □ Female	B-4	(194) 1 □ Male	2 □ Female
B-5	(195) 1□ W 2□ B 3□ O 9□ Not obs.		B-5	(195) 1□ W 2□ B 3□ O 9□ Not obs.		B-5	(195) 1□ W 2□ B 3□ O 9□ Not obs.	
B-6	(196) ☐☐☐ State or foreign country		B-6	(196) ☐☐☐ State or foreign country		B-6	(196) ☐☐☐ State or foreign country	
B-7	(197) 00□ Never attended or Kindergarten only (B-9) Elem.....1 2 3 4 5 6 7 8 High.....9 10 11 12 College...1 2 3 4 5+		B-7	(197) 00□ Never attended or Kindergarten only (B-9) Elem.....1 2 3 4 5 6 7 8 High.....9 10 11 12 College...1 2 3 4 5+		B-7	(197) 00□ Never attended or Kindergarten only (B-9) Elem.....1 2 3 4 5 6 7 8 High.....9 10 11 12 College...1 2 3 4 5+	
B-8	(198) 1 □ Yes	2 □ No	B-8	(198) 1 □ Yes	2 □ No	B-8	(198) 1 □ Yes	2 □ No
B-9	(199) 0 □ Under 14 1 □ Married − spouse in HH 2 □ Married − spouse not in HH 3 □ Widowed 4 □ Divorced 5 □ Separated 6 □ Never married		B-9	(199) 0 □ Under 14 1 □ Married − spouse in HH 2 □ Married − spouse not in HH 3 □ Widowed 4 □ Divorced 5 □ Separated 6 □ Never married		B-9	(199) 0 □ Under 14 1 □ Married − spouse in HH 2 □ Married − spouse not in HH 3 □ Widowed 4 □ Divorced 5 □ Separated 6 □ Never married	
B-10	(200) 1 □ Under 17 yrs. old (NEXT SP) 2 □ 17+ yrs. old (B-11)		B-10	(200) 1 □ Under 17 yrs. old (NEXT SP) 2 □ 17+ yrs. old (B-11)		B-10	(200) 1 □ Under 17 yrs. old (NEXT SP) 2 □ 17+ yrs. old (B-11)	
B-11	(201) 1 □ Yes	2 □ No	B-11	(201) 1 □ Yes	2 □ No	B-11	(201) 1 □ Yes	2 □ No
B-12	(202) 1 □ Yes (B-17)	2 □ No	B-12	(202) 1 □ Yes (B-17)	2 □ No	B-12	(202) 1 □ Yes (B-17)	2 □ No
B-13	(203) 1 □ Yes	2 □ No	B-13	(203) 1 □ Yes	2 □ No	B-13	(203) 1 □ Yes	2 □ No

B-14	(204)	1 ☐ Yes 2☐ No (B-16)	B-14	(204)	1 ☐ Yes 2 ☐ No (B-16)	B-14	(204)	1 ☐ Yes 2 ☐ No (B-16)
B-15	(205)	1 ☐ Looking (B-18) 2 ☐ Layoff (B-17) 3 ☐ Both (B-17)	B-15	(205)	1 ☐ Looking (B-18) 2 ☐ Layoff (B-17) 3 ☐ Both (B-17)	B-15	(205)	1 ☐ Looking (B-18) 2 ☐ Layoff (B-17) 3 ☐ Both (B-17)
B-16	(206)	1 ☐ "Yes" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)	B-16	(206)	1 ☐ "Yes" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)	B-16	(206)	1 ☐ "Yes" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)
B-17 & B-18	Employer		B-17 & B-18	Employer		B-17 & B-18	Employer	
B-19	Industry (207)		B-19	Industry (207)		B-19	Industry (207)	
B-20	Occupation (208)		B-20	Occupation (208)		B-20	Occupation (208)	
B-21	Duties		B-21	Duties		B-21	Duties	
B-22	(209) Class of worker 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV		B-22	(209) Class of worker 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV		B-22	(209) Class of worker 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV	

5

C. HEALTH INSURANCE

Medicare is a Social Security health insurance program for disabled persons and for persons 65 years old and over. People covered by Medicare have a card that looks like this. (SHOW CARD F-1)

C-1.	(Is/Are) (name(s) of all SP's in family) now covered by Medicare?	☐ Yes, one or more SP's covered ☐ No, no SP's covered (C-6)	
C-2.	ASK FOR EACH SP. MARK BOX IN EACH COLUMN BEFORE ASKING C-3. Is —— now covered by Medicare?	C-2	(210) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK
C-3.	FOR EACH PERSON WITH "COVERED" IN C-2, ASK C-3 AND C-4. Is —— now covered by the part of Social Security Medicare which pays for hospital bills?	C-3	(211) 1 ☐ Yes 2 ☐ No 9 ☐ DK
C-4.	Is —— now covered by that part of Medicare which pays for doctor's bills? This is the Medicare plan for which —— or some agency must pay a certain amount each month.	C-4	(212) 1 ☐ Yes 2 ☐ No 9 ☐ DK
C-5.	ASK C-5 FOR EACH PERSON WITH "DK" IN C-3 AND/OR C-4. May I please see the Social Security Medicare card(s) for —— (and ——) to determine the type of coverage? TRANSCRIBE THE INFORMATION FROM THE CARD OR MARK THE "CARD NOT AVAIL." BOX.	C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Card not avail.
C-6.	We are interested in all kinds of health insurance plans except those which pay only for accidents. (Not counting Medicare) (Is/Are) (name(s) of all SP's in family) now covered by a health insurance plan which pays any part ☐ Yes of a hospital, doctor's, or surgeon's bill? ☐ No (C-12)		
C-7.	What is the name of the plan? (RECORD IN TABLE H.I.; RETURN TO C-8.)		
C-8.	(Is/Are) (names of all SP'S) now covered by any other health insurance plan which pays any part of a hospital, doctor's, or surgeon's bill? ☐ Yes (REASK C-7 & C-8) ☐ No (C-9)		

PLAN 1	C-10. Does this plan pay any part of doctor's or surgeon's bills for operations?		
C-9. Does this (name) plan pay any part of hospital expenses?	(215) 1☐ Yes 2☐ No 9☐ DK		
(214) 1☐ Yes 2☐ No 9☐ DK	C-11. Is —— covered under this (name) plan? (MARK BOX FOR EACH SP.)	C-11	(216) 1☐ Cov. 2☐ Not cov. 9☐ DK
PLAN 2	C-10. Does this plan pay any part of doctor's or surgeon's bills for operations?		
C-9. Does this (name) plan pay any part of hospital expenses?	(218) 1☐ Yes 2☐ No 9☐ DK		
(217) 1☐ Yes 2☐ No 9☐ DK	C-11. Is —— covered under this (name) plan? (MARK BOX FOR EACH SP.)	C-11	(219) 1☐ Cov. 2☐ Not cov. 9☐ DK
PLAN 3	C-10. Does this plan pay any part of doctor's or surgeon's bills for operations?		
C-9. Does this (name) plan pay any part of hospital expenses?	(221) 1☐ Yes 2☐ No 9☐ DK		
(220) 1☐ Yes 2☐ No 9☐ DK	C-11. Is —— covered under this (name) plan? (MARK BOX FOR EACH SP.)	C-11	(222) 1☐ Cov. 2☐ Not cov. 9☐ DK

C-12. CHECK ITEM: REVIEW C-2 AND C-11, AND MARK BOX FOR EACH SP. IF ALL COVERED, GO TO SECTION D. IF NOT, CONTINUE.	C-12	(223) 1☐ Covered 2☐ Not covered, under 65 yrs. old 3☐ Not covered, 65+ yrs. old
ASK C-13 – C-15 FOR EACH PERSON "NOT COVERED." C-13. Many people do not carry health insurance for various reasons. (SHOW CARD F-2) Which of these statements describes why —— is not covered by any health insurance? (IF 65+): or Medicare?	C-13	(224) 1 2 3 4 5 6 7 8 9 ⟋ 10 _____ SPECIFY
C-14. Any other reason?	C-14	(225) 1☐ Yes (REASK C-13 & C-14) 2☐ No
MARK BOX IF ONLY ONE REASON GIVEN; OTHERWISE ASK: C-15. What is the main reason —— is not covered by any health insurance? (IF 65+): or Medicare?	C-15	(226) 00☐ Only one reason in C-13 OR 1 2 3 4 5 6 7 8 9 ⟋ 10 _____ SPECIFY

C-2	(210) 1 ☐ Cov.	2 ☐ Not cov.	9 ☐ DK	C-2	(210) 1 ☐ Cov.	2 ☐ Not cov.	9 ☐ DK	C-2	(210) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK
C-3	(211) 1 ☐ Yes	2 ☐ No	9 ☐ DK	C-3	(211) 1 ☐ Yes	2 ☐ No	9 ☐ DK	C-3	(211) 1 ☐ Yes 2 ☐ No 9 ☐ DK
C-4	(212) 1 ☐ Yes	2 ☐ No	9 ☐ DK	C-4	(212) 1 ☐ Yes	2 ☐ No	9 ☐ DK	C-4	(212) 1 ☐ Yes 2 ☐ No 9 ☐ DK
C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Card not avail.			C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Card not avail.			C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Card not avail.

C-11	(216) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(216) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(216) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK
C-11	(219) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(219) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(219) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK
C-11	(222) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(222) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK	C-11	(222) 1 ☐ Cov. 2 ☐ Not cov. 9 ☐ DK
C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old	C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old	C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old
C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY	C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY	C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY
C-14	(225) 1 ☐ Yes (REASK C-13 & C-14) 2 ☐ No	C-14	(225) 1 ☐ Yes (REASK C-13 & C-14) 2 ☐ No	C-14	(225) 1 ☐ Yes (REASK C-13 & C-14) 2 ☐ No
C-15	(226) 00 ☐ Only one reason in C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY	C-15	(226) 00 ☐ Only one reason in C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY	C-15	(226) 00 ☐ Only one reason in C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ SPECIFY

D. INCOME ASSISTANCE

D-1.	(Does/Do) (name(s) of all SP's in family) now receive assistance through the "Aid to Families with Dependent Children" Program, sometimes called "AFDC" or "ADC"? ☐ Yes ☐ No (D-3) ☐ DK (D-3)		
D-2.	ASK FOR EACH SP: Is —— included in the AFDC assistance payment?	D-2	(227) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-3.	(Does/Do) (name(s) of all SP's) now receive the "Supplemental Security Income" or "SSI" gold-colored check? ☐ Yes ☐ No (D-5) ☐ DK (D-5)		
D-4.	ASK FOR EACH SP: Does —— receive this check?	D-4	(228) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-5	There is a national program called Medicaid which pays for health care for persons in need. (In this State it is also called _____.) During the past 12 months, (has/have) (name(s) of SP's) received health care which has been or will be paid for by Medicaid (or _____)? ☐ Yes ☐ No (D-7) ☐ DK (D-7)		
D-6.	ASK FOR EACH SP: Did —— receive this care?	D-6	(229) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-7	(Does/Do) (name(s) of all SP's) now have a Medicaid (or _____) card which looks like this? SHOW MEDICAID CARD. ☐ Yes ☐ No (D-10) ☐ (D-10)		
D-8.	ASK FOR EACH SP: Does —— have a Medicaid (or _____) card?	D-8	(230) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-9.	ASK FOR EACH SP WITH "YES" IN D-8. May I please see ——'s (and ——'s . . .) card(s)? MARK APPROPRIATE BOX(ES) IN EACH SP's COLUMN, BEFORE ASKING D-10.	D-9	(231) ☐ Medicaid card seen 1 ☐ Current 2 ☐ Expired 3 ☐ No card seen 4 ☐ Other card seen 5 _____ SPECIFY

D-10.	(Is/Are) (name(s) of all SP's) now covered by any other public assistance program that pays for health care? ☐ Yes ☐ No (D-12) ☐ DK (D-12)		
D-11.	ASK FOR EACH SP: Is —— covered?	D-11	(232) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-12.	(Does/Do) (name(s) of all SP's) now receive military retirement payments from any branch of the Armed Forces or a pension from the Veteran's Administration? Do not include VA disability compensation. ☐ Yes ☐ No (D-15) ☐ DK (D-15)		
D-13.	ASK FOR EACH SP: Does —— receive these payments or the pension?	D-13	(233) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-14.	ASK FOR EACH PERSON WITH "YES" IN D-13. Which does —— receive; the Armed Forces retirement, the VA pension, or both?	D-14	(234) 1 ☐ AF 2 ☐ VA 3 ☐ Both
D-15.	(Is/Are) (name(s) of all SP's) now covered by CHAMP-VA, which is medical insurance for dependents or survivors of disabled veterans? ☐ Yes ☐ No (D-17) ☐ DK (D-17)		
D-16.	ASK FOR EACH SP: Is —— covered by CHAMP-VA?	D-16	(235) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-17.	(Is/Are) (name(s) of all SP's) now covered by any other program that provides health care for military dependents or survivors of military persons? ☐ Yes ☐ No (D-19) ☐ DK (D-19)		
D-18.	ASK FOR EACH SP: Is —— covered?	D-18	(236) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-19.	CHECK ITEM: REFER TO B-3 AND B-11 AND MARK FIRST APPLICABLE BOX.	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Yes" in B-11 (D-20)
D-20.	Does —— have a disability related to —— service in the Armed Forces of the United States?	D-20	(238) 1 ☐ Yes (D-21) 2 ☐ No (NEXT SP)
D-21.	Does —— now receive compensation for this disability from the Veteran's Administration?	D-21	(239) 1 ☐ Yes 2 ☐ No

	(101) NCHS USE ONLY		(101) NCHS USE ONLY		(101) NCHS USE ONLY
B-1		B-1		B-1	
B-2	(191)	B-2	(191)	B-2	(191)
D-2	(227) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-2	(227) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-2	(227) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-4	(228) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-4	(228) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-4	(228) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-6	(229) 1 ☐ Yes 2 ☒ No 9 ☐ DK	D-6	(229) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-6	(229) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-8	(230) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-8	(230) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-8	(230) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-9	(231) ☐ Medicaid card seen ⌐ 1 ☐ Current 2 ☐ Expired 3 ☐ No card seen 4 ☐ Other card seen ⌐ 5 _____ SPECIFY	D-9	(231) ☐ Medicaid card seen ⌐ 1 ☐ Current 2 ☐ Expired 3 ☐ No card seen 4 ☐ Other card seen ⌐ 5 _____ SPECIFY	D-9	(231) ☐ Medicaid card seen ⌐ 1 ☐ Current 2 ☐ Expired 3 ☐ No card seen 4 ☐ Other card seen ⌐ 5 _____ SPECIFY

D-11	(232) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-11	(232) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-11	(232) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-13	(233) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-13	(233) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-13	(233) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-14	(234) 1 ☐ AF 2 ☐ VA 3 ☐ Both	D-14	(234) 1 ☐ AF 2 ☐ VA 3 ☐ Both	D-14	(234) 1 ☐ AF 2 ☐ VA 3 ☐ Both
D-16	(235) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-16	(235) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-16	(235) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-18	(236) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-18	(236) 1 ☐ Yes 2 ☐ No 9 ☐ DK	D-18	(236) 1 ☐ Yes 2 ☐ No 9 ☐ DK
D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Yes" in B-11 (D-20)	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Yes" in B-11 (D-20)	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Yes" in B-11 (D-20)
D-20	(238) 1 ☐ Yes (D-21) 2 ☐ No (NEXT SP)	D-20	(238) 1 ☐ Yes (D-21) 2 ☐ No (NEXT SP)	D-20	(238) 1 ☐ Yes (D-21) 2 ☐ No (NEXT SP)
D-21	(239) 1 ☐ Yes 2 ☐ No	D-21	(239) 1 ☐ Yes 2 ☐ No	D-21	(239) 1 ☐ Yes 2 ☐ No

E. HOUSING AND INCOME

E-1.	How many rooms are in this ——? Count the kitchen but not the bathroom.	E-1	(240) _____Rooms number
E-2.	Do you have access to complete kitchen facilities in (this house/these living quarters); that is, a kitchen sink with piped water, a refrigerator and a range or cookstove?	E-2	(241) 1☐ Yes 2☐ No
E-3.	What is the main fuel used for heating this home?	E-3	(242) 01 ☐ Oil 02 ☐ Natural gas 03 ☐ Electricity 04 ☐ Bottled gas (propane) 05 ☐ Kerosene 06 ☐ Wood 07 ☐ Coal 08 ☐ Other 09 _____ SPECIFY 00 ☐ No fuel used
E-4.	What is the main heating equipment for this home?	E-4	(243) 01 ☐ Steam or hot water with radiators or convectors 02 ☐ Central warm air furnace with ducts to individual rooms, or central heat pump 03 ☐ Built-in electric units (permanently installed in wall, ceiling, or baseboard) 04 ☐ Floor, wall or pipeless furnace 05 ☐ Room heaters <u>with</u> flue or vent, burning oil, gas, or kerosene 06 ☐ Room heaters <u>without</u> flue or vent, burning oil, gas, or kerosene 07 ☐ Heating stove burning wood, coal, or coke 08 ☐ Fireplace(s) 09 ☐ Portable electric heater(s) 10 ☐ Other (SPECIFY) 11 _____ _____ 00 ☐ No heating equipment used (E-7) 99 ☐ Don't know

E-5. Are any other types of equipment used for heating this home? (IF MORE THAN ONE TYPE IS MENTIONED, MARK ONLY THE ONE USED MOST.)	E-5	01 ☐ Steam or hot water with radiators or convectors 02 ☐ Central warm air furnace with ducts to individual rooms, or central heat pump 03 ☐ Built-in electric units (permanently installed in wall, ceiling, or base-board) 04 ☐ Floor, wall or pipeless furnace 05 ☐ Room heaters <u>with</u> flue or vent, burning oil, gas, or kerosene 06 ☐ Room heaters <u>without</u> flue or vent, burning oil, gas, or kerosene 07 ☐ Heating stove burning wood, coal, or coke 08 ☐ Fireplace(s) 09 ☐ Portable electric heater(s) 10 ☐ Other (SPECIFY) 11 _____ _____ 00 ☐ No other heating equipment used (E-7)
E-6. What is the main fuel used by this additional equipment?	E-6	(245) 01☐ Oil 02 ☐ Natural gas 03 ☐ Electricity 04 ☐ Bottled gas (propane) 05 ☐ Kerosene 06 ☐ Wood 07 ☐ Coal 08 ☐ Other 09 _____ SPECIFY 00 ☐ No fuel used

E-7. What is the main fuel used for cooking in this home?	E-7	(246) 01 ☐ Oil 02 ☐ Natural gas 03 ☐ Electricity 04 ☐ Bottled gas (propane) 05 ☐ Kerosene 06 ☐ Wood 07 ☐ Coal 08 ☐ Other 09 _____ SPECIFY 00 ☐ No fuel used
E-8. Do you have air-conditioning — either individual room units, a central system or evaporative cooling?	E-8	(247) 1 ☐ Yes 2 ☐ No (E-10)
E-9. Which do you have?	E-9	(248) 1 ☐ Individual room unit 2 ☐ Central air-conditioning 3 ☐ Evaporative cooling

E-10. Was the total combined <u>family</u> income during the past 12 months — that is, yours, <u>(read names of all family members, including Armed Forces members living at home)</u> **more or less than $20,000? Include money from jobs, Social Security, retirement income, unemployment payments, public assistance, and so forth. Also include income from interest, dividends, net income from business, farm or rent, and any other money income received.**	E-10	(249) 1 ☐ $20,000 or more
		      (HAND CARD F-3)
		2 ☐ Less than $20,000
		      (HAND CARD F-4)

READ PARENTHETICAL PHRASE IF ARMED FORCES MEMBER LIVING AT HOME OR IF NECESSARY. **E-11.** Of those income groups, which letter best represents the total combined family income during the past 12 months (that is, yours, <u>(read names, including Armed Forces members living at home))?</u> **Include wages, salaries, and the other items we just talked about.**	E-11	(250) <u>CARD F-4</u> <u>CARD F-3</u> 01 ☐ A 11 ☐ K 21 ☐ U 02 ☐ B 12 ☐ L 22 ☐ V 03 ☐ C 13 ☐ M 23 ☐ W 04 ☐ D 14 ☐ N 24 ☐ X 05 ☐ E 15 ☐ O 25 ☐ Y 06 ☐ F 16 ☐ P 26 ☐ Z 07 ☐ G 17 ☐ Q 27 ☐ ZZ 08 ☐ H 18 ☐ R 09 ☐ I 19 ☐ S 10 ☐ J 20 ☐ T

E-12. Did any members of this family receive any Government food stamps in any of the past 12 months? (That is, from (name of month) last year, up through (name of month) this year.)	E-12	(251) 1 ☐ Yes 2 ☐ No (E-20)
E-13. In how many months of the past 12 months did any member of this family receive food stamps?	E-13	(252) _____ Months NUMBER
E-14. Did this family receive any Government food stamps in (name of last month)?	E-14	(253) 1☐ Yes (E-16) 2☐ No
E-15. In which month did any member of this family last receive food stamps? SPECIFY NAME OF MONTH.	E-15	(254) _____ MONTH
E-16. For how many persons were those food stamps authorized?	E-16	(255) _____ Persons NUMBER
E-17. What was the total face value of those food stamps received by this family in (last month/month in E-15)?	E-17	(256) $_____ . 00
E-18. Did this family spend more for food (last month/month in E-15) than the value of your food stamps?	E-18	(257) 1 ☐ Yes 2 ☐ No (E-20)
E-19. How much more?	E-19	(258) $_____ . 00
E-20. Is your family receiving food stamps at the present time?	E-20	(259) 1 ☐ Yes 2 ☐ No

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics and Technology
National Center for Health Statistics

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

FAMILY QUESTIONNAIRE (520)

WESTAT ID #:

(100)

STAND #   SEGMENT #   SERIAL #

(107)

FAMILY #

ADDRESS: (108)

Apt. No.	City
State	Zip Code

INTERVIEWER NAME:	NO: (109)

REVIEWER NAME:	NO: (110)

LANGUAGE OF INTERVIEW
(106)

☐ English

☒ Spanish

(102)-(103)
TIME BEGAN ___ : ___
     1☐ am
     2☐ pm

(104)-(105)
TIME ENDED ___ : ___
     1☐ am
     2☐ pm

A. PARENTESCOS FAMILIARES

A-1. ENTER SP # AND FIRST NAME OF EACH SP IN FAMILY AGED 19 OR UNDER. IF NO SUCH SP's, GO TO A-2.

(111) _____ / _____
SP #   FIRST NAME

(112) _____ / _____
SP #   FIRST NAME

(113) _____ / _____
SP #   FIRST NAME

A-2. CHECK ITEM:
(121) 1 ☐ No SP's aged 19 or under (B-1)
2 ☐ Two or more children in A-1 (A-5)
3 ☐ One child in A-1 (A-3)

A-3. ¿Vive en este hogar el padre biológico de ——? (IF "SI", SPECIFY WHICH PERSON)
(122)-(123) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-4. ¿Vive en este hogar la madre biológica de ——? (IF "SI", SPECIFY WHICH PERSON)
(124)-(125) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____ } (B-1)
3 ☐ HH member, not a SP

A-5. ¿Tienen (todos) (names in A-1) el mismo padre biológico?
(126)   1 ☐ S (A-6)   2 ☐ N (A-7)

ASK FOR EACH CHILD BEFORE GOING TO A-11.

A-10. ¿Vive en este hogar el padre biológico de ——? (IF "SI", SPECIFY WHICH PERSON) (PROBE IF NECESSARY: ¿Es el mismo de ——?)

(133)-(134) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

(135)-(137) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

(138)-(140) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-6. ¿Vive en este hogar su padre biológico? (IF YES, SPECIFY WHICH PERSON)
(127)-(128) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-7. ¿Tienen (todos) (names in A-1) la misma madre biológica?
(129)   1 ☐ S   2 ☐ N (A-9)

A-8. ¿Vive en este hogar su madre biológica? (IF "SI", SPECIFY WHICH PERSON)
(130)-(131) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

A-9. CHECK ITEM:
(132) 1 ☐ "S" in A-5 and A-7 (B-1)
2 ☐ "S" in A-5 and "N" in A-7 (A-11)
3 ☐ "N" in A-5 (A-10)

IF "S" IN A-7, GO TO B-1

A-11. ¿Vive en este hogar la madre biológica de ——? (IF "SI", SPECIFY WHICH PERSON) (PROBE IF NECESSARY: ¿Es la misma de ——?)

(162)-(163) 1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

(164)-(166) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

(167)-(169) 0 ☐ Same as other child — CHILD's SP # ____
1 ☐ Not a HH member
2 ☐ Sample Person — SPECIFY SP # ____
3 ☐ HH member, not a SP

(114) _____ / _____
  SP #   FIRST NAME

(141)-(143) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(170)-(172) 0 ☐ Same as other child — CHILD's SP # _____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(115) _____ / _____
  SP #   FIRST NAME

(144)-(146) 0 ☐ Same as other child — CHILD's SP # _____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(173)-(175) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(116) _____ / _____
  SP #   FIRST NAME

(147)-(149) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(176)-(178) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(117) _____ / _____
  SP #   FIRST NAME

(150)-(152) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(179)-(181) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(118) _____ / _____
  SP #   FIRST NAME

(153)-(155) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(182)-(184) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(119) _____ / _____
  SP #   FIRST NAME

(156)-(158) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(185)-(187) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(120) _____ / _____
  SP #   FIRST NAME

(159)-(161) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

(188)-(190) 0 ☐ Same as other child — CHILD's SP #_____
            1 ☐ Not a HH member
            2 ☐ Sample Person — SPECIFY SP #_____
            3 ☐ HH member, not a SP

B. CARACTERISTICAS DE LA FAMILIA

		NCHS USE ONLY
FILL FIRST COLUMN FOR HEAD OF FAMILY, THEN COMPLETE REMAINING COLUMN(S) FOR (OTHER) SAMPLE PERSON(S) IN FAMILY.	⓾⓿⓵	
B-1. Name (TRANSCRIBE FROM PAGE 3 OF SCREENER)	B-1	
B-2. SP number (TRANSCRIBE FROM PAGE 3 OF SCREENER; USE 99 FOR HEAD, IF NOT SP)	B-2	⑲① _____ (HEAD OF FAMILY)
B-3. Age (TRANSCRIBE FROM PAGE 3 OF SCREENER)	B-3	⑲② MONTHS ⑲③ YEARS
B-4. Sex	B-4	⑲④ 1 ☐ Male 2 ☐ Female
B-5. ENTER OBSERVED RACE FOR EACH PERSON WHOM YOU ARE ABLE TO OBSERVE.	B-5	⑲⑤ 1 ☐ W 2 ☐ B 3 ☐ O 9 ☐ Not obs.
B-6. ¿En cúal estado o país extranjero nació ––? (ENTER THE NAME OF THE STATE OR FOREIGN COUNTRY)	B-6	⑲⑥ ☐☐☐ Estado o país extranjero
IF UNDER 5 YEARS OLD, MARK "NEVER ATTENDED." **B-7.** ¿Cuál es el grado más alto de la escuela regular que –– haya asistido en su vida? (CIRCLE APPROPRIATE NUMBER)	B-7	⑲⑦ 00☐ Nunca asistió o sólo "Kindergarten" (B-9) Primaria 1 2 3 4 5 6 7 8 Secundaria 9 10 11 12 Universidad 1 2 3 4 5+
B-8. ¿Terminó –– el (number in B-7) (grado/año)?	B-8	⑲⑧ 1 ☐ Sí 2 ☐ No
B-9. IF UNDER 14, MARK FIRST BOX AND GO TO B-10. OTHERWISE ASK: ¿Está –– ahora casado, es viudo, divorciado, separado o nunca se casó? (IF MARRIED, REFER TO HOUSEHOLD COMPOSITION AND MARK ACCORDINGLY.)	B-9	⑲⑨ 0 ☐ Menos de 14 1 ☐ Casado – spouse in HH 2 ☐ Casado – spouse not in HH 3 ☐ Viudo 4 ☐ Divorciado 5 ☐ Separado 6 ☐ Nunca casado
B-10. CHECK ITEM	B-10	⓶⓿⓿ 1 ☐ under 17 yrs. old (NEXT SP) 2 ☐ 17+ yrs. old (B-11)
B-11. ¿Sirvió –– en las Fuerzas Armadas de los Estados Unidos?	B-11	⓶⓿⓵ 1 ☐ Sí 2 ☐ No

B-12. ¿Durante las 2 semanas pasadas, ¿trabajó —— por cualquier tiempo en algún trabajo o negocio, sin contar trabajo alrededor de la casa? (INCLUDE WORK "SIN PAGO" IN THE FAMILY (FARM/BUSINESS).)	B-12	(202) 1 ☐ Sí (B-17) 2 ☐ No
B-13. Aunque —— no trabajó durante esas 2 semanas, ¿tenía —— un trabajo o negocio?	B-13	(203) 1 ☐ Sí 2 ☐ No
B-14. ¿Estaba —— buscando trabajo o estaba en "lay off" (desempleado por falta de trabajo) de un trabajo?	B-14	(204) 1 ☐ Sí 2 ☐ No (B-16)
B15. ¿Cuál, buscando trabajo o en "lay off" de un trabajo?	B-15	(205) 1 ☐ Buscando (B-18) 2 ☐ "Lay off" (B-17) 3 ☐ Ambos (B-17)
B-16. CHECK ITEM: MARK A BOX ONLY IF "NO" IN B-14.	B-16	(206) 1 ☐ "Sí" in B-13 (B-17) 2 ☐ "N" in B-13 (NEXT SP)
B-17. ¿Para quién trabajó ——? ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER.	B-17 & B-18	Patrón
B-18 ¿Para quién trabajó —— en su último trabajo o negocio civil, a tiempo completo, que duró 2 semanas seguidas o más? ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER.		
B-19. ¿Qué tipo de negocio o industria es esto? (Por ejemplo, fábrica de televisores y radios, zapatería de venta al por menor, Departamento de Trabajo del Estado, finca.)	B-19	Industria (207)
B-20. ¿Qué tipo de trabajo hacía ——? (Por ejemplo, ingeniero eléctrico, vendedor de tienda, mecanógrafo, agricultor.)	B-20	Ocupación (208)
B-21. ¿Cuáles eran las actividades o deberes más importantes de —— en ese trabajo? (Por ejemplo, escribe a máquina, mantiene los libros de contaduría, achiva, vende autos, mantiene la operación de imprenta, mezcla concreto.)	B-21	Deberes
COMPLETE FROM ENTRIES IN B-17 THRU B-21; IF NOT CLEAR ASK: B-22. ¿Era —— empleado de una compañía privada, un negocio, o un individuo por pago, sueldo, o comisión?. . . . . . P —— empleado del gobierno federal? . . . F —— empleado del gobierno estatal? . . . S —— empleado del gobierno local? L	—— empleado en su propio negocio, práctica profesional o finca? IF NOT FARM, ASK: ¿Está el negocio incorporado? Sí . . . . I No. . . . . SE —— trabajando sin pago en un negocio de familia o en una finca? . . . . WP —— nunca trabajó o nunca trabajó en un trabajo civil a tiempo completo que duró 2 semanas o más?. . . . . . NEV	(209) Tipo de empleado 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV

B-3	(192) MONTHS	(193) YEARS	B-3	(192) MONTHS	(193) YEARS	B-3	(192) MONTHS	(193) YEARS
B-4	(194) 1☐ Male	2☐ Female	B-4	(194) 1☐ Male	2☐ Female	B-4	(194) 1☐ Male	2☐ Female
B-5	(195) 1☐ W 2☐ B 3☐ O	9☐ Not obs.	B-5	(195) 1☐ W 2☐ B 3☐ O	9☐ Not obs.	B-5	(195) 1☐ W 2☐ B 3☐ O	9☐ Not obs.
B-6	(196) ☐☐☐ Estado o país extranjero		B-6	(196) ☐☐☐ Estado o país extranjero		B-6	(196) ☐☐☐ Estado o país extranjero	

B-7	(197)
	
	00☐ Nunca asistió o sólo
	    "Kindergarten" (B-9)
	Primaria 1 2 3 4 5 6 7 8
	Secundaria 9 10 11 12
	Universidad 1 2 3 4 5+
		B-7	(197)
			
			00☐ Nunca asistió o sólo
			    "Kindergarten" (B-9)
			Primaria 1 2 3 4 5 6 7 8
			Secundaria 9 10 11 12
			Universidad 1 2 3 4 5+
				B-7	(197)
					
					00☐ Nunca asistió o sólo
					    "Kindergarten" (B-9)
					Primaria 1 2 3 4 5 6 7 8
					Secundaria 9 10 11 12
					Universidad 1 2 3 4 5+

B-8	(198) 1☐ Sí	2☐ No	B-8	(198) 1☐ Sí	2☐ No	B-8	(198) 1☐ Sí	2☐ No
B-9	(199) 0 ☐ Menos de 14 1 ☐ Casado — spouse in HH 2 ☐ Casado — spouse not in HH 3 ☐ Viudo 4 ☐ Divorciado 5 ☐ Separado 6 ☐ Nunca casado		B-9	(199) 0 ☐ Menos de 14 1 ☐ Casado — spouse in HH 2 ☐ Casado — spouse not in HH 3 ☐ Viudo 4 ☐ Divorciado 5 ☐ Separado 6 ☐ Nunca casado		B-9	(199) 0 ☐ Menos de 14 1 ☐ Casado — spouse in HH 2 ☐ Casado — spouse not in HH 3 ☐ Viudo 4 ☐ Divorciado 5 ☐ Separado 6 ☐ Nunca casado	
B-10	(200) 1☐ Under 17 yrs. old (NEXT SP) 2☐ 17+ yrs. old (B-11)		B-10	(200) 1☐ Under 17 yrs. old (NEXT SP) 2☐ 17+ yrs. old (B-11)		B-10	(200) 1☐ Under 17 yrs. old (NEXT SP) 2☐ 17+ yrs. old (B-11)	
B-11	(201) 1☐ Sí	2☐ No	B-11	(201) 1☐ Sí	2☐ No	B-11	(201) 1☐ Sí	2☐ No
B-12	(202) 1☐ Sí (B-17)	2☐ No	B-12	(202) 1☐ Sí (B-17)	2☐ No	B-12	(202) 1☐ Sí (B-17)	2☐ No

B-13	(203)	1 ☐ Sí	2 ☐ No	B-13	(203)	1 ☐ Sí	2 ☐ No	B-13	(203)	1 ☐ Sí	2 ☐ No

B-13	(203)	1 ☐ Sí 2 ☐ No	B-13	(203)	1 ☐ Sí 2 ☐ No	B-13	(203)	1 ☐ Sí 2 ☐ No
B-14	(204)	1 ☐ Sí 2 ☐ No (B-16)	B-14	(204)	1 ☐ Sí 2 ☐ No (B-16)	B-14	(204)	1 ☐ Sí 2 ☐ No (B-16)
B-15	(205)	1 ☐ Buscando (B-18) 2 ☐ "Lay off" (B-17) 3 ☐ Ambos (B-17)	B-15	(205)	1 ☐ Buscando (B-18) 2 ☐ "Lay off" (B-17) 3 ☐ Ambos (B-17)	B-15	(205)	1 ☐ Buscando (B-18) 2 ☐ "Lay off" (B-17) 3 ☐ Ambos (B-17)
B-16	(206)	1 ☐ "Sí" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)	B-16	(206)	1 ☐ "Sí" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)	B-16	(206)	1 ☐ "Sí" in B-13 (B-17) 2 ☐ "No" in B-13 (NEXT SP)
B-17 & B-18		Patrón	B-17 & B-18		Patrón	B-17 & B-18		Patrón
B-19	(207)	Industria	B-19	(207)	Industria	B-19	(207)	Industria
B-20	(208)	Ocupación	B-20	(208)	Ocupación	B-20	(208)	Ocupación
B-21		Deberes	B-21		Deberes	B-21		Deberes
B-22	(209)	Tipo de empleado 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV	B-22	(209)	Tipo de empleado 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV	B-22	(209)	Tipo de empleado 1 ☐ P 2 ☐ F 3 ☐ S 4 ☐ L 5 ☐ I 6 ☐ SE 7 ☐ WP 0 ☐ NEV

C. SEGURO DE SALUD

Medicare es un programa de seguro de salud del Seguro Social para personas incapacitadas y para personas de 65 años o más. Personas que están aseguradas por Medicare tienen una tarjeta que se parece a ésta (SHOW CARD F-1).

C-1.	¿Está(n) (name(s) of all SP's in family) asegurado(s) por Medicare ahora?	☐ Sï, uno o más asegurado ☐ No, ningún SP asegurado (C-6)	
C-2.	ASK FOR EACH SP. MARK BOX IN EACH COLUMN BEFORE ASKING C-3. ¿Está –– asegurado por Medicare ahora?	C-2	(210) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS
C-3.	FOR EACH PERSON WITH "COVERED" IN C-2, ASK C-3 AND C-4. ¿Está –– asegurado ahora por la parte de Medicare del Seguro Social que paga las cuentas de hospital?	C-3	(211) 1 ☐ Sï 2 ☐ No 9 ☐ NS
C-4.	¿Está –– asegurado ahora por esa parte de Medicare que paga las cuentas de médico? Este es el plan de Medicare por el cual –– o una agencia tiene que pagar una cierta cantidad cada mes.	C-4	(212) 1 ☐ Sï 2 ☐ No 9 ☐ NS
C-5.	ASK C-5 FOR EACH PERSON WITH "DK" IN C-3 AND/OR C-4. ¿Me puede mostrar por favor la tarjeta(s) del Seguro Social de Medicare de –– (y ––) para determinar el tipo de aseguranza? TRANSCRIBE THE INFORMATION FROM THE CARD OR MARK THE "CARD NOT AVAIL." BOX.	C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Tarjeta no obtenible
C-6.	Nos interesa todo tipo de seguros de salud excepto los que pagan sólo por accidentes. (Sin contar Medicare) ¿Está(n) (name(s) of all SP's in (family) asegurado(s) ahora por algún plan de seguro médico que paga cualquier parte de la cuenta de hospital, médico, o cirujano? ☐ Sï ☐ No (C-12)		
C-7.	¿Cómo se llama el plan? (RECORD IN TABLE H.I.; RETURN TO C-8.)		
C-8.	¿Está(n) (name(s) of all SP's) asegurado(s) ahora por algún otro plan de seguro médico que paga cualquier parte de la cuenta de hospital, médico o cirujano? ☐ Sï (REASK C-7 & C-8) ☐ No (C-9)		

PLAN 1	**C-10.** ¿Paga este plan por cualquier parte de la cuenta de médico o cirujano para operaciones?		
	(215) 1☐ Sí 2☐ No 9☐ NS		
C-9. Este plan (name), ¿paga por cualquier parte de la cuenta de hospital? (214) 1☐ Sí 2☐ No 9☐ NS	**C-11.** ¿Está —— asegurado por este plan (name)? (MARK BOX FOR EACH SP.)	C-11	(216) 1☐ Aseg. 2☐ No aseg. 9☐ NS
PLAN 2	**C-10.** ¿Paga este plan por cualquier parte de la cuenta de médico o cirujano para operaciones?		
	(218) 1☐ Sí 2☐ No 9☐ NS		
C-9. Este plan (name), ¿paga por cualquier parte de la cuenta de hospital? (217) 1☐ Sí 2☐ No 9☐ NS	**C-11.** ¿Está —— asegurado por este plan (name)? (MARK BOX FOR EACH SP.)	C-11	(219) 1☐ Aseg. 2☐ No aseg. 9☐ NS
PLAN 3	**C-10.** ¿Paga este plan por cualquier parte de la cuenta de médico o cirujano para operaciones?		
	(221) 1☐ Sí 2☐ No 9☐ NS		
C-9. Este plan (name), ¿paga por cualquier parte de la cuenta de hospital? (220) 1☐ Sí 2☐ No 9☐ NS	**C-11.** ¿Está —— asegurado por este plan (name)? (MARK BOX FOR EACH SP.)	C-11	(222) 1☐ Aseg. 2☐ No aseg. 9☐ NS
C-12. **CHECK ITEM:** REVIEW C-2 AND C-11, AND MARK BOX FOR EACH SP. IF ALL COVERED, GO TO SECTION D. IF NOT, CONTINUE.		C-12	(223) 1☐ Covered 2☐ Not covered, under 65 yrs. old 3☐ Not covered, 65+ yrs. old
ASK C-13 — C-15 FOR EACH PERSON "NOT COVERED." **C-13.** Hay muchas personas que no tienen seguro de salud por varias razones. (SHOW CARD F-2) ¿Cuál de esas razones describe por qué —— no está asegurado por cualquier seguro médico? (IF 65+): o Medicare?		C-13	(224) 1 2 3 4 5 6 7 8 9—7 10 _____ ESPECIFIQUE
C-14. ¿Cualquier otra razón?		C-14	(225) 1☐ Sí (REASK C-13 & C-14) 2☐ No
MARK BOX IF ONLY ONE REASON GIVEN; OTHERWISE ASK: **C-15.** ¿Cuál es la razón principal por la cuál —— no está asegurado por cualquier seguro médico? (IF 65+): o Medicare?		C-15	(226) 00☐ Sólo una razón en C-13 OR 1 2 3 4 5 6 7 8 9—7 10 _____ ESPECIFIQUE

C-2	(210) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-2	(210) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-2	(210) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS
C-3	(211) 1 ☐ Sí 2 ☐ No 9 ☐ NS	C-3	(211) 1 ☐ Sí 2 ☐ No 9 ☐ NS	C-3	(211) 1 ☐ Sí 2 ☐ No 9 ☐ NS
C-4	(212) 1 ☐ Sí 2 ☐ No 9 ☐ NS	C-4	(212) 1 ☐ Sí 2 ☐ No 9 ☐ NS	C-4	(212) 1 ☐ Sí 2 ☐ No 9 ☐ NS
C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Tarjeta no obtenible	C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Tarjeta no obtenible	C-5	(213) 1 ☐ Hosp. 2 ☐ Med. 3 ☐ Tarjeta no obtenible

C-11	(216) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(216) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(216) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS
C-11	(219) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(219) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(219) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS.
C-11	(222) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(222) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS	C-11	(222) 1 ☐ Aseg. 2 ☐ No aseg. 9 ☐ NS
C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old	C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old	C-12	(223) 1 ☐ Covered 2 ☐ Not covered, under 65 yrs. old 3 ☐ Not covered, 65+ yrs. old
C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE	C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE	C-13	(224) 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE
C-14	(225) 1 ☐ Sí (REASK C-13 & C-14) 2 ☐ No	C-14	(225) 1 ☐ Sí (REASK C-13 & C-14) 2 ☐ No	C-14	(225) 1 ☐ Sí (REASK C-13 & C-14) 2 ☐ No
C-15	(226) 00 ☐ Sólo una razón en C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE	C-15	(226) 00 ☐ Sólo una razón en C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE	C-15	(226) 00 ☐ Sólo una razón en C-13 OR 1 2 3 4 5 6 7 8 9 10 _____ ESPECIFIQUE

D. ASISTENCIA DE INGRESO

D-1. ¿Recibe(n) <u>(name(s) of all SP's in family)</u> ahora asistencia a través del programa "Ayuda a Familias con Hijos Dependientes" algunas veces llamado "AFDC" or "ADC"? ☐ Sí ☐ No (D-3) ☐ NS (D-3)			
D-2. ASK FOR EACH SP: ¿Está —— incluído en el pago de asistencia de AFDC?	D-2	(227) 1 ☐ Sí 2 ☐ No 9 ☐ NS	
D-3. ¿Recibe(n) <u>(name(s) of all SP's)</u> ahora el cheque de color dorado del "Ingreso de Seguros Suplementarios" (Supplemental Security Income — "SSI")? ☐ Sí ☐ No (D-5) ☐ NS (D-5)			
D-4. ASK FOR EACH SP: ¿Recibe —— este cheque?	D-4	(228) 1 ☐ Sí 2 ☐ No 9 ☐ NS	
D-5 Hay un programa nacional llamado Medicaid que paga por el cuidado de salud para los necesitados. (En este estado tambíen se llama _____.) Durante los 12 meses pasados, ¿ha(n) recibido (name(s) of SP's) cuidado de salud que ha sido o será pagado por Medicaid (o _____)? ☐ Sí ☐ No (D-7) ☐ NS (D-7)			
D-6. ASK FOR EACH SP: ¿Recibió —— este cuidado?	D-6	(229) 1 ☐ Sí 2 ☐ No 9 ☐ NS	
D-7 ¿Tiene(n) <u>(name(s) of all SP's)</u> ahora una tarjeta de Medicaid (o _____) que se parece a ésta? SHOW MEDICAID CARD. ☐ Sí ☐ No (D-10) ☐ NS (D-10)			
D-8. ASK FOR EACH SP: ¿Tiene —— una tarjeta de Medicaid (o _____)?	D-8	(230) 1 ☐ Sí 2 ☐ No 9 ☐ NS	

ASK FOR EACH SP WITH "SÍ" IN D-8.
D-9. ¿Me permite ver la tarjeta(s) de —— (y de —— ...)? MARK APPROPRIATE BOX(ES) IN EACH SP's COLUMN, BEFORE ASKING D-10.
	D-9	(231) ☐ Medicaid card seen ⌐
		        1 ☐ Current ⟋
		        2 ☐ Expired
		        3 ☐ No card seen
		        4 ☐ Other card seen ⌐⟋
		        5 _____
		                           SPECIFY	

D-10. ¿Está(n) (name(s) of all SP's) asegurado(s) ahora por cualquier otro programa de asistencia pública que paga por el cuidado de salud? ☐ Sí ☐ No (D-12) ☐ NS (D-12)		
D-11. ASK FOR EACH SP: ¿Está —— asegurado?	D-11	(232) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-12. ¿Recibe(n) (name(s) of all SP's) ahora pagos de retiro militar de cualquier rama de las Fuerzas Armadas o de una pensión de la Administración de Veteranos? No incluya compensación del VA (Administración de Veteranos) por incapacitación. ☐ Sí ☐ No (D-15) ☐ NS (D-15)		
D-13. ASK FOR EACH SP: ¿Recibe —— estos pagos o la pensión?	D-13	(233) 1 ☐ Sí 2 ☐ No 9 ☐ NS
ASK FOR EACH PERSON WITH "SÍ" IN D-13. **D-14.** ¿Cuál recibe ——, la pensión de retiro de las Fuerzas Armadas, la pensión del VA o ambas?	D-14	(234) 1 ☐ FA 2 ☐ VA 3 ☐ Ambas
D-15. ¿Está(n) (name(s) of all SP's) ahora asegurado(s) por CHAMP-VA, que es seguro médico para dependientes o sobrevivientes de veteranos incapacitados? ☐ Sí ☐ No (D-17) ☐ NS (D-17)		
D-16. ASK FOR EACH SP: ¿Está —— asegurado por CHAMP-VA?	D-16	(235) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-17. ¿Está(n) (name(s) of all SP's) ahora asegurado(s) por cualquier otro programa que provee cuidado de salud para dependientes o sobrevivientes de personas militares? ☐ Sí ☐ No (D-19) ☐ NS (D-19)		
D-18. ASK FOR EACH SP: ¿Está —— asegurado?	D-18	(236) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-19. CHECK ITEM: REFER TO B-3 AND B-11 AND MARK FIRST APPLICABLE BOX.	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Sí" in B-11 (D20)
D-20. ¿Tiene —— una incapacitación relacionada a su servicio en las Fuerzas Armadas de los Estados Unidos?	D-20	(238) 1 ☐ Sí (D-21) 2 ☐ No (NEXT SP)
D-21. ¿Recibe —— ahora compensación de la Administración de Veteranos por esta incapacitación?	D-21	(239) 1 ☐ Sí 2 ☐ No

	(101) NCHS USE ONLY		(101) NCHS USE ONLY		(101) NCHS USE ONLY
B-1		B-1		B-1	
B-2	(191)	B-2	(191)	B-2	(191)
D-2	(227) 1 □ Sí 2 □ No 9 □ NS	D-2	(227) 1 □ Sí 2 □ No 9 □ NS	D-2	(227) 1 □ Sí 2 □ No 9 □ NS
D-4	(228) 1 □ Sí 2 □ No 9 □ NS	D-4	(228) 1 □ Sí 2 □ No 9 □ NS	D-4	(228) 1 □ Sí 2 □ No 9 □ NS
D-6	(229) 1 □ Sí 2 □ No 9 □ NS	D-6	(229) 1 □ Sí 2 □ No 9 □ NS	D-6	(229) 1 □ Sí 2 □ No 9 □ NS
D-8	(230) 1 □ Sí 2 □ No 9 □ NS	D-8	(230) 1 □ Sí 2 □ No 9 □ NS	D-8	(230) 1 □ Sí 2 □ No 9 □ NS
D-9	(231) □ Medicaid card seen ⌐ 1 □ Current 2 □ Expired 3 □ No card seen 4 □ Other card seen ⌐ 5 _____ SPECIFY	D-9	(231) □ Medicaid card seen ⌐ 1 □ Current 2 □ Expired 3 □ No card seen 4 □ Other card seen ⌐ 5 _____ SPECIFY	D-9	(231) □ Medicaid card seen ⌐ 1 □ Current 2 □ Expired 3 □ No card seen 4 □ Other card seen ⌐ 5 _____ SPECIFY

D-11	(232) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-11	(232) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-11	(232) 1 ☐ Sí · 2 ☐ No 9 ☐ NS
D-13	(233) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-13	(233) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-13	(233) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-14	(234) 1 ☐ FA 2 ☐ VA 3 ☐ Ambas	D-14	(234) 1 ☐ FA 2 ☐ VA 3 ☐ Ambas	D-14	(234) 1 ☐ FA 2 ☐ VA 3 ☐ Ambas
D-16	(235) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-16	(235) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-16	(235) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-18	(236) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-18	(236) 1 ☐ Sí 2 ☐ No 9 ☐ NS	D-18	(236) 1 ☐ Sí 2 ☐ No 9 ☐ NS
D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Sí" in B-11 (D20)	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Sí" in B-11 (D20)	D-19	(237) 1 ☐ Under 17 years (NEXT SP) 2 ☐ "No" in B-11 (NEXT SP) 3 ☐ "Sí" in B-11 (D20)
D-20	(238) 1 ☐ Sí (D-21) 2 ☐ No (NEXT SP)	D-20	(238) 1 ☐ Sí (D-21) 2 ☐ No (NEXT SP)	D-20	(238) 1 ☐ Sí (D-21)) 2 ☐ No (NEXT SP)
D-21	(239) 1 ☐ Sí 2 ☐ No	D-21	(239) 1 ☐ Sí 2 ☐ No	D-21	(239) 1 ☐ Sí 2 ☐ No

9

E. VIVENDA E INGRESO

E-1.	¿Cuántos cuartos hay en esta —— ? Cuente la cocina pero no el cuarto de baño.	E-1	(240) _____ Cuartos número
E-2.	¿Tiene facilidades completas para cocinar en esta (casa/vivienda), es decir, un fregadero de cocina con agua de tubería, un refrigerador y una estufa u hornillo?	E-2	(241) 1☐ Sí 2☐ No
E-3.	¿Cuál es el combustible principal que se usa para calentar esta casa?	E-3	(242) 01 ☐ Aceite 02 ☐ Gas natural 03 ☐ Electricidad 04 ☐ Gas butano (propano) 05 ☐ Kerosina 06 ☐ Leña 07 ☐ Carbón 08 ☐ Otro 09 _____ ESPECIFIQUE 00 ☐ No se uso combustible
E-4.	¿Cuál es el sistema de calefacción principal de esta casa?	E-4	(243) 01 ☐ Sistema de vapor o agua caliente con radiadores 02 ☐ Horno central de aire caliente con tubos a cuartos individuales, o bomba central de calor 03 ☐ Unidades eléctricas instaladas permanentemente en la pared, el cielo o en el "baseboard" 04 ☐ Horno de piso, pared u horno sin tubería 05 ☐ Calentadores de cuarto con tubo de caldera o cañón de chimenea, que queman aceite, gas o kerosina 06 ☐ Calentadores de cuarto sin tubo de caldera o cañón de chimenea, que queman aceite, gas o kerosina 07 ☐ Estufas que queman carbón, leña o coque 08 ☐ Chimenea(s) 09 ☐ Calentadores eléctricos portátiles 10 ☐ Otro (ESPECIFIQUE) 11 _____ 00 ☐ No se uso ningún equipo de calefacción (E-7) 99 ☐ No sabe

E 5. ¿Se usa cualquier otro tipo de equipo para calentar esta casa? (IF MORE THAN ONE TYPE IS MENTIONED, MARK ONLY THE ONE USED MOST.)	E-5	(244) 01 ☐ Sistema de vapor o agua caliente con radiadores 02 ☐ Horno central de aire caliente con tubos a cuartos individuales, o bomba central de calor 03 ☐ Unidades eléctricas instaladas permanentemente en la pared, el cielo o en el "baseboard" 04 ☐ Horno de piso, pared u horno sin tubería 05 ☐ Calentadores de cuarto con tubo de caldera o cañón de chimenea, que queman aceite, gas o kerosina 06 ☐ Calentadores de cuarto sin tubo de caldera o cañón de chimenea, que queman aceite, gas o kerosina 07 ☐ Estufas que queman carbón, leña o coque 08 ☐ Chimenea(s) 09 ☐ Calentadores eléctricos portátiles 10 ☐ Otro (ESPECIFIQUE) 11 _____ _____ 00 ☐ No se uso ningún otro equipo de calefacción (E-7)
E-6. ¿Cuál es el combustible principal que usa este equipo adicional?	E-6	(245) 01 ☐ Aceite 02 ☐ Gas natural 03 ☐ Electricidad 04 ☐ Gas butano (propano) 05 ☐ Kerosina 06 ☐ Leña 07 ☐ Carbón 08 ☐ Otro 09 _____ ESPECIFIQUE 00 ☐ No se uso combustible

E-7. *¿Cuál es el combustible principal que se usa para cocinar en esta casa?*	E-7	(246) 01 ☐ Aceite 02 ☐ Gas natural 03 ☐ Electricidad 04 ☐ Gas butano (propano) 05 ☐ Kerosina 06 ☐ Leña 07 ☐ Carbón 08 ☐ Otro 09 _____ ESPECIFIQUE 00 ☐ No se uso combustible
E-8. *¿Tiene aire acondicionado — ya sea unidades individuales de cuarto, un sistema central o abanico evaporativo?*	E-8	(247) 1 ☐ Sí 2 ☐ No (E-10)
E-9. *¿Cuál tiene usted?*	E-9	(248) 1 ☐ Unidad individual de cuarto 2 ☐ Sistema central de aire acondicionado 3 ☐ Abanico evaporativo
E-10. *Durante los 12 meses pasados, ¿fue el ingreso combinado total* <u>de familia,</u> *es decir, el suyo, (*<u>read names of all family members, including Armed Forces members living at home</u>*) más de $20,000 o menos de $20,000? Incluya dinero de empleos, Seguro Social, ingreso de retiro, pagos de desempleo, asistencia pública, etc. También incluya ingreso de interés, dividendos, ingreso neto de negocio, finca o renta, y cualquier otro ingreso de dinero recibido.*	E-10	(249) 1 ☐ $20,000 or more (HAND CARD F-3) 2 ☐ Less than $20,000 (HAND CARD F-4)
READ PARENTHETICAL PHRASE IF ARMED FORCES MEMBER LIVING AT HOME OR IF NECESSARY. **E-11.** *De esas categorias de ingreso, ¿cuál letra mejor representa el ingreso combinado total* <u>de familia</u> *durante los 12 meses pasados (es decir, el suyo (*<u>read names, including Armed Forces members living at home</u>*))? Incluya pagos, sueldos, y las otras fuentes de ingreso que acabamos de mencionar.*	E-11	(250) CARD F-4 CARD F-3 01 ☐ A 11 ☐ K 21 ☐ U 02 ☐ B 12 ☐ L 22 ☐ V 03 ☐ C 13 ☐ M 23 ☐ W 04 ☐ D 14 ☐ N 24 ☐ X 05 ☐ E 15 ☐ O 25 ☐ Y 06 ☐ F 16 ☐ P 26 ☐ Z 07 ☐ G 17 ☐ Q 27 ☐ ZZ 08 ☐ H 18 ☐ R 09 ☐ I 19 ☐ S 10 ☐ J 20 ☐ T

E-12. ¿Recibió algún miembro de esta familia algunas (estampillas para la comida/cupones de alimento) del Gobierno en cualquier de los 12 meses pasados? (Es decir, desde (name of month) del año pasado, hasta (name of month) de este año.)	E-12	(251) 1 ☐ Sí 2 ☐ No (E-20)
E-13. ¿En cuántos de los 12 meses pasados recibió cualquier miembro de esta familia (estampillas para la comida/cupones de alimento)?	E-13	(252) _____Months Número
E-14. ¿Recibió esta familia (algunas estampillas para la comida/algunos cupones de alimento) del Gobierno en (name of last month)?	E-14	(253) 1☐ Sí (E-16) 2☐ No
E-15. ¿En qué mes recibió algún miembro de esta familia (estampillas para la comida/cupones de alimentos) por última vez? SPECIFY NAME OF MONTH.	E-15	(254) _____ MONTH
E-16. ¿Para cuántas personas fueron autorizadas esas (estampillas para la comida/cupones de alimentos)?	E-16	(255) _____ Personas. Número
E-17. ¿Cuál fue el (valor nominal/"face value") total de esas (estampillas para la comida/cupones de alimentos) que recibió esta familia en (last month/month in E-15)?	E-17	(256) $_____ __00__
E-18. ¿Gastó esta familia más por la comida de (last month/month in E-15) que el (valor nominal/"face value") de sus (estampillas para la comida/cupones de alimentos)?	E-18	(257) 1 ☐ Sí 2 ☐ No (E-20)
E-19. ¿Cuánto más?	E-19	(258) $_____. __00__
E-20. ¿Está recibiendo su familia (estampillas para la comida/cupones de alimentos) actualmente?	E-20	(259) 1 ☐ Sí 2 ☐ No

11

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

CHILD SAMPLE PERSON QUESTIONNAIRE (522)
(Ages 6 Mos.-11 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

WESTAT ID No:

(100) Stand No. _____ Segment No. _____ Serial No. _____

(107) Family No. _____

(108) SP No. _____

NCHS ID No:

(101) __ __ __ __ __ — __

NAME (First, Middle, Last)
(109)

(110) SEX
1 ☐ Male
2 ☐ Female

(111) AGE

INTERVIEWER NAME: NO. (112)

REVIEWER NAME: NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☒ English
2 ☐ Spanish

TIME BEGAN
(102)-(103)
__ __:__ __
1 ☐ am
2 ☐ pm

TIME ENDED
(104)-(105)
__ __:__ __
1 ☐ am
2 ☐ pm

DATE OF EXAMINATION
_____ / _____ / _____
Month   Day   Year

TIME
__ __:__ __ ☐ am
☐ pm

TRANSPORTATION
☐ Taxi
☐ Self

DATE OF INTERVIEW
(114)-(116)
_____ / _____ / _____
Month   Day   Year

CHILD SAMPLE PERSON QUESTIONNAIRE
Ages 6 Months-11 Years

BIRTH

A1. How old (was ——'s biological mother/were you) when —— was born?

(118) _____ years old
               number

99 ☐ DK

A2. How old (was ——'s biological father/were you) when —— was born?

(119) _____ years old
               number

99 ☐ DK

A3. Was —— born in a hospital or some other place?

(120) 1 ☐ hospital (A4)
2 ☐ other —

3 _____ (A6)
    specify

A4. How many nights (was ——'s biological mother/were you) in the hospital during this stay?

(121) 00 ☐ none
_____ nights
             number

99 ☐ DK

A5. How many nights was —— in the hospital during this stay?

(122) 00 ☐ none
_____ nights
             number

99 ☐ DK

A6. How much did —— weigh at birth?

PROBE FOR OUNCES IF NOT REPORTED; ENTER RESPONSE IN POUNDS AND OUNCES OR IN GRAMS.

(123) 9 ☐ DK (A7)

(124)(125) _____ lbs/_____ oz (A9)
        number   number

OR

(126) _____ grams (A9)
       number

A7. Did —— weigh more than 5½ pounds (2500 grams) or less?

(127) 1 ☐ 5½ lbs (2500g) or more (A8)
2 ☐ less than 5½ lbs (2500g) (A9)
9 ☐ DK (A9)

A8. Did —— weigh more than 9 pounds (4100 grams) or less?

(128) 1 ☐ 9 lbs (4100g) or more
2 ☐ less than 9 lbs (4100g)
9 ☐ DK

A9. Was —— born about when expected, or was it earlier or later?

(129) 1 ☐ earlier than expected
2 ☐ when expected (A11)
3 ☐ later than expected
9 ☐ DK (A11)

A10. About how much (earlier/later) than expected was —— born?

(130)(131) _____ {1 ☐ days
        number   2 ☐ weeks
               3 ☐ months

A11. Was —— born with any physical or mental problem or defect?

(132) 1 ☐ Y   2 ☐ N(A13)

1

A12. Did ——'s problem or defect involve (his/her)

Heart?.	(133)	1 □ Y	2 □ N	9 □ DK
Eyes?	(134)	1 □ Y	2 □ N	9 □ DK
Ears?.	(135)	1 □ Y	2 □ N	9 □ DK
Mouth or throat?.	(136)	1 □ Y	2 □ N	9 □ DK
Stomach or intestines?	(137)	1 □ Y	2 □ N	9 □ DK
Kidneys or urinary system?.	(138)	1 □ Y	2 □ N	9 □ DK
Muscles, bones, or joints?	(139)	1 □ Y	2 □ N	9 □ DK
Brain or nervous system?	(140)	1 □ Y	2 □ N	9 □ DK

A13. Did —— receive any newborn care in an intensive care unit, premature nursery, or any other type of special care facility?

(141)   1 □ Y   2 □ N(A15)

A14. How many nights did —— stay in the special care facility?

(142)   1 □ less than 1 week
         2 □ 1 week — 1 month
         3 □ more than 1 month

A15. Was —— ever breastfed?

(143)   1 □ Y   2 □ N(A18)

A16. How old was —— when —— completely stopped breastfeeding?

(144)-(145)   00 □ still breastfeeding

_____ number   { 1□ days / 2□ weeks / 3□ months }

A17. How old was —— when —— was first fed formula or regular milk on a daily basis?

(146)-(147)   00 □ never on a daily basis

_____ number   { 1□ days / 2□ weeks / 3□ months }

A18. How old was —— when —— started eating solid food (such as strained foods or any other non-liquid foods) on a daily basis?

(148)-(149)   00 □ never on a daily basis

_____ number   { 1□ days / 2□ weeks / 3□ months }

HEALTH SERVICES

B1. Would you say ——'s health in general is excellent, very good, good, fair, or poor?

(150)   1 □ excellent
        2 □ very good
        3 □ good
        4 □ fair
        5 □ poor

B2. Now I would like to ask you about ——'s visits for health care. First I will ask about routine care, including routine checkups and immunizations when nothing is wrong.

How long has it been since ——'s last visit to a clinic, health center, hospital, doctor's office or other place for routine health care?

(151)   1 □ less than 1 month
        2 □ 1 mo. less than 6 mos.
        3 □ 6 mos., less than 1 yr.
        4 □ 1 yr., less than 5 yrs.
        5 □ 5 or more years
        9 □ DK
        0 □ Never (B5)

2

B3.	Is there a particular clinic, health center, hospital, doctor's office or other place that —— usually goes to for routine health care?	(152)	1 ☐ Y 2 ☐ N (B5)
B4.	What kind of place is it — a clinic, a health center, a hospital, a doctor's office, or some other place? PROBE IF CLINIC: Is this a hospital outpatient clinic, a company or school clinic, a migrant clinic, or some other kind of clinic? PROBE IF HEALTH CENTER: Is this a community health center, neighborhood health center, a family health center, a rural health center, or some other kind of health center? PROBE IF HOSPITAL: Is this an outpatient clinic or emergency room?	(153)	01 ☐ home 02 ☐ doctor's office or private clinic 03 ☐ company or school clinic 04 ☐ hospital outpatient clinic 05 ☐ migrant clinic 06 ☐ other clinic 07 _____ 　　　　　　　　　　specify 08 ☐ hospital emergency room 09 ☐ community, neighborhood, or family health center 10 ☐ rural health center 11 ☐ HMO/prepaid group 12 ☐ other place 13 _____ 　　　　　　　　　specify
	Now I will ask about ——'s visits for health care when —— is sick or injured.		
B5.	Is there a particular clinic, health center, hospital, doctor's office or other place that —— usually goes to when —— is sick or injured?	(154)	1 ☐ Y 2 ☐ N (B19)
B6.	IF "Y" IN B3, ASK: Is this the same (place in B4) or is it somewhere else?	(155)	1 ☐ same place 2 ☐ somewhere else
	IF "SAME PLACE" IN B6, REFER TO B4 AND MARK RESPONSE WITHOUT ASKING. OTHERWISE ASK: B7. What kind of place is it — a clinic, a health center, a hospital, a doctor's office, or some other place? PROBE IF CLINIC: Is this a hospital outpatient clinic, a company or school clinic, a migrant clinic, or some other kind of clinic? PROBE IF HEALTH CENTER: Is this a community health center, neighborhood health center, a family health center, a rural health center, or some other kind of health center? PROBE IF HOSPITAL: Is this an outpatient clinic or emergency room?	(156)	01 ☐ home 02 ☐ doctor's office or private clinic (B9) 03 ☐ company or school clinic 04 ☐ hospital outpatient clinic 05 ☐ migrant clinic 06 ☐ other clinic 07 _____ 　　　　　　　　　specify 08 ☐ hospital emergency room 09 ☐ community, neighborhood, or family health center 10 ☐ rural health center 11 ☐ HMO/prepaid group 12 ☐ other place 13 _____ 　　　　　　　　specify
B8.	Is there a particular person —— usually sees at the (place in B7) when —— is sick or injured?	(157)	1 ☐ Y 2 ☐ N
B9.	Now I would like to ask you some questions about ——'s last visit to (place in B7) when —— was sick or injured. How long has it been since that visit?	(158)	1 ☐ less than 1 month 2 ☐ 1 mo. less than 6 mos. 3 ☐ 6 mos., less than 1 yr. 4 ☐ 1 yr., less than 5 yrs. 5 ☐ 5 or more years 9 ☐ DK 6 ☐ never (B18)

3

B10. About how long did it take —— to get to the (place in B7) for that visit?

PROBE IF NECESSARY: Would you say it took more than 30 minutes or less than 30 minutes?

(159) _____ minutes
number

OR

(160) 1 ☐ more than 30 minutes
2 ☐ less than 30 minutes

B11. Did —— have an appointment for that visit?

(161) 1 ☐ Y   2 ☐ N(B13)

B12. About how long was it between the time an appointment was made and the time —— actually went for that visit?

(162) 000 ☐ less than 1 day

_____ days
number

B13. After —— got to the (place in B7), about how long did —— have to wait before —— was taken care of at that visit?

(163)-(164) _____ { 1 ☐ minutes
number   2 ☐ hours

B14. What was the main reason for that visit?

(165) DO NOT READ
1 ☐ A SICKNESS OR ILLNESS
2 ☐ AN INJURY
3 ☐ A FOLLOW-UP VISIT
4 ☐ AN INJECTION
5 ☐ FOR A PRESCRIPTION
6 ☐ SOME OTHER REASON — 7 _____
specify

B15. In general, how satisfied were you with the care —— received at that visit? Would you say you were very satisified, somewhat satisfied, or not at all satisfied?

(166) 1 ☐ very satisfied (B17)
2 ☐ somewhat satisfied
3 ☐ not at all satisfied

B16. Why weren't you completely satisfied with the health care —— received at that visit?

PROBE FOR MAIN REASON.

DO NOT READ.

(167)
01 ☐ COST TOO MUCH
02 ☐ HAD TO WAIT TOO LONG
03 ☐ LANGUAGE PROBLEM — COULDN'T COMMUNICATE
04 ☐ DR. DIDN'T SPEND ENOUGH TIME WITH SP
05 ☐ MISTREATED BY DR. OR OTHER STAFF
06 ☐ CONDITION DID NOT IMPROVE AFTER TREATMENT OR MEDICATION
07 ☐ DR. DID NOT DIAGNOSE OR TREAT CONDITION
08 ☐ OTHER — 09 _____
SPECIFY
99 ☐ DK

B17. Who took —— to the (place in B7) for that visit?

(168) DO NOT READ. MARK ALL THAT APPLY.
0 ☐ CHILD WENT ALONE
1 ☐ MOTHER
2 ☐ FATHER
4 ☐ OTHER HOUSEHOLD MEMBER 5 _____
specify
6 ☐ PERSON NOT IN HOUSEHOLD

B18. Has —— visited any other clinic, health center, doctor's office or other place for health care when —— was sick or injured since that visit to the (place in B7)?

(169) 1 ☐ Y(B22)   2 ☐ N(B32)

4

B19. Many people do not have a particular place they
usually go when they are sick or injured. Could you
please give me the number of the statement which is
the <u>main</u> reason —— does not have a particular place
—— usually goes?

(170) 　1　2　3　4　5　6⌐
　　7
　　　　‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
　　　　　specify

　　1. Has two or more usual doctors or places depending
　　　 on what is wrong.
　　2. Has not needed a doctor.
　　3. Previous doctor no longer available.
　　4. Have not been able to find the right doctor.
　　5. Recently moved to area.
　　6. Other reason — please specify.

B20. Although you said —— has no particular place for health
care, is there a particular person —— usually sees if ——
is sick or injured?

(171) 　1 ☐ Y　　　2 ☐ N(B22)

B21. Where does —— usually see this person — at home, at a
clinic, a health center, a hospital, a doctor's office,
or some other place?

PROBE IF CLINIC: Is this a hospital outpatient clinic,
a company or school clinic, a migrant clinic, or some
other kind of clinic?

PROBE IF HEALTH CENTER: Is this a community
health center, neighborhood health center, a family
health center, a rural health center, or some other kind
of health center?

PROBE IF HOSPITAL: Is this an outpatient clinic
or emergency room?

(172) 　01 ☐ home
　02 ☐ doctor's office or private clinic
　03 ☐ company or school clinic
　04 ☐ hospital outpatient clinic
　05 ☐ migrant clinic
　06 ☐ other clinic 07‾‾‾‾‾‾‾‾‾‾‾‾‾
　　　　　　　　　　　specify
　08 ☐ hospital emergency room
　09 ☐ community, neighborhood, or family
　　　　 health center
　10 ☐ rural health center
　11 ☐ HMO/prepaid group
　12 ☐ other place13‾‾‾‾‾‾‾‾‾‾‾‾‾
　　　　　　　　　　specify

B22. Now I would like to ask you some questions about
——'s <u>last</u> visit to <u>any</u> clinic, health center, doctor's office
or other place for health care when —— was sick or
injured. How long has it been since that visit?

(173) 　1 ☐ less than 1 month
　2 ☐ 1 mo., less than 6 mos.
　3 ☐ 6 mos., less than 1 yr.
　4 ☐ 1 yr., less than 5 yrs.
　5 ☐ 5 or more years　.
　9 ☐ DK
　0 ☐ never (B32)

B23. What kind of place did —— visit that time — was it a
clinic, a health center, a doctor's office, or some
other place?

PROBE IF CLINIC: Was this a hospital outpatient
clinic, a company or school clinic, a migrant clinic, or
some other kind of clinic?

PROBE IF HEALTH CENTER: Was this a community
health center, a neighborhood health center, a family
health center, a rural health center, or some other
kind of health center?

PROBE IF HOSPITAL: Was this an outpatient clinic
or emergency room?

(174) 　01 ☐ home
　02 ☐ doctor's office or private clinic
　03 ☐ company or school clinic
　04 ☐ hospital outpatient clinic
　05 ☐ migrant clinic
　06 ☐ other clinic_07‾‾‾‾‾‾‾‾‾‾‾‾‾
　　　　　　　　　　　specify
　08 ☐ hospital emergency room
　09 ☐ community, neighborhood, or family
　　　　 health center
　10 ☐ rural health center
　11 ☐ HMO/prepaid group
　12 ☐ other place13‾‾‾‾‾‾‾‾‾‾‾‾‾
　　　　　　　　　　specify

5

B24. About how long did it take —— to get to the (place in B23) for that visit? PROBE IF NECESSARY: Would you say it took more than 30 minutes or less than 30 minutes?	(175) ——————————,minutes number OR (176) 1 ☐ more than 30 minutes 2 ☐ less than 30 minutes
B25. Did —— have an appointment for that visit?	(177) 1 ☐ Y 2 ☐ N (B27)
B26. About how long was it between the time an appointment was made and the time —— actually went for that visit?	(178) 000 ☐ less than 1 day —————————days number
B27. After —— got to the (place in B23), about how long did —— have to wait before —— was taken care of at that visit?	(179)(180) ——————— { 1 ☐ minutes number { 2 ☐ hours
B28. What was the main reason for that visit?	DO NOT READ (181) 1 ☐ A SICKNESS OR ILLNESS 2 ☐ AN INJURY 3 ☐ A FOLLOW-UP VISIT 4 ☐ AN INJECTION 5 ☐ FOR A PRESCRIPTION 6 ☐ SOME OTHER REASON 7———————— specify
B29. In general, how satisfied were you with the care —— received at that visit? Would you say you were very satisfied, somewhat satisfied, or not at all satisfied?	(182) 1 ☐ very satisfied (B31) 2 ☐ somewhat satisfied 3 ☐ not at all satisfied
B30. Why weren't you (completely) satisfied with the health care —— received at that visit? PROBE FOR MAIN REASON.	DO NOT READ. (183) 01 ☐ COST TOO MUCH 02 ☐ HAD TO WAIT TOO LONG 03 ☐ LANGUAGE PROBLEM – COULDN'T COMMUNICATE 04 ☐ DR. DIDN'T SPEND ENOUGH TIME WITH SP 05 ☐ MISTREATED BY DR. OR OTHER STAFF 06 ☐ CONDITION DID NOT IMPROVE AFTER TREATMENT OR MEDICATION 07 ☐ DR. DID NOT DIAGNOSE OR TREAT CONDITION 08 ☐ OTHER – 09 ————————————— specify 99 ☐ DK
B31. Who took —— to the (place in B23) for that visit?	(184) DO NOT READ. MARK ALL THAT APPLY. 0 ☐ CHILD TOOK SELF 1 ☐ MOTHER 2 ☐ FATHER 4 ☐ OTHER HOUSEHOLD MEMBER 5———————— specify 6 ☐ PERSON NOT IN HOUSEHOLD

6

B32. There are some providers of health care that we sometimes go to, such as curanderos, sobadores, herbalists, spiritualists, and others. Has —— seen any of these persons for health care during the past 12 months?	(185) 1 ☐ Y 2 ☐ N		

B33. Sometimes people have difficulties in getting medical care. Have you had any difficulties getting medical care for ——

B34. Did this problem <u>prevent</u> you from getting medical care for ——?

1. Because care was not available when —— needed it?	(186) 1 ☐ Y(B34) 2☐ N	(187) 1 ☐ Y 2 ☐ N
2. Because of how much it cost?	(188) 1 ☐ Y(B34) 2☐ N	(189) 1 ☐ Y 2 ☐ N
3. Because you didn't know where to go?	(190) 1 ☐ Y(B34) 2☐ N	(191) 1 ☐ Y 2 ☐ N
4. Because you didn't have a way to get there?	(192) 1 ☐ Y(B34) 2☐ N	(193) 1 ☐ Y 2 ☐ N
5. Because the hours were not convenient?	(194) 1 ☐ Y(B34) 2☐ N	(195) 1 ☐ Y 2 ☐ N
6. Because you had to wait too long to get an appointment?	(196) 1 ☐ Y (B34) 2☐ N	(197) 1 ☐ Y 2 ☐ N
(7. Because you needed someone to take care of your other children?)	(198) 1 ☐ Y(B34) 2☐ N	(199) 1 ☐ Y 2 ☐ N
8. Because you would lose pay from work?	(200) 1 ☐ Y(B34) 2☐ N	(201) 1 ☐ Y 2 ☐ N
9. Because you had to wait too long in the office or clinic?	(202) 1 ☐ Y(B24) 2☐ N	(203) 1 ☐ Y 2 ☐ N
10. Because the staff at the office or clinic was disrespectful?	(204) 1 ☐ Y(B34) 2☐ N	(205) 1 ☐ Y 2 ☐ N
11. Because you had no confidence in the staff?	(206) 1 ☐ Y(B34) 2☐ N	(207) 1 ☐ Y 2 ☐ N
12. Because they did not speak Spanish?	(208) 1 ☐ Y(B34) 2☐ N	(209) 1 ☐ Y 2 ☐ N
13. Because there were no (<u>Hispanic</u>) staff members at the office or clinic?	(210) 1 ☐ Y(B34) 2☐ N	(211) 1 ☐ Y 2 ☐ N

B35. About how long has it been since —— had a <u>routine</u> physical examination; that is, not for a particular illness, but for a general checkup?	(212) 1 ☐ less than 1 year ago 2 ☐ 1 yr., less than 2 yrs. ago 3 ☐ 2 yrs., less than 5 yrs. ago 4 ☐ 5 or more yrs. ago 5 ☐ never 9 ☐ DK
B36. Since —— was born, how many different times has —— stayed in the hospital overnight or longer? Do not include the hospitalization when —— was born.	(213) _____ times number

DENTAL AND ANEMIA

C1. How old was —— when —— <u>first</u> saw someone for dental care?	(214) 1 ☐ under 4 yrs. old 2 ☐ 4 yrs. old or older 9 ☐ DK 3 ☐ never (C5)

C2.	About how long has it been since —— last saw some-one for dental care?	(215) 1 ☐ 6 months ago or less 2 ☐ over 6 mos. to 12 mos. 3 ☐ over 12 mos. to 2 yrs. 4 ☐ over 2 yrs. to 5 yrs. 5 ☐ more than 5 years 9 ☐ DK
C3.	On the average, about how many times a year does —— see someone for dental care?	(216) 1 ☐ less than once a year 2 ☐ once 3 ☐ twice 4 ☐ 3 or more times 5 ☐ no regular schedule 9 ☐ DK
C4.	Has —— ever received fluoride treatments that were applied to —— teeth during a visit to a dentist or some-one else —— saw for dental care?	(217) 1 ☐ Y 2 ☐ N 9 ☐ DK
C5.	CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	(218) 1 ☐ under 5 yrs. old (C8) 2 ☐ 5+ yrs. old (C6)
C6.	Does —— go to school?	(219) 1 ☐ Y 2 ☐ N(C8)
C7.	Does —— participate in a fluoride program at school? This is a program in which fluoride tablets or rinses are given to children to use at school.	(220) 1 ☐ Y 2 ☐ N 9 ☐ DK
C8.	Is —— covered by health insurance that pays for dental care?	(221) 1 ☐ Y 2 ☐ N 9 ☐ DK
C9.	Has —— ever had anemia, sometimes called "tired blood" or "low blood"?	(222) 1 ☐ Y 2 ☐ N(D1) 9 ☐ DK(D1)
C10.	Did a doctor ever say that —— had anemia?	(223) 1 ☐ Y 2 ☐ N(D1)
C11.	Does —— still have anemia?	(224) 1 ☐ Y 2 ☐ N
C12.	Was —— treated for this condition by a doctor?	(225) 1 ☐ Y 2 ☐ N
VISION AND HEARING		
D1.	Has —— ever had trouble seeing with one or both eyes when not wearing glasses or contact lenses?	(226) 1 ☐ Y 2 ☐ N(D10)
D2.	How old was —— when —— first began having trouble seeing?	(227) 1 ☐ under 1 year old 2 ☐ 1-4 years old 3 ☐ 5-11 years old
D3.	Did —— ever see a doctor about it?	(228) 1 ☐ Y 2 ☐ N
D4.	Does —— wear glasses or contact lenses?	(229) 1 ☐ Y 2 ☐ N(D6)

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D5. Does —— have trouble with —— vision even when wearing glasses or contact lenses?	(230)	1 □ Y(D8) 2 □ N(D8)
D6. Has —— ever worn glasses or contact lenses?	(231)	1 □ Y 2 □ N(D10)
D7. Why did —— stop wearing them?		MARK ALL THAT APPLY. DO NOT READ.
	(232)	1 □ NO LONGER NEED THEM
	(233)	1 □ DIDN'T SEEM TO HELP
	(234)	1 □ INCONVENIENT
	(235)	1 □ OTHER 2_____ specify
D8. What (are/were) ——'s glasses or contact lenses prescribed for?		MARK ALL THAT APPLY. DO NOT READ.
	(236)	1 □ READING/CLOSE WORK
	(237)	1 □ SEEING DISTANT OBJECTS
	(238)	1 □ OTHER 2_____ specify
D9. How often (does/did) —— use —— glasses or contact lenses: all of the time, most of the time, hardly ever, or never?	(239)	1 □ all of the time 2 □ most of the time 3 □ hardly ever 4 □ never
D10. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD AND TO QUESTION C6.	(240)	1 □ under 5 yrs. old (D13) 2 □ 5+ yrs. old, goes to school (D11) 3 □ 5+ yrs. old, doesn't go to school (D12)
D11. Is —— able to read the blackboard from the back of the classroom (when wearing glasses or contact lenses)?	(241)	1 □ Y 2 □ N 9 □ DK
D12. Were you ever told by a doctor that —— had learning or developmental problems related to —— vision?	(242)	1 □ Y 2 □ N 9 □ DK
D13. When was the last time —— had —— vision tested?	(243)	1 □ 6 months ago or less 2 □ over 6 mos. to 12 mos. 3 □ over 12 mos. to 2 yrs. 4 □ over 2 yrs. to 5 yrs. 5 □ more than 5 yrs. 6 □ never 9 □ DK
D14. Did —— ever have an ear infection or an earache?	(244)	1 □ Y 2 □ N(D18) 9□ DK(D18)
D15. How many times has —— had an ear infection or an earache?	(245)	1 □ only once 2 □ twice 3 □ 3-5 times 4 □ 6 or more times 9 □ DK
D16. Was —— ever treated by a doctor for (any of) —— ear infection(s) or earache(s)?	(246)	1 □ Y 2 □ N(D18) 9□ DK(D18)
D17. Did a doctor ever treat an ear infection or earache —— had by placing tubes in —— ear?	(247)	1 □ Y 2 □ N 9□ DK

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D18. Has —— ever had a ruptured eardrum?	(248)	1 ☐ Y 2 ☐ N 9☐ DK
D19. Has —— <u>ever</u> had a running ear or any discharge from —— ears, not counting wax in the ears?	(249)	1 ☐ Y 2 ☐ N(D22) 9☐ DK(D22)
D20. How many times has —— had a running ear or any discharge from —— ear?	(250)	1 ☐ only once 2 ☐ twice 3 ☐ 3-5 times 4 ☐ 6 or more times 9 ☐ DK
D21. Did —— ever see a doctor because of this condition?	(251)	1 ☐ Y 2 ☐ N 9 ☐ DK
D22. Has —— <u>ever</u> had trouble hearing with one or both ears? Do not include any problems which lasted just a short period of time such as during a cold.	(252)	1 ☐ Y 2 ☐ N(D27)
D23. How old was —— when —— first began having trouble hearing?	(253)	1 ☐ under 1 year old 2 ☐ 1-4 years old 3 ☐ 5-11 years old
D24. Since this trouble began, has it gotten worse, gotten better, or stayed about the same?	(254)	1 ☐ gotten worse 2 ☐ gotten better 3 ☐ stayed the same
D25. Did —— <u>ever</u> see a doctor about it?	(255)	1 ☐ Y 2 ☐ N
D26. Does —— still have trouble hearing with one or both ears?	(256)	1 ☐ Y 2 ☐ N
D27. Has —— ever used a hearing aid?	(257)	1 ☐ Y 2 ☐ N
D28. How would you describe —— hearing (without a hearing aid) – good, —— has a little trouble, —— has a lot of trouble, or —— is deaf?	(258)	1 ☐ good 2 ☐ little trouble 3 ☐ lot of trouble 4 ☐ deaf
D29. Has —— <u>ever</u> had an operation on —— ears? EXCLUDE HAVING TUBES PLACED IN THE EARS.	(259)	1 ☐ Y 2 ☐ N
D30. When was the last time —— had —— hearing tested?	(260)	1 ☐ 6 months ago or less 2 ☐ over 6 mos. to 12 mos. 3 ☐ over 12 mos. to 2 yrs. 4 ☐ over 2 yrs. to 5 yrs. 5 ☐ never 9 ☐ DK
TB/WEIGHT/IMMUNIZATION/PESTICIDES		
E1. Were you ever told by a doctor that —— had tuberculosis?	(261)	1 ☐ Y 2 ☐ N

E2. Has —— ever lived in a household with a person who had active tuberculosis?	(262) 1 □ Y 2 □ N 9 □ DK
E3. About how tall is —— without shoes?	(263) 9 □ DK (264)—(265) _____ feet/ _____ inches number number OR (266) _____ centimeters number
E4. About how much does —— weigh without clothes or shoes?	(267) 9 □ DK (268) _____ pounds number OR (269) _____ kilograms number
E5. For —— height, would you say —— is underweight, about the right weight, or overweight?	(270) 1 □ underweight 2 □ about the right weight (E9) 3 □ overweight
E6. Has —— ever seen a doctor about —— weight?	(271) 1 □ Y 2 □ N(E9)
E7. Did the doctor ever recommend any treatment for —— weight?	(272) 1 □ Y 2 □ N(E9)
E8. What type of treatment did the doctor recommend?	MARK ALL THAT APPLY. DO NOT READ. (273) 1 □ MEDICATION (274) 1 □ REDUCING DIET (275) 1 □ HIGH CALORIE DIET (276) 1 □ EXERCISE (277) 1 □ OTHER – _2_____ specify
E9. Has —— ever received a DPT shot? A DPT shot is to prevent diphtheria, tetanus, and pertussis or whooping cough.	(278) 1 □ Y 2 □ N(E12) 9 □ DK(E12)
E10. How many DPT shots has —— ever had?	(279) 1 □ 1 2 □ 2 3 □ 3 4 □ 4 5 □ 5+
E11. How old was —— when —— had the (first) DPT shot?	(280)—(281) 00 □ under 1 mo. _____ { 1□ months old } (E16) number { 2□ years old }
E12. Has —— ever received a shot to prevent tetanus?	(282) 1 □ Y 2 □ N(E16) 9□ DK(E16)
E13. How many tetanus shots has —— ever had?	(283) 1 □ 1 2 □ 2 3 □ 3 4 □ 4 5 □ 5+

E14. How old was —— when —— had the (first) tetanus shot?		oo ☐ under 1 mo.
	(284)-(285) _____ number	⎰ 1 ☐ months old ⎱ 2 ☐ years old
E15. Why did —— receive the tetanus shot(s)? (Was it/Were they) routine immunization(s), or did —— receive the shot(s) because of an injury or illness that —— had at the time? IF MORE THAN ONE SHOT RECEIVED, MARK ALL APPLICABLE BOXES.	(286)	1 ☐ routine immunization 2 ☐ injury or illness 3 ☐ other 4 _____ specify
E16. Has —— ever lived with anyone who was working in farming?	(287)	1 ☐ Y 2 ☐ N
E17. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	(288)	1 ☐ under 6 yrs. old (E20) 2 ☐ 6 yrs. old or older (E18)
E18. Has —— ever worked or helped out in farming, for example in the fields or orchards?	(289)	1 ☐ Y 2 ☐ N(E20) 9 ☐ DK(E20)
E19. Has —— worked or helped out in farming during the past year?	(290)	1 ☐ Y 2 ☐ N
E20. (During the past five years/Since —— was born), has the prescription medication, Kwell, been used on —— to control head or body lice?	(291)	1 ☐ Y 2 ☐ N 9 ☐ DK

FUNCTIONAL IMPAIRMENT

F1. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	(292)	1 ☐ under 5 yrs. old (F2) 2 ☐ 5+ yrs. old (F4)
F2. Is —— able to take part at all in the usual kinds of play activities done by most (children/babies) —— age?	(293)	1 ☐ Y 2 ☐ N(F10)
F3. Is —— limited in the kind or amount of play activities —— can do because of an impairment or health problem?	(294)	1 ☐ Y(F10) 2 ☐ N(F8)
F4. Does any impairment or health problem now keep —— from attending school?	(295)	1 ☐ Y(F10) 2 ☐ N
F5. Does —— attend a special school or special classes because of any impairment or health problem?	(296)	1 ☐ Y(F10) 2 ☐ N
F6. Does —— need to attend a special school or special classes because of any impairment or health problem?	(297)	1 ☐ Y(F10) 2 ☐ N
F7. Is —— limited in school attendance because of —— health?	(298)	1 ☐ Y(F10) 2 ☐ N
F8. Is —— limited in any way in any activities because of an impairment or health problem?	(299)	1 ☐ Y 2 ☐ N(G1)
F9. In what way is —— limited? RECORD LIMITATION, NOT CONDITION.	(300)	1 _____ limitation

F10. What condition causes this limitation?

_____
condition

F11. When did you first notice ——'s (condition in F10)?

PROBE IF NECESSARY: **Was it within the past 3 months or was it more than 3 months ago?**

(301) 1 ☐ more than 3 months ago (G1)

☐ 3 months ago or less —

SPECIFY IF 3 MONTHS OR LESS:
2 ☐ CONDITION IS ON CARD CSP 2 (G1)
3 ☐ CONDITION NOT ON CARD CSP 2 (F12)

F12. Is this limitation caused by any other condition?

(302) 1 ☐ Y   2 ☐ N(G1)

F13. What other condition causes this limitation?

_____
condition

F14. When did you first notice ——'s (condition in F13)?

(303) 1 ☐ more than 3 months ago (G1)

☐ 3 months ago or less —

SPECIFY IF 3 MONTHS OR LESS:
2 ☐ CONDITION IS ON CARD CSP 2 (G1)
3 ☐ CONDITION NOT ON CARD CSP 2
(REASK F12-F14)

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CONDITION LIST

	G1. Did a doctor ever say that —— had - IF "YES" ASK G2 - G4 BEFORE GOING TO NEXT CONDITION.			G2. How old was —— when first had...?	
a.	Asthma?	(304) 1 ☐ Y(G2)	2 ☐ N	(305) ___ mos.	(306) ___ yrs.
b.	Other lung disease?	(309) 1 ☐ Y(G2)	2 ☐ N	(310) ___ mos.	(311) ___ yrs.
c.	Mental retardation?	(314) 1 ☐ Y(G4)	2 ☐ N	/////////////////////	
d.	Coordination problems?	(316) 1 ☐ Y(G2)	2 ☐ N	(317) ___ mos.	(318) ___ yrs.
e.	Muscle weakness/paralysis?	(321) 1 ☐ Y(G2)	2 ☐ N	(322) ___ mos.	(323) ___ yrs.
f.	Rheumatic fever?	(326) 1 ☐ Y(G2)	2 ☐ N	(327) ___ mos.	(328) ___ yrs.
g.	Rheumatic heart disease?	(331) 1 ☐ Y(G2)	2 ☐ N	(332) ___ mos.	(333) ___ yrs.
h.	Other heart condition?	(336) 1 ☐ Y(G2)	2 ☐ N	(337) ___ mos.	(338) ___ yrs.
i.	Urinary infection?	(341) 1 ☐ Y(G2)	2 ☐ N	(342) ___ mos.	(343) ___ yrs.
j.	Convulsions?	(346) 1 ☐ Y(G2)	2 ☐ N	(347) ___ mos.	(348) ___ yrs.
k.	Eczema?	(351) 1 ☐ Y(G2)	2 ☐ N	(352) ___ mos.	(353) ___ yrs.
l.	Speech problems?	(356) 1 ☐ Y(G2)	2 ☐ N	(357) ___ mos.	(358) ___ yrs.
m.	Psychological or behavioral problems?	(361) 1 ☐ Y(G2)	2 ☐ N	(362) ___ mos.	(363) ___ yrs.
n.	Poisoning?	(366) 1 ☐ Y(G2)	2 ☐ N	(367) ___ mos.	(368) ___ yrs.

G3.	Does — still have ...?			G4.	Has — ever been treated by a doctor for — ...?		
(307)	1 □ Y	2 □ N	9 □ DK	(308)	1 □ Y	2 □ N	9 □ DK
(312)	1 □ Y	2 □ N	9 □ DK	(313)	1 □ Y	2 □ N	9 □ DK
////////	////////	////////	////////	(315)	1 □ Y	2 □ N	9 □ DK
(319)	1 □ Y	2 □ N	9 □ DK	(320)	1 □ Y	2 □ N	9 □ DK
(324)	1 □ Y	2 □ N	9 □ DK	(325)	1 □ Y	2 □ N	9 □ DK
(329)	1 □ Y	2 □ N	9 □ DK	(330)	1 □ Y	2 □ N	9 □ DK
(334)	1 □ Y	2 □ N	9 □ DK	(335)	1 □ Y	2 □ N	9 □ DK
(339)	1 □ Y	2 □ N	9 □ DK	(340)	1 □ Y	2 □ N	9 □ DK
(344)	1 □ Y	2 □ N	9 □ DK	(345)	1 □ Y	2 □ N	9 □ DK
(349)	1 □ Y	2 □ N	9 □ DK	(350)	1 □ Y	2 □ N	9 □ DK
(354)	1 □ Y	2 □ N	9 □ DK	(355)	1 □ Y	2 □ N	9 □ DK
(359)	1 □ Y	2 □ N	9 □ DK	(360)	1 □ Y	2 □ N	9 □ DK
(364)	1 □ Y	2 □ N	9 □ DK	(365)	1 □ Y	2 □ N	9 □ DK
////////	////////	////////	////////	(369)	1 □ Y	2 □ N	9 □ DK

SCHOOL ATTENDANCE AND LANGUAGE USE

H1. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD AND TO QUESTION C6.	(370) 1 ☐ under 5 yrs. old (H17) 2 ☐ 5+ yrs. old, goes to school (H3) 3 ☐ 5+ yrs. old, not in school (H2)
H2. Has —— ever attended school?	(371) 1 ☐ Y 2 ☐ N(H16)
H3. Is —— now either going to school or on vacation from school?	(372) 1 ☐ going to school 2 ☐ on vacation from school 3 ☐ neither (H5)
H4. What grade (is —— in now/will —— be in)?	(373) 00 ☐ nursery school 77 ☐ kindergarten } (H7) _____ grade number
H5. Why did —— stop going to school?	(374) 1 ☐ health problem 2 ☐ family needs child at home 3 ☐ dropped out 4 ☐ other 5 _____ specify
H6. How long ago did —— stop going to school?	(375) 00 ☐ less than 1 month ago (376) _____ { 1☐ months number { 2☐ years
IF MORE THAN 12 MONTHS AGO IN H6, GO TO H8. OTHERWISE ASK: H7. During the past 12 months, about how many days was —— absent from school because of illness?	(377) 000 ☐ none _____ days number
H8. Has —— repeated any grades for any reason?	(378) 1 ☐ Y 2 ☐ N
H9. Has —— ever skipped any grades for any reason?	(379) 1 ☐ Y 2 ☐ N
H10. When —— first began to talk, what language did —— speak?	(380) 1 ☐ Spanish 2 ☐ English (H13) 3 ☐ other 4 _____ specify
H11. Can —— speak English now?	(381) 1 ☐ Y 2 ☐ N(H13)
H12. How old was —— when —— first began to speak English?	(382) _____ years old number
H13. What language does —— mainly speak at home now?	(383) 1 ☐ Spanish 2 ☐ English 3 ☐ both equally 4 ☐ other language 5 _____ specify

H14. What language do (——'s parents/you) mainly speak at home now?	(384)	1 ☐ Spanish 2 ☐ English 3 ☐ both equally 4 ☐ other language _5_____ *specify*
H15. What language (does/did) —— mainly speak at school in —— classes?	(385)	1 ☐ Spanish 2 ☐ English 3 ☐ both equally 4 ☐ depends on subject matter 5 ☐ other language — _6_____ *specify* (J1)
H16. Why has —— never attended school?	(386) (387) (388) (389)	MARK ALL THAT APPLY. DO NOT READ. 1 ☐ TOO YOUNG — NO SCHOOLS AROUND FOR CHILDREN THAT AGE 1 ☐ HEALTH PROBLEM 1 ☐ FAMILY NEEDS CHILD AT HOME 1 ☐ OTHER —_2_____ *specify*
H17. When —— first began to talk, what language did —— speak?	(390)	1 ☐ Spanish 2 ☐ English (H20) 3 ☐ other — _4_____ *specify* 5 ☐ doesn't talk yet (H21)
H18. Can —— speak English now?	(391)	1 ☐ Y 2 ☐ N(H20)
H19. How old was —— when —— first began to speak English?	(392)	_____ years old *number*
H20. What language does —— mainly speak at home now?	(393)	1 ☐ Spanish 2 ☐ English 3 ☐ both equally 4 ☐ other language — _5_____ *specify*
H21. What language do (——'s parents/you) mainly speak at home now?	(394)	1 ☐ Spanish 2 ☐ English 3 ☐ both equally 4 ☐ other language — _5_____ *specify*
MEAL PROGRAMS		
J1. Has —— ever received food or health care under the Women, Infants, and Children (WIC) program?	(395)	1 ☐ Y 2 ☐ N(J4) 9 ☐ DK(J4)
J2. Is —— now receiving food or health care under the Women, Infants, and Children (WIC) program?	(396)	1 ☐ Y 2 ☐ N 9 ☐ DK

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J3.	How long (did — receive/has — been receiving) food or health care from WIC?	(397) (398) _____ number { 1 □ months / 2 □ years
J4.	**CHECK ITEM:** REFER TO ITEM H3	(399) 1 □ now going to school or on vacation (J5) 2 □ neither (K1)
J5.	Does the school that — attends serve a complete breakfast?	(400) 1 □ Y 2 □ N
J6.	How many times a week does — usually eat breakfast served by the school?	(401) 0 □ None (J10) _____ times number 9 □ DK
J7.	During this (past) school year did (—'s parents/you) fill out a form to enable — to eat breakfast at school for free or at a reduced price?	(402) 1 □ Y 2 □ N(J9)
J8.	Does — eat breakfast at school for free or at a reduced price?	(403) 1 □ Yes 2 □ No, not eligible 3 □ No, other reason
J9.	How much does — pay for — breakfast per day?	(404) _____ cents number 000 □ free
J10.	Does the school that — attends serve a complete lunch?	(405) 1 □ Y 2 □ N
J11.	How many times a week does — usually eat lunch served by the school?	(406) 0 □ None (J15) _____ times number 9 □ DK
J12.	During this (past) school year did (—'s parents/you) fill out a form to enable — to eat lunch at school for free or at a reduced price?	(407) 1 □ Y 2 □ N(J14)

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J13. Does —— eat lunch at school for free or at a reduced price?

(408) 1 ☐ Yes
2 ☐ 'No, not eligible
3 ☐ No, other reason

J14. How much does —— pay for —— lunch per day?

(409) _____ cents
number

000 ☐ free

J15. Does —— ever bring —— lunch from home?

(410) 1 ☐ Yes, always
2 ☐ Yes, sometimes
3 ☐ No (K1)

J16. On days that —— does not buy lunch at school, does —— buy milk?

(411) 1 ☐ Yes, always
2 ☐ Yes, sometimes
3 ☐ No (K1)

J17. How much does —— pay for —— milk per day?

(412) _____ cents
number

000 ☐ free

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MEDICINE/VITAMIN USAGE

K1. During the past 2 weeks, has —— taken or used any vitamins
or minerals?

(413) 1 ☐ Y (K2)   2 ☐ N (K5)

K2. May I see the container(s) of ——'s vitamins and minerals? RECORD BRAND NAME	**K3.** How much of the (vitamin/mineral) does —— take each time —— uses it?	**K4.** How often does —— take this (vitamin/ mineral)?
(414)	(415) (416) _____ number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other	(417) (418) _____ times per 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 _____ specify
(414)	(415) (416) _____ number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other	(417) (418) _____ times per 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 _____ specify
(414)	(415) (416) _____ number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other	(417) (418) _____ times per 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 _____ specify

☐ Continuation booklet

K5. We are interested in all kinds of medicines that people take or use. First I will ask about —— use of medicines that can be obtained <u>without</u> a doctor's prescription.

During the past 2 weeks, has —— taken or used any of the following types of medicines?

a) Cough, throat, cold or congestion medicine?	(419)	1 ☐ Y 2 ☐ N
b) Pain relievers, such as aspirin or Tylenol?	(420)	1 ☐ Y 2 ☐ N
c) Sleeping tablets, sedatives, or tranquilizers?	(421)	1 ☐ Y 2 ☐ N
d) Anti-depressants, stimulants, or pep pills?	(422)	1 ☐ Y 2 ☐ N
e) Diet pills or dieting aids?	(423)	1 ☐ Y 2 ☐ N
f) Laxatives?	(424)	1 ☐ Y 2 ☐ N
g) Medicines for diarrhea?	(425)	1 ☐ Y 2 ☐ N
h) Medicines for indigestion?	(426)	1 ☐ Y 2 ☐ N
i) Suppositories?	(427)	1 ☐ Y 2 ☐ N
j) Eye drops?	(428)	1 ☐ Y 2 ☐ N
k) Any other medicines, pills, or ointments for which a doctor's prescription is not needed? IF YES, SPECIFY: 1 _____ (430) _____	(429)	1 ☐ Y 2 ☐ N

K6. During the past 2 weeks has —— taken or used any medicines for which a doctor's prescription is needed?

(432) 1 ☐ Y(K7)   2 ☐ N(K14)

K7. May I see the container(s) of the medicine(s) —— took? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS K8 THROUGH 13 FOR EACH.	K8. What is the health problem —— had for which —— took the (medicine)? PROBE FOR SYMPTOM OR CONDITION.	K9. Did —— take (dosage reported in K7) per (frequency reported in K7)?
Label printed in: (433) 1 ☐ English 2 ☐ Spanish 3 ☐ Both	(442)	
Name: (434)		(443) 1 ☐ Y (K12)
Prescribed for SP? (435) 1 ☐ Y 2 ☐ N		2 ☐ N
Strength: (436)		
Dosage: (437)-(438)		
Frequency: (439)-(440)		
IF "AS NEEDED," ASK K8 AND GO TO NEXT MEDICATION		
1 ☐ Container not seen-information (441) furnished by respondent		
Label printed in: (433) 1 ☐ English 2 ☐ Spanish 3 ☐ Both	(442)	
Name: (434)		(443) 1 ☐ Y (K12)
Prescribed for SP? (435) 1 ☐ Y 2 ☐ N		2 ☐ N
Strength: (436)		
Dosage: (437)-(438)		
Frequency: (439)-(440)		
IF "AS NEEDED," ASK K8 AND GO TO NEXT MEDICATION		
1 ☐ Container not seen-information (441) furnished by respondent		

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K10. How much of the (medicine) did —— take?	K11. Did a doctor advise —— to take (dosage in K10)/(frequency in K10)?	K12. Does the (medicine) make —— feel bad or cause any side effects?	K13. What does —— do when this happens?
(444)-(445) 1 ☐ tablet/capsule 2 ☐ teaspoon number 3 ☐ tablespoon 4 ☐ other (446)-(447) ___ times — per { 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ___ specify	(448) 1 ☐ Yes 2 ☐ No	(449) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No } GO TO NEXT MEDICATION 9 ☐ DK }	(450) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY
(444)-(445) 1 ☐ tablet/capsule 2 ☐ teaspoon number 3 ☐ tablespoon 4 ☐ other (446)-(447) ___ times — per { 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ___ specify	(448) 1 ☐ Yes 2 ☐ No	(449) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No } GO TO NEXT MEDICATION 9 ☐ DK }	(450) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY

K7. May I see the container(s) of the medicine(s) —— took? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS K8 THROUGH 13 FOR EACH.	K8. What is the health problem —— had for which —— took the (medicine)? PROBE FOR SYMPTOM OR CONDITION.	K9. Did —— take (dosage reported in K7) per (frequency reported in K7)?
Label printed in: 1 ☐ English 2 ☐ Spanish 3 ☐ Both	(442)	
Name: (434)		(443) 1 ☐ Y (K12) 2 ☐ N
Prescribed for SP? (435) 1 ☐ Y 2 ☐ N		
Strength: (436)		
Dosage: (437) (438)		
Frequency: (439) (440)		
IF "AS NEEDED," ASK K8 AND GO TO NEXT MEDICATION.		
1 ☐ Container not seen-information furnished (441) by respondent.		
Label printed in: 1 ☐ English 2 ☐ Spanish 3 ☐ Both	(442)	
Name: (434)		(443) 1 ☐ Y (K12) 2 ☐ N
Prescribed for SP? (435) 1 ☐ Y 2 ☐ N		
Strength: (436)		
Dosage: (437) (438)		
Frequency: (439) (440)		
IF "AS NEEDED," ASK K8 AND GO TO NEXT MEDICATION.		
1 ☐ Container not seen-information furnished (441) by respondent.		
☐ Continuation booklet		

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K10. How much of the (medicine) did —— take?	K11. Did a doctor advise —— to take (dosage in K10)/(frequency in K10)?	K12. Does the (medicine) make —— feel bad or cause any side effects?	K13. What does —— do when this happens?
(444) (445) number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other (446) (447) ———— per times 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ———— specify	(448) 1 ☐ Yes 2 ☐ No	(449) 1 ☐ Yes – SPECIFY PROBLEM 3 ———————— ———————— 2 ☐ No ⎫ GO TO NEXT ⎬ MEDICATION 9 ☐ DK ⎭	(450) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 ———————— SPECIFY
(444) (445) number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other (446) (447) ———— per times 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ———— specify	(448) 1 ☐ Yes 2 ☐ No	(449) 1 ☐ Yes – SPECIFY PROBLEM 3 ———————— ———————— 2 ☐ No ⎫ GO TO NEXT ⎬ MEDICATION 9 ☐ DK ⎭	(450) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 ———————— SPECIFY

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K14. Has —— been told by a doctor to take any medicines <u>during the past 6 months</u> that —— did <u>not</u> take during that period?

(451) 1 □ Y(K15)   2 □ N (L1)

K15. What are the names of the medicines that —— did not take? (PROBE FOR BRAND NAMES, ENTER EACH ON SEPARATE LINE. THEN ASK K16 AND K17 FOR EACH.)	K16. What was the health problem —— had for which the doctor recommended the (medicine)?
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)

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K17. What was —— main reason
for not taking the (<u>medicine</u>)?

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   ————————————

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   ————————————

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   ————————————

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   ————————————

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   ————————————

(454) 1 □ SIDE EFFECTS   3 □ DIDN'T THINK IT WOULD WORK   5 □ OTHER — SPECIFY

     2 □ COST TOO MUCH   4 □ HAVEN'T YET OBTAINED MEDICINE   <u>6</u>————————

RESPONDENT FOR SAMPLE CHILD

L1. CHECK ITEM: MARK ONE BOX.

INDICATE MAIN RESPONDENT'S RELATIONSHIP
TO SAMPLE CHILD.

(455) 1 ☐ MOTHER
2 ☐ FATHER
3 ☐ SISTER OR BROTHER
4 ☐ OTHER –5 _____
SPECIFY

SAMPLE CHILD SELF-RESPONSE

M1. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD

(456) 1 ☐ under 6 yrs. old (END)

2 ☐ 6+ years old (M2)

M2. Now I have a few questions I would like to ask –– directly.
Is –– available now?

(457) 1 ☐ Y(M3)   2 ☐ N (END)

M3. INTRODUCTION: I would like to ask you a few questions
about your health.

M4. Do you have any trouble seeing (with your glasses on)?

(458) 1 ☐ Y   2 ☐ N

M5. When you are at school, can you read the blackboard
from the back of the classroom (with your glasses on)?

(459) 1 ☐ Y   2 ☐ N
3 ☐ doesn't go to school

M6. Do you have any trouble hearing?

(460) 1 ☐ Y   2 ☐ N

M7. When you are at school, can you hear the teacher
from the back of the classroom?

(461) 1 ☐ Y   2 ☐ N
3 ☐ doesn't go to school

M8. Do you think that you are underweight, about the right
weight, or overweight?

(462) 1 ☐ underweight (M9)
2 ☐ about the right weight (M13)
3 ☐ overweight (M11)

M9. Would you like to weigh more?

(463) 1 ☐ Y   2 ☐ N(M13)

M10. Are you trying to gain weight?

(464) 1 ☐ Y(M13)   2 ☐ N(M13)

M11. Would you like to weigh less?

(465) 1 ☐ Y   2 ☐ N(M13)

M12. Are you trying to lose weight?

(466) 1 ☐ Y   2 ☐ N

M13. Would you say your health in general is excellent, very good
good, fair or poor?

(467) 1 ☐ excellent
2 ☐ very good
3 ☐ good
4 ☐ fair
5 ☐ poor

MEDICINE/VITAMIN MEC

DO NOT ASK IN HOUSEHOLD

N1. REFER TO MEDICINE/VITAMIN USAGE SECTION. MARK ONE BOX.

(473) 1 ☐ No medicine or vitamin reported (N3)

2 ☐ Medicine or vitamin reported (N2)

N2. When an interviewer spoke with you a few weeks ago, you mentioned —— had taken (medicine/vitamins/minerals in questions K2, K5, and K7). Has —— taken any of these medicines during the past 24 hours?

(468) 1 ☐ Y   2 ☐ N

N3. Has —— taken any (other) medicines, vitamins or minerals during the past 24 hours?

(469) 1 ☐ Y   2 ☐ N

IF "YES" IN EITHER N1 OR N2, GO TO N3. OTHERWISE, END QUESTIONNAIRE.

N4. What are the names of all medicines, vitamins and minerals —— took during the past 24 hours? Any others?	**N5.** How much of the (medicine/vitamin/mineral) did —— take during the past 24 hours?
(470)	(471) (472) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other
(470)	(471) . (472) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other
(470)	(471) (472) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other
(470)	(471) (472) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

SPANISH VERSION

CHILD SAMPLE PERSON
QUESTIONNAIRE (522)
(Ages 6 Mos. – 11 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

WESTAT
ID No:

(100)

Stand No.　　Segment No.　　Serial No.

(107)

Family No.

(108)

SP No.

NCHS
ID No:

(101)

___ ___ ___ ___ ___ – ___

NAME (First, Middle, Last)

(109)

(110)　SEX
1 ☐　Male
2 ☐　Female

(111)　AGE

INTERVIEWER NAME:　　NO. (112)

REVIEWER NAME:　　NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☐　English
2 ☒　Spanish

TIME BEGAN
(102)-(103)
1 ☐ am
2 ☐ pm
___ ___:___ ___

TIME ENDED
(104)-(105)
1 ☐ am
2 ☐ pm
___ ___:___ ___

DATE OF EXAMINATION
___/ ___/ ___
Month　Day　Year

TIME
☐ am
___ ___:___ ___☐ pm

TRANSPORTATION
☐　Taxi
☐　Self

DATE OF INTERVIEW
(114)-(116)
___/ ___/ ___
Month　Day　Year

CHILD SAMPLE PERSON QUESTIONNAIRE

Ages 6 Months — 11 Years

(SPANISH VERSION)

NACIMIENTO

A1. ¿Qué edad tenía (la madre biológica de —— /usted) cuando —— nació?

(118) _____ años de edad
número

99 ☐ NS

A2. ¿Qué edad tenia (el padre biológico de —— /usted) cuando —— nació?

(119) _____ años de edad
número

99 ☐ NS

A3. ¿Nació —— en un hospital o en algún otro lugar?

(120) 1 ☐ hospital (A4)
2 ☐ otro —
3 _____ (A6)
especifique

A4. ¿Cuántas noches estuvo (la madre biológica de —— / usted) en el hospital durante este período?

(121) 00 ☐ ninguna
_____ noches
número

99 ☐ NS

A5. ¿Cuántas noches pasó —— en el hospital durante este período?

(122) 00 ☐ ninguna
_____ noches
número

99 ☐ NS

A6. ¿Cuánto pesó —— al nacer?

PROBE FOR OUNCES IF NOT REPORTED;
ENTER RESPONSE IN POUNDS AND OUNCES
OR IN GRAMS.

(123) 9 ☐ NS (A7)

(124)–(125) _____ libras/_____ onzas (A9)
número   número
OR

(126) _____ gramos (A9)
número

A7. ¿Pesó —— más de 5½ libras (2500 gramos) o menos?

(127) 1 ☐ 5½ libras (2500g) o más (A8)
2 ☐ menos de 5½ libras (2500g)(A9)
9 ☐ NS (A9)

A8. ¿Pesó —— más de 9 libras (4100 gramos) o menos?

(128) 1 ☐ 9 libras (4100g) o más
2 ☐ menos de 9 libras (4100g)
9 ☐ NS

A9. ¿Nació —— más o menos cuando se esperaba, o nació antes o después que se esperaba?

(129) 1 ☐ más temprano de cuando se esperaba
2 ☐ cuando se esperaba (A11)
3 ☐ más tarde de cuando se esperaba
9 ☐ NS (A11)

A10. Más o menos, ¿cuánto tiempo (antes/después) de lo que se esperaba nació —— ?

(130)–(131) _____ 1 ☐ días
número   2 ☐ semanas
3 ☐ meses

A11. ¿Nació —— con algún problema o defecto físico o mental?

(132) 1 ☐ S   2 ☐ N (A13)

1

A12. ¿El problema o defecto de —— tuvo que ver con —				
el corazón?	(133)	1 ☐ S	2 ☐ N	9 ☐ NS
los ojos?	(134)	1 ☐ S	2 ☐ N	9 ☐ NS
los oídos?	(135)	1 ☐ S	2 ☐ N	9 ☐ NS
la boca o la garganta?	(136)	1 ☐ S	2 ☐ N	9 ☐ NS
el estómago o los intestinos?	(137)	1 ☐ S	2 ☐ N	9 ☐ NS
los riñones o el sistema urinario?	(138)	1 ☐ S	2 ☐ N	9 ☐ NS
los músculos, los huesos o las coyunturas?	(139)	1 ☐ S	2 ☐ N	9 ☐ NS
el cerebro o el sistema de nervios?	(140)	1 ☐ S	2 ☐ N	9 ☐ NS

A13. ¿Recibió —— algún cuidado de recién nacido en una unidad de cuidado intensivo, en una sala de recién nacidos prematuros, o en algún otro tipo de facilidad de cuidado especial?

(141) 1 ☐ S   2 ☐ N(A15)

A14. ¿Cuántas noches se quedó —— en la facilidad de cuidado especial?

(142)
1 ☐ menos de 1 semana
2 ☐ 1 semana — 1 mes
3 ☐ más de un mes

A15. ¿Se le dió alguna vez pecho a —— ?

(143) 1 ☐ S   2 ☐ N(A18)

A16. ¿Qué edad tenía —— cuando le dejaron de dar pecho por completo?

00 ☐ aún se le da pecho

(144)-(145) _____ número
1 ☐ días
2 ☐ semanas
3 ☐ meses

A17. ¿Qué edad tenía —— cuando se le dió por primera vez fórmula o leche fresca diariamente?

00 ☐ nunca diariamente

(146)-(147) _____ número
1 ☐ días
2 ☐ semanas
3 ☐ meses

A18. ¿Qué edad tenía —— cuando empezó a comer comida sólida tal como comidas coladas u otras comidas no líquidas diariamente?

00 ☐ nunca diariamente

(148)-(149) _____ número
1 ☐ días
2 ☐ semanas
3 ☐ meses

SERVICIOS DE SALUD

B1. ¿Diría usted que la salud de —— en general es excelente, muy buena, buena, regular, o mala?

(150)
1 ☐ excelente
2 ☐ muy buena
3 ☐ buena
4 ☐ regular
5 ☐ mala

B2. Ahora quisiera preguntarle sobre las visitas de —— para el cuidado de salud. Primero voy a preguntarle sobre cuidado rutinario, incluyendo exámenes rutinarios y vacunas cuando nada está mal.

¿Cuánto tiempo hace desde la última visita de —— a una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar para cuidado de salud rutinario?

(151)
1 ☐ menos·de un mes
2 ☐ 1 mes, menos de 6 meses
3 ☐ 6 meses, menos de un año
4 ☐ 1 año, menos de 5 años
5 ☐ 5 o más años
9 ☐ NS
0 ☐ nunca (B5)

2

B3. ¿Hay una clínica, un centro de salud, un hospital, una oficina de médico, u otro lugar en particular a que —— va usualmente para cuidado de salud rutinario?	(152) 1 ☐ S 2 ☐ N(B5)

B4. ¿Qué clase de lugar es — una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar?
 	
PROBE IF CLINIC: ¿Es clínica de paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?
 	
PROBE IF HEALTH CENTER: ¿Es un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro rural de salud o alguna otra clase de centro de salud?
 	
PROBE IF HOSPITAL: ¿Es una clínica para paciente externo o sala de emergencia?
	(153) 01 ☐ casa
	02 ☐ oficina de médico o clínica privada
	
	03 ☐ clínica de compañía o escuela
	04 ☐ clínica de paciente externo de hospital
	05 ☐ clínica para trabajadores migrantes
	06 ☐ otra clínica <u>07</u>
	                  _{especifique}
	08 ☐ sala de emergencia de hospital
	09 ☐ centro de salud de la comunidad, del vecindario, o familiar
	
	10 ☐ centro rural de salud
	11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
	12 ☐ otro lugar _____
	                  _{especifique}

B5. Ahora voy a preguntarle sobre las visitas de —— para cuidado de salud cuando está enfermo o herido. ¿Hay una clínica, un centro de salud, un hospital, una oficina de médico, u otro lugar en particular a que —— va usualmente cuando está enfermo o herido?	(154) 1 ☐ S 2 ☐ N(B19)

B6. IF "S" in B3, ASK: ¿Es este el mismo (<u>place in B4</u>) o es otro lugar?	(155) 1 ☐ mismo lugar 2 ☐ otro lugar

IF "MISMO LUGAR" IN B6, REFER TO B4 AND MARK RESPONSE WITHOUT ASKING. OTHERWISE ASK:
 	
B7. ¿Qué clase de lugar es — una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar?
 	
PROBE IF CLINIC: ¿Es clínica de paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?
 	
PROBE IF HEALTH CENTER: ¿Es un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro rural de salud o alguna otra clase de centro de salud?
 	
PROBE IF HOSPITAL: ¿Es una clínica para paciente externo o sala de emergencia?
	(156) 01 ☐ casa
	02 ☐ oficina de médico o clínica privada (B9)
	
	03 ☐ clínica de compañía o escuela
	04 ☐ clínica de paciente externo de hospital
	05 ☐ clínica para trabajadores migrantes
	06 ☐ otra clínica <u>07</u>
	                  _{especifique}
	08 ☐ sala de emergencia de hospital
	09 ☐ centro de salud de la comunidad, del vecindario, o familiar
	
	10 ☐ centro rural de salud
	11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
	12 ☐ otro lugar <u>13</u>
	                  _{especifique}

B8. ¿Hay alguna persona en particular que —— ve usualmente en (place in B7) cuando está enfermo o herido?	(157)	1 ☐ S 2 ☐ N
B9. Ahora quisiera hacerle algunas preguntas sobre la última visita de —— a (place in B7) cuando estuvo enfermo o herido. ¿Cuánto tiempo hace desde esa visita?	(158)	1 ☐ menos de un mes 2 ☐ 1 mes, menos de 6 meses 3 ☐ 6 meses, menos de un año 4 ☐ 1 año, menos de 5 años 5 ☐ 5 años o más 6 ☐ Nunca (B18) 9 ☐ NS
B10. ¿Cuánto tiempo le tomó más o menos para llegar a (place in B7) para esa visita? PROBE IF NECESSARY: ¿Diría usted que le tomó más de 30 minutos o menos de 30 minutos?	(159) (160)	_____ minutos número OR 1 ☐ más de 30 minutos 2 ☐ menos de 30 minutos
B11. ¿Tuvo (una cita/un turno) para esa visita?	(161)	1 ☐ S 2 ☐ N(B13)
B12. ¿Cuánto tiempo pasó más o menos entre cuando se hizo la cita y cuando —— fue a esa visita?	(162)	000 ☐ menos de un día _____ días número
B13. Después de que llegó —— a (place in B7) para esa visita, ¿cuánto tiempo tuvo que esperar más o menos antes que le atendieran?	(163)-(164)	_____ { 1 ☐ minutos número { 2 ☐ horas
B14. ¿Cuál fue la razón principal por esa visita?	(165)	DO NOT READ. 1 ☐ UNA ENFERMEDAD O UN MALESTAR 2 ☐ UNA HERIDA 3 ☐ UNA VISITA DE SEGUIMIENTO/ "FOLLOW-UP" 4 ☐ UNA INYECCIÓN 5 ☐ PARA UNA RECETA 6 ☐ ALGUNA OTRA RAZÓN 7 _____ ESPECIFIQUE
B15. En general, ¿qué satisfecho estuvo usted con el servicio que —— recibió en esa visita? ¿Diría usted que estuvo muy satisfecho, algo satisfecho o nada satisfecho?	(166)	1 ☐ muy satisfecho (B17) 2 ☐ algo satisfecho 3 ☐ nada satisfecho
B16. ¿Por qué no estuvo (completamente) satisfecho con el cuidado de salud que —— recibió en esa visita? PROBE FOR MAIN REASON.	(167)	DO NOT READ. 01 ☐ CUESTA DEMASIADO 02 ☐ TUVO QUE ESPERAR DEMASIADO 03 ☐ PROBLEMA DE LENGUAJE – NO PUDO COMUNICARSE 04 ☐ EL MÉDICO NO LE DIÓ SUFICIENTE TIEMPO AL "SP" 05 ☐ EL MÉDICO U OTRO PERSONAL NO LO TRATÓ BIEN 06 ☐ LA CONDICIÓN NO MEJORÓ DESPUÉS DEL TRATAMIENTO O MEDICAMENTO 07 ☐ EL MÉDICO NO DIAGNOSTICÓ NI TRATÓ LA CONDICIÓN 08 ☐ OTRO – 09 _____ ESPECIFIQUE 99 ☐ NS

B17. ¿Quién llevó a —— a (place in B7) para esa visita?

(168)   0 ☐ EL NIÑO FUE SOLO
        1 ☐ MADRE
        2 ☐ PADRE
        4 ☐ OTRO MIEMBRO DE LA CASA ⌐⌐
        5 _____
                              ESPECIFIQUE
        6 ☐ PERSONA NO MIEMBRO DE LA CASA

B18. ¿Ha visitado —— cualquier otra clínica, centro de salud, oficina de médico, u otro lugar para el cuidado de salud cuando estaba enfermo o herido desde esa visita a (place in B7)?

(169)   1 ☐ S (B22)   2 ☐ N (B32)

HAND CARD CSP 1

B19. Muchas personas no tienen un lugar en particular donde usualmente van cuando están enfermos o heridos. ¿Podría usted darme el número de la frase que mejor explica la razón principal por la cual —— no tiene un lugar en particular donde usualmente va?

> 1 — Tiene dos o más médicos o lugares a los que usualmente va dependiendo del problema que tenga.
> 3 — No ha necesitado médico.
> 3 — El médico que le atendía ya no está disponible.
> 4 — No ha podido encontrar el médico apropiado.
> 5 — Acaba de mudarse al área.
> 6 — Otra razón-especifique por favor.

(170)   1   2   3   4   5   6   ⌐⌐
        7 _____
                              especifique

B20. Aunque usted dijo que —— no tiene un lugar en particular donde recibe cuidado de salud, ¿hay alguna persona en particular a quien —— ve usualmente cuando está enfermo o herido?

(171)   1 ☐ S   2 ☐ N(B22)

B21. ¿Dónde ve —— a esta persona usualmente — en casa, en una clínica, en un centro de salud, en un hospital, en una oficina de médico o en algún otro lugar?

PROBE IF CLINIC: ¿Es una clínica para paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?

PROBE IF HEALTH CENTER: ¿Es un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro de salud rural o alguna otra clase de centro de salud?

PROBE IF HOSPITAL: ¿Es una clínica para paciente externo o sala de emergencia?

(172)   01 ☐ casa
        02 ☐ oficina de médico o clínica privada

        03 ☐ clínica de compañía o escuela
        04 ☐ clínica para paciente externo de hospital
        05 ☐ clínica para trabajadores migrantes
        06 ☐ otra clínica 07 _____
                              especifique

        08 ☐ sala de emergencia de hospital
        09 ☐ central de salud de la comunidad, del vecindario, o familiar

        10 ☐ centro rural de salud
        11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
        12 ☐ otro lugar 13 _____
                              especifique

5

B22. Ahora me gustaría hacerle unas preguntas sobre la última visita de –– a cualquier clínica, centro de salud, oficina del médico u otro lugar para el cuidado de salud cuando estuvo enfermo o herido. ¿Cuánto tiempo hace desde esa visita?

(173)
- 1 ☐ menos de 1 mes
- 2 ☐ 1 mes, menos de 6 meses
- 3 ☐ 6 meses, menos de 1 año
- 4 ☐ 1 año, menos de 5 años
- 5 ☐ 5 años o más
- 9 ☐ NS
- 0 ☐ nunca (B32)

B23. ¿Qué clase de lugar visitó –– para esa visita – era una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar?

PROBE IF CLINIC: ¿Era una clínica de paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?

PROBE IF HEALTH CENTER: ¿Era un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro rural de salud o alguna otra clase de centro de salud?

PROBE IF HOSPITAL: ¿Era una clínica para paciente externo o sala de emergencia?

(174)
- 01 ☐ casa
- 02 ☐ oficina de médico o clínica privada
- 03 ☐ clínica de compañía o escuela
- 04 ☐ clínica de paciente externo de hospital
- 05 ☐ clínica para trabajadores migrantes
- 06 ☐ otra clínica 07 _____ especifique
- 08 ☐ sala de emergencia de hospital
- 09 ☐ centro de salud de la comunidad, del vecindario, o familiar
- 10 ☐ centro rural de salud
- 11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
- 12 ☐ otro lugar 13 _____ especifique

B24. ¿Cuánto tiempo le tomó más o menos para llegar a (place in B23) para esa visita?

PROBE IF NECESSARY: ¿Diría usted que le tomó más de 30 minutos o menos de 30 minutos?

(175) _____ minutos
número

OR

(176)
- 1 ☐ más de 30 minutos
- 2 ☐ menos de 30 minutos

B25. ¿Tuvo (una cita/un turno) para esa visita?

(177) 1 ☐ S   2 ☐ N (B27)

B26. ¿Cuánto tiempo pasó más o menos entre cuando se hizo la cita y cuando –– fue para esa visita?

(178) 000 ☐ menos de un día
_____ días
numero

B27. Después de que llegó a (place in B23) para esa visita, ¿cuánto tiempo tuvo que esperar más o menos antes que le atendieran?

(179)—(180) _____ { 1 ☐ minutos
número   { 2 ☐ horas

B28. ¿Cuál fue la razón principal por esa visita?

DO NOT READ.

(181)
- 1 ☐ UNA ENFERMEDAD O UN MALESTAR
- 2 ☐ UNA HERIDA
- 3 ☐ UNA VISITA DE SEGUIMIENTO/ "FOLLOW-UP"
- 4 ☐ UNA INYECCIÓN
- 5 ☐ PARA UNA RECETA
- 6 ☐ ALGUNA OTRA RAZÓN 7 _____ ESPECIFIQUE

6

B29. En general, ¿qué satisfecho estuvo usted con el servicio que —— recibió en esa visita?
¿Diría usted que estuvo muy satisfecho, algo satisfecho o nada satisfecho?

(182)
- 1 ☐ muy satisfecho (B31)
- 2 ☐ algo satisfecho
- 3 ☐ nada satisfecho

B30. ¿Por qué no estuvo (completamente) satisfecho con el cuidado de salud que recibió en esa visita?

PROBE FOR MAIN REASON.

DO NOT READ
MARK ONE BOX ONLY.

(183)
- 01 ☐ CUESTA DEMASIADO
- 02 ☐ TUVO QUE ESPERAR DEMASIADO
- 03 ☐ PROBLEMA DE LENGUAJE – NO PUDO COMUNICARSE
- 04 ☐ EL MÉDICO NO LE DIÓ SUFICIENTE TIEMPO AL "SP"
- 05 ☐ EL MÉDICO U OTRO PERSONAL NO LO TRATÓ BIEN
- 06 ☐ LA CONDICIÓN NO MEJORÓ DESPUÉS DEL TRATAMIENTO O MEDICAMENTO
- 07 ☐ EL MÉDICO NO DIAGNOSTICÓ NI TRATÓ LA CONDICIÓN
- 08 ☐ OTRO – 09 _____
  ESPECIFIQUE
- 99 ☐ NS

B31. ¿Quién llevó a —— a (place in B23) para esa visita?

DO NOT READ.
MARK ALL THAT APPLY.

(184)
- 0 ☐ EL NIÑO FUE SOLO
- 1 ☐ MADRE
- 2 ☐ PADRE
- 4 ☐ OTRO MIEMBRO DE LA CASA ⌐
  5 _____
  ESPECIFIQUE

- 6 ☐ PERSONA NO MIEMBRO DE LA CASA

B32. Hay algunas personas que vemos algunas veces que proveen cuidado de salud, tal como curanderos, sobadores, (herbolarios/hierberos), (espiritualistas/espiritistas), y otros. En los últimos 12 mesas, ¿ha visto —— a cualquiera de estas personas para el cuidado de salud?

(185)
- 1 ☐ S   2 ☐ N

B33. A veces las personas tienen dificultad en obtener cuidado médico. ¿Ha tenido usted alguna dificultad en obtener cuidado médico para ——

B34. ¿Este problema le impidió obtener cuidado médico para ——?

1. Porque el cuidado no estaba disponible cuando lo necesitaba?
(186)—(187) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

2. Por lo que costaba?
(188)—(189) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

3. Porque no sabía a donde ir?
(190)—(191) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

4. Porque no tenía como llegar?
(192)—(193) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

5. Porque el horario no era conveniente?
(194)—(195) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

6. Porque tenía que esperar demasiado para obtener (una cita/un turno)?
(196)—(197) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

(7. Porque necesitaba a alguien que le cuidara sus otros niños?)
(198)—(199) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

8. Porque perdería sueldo por faltar al trabajo?
(200)—(201) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

9. Porque tenía que esperar demasiado en la oficina o clínica?
(202)—(203) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

10. Porque el personal de la oficina o la clínica le faltó el respeto?
(204)—(205) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

11. Porque no tenía confianza en el personal?
(206)—(207) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

12. Porque no hablaban español?
(208)—(209) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

13. Porque no habían empleados (hispanos) en la oficina o clínica?
(210)—(211) 1 □ S(B34) 2 □ N | 1 □ S 2 □ N

B35. ¿Cuánto tiempo hace más o menos desde que —— tuvo un examen físico rutinario; es decir, no para una enfermedad en particular, sino para un examen en general?

(212)
1 □ hace menos de un año
2 □ 1 año, menos de 2 años
3 □ 2 años, menos de 5 años
4 □ 5 años o más
5 □ nunca
9 □ NS

B36. Desde que nació ——, ¿cuántas veces diferentes estuvo internado una noche o más en el hospital? No incluya la hospitalización cuando —— nació.

(213)
_____ veces
número

8

DENTAL Y ANEMIA	
C1. ¿Qué edad tenía —— cuando —— vió por <u>primera</u> vez a alguien para cuidado dental?	⟨214⟩ 1 ☐ menos de 4 años de edad 2 ☐ 4 años de edad o mayor 9 ☐ NS 3 ☐ nunca (C5)
C2. Más o menos, ¿cuánto tiempo hace desde la <u>última vez</u> que —— vió a alguien para cuidado dental?	⟨215⟩ 1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 12 meses 3 ☐ más de 12 meses a 2 años 4 ☐ más de 2 años a 5 años 5 ☐ más de 5 años 9 ☐ NS
C3. En promedio, más o menos, ¿cuántas veces al año ve —— a alguien para cuidado dental?	⟨216⟩ 1 ☐ menos de una vez al año 2 ☐ una vez 3 ☐ dos veces 4 ☐ 3 veces o más 5 ☐ no tiene programa regular 9 ☐ NS
C4. ¿Ha recibido —— alguna vez tratamientos de fluoruro que fueron aplicados a los dientes de —— durante una visita al dentista o por otra persona a quien —— vió para cuidado dental?	⟨217⟩ 1 ☐ S 2 ☐ N 9 ☐ NS
C5. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	⟨218⟩ 1 ☐ under 5 yrs. old (C8) 2 ☐ 5+ yrs. old (C6)
C6. ¿Asiste —— a la escuela?	⟨219⟩ 1 ☐ S 2 ☐ N(C8)
C7. ¿Participa —— en un programa de fluoruro en la escuela? Este es un programa en el cual se les dan a los niños tabletas o enjuagues de fluoruro para uso en la escuela.	⟨220⟩ 1 ☐ S 2 ☐ N 9 ☐ NS
C8. ¿Está asegurado —— por una póliza de salud que paga por cuidado dental?	⟨221⟩ 1 ☐ S 2 ☐ N 9 ☐ NS
C9. ¿Ha tenido —— <u>alguna vez</u> anemia?	⟨222⟩ 1 ☐ S 2 ☐ N(D1) 9 ☐ NS(D1)
C10. ¿Dijo alguna vez un médico que —— tenía anemia?	⟨223⟩ 1 ☐ S 2 ☐ N(D1)
C11. ¿Tiene —— anemia todavía?	⟨224⟩ 1 ☐ S 2 ☐ N
C12. ¿Fue atendido —— para esta condición por un médico?	⟨225⟩ 1 ☐ S 2 ☐ N

9

LA VISTA Y EL OIDO	
D1. ¿Ha tenido —— _alguna vez_ problemas para ver con uno o con ambos ojos cuando <u>no</u> usa (lentes/anteojos/espejuelos) o lentes de contacto?	(226) 1 ☐ S 2 ☐ N(D10)
D2. ¿Qué edad tenía —— cuando —— empezó a tener dificultades con la vista?	(227) 1 ☐ menos de 1 año de edad 2 ☐ 1-4 años de edad 3 ☐ 5-11 años de edad
D3. ¿Vió _alguna vez_ —— a un médico para eso?	(228) 1 ☐ S 2 ☐ N
D4. ¿Usa —— (lentes/anteojos/espejuelos) o lentes de contacto?	(229) 1 ☐ S 2 ☐ N(D6)
D5. ¿Tiene —— problemas con la vista aún cuando usa (lentes/anteojos/espejuelos) o lentes de contacto?	(230) 1 ☐ S(D8) 2 ☐ N(D8)
D6. ¿Ha usado —— alguna vez (lentes/anteojos/espejuelos) o lentes de contacto?	(231) 1 ☐ S 2 ☐ N(D10)
D7. ¿Por qué dejó —— de usarlos?	MARK ALL THAT APPLY. DO NOT READ. (232) 1 ☐ YA NO LOS NECESITABA (233) 1 ☐ NO LE AYUDABAN (234) 1 ☐ INCONVENIENTES (235) 1 ☐ OTRO 2 _____ ESPECIFIQUE
D8. ¿Para qué le recetaron a —— los (lentes/anteojos/espejuelos) o lentes de contacto?	MARK ALL THAT APPLY. DO NOT READ. (236) 1 ☐ LEER/HACER TRABAJOS DE CERCA (237) 1 ☐ VER OBJETOS LEJANOS (238) 1 ☐ OTRO 2 _____ ESPECIFIQUE
D9. ¿Con qué frecuencia (usa/usaba) —— sus (lentes/anteojos/espejuelos) o lentes de contacto: todo el tiempo, la mayoría del tiempo, casi nunca, o nunca?	(239) 1 ☐ todo el tiempo 2 ☐ la mayoría del tiempo 3 ☐ casi nunca 4 ☐ nunca
D10. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD AND TO QUESTION C6.	(240) 1 ☐ under 5 yrs. old (D13) 2 ☐ 5+ yrs. old, goes to school (D11) 3 ☐ 5+ yrs. old, doesn't go to school (D12)
D11. ¿Puede —— leer el pizarrón desde atrás de la sala de clase (cuando usa los (lentes/anteojos/espejuelos) o lentes de contacto)?	(241) 1 ☐ S 2 ☐ N 9 ☐ NS
D12. ¿Le ha dicho alguna vez un médico que —— tenía problemas de aprendizaje o de desarrollo relacionados a la vista de —— ?	(242) 1 ☐ S 2 ☐ N 9 ☐ NS

D13. ¿Cuándo fue la última vez que le hicieron un examen de la vista a —— ?	(243)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 12 meses 3 ☐ más de 12 meses a 2 años 4 ☐ más de 2 años a 5 años 5 ☐ más de 5 años 6 ☐ nunca 9 ☐ NS
D14. ¿Tuvo alguna vez —— una infección de oído o dolor de oído?	(244)	1 ☐ S 2 ☐ N(D18) 9 ☐ NS(D18)
D15. ¿Cuántas veces ha tenido —— una infección de oído o dolor de oído?	(245)	1 ☐ solamente una vez 2 ☐ dos veces 3 ☐ 3-5 veces 4 ☐ 6 veces o más 9 ☐ NS
D16. ¿Ha sido —— atendido alguna vez por un médico por (alguna(s)) infección(es) o dolor(es) de oído?	(246)	1 ☐ S 2 ☐ N(D18) 9 ☐ NS(D18)
D17. ¿Le ha tratado alguna vez un médico una infección o un dolor de oído a —— poniéndole tubos en el oído?	(247)	1 ☐ S 2 ☐ N 9 ☐ NS
D18. ¿Ha tenido —— alguna vez un tímpano roto?	(248)	1 ☐ S 2 ☐ N 9 ☐ NS
D19. ¿Tuvo —— <u>alguna vez</u> un oído supurante o cualquier derrame del oído no tomando en cuenta la cera en los oídos?	(249)	1 ☐ S 2 ☐ N(D22) 9 ☐ NS(D22)
D20. ¿Cuántes veces ha tenido —— un oído supurante o cualquier derrame del oído?	(250)	1 ☐ sólo una vez 2 ☐ dos veces 3 ☐ 3-5 veces 4 ☐ 6 veces o más 9 ☐ NS
D21. ¿Vió —— alguna vez a un médico debido a esta condición?	(251)	1 ☐ S 2 ☐ N 9 ☐ NS
D22. ¿Ha tenido —— <u>alguna vez</u> problemas para oír con uno o los dos oídos? No incluya ningunos problemas que duraron sólo un período corto tal como cuando tenía catarro.	(252)	1 ☐ S 2 ☐ N(D27)
D23. ¿Qué edad tenía —— cuando —— empezó a tener problemas en oír?	(253)	1 ☐ menos de un año de edad 2 ☐ 1-4 años de edad 3 ☐ 5-11 años de edad
D24. Desde que este problema empezó, ¿se ha puesto peor, mejor, o se he quedado igual?	(254)	1 ☐ peor 2 ☐ mejor 3 ☐ igual
D25. ¿Vió —— <u>alguna vez</u> a un médico sobre eso?	(255)	1 ☐ S 2 ☐ N
D26. ¿Todavía tiene —— problemas en oír con uno o los dos oídos?	(256)	1 ☐ S 2 ☐ N

11

D27. ¿Ha usado —— alguna vez un (aparato auditivo/aparato para oír/"hearing aid")?	(257)	1 ☐ S 2 ☐ N
D28. ¿Comó describiría usted la capacidad de —— en oír (sin aparato para oír) – buena, tiene poca dificultad, tiene mucha dificultad o está sordo?	(258)	1 ☐ buena 2 ☐ poca dificultad 3 ☐ mucha dificultad 4 ☐ sordo
D29. ¿Ha tenido —— alguna vez una operación de los oídos? EXCLUDE HAVING TUBES PLACED IN THE EARS.	(259)	1 ☐ S 2 ☐ N
D30. ¿Cuándo fue la última vez que le examinaron el oído a —— ?	(260)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 12 meses 3 ☐ más de 12 meses a 2 años 4 ☐ más de 2 años a 5 años 5 ☐ nunca 9 ☐ NS
TUBERCULOSIS/PESO/INMUNIZACION/PESTICIDAS		
E1. ¿Le ha dicho alguna vez un médico que —— tenía tuberculosis?	(261)	1 ☐ S 2 ☐ N
E2. ¿Ha vivido —— alguna vez en un hogar con una persona que tenía tuberculosis activa?	(262)	1 ☐ S 2 ☐ N 9 ☐ NS

E3. Más o menos, ¿qué estatura tiene —— sin zapatos?	(263)
	(264)-(265)
	
	(266)
		9 ☐ NS
		_____ pies/ _____ pulgadas
		    número número
		OR
		_____ cms
		    número

E4. Más o menos, ¿cuánto pesa —— sin ropa o zapatos?	(267)
	
	(268)
	
	(269)
		9 ☐ NS
		_____libras
		    número
		OR
		_____kilos
		    número

E5. Para su estatura, ¿diría usted que —— está bajo peso, más o menos a su debido peso o sobre peso?	(270)	1 ☐ bajo peso 2 ☐ más o menos a su debido peso (E9) 3 ☐ sobre peso
E6. ¿Ha visto —— alguna vez a un médico con relación a su peso?	(271)	1 ☐ S 2 ☐ N(E9)
E7. ¿Recomendó el médico alguna vez cualquier tratamiento para el peso de —— ?	(272)	1 ☐ S 2 ☐ N(E9)
E8. ¿Qué tipo de tratamiento recomendó el médico?	(273) (274) (275) (276) (277)	MARK ALL THAT APPLY. DO NOT READ. 1 ☐ MEDICINA 1 ☐ DIETA PARA REDUCIR 1 ☐ DIETA DE ALTA CALORÍA 1 ☐ EJERCICIO 1 ☐ OTRO – 2 _____ ESPECIFIQUE

E9. ¿Ha recibido —— alguna vez una inyección de DPT? La inyección de DPT es para prevenir la difteria, el tétano y la tos ferina?	(278) 1 ☐ S 2 ☐ N(E12) 9 ☐ NS(E12)
E10. ¿Cuántas inyecciones de DPT ha recibido —— en su vida?	(279) 1 ☐ 1 2 ☐ 2 3 ☐ 3 4 ☐ 4 5 ☐ 5+
E11. ¿Qué edad tenía —— cuando recibió la (primera) inyección de DPT?	00 ☐ menos de 1 mes (280)—(281) _____ { 1 ☐ meses de edad número { 2 ☐ años de edad } (E16)
E12. ¿Ha recibido —— alguna vez una inyección para prevenir el tétano?	(282) 1 ☐ S 2 ☐ N(E16) 9 ☐ NS(E16)
E13. ¿Cuántas inyecciones ha recibido —— contra el tétano en su vida?	(283) 1 ☐ 1 2 ☐ 2 3 ☐ 3 4 ☐ 4 5 ☐ 5+
E14. ¿Qué edad tenía —— cuando recibió la (primera) inyección contra el tétano?	00 ☐ menos de 1 mes (284)—(285) _____ { 1 ☐ meses de edad número { 2 ☐ años de edad
E15. ¿Por qúe recibió —— la(s) inyección(es) contra el tétano? ¿(Era/Eran) vacuna(s) rutinaria(s) o la(s) recibió debido a una herida o enfermedad que —— tuvo en ese tiempo? IF MORE THAN ONE SHOT RECEIVED MARK ALL APPLICABLE BOXES.	(286) 1 ☐ vacuna(s) rutinaria(s) 2 ☐ herida o enfermedad 3 ☐ otro 4 _____ especifique
E16. ¿Ha vivido —— alguna vez con alguien que hacía trabajo (agrícola/de campo/de fincal)?	(287) 1 ☐ S 2 ☐ N
E17. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	(288) 1 ☐ under 6 yrs. old (E20) 2 ☐ 6 yrs. old or older (E18)
E18. ¿Trabajó —— alguna vez o ayudó en trabajo (agrícola/ del campo/de finca), por ejemplo en los campos o las huertas?	(289) 1 ☐ S 2 ☐ N(E20) 9 ☐ NS(E20)
E19. ¿Ha trabajado o ayudado —— en trabajo (agrícola/del campo/de finca) durante el año pasado?	(290) 1 ☐ S 2 ☐ N
E20. (Durante los cinco años pasados/Desde que nació ——) ¿le han puesto la medicina recetada, Kwell, para el control de piojos de la cabeza o cuerpo?	(291) 1 ☐ S 2 ☐ N 9 ☐ NS
IMPEDIMENTO FUNCIONAL	
F1. CHECK ITEM: REFER TO AGE OF SAMPLE CHILD.	(292) 1 ☐ Under 5 yrs. old (F2) 2 ☐ 5+ yrs. old (F4)

13

F2. ¿Puede —— participar <u>en algún modo</u> en las actividades de juegos típicos de la mayoría de (niños/bebés) de su edad?	(293)	1 ☐ S 2 ☐ N(F10)
F3. ¿Está —— limitado en el tipo <u>o</u> la cantidad de juegos en que puede participar —— debido a un impedimento o problema de salud?	(294)	1 ☐ S(F10) 2 ☐ N(F8)
F4. ¿Hay algún impedimento o problema de salud que <u>ahora</u> le impide que —— asistir la escuela?	(295)	1 ☐ S(F10) 2 ☐ N
F5. ¿Asiste —— a una escuela especial, o a clases especiales debido a algún impedimento o problema de salud?	(296)	1 ☐ S(F10) 2 ☐ N
F6. ¿Necesita —— asistir a una escuela especial o a clases especiales debido a algún impedimento o problema de salud?	(297)	1 ☐ S(F10) 2 ☐ N
F7. ¿Está limitado —— en su asistencia a la escuela debido a su salud?	(298)	1 ☐ S(F10) 2 ☐ N
F8. ¿Está limitado —— en <u>alguna forma</u> en cualquier actividad debido a un impedimento o problema de salud?	(299)	1 ☐ S 2 ☐ N(G1)
F9. ¿En qué forma está limitado —— ? RECORD LIMITATION, NOT CONDITION.	(300)	1 _____ limitacion
F10. ¿Qué condición causa esta limitación?		_____ condición
F11. ¿Cuándo notó por primera vez (<u>condition in F10</u>) de —— ? PROBE IF NECESSARY: ¿Fue durante los **3** meses pasados o hace más de **3** meses?	(301)	1 ☐ más de 3 meses (G1) ☐ 3 meses o menos — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD CSP 2 (G1) 3 ☐ CONDITION NOT ON CARD CSP 2 (F12)
F12. ¿Esta limitación es causada por alguna otra condición?	(302)	1 ☐ S 2 ☐ N(G1)
F13. ¿Qué otra condición causa esta limitación?		_____ condición
F14. ¿Cuándo notó por primera vez (<u>condition in F13</u>) de —— ?	(303)	1 ☐ más de 3 meses (G1) ☐ 3 meses o menos — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD CSP 2 (G1) 3 ☐ CONDITION NOT ON CARD CSP 2 (REASK F12-F14)

LISTA DE CONDICIONES

G1.	¿Le dijo un médico alguna vez que —— tenía — IF "S" ASK G2-G4 BEFORE GOING TO NEXT CONDITION.			G2.	¿Qué edad tenía —— la primera vez que tuvo...?	
a.	Asma?	(304) 1 ☐ S(G2)	2 ☐ N	(305) __ meses	(306) __ años	
b.	Otra enfermedad del pulmón?	(309) 1 ☐ S(G2)	2 ☐ N	(310) __ meses	(311) __ años	
c.	Retraso mental?	(314) 1 ☐ S(G4)	2 ☐ N	///////////////		
d.	Problemas en la coordinación?	(316) 1 ☐ S(G2)	2 ☐ N	(317) __ meses	(318) __ años	
e.	Debilidad muscular/parálisis?	(321) 1 ☐ S(G2)	2 ☐ N	(322) __ meses	(323) __ años	
f.	Fiebre reumática?	(326) 1 ☐ S(G2)	2 ☐ N	(327) __ meses	(328) __ años	
g.	Enfermedad reumática del corazón?	(331) 1 ☐ S(G2)	2 ☐ N	(332) __ meses	(333) __ años	
h.	Otra condición del corazón?	(336) 1 ☐ S(G2)	2 ☐ N	(337) __ meses	(338) __ años	
i.	Infección urinaria?	(341) 1 ☐ S(G2)	2 ☐ N	(342) __ meses	(343) __ años	
j.	Convulsiones?	(346) 1 ☐ S(G2)	2 ☐ N	(347) __ meses	(348) __ años	
k.	Eczema?	(351) 1 ☐ S(G2)	2 ☐ N	(352) __ meses	(353) __ años	
l.	Problemas con el hablar?	(356) 1 ☐ S(G2)	2 ☐ N	(357) __ meses	(358) __ años	
m.	Problemas psicológicos o problemas de comportamiento?	(361) 1 ☐ S(G2)	2 ☐ N	(362) __ meses	(363) __ años	
n.	Envenenamiento?	(366) 1 ☐ S(G2)	2 ☐ N	(367) __ meses	(368) __ años	

G3.	Tiene —— todavía ...?			G4.	¿Fue alguna vez —— atendido por un médico debido a ...?		
(307)	1 ☐ S	2 ☐ N	9 ☐ NS	(308)	1 ☐ S	2 ☐ N	9 ☐ NS
(312)	1 ☐ S	2 ☐ N	9 ☐ NS	(313)	1 ☐ S	2 ☐ N	9 ☐ NS
/////	/////	/////	/////	(315)	1 ☐ S	2 ☐ N	9 ☐ NS
(319)	1 ☐ S	2 ☐ N	9 ☐ NS	(320)	1 ☐ S	2 ☐ N	9 ☐ NS
(324)	1 ☐ S	2 ☐ N	9 ☐ NS	(325)	1 ☐ S	2 ☐ N	9 ☐ NS
(329)	1 ☐ S	2 ☐ N	9 ☐ NS	(330)	1 ☐ S	2 ☐ N	9 ☐ NS
(334)	1 ☐ S	2 ☐ N	9 ☐ NS	(335)	1 ☐ S	2 ☐ N	9 ☐ NS
(339)	1 ☐ S	2 ☐ N	9 ☐ NS	(340)	1 ☐ S	2 ☐ N	9 ☐ NS
(344)	1 ☐ S	2 ☐ N	9 ☐ NS	(345)	1 ☐ S	2 ☐ N	9 ☐ NS
(349)	1 ☐ S	2 ☐ N	9 ☐ NS	(350)	1 ☐ S	2 ☐ N	9 ☐ NS
(354)	1 ☐ S	2 ☐ N	9 ☐ NS	(355)	1 ☐ S	2 ☐ N	9 ☐ NS
(359)	1 ☐ S	2 ☐ N	9 ☐ NS	(360)	1 ☐ S	2 ☐ N	9 ☐ NS
(364)	1 ☐ S	2 ☐ N	9 ☐ NS	(365)	1 ☐ S	2 ☐ N	9 ☐ NS
/////	/////	/////	/////	(369)	1 ☐ S	2 ☐ N	9 ☐ NS

ASISTENCIA A LA ESCUELA Y USO DEL IDIOMA

H1. **CHECK ITEM:** REFER TO AGE OF SAMPLE CHILD AND TO QUESTION C6.	(370) 1 ☐ Under 5 yrs. old (H17) 2 ☐ 5+ yrs. old, goes to school (H3) 3 ☐ 5+ yrs. old, not in school (H2)
H2. ¿Ha asistido alguna vez —— a la escuela?	(371) 1 ☐ S 2 ☐ N(H16)
H3. ¿Está <u>ahora</u> —— asistiendo a la escuela o está de vacaciones de la escuela?	(372) 1 ☐ asiste a la escuela 2 ☐ de vacaciones de la escuela 3 ☐ ninguno (H5)
H4. ¿En qué grado (está —— ahora/estará ——)?	(373) 00 ☐ "nursery" 77 ☐ kinder/"kindergarten" } (H7) _____ grado *número*
H5. ¿Por qué dejó —— de asistir a la escuela?	DO NOT READ. (374) 1 ☐ PROBLEMA DE SALUD 2 ☐ LA FAMILIA NECESITA AL NIÑO EN LA CASA 3 ☐ ABANDONÓ LA ESCUELA 4 ☐ OTRO 5_____ ESPECIFIQUE
H6. ¿Cuánto tiempo hace que —— dejó de asistir a la escuela?	00 ☐ hace menos de un mes (375)-(376) _____ { 1 ☐ meses *número* { 2 ☐ años
IF MORE THAN 12 MONTHS AGO IN H6, GO TO H8. OTHERWISE ASK: **H7.** Durante los 12 meses pasados, más o menos, ¿cuántos días estuvo —— ausente de la escuela debido a enfermedad?	(377) 000 ☐ ninguno _____ días *número*
H8. ¿Ha repetido —— cualquier grado de la escuela por cualquier razón?	(378) 1 ☐ S 2 ☐ N
H9. ¿Ha saltado —— alguna vez cualquier grado por cualquier razón?	(379) 1 ☐ S 2 ☐ N
H10. Cuando —— empezó a hablar, ¿cuál idioma habló?	(380) 1 ☐ español 2 ☐ inglés (H13) 3 ☐ otro 4_____ especifique
H11. ¿Puede —— hablar inglés ahora?	(381) 1 ☐ S 2 ☐ N(H13)

H12. ¿Qué edad tenía —— cuando empezó a hablar el inglés?	(382)	_____ años de edad número
H13. ¿Qué idoma principalmente habla —— ahora en casa?	(383)	1 ☐ español 2 ☐ inglés 3 ☐ los dos igualmente 4 ☐ otro idioma 5_____ especifique
H14. ¿Qué idioma principalmente (hablan los padres de —— /habla usted) en la casa ahora?	(384)	1 ☐ español 2 ☐ inglés 3 ☐ los dos igualmente 4 ☐ otro idioma 5_____ especifique
H15. ¿Qué idioma principalmente (habla/habló) —— en sus clases en la escuela?	(385)	1 ☐ español 2 ☐ inglés 3 ☐ los dos igualmente ⎫ ⎬ (J1) 4 ☐ depende del tópico ⎭ 5 ☐ otro idioma 6_____ especifique
H16. ¿Por qué nunca ha asistido —— a la escuela?		MARK ALL THAT APPLY. DO NOT READ.
	(386)	1 ☐ DEMASIADO JOVEN – NO HAY ESCUELAS CERCA PARA NIÑOS DE SU EDAD
	(387)	1 ☐ PROBLEMA DE SALUD
	(388)	1 ☐ LA FAMILIA NECESITA AL NIÑO EN LA CASA
	(389)	1 ☐ OTRO 2_____ ESPECIFIQUE
H17. Cuando —— empezó a hablar, ¿cuál idioma habló?	(390)	1 ☐ español 2 ☐ inglés (H20) 3 ☐ otro 4_____ especifique 5 ☐ todavía no habla (H21)
H18. ¿Puede —— hablar inglés ahora?	(391)	1 ☐ S 2 ☐ N (H20)
H19. ¿Qué edad tenía —— cuando empezó a hablar el inglés?	(392)	_____ años de edad número
H20. ¿Qué idioma principalmente habla —— ahora en casa?	(393)	1 ☐ español 2 ☐ inglés (H20) 3 ☐ los dos igualmente 4 ☐ otro idioma 5_____ especifique
H21. ¿Qué idioma principalmente (hablan los padres de —— /habla usted) en la casa ahora?	(394)	1 ☐ español 2 ☐ inglés 3 ☐ los dos igualmente 4 ☐ otro idioma 5_____ especifique

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PROGRAMAS DE ALIMENTO

J1. ¿Ha recibido —— alguna vez comida o servicios médicos bajo el programa (WIC) Mujeres, Infantes y Niños?

(395) 1 ☐ S   2 ☐ N(J4)   9 ☐ NS(J4)

J2. ¿Recibe —— ahora comida o servicios médicos bajo el programa (WIC) Mujeres, Infantes y Niños?

(396) 1 ☐ S   2 ☐ N   9 ☐ NS

J3. ¿Por cuánto tiempo (recibió —— /ha estado recibiendo ——) comida o servicios médicos del programa WIC?

(397)—(398) _____ número { 1 ☐ meses   2 ☐ años

J4. CHECK ITEM: REFER TO ITEM H3.

(399) 1 ☐ Now going to school or on vacation (J5)
2 ☐ Neither (K1)

J5. ¿La escuela a que —— asiste sirve un (desayuno/almuerzo/"breakfast") completo?

(400) 1 ☐ S   2 ☐ N

J6. Usualmente, ¿cuántas veces por semana come —— el (desayuno/almuerzo/"breakfast") servido por la escuela?

(401) _____ veces
número
0 ☐ ninguna (J10)
9 ☐ NS

J7. Durante este año (pasado) escolar, ¿(llenaron los padres de ——/llenó usted) un formulario para que —— pudiera comer el (desayuno/almuerzo/"breakfast") en la escuela a un precio reducido o gratis?

(402) 1 ☐ S   2 ☐ N(J9)

J8. ¿Come —— el (desayuno/almuerzo/"breakfast") a un precio reducido o gratis?

(403) 1 ☐ Sí
2 ☐ No, no elegible
3 ☐ No, otra razón

J9. ¿Cuánto paga —— por su (desayuno/almuerzo/"breakfast") por día?

(404) _____ centavos
numero
000 ☐ gratis

J10. La escuela a que —— asiste, ¿sirve una comida de mediodía completa?

(405) 1 ☐ S   2 ☐ N

J11. Usualmente, ¿cuántas veces por semana come —— la comida de mediodía servida por la escuela?

(406) _____ veces
número
0 ☐ ninguna (J15)
9 ☐ NS

J12. Durante este año (pasado) escolar, ¿(llenaron los padres de —— /llenó usted) un formulario para que —— pudiera comer la comida de mediodía en la escuela a un precio reducido o gratis?

(407) 1 ☐ S   2 ☐ N (J14)

J13. ¿Come —— la comida de mediodía a un precio reducido o gratis?

(408) 1 ☐ Sí
2 ☐ No, no elegible
3 ☐ No, otra razón

J14. ¿Cuánto paga —— por su comida de mediodía por día?

(409) _____ centavos
número

000 ☐ gratis

J15. ¿Trae —— alguna vez su comida de mediodía de casa?

(410) 1 ☐ Sí, siempre
2 ☐ Sí, algunas veces
3 ☐ No (K1)

J16. En días que —— no come la comida de mediodía en la escuela, ¿compra leche?

(411) 1 ☐ Sí, siempre
2 ☐ Sí, algunas veces
3 ☐ No (K1)

J17. ¿Cuánto paga —— por su leche por día?

(412) _____ centavos
número

000 ☐ gratis

EL USO DE MEDICINA/VITAMINA

K1. Durante las 2 semanas pasadas, ¿ha tomado o usado algunas vitaminas o minerales? (413) 1 ☐ S(K2)   2 ☐ N(K5)

K2. ¿Me permite ver el (envase(s)/ botella(s) de vitaminas y minerales de —— ? RECORD BRAND NAME	**K3.** ¿Qué cantidad del (vitamin/ mineral) toma —— cada vez que lo usa?	**K4.** ¿Con qué frecuencia toma —— este (vitamin/mineral)?
(414)	(415)–(416) ⎰ 1 ☐ tableta/cápsula número ⎱ 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro	(417)–(418) ⎰ 1 ☐ día ——por⎱ 2 ☐ semana veces 3 ☐ mes 4 ☐ otro — 5 _____ especifique
(414) ☐ Continuation booklet	(415)–(416) ⎰ 1 ☐ tableta/cápsula número ⎱ 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro	(417)–(418) ⎰ 1 ☐ día ——por⎱ 2 ☐ semana veces 3 ☐ mes 4 ☐ otro — 5 _____ especifique

K5. Estamos interesados en todas clases de medicinas que la gente toma o usa. Primero le preguntaré sobre el uso de medicinas que se pueden obtener <u>sin</u> receta de médico.

Durante las 2 semanas pasadas, ¿ha tomado o usado —— algunas de las siguientes clases de medicinas:

a) Medicina contra la tos, dolor de garganta, catarro o congestión?	(419)	1 ☐ S 2 ☐ N
b) Calmantes para el dolor, tal como la aspirina o Tylenol?	(420)	1 ☐ S 2 ☐ N
c) Tabletas para dormir, sedativos o tranquilizantes?	(421)	1 ☐ S 2 ☐ N
d) Antidepresivos, estimulantes o píldoras animadoras?	(422)	1 ☐ S 2 ☐ N
e) Píldoras o productos que le ayudan a bajar de peso?	(423)	1 ☐ S 2 ☐ N
f) Laxantes?	(424)	1 ☐ S 2 ☐ N
g) Medicinas para la diarrea?	(425)	1 ☐ S 2 ☐ N
h) Medicinas para la indigestión?	(426)	1 ☐ S 2 ☐ N
i) Supositorios?	(427)	1 ☐ S 2 ☐ N
j) Gotas para los ojos?	(428)	1 ☐ S 2 ☐ N
k) Algunas otras medicinas, píldoras o (pomadas/ungüentos) para las cuales no se necesita una receta del médico? SI S1, ESPECIFIQUE:(430)——————————— _____	(429)	1 ☐ S 2 ☐ N

K6. Durante las 2 semanas pasadas, ¿ha tomado o ha usado —— algunas medicinas para las cuales se necesita una receta de médico?

(432) 1 ☐ S(K7)   2 ☐ N(K14)

K7. ¿Me permite ver el (envase(s) /botella(s)) de la medicina(s) que tomó —— ? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS K8 THROUGH 13 FOR EACH.	**K8.** ¿Cuál es el problema de salud por el cual tomó —— la (medicine)? PROBE FOR SYMPTOM OR CONDITION.	**K9.** ¿Tomó —— (dosage reported in K7) por (frequency reported in K7)?
Etiqueta impresa en: (433) 1 ☐ inglés 2 ☐ español 3 ☐ ambos	(442)	(443) 1 ☐ S(K12) 2 ☐ N
(434) Nombre:		
¿Recetada para la SP? (435) 1 ☐ S 2 ☐ N		
(436) Potencia:		
(437)-(438) Dosis:		
(439)-(440) Frecuencia:		
IF "SEGUN SE NECESITE," ASK K8 AND GO TO NEXT MEDICATION.		
(441) 1 ☐ No se vió el envase — la información fue dada por el respondedor		
Etiqueta impresa en: (433) 1 ☐ inglés 2 ☐ español 3 ☐ ambos	(442)	(443) 1 ☐ S(K12) 2 ☐ N
(434) Nombre:		
¿Recetada para la SP? (435) 1 ☐ S 2 ☐ N		
(436) Potencia:		
(437)-(438) Dosis:		
(439)-(440) Frecuencia:		
IF "SEGUN SE NECESITE," ASK K8 AND GO TO NEXT MEDICATION.		
(441) 1 ☐ No se vió el envase — la información fue dada por el respondedor		

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K10. ¿Cuánto de la (medicine) tomó ——?	K11. ¿Le aconsejó un médico a —— que tomara (dosage in K10)/ por (frequency in K10)?	K12. ¿La (medicine) le hace sentirse mal o le causa a —— algunos (mal efectos/" side effects")?	K13. ¿Qué es lo que hace —— cuando esto sucede?
(444)-(445) _____ número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (446)-(447) _____ por veces 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 _____ especifique	(448) 1 ☐ Sí 2 ☐ No	(449) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO 　　　　 ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(450) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE
(444)-(445) _____ número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (446)-(447) _____ por veces 1 ☐ día 2 ☐ semana 3 ☐ mes ⁏ ☐ otro — 5 _____ especifique	(448) 1 ☐ Sí 2 ☐ No	(449) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO 　　　　 ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(450) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE

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K7. ¿Me permite ver el (envase(s) /botella(s)) de la medicina(s) que tomó ——? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS K8 THROUGH 13 FOR EACH.	K8. ¿Cuál es el problema de salud por el cual tomó —— la (medicine)? PROBE FOR SYMPTOM OR CONDITION.	K9. ¿Tomó —— (dosage reported in K7) por (frequency reported in K7)?
(433) Etiqueta impresa en: 1 ☐ inglés 2 ☐ español 3 ☐ ambos	(442)	(443) 1 ☐ S(K12) 2 ☐ N
(434) Nombre:		
(435) ¿Recetada para la SP? 1 ☐ S 2 ☐ N		
(436) Potencia:		
(437)-(438) Dosis:		
(439)-(440) Frecuencia:		
IF "SEGUN SE NECESITE," ASK K8 AND GO TO NEXT MEDICATION.		
(441) 1 ☐ No se vió el envase — la información fue dada por el respondedor		
(433) Etiqueta impresa en: 1 ☐ inglés 2 ☐ español 3 ☐ ambos	(442)	(443) 1 ☐ S(K12) 2 ☐ N
(434) Nombre:		
(435) ¿Recetada para la SP? 1 ☐ S 2 ☐ N		
(436) Potencia:		
(437)-(438) Dosis:		
(439)-(440) Frecuencia:		
IF "SEGUN SE NECESITE," ASK K8 AND GO TO NEXT MEDICATION.		
(441) 1 ☐ No se vió el envase — la información fue dada por el respondedor		
☐ Continuation booklet		

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K10. ¿Cuánto de la (medicine) tomó ——?	K11. ¿Le aconsejó un médico a —— que tomara (dosage in K10)/ por (frequency in K10)?	K12. ¿La (medicine) le hace sentirse mal o le causa a —— algunos (mal efectos/" side effects")?	K13. ¿Qué es lo que hace —— cuando esto sucede?
(444)-(445) ——— número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (446)-(447) ——— veces por 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 ——————— especifique	(448) 1 ☐ Sí 2 ☐ No	(449) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 ——————— ——————— 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(450) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 ——————— ESPECIFIQUE
(444)-(445) ——— número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (446)-(447) ——— veces por 1 ☐ día 2 ☐ semana 3 ☐ mes ☐ otro — 5 ——————— especifique	(448) 1 ☐ Sí 2 ☐ No	(449) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 ——————— ——————— 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(450) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 ——————— ESPECIFIQUE

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K14. ¿Le ha dicho un médico a —— que tome algunas medicinas <u>durante los 6 meses pasados</u> que —— <u>no</u> tomó durante ese período?

(451)   1 ☐ S (K15)   2 ☐ N (L1)

K15. ¿Cuáles son los nombres de las medicinas que —— no tomó? PROBE FOR BRAND NAMES, ENTER EACH ON SEPARATE LINE. THEN ASK K16 AND K17 FOR EACH.	**K16.** ¿Cuál fue el problema de salud que tenía —— por el cual el médico recomendó la (<u>medicine</u>)?
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)
(452)	(453)

RESPONDENT FOR SAMPLE CHILD

L1. **CHECK ITEM:** MARK ONE BOX. INDICATE MAIN RESPONDENT'S RELATION- SHIP TO SAMPLE CHILD.	(455) 1 ☐ MOTHER 2 ☐ FATHER 3 ☐ SISTER OR BROTHER 4 ☐ OTHER <u>5</u>_____ SPECIFY

K17. ¿Cuál fue la razón principal por la cual no
tomó la (medicine) —— ?

(454) 1 ☐ MAL EFECTO	3 ☐ PENSÉ QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
2 ☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVÍA	6 _____

(454) 1 ☐ MAL EFECTO	3 ☐ PENSÉ QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
2 ☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVÍA	6 _____

(454) 1 ☐ MAL EFECTO	3 ☐ PENSÉ QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
2 ☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVÍA	6 _____

1 ☐ MAL EFECTO	3 ☐ PENSE QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
2 ☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVIA	6 _____

1 ☐ MAL EFECTO	3 ☐ PENSE QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
2 ☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVIA	6 _____

1 ☐ MAL EFECTO	3 ☐ PENSE QUE NO LE IBA A SERVIR	5 ☐ OTRO – ESPECIFIQUE
☐ CUESTA DEMASIADO	4 ☐ NO LA HE CONSEGUIDO TODAVIA	6 _____

AUTO-RESPUESTA DEL NIÑO EJEMPLAR

M1. **CHECK ITEM:** REFER TO AGE OF SAMPLE CHILD.

(456) 1 ☐ Under 6 yrs. old (END)

2 ☐ 6+ years old (M2)

M2. Ahora tengo unas pocas preguntas que me gustaría hacerle a —— directamente. ¿Está —— disponible ahora?

(457) 1 ☐ S(M3) 2 ☐ N (END)

M3. INTRODUCTION: Me gustaría hacerte unas cuantas preguntas sobre tu salud.

M4. ¿Tienes cualquier dificultad para ver (con tus (lentes/anteojos/espejuelos) puestos)?

(458) 1 ☐ S 2 ☐ N

M5. Cuando estás en la escuela, ¿puedes leer el pizarrón desde atrás de la sala de clase (con tus (lentes/anteojos/espejuelos) puestos)?

(459) 1 ☐ S 2 ☐ N

3 ☐ no va a la escuela

M6. ¿Tienes algún problema para oír?

(460) 1 ☐ S 2 ☐ N

M7. Cuando estás en la escuela, ¿puedes oír a la maestra desde atrás de la sala de clase?

(461) 1 ☐ S 2 ☐ N

3 ☐ no va a la escuela

M8. ¿Piensas que estás bajo peso, más o menos a tu debido peso, o sobre peso?

(462) 1 ☐ bajo peso (M9)
2 ☐ más o menos a su debido peso (M13)
3 ☐ sobre peso (M11)

M9. ¿Te gustaría pesar más?

(463) 1 ☐ S 2 ☐ N(M13)

M10. ¿Estás tratando de aumentar de peso?

(464) 1 ☐ S(M13) 2 ☐ N(M13)

M11. ¿Te gustaría pesar menos?

(465) 1 ☐ S 2 ☐ N(M13)

M12. ¿Estás tratando de perder peso?

(466) 1 ☐ S 2 ☐ N

M13. ¿Dirías que tu salud en general es excelente, muy buena, buena, regular o mala?

(467) 1 ☐ excelente
2 ☐ muy buena
3 ☐ buena
4 ☐ regular
5 ☐ mala

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MEDICINA/VITAMINA MEC

DO NOT ASK IN HOUSEHOLD

N1. REFER TO MEDICINE/VITAMIN USAGE SECTION. MARK ONE BOX.	ⓐ₇₃ 1 ☐ No medicine or vitamin reported (N3). 2 ☐ Medicine or vitamin reported (N2).

N2. Cuando un entrevistador habló con usted hace unas cuantas semanas, usted le mencionó que —— había tomado (<u>medicines/ vitamins/minerals in K2, K5, and K7</u>). ¿Ha tomado —— alguna de estas medicinas durante las últimas 24 horas?

⽊₄₆₈   1 ☐ S   2 ☐ N

N3. ¿Ha tomado —— algunas (otras) medicinas, vitaminas o minerales durante las últimas 24 horas?

⽊₄₆₉   1 ☐ S   2 ☐ N

IF "S" IN EITHER N2 OR N3; GO TO N4. OTHERWISE, END QUESTIONNAIRE.

N4. ¿Cuáles son los nombres de todas las medicinas, vitaminas y minerals que tomó —— durante las últimas 24 horas?	N5. ¿Cuánto de la (<u>medicine/vitamin/mineral</u>) tomó —— durante las últimas 24 horas?

ⓐ₄₇₀	ⓐ₄₇₁-ⓐ₄₇₂ _____ ⎰ 1 ☐ tableta/cápsula
	⎱ 2 ☐ cucharadita
	   3 ☐ cuchara
	   4 ☐ otro

ⓐ₄₇₀	ⓐ₄₇₁-ⓐ₄₇₂ _____ ⎰ 1 ☐ tableta/cápsula
	⎱ 2 ☐ cucharadita
	   3 ☐ cuchara
	   4 ☐ otro

ⓐ₄₇₀	ⓐ₄₇₁-ⓐ₄₇₂ _____ ⎰ 1 ☐ tableta/cápsula
	⎱ 2 ☐ cucharadita
	   3 ☐ cuchara
	   4 ☐ otro

ⓐ₄₇₀	ⓐ₄₇₁-ⓐ₄₇₂ _____ ⎰ 1 ☐ tableta/cápsula
	⎱ 2 ☐ cucharadita
	   3 ☐ cuchara
	   4 ☐ otro

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

ADULT SAMPLE PERSON QUESTIONNAIRE (521)
(Ages 12-74 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

WESTAT ID No:

(100) _____ _____ _____
Stand No.   Segment No.   Serial No.

(107) Family No.

(108) SP No.

NCHS ID No:

(101) __ __ __ __ __ -

NAME (First, Middle, Last)

(109)

(110) SEX
1 ☐ Male
2 ☐ Female

(111) AGE

INTERVIEWER NAME: NO. (112)

REVIEWER NAME: NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☒ English
2 ☐ Spanish

TIME BEGAN
(102)-(103)
__ __ : __ __
1 ☐ am
2 ☐ pm

TIME ENDED
(104)-(105)
__ __ : __ __
1 ☐ am
2 ☐ pm

DATE OF EXAMINATION
___/___/___
Month   Day   Year

TIME
__ __ : __ __
☐ am
☐ pm

TRANSPORTATION
☐ Taxi
☐ Self

DATE OF INTERVIEW
(114)-(116)
___/___/___
Month   Day   Year

ADULT SAMPLE PERSON QUESTIONNAIRE
Ages 12-74 Years

HEALTH SERVICES

A1. Would you say your health in general is excellent, very good, good, fair, or poor?

(118)
1 ☐ excellent
2 ☐ very good
3 ☐ good
4 ☐ fair
5 ☐ poor

A2. How much control do you think you have over your future health: a great deal, some, very little, or none?

(119)
1 ☐ great deal
2 ☐ some
3 ☐ very little
4 ☐ none
9 ☐ DK

A3. On the average, about how many hours of sleep do you get each day, that is, during a 24-hour period?

(120)
_____ hours
number

A4. In your job or housework, how much of the time do you have to use lots of arm, leg, or back muscles, as in lifting, pulling, carrying, digging, and so on? Would you say: most of the time, some of the time or hardly ever or never?

Most of the time	Some of the time	Hardly ever or never
1 ☐	2 ☐	3 ☐

(121)

A5. Outside of your job or work around the house, how often do you take part in activities which require a lot of body movement or energy, like ball games, cycling, dancing, and so on? Would you say: frequently, sometimes, or hardly ever or never?

Freq.	Sometimes	Hardly ever or never
1 ☐	2 ☐	3 ☐

(122)

A6. Now I would like to ask you some questions about your use of health care services.

Is there a particular clinic, health center, doctor's office or other place that you usually go to if you are sick or need advice about your health?

(123)
1 ☐ Y   2 ☐ N (A18)

A7. What kind of place is it - a clinic, a health center, a hospital, a doctor's office, or some other place?

(124)
01 ☐ home
02 ☐ doctor's office or private clinic (A9)

PROBE IF CLINIC: Is this a hospital outpatient clinic, a company or school clinic, a migrant clinic, or some other kind of clinic?

03 ☐ company or school clinic
04 ☐ hospital outpatient clinic
05 ☐ migrant clinic
06 ☐ other clinic 07 _____
specify

PROBE IF HEALTH CENTER: Is this a community health center, neighborhood health center, a family health center, a rural health center, or some other kind of health center?

08 ☐ hospital emergency room
09 ☐ community, neighborhood, or family health center

PROBE IF HOSPITAL: Is this an outpatient clinic or meergency room?

10 ☐ rural health center
11 ☐ HMO/prepaid group
12 ☐ other place 13 _____
specify

1

A8. Is there a particular person you usually see at the (place in A7)?	(125)	1 ☐ Y　　2 ☐ N
A9. Now I would like to ask you some questions about your last visit to the (place in A7). How long has it been since that visit?	(126)	1 ☐ less than 1 month 2 ☐ 1 mo., less than 6 mos. 3 ☐ 6 mos., less than 1 yr. 4 ☐ 1 yr., less than 5 yrs. 5 ☐ 5 or more years 9 ☐ DK
A10. About how long did it take you to get to the (place in A7) for that visit? PROBE IF NECESSARY: Would you say it took more than 30 minutes or less than 30 minutes?	(127) (128)	_____ minutes 　　　number OR 1 ☐ more than 30 minutes 2 ☐ less than 30 minutes
A11. Did you have an appointment for that visit?	(129)	1 ☐ Y　　2 ☐ N(A13)
A12. About how long was it between the time you made the appointment and the time you actually went for that visit?	(130)	000 ☐ less than 1 day _____ days 　　number
A13. After you got to the (place in A7), about how long did you have to wait before you were taken care of at that visit?	(131)-(132)	_____ { 1 ☐ minutes number { 2 ☐ hours
A14. What was the main reason for that visit?	(133)	DO NOT READ. 01 ☐ A SICKNESS OR ILLNESS 02 ☐ AN INJURY 03 ☐ A FOLLOW-UP VISIT 04 ☐ A GENERAL CHECKUP 05 ☐ AN INJECTION 06 ☐ FOR A PRESCRIPTION 07 ☐ PRE- OR POST-NATAL CARE 08 ☐ SOME OTHER REASON — 09 _____ 　　　　　　specify
A15. In general, how satisfied were you with the care you received at that visit? Would you say you were very satisfied, somewhat satisfied, or not at all satisfied?	(134)	1 ☐ very satisfied (A17) 2 ☐ somewhat satisfied 3 ☐ not at all satisfied
A16. Why weren't you (completely) satisfied with the health care you received at that visit? PROBE FOR MAIN.REASON.	(135)	DO NOT READ. 01 ☐ COST TOO MUCH 02 ☐ HAD TO WAIT TOO LONG 03 ☐ LANGUAGE PROBLEM — COULDN'T COMMUNICATE 04 ☐ DR. DIDN'T SPEND ENOUGH TIME WITH SP 05 ☐ MISTREATED BY DR. OR OTHER STAFF 06 ☐ CONDITION DID NOT IMPROVE AFTER TREATMENT OR MEDICATION 07 ☐ DR. DID NOT DIAGNOSE OR TREAT CONDITION 08 ☐ OTHER — 09 _____ 　　　　　　　　SPECIFY 99 ☐ DK

A17. Have you visited <u>any other</u> clinic, health center, doctor's office or other place for health care since your last visit to the (place in A7)?

(136) 1 ☐ Y(21)   2 ☐ N(A30)

HAND CARD ASP 1

A18. Many people do not have a particular place they usually go when they are sick or need advice about their health. Could you please give me the number of the statement which is the <u>main</u> reason you do not have a particular place you usually go?

1. Have two or more usual doctors or places depending on what's wrong.
2. Haven't needed a doctor.
3. Previous doctor no longer available.
4. Haven't been able to find the right doctor.
5. Recently moved to area.
6. Other reason - please specify.

(137) 1   2   3   4   5   6 ⌐
7 _____
        specify

A19. Although you said you have no particular place for health care, is there a particular person you usually see when you are sick and need health care?

(138) 1 ☐ Y   2 ☐ N(A21)

A20. Where do you usually see this person - at home, at a clinic, a health center, a hospital, a doctor's office, or some other place?

PROBE IF CLINIC: Is this a hospital outpatient clinic, a company or school clinic, a migrant clinic, or some other kind of clinic?

PROBE IF HEALTH CENTER: Is this a community health center, neighborhood health center, a family health center, a rural health center, or some other kind of health center?

PROBE IF HOSPITAL. Is this an outpatient clinic or emergency room?

(139) 01 ☐ home
02 ☐ doctor's office or private clinic

03 ☐ company or school clinic
04 ☐ hospital outpatient clinic
05 ☐ migrant clinic
06 ☐ other clinic 07 _____
                          specify

08 ☐ hospital emergency room
09 ☐ community, neighborhood, or family
         health center

10 ☐ rural health center
11 ☐ HMO/prepaid group
12 ☐ other place 13 _____
                          specify

A21. Now I would like to ask you some questions about your last visit to <u>any</u> clinic, health center, doctor's office or other place for health care. How long has it been since your last visit for health care?

(140) 1 ☐ less than 1 month
2 ☐ 1 mo., less than 6 mos.
3 ☐ 6 mos., less than 1 yr.
4 ☐ 1 yr., less than 5 yrs.
5 ☐ 5 or more years
6 ☐ never (A30)
9 ☐ DK

A22. What kind of place did you visit that time - was it a clinic, a health center, a hospital, a doctor's office, or some other place?

(141)   01 ☐ home
      02 ☐ doctor's office or private clinic

PROBE IF CLINIC: Was this a hospital outpatient clinic, a company or school clinic, a migrant clinic, or some other kind of clinic?

      03 ☐ company or school clinic
      04 ☐ hospital outpatient clinic
      05 ☐ migrant clinic
      06 ☐ other clinic <u>07   </u>
                                     specify

PROBE IF HEALTH CENTER: Was this a community health center, neighborhood health center, a family health center, a rural health center, or some other kind of health center?

      08 ☐ hospital emergency room
      09 ☐ community, neighborhood, or family health center

PROBE IF HOSPITAL: Was this an outpatient clinic or emergency room?

      10 ☐ rural health center
      11 ☐ HMO/prepaid group
      12 ☐ other place <u>13   </u>
                                 specify

A23. About how long did it take you to get to the (<u>place in A22</u>) for that visit?

(142)   <u>   </u> minutes
                  number

OR

PROBE IF NECESSARY: Would you say it took more than 30 minutes or less than 30 minutes?

(143)   1 ☐ more than 30 minutes
      2 ☐ less than 30 minutes

A24. Did you have an appointment for that visit?

(144)   1 ☐ Y   2 ☐ N (A26)

A25. About how long was it between the time you made the appointment and the time you actually went for that visit?

(145)   000 ☐ less than 1 day

<u>   </u> days
        number

A26. After you got to the (<u>place in A22</u>), about how long did you have to wait before you were taken care of at that visit?

(146)-(147) <u>   </u> { 1 ☐ minutes
           number   2 ☐ hours

A27. What was the main reason for that visit?

DO NOT READ.

(148)   01 ☐ A SICKNESS OR ILLNESS
      02 ☐ AN INJURY
      03 ☐ A FOLLOW-UP VISIT
      04 ☐ A GENERAL CHECKUP
      05 ☐ AN INJECTION
      06 ☐ FOR A PRESCRIPTION
      07 ☐ PRE- OR POST-NATAL CARE
      08 ☐ SOME OTHER REASON —
      <u>09   </u>
                           specify

A28. In general, how satisfied were you with the care you received at that visit? Would you say you were very satisfied, somewhat satisfied, or not at all satisfied?

(149)   1 ☐ very satisfied (A30)
      2 ☐ somewhat satisfied
      3 ☐ not at all satisfied

A29. Why weren't you (completely) satisfied with the health care you received at that visit?

PROBE FOR MAIN REASON.

(150)
- 01 ☐ COST TOO MUCH
- 02 ☐ HAD TO WAIT TOO LONG
- 03 ☐ LANGUAGE PROBLEM – COULDN'T COMMUNICATE
- 04 ☐ DR. DIDN'T SPEND ENOUGH TIME WITH SP
- 05 ☐ MISTREATED BY DR. OR OTHER STAFF
- 06 ☐ CONDITION DID NOT IMPROVE AFTER TREATMENT OR MEDICATION
- 07 ☐ DR. DID NOT DIAGNOSE OR TREAT CONDITION
- 08 ☐ OTHER – <u>09</u> _____
- 99 ☐ DK   Specify

A30. There are some providers of health care that we sometimes go to, such as curanderos, sobadores, herbalists, spiritualists, and others. Have you seen or talked to any of these persons for health care during the past 12 months?

(151)   1 ☐ Y   2 ☐ N

A31. Sometimes people have difficulties in getting medical care. Have you had any difficulties getting medical care –

A32. Did this problem <u>prevent</u> you from getting medical care for yourself?

	A31	A32
1. Because care was not available when you needed it?	(152) 1 ☐ Y(A32) 2 ☐ N	(153) 1 ☐ Y 2 ☐ N
2. Because of how much it cost?	(154) 1 ☐ Y(A32) 2 ☐ N	(155) 1 ☐ Y 2 ☐ N
3. Because you didn't know where to go?	(156) 1 ☐ Y(A32) 2 ☐ N	(157) 1 ☐ Y 2 ☐ N
4. Because you didn't have a way to get there?	(158) 1 ☐ Y(A32) 2 ☐ N	(159) 1 ☐ Y 2 ☐ N
5. Because the hours were not convenient?	(160) 1 ☐ Y(A32) 2 ☐ N	(161) 1 ☐ Y 2 ☐ N
6. Because you had to wait too long to get an appointment?	(162) 1 ☐ Y(A32) 2 ☐ N	(163) 1 ☐ Y 2 ☐ N
(7. Because you needed someone to take care of your children?)	(164) 1 ☐ Y(A32) 2 ☐ N	(165) 1 ☐ Y 2 ☐ N
8. Because you would lose pay from work?	(166) 1 ☐ Y(A32) 2 ☐ N	(167) 1 ☐ Y 2 ☐ N
9. Because you had to wait too long in the office or clinic?	(168) 1 ☐ Y(A32) 2 ☐ N	(169) 1 ☐ Y 2 ☐ N
10. Because the staff at the office or clinic was disrespectful?	(170) 1 ☐ Y(A32) 2 ☐ N	(171) 1 ☐ Y 2 ☐ N
11. Because you had no confidence in the staff?	(172) 1 ☐ Y(A32) 2 ☐ N	(173) 1 ☐ Y 2 ☐ N
12. Because they did not speak Spanish?	(174) 1 ☐ Y(A32) 2 ☐ N	(175) 1 ☐ Y 2 ☐ N
13. Because there were no (Hispanic) staff members at the office or clinic?	(176) 1 ☐ Y(A32) 2 ☐ N	(177) 1 ☐ Y 2 ☐ N

5

A33. About how long has it been since you had a routine physical examination; that is, not for a particular illness, but for a general checkup?	(178)	1 ☐ less than 1 year ago 2 ☐ 1 yr., less than 2 yrs.ago 3 ☐ 2 yrs., less than 5 yrs.ago 4 ☐ 5 or more yrs. ago 5 ☐ never 9 ☐ DK
A34. During the past 12 months, that is, since (date) a year ago, were you a patient in a hospital over-night or longer?	(179)	1 ☐ Y 2 ☐ N(B1)
A35. During the past 12 months, how many different times did you stay in the hospital overnight or longer?	(180)	_____ times number

SELECTED CONDITIONS

B1. Were you ever told by a doctor that you had tuberculosis?	(181)	1 ☐ Y 2 ☐ N
B2. Have you ever lived in a household with a person who had active tuberculosis?	(182)	1 ☐ Y 2 ☐ N 9 ☐ DK
B3. Have you ever had anemia, sometimes called "tired blood" or "low blood"?	(183)	1 ☐ Y 2 ☐ N(B7) 9 ☐ DK(B7)
B4. Did a doctor ever tell you that you had anemia?	(184)	1 ☐ Y 2 ☐ N(B7)
B5. Do you still have anemia?	(185)	1 ☐ Y 2 ☐ N 9 ☐ DK
B6. Were you treated for this condition by a doctor?	(186)	1 ☐ Y 2 ☐ N
B7. About how tall are you without shoes?	(187) (188)	_____/_____ feet inches
B8. About how much do you weigh without shoes? IF NOW PREGNANT, RECORD CURRENT WEIGHT. THEN ASK: About how much did you weigh just before you became pregnant?	(189) (190)	current weight: _____ pounds number weight before pregnant: _____ pounds number
B9. Do you now consider yourself to be overweight, underweight, or about right?	(191)	1 ☐ overweight 2 ☐ underweight 3 ☐ about right 9 ☐ DK
B10. CHECK ITEM	(192)	1 ☐ Age 25 or younger (B12) 2 ☐ Age 26+ (B11)
B11. About how much did you weigh when you were 25?	(193)	_____ pounds number

6

B12. Do you have trouble biting or chewing any kinds of food, such as firm meats or apples?	(194)	1 ☐ Y 2 ☐ N
B13. How would you describe the condition of your <u>teeth</u>: excellent, very good, good, fair or poor?	(195)	1 ☐ excellent 2 ☐ very good 3 ☐ good 4 ☐ fair 5 ☐ poor 6 ☐ has no teeth
B14. How would you describe the condition of your <u>gums</u>: excellent, very good, good, fair or poor?	(196)	1 ☐ excellent 2 ☐ very good 3 ☐ good 4 ☐ fair 5 ☐ poor
B15. About how long has it been since you <u>last</u> saw a dentist or dental hygienist for dental care?	(197)	1 ☐ 6 months ago or less 2 ☐ over 6 months to 12 months 3 ☐ over 12 months to 2 years 4 ☐ over 2 years to 5 years 5 ☐ more than 5 years 6 ☐ never (B20) 9 ☐ DK
B16. What was the main reason for your last visit for dental care?	(198)	DO NOT READ. 01 ☐ REGULAR CHECKUP 02 ☐ FOR CLEANING TEETH 03 ☐ TO HAVE TEETH FILLED 04 ☐ TROUBLE WITH GUMS 05 ☐ TO HAVE TEETH PULLED OR OR OTHER SURGERY 06 ☐ TOOTHACHE 07 ☐ ADJUSTMENT OR REPAIR OF DENTAL PLATE 08 ☐ TO HAVE A DENTAL PLATE MADE 09 ☐ FOR A PRESCRIPTION 10 ☐ SOME OTHER REASON — 11 _____ SPECIFY
IF "FOR CLEANING TEETH" IN B16, SKIP TO B19. B17. Have you ever had your teeth cleaned by a dentist or dental hygienist?	(199)	1 ☐ Y 2 ☐ N(B20)
B18. When was the last time they were cleaned?	(200)	1 ☐ 6 months ago or less 2 ☐ over 6 months to 12 months 3 ☐ over 12 months to 2 years 4 ☐ over 2 years to 5 years (B20) 5 ☐ more than 5 years (B20) 9 ☐ DK (B20)
B19. During the past 2 years, how many times have you had your teeth cleaned by a dentist or a dental hygienist?	(201)	1 ☐ once 2 ☐ twice 3 ☐ three times 4 ☐ four or more times 9 ☐ DK

7

B20.	Are you covered by health insurance that pays for dental care?	(202)	1 □ Y	2 □ N	9 □ DK

DIABETES

C1.	Do you have diabetes or sugar diabetes?	(203)	1 □ Y	2 □ N(C6)	
C2.	Did a doctor tell you that you have it?	(204)	1 □ Y(C4)	2 □ N	
C3.	Did any other health professional, such as a nurse or physician's assistant, tell you that you have it?	(205)	1 □ Y	2 □ N(C6)	
C4.	How long ago did the (doctor/health professional) first tell you that you had diabetes?	(206)	_____ years ago number		
C5.	How old were you then?	(207)	_____ years old number		

C6.	Have you ever been told by a doctor or other health professional that you have — (IF YES," ASK C7)				C7.	How old were you then?
	Borderline diabetes?	(208)	1 □ Y(C7) 2 □ N	(209)	_____ yrs. old number	
	Potential diabetes?	(210)	1 □ Y(C7) 2 □ N	(211)	_____ yrs. old number	
	Prediabetes?	(212)	1 □ Y(C7) 2 □ N	(213)	_____ yrs. old number	

C8.	CHECK ITEM. MARK FIRST APPLICABLE BOX ONLY.	(214)	1 □ Diabetes — "Y" in either C2 or C3 2 □ Borderline diabetes 3 □ Potential diabetes 4 □ Prediabetes 5 □ 6 _____ specify type 7 □ none of these (D1)

IN QUESTIONS C9-C27 ASK ABOUT CONDITION MARKED IN C8.		

C9.	When you were first told by a (doctor/health professional) that you had (diabetes/. . .), were any of the following tests done?				
	a. The oral glucose tolerance test, in which you drink a sweet drink and samples of your blood are taken from your arm for a few hours afterwards?	(215)	1 □ Y	2 □ N	9 □ DK
	b. A test for sugar or glucose in your urine?	(216)	1 □ Y	2 □ N	9 □ DK
	c. A test for sugar or glucose in your blood?	(217)	1 □ Y	2 □ N	9 □ DK

C10. Were you a patient in a hospital at the time a (doctor/health professional) first told you that you had (diabetes/...)?	(218)	1 □ Y 2 □ N
C11. (Not counting that first time) Have you ever been hospitalized because of your (diabetes/...)?	(219)	1 □ Y 2 □ N
C12. About how much did you weigh when you first were told you had (diabetes/...)?	(220)	_____ pounds number
C13. Have you ever taken insulin injections?	(221)	1 □ Y 2 □ N (C18)
C14. Have you been taking insulin injections for most of the past 12 months?	(222)	1 □ Y 2 □ N
C15. Are you now taking insulin injections?	(223)	1 □ Y 2 □ N(C17)
C16. About how many units per day do you take?	(224)	_____ units per day number
C17. How many years (have you been taking/did you take) insulin injections?	(225)	00 □ Less than 1 year _____ years number
C18. Have you ever taken diabetes pills?	(226)	1 □ Y 2 □ N(C23)
C19. Have you been taking them most of the past 12 months?	(227)	1 □ Y 2 □ N
C20. Are you now taking diabetes pills?	(228)	1 □ Y 2 □ N(C22)
C21. What is the name of the medicine you are taking?	(229)	1 _____ specify
C22. How many years (have you been taking/did you take) diabetes pills?	(230)	00 □ Less than 1 year _____ years number
C23. Has a doctor, nurse, or other health professional ever given you a diet or instructions on what foods to eat for your (diabetes/...)?	(231)	1 □ Y 2 □ N(C25)
C24. Do you now follow the diet or instructions?	(232)	1 □ Y 2 □ N
C25. Do you carry or wear anything which identifies you as having (diabetes/...)?	(233)	1 □ Y 2 □ N
C26. When did you last see or talk to a doctor or other health professional about your (diabetes/...)?	(234)	1 □ during past 2 weeks 2 □ over 2 weeks to 6 months 3 □ over 6 mos. to 12 mos. 4 □ over 12 mos. to 2 yrs. 5 □ over 2 yrs. to 5 yrs. } (D1) 6 □ over 5 yrs. ago

9

| C27. | About how many times a year do you see a doctor or other health professional about your (diabetes/. . .)? | (235) | 1 ☐ less than once a year
2 ☐ once
3 ☐ twice
4 ☐ 3-4 times
5 ☐ 5 or more times
6 ☐ no regular schedule |

VISION AND HEARING

D1.	Have you <u>ever</u> had trouble seeing with one or both eyes when <u>not</u> wearing glasses or contact lenses?	(236)	1 ☐ Y 2 ☐ N(D10)
D2.	How old were you when you first began having trouble seeing?	(237)	01 ☐ 0-4 years old 02 ☐ 5-9 years old 03 ☐ 10-19 years old 04 ☐ 20-29 years old 05 ☐ 30-39 years old 06 ☐ 40-49 years old 07 ☐ 50-59 years old 08 ☐ 60-64 years old 09 ☐ 65 years old or older
D3.	Did you <u>ever</u> see a doctor about it?	(238)	1 ☐ Y 2 ☐ N
D4.	Do you wear glasses or contact lenses?	(239)	1 ☐ Y 2 ☐ N(D6)
D5.	Do you have trouble with your vision even when wearing glasses or contact lenses?	(240)	1 ☐ Y(D8) 2 ☐ N(D8)
D6.	Have you ever worn glasses or contact lenses?	(241)	1 ☐ Y 2 ☐ N(D10)
D7.	Why did you stop wearing them?		MARK ALL THAT APPLY. DO NOT READ. (242) 1 ☐ NO LONGER NEED THEM (243) 1 ☐ DIDN'T SEEM TO HELP (244) 1 ☐ INCONVENIENT (245) 1 ☐ OTHER 2_____ SPECIFY
D8.	What (are/were) your glasses or contact lenses prescribed for?		MARK ALL THAT APPLY. DO NOT READ. (246) 1 ☐ READING/CLOSE WORK (247) 1 ☐ SEEING DISTANT OBJECTS (248) 1 ☐ OTHER 2_____ SPECIFY
D9.	How often (do/did) you use your glasses or contacts: All of the time, most of the time, hardly ever, or never?	(249)	1 ☐ all of the time 2 ☐ most of the time 3 ☐ hardly ever 4 ☐ never

10

D10. When was the last time you had your vision tested?	(250)	1 ☐ 6 mos. ago or less 2 ☐ over 6 mos. to 12 mos. 3 ☐ over 12 mos. to 2 yrs. 4 ☐ over 2 yrs. to 5 yrs. 5 ☐ more than 5 yrs. 6 ☐ never 9 ☐ DK
D11. Have you <u>ever</u> had trouble hearing with one or both ears? Do not include any problems which lasted just a short period of time such as during a cold.	(251)	1 ☐ Y 2 ☐ N (E1)
D12. Did you <u>ever</u> see a doctor about it?	(252)	1 ☐ Y 2 ☐ N
D13. How old were you when you first began having trouble hearing?	(253)	1 ☐ 0-4 years old 2 ☐ 5-9 years old 3 ☐ 10-19 years old 4 ☐ 20-29 years old 5 ☐ 30-39 years old 6 ☐ 40-49 years old 7 ☐ 50 years old or older
D14. Since this trouble began, has it gotten worse, gotten better, or stayed about the same?	(254)	1 ☐ gotten worse 2 ☐ gotten better 3 ☐ stayed the same
D15. Have you <u>ever</u> had an operation on your ears? INCLUDE HAVING TUBES PLACED IN THE EARS.	(255)	1 ☐ Y 2 ☐ N
D16. Have you <u>ever</u> used a hearing aid?	(256)	1 ☐ Y 2 ☐ N
D17. How would you describe your hearing (without a hearing aid) - good, you have a little trouble, you have a lot of trouble, or you are deaf?	(257)	1 ☐ good 2 ☐ little trouble 3 ☐ lot of trouble 4 ☐ deaf
HYPERTENSION		
E1. <u>About</u> how long has it been since you <u>last</u> had your blood pressure taken?	(258)	1 ☐ 6 months ago or less 2 ☐ over 6 mos. to 1 yr. ago 3 ☐ over 1 year ago 4 ☐ never (E6)

E2. Who took your blood pressure the <u>last</u> time?	(259)	DO NOT READ.
		
		01 ☐ MEDICAL DOCTOR
		02 ☐ NURSE
		03 ☐ OTHER HEALTH PROFESSIONAL –
		04 _____
		             SPECIFY
		
		05 ☐ FAMILY MEMBER
		06 ☐ FRIEND
		07 ☐ YOURSELF (E4)
		08 ☐ OTHER 09 _____
		                 SPECIFY
		
		99 ☐ DK

11

E3. What were you told when you last had your blood pressure taken?
 	
That it was:
 	
A little high, and it needs to be treated? . . . .
A little high, and it needs to be watched? . . . . . .
A little high, but there is no need to worry? . . . . .
Normal? . . . .
Something else? . . . .
	(260)	01 ☐ high, needs treatment
		02 ☐ high, needs to be watched
		03 ☐ *high, no worry*
		04 ☐ normal
		05 ☐ something else — ⎤
		     06 _____ ⎬ (E6)
		            specify
		07 ☐ TOLD NUMBERS BUT
		        NO EXPLANATION
		08 ☐ NOT TOLD ANYTHING
		99 ☐ DK

IF "YOURSELF" MARKED IN E2, ASK: **E4.** The last time you took your blood pressure, did you use a coin operated unit or some other equipment?	(261)	1 ☐ coin operated 2 ☐ other equipment — 3 _____ specify
E5. Was your reading high, low, or normal?	(262)	1 ☐ high 2 ☐ low 3 ☐ normal 9 ☐ DK
E6. Do you think that people with high blood pressure can tell when their blood pressure is high? *DO NOT PROBE IF "DON'T KNOW."*	(263)	1 ☐ Y 2 ☐ N 9 ☐ DK
E7. Have you <u>ever</u> been told by a doctor that you had high blood pressure?	(264)	1 ☐ Y(E10) 2 ☐ N
E8. Another name for high blood pressure is hypertension. Have you <u>ever</u> been told by a doctor that you had hypertension?	(265)	1 ☐ Y(E10) 2 ☐ N
E9. Have you <u>ever</u> been told by any other health professional, such as a nurse or a physician's assistant, that you had high blood pressure or hypertension?	(266)	1 ☐ Y 2 ☐ N(F1)
E10. How many times were you told that you had (high blood pressure/hypertension): once, or two or more times?	(267)	1 ☐ once 2 ☐ two or more times
E11. Have you <u>ever</u> been advised by a doctor or other health professional to lose weight because of your (high blood pressure/hypertension)?	(268)	1 ☐ Y 2 ☐ N(E17)
E12. Did you lose as much weight as you were advised to lose?	(269)	1 ☐ Y 2 ☐ N
E13. Are you <u>now</u> at the weight that was recommended for you because of your (high blood pressure/hypertension)?	(270)	1 ☐ Y(E17) 2 ☐ N
E14. Are you now trying to lose weight because of your (high blood pressure/hypertension)?	(271)	1 ☐ Y(E17) 2 ☐ N
E15. Are you trying to maintain your current weight?	(272)	1 ☐ Y 2 ☐ N

E16. Why aren't you trying to lose weight?

MARK ALL THAT APPLY.
DO NOT READ.

(273) 1 ☐ DIDN'T DO ANY GOOD

(274) 1 ☐ M.D. SAID TO STOP

(275) 1 ☐ DON'T NEED TO ANYMORE

(276) 1 ☐ TOO MUCH TROUBLE

(277) 1 ☐ OTHER REASON 2_____
                                              SPECIFY

(278) 9 ☐ DK/NO REASON

E17. Have you <u>ever</u> been advised by a doctor or other health professional to use less salt because of your (high blood pressure/hypertension)?

(279) 1 ☐ Y   2 ☐ N(E22)

E18. Did you ever reduce your use of salt after you were advised to do so because of your (high blood pressure/hypertension)?

(280) 1 ☐ Y(E20) 2 ☐ N

E19. Why didn't you ever reduce your use of salt?

MARK ALL THAT APPLY.
DO NOT READ.

(281) 1 ☐ DIDN'T DO ANY GOOD

(282) 1 ☐ DIDN'T THINK IT WOULD WORK

(283) 1 ☐ TOO MUCH TROUBLE

(284) 1 ☐ OTHER REASON –

         2_____
                        SPECIFY

(285) 9 ☐ DK/NO REASON

} (E22)

E20. Do you <u>now</u> use more salt, less salt, or about the same amount of salt as you did when you were advised to use less salt?

(286) 1 ☐ more
      2 ☐ less (E22)
      3 ☐ same

E21. Why don't you use less salt now?

MARK ALL THAT APPLY.
DO NOT READ.

(287) 1 ☐ DIDN'T DO ANY GOOD

(288) 1 ☐ DIDN'T THINK IT WOULD WORK

(289) 1 ☐ M.D. SAID COULD USE MORE SALT

(290) 1 ☐ TOO MUCH TROUBLE

(291) 1 ☐ OTHER REASON 2_____
                                         SPECIFY

(292) 9 ☐ DK/NO REASON

E22. Has a doctor <u>ever</u> prescribed medicine for your (high blood pressure/hypertension)?

(293) 1 ☐ Y   2 ☐ N(E26)

E23. Are you <u>now</u> taking any medicine prescribed by a doctor for your (high blood pressure/hypertension)?

(294) 1 ☐ Y   2 ☐ N(E25)

13

E24. A good many people have trouble remembering to take their medicine regularly. Would you say that you take your medicine exactly as you should every day, that you miss sometimes but not often, that you miss a lot, that you hardly ever take your medicine as you should, or that you never take your medicine as you should?	(295)	1 ☐ exactly every day 2 ☐ miss sometimes 3 ☐ miss a lot } (E26) 4 ☐ hardly ever take as should 5 ☐ never take as should

E25. Why did you stop taking your medicine?		MARK ALL THAT APPLY. DO NOT READ.
	(296)	1 ☐ ONLY TAKE WHEN NEEDED
	(297)	1 ☐ M.D. SAID TO STOP
	(298)	1 ☐ DIDN'T NEED IT ANYMORE
	(299)	1 ☐ TOO MUCH BOTHER
	(300)	1 ☐ MEDICINE RAN OUT
	(301)	1 ☐ COSTS TOO MUCH
	(302)	1 ☐ SIDE EFFECTS 2 _____ SPECIFY
	(303)	1 ☐ OTHER — 2 _____ SPECIFY
	(304)	9 ☐ DK

E26. Do you see a doctor or other health professional regularly about your (high blood pressure/hypertension)?	(305)	1 ☐ Y 2 ☐ N

E27. About how many times a year do you see a doctor or other health professional about your (high blood pressure/hypertension)?	(306)	1 ☐ less than once a year 2 ☐ once 3 ☐ twice 4 ☐ 3-4 times 5 ☐ 5 or more times 6 ☐ no regular schedule

E28. About how long ago did you last see a doctor or other health professional about your (high blood pressure/hypertension)?	(307)	1 ☐ less than 1 month ago 2 ☐ one month ago 3 ☐ more than 1 month, to 6 months ago 4 ☐ more than 6 months, to 1 year ago 5 ☐ more than 1 year ago

DIGESTIVE DISEASE

F1. CHECK ITEM	(308)	1 ☐ Age under 20 (J1) 2 ☐ Age 20+ (F2)

F2. Has a doctor ever told you that you had gallstones?	(309)	1 ☐ Y 2 ☐ N

F3. Have you ever had an x-ray of your gallbladder? For a gallbladder x-ray you take some pills the night before the x-ray and you are not allowed to eat anything until after having the x-ray done.	(310)	1 ☐ Y 2 ☐ N

F4. Have you ever had surgery or an operation for gallstones or gallbladder disease?	(311)	1 ☐ Y 2 ☐ N(F6)

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F5.	How long ago did you have your (last) surgery or operation for your gallbladder?	(312) 1 ☐ less than 5 years ago 2 ☐ 5 or more years ago
F6.	During the past year have you had any attacks of nausea and/or vomiting lasting more than 2 hours?	(313) 1 ☐ Y 2 ☐ N(F17)
F7.	About how many days in the past year have you had this trouble?	(314) 999 ☐ DK _____days number
F8.	What was the longest period that this trouble lasted during the past year?	(315) 000 ☐ less than 1 day (F10) _____days number
	IF ENTRY IN F8 IS 3 OR MORE DAYS, ASK: F9. How many times in the past year did you have this trouble for 3 days or longer?	(316) 99 ☐ DK _____times number
F10.	In the past year, what is the longest period of time you went without having this trouble?	(317) 1 ☐ less than 1 month 2 ☐ 1 mo., less than 3 mos. 3 ☐ 3 mos., less than 6 mos. 4 ☐ 6 mos. or longer 9 ☐ DK
F11.	How old were you the first time you had this sick feeling that lasted more than 2 hours?	(318) _____ years old number
F12.	Do you get this feeling while you are eating, after eating, or is it not related to eating?	(319) 1 ☐ while eating (F14) 2 ☐ after eating (F13) 3 ☐ not related to eating (F14) 9 ☐ DK (F14)
F13.	How long after eating do you start to feel sick?	(320) 1 ☐ 1 hour or less 2 ☐ more than 1, less than 2 hrs. 3 ☐ 2 or more hours 9 ☐ DK
F14.	Have you ever seen a doctor about this sick feeling?	(688) 1 ☐ Y 2 ☐ Y (F16)
F15.	What did the doctor say it was?	(689) 1 _____(F17) specify
F16.	What was the cause of this sick feeling?	(690) 1 _____ specify
F17.	During the past five years, have you had pain in your abdomen or lower chest which lasted a half hour or more?	(321) 1 ☐ yes 2 ☐ no (F37) 9 ☐ DK (F37)

F18. Please show me where the pain was located.

MARK AREA(S) SHOWN

front   back

(322) - (330)

FRONT

BACK
6

1

2 3 4

5

7 8

9

F19. When was the last time you had this pain?	(331)	1 ☐ 6 months ago or less 2 ☐ over 6 mos. to 1 year 3 ☐ more than 1 yr. ago (F31)
F20. How long does the pain usually last?	(332)	1 ☐ 1 hr. or less 2 ☐ more than 1, up to 5 hrs. 3 ☐ more than 5, up to 24 hrs. 4 ☐ more than 24 hrs. 9 ☐ DK
F21. While you are having the pain, is it steady or does it come in waves?	(333)	1 ☐ steady 2 ☐ comes in waves 3 ☐ both
F22. When you have the pain, do you move around or do you lie still?	(334)	1 ☐ move around 2 ☐ lie still 3 ☐ both
F23. At about what hour does the pain usually start?	(335)-(336)	__o'clock {1☐ AM / 2☐ PM} OR 00 ☐ no particular time 99 ☐ DK
F24. Have you ever been awakened from sleep by this pain?	(337)	1 ☐ Y 2 ☐ N 9 ☐ DK
F25. Do you get this pain while you are eating, after eating, or is it not related to eating?	(338)	1 ☐ while eating (F27) 2 ☐ after eating (F26) 3 ☐ not related to eating (F27) 9 ☐ DK (F27)
F26. How long after eating do you get this pain?	(339)	1 ☐ 1 hour or less 2 ☐ more than 1, up to 2 hrs. 3 ☐ more than 2 hrs. 9 ☐ DK

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F27. Do you usually feel sick to your stomach either before or after you get this pain?	(340) 1 ☐ Y	2 ☐ N	9 ☐ DK

F28. Within a day or two of having the pain, have you had any of the following:

Fever or chills? . . . .   (341) 1 ☐ Y   2 ☐ N   9 ☐ DK

Itching? . . . .   (342) 1 ☐ Y   2 ☐ N   9 ☐ DK

Yellow jaundice? . . . .   (343) 1 ☐ Y   2 ☐ N   9 ☐ DK

Unusually dark colored urine? . . . .   (344) 1 ☐ Y   2 ☐ N   9 ☐ DK

Unusually light colored bowel movements? . . . . .   (345) 1 ☐ Y   2 ☐ N   9 ☐ DK

F29. About how many days in the past year have you had this pain in the abdomen or lower chest?

(346) _____ days
                 number
999 ☐ DK

F30. In the past year, what was the longest period of days, weeks, or months in which you did not have this pain?

(347)-(348) _____ { 1 ☐ days
         number   2 ☐ weeks
                       3 ☐ months

F31. How old were you when you had your first attack of the pain?

(349) _____ _____ years old
              number

F32. Have you ever seen a doctor about this pain?   (350) 1 ☐ Y   2 ☐ N (F34)

F33. What did the doctor say it was?   (691) 1 _____ (F35)
                                          specify

F34. What was the cause of this pain?   (692) 1 _____
                                          specify

F35. Have you ever received an injection of medication to relieve the pain?   (351) 1 ☐ Y   2 ☐ N   9 ☐ DK

F36. Have you ever been hospitalized for the pain?   (352) 1 ☐ Y   2 ☐ N   9 ☐ DK

F37. During the past year have you had any of the following kinds of distress after eating?

Fullness or bloating . . . .   (353) 1 ☐ Y   2 ☐ N   9 ☐ DK

Belching . . . .   (354) 1 ☐ Y   2 ☐ N   9 ☐ DK

Sickness to your stomach or throwing up . . . . . .   (355) 1 ☐ Y   2 ☐ N   9 ☐ DK

Bitter taste in your mouth . . . .   (356) 1 ☐ Y   2 ☐ N   9 ☐ DK

Heartburn or burning pain . . . .   (357) 1 ☐ Y   2 ☐ N   9 ☐ DK

Stomach cramps . . . .   (358) 1 ☐ Y   2 ☐ N   9 ☐ DK

F38. During the past year, how often have you had (this feeling/<u>any</u> of these feelings)?

(359) 1 □ once or twice
2 □ 3+ times, but less than once per month
3 □ about once per month
4 □ weekly or almost weekly
5 □ daily or almost daily

F39. Is the distress caused by any of the following foods?

Milk	(360) 1 □ Y	2 □ N	9 □ DK
Fatty foods	(361) 1 □ Y	2 □ N	9 □ DK
Green vegetables	(362) 1 □ Y	2 □ N	9 □ DK
Seafood	(363) 1 □ Y	2 □ N	9 □ DK
Any other food 3 _____ specify	(364) 1 □ Y	2 □ N	9 □ DK

F40. How often do you have a bowel movement?

(365) 1 □ 3 or more times per day
2 □ twice per day
3 □ once per day
4 □ every other day
5 □ less often than every other day
9 □ DK

CARDIOVASCULAR CONDITIONS

G1. Have you ever had any pain or discomfort in your chest?

(366) 1 □ Y(G3) 2 □ N

G2. Have you ever had any pressure or heaviness in your chest?

(367) 1 □ Y 2 □ N(G13)

G3. Do you get it when you walk uphill or hurry?

(368) 1 □ Y 2 □ N(G11)
3 □ never hurries or walks uphill

G4. Do you get it when you walk at an ordinary pace on the level?

(369) 1 □ Y 2 □ N

G5. CHECK ITEM: MARK ONE BOX.

(370) 1 □ "Y" in G3 AND/OR G4 (G6)
2 □ Other (G11)

G6. What do you do if you get the (pain or discomfort/pressure or heaviness) while you are walking? Do you stop, slow down, continue at the same pace, or take medicine?

(371) 1 □ stop or slow down
2 □ continue at same pace (G11)
3 □ take medicine

G7. If you stand still, what happens to the (pain or discomfort/pressure or heaviness)? Is it relieved or not?

(372) 1 □ relieved
2 □ not relieved (G11)

G8. How soon is it relieved?	(373)	_____ minutes number

G9. Where is the (pain or discomfort/pressure or heaviness) located?

(374)-(381)   MARK AREA(S) SHOWN.

PROBE IF NECESSARY:
Please show me where it is located.

G10. Do you feel it anywhere else?

(382)   1 ☐ Y (MARK   2 ☐ N
             AREA IN
             G9)

G11. Did you see a doctor because of your (pain or discomfort/pressure or heaviness)?

(383)   1 ☐ Y   2 ☐ N(G13)

G12. What did the doctor say it was?

(384)   1 _____
             Specify

G13. Have you ever had a severe pain across the front of your chest lasting for half an hour or more?

(385)   1 ☐ Y   2 ☐ N(H1)

G14. How many of these attacks have you had?

(386)   01 ☐ One (G17)

_____ attacks
         number

G15. What was the date of your first attack?

9999 ☐ DK

(387)-(388)   _____ / _____
           mo.   yr.

G16. What was the duration of the pain during your first attack?

(389)   1 ☐ 30-59 min.
        2 ☐ 1-2 hrs.
        3 ☐ 3-5 hrs.
        4 ☐ 6-11 hrs.
        5 ☐ 12-23 hrs.
        6 ☐ 24-47 hrs.
        7 ☐ 2 days or more
        9 ☐ DK

G17. What was the date of your (last) attack?

9999 ☐ DK

(390)-(391)   _____ / _____
           mo.   yr.

19

G18. What was the duration of the pain during your (last) attack?	(392)	1 ☐ 30-59 min. 2 ☐ 1-2 hrs. 3 ☐ 3-5 hrs. 4 ☐ 6-11 hrs. 5 ☐ 12-23 hrs. 6 ☐ 24-47 hrs. 7 ☐ 2 days or more 9 ☐ DK
G19. Did you see a doctor because of this pain?	(393)	1 ☐ Y 2 ☐ N(G21)
G20. What did the doctor say it was?	(394)	1 _____ specify
G21. Have you ever had an electrical recording of your heart, also called an ECG, performed? This involves placing wires on the chest and arms.	(395)	1 ☐ Y 2 ☐ N

SMOKING

H1. Have you smoked at least 100 cigarettes in your entire life?	(396)	1 ☐ Y 2 ☐ N(H13)
H2. About how old were you when you first started smoking cigarettes fairly regularly?	(397)	_____ years old number 00 ☐ never smoked regularly
H3. Do you smoke cigarettes now?	(398)	1 ☐ Y(H6) 2 ☐ N
H4. About how long has it been since you last smoked cigarettes (fairly regularly)?	(399)	_____ years (H8) number 00 ☐ less than 1 year
H5. About what date was that?	(400)-(402)	___/___/___ mo. day yr.
H6. We are interested in the actual number of cigarettes people smoke in a day. How many cigarettes a day (do/did) you smoke (when you last smoked regularly)? IF ANSWERS IN PACKS, ASK: Could you give me the actual number of cigarettes?	(403) (404)	00 ☐ less than 1 per day _____cigarettes number _____packs number
H7. Was there ever a period when you smoked more than (number in H6) cigarettes a day?	(405)	1 ☐ Y 2 ☐ N (H9)
H8. During the period when you were smoking the most, about how many cigarettes a day did you usually smoke?	(406) (407)	00 ☐ less than 1 per day _____cigarettes number _____packs number

IF 1 YEAR OR MORE IN H4, GO TO H13. H9. What brand of cigarette (do/did) you usually smoke?	Brand name(s) (408) _____ (409) _____
IF MORE THAN ONE BRAND, ASK: H10. Which brand (do/did) you smoke the most?	Brand name (410) _____
CHECK CARD ASP 2, BRAND LIST. IF BRAND(S) NAMED APPEAR(S) ON LIST, ASK: H11. Is that <u>X</u> , <u>Y</u> , or <u>Z</u> ? INCLUDE ALL NAMES FOR THE BRAND	(411) _____
H12. What type of cigarettes are the (<u>brand</u>) that you (smoke/smoked)? Are they: a. Filter tip or non-filter tip? . . . . b. Menthol or plain? . . . . c. Hardpack or softpack? . . . . d. Regular, Kingsize, 100 or 120 millimeter? . . . . e. High, medium, or low tar and nicotine?	 (412) 1 □ FT 2 □ NFT 9 □ DK (413) 1 □ M 2 □ P 9 □ DK (414) 1 □ HP 2 □ SP 9 □ DK (415) 1 □ R 2 □ K 3 □ 100 4 □ 120 9 □ DK (416) 1 □ H 2 □ M 3 □ L 9 □ DK
H13. Do you smoke cigars now?	(417) 1 □ Y 2 □ N(H15)

H14. About how many cigars a day do you smoke?	(418) _____ cigars per day
	         number
	
	□ less than 1 per day —
	  specify ⌐↓
	
	      66 □ 3-6 per week
	      77 □ less than 3
	           per week

H15. Do you smoke a pipe now?	(419) 1 □ Y 2 □ N(H17)

H16. About how many pipefuls of tobacco a day do you usually smoke?	(420) _____ pipefuls per day
	         number
	
	□ less than 1 per day —
	
	  specify ⌐↓
	
	      66 □ 3-6 per week
	      77 □ less than 3
	           per week

H17. Does anyone (else) in your household smoke cigarettes, cigars, or a pipe inside your home?	(421) 1 □ Y 2 □ N

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H18. Do you share an office with or work near someone (else) who smokes cigarettes, cigars, or a pipe in your presence?	(422)	1 ☐ Y 2 ☐ N

FUNCTIONAL IMPAIRMENT

J1. CHECK ITEM.	(423)	1 ☐ Age under 18 (J28) 2 ☐ Age 71 or older (J25) 3 ☐ Age 18-70 (J2)
J2. What was your major activity during most of the past 12 months; working at a job or business, keeping house, going to school, or something else?	(424)	1 ☐ working (J3) 2 ☐ keeping house (J5) 3 ☐ going to school (J12) 4 ☐ something else (J12)
J3. Does any impairment or health problem <u>now</u> keep you from working at a job or business?	(425)	1 ☐ Y(J17) 2 ☐ N
J4. Are you limited in the kind or amount of work you can do because of any impairment or health problem?	(426)	1 ☐ Y(J17) 2 ☐ N(J15)
J5. Does any impairment or health problem <u>now</u> completely keep you from doing any housework?	(427)	1 ☐ Y(J7) 2 ☐ N
J6. Are you limited in the kind <u>or</u> amount of housework you can do because of any impairment or health problem?	(428)	1 ☐ Y(J7) 2 ☐ N(J12)
J7. What condition causes this limitation?		_____ condition
J8. When did you first notice your <u>(condition in J7)</u>? PROBE IF NECESSARY: Was it within the past 3 months or was it more than 3 months ago?	(429)	1 ☐ more than 3 months ago (J12) ☐ 3 months ago or less — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J12) 3 ☐ CONDITION NOT ON CARD ASP 3 (J9)
J9. Is this limitation caused by any other condition?	(430)	1 ☐ Y 2 ☐ N(J12)
J10. What other condition causes this limitation?		_____ condition

J11. When did you first notice your <u>(condition in J10)</u>?	(431)	1 ☐ more than 3 months ago (J12)
		   ☐ 3 months ago or less —
		
		SPECIFY IF 3 MONTHS AGO OR LESS —
		
		2 ☐ CONDITION IS ON CARD ASP 3 (J12)
		3 ☐ CONDITION NOT ON CARD ASP 3
		      (REASK J9-J11)

J12. Does any impairment or health problem keep you from working at a job or business?	(432)	1 ☐ Y(J17) 2 ☐ N
J13. Are you limited in the kind <u>or</u> amount of work you could do because of any impairment or health problem?	(433)	1 ☐ Y(J17) 2 ☐ N(J14)

J14. CHECK ITEM.	(434) 1 ☐ "Yes" in J5 OR J6 (J22) 2 ☐ Other (J15)
J15. Are you limited in any way in any activities because of an impairment or health problem?	(435) 1 ☐ Y　　2 ☐ N(J22)
J16. In what way are you limited? RECORD LIMITATION, NOT CONDITION.	(436) 1 _____ limitation
J17. What condition causes this limitation?	_____ condition
J18. When did you first notice your (condition in J17)? PROBE IF NECESSARY: Was it within the past 3 months or was it more than 3 months ago?	(437) 1 ☐ more than 3 months ago (J22) ☐ 3 months ago or less — SPECIFY IF 3 MONTHS AGO OR LESS— 2 ☐ CONDITION IS ON CARD ASP 3 (J22) 3 ☐ CONDITION NOT ON CARD ASP 3 (J19)
J19. Is this limitation caused by any other condition?	(438) 1 ☐ Y　　2 ☐ N(J22)
J20. What other condition causes this limitation?	_____ condition
J21. When did you first notice your (condition in J20)?	(439) 1 ☐ more than 3 months ago (J22) ☐ 3 months ago or less — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J22) 3 ☐ CONDITION NOT ON CARD ASP 3 (REASK J19-J21)
J22. CHECK ITEM.	(440) 1 ☐ Age 60-70 (J23) 2 ☐ Age 18-59, limitation reported (J23) 3 ☐ Other (J39)
J23. Because of any impairment or health problem, do you need the help of other persons with your personal care needs, such as eating, bathing, dressing, or getting around this home?	(441) 1 ☐ Y(J39) 2 ☐ N
J24. Because of any impairment or health problem, do you need the help of other persons in handling your routine needs, such as taking care of this place, doing necessary business, shopping, or getting around for other purposes?	(442) 1 ☐ Y(J39) 2 ☐ N(J39)
ASK FOR AGES 71+ ONLY: **J25.** What was your major activity during most of the past 12 months; working at a job or business, keeping house, going to school, or something else?	(443) 1 ☐ working 2 ☐ keeping house 3 ☐ going to school 4 ☐ something else
J26. Because of any impairment or health problem, do you need the help of other persons with your personal care needs, such as eating, bathing, dressing, or getting around this home?	(444) 1 ☐ Y(J34) 2 ☐ N

J27. Because of any impairment or health problem, do you need the help of other persons in handling your routine needs, such as taking care of this place, doing necessary business, shopping, or getting around for other purposes?	(445)	1 ☐ Y(J34) 2 ☐ N(J32)
ASK FOR AGES 12-17 ONLY: **J28.** Does any impairment or health problem <u>now</u> keep you from attending school?	(446)	1 ☐ Y(J34) 2 ☐ N
J29. Do you attend a special school or special classes because of any impairment or health problem?	(447)	1 ☐ Y(J34) 2 ☐ N
J30. Do you need to attend a special school or special classes because of any impairment or health problem?	(448)	1 ☐ Y(J34) 2 ☐ N
J31. Are you limited in school attendance because of your health?	(449)	1 ☐ Y(J34) 2 ☐ N
J32. Are you limited in <u>any way</u> in any activities because of an impairment or health problem?	(450)	1 ☐ Y 2 ☐ N(J39)
J33. In what way are you limited? RECORD LIMITATION, NOT CONDITION.	(451)	1 _____ 　　　　　　　limitation
J34. What condition causes this limitation?		_____ 　　　　　　condition
J35. When did you first notice your (<u>condition in J34</u>)? PROBE IF NECESSARY: Was it within the past 3 months or was it more than 3 months ago?	(452)	1 ☐ more than 3 months ago (J39) 　 ☐ 3 months ago or less — 　　SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J39) 3 ☐ CONDITION NOT ON CARD ASP 3 (J36)
J36. Is this limitation caused by any other condition?	(453)	1 ☐ Y 2 ☐ N(J39)
J37. What other condition causes this limitation?		_____ 　　　　　　condition
J38. When did you first notice your (<u>condition in J37</u>)?	(454)	1 ☐ more than 3 months ago (J39) 　 ☐ 3 months ago or less — 　　SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J39) 3 ☐ CONDITION NOT ON CARD ASP 3 　　(REASK J36-J38)
J39. CHECK ITEM.	(455)	1 ☐ Age 18 or older (J40) 2 ☐ Age 12-17 (K1)
J40. Have you ever changed your job, stopped working or made any changes in your housework because of a disability or health problem?	(456)	1 ☐ Y 2 ☐ N(K1)

J41. What was the health problem? (457) 1 _____
specify

J42. Did you -

Retire because of a disability?	(458)	1 ☐ Y	2 ☐ N
Change permanently to an easier job?	(459)	1 ☐ Y	2 ☐ N
Change temporarily to an easier job?	(460)	1 ☐ Y	2 ☐ N
Cut down to part-time work only?	(461)	1 ☐ Y	2 ☐ N
Have to stop working for a few months?	(462)	1 ☐ Y	2 ☐ N
Have to cut down on housework?	(463)	1 ☐ Y	2 ☐ N
Stop doing all housework?	(464)	1 ☐ Y	2 ☐ N
Make some other change?	(465)	1 ☐ Y	2 ☐ N

3 _____
specify

CONDITION LIST

K1. Has a doctor <u>ever</u> told you that you had: (IF "YES" ASK K2 & K3 BEFORE GOING TO NEXT CONDITION).

K2. Do you still have . . . ?

K3. How many years ago did you <u>first</u> have . . . ?

Condition	K1	K2	K3
Emphysema?	(466) 1 ☐ Y(K2) 2 ☐ N	(467) 1 ☐ Y 2 ☐ N 9 ☐ DK	(468) _____
Chronic bronchitis?	(469) 1 ☐ Y(K2) 2 ☐ N	(470) 1 ☐ Y 2 ☐ N 9 ☐ DK	(471) _____
Rheumatic fever?	(472) 1 ☐ Y(K2) 2 ☐ N	(473) 1 ☐ Y 2 ☐ N 9 ☐ DK	(474) _____
Rheumatic heart disease?	(475) 1 ☐ Y(K2) 2 ☐ N	(476) 1 ☐ Y 2 ☐ N 9 ☐ DK	(477) _____
Heart murmur?	(478) 1 ☐ Y(K2) 2 ☐ N	(479) 1 ☐ Y 2 ☐ N 9 ☐ DK	(480) _____
Heart failure?	(481) 1 ☐ Y(K2) 2 ☐ N	(482) 1 ☐ Y 2 ☐ N 9 ☐ DK	(483) _____
Heart attack?	(484) 1 ☐ Y(K3) 2 ☐ N	////////////////	(485) _____
Kidney problems?	(486) 1 ☐ Y(K2) 2 ☐ N	(487) 1 ☐ Y 2 ☐ N 9 ☐ DK	(488) _____
Cirrhosis of the liver?	(489) 1 ☐ Y(K2) 2 ☐ N	(490) 1 ☐ Y 2 ☐ N 9 ☐ DK	(491) _____
Hepatitis?	(492) 1 ☐ Y(K2) 2 ☐ N	(493) 1 ☐ Y 2 ☐ N 9 ☐ DK	(494) _____
Yellow jaundice?	(495) 1 ☐ Y(K2) 2 ☐ N	(496) 1 ☐ Y 2 ☐ N 9 ☐ DK	(497) _____
Stroke?	(498) 1 ☐ Y (K3) 2 ☐ N	////////////////	(499) _____
Glaucoma?	(500) 1 ☐ Y(K2) 2 ☐ N	(501) 1 ☐ Y 2 ☐ N 9 ☐ DK	(502) _____
Cataracts?	(503) 1 ☐ Y(K2) 2 ☐ N	(504) 1 ☐ Y 2 ☐ N 9 ☐ DK	(505) _____
Strabismus or crossed eyes?	(506) 1 ☐ Y(K2) 2 ☐ N	(507) 1 ☐ Y 2 ☐ N 9 ☐ DK	(508) _____
An eye injury?	(509) 1 ☐ Y(K2) 2 ☐ N	(510) 1 ☐ Y 2 ☐ N 9 ☐ DK	(511) _____
Goiter?	(512) 1 ☐ Y(K2) 2 ☐ N	(513) 1 ☐ Y 2 ☐ N 9 ☐ DK	(514) _____
Other thyroid disease?	(515) 1 ☐ Y(K2) 2 ☐ N	(516) 1 ☐ Y 2 ☐ N 9 ☐ DK	(517) _____

PESTICIDE EXPOSURE

L1. Have you <u>ever</u> done farm work, either paid or unpaid? Some examples of farm work are working with crops or animals and supervising other workers on farms or orchards.

(518) 1 ☐ Y 2 ☐ N(L27)

L2. Approximately how many years have you worked in farming?

(519) 99 ☐ DK

_____years
number

L3. Are you a migrant farmworker?

(520) 1 ☐ Y(L5) 2 ☐ N

L4. Have you <u>ever</u> worked in farming away from your usual home for more than two weeks at a time?

(521) 1 ☐ Y 2 ☐ N(L6)

L5. How many months per year are or were you away from your usual home working in farming?

(522) 99 ☐ DK
00 ☐ less than 1 month per year

_____months per year
number

L6. Have you worked in farming at any time during the past year?

(523) 1 ☐ Y 2 ☐ N(L14)

L7. During the past year, have you worked on any of the following types of farms:

Animal or dairy farm? . . . . (524) 1 ☐ Y 2 ☐ N

Poultry farm? . . . . (525) 1 ☐ Y 2 ☐ N

Vegetable or truck farm? . . . . (526) 1 ☐ Y 2 ☐ N

Fruit orchard? . . . . : . . (527) 1 ☐ Y 2 ☐ N

Cotton farm? . . . . (528) 1 ☐ Y 2 ☐ N

Tobacco farm? . . . . (529) 1 ☐ Y 2 ☐ N

Grain farm? . . . . (530) 1 ☐ Y 2 ☐ N

Some other kind of farm? 3_____ (531) 1 ☐ Y 2 ☐ N
specify

L8. During the past year, what agricultural crops have you mainly worked with?

(532) 9 ☐ DK
0 ☐ none

(533)-(537) _____

_____

_____

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L9. During the past year, have you performed any of the following jobs:

Picker or harvester?	(538)	1 ☐ Y	2 ☐ N
Cultivator?	(539)	1 ☐ Y	2 ☐ N
Planter?	(540)	1 ☐ Y	2 ☐ N
Sorter?	(541)	1 ☐ Y	2 ☐ N
Packer?	(542)	1 ☐ Y	2 ☐ N
Pesticide sprayer?	(543)	1 ☐ Y	2 ☐ N
Pesticide mixer;	(544)	1 ☐ Y	2 ☐ N
Pesticide flagman?	(545)	1 ☐ Y	2 ☐ N
Field foreman?	(546)	1 ☐ Y	2 ☐ N
Any other farm job? <u>3_____</u> specify	(547)	1 ☐ Y	2 ☐ N

L10. How many months of the year do you usually work in farming?

(548) 00 ☐ less than 1 mo. per yr.

<u>_____</u> mos. per year
number

L11. When working in farming, do you usually eat any meals in or near the fields during the working day?

(549) 1 ☐ Y   2 ☐ N(L13)

L12. When working in farming, where does the water you use for washing your hands come from?

Is It: Brought to the fields from somewhere else?	(550)	1 ☐ Y	2 ☐ N
From a well in the fields?	(551)	1 ☐ Y	2 ☐ N
Irrigation water or standing water at the field? . . .	(552)	1 ☐ Y	2 ☐ N
From some other source? <u>3_____</u> specify	(553)	1 ☐ Y	2 ☐ N
	(554)	0 ☐ DOESN'T WASH HANDS	

L13. When working in farming, where does your drinking water come from?

Is It: Brought to the fields from somewhere else?	(555)	1 ☐ Y	2 ☐ N
From a well in the fields?	(556)	1 ☐ Y	2 ☐ N
Irrigation water or standing water at the field? . . .	(557)	1 ☐ Y	2 ☐ N
From some other source? <u>3_____</u> specify	(558)	1 ☐ Y	2 ☐ N
	(559)	0 ☐ DOESN'T DRINK WATER	

L14. Pesticides are chemicals used to kill insects, weeds, plant diseases, and rodents. When working in farming, to your knowledge, have pesticides <u>ever</u> been applied to an area while you were working in it?

(560) 1 ☐ Y   2 ☐ N(L16) 9 ☐ DK(L16)

L15. How many times?

(561) 1 ☐ 1-2 times
2 ☐ 3-5 times
3 ☐ 6-10 times
4 ☐ more than 10 times
9 ☐ DK

L16. Have you ever mixed, handled, or applied pesticides while working in farming?	(562)	1 ☐ Y 2 ☐ N(L20) 9 ☐ DK(L20)
L17. Approximately how many times per year have you usually mixed, handled, or applied pesticides while working in farming?	(563)	1 ☐ less than once per year 2 ☐ 1-12 times per year 3 ☐ more than 12 times per yr.
L18. Have you ever used any of the following items of protective equipment while mixing, handling, or applying pesticides:		
Gloves?...............................	(564)	1 ☐ Y 2 ☐ N
Special suit over clothes?	(565)	1 ☐ Y 2 ☐ N
Mask?................................	(566)	1 ☐ Y 2 ☐ N
Goggles?	(567)	1 ☐ Y 2 ☐ N
Rubber boots?	(568)	1 ☐ Y 2 ☐ N
Head covering?........................	(569)	1 ☐ Y 2 ☐ N
Any other item? 3 _____ specify	(570)	1 ☐ Y 2 ☐ N
IF ALL "N" in L18, SKIP TO L20. OTHERWISE ASK: **L19.** How often have you used any protective equipment while mixing, handling, or applying pesticides: Always, sometimes, or never?	(571)	1 ☐ always 2 ☐ sometimes 3 ☐ never
L20. While working in farming, have any pesticides ever been spilled or sprayed on any part of your body?	(572)	1 ☐ Y 2 ☐ N (L26) 9 ☐ DK (L26)
L21. How many times have pesticides been spilled or sprayed on you?	(573)	999 ☐ DK _____ times number
L22. Did you ever become ill because pesticides were spilled or sprayed on you?	(574)	1 ☐ Y 2 ☐ N
L23. Did you ever see a doctor because pesticides were spilled or sprayed on you?	(575)	1 ☐ Y 2 ☐ N
L24. Did you ever lose any work time as a result of having pesticides spilled or sprayed on you?	(576)	1 ☐ Y 2 ☐ N
L25. What specific pesticides were spilled or sprayed on you? IF NAME(S) NOT KNOWN, ENTER WHAT PESTICIDE IS USED FOR OR ON.	(577) (578)-(582)	9 ☐ DK _____ _____
L26. Besides while working in farming, have you mixed, applied or handled any pesticides <u>during the past year</u>?	(583)	1 ☐ Y (L28) 2 ☐ N (L28) 9 ☐ DK (L28)
L27. Pesticides are chemicals used to kill insects, weeds, plant diseases and rodents. Have you mixed, applied or handled any pesticides <u>during the past year</u>?	(693)	1 ☐ Y 2 ☐ N 9 ☐ DK

L28. During the past five years, have you used the prescription medication, Kwell, to control body or head lice?	(584)	1 ☐ Y 2 ☐ N
L29. Have you <u>ever</u> worked in a pesticide processing plant?	(585)	1 ☐ Y 2 ☐ N 9 ☐ DK
L30. Have you <u>ever</u> worked as a pesticide applicator or sprayer, for example, an exterminator or a pest control specialist?	(586)	1 ☐ Y 2 ☐ N 9 ☐ DK

ACCULTURATION

M1. Do you speak any Spanish?	(587)	1 ☐ Y 2 ☐ N(M4)
M2. Would you say that you speak mostly Spanish, or mostly English, or do you speak Spanish and English about the same?	(589)	1 ☐ mostly Spanish 2 ☐ mostly English 3 ☐ both about the same
M3. What language do you prefer: Spanish only, mostly Spanish, mostly English, English only, or Spanish and English about equally?	(590)	1 ☐ Spanish only 2 ☐ mostly Spanish 3 ☐ mostly English 4 ☐ English only 5 ☐ both equally
M4. Can you read Spanish?	(591)	1 ☐ Y 2 ☐ N
M5. Can you read English?	(592)	1 ☐ Y 2 ☐ N
IF "YES" TO BOTH M4 AND M5, ASK: M6. Which do you read better?	(593)	1 ☐ Spanish 2 ☐ English 3 ☐ both the same
M7. Can you write in Spanish?	(594)	1 ☐ Y 2 ☐ N
M8. Can you write in English?	(595)	1 ☐ Y 2 ☐ N
IF "YES" TO BOTH M7 AND M8, ASK: M9. In which language do you write better?	(596)	1 ☐ Spanish 2 ☐ English 3 ☐ both the same

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HAND CARD ASP 4

M10. Which of those groups <u>best</u> describes your ethnic identification?

(597)
- 01 ☐ Boricuan
- 02 ☐ Puerto Rican
- 03 ☐ Cuban
- 04 ☐ Cuban-American
- 05 ☐ Mexican/Mexicano
- 06 ☐ Chicano
- 07 ☐ Mexican-American

- - - - - - - - - - - - - - - - - -

- 08 ☐ Hispano
- 09 ☐ Latin American
- 10 ☐ Other Spanish or other Hispanic
- 11 ☐ American
- 12 ☐ Anglo-American
- 13 ☐ other group 14 _____
  specify

IF ANY BOX BELOW THE LINE IN M10 IS CHECKED, ASK:

M11. What is your country of origin?

(598) 1 _____
                    specify

M12. Which of those groups <u>best</u> describes your mother's ethnic identification?

(599)
- 01 ☐ Boricuan
- 02 ☐ Puerto Rican
- 03 ☐ Cuban
- 04 ☐ Cuban-American
- 05 ☐ Mexican/Mexicano
- 06 ☐ Chicano
- 07 ☐ Mexican-American
- 08 ☐ Hispano
- 09 ☐ Latin American
  10 _____
         specify country
- 11 ☐ other Spanish or other Hispanic
  12 _____
         specify country
- 13 ☐ American
- 14 ☐ Anglo-American
- 15 ☐ other group 16 _____
               specify

M13. Which of those groups <u>best</u> describes your father's ethnic identification?

(600)
- 01 ☐ Boricuan
- 02 ☐ Puerto Rican
- 03 ☐ Cuban
- 04 ☐ Cuban-American
- 05 ☐ Mexican/Mexicano
- 06 ☐ Chicano
- 07 ☐ Mexican-American
- 08 ☐ Hispano
- 09 ☐ Latin American
  10 _____
         specify country
- 11 ☐ other Spanish or other Hispanic
  12 _____
         specify country
- 13 ☐ American
- 14 ☐ Anglo-American
- 15 ☐ other group 16 _____
               specify

M14. In what country or State was your father born?	(601)	1 ☐ U.S., except Puerto Rico 2 ☐ Puerto Rico 3 ☐ Cuba 4 ☐ Mexico 5 ☐ other 6_____ specify
M15. In what country or State was your mother born?	(602)	1 ☐ U.S., except Puerto Rico 2 ☐ Puerto Rico 3 ☐ Cuba 4 ☐ Mexico 5 ☐ other 6_____ specify

MEAL PROGRAMS

N1. CHECK ITEM:	(603)	1 ☐ under 19 (N2) 2 ☐ 19-59 (P1) 3 ☐ 60+ (N16)
N2. Are you now attending school?	(604)	1 ☐ Y 2 ☐ N(P1)
N3. Does the school that you attend serve a complete breakfast?	(605)	1 ☐ Y 2 ☐ N
N4. How many times a week do you usually eat breakfast served by the school?	(606)	_____ times 0 ☐ none (N8) 9 ☐ DK
N5. During this (past) school year did your parents fill out a form to enable you to eat breakfast at school for free or at a reduced price?	(607)	1 ☐ Y 2 ☐ N(N7)
N6. Do you eat breakfast at school for free or at a reduced price?	(608)	1 ☐ yes 2 ☐ no, not eligible 3 ☐ no, other reason
N7. How much do you pay for your breakfast per day?	(609)	_____ cents number 000 ☐ free
N8. Does the school that you attend serve a complete lunch?	(610)	1 ☐ Y 2 ☐ N
N9. How many times a week do you usually eat lunch served by the school?	(611)	_____ times number 0 ☐ none (N13) 9 ☐ DK
N10. During this (past) school year did your parents fill out a form to enable you to eat lunch at school for free or at a reduced price?	(612)	1 ☐ Y 2 ☐ N(N12)
N11. Do you eat lunch at school for free or at a reduced price?	(613)	1 ☐ yes 2 ☐ no, not eligible 3 ☐ no, other reason

N12. How much do you pay for your lunch per day?

(614) _____ cents
number

000 □ free

N13. Do you ever bring your lunch from home?

(615) 1 □ yes, always
2 □ yes, sometimes
3 □ no (P1)

N14. On days that you do not eat lunch served by the school, do you buy milk?

(616) 1 □ yes, always
2 □ yes, sometimes
3 □ no (P1)

N15. How much do you pay for your milk per day?

(617) _____ cents
number

000 □ free

} (P1)

N16. Do you participate in any program in which prepared meals or groceries are delivered to your home on a regular basis?

(618) 1 □ Y   2 □ N(N20)

N17. Are prepared meals or groceries delivered to your home?

(619) 1 □ prepared meals only
2 □ groceries only
3 □ both
4 □ other — 5 _____
specify

N18. Is the sponsor of the program —

A local health department? . . . .
(620) 1 □ Y   2 □ N

Another department of local government? . . . . . .
(621) 1 □ Y   2 □ N

A State government? . . . .
(622) 1 □ Y   2 □ N

A church group? . . . .
(623) 1 □ Y   2 □ N

Some other voluntary organization?
(624) 1 □ Y   2 □ N

3 _____
specify

N19. About how often is the food brought to your home?

(625) 01 □ two or three times a day
02 □ once a day
03 □ four to six times a week
04 □ two or three times a week
05 □ once a week
06 □ two or three times a month
07 □ once a month
08 □ less than once a month
09 □ other — 10 _____
specify

N20. Do you participate on a regular basis in any program in which you go out to a place where meals are served to groups of people?

(626) 1 □ Y   2 □ N(P1)

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N21. Is the sponsor of the program —

A local health department? . . . . (627) 1 ☐ Y   2 ☐ N

Another department of local government? . . . . . . (628) 1 ☐ Y   2 ☐ N

A State government? . . . . (629) 1 ☐ Y   2 ☐ N

A church group? . . . . (630) 1 ☐ Y   2 ☐ N

Some other voluntary organization? . . . .

3 _____ (631) 1 ☐ Y   2 ☐ N
                        Specify

N22. About how often do you go out for these meals?

(632) 01 ☐ two or three times a day
         02 ☐ once a day
         03 ☐ four to six times a week
         04 ☐ two or three times a week
         05 ☐ once a week
         06 ☐ two or three times a month
         07 ☐ once a month
         08 ☐ less than once a month
         09 ☐ other — 10 _____
                           specify

MEDICINE/VITAMIN USAGE

P1. During the past 2 weeks, have you taken or used any vitamins or minerals?

(633) 1 ☐ Y(P2)　　2 ☐ N(P5)

P2. May I see the container(s) of your vitamins and minerals? RECORD BRAND NAME	P3. How much of the (vitamin/mineral) do you take each time you use it?	P4. How often do you take this (vitamin/mineral)?
(634)	(635)-(636) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other }	(637)-(638) ____ times per { 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ____ specify }
(634)	(635)-(636) ____ number { 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other }	(637)-(638) ____ times per { 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other — 5 ____ specify }
☐ Continuation booklet		

P5. We are interested in all kinds of medicines that people take or use. First I will ask about your use of medicines that can be obtained <u>without</u> a doctor's prescription.

During the past 2 weeks, have you taken or used any of the following types of of medicines?

a) Cough, throat, cold or congestion medicine?	(639)	1 ☐ Y　　2 ☐ N
b) Pain relievers, such as aspirin or Tylenol?	(640)	1 ☐ Y　　2 ☐ N
c) Sleeping tablets, sedatives, or tranquilizers?	(641)	1 ☐ Y　　2 ☐ N
d) Anti-depressants, stimulants, or pep pills?	(642)	1 ☐ Y　　2 ☐ N
e) Diet pills or dieting aids?	(643)	1 ☐ Y　　2 ☐ N
f) Laxatives?	(644)	1 ☐ Y　　2 ☐ N
g) Medicines for diarrhea?	(645)	1 ☐ Y　　2 ☐ N
h) Medicines for indigestion?	(646)	1 ☐ Y　　2 ☐ N
i) Suppositories?	(647)	1 ☐ Y　　2 ☐ N
j) Eye drops?	(648)	1 ☐ Y　　2 ☐ N
k) Any other medicines, pills, or ointments for which a doctor's prescription is not needed?	(649)	1 ☐ Y　　2 ☐ N

IF YES, SPECIFY: (650) _____
_____

P6. During the past 2 weeks have you taken or used any medicines for which a doctor's prescription is needed?

(651) 1 ☐ Y (P7)   2 ☐ N (P14)

P7. May I see the container(s) of the medicine(s) you took? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS P8 THROUGH 13 FOR EACH.	**P8.** What is the health problem you had for which you took the (medicine)? PROBE FOR SYMPTOM OR CONDITION.	**P9.** Did you take (dosage reported in P7) per (frequency reported in P7)?
Label printed in: (652) 1 ☐ English 2 ☐ Spanish 3 ☐ Both Name: (655) Prescribed for SP? (656) 1 ☐ Y 2 ☐ N Strength: (657) Dosage: (658)-(659) Frequency: (660)-(661) IF "AS NEEDED," ASK P8 AND GO TO NEXT MEDICATION (662) 1 ☐ Container not seen-information furnished by respondent	(653)	(654) 1 ☐ Y (P12) 2 ☐ N
(652) Label printed in: 1 ☐ English 2 ☐ Spanish 3 ☐ Both Name: (655) Prescribed for SP? (656) 1 ☐ Y 2 ☐ N Strength: (657) Dosage: (658)-(659) Frequency: (660)-(661) IF "AS NEEDED," ASK P8 AND GO TO NEXT MEDICATION (662) 1 ☐ Container not seen-information furnished by respondent	(653)	(654) 1 ☐ Y (P12) 2 ☐ N

P10. How much of the (medicine) did you take?	P11. Did a doctor advise you to take (dosage in K10)/(frequency in K10)?	P12. Does the (medicine) make you feel bad or cause any side effects?	P13. What do you do when this happens?
(663)-(664) 1 ☐ tablet/capsule 2 ☐ teaspoon number 3 ☐ tablespoon 4 ☐ other (665)-(666) _____per 1☐ day times 2☐ week 3☐ month 4☐ other — 5 _____ specify	(667) 1 ☐ Yes 2 ☐ No	(668) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No GO TO NEXT MEDICATION 9 ☐ DK	(669) DO NOT READ. 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY
(663)-(664) 1 ☐ tablet/capsule 2 ☐ teaspoon number 3 ☐ tablespoon 4 ☐ other (665)-(666) _____per 1☐ day times 2☐ week 3☐ month 4☐ other — 5 _____ specify	(667) 1 ☐ Yes 2 ☐ No	(668) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No GO TO NEXT MEDICATION 9 ☐ DK	(669) DO NOT READ. 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY

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P7. May I see the container(s) of the medicine(s) you took? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS P8 THROUGH 13 FOR EACH.	P8. What is the health problem you had for which you took the (medicine)? PROBE FOR SYMPTOM OR CONDITION.	P9. Did you take (dosage reported in K7) per (frequency reported in P7)?
Label printed in: (652) 1 ☐ English 2 ☐ Spanish 3 ☐ Both Name: (655) Prescribed for SP? (656) 1 ☐ Y 2 ☐ N Strength: (657) Dosage: (658)-(659) Frequency: (660)-(661) IF "AS NEEDED," ASK P8 AND GO TO NEXT MEDICATION. (662) 1 ☐ Container not seen-information furnished by respondent	(653)	(654) 1 ☐ Y (P12) 2 ☐ N
(652) Label printed in: 1 ☐ English 2 ☐ Spanish 3 ☐ Both Name: (655) Prescribed for SP? (656) 1 ☐ Y 2 ☐ N Strength: (657) Dosage: (658)-(659) Frequency: (660)-(661) IF "AS NEEDED," ASK P8 AND GO TO NEXT MEDICATION (662) 1 ☐ Container not seen-information furnished by respondent	(653)	(654) 1 ☐ Y (P12) 2 ☐ N

☐ Continuation booklet

38

P10. How much of the (medicine) did you take?	P11. Did a doctor advise you to take (dosage in P10)/(frequency in P10)?	P12. Does the (medicine) make you feel bad or cause any side effects?	P13. What do you do when this happens?
(663)–(664) number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other (665)–(666) _____ times per 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other – 5 _____ specify	(667) 1 ☐ Yes 2 ☐ No	(668) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No } GO TO NEXT MEDICATION 9 ☐ DK }	(669) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY
(663)–(664) number 1 ☐ tablet/capsule 2 ☐ teaspoon 3 ☐ tablespoon 4 ☐ other (665)–(666) _____ times per 1 ☐ day 2 ☐ week 3 ☐ month 4 ☐ other – 5 _____ specify	(667) 1 ☐ Yes 2 ☐ No	(668) 1 ☐ Yes – SPECIFY PROBLEM 3 _____ _____ 2 ☐ No } GO TO NEXT MEDICATION 9 ☐ DK }	(669) DO NOT READ 1 ☐ QUIT USING MEDICINE 2 ☐ DECREASE USE 3 ☐ CONSULT DOCTOR 4 ☐ CONTINUE TAKING AS PRESCRIBED 5 ☐ OTHER – 6 _____ SPECIFY

P14. Have you been told by a doctor to take any medicines <u>during the past 6 months</u> that you did <u>not</u> take during that period?

(670) 1 ☐ Y(P15) 2 ☐ N(Q1)

P15. What are the names of the medicines that you did not take? (PROBE FOR BRAND NAMES, ENTER EACH ON SEPARATE LINE. THEN ASK P16 AND P17 FOR EACH.)	**P16.** What was the health problem you had for which the doctor recommended the (<u>medicine</u>)?
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)

**P17. What was your main reason
for not taking the (medicine)?**

(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER – SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____
(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER – SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____
(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER – SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____
(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER – SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____
(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER – SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____
(673) 1 ☐ SIDE EFFECTS	3 ☐ DIDN'T THINK IT WOULD WORK	5 ☐ OTHER–SPECIFY
2 ☐ COST TOO MUCH	4 ☐ HAVEN'T YET OBTAINED MEDICINE	6 _____

NAME/SSAN

We would like to know how people's health practices and conditions relate to how long they live. The following information will be used to check against the vital statistics records maintained by the National Center for Health Statistics of the U.S. Public Health Service. The results will only be used for statistical purposes and no individual identification will be shown in any analysis. To make sure that our records are complete:

Q1. What is your full name, including middle name?

(674) _____
                              first

VERIFY SPELLING.

(675) _____
                              middle

(676) _____
                              last

Q2. What is your date of birth?

(677)(679) ___ / ___ / ___
            mo.   day   yr.

Q3. What is your father's last name?
VERIFY SPELLING. DO NOT WRITE "SAME."

(680) _____
                     father's last name

Q4. We would like to have your Social Security Number. This will have no effect in any way on your benefits. This information is voluntary and is collected under the authority of the Public Health Service Act (42 U.S.C. 242K Section 306).

What is your Social Security number?

(681)

___ ___ ___ — ___ ___ — ___ ___ ___ ___
                    Social Security Number

Q5. CHECK ITEM: RESPONDENT

MARK MAIN RESPONDENT

(682) 1 ☐ SAMPLE PERSON
       2 ☐ MOTHER
       3 ☐ FATHER
       4 ☐ SISTER OR BROTHER
       5 ☐ OTHER — 6 _____
                            SPECIFY

Q6. IF OTHER THAN SAMPLE PERSON, EXPLAIN REASON FOR ACCEPTING PROXY RESPONDENT.

(694) 1 _____

MEDICINE/VITAMIN MEC

DO NOT ASK IN HOUSEHOLD

R1. REFER TO MEDICINE/VITAMIN USAGE SECTION. MARK ONE BOX.	(695) 1 ☐ No medicine or vitamin reported (R3). 2 ☐ Medicine or vitamin reported (R2).

R2. When an interviewer spoke with you a few weeks ago, you mentioned you had taken (medicine/vitamins/minerals in questions P2, P5, and P7). Have you taken any of these medicines during the past 24 hours?

(683)   1 ☐ Y   2 ☐ N

R3. Have you taken any (other) medicines, vitamins or minerals during the past 24 hours?

(684)   1 ☐ Y   2 ☐ N

IF "Y" IN EITHER R2 OR R3 GO TO R4. OTHERWISE, END QUESTIONNAIRE.

R4. What are the names of all medicines, vitamins and minerals you took during the past 24 hours? Any others?	**R5.** How much of the (medicine, vitamin/mineral) did you take during the past 24 hours?
(685)	(686)-(687) _____ number ⎧ 1 ☐ tablet/capsule ⎨ 2 ☐ teaspoon ⎩ 3 ☐ tablespoon 4 ☐ other
(685)	(686)-(687) _____ number ⎧ 1 ☐ tablet/capsule ⎨ 2 ☐ teaspoon ⎩ 3 ☐ tablespoon 4 ☐ other
(685)	(686)-(687) _____ number ⎧ 1 ☐ tablet/capsule ⎨ 2 ☐ teaspoon ⎩ 3 ☐ tablespoon 4 ☐ other
(685)	(686)-(687) _____ number ⎧ 1 ☐ tablet/capsule ⎨ 2 ☐ teaspoon ⎩ 3 ☐ tablespoon 4 ☐ other

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

SPANISH VERSION

ADULT SAMPLE PERSON
SUPPLEMENT (523)
(Ages 12-74 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

NOTICE: La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recogida con la garantía que será mantenida en la más estricta confidencialidad, será usada sólo para los propósitos establecidos para este estudio y no será divulgada o entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con la Sección 308(d) de la Ley del Servicio de Salud Pública — Public Health Service Act (42 USC 242 m).

WESTAT ID No: (100) ___ ___ ___
Stand No. Segment No. Serial No.

(107) ___ Family No.

(108) ___ SP No.

NCHS ID No: (101) __ __ __ __ __ __

NAME (First, Middle, Last) (109)

(110) SEX
1 ☐ Male
2 ☐ Female

(111) AGE

INTERVIEWER NAME: NO. (112)

REVIEWER NAME: NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☐ English
2 ☒ Spanish

TIME BEGAN (102)-(103)
1 ☐ am
2 ☐ pm
__ __ : __ __

TIME ENDED (104)-(105)
1 ☐ am
2 ☐ pm
__ __ : __ __

DATE OF EXAMINATION
___ / ___ / ___
Month Day Year

TIME
☐ am
☐ pm

TRANSPORTATION
☐ Taxi
☐ Self

DATE OF INTERVIEW
(114)-(116)
___ / ___ / ___
Month Day Year

ADULT SAMPLE PERSON QUESTIONNAIRE
(SPANISH VERSION)
Ages 12-74 Years

SERVICIOS DE SALUD

A1. ¿Diría usted que su salud en general es excelente, muy buena, buena, regular, o mala?

(118)
- 1 ☐ excelente
- 2 ☐ muy buena
- 3 ☐ buena
- 4 ☐ regular
- 5 ☐ mala

A2. ¿Cuánto control piensa usted que tiene sobre su salud futura: mucho, algo, muy poco o nada?

(119)
- 1 ☐ mucho
- 2 ☐ algo
- 3 ☐ muy poco
- 4 ☐ nada
- 9 ☐ NS

A3. En promedio, ¿ cuántas horas duerme más o menos al día, es decir, durante un período de 24 horas?

(120)
_____ horas
número

A4. En su trabajo o quehaceres domésticos, ¿qué parte del tiempo más o menos usa gran cantidad de músculos de brazo, pierna o espalda, como para levantar, estirar, cargar, escarbar, u otras cosas? ¿Diría usted: la mayoría del tiempo, parte del tiempo, o casi nunca o nunca?

(121)

la mayoría del tiempo	parte del tiempo	casi nunca o nunca
1 ☐	2 ☐	3 ☐

A5. Fuera de su empleo o trabajo alrededor de la casa, ¿con qué frecuencia participa usted en actividades que requieren gran movimiento del cuerpo o energía, como juegos de pelota, montar en bicicleta, bailar, o actividades similares? ¿Diría usted: frecuentemente, algunas veces, o casi nunca o nunca?

(122)

frecuentemente	algunas veces	casi nunca o nunca
1 ☐	2 ☐	3 ☐

A6. Ahora me gustaría hacerle unas preguntas sobre su uso de servicios para el cuidado de salud.

¿Hay una clínica, un centro de salud, una oficina de médico, u otro lugar en particular a que usted va usualmente cuando está enfermo o necesita consejos sobre su salud?

(123)

1 ☐ S   2 ☐ N(A18)

A7. ¿Qué clase de lugar es — una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar?

PROBE IF CLINIC: ¿Es clínica de paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?

PROBE IF HEALTH CENTER: ¿Es un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro rural de salud o alguna otra clase de centro de salud?

PROBE IF HOSPITAL: ¿Es una clínica para paciente externo o sala de emergencia?

(124)
- 01 ☐ casa
- 02 ☐ oficina de médico o clínica privada (A9)
- 03 ☐ clínica de compañía o escuela
- 04 ☐ clínica de paciente externo de hospital
- 05 ☐ clínica para trabajadores migrantes
- 06 ☐ otra clínica 07 _____
  especifique
- 08 ☐ sala de emergencia de hospital
- 09 ☐ centro de salud de la comunidad, del vecindario, o familiar
- 10 ☐ centro rural de salud
- 11 ☐ HMO (Organización para el Mantenimiento de la Salud)/grupo prepagado
- 12 ☐ otro lugar 13 _____
  especifique

A8. ¿Hay alguna persona en particular que usted ve usualmente en (place in A7)?

(125)

1 ☐ S   2 ☐ N

1

A9.	Ahora quisiera hacerle algunas preguntas sobre su última visita a (place in A7). ¿Cuánto tiempo hace desde esa visita?	(126)	1 ☐ menos de 1 mes 2 ☐ 1 mes, menos de 6 meses 3 ☐ 6 meses, menos de 1 año 4 ☐ 1 año, menos de 5 años 5 ☐ 5 años o más 9 ·☐ NS
A10.	¿Cuánto tiempo le tomó más o menos para llegar a (place in A7) para esa visita? PROBE IF NECESSARY: ¿Diría usted que le tomó más de 30 minutos o menos de 30 minutos?	(127) (128)	_____minutos número OR 1 ☐ más de 30 minutos 2 ☐ menos de 30 minutos
A11.	¿Tuvo (una cita/un turno) para esa visita?	(129)	1 ☐ S ☐ N(A13)
A12.	¿Cuánto tiempo pasó más o menos entre cuando hizo la cita y cuando usted fue a esa visita?	(130)	000 ☐ menos de un día _____días número
A13.	Después de que llegó a (place in A7) para esa visita, ¿cuánto tiempo tuvo que esperar más o menos antes que le atendieran?	(131) (132)	_____ { 1☐ minutos número { 2☐ horas

A14.	¿Cuál fue la razón principal por esa visita?	(133)	DO NOT READ.
			
			01 ☐ UNA ENFERMEDAD O UN MALESTAR
			02 ☐ UNA HERIDA
			03 ☐ UNA VISITA DE SEGUIMIENTO/
			      "FOLLOW-UP"
			04 ☐ UN EXAMEN GENERAL
			05 ☐ UNA INYECCIÓN
			06 ☐ PARA UNA RECETA
			07 ☐ CUIDADO PRE- O POST-NATAL
			08 ☐ ALGUNA OTRA RAZÓN 09_____
			                    ESPECIFIQUE

A15.	En general, ¿qué satisfecho estuvo usted con el servicio que recibió en esa visita? ¿Diría usted que estuvo muy satisfecho, algo satisfecho o nada satisfecho?	(134)	1 ☐ muy satisfecho (A17) 2 ☐ algo satisfecho 3 ☐ nada satisfecho

A16.	¿Por qué no estuvo (completamente) satisfecho con el cuidado de salud que recibió en esa visita?
	
	PROBE FOR MAIN REASON.
		(135)	DO NOT READ.
			
			01 ☐ CUESTA DEMASIADO
			02 ☐ TUVO QUE ESPERAR DEMASIADO
			03 ☐ PROBLEMA DE LENGUAJE – NO PUDO
			      COMUNICARSE
			04 ☐ EL MÉDICO NO LE DIÓ SUFICIENTE
			      TIEMPO AL "SP"
			05 ☐ EL MÉDICO U OTRO PERSONAL NO LO
			      TRATO BIEN
			06 ☐ LA CONDICIÓN NO MEJORÓ DESPUES
			      DEL TRATAMIENTO O MEDICAMENTO
			07 ☐ EL MÉDICO NO DIAGNOSTICÓ NI TRATÓ
			      LA CONDICIÓN
			08 ☐ OTRO - 09_____
			                    ESPECIFIQUE
			99 ☐ NS

A17.	¿Ha visitado cualquier otra clínica, centro de salud, oficina de médico, u otro lugar para el cuidado de salud desde su última visita a (place in A7)?	(136)	1 ☐ S(A21) 2 ☐ N(A30)

2

HAND CARD ASP 1.

A18. Muchas personas no tienen un lugar en particular donde usualmente van cuando están enfermos o necesitan consejos sobre su salud. ¿Podría usted darme el número de la frase que mejor explica la razón principal por la cual usted no tiene un lugar en particular donde usualmente va?

1 — Tengo dos o más médicos o lugares a los que usualmente voy dependiendo del problema que tenga.
2 — No he necesitado médico.
3 — El médico que me atendía ya no está disponible.
4 — No he podido encontrar el médico apropiado.
5 — Acabo de mudarme al área.
6 — Otra razón-especifique por favor.

(137) 1 2 3 4 5 6 ⌐
7 _____
                especifique

A19. Aunque usted dijo que no tiene un lugar en particular donde recibe cuidado de salud, ¿hay alguna persona en particular que usualmente ve cuando está enfermo y necesita cuidado de salud?

(138) 1 ☐ S   2 ☐ N(A21)

A20. ¿Dónde ve usualmente a esta persona — en casa, en una clínica, en un centro de salud, en un hospital, en una oficina de médico o en algún otro lugar?

PROBE IF CLINIC: ¿Es una clínica para paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?

PROBE IF HEALTH CENTER: ¿Es un centro de salud de la comunidad, o del vecindario, un centro de salud familiar, un centro de salud rural o alguna otra clase de centro de salud?

PROBE IF HOSPITAL: ¿Es una clínica para paciente externo o sala de emergencia?

(139)
01 ☐ casa
02 ☐ oficina de médico o clínica privada
03 ☐ clínica de compañía o escuela
04 ☐ clínica para paciente externo de hospital
05 ☐ clínica para trabajadores migrantes
06 ☐ otra clínica 07 _____
                        especifique
08 ☐ sala de emergencia de hospital
09 ☐ centro de salud de la comunidad o del vecindario, o familiar
10 ☐ centro rural de salud
11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
12 ☐ otro lugar 13 _____
                      especifique

A21. Ahora me gustaría hacerle unas preguntas sobre su última visita a cualquier clínica, centro de salud, oficina de médico u otro lugar para el cuidado de salud. ¿Cuánto tiempo hace desde su última visita para el cuidado de salud?

(140)
1 ☐ menos de un mes
2 ☐ 1 mes, menos de 6 meses
3 ☐ 6 meses, menos de un año
4 ☐ 1 año, menos de 5 años
5 ☐ 5 años o más
6 ☐ Nunca (A30)
9 ☐ NS

3

A22. ¿Qué clase de lugar visitó para esa visita — fue una clínica, un centro de salud, un hospital, una oficina de médico o algún otro lugar?

PROBE IF CLINIC: ¿Fue una clínica de paciente externo de hospital, una clínica de compañía o escuela, una clínica para trabajadores migrantes o alguna otra clase de clínica?

PROBE IF HEALTH CENTER: ¿Fue un centro de salud de la comunidad o del vecindario, un centro de salud familiar, un centro rural de salud o alguna otra clase de centro de salud?

PROBE IF HOSPITAL: ¿Fue una clínica para paciente externo o sala de emergencia?

(141)
01 ☐ casa
02 ☐ oficina de médico o clínica privada
03 ☐ clínica de compañía o escuela
04 ☐ clínica de paciente externo de hospital
05 ☐ clínica para trabajadores migrantes
06 ☐ otro clínica 07 _____
                    especifique

08 ☐ sala de emergencia de hospital
09 ☐ centro de salud de la comunidad, del vecindario, o familiar
10 ☐ centro rural de salud
11 ☐ HMO (Organización para el Mantenimiento de la Salud)/ grupo prepagado
12 ☐ otro lugar 13 _____
                    especifique

A23. ¿Cuánto tiempo le tomó más o menos para llegar a (place in A22) para esa visita?

PROBE IF NECESSARY: ¿Diría usted que le tomó más de 30 minutos o menos de 30 minutos?

(142) _____ minutos
              número

OR

(143) 1 ☐ más de 30 minutos
      2 ☐ menos de 30 minutos

A24. ¿Tuvo (una cita/un turno) para esa visita?

(144) 1 ☐ S   2 ☐ N(A26)

A25. ¿Cuánto tiempo pasó más o menos entre cuando hizo la cita y cuando usted fue para esa visita?

(145) 000 ☐ menos de un día

_____ días
        número

A26. Después de que llegó a (place in A22) para esa visita, ¿cuánto tiempo tuvo que esperar más o menos antes que le atendieran?

(146)(147) _____ { 1 ☐ minutos
              número   2 ☐ horas

A27. ¿Cuál fue la razón principal por esa visita?

DO NOT READ.

(148)
01 ☐ UNA ENFERMEDAD O UN MALESTAR
02 ☐ UNA HERIDA
03 ☐ UNA VISITA DE SEGUIMIENTO/"FOLLOW-UP"
04 ☐ UN EXAMEN GENERAL
05 ☐ UNA INYECCIÓN
06 ☐ PARA UNA RECETA
07 ☐ CUIDADO PRE- O POST-NATAL
08 ☐ ALGUNA OTRA RAZÓN 09 _____
                            especifique

A28. En general, ¿qué satisfecho estuvo usted con el servicio que recibió en esa visita?
¿Diría usted que estuvo muy satisfecho, algo satisfecho o nada satisfecho?

(149) 1 ☐ muy satisfecho (A30)
      2 ☐ algo satisfecho
      3 ☐ nada satisfecho

4

A29. ¿Por qué no estuvo (completamente) satisfecho con el cuidado de salud que recibió en esa visita?

PROBE FOR MAIN REASON.

(150)　DO NOT READ.

- 01 ☐ CUESTA DEMASIADO
- 02 ☐ TUVO QUE ESPERAR DEMASIADO
- 03 ☐ PROBLEMA DE LENGUAJE – NO PUDO COMUNICARSE
- 04 ☐ EL MÉDICO NO LE DIÓ SUFICIENTE TIEMPO AL "SP"
- 05 ☐ EL MÉDICO U OTRO PERSONAL NO LO TRATÓ BIEN
- 06 ☐ LA CONDICIÓN NO MEJORÓ DESPUÉS DEL TRATAMIENTO O MEDICAMENTO
- 07 ☐ EL MÉDICO NO DIAGNOSTICÓ NI TRATÓ LA CONDICIÓN
- 08 ☐ OTRO – 09 _____
  　　　　　　　　　　　　ESPECIFIQUE
- 99 ☐ NS

A30. Hay algunas personas que vemos algunas veces que proveen cuidado de salud, tal como curanderos, sobadores (herbolarios/hierberos), (espiritualistas/espiritistas), y otros. En los 12 meses pasados, ¿ha visto o hablado con cualquiera de estas personas sobre el cuidado de salud?

(151)　1 ☐ S　　2 ☐ N

A31. A veces las personas tienen dificultad en obtener cuidado médico. ¿Ha tenido usted alguna dificultad en obtener cuidado médico-

A32. ¿Este problema le impidió obtener cuidado médico para usted mismo?

		A31	A32
1.	Porque el cuidado no estaba disponible cuando lo necesitaba?	(152) 1 ☐ S(A32) 2 ☐ N	(153) 1 ☐ S　　2 ☐ N
2.	Por lo que costaba?	(154) 1 ☐ S(A32) 2 ☐ N	(155) 1 ☐ S　　2 ☐ N
3.	Porque no sabía adonde ir?	(156) 1 ☐ S(A32) 2 ☐ N	(157) 1 ☐ S　　2 ☐ N
4.	Porque no tenía como llegar?	(158) 1 ☐ S(A32) 2 ☐ N	(159) 1 ☐ S　　2 ☐ N
5.	Porque el horario no era conveniente?	(160) 1 ☐ S(A32) 2 ☐ N	(161) 1 ☐ S　　2 ☐ N
6.	Porque tenía que esperar demasiado para obtener (una cita/un turno)?	(162) 1 ☐ S(A32) 2 ☐ N	(163) 1 ☐ S　　2 ☐ N
(7.	Porque necesitaba a alguien que le cuidara sus niños?)	(164) 1 ☐ S(A32) 2 ☐ N	(165) 1 ☐ S　　2 ☐ N
8.	Porque perdería sueldo por faltar al trabajo?	(166) 1 ☐ S(A32) 2 ☐ N	(167) 1 ☐ S　　2 ☐ N
9.	Porque tenía que esperar demasiado en la oficina o clínica?	(168) 1 ☐ S(A32) 2 ☐ N	(169) 1 ☐ S　　2 ☐ N
10.	Porque el personal de la oficina o la clínica le faltó el respeto?	(170) 1 ☐ S(A32) 2 ☐ N	(171) 1 ☐ S　　2 ☐ N
11.	Porque no tenía confianza en el personal?	(172) 1 ☐ S(A32) 2 ☐ N	(173) 1 ☐ S　　2 ☐ N
12.	Porque no hablaban español?	(174) 1 ☐ S(A32) 2 ☐ N	(175) 1 ☐ S　　2 ☐ N
13.	Porque no había empleados (hispanos) en la oficina o clínica?	(176) 1 ☐ S(A32) 2 ☐ N	(177) 1 ☐ S　　2 ☐ N

5

A33.	¿Cuánto tiempo hace más o menos desde que tuvo un examen físico rutinario; es decir, no para una enfermedad en particular, sino para un examen en general?	(178)	1 ☐ hace menos de 1 año 2 ☐ 1 año, menos de 2 años 3 ☐ 2 años, menos de 5 años 4 ☐ 5 años o más 5 ☐ nunca 9 ☐ NS
A34.	Durante los 12 meses pasados, es decir, desde (date) hace un año, ¿pasó usted una noche o más internado en un hospital?	(179)	1 ☐ S 2☐ N(B1)
A35.	Durante los 12 meses pasados, ¿ cuántas veces diferentes fue internado una noche o más en el hospital?	(180)	_____ veces número

CONDICIONES SELECCIONADAS

B1.	¿Le ha dicho alguna vez un médico que usted tenía tuberculosis?	(181)	1 ☐ S 2 ☐ N
B2.	¿Ha vivido alguna vez en un hogar con una persona que tenía tuberculosis activa?	(182)	1 ☐ S 2 ☐ N 9 ☐ NS
B3.	¿Ha tenido alguna vez anemia?	(183)	1 ☐ S 2 ☐ N (B7) 9 ☐ NS (B7)
B4.	¿Le dijo alguna vez un médico que tenía anemia?	(184)	1 ☐ S 2 ☐ N (B7)
B5.	¿Todavía tiene anemia?	(185)	1 ☐ S 2 ☐ N 9 ☐ NS
B6.	¿Fue atendido para esta condición por un médico?	(186)	1 ☐ S 2 ☐ N
B7.	Más o menos, ¿qué estatura tiene usted sin zapatos?	(187)–(188)	_____ / _____ pies pulgadas
B8.	Más o menos, ¿cuánto pesa sin zapatos? IF NOW PREGNANT, RECORD CURRENT WEIGHT, THEN ASK: Más o menos, ¿cuánto pesaba inmediatamente antes de quedar embarazada?	(189) (190)	peso actual: _____ libras número peso antes de quedar embarazada: _____ libras número
B9.	¿Considera usted que ahora está sobre peso, bajo peso, o más o menos bien?	(191)	1 ☐ sobre peso 2 ☐ bajo peso 3 ☐ más o menos bien 9 ☐ NS
B10.	CHECK ITEM	(192)	1 ☐ Age 25 or younger (B12) 2 ☐ Age 26+ (B11)
B11.	Más o menos, ¿cuánto pesaba cuando tenía 25 años de edad?	(193)	_____ libras número
B12.	¿Tiene usted dificultad en morder o en masticar cualquier tipo de comida, tal como carnes firmes, o manzanas?	(194)	1 ☐ S 2 ☐ N

6

B13. ¿Cómo describiría la condición de sus <u>dientes</u>: excelente, muy buena, buena, regular o mala?	(195)	1 ☐ excelente 2 ☐ muy buena 3 ☐ buena 4 ☐ regular 5 ☐ mala 6 ☐ no tiene dientes
B14. ¿Cómo describiría la condición de sus <u>encías</u>: excelente, muy buena, buena, regular o mala?	(196)	1 ☐ excelente 2 ☐ muy buena 3 ☐ buena 4 ☐ regular 5 ☐ mala
B15. Más o menos, ¿cuánto tiempo hace desde la <u>última</u> vez que vió a un dentista o higienista dental para cuidado dental?	(197)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 12 meses 3 ☐ más de 12 meses a 2 años 4 ☐ más de 2 años a 5 años 5 ☐ más de 5 años 6 ☐ nunca (B20) 9 ☐ NS
B16. ¿Cuál fue la razón principal por su última visita para cuidado dental?	(198)	DO NOT READ 01 ☐ EXAMEN REGULAR 02 ☐ PARA LIMPIAR LOS DIENTES 03 ☐ PARA EMPASTAR LOS DIENTES 04 ☐ PROBLEMA CON LAS ENCÍAS 05 ☐ PARA SACAR DIENTES U OTRA CIRUGÍA 06 ☐ DOLOR DE DIENTE 07 ☐ AJUSTE O REPARACIÓN DE LA PLACA DE DIENTES/DENTADURA POSTIZA 08 ☐ PARA QUE HICIERAN UNA PLACA DENTAL/DENTADURA POSTIZA 09 ☐ PARA UNA RECETA 10 ☐ ALGUNA OTRA RAZÓN 11 _____ ESPECIFIQUE
IF "PARA LIMPIAR LOS DIENTES" IN B16, SKIP TO B19. B17. ¿Le ha limpiado alguna vez los dientes un dentista o higienista dental?	(199)	 1 ☐ S 2 ☐ N (B20)
B18. ¿Cuándo fue la última vez que se los limpiaron?	(200)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 12 meses 3 ☐ más de 12 meses a 2 años 4 ☐ más de 2 años a 5 años (B20) 5 ☐ más de 5 años (B20) 9 ☐ NS (B20)
B19. Durante los 2 años pasados, ¿cuántas veces le ha limpiado los dientes un dentista o higienista dental?	(201)	1 ☐ una vez 2 ☐ dos veces 3 ☐ tres veces 4 ☐ cuatro o más veces 9 ☐ NS
B20. ¿Tiene seguro de salud que paga por el cuidado dental?	(202)	1 ☐ S 2 ☐ N 9 ☐ NS

7

C1. ¿Tiene usted diabetes o azúcar en la sangre?	(203)	1 ☐ S 2 ☐ N (C6)
C2. ¿Le dijo un médico que la tiene?	(204)	1 ☐ S (C4) 2 ☐ N
C3. ¿Le dijo algún otro profesional de salud, tal como una enfermera o un "physician's assistant," que la tiene?	(205)	1 ☐ S 2 ☐ N (C6)
C4. ¿Cuánto tiempo hace que el (médico/profesional de salud) le dijo por primera vez que tenía diabetes?	(206)	hace _____ años número
C5. ¿Qué edad tenía entonces?	(207)	_____ años de edad número

C6. ¿Le ha dicho alguna vez un médico u otro profesional de salud que usted tiene —

(IF "S," ASK C7)

C7. ¿Qué edad tenia usted entonces?

Diabetes marginal/en el límite de diabetes/ "borderline diabetes?"	(208) 1 ☐ S (C7) 2 ☐ N	(209) _____ años de edad número
Diabetes potencial/la posibilidad de diabetes/ "potential diabetes?"	(210) 1 ☐ S (C7) 2 ☐ N	(211) _____ años de edad número
Prediabetes?	(212) 1 ☐ S (C7) 2 ☐ N	(213) _____ años de edad número

C8. CHECK ITEM. MARK FIRST APPLICABLE BOX ONLY.

(214)
1 ☐ Diabetes — "S" in either C2 or C3
2 ☐ Borderline diabetes
3 ☐ Potential diabetes
4 ☐ Prediabetes
5 ☐ 6 _____
specify type

7 ☐ none of these (D1)

IN QUESTIONS C9-C27 ASK ABOUT CONDITION
MARKED IN C8.

C9. Cuando el (médico/profesional de salud) le dijo por primera vez que usted tenía (diabetes/...), ¿le hicieron cualquiera de las siguientes pruebas?

a. ¿Prueba oral de tolerancia a la glucosa, en la cual usted toma una bebida dulce y le (toman/sacan) muestras de sangre del brazo por varias horas después?	(215)	1 ☐ S 2 ☐ N 9 ☐ NS
b. ¿Una prueba para el azúcar o la glucosa en la orina?	(216)	1 ☐ S 2 ☐ N 9 ☐ NS
c. ¿Una prueba para el azúcar o la glucosa en la sangre?	(217)	1 ☐ S 2 ☐ N 9 ☐ NS

8

C10. ¿Era usted paciente en un hospital cuando un (médico/ profesional de salud) le dijo por primera vez que usted tenía (diabetes/...)?	(218)	1 ☐ S 2 ☐ N
C11. (Sin contar la primera vez) ¿Ha estado hospitalizado alguna vez debido a su (diabetes/...)?	(219)	1 ☐ S 2 ☐ N
C12. Más o menos, ¿cuánto pesaba usted la primera vez que le dijeron que tenía (diabetes/...)?	(220)	_____ libras número
C13. ¿Ha recibido alguna vez inyecciones de insulina?	(221)	1 ☐ S 2 ☐ N (C18)
C14. ¿Ha estado recibiendo inyecciones de insulina durante la mayor parte de los 12 meses pasados?	(222)	1 ☐ S 2 ☐ N
C15. ¿Está recibiendo inyecciones de insulina ahora?	(223)	1 ☐ S 2 ☐ N (C17)
C16. Más o menos, ¿cuántas unidades de insulina toma por día?	(224)	_____ unidades por día número
C17. ¿Por cuántos años (ha estado tomando/tomaba) inyecciones de insulina?	(225)	00 ☐ menos de 1 año _____ años número
C18. ¿Ha tomado alguna vez píldoras para la diabetes?	(226)	1 ☐ S 2 ☐ N (C23)
C19. ¿Las ha estado tomando durante la mayor parte de los 12 meses pasados?	(227)	1 ☐ S 2 ☐ N
C20. ¿Ahora toma píldoras para la diabetes?	(228)	1 ☐ S 2 ☐ N (C22)
C21. ¿Cuál es el nombre de la medicina que está tomando?	(229)	1 _____ especifique
C22. ¿Por cuántos años (ha estado tomando/tomaba) píldoras para la diabetes?	(230)	00 ☐ menos de 1 año _____ años número
C23. ¿Le ha dado alguna vez un médico, enfermera u otro profesional de salud una dieta o instrucciones sobre cuales alimentos debe comer para su (diabetes/...)?	(231)	1 ☐ S 2 ☐ N (C25)
C24. ¿Sigue usted ahora la dieta o las instrucciones?	(232)	1 ☐ S 2 ☐ N
C25. ¿Lleva o trae puesto algo que le identifique como alguien que tiene (diabetes/...)?	(233)	1 ☐ S 2 ☐ N
C26. ¿Cuándo fue la última vez que vió o habló con un médico u otro profesional de salud acerca de su (diabetes/...)?	(234)	1 ☐ durante las 2 semanas pasadas 2 ☐ más de 2 semanas a 6 meses 3 ☐ más de 6 meses a 12 meses 4 ☐ más de 12 meses a 2 años 5 ☐ más de 2 años a 5 años } (D1) 6 ☐ hace más de 5 años
C27. Más o menos, ¿cuántas veces por año ve usted a un médico u otro profesional de salud acerca de su (diabetes/...)?	(235)	1 ☐ menos de una vez por año 2 ☐ una vez 3 ☐ dos veces 4 ☐ 3-4 veces 5 ☐ 5 veces o más 6 ☐ no tiene plan regular

9

LA VISTA Y EL OÍDO

D1. ¿Ha tenido usted <u>alguna vez</u> problemas para ver con uno o ambos ojos cuando <u>no</u> usa (lentes/anteojos/espejuelos) o lentes de contacto?

(236) 1 ☐ S 2 ☐ N (D10)

D2. ¿Qué edad tenía cuando empezó a tener dificultades con la vista?

(237)
01 ☐ 0-4 años de edad
02 ☐ 5-9 años de edad
03 ☐ 10-19 años de edad
04 ☐ 20-29 años de edad
05 ☐ 30-39 años de edad
06 ☐ 40-49 años de edad
07 ☐ 50-59 años de edad
08 ☐ 60-64 años de edad
09 ☐ 65 años de edad o mayor

D3. ¿Vió usted <u>alguna vez</u> a un médico para eso?

(238) 1 ☐ S 2 ☐ N

D4. ¿Usa (lentes/anteojos/espejuelos) o lentes de contacto?

(239) 1 ☐ S 2 ☐ N (D6)

D5. ¿Tiene problemas con la vista aún cuando usa (lentes/anteojos/espejuelos) o lentes de contacto?

(240) 1 ☐ S (D8) 2 ☐ N (D8)

D6. ¿Ha usado alguna vez (lentes/anteojos/espejuelos) o lentes de contacto?

(241) 1 ☐ S 2 ☐ N (D10)

D7. ¿Por qué dejó de usarlos?

MARK ALL THAT APPLY. DO NOT READ

(242) 1 ☐ YA NO LOS NECESITO

(243) 1 ☐ NO ME AYUDABAN

(244) 1 ☐ SON INCONVENIENTES

(245) 1 ☐ OTRO [2]_____
ESPECIFIQUE

D8. ¿Para qué le recetaron los (lentes/anteojos/espejuelos) o lentes de contacto?

MARK ALL THAT APPLY. DO NOT READ

(246) 1 ☐ LEER/HACER TRABAJOS DE CERCA

(247) 1 ☐ VER OBJETOS LEJANOS

(248) 1 ☐ OTRO —[2]_____
ESPECIFIQUE

D9. ¿Con qué frecuencia (usa/usaba) sus (lentes/anteojos/espejuelos) o lentes de contacto: todo el tiempo, la mayoría del tiempo, casi nunca, o nunca?

(249)
1 ☐ todo el tiempo
2 ☐ la mayoría del tiempo
3 ☐ casi nunca
4 ☐ nunca

D10. ¿Cuándo fue la última vez que le examinaron la vista?

(250)
1 ☐ hace 6 meses o menos
2 ☐ más de 6 meses a 12 meses
3 ☐ más de 12 meses a 2 años
4 ☐ más de 2 años a 5 años
5 ☐ más de 5 años
6 ☐ nunca
9 ☐ NS

D11. ¿Ha tenido usted <u>alguna vez</u> problemas para oír con uno o los dos oídos? No incluya ningunos problemas que duraron sólo un período corto, tal como cuando tiene un catarro.	(251)	1 ☐ S 2 ☐ N (E1)
D12. ¿Vió <u>alguna vez</u> a un médico sobre eso?	(252)	1 ☐ S 2 ☐ N
D13. ¿Qué edad tenía usted cuando primero empezó a tener problemas para oír?	(253)	1 ☐ 0-4 años de edad 2 ☐ 5-9 años de edad 3 ☐ 10-19 años de edad 4 ☐ 20-29 años de edad 5 ☐ 30-39 años de edad 6 ☐ 40-49 años de edad 7 ☐ 50 años de edad o mayor
D14. Desde que empezó este problema, ¿se ha puesto peor, mejor, o se ha quedado más o menos igual?	(254)	1 ☐ peor 2 ☐ mejor 3 ☐ igual
D15. ¿Ha tenido <u>alguna vez</u> una operación de los oídos? INCLUDE HAVING TUBES PLACED IN THE EARS.	(255)	1 ☐ S 2 ☐ N
D16. ¿Ha usado alguna vez un (audífono/aparato para oír/ "hearing aid")?	(256)	1 ☐ S 2 ☐ N
D17. ¿Cómo describiría su capacidad para oír (sin aparato para oír) — buena, tiene un poco de dificultad, tiene mucha dificultad o está sordo?	(257)	1 ☐ buena 2 ☐ poco de dificultad 3 ☐ mucha dificultad 4 ☐ sordo
HIPERTENSION		
E1. ¿Cuánto tiempo hace <u>más o menos</u> desde <u>la última</u> vez que le tomaron la presión?	(258)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a un año 3 ☐ más de un año 4 ☐ nunca (E6)
E2. ¿Quién le tomó la presión la <u>última vez</u>?	(259)	DO NOT READ. 01 ☐ MÉDICO 02 ☐ ENFERMERA 03 ☐ OTRO PROFESIONAL DE SALUD — 04 _____ especifique 05 ☐ MIEMBRO DE LA FAMILIA 06 ☐ AMIGO 07 ☐ USTED MISMO (E4) 08 ☐ OTRO 09 _____ especifique 99 ☐ NS

E3. ¿Qué le dijeron la última vez que le tomaron la presión?
 	
¿Qué estaba:
 	
    Un poco alta, y necesita tratamiento?
    Un poco alta, y necesita observarse?
    Un poco alta, pero no hay necesidad
        de preocuparse? . . . .
    Normal? . . . .
    Otra cosa? _____
                 especifique
	(260) 01 ☐ alta, necesita tratamiento
	02 ☐ alta, necesita observación
	03 ☐ alta, ninguna preocupación
	
	04 ☐ normal
	05 ☐ otra cosa —
	
	   06 _____
	              especifique
	
	07 ☐ TOLD NUMBERS BUT NO
	      EXPLANATION
	
	08 ☐ NOT TOLD ANYTHING
	99 ☐ DK
		(E6)

IF "USTED MISMO" MARKED IN E2, ASK:
E4. La última vez que se tomó la presión, ¿usó un aparato accionado por monedas u otro aparato?
	(261) 1 ☐ accionado por moneda
	2 ☐ otro aparato —
	   3 _____
	              especifique	

E5. ¿Estaba la presión alta, baja o normal?	(262) 1 ☐ alta 2 ☐ baja 3 ☐ normal 9 ☐ NS	
E6. ¿Cree usted que personas con la presión alta pueden darse cuenta cuando tienen la presión alta? DO NOT PROBE IF "NO SABE."	(263) 1 ☐ S 2 ☐ N 9 ☐ NS	
E7. ¿Le ha dicho un médico <u>alguna vez</u> que usted tenía la presión alta?	(264) 1 ☐ S (E10) 2 ☐ N	
E8. Otro nombre para la presión alta es hipertensión. ¿Le ha dicho un médico <u>alguna vez</u> que usted tenía hipertensión?	(265) 1 ☐ S (E10) 2 ☐ N	
E9. ¿Le ha dicho <u>alguna vez</u> algún otro profesional de salud, tal como una enfermera o un "physician's assistant," que usted tenía alta presión o hipertensión?	(266) 1 ☐ S 2 ☐ N (F1)	
E10. ¿Cuántas veces le dijeron que usted tenía (alta presión/ hipertensión): una vez, o dos o más veces?	(267) 1 ☐ una vez 2 ☐ dos o más veces	
E11. ¿Ha sido aconsejado <u>alguna vez</u> por un médico u otro profesional de salud que bajara de peso debido a su (alta presión/hipertensión)?	(268) 1 ☐ S ☐ N (E17)	
E12. ¿Bajó la cantidad de peso que se le aconsejó?	(269) 1 ☐ S ☐ N	
E13. ¿Pesa <u>ahora</u> lo que le recomendaron debido a su (alta presión/hipertensión)?	(270) 1 ☐ S (E17) ☐ N	
E14. ¿Está ahora tratando de bajar de peso debido a su (alta presión/hipertensión)?	(271) 1 ☐ S (E17) ☐ N	
E15. ¿Está tratando de mantener su peso actual?	(272) 1 ☐ S ☐ N	

12

E16. ¿Por qué no está tratando de bajar de peso?

(273) 1 ☐ NO TUVO BUEN RESULTADO

(274) 1 ☐ EL MÉDICO DIJO QUE LO DES-CONTINUARA

(275) 1 ☐ YA NO NECESITO PERDER MÁS

(276) 1 ☐ MUCHA MOLESTIA

(277) 1 ☐ OTRA RAZÓN 2 _____
ESPECIFIQUE

(278) 9 ☐ NS/NO RAZÓN

E17. ¿Le ha aconsejado <u>alguna vez</u> un médico u otro pro-fesional de salud que use menos sal debido a su (alta presión/hipertensión)?

(279) 1 ☐ S   2 ☐ N (E22)

E18. ¿Redujó alguna vez su uso de sal después que le aconsejaron que lo hiciera debido a su (alta presión/hipertensión)?

(280) 1 ☐ S (E20) 2 ☐ N

E19. ¿Por qué no redujó usted alguna vez su uso de sal?

(281) 1 ☐ NO TUVO BUEN RESULTADO

(282) 1 ☐ PENSÉ QUE NO TUVIERA EFECTO

(283) 1 ☐ MUCHA DIFICULTAD

(284) 1 ☐ OTRA RAZÓN 2 _____
ESPECIFIQUE

(285) 9 ☐ NS/NO RAZÓN

}(E22)

E20. ¿Usa <u>ahora</u> más sal, menos sal o más o menos la misma cantidad de sal que usaba cuando le aconsejaron que usara menos sal?

(286) 1 ☐ más
2 ☐ menos (E22)
3 ☐ lo mismo

E21. ¿Por qué no usa menos sal ahora?

(287) 1 ☐ NO TUVO BUEN RESULTADO

(288) 1 ☐ PENSÉ QUE NO TUVIERA EFECTO

(289) 1 ☐ MÉDICO DIJO QUE PODÍA USAR MÁS SAL

(290) 1 ☐ MUCHA DIFICULTAD

(291) 1 ☐ OTRA RAZÓN 2 _____
ESPECIFIQUE

(292) 9 ☐ NS/NO RAZÓN

13

E22. ¿Le ha recetado un médico alguna vez medicina para su (alta presión/hipertensión)?

(293)   1 ☐ S   2 ☐ N (E26)

E23. ¿Está tomando ahora alguna medicina recetada por un médico para su (alta presión/hipertensión)?

(294)   1 ☐ S   2 ☐ N (E25)

E24. Muchas personas tienen dificultad en acordarse de tomar su medicina regularmente. ¿Diría usted que toma su medicina exactamente como debe todos los días, que a veces se le pasa pero no frecuentemente, que se le pasa muy seguido, que raramente toma la medicina como debe, o que nunca toma la medicina como debe?

(295)   1 ☐ exactamente todos los días
2 ☐ a veces se le pasa
3 ☐ se le pasa muy seguido
4 ☐ raramente la toma como debe
5 ☐ nunca la toma como debe

} E(26)

E25. ¿Por qué dejó de tomar su medicina?

MARK ALL THAT APPLY. DO NOT READ.

(296)   1 ☐ SOLO TOMA CUANDO NECESITA

(297)   1 ☐ MÉDICO DIJO QUE PARARA

(298)   1 ☐ YA NO LA NECESITABA

(299)   1 ☐ MUCHA MOLESTIA

(300)   1 ☐ SE TERMINÓ LA MEDICINA

(301)   1 ☐ CUESTA MUCHO

(302)   1 ☐ MALOS EFECTOS [2]_____
                                        ESPECIFIQUE

(303)   1 ☐ OTRO — [2]_____
                                        ESPECIFIQUE

(304)   9 ☐ NS

E26. ¿Ve a un médico u otro profesional de salud regularmente sobre su (alta presión/hipertensión)?

(305)   1 ☐ S   2 ☐ N

E27. Más o menos, ¿cuántas veces por año ve a un médico u otro profesional de salud sobre su (alta presión/hipertensión)?

(306)   1 ☐ menos de una vez por año
2 ☐ una vez
3 ☐ dos veces
4 ☐ 3-4 veces
5 ☐ 5 veces o más
6 ☐ no tiene programa regular

E28. Más o menos, ¿cuánto tiempo hace desde la última vez que vió a un médico u otro profesional de salud sobre su (alta presión/hipertensión)?

(307)   1 ☐ hace menos de un mes
2 ☐ hace un mes
3 ☐ hace más de un mes a 6 meses
4 ☐ hace más de 6 meses a un año
5 ☐ hace más de un año

14

ENFERMEDAD DIGESTIVA

F1. CHECK ITEM	(308)	1 ☐ Age under 20 (J1) 2 ☐ Age 20+ (F2)
F2. ¿Le ha dicho un médico alguna vez que usted tenía piedras en la vesícula?	(309)	1 ☐ S 2 ☐ N
F3. ¿Le han tomado alguna vez rayos X de la vesícula biliar? Para rayos X de la vesícula biliar, usted toma píldoras la noche antes de los rayos X, y no se permite comer nada hasta después que le hagan los rayos X.	(310)	1 ☐ S 2 ☐ N
F4. ¿Le han hecho alguna vez cirugía o una operación para las piedras o para una enfermedad de la vesícula biliar?	(311)	1 ☐ S 2 ☐ N (F6)
F5. ¿Cuánto tiempo hace que tuvo su (última) cirugía u operación de la vesícula?	(312)	1 ☐ hace menos de cinco años 2 ☐ hace cinco años o más
F6. Durante el año pasado, ¿ha tenido algún ataque de náusea y/o vómito que duró más de 2 horas?	(313)	1 ☐ S 2 ☐ N (F17)
F7. Más o menos, ¿cuántos días durante el año pasado tuvo usted este problema?	(314)	999 ☐ NS _____ días número
F8. ¿Cuál fue el período más largo que le duró este problema durante el año pasado?	(315)	000 ☐ menos de un día (F10) _____ días número
IF ENTRY IN F8 IS 3 OR MORE DAYS, ASK: **F9.** ¿Cuántas veces durante el año pasado tuvo este problema por 3 días o más?	(316)	99 ☐ NS _____ veces número
F10. Durante el año pasado, ¿cuál fue el período de tiempo más largo que estuvo sin tener este problema?	(317)	1 ☐ menos de 1 mes 2 ☐ 1 mes, menos de 3 meses 3 ☐ 3 meses, menos de 6 meses 4 ☐ 6 meses o más 9 ☐ NS
F11. ¿Qué edad tenía la primera vez que se sintió mal y que le haya durado más de 2 horas?	(318)	_____ años de edad número
F12. ¿Tiene este malestar cuando está comiendo, después de comer, o no está relacionado con comer?	(319)	1 ☐ cuando está comiendo (F14) 2 ☐ después de comer (F13) 3 ☐ no está relacionado con comer (F14) 9 ☐ NS (F14)
F13. ¿Cuánto tiempo después de comer empieza a sentirse mal?	(320)	1 ☐ 1 hora o menos 2 ☐ más de 1, menos de 2 horas 3 ☐ 2 horas o más 9 ☐ NS

F 14. ¿Ha visitado alguna vez a un médico acerca de este malestar?	(688)	1 ☐ S 2 ☐ N (F16)
F 15. ¿Qué le dijo el médico que era?	(689)	1 _____(F17) especifique
F 16. ¿Qué fue la causa de este malestar?	(690)	1 _____ especifique
F 17. Durante los 5 años pasados, ¿ha tenido dolor en el abdomen o en la parte baja del pecho que duró media hora o más?	(321)	1 ☐ S 2 ☐ N (F37) 9 ☐ NS (F37)

F 18. Por favor, enséñeme donde estaba localizado el dolor.

MARK AREA(S) SHOWN

(322)-(330)

FRONT   BACK

F 19. ¿Cuándo fue la última vez que usted tuvo este dolor?	(331)	1 ☐ hace 6 meses o menos 2 ☐ más de 6 meses a 1 año 3 ☐ hace más de 1 año (F31)
F 20. ¿Cuánto tiempo le dura este dolor, usualmente?	(332)	1 ☐ 1 hora o menos 2 ☐ más de 1, hasta 5 horas 3 ☐ más de 5, hasta 24 horas 4 ☐ más de 24 horas 9 ☐ NS
F 21. Mientras tiene el dolor, ¿es constante o va y viene?	(333)	1 ☐ constante 2 ☐ va y viene 3 ☐ ambos
F 22. Cuando tiene el dolor, ¿se mueve o se acuesta y se queda quieto?	(334)	1 ☐ se mueve 2 ☐ se acuesta y se queda quieto 3 ☐ ambos
F 23. Más o menos, ¿a qué hora le empieza el dolor usualmente?	(335)-(336)	a la (las) _____ { 1 ☐ AM 2 ☐ PM OR 00 ☐ no hay tiempo en particular 99 ☐ NS
F 24. ¿Le ha despertado alguna vez este dolor?	(337)	1 ☐ S 2 ☐ N 9 ☐ NS
F 25. ¿Le viene este dolor cuando está comiendo, después de comer o no está relacionado con comer?	(338)	1 ☐ cuando está comiendo (F27) 2 ☐ después de comer (F26) 3 ☐ no está relacionado con comer (F27) 9 ☐ NS (F27)

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F26. ¿Cuánto tiempo después de comer le viene el dolor?

(339)
1 ☐ 1 hora o menos
2 ☐ más de 1 hora, a 2 horas
3 ☐ más de 2 horas
9 ☐ NS

F27. Usualmente, ¿se siente mal del estómago antes o después que le viene el dolor?

(340) 1 ☐ S   2 ☐ N   9 ☐ NS

F28. Entre un día o dos después de que le viene el dolor, ¿ha tenido alguno de los siguientes:

Fiebre o escalofríos? . . . . (341) 1 ☐ S   2 ☐ N   9 ☐ NS

Comezón/picazón? . . . . (342) 1 ☐ S   2 ☐ S   9 ☐ NS

Ictericia amarilla? . . . . (343) 1 ☐ S   2 ☐ N   9 ☐ NS

Orina extremadamente oscura? . . . . (344) 1 ☐ S   2 ☐ N   9 ☐ NS

(Evacuaciones/excrementos) de un color
extremadamente claro?. . . . . (345) 1 ☐ S   2 ☐ N   9 ☐ NS

F29. Más o menos, ¿cuántos días durante el año pasado ha tenido usted este dolor en el abdomen o en la parte baja del pecho?

(346) _____ días
                    número
999 ☐ NS

F30. En el año pasado, ¿cuál fue el período más largo de días, semanas, o meses en que no tuvo este dolor?

(347)(348)
_____   1 ☐ días
       número   2 ☐ semanas
                      3 ☐ meses

F31. ¿Qué edad tenía cuando tuvo el primer ataque de este dolor?

(349) _____ años de edad
                    número

F32. ¿Ha visitado alguna vez a un médico acerca de este dolor?

(350) ☐ S   ☐ N (F34)

F33. ¿Qué le dijo el médico que era?

(691) 1_____ (F35)
                    especifique

F34. ¿Qué fue la causa de este dolor?

(692) 1_____
                    especifique

F35. ¿Ha recibido alguna vez una inyección de medicina para aliviar el dolor?

(351) 1 ☐ S   2 ☐ N   9 ☐ NS

F36. ¿Ha sido hospitalizado alguna vez por el dolor?

(352) 1 ☐ S   2 ☐ N   9 ☐ NS

F37. Durante el año pasado, ¿ha tenido cualquiera de las siguientes clases de trastornos después de comer?

Llenura . . . . (353) 1 ☐ S   2 ☐ N   9 ☐ NS

Erutación. . . . . (354) 1 ☐ S   2 ☐ N   9 ☐ NS

(Malestar del estómago/estómago
revuelto) o vómito. (355) 1 ☐ S   2 ☐ N   9 ☐ NS

Sabor amargo en la boca . . . . (356) 1 ☐ S   2 ☐ N   9 ☐ NS

(Acedía/acidez) o ardor . . . . (357) 1 ☐ S   2 ☐ N   9 ☐ NS

Calambres en el estómago . . . . (358) 1 ☐ S   2 ☐ N   9 ☐ NS

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IF "N" OR "NS" TO <u>ALL</u>, SKIP TO QUESTION F40. **F38. Durante el año pasado, ¿con qúe frecuencia ha tenido (este trastorno/<u>cualquiera</u> de estos trastornos)?**	(359)	1 ☐ una o dos veces 2 ☐ 3 veces o más, pero menos de una vez por mes 3 ☐ como una vez por mes 4 ☐ semanalmente o casi semanalmente 5 ☐ diariamente o casi diariamente

F39. ¿Es causado el trastorno por cualquiera de los siguientes alimentos?

Leche	(360)	1 ☐ S	2 ☐ N	9 ☐ NS
Alimentos grasosos	(361)	1 ☐ S	2 ☐ N	9 ☐ NS
Vegetales verdes	(362)	1 ☐ S	2 ☐ N	9 ☐ NS
Mariscos o pescado	(363)	1 ☐ S	2 ☐ N	9 ☐ NS
Algún otro alimento 3_____ especifique	(364)	1 ☐ S	2 ☐ N	9 ☐ NS

F40. ¿Con qué frecuencia (elimina/evacua/obra/mueve el vientre/"hace número dos")?	(365)	1 ☐ 3 o más veces al día 2 ☐ dos veces al día 3 ☐ una vez al día 4 ☐ cada otro día 5 ☐ menos de cada otro día 9 ☐ NS

CONDICIONES CARDIOVASCULARES

G1. ¿Ha tenido alguna vez algún dolor o molestia en el pecho?	(366)	1 ☐ S (G3)　2 ☐ N
G2. ¿Ha tenido alguna vez alguna presión o pesadez en el pecho?	(367)	1 ☐ S　　2 ☐ N (G13)
G3. ¿Le viene esto cuando camina cuesta arriba o de prisa?	(368)	1 ☐ S　　2 ☐ N (G11) 3 ☐ nunca camina cuesta arriba o de prisa
G4. ¿Le viene cuando camina a un paso normal en nivel plano?	(369)	1 ☐ S　　2 ☐ N
G5. CHECK ITEM: MARK ONE BOX.	(370)	1 ☐ "S" IN G3 AND/OR G4 (G6) 2 ☐ OTHER (G11)
G6. ¿Qué hace usted si le da (el dolor o molestia/la presión o pesadez) cuando está caminando? ¿Se detiene usted, camina más despacio, continúa al mismo paso o toma medicina?	(371)	1 ☐ se detiene o se va despacio 2 ☐ continúa al mismo paso (G11) 3 ☐ toma medicina
G7. Si usted se detiene, ¿qué le pasa (al dolor o molestia/ a la presión o pesadez)? ¿Se le alivia o no?	(372)	1 ☐ se alivia 2 ☐ no se alivia (G11)
G8. ¿Qué tan pronto se alivia?	(373)	_____minutos número

G9. ¿Dónde está localizado (el dolor o molestia/la presión o pesadez)?

(374) – (381)

PROBE IF NECESSARY:
Por favor enséñeme donde está localizado.

G10. ¿Lo siente en algún otró lugar?

(382) 1 ☐ S (MARK AREA 2 ☐ N
IN G9)

G11. ¿Vió a un médico a causa de su (dolor o molestia/ presión o pesadez)?

(383) 1 ☐ S 2 ☐ N (G13)

G12. ¿Qué le dijo el médico que era?

(384) 1 _____
especifique

G13. ¿Ha tenido alguna vez un dolor fuerte a través del frente del pecho que duró por media hora o más?

(385) 1 ☐ S 2 ☐ N (H1)

G14. ¿Cuántos de estos ataques ha tenido?

(386) 01 ☐ uno (G17)

_____ ataques
número

G15. ¿Cuál fue la fecha de su primer ataque?

9999 ☐ NS
(387)–(388)

_____ /. _____
mes   año

G16. ¿Cuánto le duró el dolor durante su primer ataque?

(389)
1 ☐ 30-59 minutos
2 ☐ 1-2 horas
3 ☐ 3-5 horas
4 ☐ 6-11 horas
5 ☐ 12-23 horas
6 ☐ 24-47 horas
7 ☐ 2 días o más
9 ☐ NS

G17. ¿Cuál fue la fecha de su (último) ataque?

(390) 9999 ☐ NS

(391)
_____ /. _____
mes   año

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G18. ¿Cuánto le duró el dolor durante su (último) ataque?	(392)	1 ☐ 30-59 minutos
		2 ☐ 1-2 horas
		3 ☐ 3-5 horas
		4 ☐ 6-11 horas
		5 ☐ 12-23 horas
		6 ☐ 24-47 horas
		7 ☐ 2 días o más
		9 ☐ NS

| G19. ¿Vió a un médico debido a este dolor? | (393) | 1 ☐ S   2 ☐ N (G21) |

| G20. ¿Qué le dijo el médico que era? | (394) | 1 _____ |
| | | especifique |

| G21. ¿Ha tenido alguna vez una grabación eléctrica hecha del corazón que también le llaman un electrocardiograma (ECG)? Esto requiere poner alambres sobre el pecho y en los brazos. | (395) | 1 ☐ S   2 ☐ N |

EL FUMAR

| H1. ¿Ha fumado por lo menos 100 cigarrillos en toda su vida? | (396) | 1 ☐ S   2 ☐ N (H13) |

H2. Más o menos, ¿qué edad tenía usted cuando empezó a fumar cigarrillos bastante regularmente?	(397)	_____ años de edad
		número
		00 ☐ nunca fumó regularmente

| H3. ¿Fuma cigarrillos ahora? | (398) | 1 ☐ S (H6)   2 ☐ N |

H4. Más o menos, ¿hace cuánto tiempo que dejó de fumar cigarrillos (bastante regularmente)?	(399)	_____ años (H8)
		número
		00 ☐ menos de un año

| H5. ¿En qué fecha fue eso más o menos? | (400) (402) | _____ / _____ / _____ |
| | | mes   dia   año |

H6. Estamos interesados en el número actual de cigarrillos que las personas fuman en un día. ¿Cuántos cigarrillos por día (fuma/fumaba) usted (cuando fumaba regularmente la última vez)?	(403)	00 ☐ menos de uno por día
		_____ cigarrillos
		número
IF ANSWER IN PACKS, ASK:	(404)	_____ cajetillas
¿Me podría dar el número exacto de cigarrillos?		número

| H7. ¿Hubo alguna vez un período cuando fumaba más de (number in H6) cigarrillos por día? | (405) | 1 ☐ S   2 ☐ N (H9) |

H8. Durante el período cuando fumaba más, ¿cuántos cigarrillos más o menos fumaba por día usualmente?	(406)	00 ☐ menos de uno por día
		_____ cigarrillos
		número
	(407)	_____ cajetillas
		número

IF 1 YEAR OR MORE IN H4, GO TO H13.	Nombre(s) de la marca(s)
H9. ¿Qué marca de cigarrillos (fuma/fumaba) usted usualmente?	(408) _____ (409) _____

IF MORE THAN ONE BRAND, ASK:	Nombre de la marca
H10. ¿Qué marca (fuma/fumaba) usted más?	(410) _____

CHECK CARD ASP 2, BRAND LIST. IF BRAND(S) NAMED APPEAR(S) ON LIST, ASK: H11. ¿Esos son <u>X</u> , <u>Y</u> , o <u>Z</u> ? INCLUDE ALL NAMES FOR THE BRAND.	(411) _____

H12. ¿Qué clase de cigarillos (<u>Brand</u>) son los que usted (fuma/fumaba)? ¿Son:

a. Cigarrillos con filtro o sin filtro?	(412) 1 ☐ CF 2 ☐ SF 9 ☐ NS
b. Mentolado o sin mentol?	(413) 1 ☐ M 2 ☐ SM 9 ☐ NS
c. Caja o paquete suave?	(414) 1 ☐ C 2 ☐ P 9 ☐ NS
d. Regular, king size, 100 or 120 milímetros?	(415) 1 ☐ R 2 ☐ KS 3 ☐ 100 4 ☐ 120 9 ☐ NS
e. Altos, medianos o bajos en nivel de brea y nicotina?	(416) 1 ☐ A 2 ☐ M 3 ☐ B 9 ☐ NS

H13. ¿Fuma (puros/tabacos/cigarros) ahora?	(417) 1 ☐ S 2 ☐ N (H15)

H14. ¿Cuántos (puros/tabacos/cigarros) fuma por día más o menos?	(418) _____ puros tabacos/cigarros por día
	              número
	
	☐ menos de 1 por día —
	especifique ⌐
	              ↓
	   66 ☐ 3-6 por semana
	   77 ☐ menos de 3 por
	              semana

H15. ¿Fuma pipa ahora?	(419) 1 ☐ S 2 ☐ N (H17)

H16. Usualmente, ¿cuántas pipas llenas de tabaco fuma, más o menos, por día?	(420) _____ pipas llenas de tabaco por día
	              número
	
	☐ menos de una por día —
	especifique ⌐
	              ↓
	   66 ☐ 3-6 por semana
	   77 ☐ menos de 3 por
	              semana

H17. ¿Fuma alguna (otra) persona de su hogar cigarrillos, (puros/cigarros/tabacos), o pipa dentro de su casa?	(421) 1 ☐ S 2 ☐ N
H18. ¿Comparte su oficina con o trabaja cerca de alguien (otro) que fuma cigarrillos, (puros/cigarros/tabacos), o pipa en su presencia?	(422) 1 ☐ S 2 ☐ N

IMPEDIMENTO FUNCIONAL

J1. CHECK ITEM	(423) 1 ☐ Age under 18 (J28) 2 ☐ Age 71 or older (J25) 3 ☐ Age 18-70 (J2)
J2. ¿Cuál fue su actividad principal durante la mayor parte de los 12 meses pasados; trabajar en un empleo o negocio, hacer los quehaceres de la casa, asistir a la escuela o alguna otra cosa?	(424) 1 ☐ trabajar (J3) 2 ☐ quehaceres de la casa (J5) 3 ☐ asistir a la escuela (J12) 4 ☐ alguna otra cosa (J12)
J3. ¿Le impide <u>ahora</u> trabajar en un empleo o negocio algún impedimento o problema de salud?	(425) 1 ☐ S(J17) 2 ☐ N
J4. ¿Está limitado en la clase o cantidad de trabajo que puede hacer debido a algún impedimento o problema de salud?	(426) 1 ☐ S(J17) 2 ☐ N(J15)
J5. ¿Le impide por completo el hacer los quehaceres de la casa algún impedimento o problema de salud <u>ahora</u>?	(427) 1 ☐ S(J7) 2 ☐ N
J6. ¿Está limitado en la clase <u>o</u> cantidad de quehaceres de la casa que puede hacer debido a algún impedimento o problema de salud?	(428) 1 ☐ S(J7) 2 ☐ N(J12)
J7. ¿Qué condición causa esta limitación?	_____ condición
J8. ¿Cuándo notó por primera vez su (<u>condition in J7</u>)? PROBE IF NECESSARY: ¿Fue durante los 3 meses pasados o hace más de 3 meses?	(429) 1 ☐ hace más de 3 meses (J12) ☐ hace 3 meses o menos — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J12) 3 ☐ CONDITION NOT ON CARD ASP 3 (J9)
J9. ¿Esta limitación es causada por alguna otra condición?	(430) 1 ☐ S 2 ☐ N(J12)
J10. ¿Qué otra condición causa esta limitación?	_____ condición

<div align="center">22</div>

J11. ¿Cuándo notó por primera vez su (condition in J10)?

(431)   1 ☐ hace más de 3 meses (J12)

    ☐ hace 3 meses o menos —

      SPECIFY IF 3 MONTHS AGO OR LESS —

    2 ☐ CONDITION IS ON CARD ASP 3 (J12)

    3 ☐ CONDITION NOT ON CARD ASP 3
      (REASK J9-11)

J12. ¿Le impide trabajar en un empleo o negocio algún impedimento o problema de salud?

(432)   1 ☐ S(J17)   2 ☐ N

J13. ¿Está usted limitado en la clase o cantidad de trabajo que podría hacer debido a algún impedimento o problema de salud?

(433)   1 ☐ S(J17)   2 ☐ N(J14)

J14. CHECK ITEM

(434)   1 ☐ "S" in J5 OR J6 (J22)

    2 ☐ Other (J15)

J15. ¿Está limitado en alguna forma en cualquier actividad debido a un impedimento o problema de salud?

(435)   1 ☐ S   2 ☐ N(J22)

J16. ¿En qué forma está limitado? RECORD LIMITATION, NOT CONDITION.

(436)   1 _____
               limitación

J17. ¿Qué condición causa esta limitación?

    _____
            condición

J18. ¿Cuándo notó por primera vez su (condition in J17)?

PROBE IF NECESSARY: ¿Fue durante los 3 meses pasados o hace más de 3 meses?

(437)   1 ☐ hace más de 3 meses (J22)

    ☐ hace 3 meses o menos —
      SPECIFY IF 3 MONTHS AGO OR LESS —

    2 ☐ CONDITION IS ON CARD ASP 3 (J22)

    3 ☐ CONDITION NOT ON CARD ASP 3 (J19)

J19. ¿Esta limitación es causada por alguna otra condición?

(438)   1 ☐ S   2 ☐ N(J22)

J20. ¿Qué otra condición causa esta limitación?

    _____
            condición

J21. ¿Cuándo notó por primera vez su (condition in J20)?

(439)   1 ☐ hace más de 3 meses (J22)

    ☐ hace 3 meses o menos —

      SPECIFY IF 3 MONTHS AGO OR LESS —

    2 ☐ CONDITION IS ON CARD ASP 3 (J22)

    3 ☐ CONDITION NOT ON CARD ASP 3
      (REASK J12-J21)

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J22. CHECK ITEM	(440) 1 ☐ Age 60-70 (J23)
	        2 ☐ Age 18-59, limitation reported (J23)
	
	        3 ☐ Other (J39)

J23. Debido a algún impedimento o problema de salud, ¿necesita la ayuda de otras personas para sus necesidades del cuidado personal, tal como comer, bañarse, vestirse, o moverse en este hogar?	(441) 1 ☐ S(J39) 2 ☐ N
J24. Debido a algún impedimento o problema de salud, ¿necesita la ayuda de otras personas en el manejo de sus necesidades rutinarias, tal como el atender de este lugar, hacer asuntos necesarios, compras, o movilizarse para otros propósitos?	(442) 1 ☐ S(J39) 2 ☐ N(J39)

ASK FOR AGES 71+ ONLY:
 	
J25. ¿Cuál fue su actividad principal durante la mayor parte de los 12 meses pasados; trabajar en un empleo o negocio, hacer los quehaceres de la casa, asistir a la escuela o alguna otra cosa?
	(443) 1 ☐ trabajar
	        2 ☐ quehaceres de la casa
	        3 ☐ asistir a la escuela
	        4 ☐ alguna otra cosa

J26. Debido a algún impedimento o problema de salud, ¿necesita la ayuda de otras personas para sus necesidades del cuidado personal, tal como comer, bañarse, vestirse, o moverse en este hogar?	(444) 1 ☐ S(J34) 2 ☐ N
J27. Debido a algún impedimento o problema de salud, ¿necesita la ayuda de otras personas en el manejo de sus necesidades rutinarias, tal como el atender de este lugar, hacer asuntos necesarios, compras, o movilizarse para otros propósitos?	(445) 1 ☐ S(J34) 2 ☐ N(J32)
ASK FOR AGES 12-17 ONLY: **J28.** ¿Le impide <u>ahora</u> asistir a la escuela algún impedimento o problema de salud?	(446) 1 ☐ S(J34) 2 ☐ N
J29. ¿Asiste a una escuela especial o a clases especiales debido a algún impedimento o problema de salud?	(447) 1 ☐ S(J34) 2 ☐ N
J30. ¿Necesita asistir a una escuela especial o a clases especiales debido a algún impedimento o problema de salud?	(448) 1 ☐ S(J34) 2 ☐ N
J31. ¿Está limitado en su asistencia a la escuela debido a su salud?	(449) 1 ☐ S(J34) 2 ☐ N
J32. ¿Está limitado en <u>alguna forma</u> en cualquier actividad debido a un impedimento o problema de salud?	(450) 1 ☐ S 2 ☐ N(J39)
J33. ¿En qué forma está limitado? RECORD LIMITATION, NOT CONDITION.	(451) 1 _____ limitación
J34. ¿Qué condición le causa esta limitación?	_____ condición

J35. ¿Cuándo notó por primera vez su (condition in J34)? PROBE IF NECESSARY: ¿Fue durante los 3 meses pasados o hace más de 3 meses?	(452)	1 ☐ hace más de 3 meses (J39) ☐ hace 3 meses o menos — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J39) 3 ☐ CONDITION NOT ON CARD ASP 3 (J36)
J36. ¿Esta limitación es causada por alguna otra condición?	(453)	1 ☐ S 2 ☐ N(J39)
J37. ¿Qué otra condición causa esta limitación?		_____ condición
J38. ¿Cuándo notó por primera vez su (condition in J37)?	(454)	1 ☐ hace más de 3 meses (J39) ☐ hace 3 meses o menos — SPECIFY IF 3 MONTHS AGO OR LESS — 2 ☐ CONDITION IS ON CARD ASP 3 (J39) 3 ☐ CONDITION NOT ON CARD ASP 3 (REASK J36-38)
J39. CHECK ITEM	(455)	1 ☐ Age 18 or older (J40) 2 ☐ Age 12-17 (K1)
J40. ¿Ha cambiado alguna vez de trabajo, dejado de trabajar o hecho algunos cambios en sus quehaceres de casa a causa de un impedimento o problema de salud?	(456)	1 ☐ S 2 ☐ N(K1)
J41. ¿Cuál fue el problema de salud?	(457)	1 _____ especifique
J42.		
¿Se retiró por un impedimento?.	(458)	1 ☐ S 2 ☐ N
¿Cambió permanentemente a un trabajo más fácil?.	(459)	1 ☐ S 2 ☐ N
¿Cambió temporalmente a un trabajo más fácil?.	(460)	1 ☐ S 2 ☐ N
¿Redujo su trabajo a tiempo (parcial/ "part-time")?.	(461)	1 ☐ S 2 ☐ N
¿Tuvo que dejar de trabajar por unos meses?	(462)	1 ☐ S 2 ☐ N
¿Tuvo que reducir la cantidad de trabajo en los quehaceres de casa?.	(463)	1 ☐ S 2 ☐ N
¿Dejó de hacer todos los quehaceres de casa?.	(464)	1 ☐ S 2 ☐ N
¿Hizo algún otro cambio? . . . . 3 _____ especifique	(465)	1 ☐ S 2 ☐ N

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LISTA DE CONDICIONES

K1. ¿Alguna vez le dijo un médico que tenía: (IF "Sí ASK K2 AND K3 BEFORE GOING TO NEXT CONDITION)

Condición	K1			K2. ¿Todavía tiene...?			K3. ¿Hace cuántos años que tuvo por primera vez...?
Enfisema?	(466) 1 ☐ S(K2)	2 ☐ N		(467) 1 ☐ S	2 ☐ N	9 ☐ NS	(468) _____
Bronquitis crónica?	(469) 1 ☐ S(K2)	2 ☐ N		(470) 1 ☐ S	2 ☐ N	9 ☐ NS	(471) _____
Fiebre reumática?	(472) 1 ☐ S(K2)	2 ☐ N		(473) 1 ☐ S	2 ☐ N	9 ☐ NS	(474) _____
Enfermedad reumática del corazón?	(475) 1 ☐ S(K2)	2 ☐ N		(476) 1 ☐ S	2 ☐ N	9 ☐ NS	(477) _____
Soplo/murmullo?	(478) 1 ☐ S(K2)	2 ☐ N		(479) 1 ☐ S	2 ☐ N	9 ☐ NS	(480) _____
Fallo del corazón?	(481) 1 ☐ S(K2)	2 ☐ N		(482) 1 ☐ S	2 ☐ N	9 ☐ NS	(483) _____
Ataque de corazón?	(484) 1 ☐ S(K3)	2 ☐ N		////////			(485) _____
Problemas de los riñones?	(486) 1 ☐ S(K2)	2 ☐ N		(487) 1 ☐ S	2 ☐ N	9 ☐ NS	(488) _____
Cirrosis del hígado?	(489) 1 ☐ S(K2)	2 ☐ N		(490) 1 ☐ S	2 ☐ N	9 ☐ NS	(491) _____
Hepatitis?	(492) 1 ☐ S(K2)	2 ☐ N		(493) 1 ☐ S	2 ☐ N	9 ☐ NS	(494) _____
Ictericia/piel amarilla?	(495) 1 ☐ S(K2)	2 ☐ N		(496) 1 ☐ S	2 ☐ N	9 ☐ NS	(497) _____
Derrame cerebral/ embolia cerebral?	(498) 1 ☐ S(K3)	2 ☐ N		////////			(499) _____
Glaucoma?	(500) 1 ☐ S(K2)	2 ☐ N		(501) 1 ☐ S	2 ☐ N	9 ☐ NS	(502) _____
Cataratas?	(503) 1 ☐ S(K2)	2 ☐ N		(504) 1 ☐ S	2 ☐ N	9 ☐ NS	(505) _____
Estrabismo u ojos bizcos?	(506) 1 ☐ S(K2)	2 ☐ N		(507) 1 ☐ S	2 ☐ N	9 ☐ NS	(508) _____
Una herida en el ojo?	(509) 1 ☐ S(K2)	2 ☐ N		(510) 1 ☐ S	2 ☐ N	9 ☐ NS	(511) _____
Bocio?	(512) 1 ☐ S(K2)	2 ☐ N		(513) 1 ☐ S	2 ☐ N	9 ☐ NS	(514) _____
Otra enfermedad de la tiroide?	(515) 1 ☐ S(K2)	2 ☐ N		(516) 1 ☐ S	2 ☐ N	9 ☐ NS	(517) _____

EXPOSICION AL PESTICIDA

L1. ¿Ha trabajado usted alguna vez, bien sea pagado o sin pago, en trabajo (agrícola/del campo/de finca)? Algunos ejemplos de trabajo (agrícola/del campo/de finca) son trabajos con cosechas o animales y supervisando otros trabajadores en fincas o huertas.

(518)   1 ☐ S   2 ☐ N(L27)

26

L2. ¿Cuántos años aproximadamente ha hecho trabajo (agrícola/del campo/de finca)?

(519) 99 □ NS

_____años
número

L3. ¿Es usted trabajador migrante (de agrícola/del campo/de finca)?

(520) 1 □ S(L5)   2 □ N

L4. ¿Ha hecho alguna vez trabajo (agrícola/del campo/de finca) fuera de su hogar habitual por más de dos semanas a la vez?

(521) 1 □ S   2 □ N(L6)

L5. ¿Cuántos meses al año está o estuvo usted fuera de su hogar habitual haciendo trabajo (agrícola/del campo/de finca)?

(522) 99 □ NS
00 □ menos de 1 mes por año
_____ meses por año
número

L6. ¿Ha hecho trabajo (agrícola/del campo/de finca) durante cualquier parte del año pasado?

(523) 1 □ S   2 □ N(L14)

L7. Durante el año pasado, ¿ha trabajado en cualquiera de las siguientes clases de trabajo (agrícola/del campo/de finca)?

Finca de animales o lechería?. . . . . (524) 1 □ S   2 □ N

Finca de (aves de corral/pollos)?. . . . . (525) 1 □ S   2 □ N

Finca de vegetales? . . . . (526) 1 □ S   2 □ N

Huerta de fruta? . . . . (527) 1 □ S   2 □ N

Finca de algodón?. . . . . (528) 1 □ S   2 □ N

Finca de tabaco?. . . . . (529) 1 □ S   2 □ N

Finca de (grano/cereal)? . . . . (530) 1 □ S   2 □ N

Alguna otra clase de finca? 3_____ (531) 1 □ S   2 □ N
especifique

L8. Durante el año pasado, ¿con qué cosechas agrícolas ha trabajado principalmente?

(532) 9 □ NS
0 □ ninguna

(533)-(537) _____

_____

_____

27

L9. Durante el año pasado, ¿ha hecho cualquiera de los siguientes trabajos:

(Piscador/recogedor) o cosechador? . . . . ⓹③⑧ 1 ☐ S   2 ☐ N

Cultivador? . . . . ⓹③⑨ 1 ☐ S   2 ☐ N

Sembrador? . . . . ⓹④⓪ 1 ☐ S   2 ☐ N

(Surtidor/clasificador)?. . . . . ⓹④① 1 ☐ S   2 ☐ N

Empacador?. . . . . ⓹④② 1 ☐ S   2 ☐ N

Rociador de pesticidas? . . . . ⓹④③ 1 ☐ S   2 ☐ N

Mezclador de pesticidas?. . . . . ⓹④④ 1 ☐ S   2 ☐ N

(Abanderado de pesticidas/"flagman")?. . . . . ⓹④⑤ 1 ☐ S   2 ☐ N

(Mayordomo de campo/"foreman"/
    capataz)?. . . . . ⓹④⑥ 1 ☐ S   2 ☐ N

Algún otro trabajo de finca?³_____ ⓹④⑦ 1 ☐ S   2 ☐ N
                          especifique

L10. ¿Cuántos meses por año acostumbra usted hacer trabajo (agrícola/del campo/de finca)?

⓹④⑧   00 ☐ menos de 1 mes al año

_____ meses por año
       número

L11. Cuando está haciendo trabajo (agrícola/del campo/ de finca) ¿acostumbra usted a comer alguna de las comidas en o cerca de los campos durante el día de trabajo?

⓹④⑨   1 ☐ S   2 ☐ N(L13)

L12. Cuando está haciendo trabajo (agrícola/del campo/ de finca), ¿de dónde viene el agua que usa para lavarse las manos?

¿Es: Traído a los campos desde otro lugar?. . . . . ⓹⑤⓪ 1 ☐ S   2 ☐ N

De (una noria/un pozo) en los campos?. . . . . ⓹⑤① 1 ☐ S   2 ☐ N

Agua de riego o estancada en el campo?. . . . . ⓹⑤② 1 ☐ S   2 ☐ N

De alguna otra fuente?³_____ ⓹⑤③ 1 ☐ S   2 ☐ S
                      especifique

⓹⑤④   0 ☐ NO SE LAVA MANOS

L13. Cuando está haciendo trabajo (agrícola/del campo/ de finca), ¿de dónde viene el agua que toma?

¿Es: Traído a los campos desde otro lugar?. . . . . ⓹⑤⑤ 1 ☐ S   2 ☐ N

De (una noria/un pozo) en los campos?. . . . . ⓹⑤⑥ 1 ☐ S   2 ☐ N

Agua de riego o estancada en el campo?. . . . . ⓹⑤⑦ 1 ☐ S   2 ☐ N

De alguna otra fuente? ³_____ ⓹⑤⑧ 1 ☐ S   2 ☐ N
                      especifique

⓹⑤⑨   0 ☐ NO TOMA AGUA

L14. Los pesticidas son químicos usados para matar insectos, mala hierba, enfermedades de plantas, y roedores. Mientras trabajando en trabajo (agrícola/del campo/ de finca), según su conocimiento, ¿se aplicaron alguna vez pesticidas a un área mientras usted trabajaba en ella?

(560) 1 ☐ S   2 ☐ N(L16) 9 ☐ NS(L16)

L15. ¿Cuántas veces?

(561) 1 ☐ 1-2 veces
       2 ☐ 3-5 veces
       3 ☐ 6-10 veces
       4 ☐ más de 10 veces
       9 ☐ NS

L16. ¿Ha mezclado, manejado o aplicado pesticidas alguna vez mientras haciendo trabajo (agrícola/del campo/ de finca)?

(562) 1 ☐ S   2 ☐ N(L20) 9 ☐ NS(L20)

L17. Aproximadamente, ¿cuántas veces por año ha usted mezclado, manejado o aplicado pesticidas usualmente mientras trabajando en trabajo (agrícola/del campo/ de finca)?

(563) 1 ☐ menos de una vez por año
       2 ☐ 1-12 veces por año
       3 ☐ más de 12 veces por año

L18 ¿Ha usado alguna vez cualquiera de los siguientes artículos de equipo protectivo mientras mezclando, manejando o aplicando pesticidas:

Guantes?	(564)	1 ☐ S 2 ☐ N
Traje especial sobre la ropa?	(565)	1 ☐ S 2 ☐ N
Máscara?	(566)	1 ☐ S 2 ☐ N
(Espejuelos/gafas protectivas)?	(567)	1 ☐ S 2 ☐ N
Botas de hule?	(568)	1 ☐ S 2 ☐ N
Cubierta para la cabeza?	(569)	1 ☐ S 2 ☐ N
Algún otro artículo? 3_____	(570)	1 ☐ S 2 ☐ N
especifique		

IF ALL "N" IN L18, SKIP TO L20.
OTHERWISE ASK:

L19. ¿Con qué frecuencia ha usado algún equipo protectivo mientras mezclando, manejando o aplicando pesticidas: siempre, algunas veces, o nunca?

(571) 1 ☐ siempre
       2 ☐ algunas veces
       3 ☐ nunca

L20. Mientras haciendo trabajo (agrícola/del campo/de finca) ¿se le derramaron o le rociaron con algún pesticida alguna vez en cualquier parte del cuerpo?

(572) 1 ☐ S
       2 ☐ N (L26)
       9 ☐ NS (L26)

L21. ¿Cuántas veces le han derramado o rociado los pesticidas encima?

(573) 999 ☐ NS
       _____veces
           número

L22. ¿Se enfermó alguna vez debido a que le derramaron o rociaron pesticidas por encima?

(574) 1 ☐ S   2 ☐ N

L23. ¿Vió a un médico alguna vez debido a que pesticidas fueron derramados o rociados por encima?	(575)	1 ☐ S 2 ☐ N
L24. ¿Perdió algún tiempo de trabajo alguna vez como resultado de tener pesticidas derramados o rociados por encima?	(576)	1 ☐ S 2 ☐ N
L25. ¿Qué pesticidas específicos se le derramaron o se le rociaron encima a usted? IF NAME(S) NOT KNOWN, ENTER WHAT PESTICIDE IS USED FOR OR ON.	(577) (578)-(582)	9 ☐ NS _____ _____ _____
L26. Además de cuando hace trabajo (agrícola/del campo/ de finca), durante el año pasado, ¿ha mezclado, aplicado o manejado algunos pesticidas?	(583)	1 ☐ S(L28) 2 ☐ N(L28) 9 ☐ NS(L28)
L27. Los pesticidas son químicos usados para matar insectos, mala hierba, enfermedades de plantas, y roedores. Durante el año pasado, ¿ha mezclado, aplicado, o manejado algunos pesticidas?	(693)	1 ☐ S 2 ☐ N 9 ☐ NS
L28. Durante los cinco años pasados, ¿ha usado la medicina recetada, Kwell, para el control de piojos en el cuerpo o en la cabeza?	(584)	1 ☐ S 2 ☐ N
L29. ¿Ha trabajado alguna vez en una fábrica que procesa pesticida?	(585)	1 ☐ S 2 ☐ N 9 ☐ NS
L30. ¿Ha trabajado alguna vez como aplicador o rociador de pesticida, por ejemplo, un exterminador o un especialista de (control de insecto/control de insecto dañino/"pest control")?	(586)	1 ☐ S 2 ☐ N 9 ☐ NS

ACULTURACIÓN

M1. ¿Habla un poco de inglés?	(588)	1 ☐ S 2 ☐ N(M4)
M2. ¿Diría usted que habla principalmente español, o principalmente inglés, o habla español e inglés más o menos igual?	(589)	1 ☐ principalmente español 2 ☐ principalmente inglés 3 ☐ ambos igual
M3. ¿Qué idioma prefiere; solamente español, principalmente español, principalmente inglés, solamente inglés, o español e inglés más o menos igual?	(590)	1 ☐ sólo español 2 ☐ principalmente español 3 ☐ principalmente inglés 4 ☐ sólo inglés 5 ☐ ambos igual

M4. ¿Puede leer español?	(591) 1 ☐ S 2 ☐ N
M5. ¿Puede leer inglés?	(592) 1 ☐ S 2 ☐ N

IF "S" TO BOTH M4 AND M5, ASK:
 	
M6. ¿Cuál lee mejor?
	(593) 1 ☐ español
	        2 ☐ inglés
	        3 ☐ los dos igual

M7. ¿Puede escribir español?	(594) 1 ☐ S 2 ☐ N
M8. ¿Puede escribir inglés?	(595) 1 ☐ S 2 ☐ N

IF "S" TO BOTH M7 AND M8, ASK:
 	
M9. ¿En qué idioma escribe mejor?
	(596) 1 ☐ español
	        2 ☐ inglés
	        3 ☐ los dos igual

HAND CARD ASP 4
 	
M10. ¿Cuál de esos grupos <u>mejor</u> describe su identifi-cación étnica?
	(597) 01 ☐ boricua
	        02 ☐ puertorriqueño
	        03 ☐ cubano
	        04 ☐ cubano-americano
	        05 ☐ mexicano
	        06 ☐ chicano
	        07 ☐ méxico-americano
	        – – – – – – – – – – –
	        08 ☐ hispano
	        09 ☐ latino americano
	        10 ☐ otro español u otro hispano
	        11 ☐ americano
	        12 ☐ anglo-americano
	        13 ☐ otro grupo[14]_____
	                           especifique

IF ANY BOX BELOW THE LINE IN M10 IS CHECKED, ASK: **M11.** ¿Cuál es su país de origen?	(598) 1_____ especifique

31

M12. ¿Cuál de esos grupos mejor describe la identifi-
cación étnica de su madre?

(599)
- 01 ☐ boricua
- 02 ☐ puertorriqueña
- 03 ☐ cubana
- 04 ☐ cubana americana
- 05 ☐ mexicana
- 06 ☐ chicana
- 07 ☐ méxico-americana
- 08 ☐ hispana
- 09 ☐ latino americana —

10 _____
    especifique país

- 11 ☐ otra española, u otra hispana —

12 _____
    especifique país

- 13 ☐ americana
- 14 ☐ anglo-americana
- 15 ☐ otro grupo —

16 _____
    especifique

M13. ¿Cuál de esos grupos mejor describe la identifi-
cación étnica de su padre?

(600)
- 01 ☐ boricua
- 02 ☐ puertorriqueño
- 03 ☐ cubano
- 04 ☐ cubano americano
- 05 ☐ mexicano
- 06 ☐ chicano
- 07 ☐ méxico-americano
- 08 ☐ hispano
- 09 ☐ latino americano —

10 _____
    especifique país

- 11 ☐ otro español u otro hispano —

12 _____
    especifique país

- 13 ☐ americano
- 14 ☐ anglo-americano
- 15 ☐ otro grupo —

16 _____
    especifique

M14. ¿En qué país o estado nació su padre?

(601)
- 1 ☐ Estados Unidos, excepto
        Puerto Rico
- 2 ☐ Puerto Rico
- 3 ☐ Cuba
- 4 ☐ México
- 5 ☐ otro 6_____
            especifique

M15. ¿En qué país o estado nació su madre?

(602)
- 1 ☐ Estados Unidos, excepto
        Puerto Rico
- 2 ☐ Puerto Rico
- 3 ☐ Cuba
- 4 ☐ México
- 5 ☐ otro 6_____
            especifique

PROGRAMAS DE ALIMENTO

N1. CHECK ITEM

(603)
1 ☐ Under 19 (N2)
2 ☐ 19-59 (P1)
3 ☐ 60+ (N16)

N2. ¿Asiste usted a la escuela ahora?

(604) 1 ☐ S   2 ☐ N(P1)

N3. La escuela a que usted asiste ¿sirve un (desayuno/almuerzo/"breakfast") completo?

(605) 1 ☐ S   2 ☐ N

N4. Usualmente, ¿cuántas veces por semana come usted el (desayuno/almuerzo/"breakfast") servido por la escuela?

(606) _____ veces
número

0 ☐ ninguna (N8)
9 ☐ NS

N5. Durante este año (pasado) escolar ¿llenaron sus padres un formulario para que usted pudiera comer el (desayuno/almuerzo/"breakfast") en la escuela a un precio reducido o gratis?

(607) ☐ S   2 ☐ N (N7)

N6. ¿Come el (desayuno/almuerzo/"breakfast") en la escuela a un precio reducido o gratis?

(608)
1 ☐ sí
2 ☐ no, no es eligible
3 ☐ no, otra razón

N7. ¿Cuánto paga por su (desayuno/almuerzo/"breakfast") por día?

(609) _____ centavos
número

000 ☐ gratis

N8. La escuela que usted asiste, ¿sirve una comida de mediodía completa?

(610) 1 ☐ S   2 ☐ N

N9. Usualmente, ¿cuántas veces por semana come usted la comida de mediodía servida por la escuela?

(611) _____ veces
número

0 ☐ ninguna (N13)
9 ☐ NS

N10. Durante este año (pasado) escolar, ¿llenaron sus padres un formulario para que usted pudiera comer la comida de mediodía en la escuela a un precio reducido o gratis?

(612) 1 ☐ S   2 ☐ N(N12)

N11. ¿Come usted la comida de mediodía en la escuela a un precio reducido o gratis?

(613)
1 ☐ sí
2 ☐ no, no es elegible
3 ☐ no, otra razón

N12. ¿Cuánto paga por su comida de mediodía por día?

(614) _____ centavos
número

000 ☐ gratis

33

N13. ¿Trae de casa alguna vez su comida de mediodía?	(615)	1 ☐ sí, siempre 2 ☐ sí, algunas veces 3 ☐ no (P1)
N14. En días que no come la comida de mediodía servida por la escuela, ¿compra leche?	(616)	1 ☐ sí, siempre 2 ☐ sí, algunas veces 3 ☐ no (P1)
N15. ¿Cuánto paga por su leche por día?	(617)	_____ centavos número 000 ☐ gratis } (P1)
N16. ¿Participa usted en algún programa en el cual le entregan en su casa comidas ya preparadas o (comestibles/víveres) regularmente?	(618)	1 ☐ S 2 ☐ N(N20)
N17. ¿Le entregan a su casa comidas ya preparadas o (comestibles/víveres)?	(619)	1 ☐ sólo comidas preparadas 2 ☐ sólo comestibles 3 ☐ ambos 4 ☐ otro —5_____ especifique
N18. ¿Patrocina el programa — Un departamento local de salud? . . . . Otro departamento del gobierno local? . . . . Un gobierno estatal? . . . . Un grupo de la iglesia? . . . . Alguna otra organización voluntaria?. . . . . Especifique 3_____	(620) (621) (622) (623) (624)	1 ☐ S 2 ☐ N 1 ☐ S 2 ☐ N 1 ☐ S 2 ☐ N 1 ☐ S 2 ☐ N 1 ☐ S 2 ☐ N
N19. ¿Cuántas veces más o menos se le trae esta comida a su casa?	(625)	01 ☐ dos o tres veces por día 02 ☐ una vez por día 03 ☐ cuatro a seis veces por semana 04 ☐ dos o tres veces por semana 05 ☐ una vez por semana 06 ☐ dos o tres veces por mes 07 ☐ una vez por mes 08 ☐ menos de una vez por mes 09 ☐ otro —10_____ especifique
N20. ¿Participa regularmente en algún programa en el cual usted va a un lugar donde se le sirve comidas a grupos de personas?	(626)	1 ☐ S 2 ☐ N(P1)

N21. ¿Patrocina el programa —

Un departamento local de salud? . . . . (627)   1 ☐ S   2 ☐ N

Otro departamento del gobierno local? . . . . (628)   1 ☐ S   2 ☐ N

Un gobierno estatal? . . . . (629)   1 ☐ S   2 ☐ N

Un grupo de la iglesia? . . . . (630)   1 ☐ S   2 ☐ N

Alguna otra organización voluntaria?. . . . .

       Especifique 3_____ (631)   1 ☐ S   2 ☐ N

N22. Más o menos, ¿con qué frecuencia sale usted para estas comidas?

(632)
- 01 ☐ dos o tres veces por día
- 02 ☐ una vez por día
- 03 ☐ cuatro a seis veces por semana
- 04 ☐ dos o tres veces por semana
- 05 ☐ una vez por semana
- 06 ☐ dos o tres veces por mes
- 07 ☐ una vez por mes
- 08 ☐ menos de una vez por mes
- 09 ☐ otro —10_____
                             especifique

EL USO DE MEDICINA/VITAMINA

P1. Durante las 2 semanas pasadas, ¿ha tomado o usado algunas vitaminas o minerales? (633) 1 ☐ S(P2) 2 ☐ N(P5)

P2. ¿Me permite ver el (envase(s)/ botella(s)) de sus vitaminas y minerales? RECORD BRAND NAME	P3. ¿Qué cantidad del (vitamin/ mineral) toma cada vez que lo usa?	P4. ¿Con qué frecuencia toma este (vitamin/mineral)?
(634)	(635)-(636) _____ número { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro	(637)-(638) _____ veces por { 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 _____ especifique
(634)	(635)-(636) _____ número { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro	(637)-(638) _____ veces por { 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 _____ especifique
☐ Continuation booklet		

P5. Estamos interesados en todas clases de medicinas que la gente toma o usa. Primero le preguntaré sobre su uso de medicinas que se pueden obtener <u>sin</u> receta de médico.

Durante las 2 semanas pasadas, ¿ha tomado o usado algunas de las siguientes clases de medicinas:

a) Medicina contra la tos, dolor de garganta, catarro o congestión?	(639)	1 ☐ S 2 ☐ N
b) Calmantes para el dolor, tal como la aspirina o Tylenol?	(640)	1 ☐ S 2 ☐ N
c) Tabletas para dormir, sedativos o tranquilizantes?	(641)	1 ☐ S 2 ☐ N
d) Antidepresivos, estimulantes o píldoras animadoras?	(642)	1 ☐ S 2 ☐ N
e) Píldoras o productos que le ayudan a bajar de peso?	(643)	1 ☐ S 2 ☐ N
f) Laxantes?	(644)	1 ☐ S 2 ☐ N
g) Medicinas para la diarrea?	(645)	1 ☐ S 2 ☐ N
h) Medicinas para la indigestión?	(646)	1 ☐ S 2 ☐ N
i) Supositorios?	(647)	1 ☐ S 2 ☐ N
j) Gotas para los ojos?	(648)	1 ☐ S 2 ☐ N
k) Algunas otras medicinas, píldoras o (pomadas/ungüentos) para las cuales no se necesita una receta del médico? SI S1, ESPECIFIQUE (650) _____	(649)	1 ☐ S 2 ☐ N

P6. Durante las 2 semanas pasadas, ¿ha tomado o ha usado algunas medicinas para las cuales se necesita una receta de médico?

(651)   1 ☐ S(P7)   2 ☐ S(P14)

P7. ¿Me permite ver el (envase(s) /botella(s)) de la medicina(s) que tomó? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS P8 THROUGH 13 FOR EACH.	**P8.** ¿Cuál es el problema de salud por el cual tomó usted la (medicine)? PROBE FOR SYMPTOM OR CONDITION.	**P9.** ¿Tomó (dosage reported in P7) por (frequency reported in P7)?
Etiqueta impresa en: (652) 1 ☐ inglés 2 ☐ español 3 ☐ ambos (655) Nombre: ¿Recetada para la SP? (656) 1 ☐ S 2 ☐ N (657) Potencia: (658)—(659) Dosis: (660)—(661) Frecuencia: IF "SEGUN SE NECESITE," ASK P8 AND GO TO NEXT MEDICATION. (662) 1 ☐ No se vió el envase — la información fue dada por el respondedor	(653)	(654) 1 ☐ S(P12) 2 ☐ N
Etiqueta impresa en: (652) 1 ☐ inglés 2 ☐ español 3 ☐ ambos (655) Nombre: ¿Recetada para la SP? (656) 1 ☐ S 2 ☐ N (657) Potencia: (658)—(659) Dosis: (660)—(661) Frecuencia: IF "SEGUN SE NECESITE," ASK P8 AND GO TO NEXT MEDICATION. (662) 1 ☐ No se vió el envase — la información fue dada por el respondedor	(653)	(654) 1 ☐ S(P12) 2 ☐ N

38

P10. ¿Cuánto de la (medicine) tomó?	P11. ¿Le aconsejó un médico que tomara (dosage in P10)/ por (frequency in P10)?	P12. ¿La (medicine) le hace sentirse mal o le causa algunos (mal efectos/"side effects")?	P13. ¿Qué es lo que hace cuando esto sucede?
(663)-(664) _____ número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (665)-(666) _____ por veces 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 _____ especifique	(667) 1 ☐ Sí 2 ☐ No	(668) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(669) DO NOT READ 1 ☐ DEJA DE USAR LA MÉDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE
(663)-(664) _____ número 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (665)-(666) _____ por veces 1 ☐ día 2 ☐ semana 3 ☐ mes 4 ☐ otro — 5 _____ especifique	(667) 1 ☐ Sí 2 ☐ No	(668) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(669) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE

P7. ¿Me permite ver el (envase(s) /botella(s)) de la medicina(s) que tomó? RECORD SPECIFIED INFORMATION FOR EACH, THEN ASK QUESTIONS P8 THROUGH 13 FOR EACH.	P8. ¿Cuál es el problema de salud por el cual tomó usted la (medicine)? PROBE FOR SYMPTOM OR CONDITION.	P9. ¿Tomó (dosage reported in P7) por (frequency reported in P7)?

Etiqueta impresa en:
(652) 1 □ inglés 2 □ español 3 □ ambos
 	
(655) Nombre:
 	
¿Recetada para la SP?
(656)   1 □ S   2 □ N
 	
(657) Potencia:
 	
(658)‑ Dosis:
 	
(660)(661) Frecuencia:
 	
IF "SEGUN SE NECESITE," ASK P8 AND GO TO NEXT MEDICATION.
 	
(662) 1 □ No se vió el envase — la información
     fue dada por el respondedor
	(653)	(654) 1 □ S(P12)
		
		   2 □ N

Etiqueta impresa en:
(652) 1 □ inglés 2 □ español 3 □ ambos
 	
(655) Nombre:
 	
¿Recetada para la SP?
(656)   1 □ S   2 □ N
 	
(657) Potencia:
 	
(658)(659) Dosis:
 	
(660)(661) Frecuencia:
 	
IF "SEGUN SE NECESITE," ASK P8 AND GO TO NEXT MEDICATION.
 	
(662) 1 □ No se vió el envase — la información
     fue dada por el respondedor
	(653)	(654) 1 □ S(P12)
		
		   2 □ N

□ Continuation Booklet		

P10. ¿Cuánto de la (medicine) tomó?	P11. ¿Le aconsejó un médico que tomara (dosage in P10)/ por (frequency in P10)?	P12. ¿La (medicine) le hace sentirse mal o le causa algunos (mal efectos/"side effects")?	P13. ¿Qué es lo que hace cuando esto sucede?
(663)-(664) _____ número { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (665)-(666) { 1 ☐ día 2 ☐ semana _____ por veces 3 ☐ mes 4 ☐ otro — 5 _____ especifique	(667) 1 ☐ Sí 2 ☐ No	(668) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(669) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE EL USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE
(663)-(664) _____ número { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cucharada 4 ☐ otro (665)-(666) { 1 ☐ día 2 ☐ semana _____ por veces 3 ☐ mes 4 ☐ otro — 5 _____ especifique	(667) 1 ☐ Sí 2 ☐ No	(668) 1 ☐ Sí – ESPECIFIQUE PROBLEMA 3 _____ _____ 2 ☐ No ⎫ GO TO ⎬ NEXT 9 ☐ NS ⎭ MEDICATION	(669) DO NOT READ. 1 ☐ DEJA DE USAR LA MEDICINA 2 ☐ DISMINUYE USO 3 ☐ CONSULTA AL MÉDICO 4 ☐ CONTINÚA TOMÁNDOLA SEGÚN LA RECETA 5 ☐ OTRO 6 _____ ESPECIFIQUE

P14. ¿Le ha dicho un médico que tome algunas medicinas durante los 6 meses pasados que usted <u>no</u> tomó durante ese período?

(670)   1 ☐ S (P15)   2 ☐ N (Q1)

P15. ¿Cuáles son los nombres de las medicinas que no tomó? PROBE FOR BRAND NAMES, ENTER EACH ON SEPARATE LINE. THEN ASK P16 AND P17 FOR EACH.	**P16.** ¿Cuál era el problema de salud que tenía por el cual el médico recomendó la (<u>medicine</u>)?
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)
(671)	(672)

P17. ¿Cuál fue la razón principal por la cual no tomó la (<u>medicine</u>)?

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

(673) 1 □ MAL EFECTO   3 □ PENSÉ QUE NO ME IBA A SERVIR   5 □ OTRO – ESPECIFIQUE

2 □ CUESTA DEMASIADO   4 □ NO LA HE CONSEGUIDO TODAVÍA   <u>6   </u>

43

Quisiéramos saber cómo las costumbres y las condiciones de salud de las personas están relacionadas con el número de años que viven. La información que nos dé se usará solamente para comparar con las estadísticas vitales que se mantienen en el Centro Nacional de Estadísticas de Salud del Servicio de Salud Pública de los Estados Unidos. Los resultados serán usados únicamente para propósitos estadísticos y no se utilizará identificación individual en cualquier análisis. Para asegurar que nuestros datos estén completos:

Q1. ¿Cuál es su nombre completo, incluyendo su segundo nombre?

VERIFY SPELLING.

(674) _____
primer

(675) _____
segundo

(676) _____
apellido

Q2. ¿Cuál es la fecha de su nacimiento?

(677) (679) _____ / _____ / _____
mes   día   año

Q3. ¿Cuál es el apellido de su padre? VERIFY SPELLING. DO NOT WRITE "SAME."

(680) _____
apellido del padre

Q4. Quisiéramos saber su número de (Seguro Social/"Social Security"). Esto no tendrá ningún efecto sobre sus beneficios. Esta información es voluntaria y es recogida bajo la autoridad de le Ley de Servicio Público (42 U.S.C.242K, Sección 306).

¿Cuál es su número de (Seguro Social/"Social Security")?

(681) _ _ _ - _ _ - _ _ _ _
número de Seguro Social

Q5. CHECK ITEM: RESPONDENT

MARK MAIN RESPONDENT

(682)
1 ☐ SAMPLE PERSON
2 ☐ MOTHER
3 ☐ FATHER
4 ☐ BROTHER OR SISTER
5 ☐ OTHER — 6 _____
SPECIFY

Q6. IF OTHER THAN SAMPLE PERSON, EXPLAIN REASON FOR ACCEPTING PROXY RESPONDENT.

(694) 1_____

44

MEDICINA/VITAMINA MEC

DO NOT ASK IN HOUSEHOLD.

R1. REFER TO MEDICINE/VITAMIN USAGE SECTION. MARK ONE BOX.	(695) ☐ No medicine or vitamin reported (R3) ☐ Medicine or vitamin reported (R2)

R2. Cuando un entrevistador habló con usted hace unas cuantas semanas, usted mencionó que había tomado (medicine/ vitamin/mineral in P2, P5, and P7.) ¿Ha tomado alguna de estas medicinas durante las últimas 24 horas?

(683)　　　　1 ☐ S　　　2 ☐ N

R3. ¿Ha tomado algunas (otras) medicinas, vitaminas o minerales durante las últimas 24 horas?

(684)　　1 ☐ S　　　2 ☐ N

IF "S" IN EITHER R2 OR R3, GO TO R4. OTHERWISE END QUESTIONNAIRE.

R4. Cuáles son los nombres de todas las medicinas, vitaminas y minerales que tomó durante las últimas 24 horas? ¿Ningunas otras?	**R5.** ¿Cuánto de la (medicine, vitamin or mineral) tomó durante las últimas 24 horas?
(685)	(686)-(687) _____ número { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cuchara 4 ☐ otro
(685)	(686)-(687) _____ { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cuchara 4 ☐ otro
(685)	(686)-(687) _____ { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cuchara 4 ☐ otro
(685)	(686)-(687) _____ { 1 ☐ tableta/cápsula 2 ☐ cucharadita 3 ☐ cuchara 4 ☐ otro

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

ADULT SAMPLE PERSON
SUPPLEMENT (523)
(Ages 12-74 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

WESTAT ID No: (100) _____ _____ _____
Stand No.   Segment No.   Serial No.

(107) _____ Family No.

(108) _____ SP No.

NCHS ID No: (101) __ __ __ __ - __ __

NAME (First, Middle, Last) (109)

(110) **SEX**
1 ☐ Male
2 ☐ Female

(111) **AGE**

INTERVIEWER NAME: NO. (112)

REVIEWER NAME: NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☒ English
2 ☐ Spanish

TIME BEGAN
(102)-(103)
1 ☐ am
2 ☐ pm

TIME ENDED
(104)-(105)
__ __ : __ __
1 ☐ am
2 ☐ pm

DATE OF EXAMINATION
_____ / _____ / _____
Month   Day   Year

TIME
☐ am
☐ pm

TRANSPORTATION
☐ Taxi
☐ Self

DATE OF INTERVIEW
(114)-(116)
_____ / _____ / _____
Month   Day   Year

ADULT SAMPLE PERSON SUPPLEMENT
(Ages 12-74 Years)

SECTION A

A1. During the past seven days, have any weed killers or products to control plant disease been applied to your garden or to the area immediately around your home?

(114) 1 □ Y   2 □ N   9 □ DK

A2. During the past seven days, have any insecticides been applied to your home, garden, yard, pets, or houseplants? Some examples of insecticides are mosquito repellents, roach and ant killers, no-pest strips, flea powders and collars, and insecticide dust.

(115) 1 □ Y   2 □ N   9 □ DK

A3. During the past seven days, has any pesticide spilled or been sprayed on any part of your body accidentally or for any reason?

(116) 1 □ Y   2 □ N

A4. During the past seven days, have you worked in any of the following occupations or businesses:

Pesticide processing plant? . . . .   (117) 1 □ Y   2 □ N

Pesticide application or spraying? . . . .   (118) 1 □ Y   2 □ N

Farmwork or agriculture? . . . .   (119) 1 □ Y   2 □ N

SECTION B

B1.   CHECK ITEM

(120) 1 □ Age 12-19 (B2)
2 □ Age 20+ (C1)

B2. Have you smoked at least 100 cigarettes in your entire life?

(121) 1 □ Y   2 □ N(B14)

B3. About how old were you when you first started smoking cigarettes fairly regularly?

(122) _____ years old
number
00 □ never smoked regularly

B4. Do you smoke cigarettes now?

(123) 1 □ Y(B7)   2 □ N

B5. About how long has it been since you last smoked cigarettes (fairly regularly)?

(124) _____ years (B9)
number
00 □ less than 1 year

B6. About what date was that?

(125)-(127) ___ / ___ / ___
mo.   day   yr.

1

B7. We are interested in the actual number of cigarettes people smoke in a day. How many cigarettes a day (do/did) you smoke (when you last smoked regularly)? IF ANSWERS IN PACKS, ASK: Could you give me the actual number of cigarettes?	(128) 00 ☐ less than 1 per day _____ cigarettes number (129) _____ packs number
B8. Was there ever a period when you smoked more than (number in B7) cigarettes a day?	(130) 1 ☐ Y 2 ☐ N(B10)
B9. During the period when you were smoking the most, about how many cigarettes a day did you usually smoke?	(131) 00 ☐ less than 1 per day _____ cigarettes number (132) _____ packs number
IF 1 YEAR OR MORE IN B5, GO TO B14. **B10.** What brand of cigarette (do/did) you usually smoke?	Brand name(s) (133) _____ (134) _____
IF MORE THAN ONE BRAND, ASK: **B11.** Which brand (do/did) you smoke the most?	Brand name (135) _____
CHECK CARD SUP-1, BRAND LIST. IF BRAND(S) NAMED APPEAR(S) ON LIST, ASK: **B12.** Is that <u>X</u> , <u>Y</u> , or <u>Z</u> ? INCLUDE ALL NAMES FOR THE BRAND.	(136) _____

B13. What type of cigarettes are the (brand) that you (smoke/smoked)? Are they:
 	
    a. Filter tip or non-filter tip? . . . .
 	
    b. Menthol or plain? . . . .
 	
    c. Hardpack or softpack? . . . .
 	
    d. Regular, Kingsize, 100 or 120 millimeter? . . . .
 	
    e. High, medium, or low tar and nicotine? . . . . .
	
	(137) 1 ☐ FT 2 ☐ NFT 9 ☐ DK
	
	(138) 1 ☐ M 2 ☐ P 9 ☐ DK
	
	(139) 1 ☐ HP 2 ☐ SP 9 ☐ DK
	
	(140) 1 ☐ R 2 ☐ K 3 ☐ 100 4 ☐ 120 9 ☐ DK
	
	(141) 1 ☐ H 2 ☐ M 3 ☐ L 9 ☐ DK

B14. Does anyone (else) in your household smoke cigarettes, cigars, or a pipe inside your home?	(142) 1 ☐ Y 2 ☐ N
SECTION C	
C1. CHECK ITEM	(143) 1 ☐ Female (C2) 2 ☐ Male (D1)

2

The next questions ask about health conditions of females and about birth history.

C2.	How old were you when your periods or menstrual cycles started?	(144) 00 ☐ haven't started yet (D1) _____ years old number
C3.	Have your periods stopped entirely—not counting during pregnancy?	(145) 1 ☐ Y(C5) 2 ☐ N
C4.	How many days ago did your last period or menstrual cycle end?	(146) 000 ☐ having it now _____ days ago } (C8) number
C5.	How old were you when they stopped?	(147) _____ years old number
C6.	Have you had a hysterectomy? DEFINE IF NECESSARY: Has your uterus been removed?	(148) 1 ☐ Y 2 ☐ N(C8)
C7.	How old were you when you had your (hysterectomy/uterus removed)?	(149) _____ years old number
C8.	Have you ever had one or both of your ovaries removed (either when you had your uterus removed or at another time)?	(150) 1 ☐ Y 2 ☐ N(C11) 9 ☐ DK(C11)
C9.	Were both ovaries removed or only one?	(151) 1 ☐ both 2 ☐ one 9 ☐ DK
C10.	How old were you when you had the (ovary/ovaries) removed?	(152) _____ years old number
C11.	Have you had a tubal ligation—that is, an operation to tie, cut or burn your tubes so you couldn't get pregnant?	(153) 1 ☐ Y 2 ☐ N(C13) 9 ☐ DK(C13)
C12.	How old were you when you had this operation?	(154) _____ years old number
C13.	Have you ever taken birth control pills?	(155) 1 ☐ Y 2 ☐ N(C22)
C14.	How old were you when you began taking birth control pills?	(156) _____ years old number

3

C15. Are you taking birth control pills now?	(157) 1 ☐ Y(C18) 2 ☐ N
C16. How long ago did you stop taking them?	(158)-(159) $\left\{\begin{array}{l}\text{1 ☐ days}\\\text{2 ☐ weeks}\\\text{3 ☐ months}\\\text{4 ☐ years}\end{array}\right.$ number
C17. Why did you stop taking them?	DO NOT READ. (160) 1 ☐ NORMAL CYCLE (C18) (161) 1 ☐ DEPRESSION (162) 1 ☐ OTHER MENTAL SIDE EFFECTS (163) 1 ☐ PHYSICAL SIDE EFFECTS $\left.\begin{array}{l}\\\\\end{array}\right\}$ (C22) (164) 1 ☐ PHYSICIAN RECOMMENDATION (165) 1 ☐ OTHER 2_____ SPECIFY
C18. SHOW CARD SUP-2, ORAL CONTRACEPTIVES CHART. Please look at this chart and show me the brand of pills you are using.	(166) _____ number 999 ☐ DK 777 ☐ other 666 _____ specify
C19. How long have you been taking this brand of pill?	(167)-(168) _____ number $\left\{\begin{array}{l}\text{1 ☐ days}\\\text{2 ☐ weeks}\\\text{3 ☐ months}\\\text{4 ☐ years}\end{array}\right.$
C20. Have you taken any other brand in the past year?	(169) 1 ☐ Y 2 ☐ N(C22)
C21. What other brands have you taken in the past year?	(170)-(172) _____, _____, _____ number number number 999 ☐ DK
DO NOT ASK IF "Y" IN C3. C22. Have you had a birth control shot within the last 6 months?	(173) 1 ☐ Y 2 ☐ N
C23. About how long has it been since you had a Pap smear test for cancer?	(174) 99 ☐ DK 98 ☐ never 00 ☐ less than 1 year _____ years number
C24. About how long has it been since you had your breasts examined by a doctor or other health professional?	(175) 99 ☐ DK 98 ☐ never 00 ☐ less than 1 year _____ years number
C25. Have you ever been pregnant?	(176) 1 ☐ Y 2 ☐ N(D1)

4

C26. **CHECK ITEM:** REFER TO C3, C6, C9, AND C11. MARK FIRST APPLICABLE BOX. .	(177) 1 ☐ "Y" in any of C3, C6 or C11 (C29) 2 ☐ "Both" in C9 (C29) 3 ☐ Other (C27)
C27. Are you <u>now</u> pregnant?	(178) 1 ☐ Y 2 ☐ N(C29)
C28. Which month of pregnancy are you in?	(179) _____ month number
IF AGE 60+, SKIP TO C32. OTHERWISE ASK: C29. (Besides this pregnancy) Have you been pregnant during the last **12 months?**	(180) 1 ☐ Y 2 ☐ N(C32)
C30. How many months ago did that pregnancy end?	(181) 1 ☐ less than 4 months ago 2 ☐ 4 mos.-less than 7 mos. ago 3 ☐ 7 mos.-less than 10 mos. ago 4 ☐ 10-12 months ago
C31. Are you now breastfeeding a child?	(182) 1 ☐ Y 2 ☐ N
C32. How many times have you been pregnant? Be sure to count all your pregnancies whether they ended in miscarriage, stillbirth, abortion, or live birth.	(183) _____ pregnancies number
C33. What is the total number of miscarriages you have had?	(184) 00 ☐ none _____ miscarriages number
C34. What is the total number of stillbirths you have had?	(185) 00 ☐ none _____ stillbirths number
C35. What is the total number of live births you have had?	(186) 00 ☐ none (D1) 01 ☐ one live birth (C36) _____ live births (C38) number
C36. Did this child weigh less than 5½ pounds (2500 grams) at birth?	(187) 1 ☐ Y 2 ☐ N 9 ☐ DK
C37. Was this child born with any physical or mental problem or defect?	(188) 1 ☐ Y(C40) 2 ☐ N(D1)
C38. How many of your children (who were born alive) weighed less than 5½ pounds (2500 grams) at **birth?**	(189) 00 ☐ none _____ children number
C39. How many of your children (who were born alive) were born with any physical or mental problem or defect?	(190) 00 ☐ none (D1) _____ children number

5

C40. Now I will ask about the kinds of problems your (child/children) had at birth. Please tell me the name(s) of your (child/children) who (was/were) born with a problem (starting with the first child born with a problem).

LIST NAMES OF CHILDREN BELOW.

Did ——'s problem or defect involve (his/her)—

READ LIST, MARK RESPONSE FOR EACH CATEGORY FOR FIRST CHILD.
THEN, IF ANOTHER CHILD WITH A PROBLEM, SAY:

Now think about (INSERT NAME OF (SECOND/ . . .) CHILD WITH PROBLEM).
Did this child's problem or defect involve (his/her)—

Did ——'s problem or defect involve (his/her)—	First or Only Child with Problem	Second Child with Problem	Third Child with Problem
	name	name	name
heart?	(191) 1 □ Y 2 □ N 9 □ DK	(199) 1 □ Y 2 □ N 9 □ DK	(207) 1 □ Y 2 □ N 9 □ DK
eyes?.	(192) 1 □ Y 2 □ N 9 □ DK	(200) 1 □ Y 2 □ N 9 □ DK	(208) 1 □ Y 2 □ N 9 □ DK
ears?.	(193) 1 □ Y 2 □ N 9 □ DK	(201) 1 □ Y 2 □ N 9 □ DK	(209) 1 □ Y 2 □ N 9 □ DK
mouth or throat?.	(194) 1 □ Y 2 □ N 9 □ DK	(202) 1 □ Y 2 □ N 9 □ DK	(210) 1 □ Y 2 □ N 9 □ DK
stomach or intestines?	(195) 1 □ Y 2 □ N 9 □ DK	(203) 1 □ Y 2 □ N 9 □ DK	(211) 1 □ Y 2 □ N 9 □ DK
kidneys or urinary system? .	(196) 1 □ Y 2 □ N 9 □ DK	(204) 1 □ Y 2 □ N 9 □ DK	(212) 1 □ Y 2 □ N 9 □ DK
muscles, bones, or joints? . .	(197) 1 □ Y 2 □ N 9 □ DK	(205) 1 □ Y 2 □ N 9 □ DK	(213) 1 □ Y 2 □ N 9 □ DK
brain or nervous system?. . .	(198) 1 □ Y 2 □ N 9 □ DK	(206) 1 □ Y 2 □ N 9 □ DK	(214) 1 □ Y 2 □ N 9 □ DK

SECTION D

D1. I would like to talk to you about drinking alcoholic beverages. Alcoholic beverages include liquor such as whiskey, rum, gin, vodka or tequila, or beer, or wine.

D2. In you entire life have you had at least 12 drinks of any kind of alcoholic beverage?

(215) 1 □ Y   2 □ N(D4)

D3. In any one year have you had at least 12 drinks of any kind of alcoholic beverage?

(216) 1 □ Y(D5) 2 □ N

6

D4. What is your main reason for not drinking?	(217) 01 ☐ NO NEED/NOT NECESSARY 02 ☐ DON'T CARE FOR/DISLIKE IT 03 ☐ MEDICAL/HEALTH REASONS 04 ☐ RELIGIOUS/MORAL REASONS 05 ☐ BROUGHT UP NOT TO DRINK 06 ☐ COSTS TOO MUCH 07 ☐ FAMILY MEMBER ALCOHOLIC 08 ☐ INFREQUENT DRINKER 09 ☐ OTHER ⟶ 10 _____ specify	(E1)
D5. Not counting small tastes, how old were you when you started drinking alcoholic beverages?	(218) _____ years old number	
HAND CALENDAR CARD. **D6.** Did you have a drink during the period outlined in red?	(219) 1 ☐ Y(D8) 2 ☐ N	

D7. When was your last drink?
 	
ENTER DATE AND CHECK BOX
	(220)-(222) ____/____/____ ⟶
	  Month Day Year
	(223) 1 ☐ before 4-week reference period, less than 1 year from end of reference period (D32)
	   2 ☐ 1 or more years ago from end of reference period (D64)	

D8. During that period, when did you last have a drink?	(224)-(226) ____/____/____ mo. day yr.	
D9. Let's talk about the 4 weeks outlined in red. During that 4-week period, on how many days did you drink any beer?	(227) 00 ☐ none or never (D13) _____ days number	
D10. During that 4-week period, on the day(s) when you drank beer, about how many beers did you drink (a day)?	(228) _____ beers number	
D11. During those four weeks, what was the total number of beers you drank?	(229) _____ beers number	
D12. How many ounces were in a typical can or bottle or glass that you drank during that period?	(230) _____ ounces number	
D13. During that 4-week period, on how many days did you drink any wine?	(231) 00 ☐ none or never (D17) _____ days number	
D14. During that 4-week period, on the day(s) when you drank wine, about how many glasses of wine did you drink (a day)?	(232) _____ glasses number	

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D15. During those four weeks, what was the total number of glasses of wine that you drank?	(233)	_____glasses number
D16. How many ounces were in a typical glass that you drank during that period?	(234)	_____ounces number
D17. During that 4-week period, on how many days did you drink any liquor, such as whiskey, rum, gin, vodka, or tequila?	(235)	00 ☐ none or never (D21) _____days number
D18. During that 4-week period, on the day(s) when you drank liquor, such as whiskey, rum, gin, vodka, or tequila, about how many drinks did you have a (day)?	(236)	_____drinks number
D19. During those four weeks, what was the total number of drinks of liquor you drank?	(237)	_____drinks number
D20. How many ounces of liquor were in a typical glass that you drank during that period?	(238)	_____ounces number
D21. CHECK ITEM: REFER TO QUESTIONS D9, D13, AND D17 AND MARK FIRST APPROPRIATE BOX.	(239)	1 ☐ only one beverage type (D24) 2 ☐ drank every day (D24) 3 ☐ other (D22)
D22. I have asked you about beer, wine, and liquor separately. Now I want you to think about them combined.	/////////////////////////////////
D23. During those 4 weeks outlined in red, on how many days altogether did you drink any kind of alcoholic beverage, that is, beer, or wine, or liquor?	(240)	01 ☐ one day only (D29) OR _____ days number
D24. During those 4 weeks, did you have more than (largest number in D10, D14, or D18) drink(s) of any kind of alcoholic beverage on a single day?	(241)	1 ☐ Y 2 ☐ N(D29)
D25. During those 4 weeks, on how many days did you have more than (largest number in D10, D14, or D18) drinks(s) of any kind of alcoholic beverage, that is, beer, wine, or liquor?	(242)	01 ☐ one day only (D28) _____days number
D26. What was the largest number of drinks you had on any one of those days?	(243)	_____drinks number
D27. On how many days during those 4 weeks did you have (number in D26) drinks?	(244)	_____days (D29) number

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D28. How many drinks did you have on that day?	(245)	_____ drinks number
D29. Was your drinking during those four weeks typical of your drinking over the past 12 months?	(246)	1 ☐ Y(D31) 2 ☐ N
D30. Did you drink more or less than usual during those 4 weeks?	(247)	1 ☐ more ⎫ 2 ☐ less ⎬ (D51)
D31. For how many years has this been typical of your drinking?	(248)	_____ years (D51) number
D32. Let's talk about the 4-week period ending the day you had your last drink. During those 4 weeks, on how many days did you drink any beer?	(249)	00 ☐ none or never (D36) _____ days number
D33. During that 4-week period, on the day(s) when you drank beer, about how many beers did you drink (a day)?	(250)	_____ beers number
D34. During those four weeks, what was the total number of beers you drank?	(251)	_____ beers number
D35. About how many ounces were in a typical can or bottle or glass of beer that you drank during that period?	(252)	_____ ounces number
D36. During those 4 weeks, on how many days did you drink any wine?	(253)	00 ☐ none or never (D40) _____ days number
D37. During that 4-week period, on the day(s) when you drank wine, about how many glasses of wine did you drink (a day)?	(254)	_____ glasses number
D38. During those four weeks, what was the total number of glasses of wine that you drank?	(255)	_____ glasses number
D39. About how many ounces were in a typical glass that you drank during that period?	(256)	_____ ounces number
D40. During those 4 weeks, on how many days did you drink any liquor, such as whiskey, rum, gin, vodka or tequila?	(257)	00 ☐ none or never (D44) _____ days number

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D41. During that 4-week period, on the day(s) when you drank liquor, such as whiskey, rum, gin, vodka or tequila, about how many drinks did you have (a day)?	(258)	_____drinks number
D42. During those four weeks, what was the total number of drinks you had?	(259)	_____drinks number
D43. About how many ounces of liquor were in a typical drink you had during that period?	(260)	_____ounces number
D44. CHECK ITEM: REFER TO QUESTIONS D32, D36, AND D40 AND MARK FIRST APPROPRIATE BOX.	(261)	1 ☐ only one beverage type (D47) 2 ☐ drank every day (D47) 3 ☐ other (D45)
D45. I have asked you about beer, wine, and liquor separately. Now I want you to think about them combined.	////////////////////////////
D46. During those 4 weeks, on how many days altogether did you drink any kind of alcoholic beverage, that is, beer, or wine, or liquor?	(262)	01 ☐ one day only OR _____days number
D47. Was your drinking during those 4 weeks typical of your drinking during the 12 months before your last drink?	(263)	1 ☐ Y(D49) 2 ☐ N
D48. Did you drink more or less than usual during those 4 weeks?	(264)	1 ☐ more 2 ☐ less } (D50)
D49. For how many years did you drink the same as you did in the 4 weeks before your last drink?	(265)	_____years number
D50. What is your main reason for not drinking since (date in D7)?	(266)	DO NOT READ. 01 ☐ NO NEED/NOT NECESSARY 02 ☐ DON'T CARE FOR/DISLIKE IT 03 ☐ MEDICAL/HEALTH REASONS 04 ☐ RELIGIOUS/MORAL REASONS 05 ☐ ALCOHOLIC/PROBLEM DRINKING (SELF) 06 ☐ COSTS TOO MUCH 07 ☐ FAMILY MEMBER AN ALCOHOLIC OR PROBLEM DRINKER 08 ☐ INFREQUENT DRINKER 09 ☐ OTHER 10 _____ specify
D51. Now think back over the 12-month period before your last drink. In how many of those months did you have at least one drink of any alcoholic beverage, that is, either beer or wine or liquor?	(267)	_____months number

D52. During those months, on how many days did you have 9 or more drinks of any alcoholic beverage?

(268) _____ days
number

D53. On how many days did you have at least 5 drinks of any alcoholic beverage?

(269) _____ days
number

D54. The next few questions are about drinking during your lifetime beginning with the age you started drinking and ending with your last drink.

Was there ever a period in your life when you considered yourself to be a heavy drinker?

(270) 1 ☐ Y   2 ☐ N (D57)

D55. How many years were you a heavy drinker?

(271) _____ years
number

D56. When you were a heavy drinker, how many drinks of alcoholic beverages did you have in a typical week?

(272) _____ drinks
number

D57. Was there ever a period in your life when you considered yourself to be a moderate drinker?

(273) 1 ☐ Y   2 ☐ N (D60)

D58. How many years were you a moderate drinker?

(274) _____ years
number

D59. When you were a moderate drinker, how many drinks of alcoholic beverages did you have in a typical week?

(275) _____ drinks
number

D60. Was there ever a period in your life when you considered yourself to be a light drinker?

(276) 1 ☐ Y   2 ☐ N (D63)

D61. How many years were you a light drinker?

(277) _____ years
number

D62. When you were a light drinker, how many drinks of alcoholic beverages did you have in a typical week?

(278) _____ drinks
number

D63. Do you now consider yourself to be a light, moderate, or heavy drinker?

(279) 1 ☐ abstainer
      2 ☐ light
      3 ☐ moderate   } (E1)
      4 ☐ heavy

D64. The next few questions are about drinking during your lifetime beginning with the age you started drinking and ending with your last drink.

Was there ever a period in your life when you considered yourself to be a heavy drinker?

(280) 1 ☐ Y   2 ☐ N (D67)

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D65. How many years were you a heavy drinker?	(281)	_____ years number
D66. When you were a heavy drinker, how many drinks of alcoholic beverages did you have in a typical week?	(282)	_____ drinks number
D67. Was there ever a period in your life when you considered yourself to be a moderate drinker?	(283)	1 ☐ Y 2 ☐ N (D70)
D68. How many years were you a moderate drinker?	(284)	_____ years number
D69. When you were a moderate drinker, how many drinks of alcoholic beverages did you have in a typical week?	(285)	_____ drinks number
D70. Was there ever a period in your life when you considered yourself to be a light drinker?	(286)	1 ☐ Y 2 ☐ N (D73)
D71. How many years were you a light drinker?	(287)	_____ years number
D72. When you were a light drinker, how many drinks of alcoholic beverages did you have in a typical week?	(288)	_____ drinks number
D73. What is your main reason for not drinking since (date in D7)?	(289)	DO NOT READ. 01 ☐ NO NEED/NOT NECESSARY 02 ☐ DONT' CARE FOR/DISLIKE IT 03 ☐ MEDICAL/HEALTH REASONS 04 ☐ RELIGIOUS/MORAL REASONS 05 ☐ ALCOHOLIC/PROBLEM DRINKING (SELF) 06 ☐ COSTS TOO MUCH 07 ☐ FAMILY MEMBER AN ALCOHOLIC OR PROBLEM DRINKER 08 ☐ INFREQUENT DRINKER 09 ☐ OTHER 10 _____ specify

SECTION E

E1. INTRODUCTION.

Now I have some questions about pills and other drugs you may have used.

SHOW CARD SUP-4, SEDATIVE CHART.

Please have a good look at all of the pills on this card. These pills are barbiturates and other sedatives.

PAUSE WHILE RESPONDENT LOOKS AT CARD.

Sometimes doctors prescribe these pills to calm people down during the day or to help them sleep at night. But besides the medical uses, people sometimes take these pills on their own, to help them relax, or just to feel good.

E2.	Did you <u>ever</u> take <u>any</u> of these kinds of pills just to see what it was like and how it would work?	(290)	1 □ Y 2 □ N 9 □ DK
E3.	Did you <u>ever</u> take <u>any</u> of these kinds of pills just to enjoy the feeling they give you?	(291)	1 □ Y 2 □ N 9 □ DK
E4.	Did you <u>ever</u> take <u>any</u> of these pills for some <u>other</u> nonmedical reason, and not because you needed it?	(292)	1 □ Y 2 □ N 9 □ DK
E5.	CHECK ITEM	(293)	1 □ "N" or "DK" in E2, E3 <u>AND</u> E4 (E7) 2 □ Other (E6)
E6.	When was the <u>most recent</u> time you took any of these for nonmedical reasons?	(294)	1 □ within the past week 2 □ within the past month 3 □ within the past 6 months 4 □ 6 months to a year ago 5 □ more than a year ago 6 □ more than two years ago 7 □ more than 5 years ago 9 □ DK
E7.	How old were you when you first had a chance to try marijuana or hash if you wanted to?	(295)	_____years old number 99 □ DK 00 □ never had chance (E12)
E8.	About how old were you the first time you tried marijuana or hash?	(296)	_____years old number 99 □ DK 00 □ never used (E12)
E9.	When was the <u>most recent</u> time you used marijuana or hash?	(297)	1 □ within the past week 2 □ within the past month 3 □ within the past 6 months 4 □ 6 months to a year ago 5 □ more than a year ago } (E11) 6 □ more than two years ago 7 □ more than 5 years ago 9 □ DK
E10.	In the past 30 days, on how many different days did you use marijuana or hash?	(298)	_____ days number
E11.	In your entire life, about how many times have you used marijuana or hash?	(299)	1 □ 1-2 times 2 □ 3-10 times 3 □ 11-99 times 4 □ 100 times or more
E12.	CHECK ITEM	(300)	1 □ Age 12-44 (E13) 2 □ Age 45+ (F1)

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E13. INTRODUCTION.

The next questions are about inhalants that people sniff or breathe in, to get high or to make them feel good. I am referring to things like lighter fluids, aerosol sprays like PAM, glue, amyl nitrite, "poppers," or locker room odorizers.

E14. How old were you when you first had a chance to try one of these inhalants if you wanted to?

(301) _____years old
number

99 ☐ DK
00 ☐ never had chance (E18)

E15. About how old were you the first time you used one of these inhalants?

(302) _____years old
number

99 ☐ DK
00 ☐ never used (E18)

E16. Have you ever used any of the following inhalants for kicks or to get high?

Gasoline or lighter fluid	(303)	1 ☐ Y	2 ☐ N
Spray paint	(304)	1 ☐ Y	2 ☐ N
Other aerosol sprays	(305)	1 ☐ Y	2 ☐ N
"Shoe shine," glue, or toluene	(306)	1 ☐ Y	2 ☐ N
Lacquer thinner, other paint solvents	(307)	1 ☐ Y	2 ☐ N
Amyl nitrite or poppers	(308)	1 ☐ Y	2 ☐ N
Halothane, ether, or other anesthetics	(309)	1 ☐ Y	2 ☐ N
Nitrous oxide, whippets	(310)	1 ☐ Y	2 ☐ N
"Locker Room" odorizers	(311)	1 ☐ Y	2 ☐ N

E17. When was the <u>most</u> <u>recent</u> time that you used one of these inhalants to get high or to feel good?

(312)
1 ☐ within the past week
2 ☐ within the past month
3 ☐ within the past 6 months
4 ☐ 6 months to a year ago
5 ☐ more than a year ago
6 ☐ more than two years ago
7 ☐ more than 5 years ago
9 ☐ DK

E18. How old were you when you first had a chance to try cocaine if you wanted to?

(313) _____years old
number

99 ☐ DK
00 ☐ never had a chance (F1)

E19. About how old were you the first time you tried cocaine?

(314) _____years old
number

99 ☐ DK
00 ☐ never used (F1)

14

E20. When was the <u>most</u> <u>recent</u> time that you used cocaine?

(315)

1 ☐ within the past week
2 ☐ within the past month
3 ☐ within the past 6 months
4 ☐ 6 months to a year ago
5 ☐ more than a year ago
6 ☐ more than two years ago
7 ☐ more than 5 years ago
9 ☐ DK

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SECTION F

| F1. | CHECK ITEM | (316) | 1 ☐ Age under 20 (END) |
| | | | 2 ☐ Age 20+ (F2) |

F2. In your lifetime, have you ever had two weeks or more during which you felt sad, blue, depressed or when you lost all interest and pleasure in things that you usually cared about or enjoyed?

(317) 1 ☐ Y
      2 ☐ N

F33. During (this/that) spell of (depression/<u>RESPONDENT'S EQUIVALENT</u>) which of these other problems did you have? For instance, during that spell:

FOR QUESTIONS F34-F49, READ EACH QUESTION WITH A CHECK IN BOX 5.

F3. Has there ever been a period of two weeks or longer when you <u>lost your appetite?</u>

(318) Y→PROBE ☐3 ☐4
   1 ☐ N

F34. Did you lose your appetite?

☐5

(360) 1 ☐ Y
     2 ☐ N

F4. Have you ever <u>lost weight</u> without trying to—as much as two pounds a week for several weeks (or as much as ten pounds altogether)?

(319) Y→PROBE ☐3 ☐4
   1 ☐ N

F35. Did you lose weight without trying to—as much as two pounds a week for several weeks (or as much as ten pounds altogether)?

☐5

(361) 1 ☐ Y
     2 ☐ N

F5. Have you ever had a period when your eating increased so much that you <u>gained</u> as much as two pounds a week for several weeks (or ten pounds altogether)?

(320) Y→PROBE ☐3 ☐4
   1 ☐ N

F36. Did your eating increase so much that you gained as much as two pounds a week for several weeks (or ten pounds altogether)?

☐5

(362) 1 ☐ Y
     2 ☐ N

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(321) 1 ☐ **APPETITE SUMMARY:** CHECK BOX IF CODE '5' IN F3, F4, or F5.

F6. Have you ever had a period of two weeks or more when you had <u>trouble falling asleep,</u> staying asleep or with waking up too early?

(322) Y→PROBE ☐3 ☐4
   1 ☐ N

F37. Did you have trouble falling asleep, staying asleep or waking up too early?

☐5

(363) 1 ☐ Y
     2 ☐ N

F7. Have you ever had a period of two weeks or longer when you were <u>sleeping too much?</u>

(323) Y→PROBE ☐3 ☐4
   1 ☐ N

F38. Were you sleeping too much?

☐5

(364) 1 ☐ Y
     2 ☐ N

(324) 1 ☐ SLEEP SUMMARY: CHECK BOX IF CODE '5' IN F6 or F7.

F8. Has there ever been a period (325) Y→PROBE ☐3   F39. Were you tired out all the time?
lasting two weeks or more when   ☐5
you felt tired out all the time?   ☐4   (365) 1 ☐ Y
                          1 ☐ N   2 ☐ N

(326) 1 ☐ TIRED OUT SUMMARY: CHECK BOX IF CODE '5' IN F8.

F9. Has there ever been a period (327) Y→PROBE ☐3   F40. Did you talk or move more slowly than is normal
of two weeks or more when   ☐5   for you?
you talked or moved more   1 ☐ N   ☐4
slowly than is normal for you?   (366) 1 ☐ Y
                                                             2 ☐ N

F10. Has there ever been a period (328) Y→PROBE ☐3   F41. Did you have to be moving all the time—that is you
of two weeks or more when   ☐5   couldn't sit still and paced up and down?
you had to be moving all the   ☐4
time—that is, you couldn't sit 1 ☐ N   (367) 1 ☐ Y
still and paced up and down?   2 ☐ N

(329) 1 ☐ SLOW, RESTLESS SUMMARY: CHECK BOX IF CODE '5' IN F9 or F10.

F11. Was there ever a period of (330) Y→ASK A ☐2   F42. Was your interest in sex a lot less than usual?
several weeks when your interest   ☐3
in sex was a lot less than usual?   ☐4   ☐5
                                             ☐8   (368) 1 ☐ Y
                          1 ☐ N(F12)   2 ☐ N

IF VOLUNTEERS NO INTEREST
EVER, MARK BOX 8 AND SKIP
TO F12.

A. Did you tell a doctor or any other professional
about your decreased interest in sex?

       Y→PROBE
(331) 1 ☐ N

B. Did you take medication more than once for your
decreased interest in sex?

       Y→PROBE
(332) 1 ☐ N

C. Did your decreased interest in sex interfere with your
life or activities a lot?

       YES→PROBE
(333) 1 ☐ N→MARK BOX 2.

(334) 1 ☐ SEX SUMMARY: CHECK BOX IF CODE '5' IN F11.

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(335)

F12. Has there ever been a period of   Y→   ☐5   F43. Did you feel worthless, sinful, or guilty?
two weeks or more when you felt
worthless, sinful or guilty?   1 ☐ N

(369)   1 ☐ Y
       2 ☐ N

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(336) 1 ☐ WORTHLESS SUMMARY: CHECK BOX IF CODE '5' IN F12.

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(337)

F13. Has there ever been a period of   Y→PROBE   ☐3   F44. Did you have a lot more trouble concentrating than is
two weeks or more when you   ☐4   ☐5   normal for you?
had a lot more <u>trouble concen-</u>
<u>trating</u> than is normal for you?   1 ☐ N

(370)   1 ☐ Y
       2 ☐ N

- -

(338)

F14. Have you ever had a period of   Y→PROBE   ☐3   F45. Did your thoughts come much slower than usual or seem
two weeks or more when your   ☐4   ☐5   mixed up?
<u>thoughts</u> came much <u>slower</u>
than usual or seemed mixed up?   1 ☐ N

(371)   1 ☐ Y
       2 ☐ N

---

(339) 1 ☐ TROUBLE THINKING SUMMARY: CHECK BOX IF CODE '5' IN F13 or F14.

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(340)

F15. Has there ever been a period of   Y→   ☐5   F46. Did you think a lot about death—either your own,
two weeks or more when you   someone else's or death in general?
<u>thought a lot about death</u>—
either your own, someone else's   1 ☐ N
or death in general?

(372)   1 ☐ Y
       2 ☐ N

- -

(341)

F16. Has there ever been a period of   Y→   ☐5   F47. Did you feel like you wanted to die?
two weeks or more when you
felt like you <u>wanted to die?</u>   1 ☐ N

(373)   1 ☐ Y
       2 ☐ N

- -

(342)

F17. Have you ever felt so low you   Y→   ☐5   F48. Did you feel so low that you thought of
<u>thought</u> of committing <u>suicide?</u>   committing suicide?

     1 ☐ N

(374)   1 ☐ Y
       2 ☐ N

- -

(343)

F18. Have you ever attempted <u>suicide?</u>   Y→   ☐5   F49. Did you attempt suicide?

     1 ☐ N

(375)   1 ☐ Y
       2 ☐ N

---

(344) 1 ☐ DEATH SUMMARY: CHECK BOX IF ANY '5'
        CODED IN F15-F18.   GO TO G1.

F19. CHECK ITEM. REFER TO SUMMARY BOXES ON PAGES 16-18.

(345) 1 ☐ FEWER THAN 4 SUMMARY BOXES CHECKED (G1)

2 ☐ 4 OR MORE SUMMARY BOXES CHECKED, AND "N" IN F2 (F22)

3 ☐ 4 OR MORE SUMMARY BOXES CHECKED, AND "Y" IN F2 (F20)

F20. You said you've had a period of feeling (depressed/RESPONDENT'S EQUIVALENT) and also said you've had some other problems (MENTION ALL QUESTIONS CODED '5' IN F3-F18). Has there ever been a time when the feelings of (depression/RESPONDENT'S EQUIVALENT) and some of these other problems occurred together, that is within the same month?

(346) 1 ☐ Y(F24) 2 ☐ N

F21. So there's never been a period when you felt (depressed/RESPONDENT'S EQUIVALENT) at the same time you were having some of these other problems?

(347) 1 ☐ has been a period (F24)
2 ☐ never been a period (G1)

F22. You said you have had periods when (MENTION ALL QUESTIONS CODED '5' IN F3-F18.). Was there ever a time when several of these problems occurred together—that is, within the same month?

(348) 1 ☐ Y   2 ☐ N(G1)

F23. When you were having some of these problems at about the same time, were you feeling okay, or were you feeling low, gloomy, blue or uninterested in everything?

(349) 1 ☐ okay(G1)
2 ☐ low or equivalent

F24. What's the longest spell you've ever had when you felt (depressed/RESPONDENT'S EQUIVALENT) and had several of these other problems at the same time?

(350)(351) _____ number ⎰ 1 ☐ weeks
⎱ 2 ☐ months
3 ☐ years

F25. CHECK ITEM

(352) 1 ☐ less than 2 weeks in F24 (G1)
2 ☐ other (F26)

F26. Have you had more than one spell when you felt (depressed/RESPONDENT'S EQUIVALENT) and had several of these other problems at the same time?

(353) 1 ☐ Y   2 ☐ N

F27. Did (this spell/any of those spells) occur just after someone close to you died?

IF VOLUNTEERS BEGAN MORE THAN 2 MONTHS AFTER DEATH, MARK "N" AND SKIP TO F29.

(354) 1 ☐ Y   2 ☐ N(F29)

F28. Have you had any spell of depression along with these other problems (such as <u>MENTION SOME PROBLEMS CODED '5' IN F3-F18</u>) at times when it wasn't due to a death?

(355) 1 ☐ only due to death
2 ☐ other times or not due to death

F29. Are you in one of these spells of feeling low or disinterested and having some of these other problems now?

(356) 1 ☐ Y(F31)
2 ☐ N

F30. When did your last spell like that end?

(357) 1 ☐ within last 2 weeks
2 ☐ within last month
3 ☐ within last 6 months
4 ☐ within last year
5 ☐ more than 1 year ago

F31. CHECK ITEM.

(358) 1 ☐ "Y" in F26 (F32)
2 ☐ more than 52 weeks or more than 1 year in F24 (F32)
3 ☐ other (F33—page 16)

F32. Now I'd like to know about the time when you were feeling (depressed/<u>RESPONDENT'S EQUIVALENT</u>) for at least 2 weeks and had the largest number of these problems at the same time. How old were you at that time? (IF CAN'T CHOOSE: Then pick one bad spell.)

(359) _____years old
number   (F33—page 16)

G1. I am going to read a list of ways you may have felt. Please tell me how often you have felt this way <u>during the past week</u>: rarely or none of the time; some or a little of the time; occasionally or a moderate amount of time; or most or all of the time.

HAND RESPONDENT CARD SUP-5 FOR QUESTION G1. During the past week, that would be from (date) through today:		Rarely or None of the Time (Less than 1 Day)	Some or a Little of the Time (1-2 Days)	Occasionally or a Moderate Amount of Time (3-4 Days)	Most or All of the Time (5-7 Days)
a.	I was bothered by things that usually don't bother me	(376) 0 □	1 □	2 □	3 □
b.	I did not feel like eating; my appetite was poor	(377) 0 □	1 □	2 □	3 □
c.	I felt that I could not shake off the blues even with help from my family or friends	(378) 0 □	1 □	2 □	3 □
d.	I felt that I was just as good as other people	(379) 0 □	1 □	2 □	3 □
e.	I had trouble keeping my mind on what I was doing	(380) 0 □	1 □	2 □	3 □
f.	I felt depressed	(381) 0 □	1 □	2 □	3 □
g.	I felt that everything I did was an effort	(382) 0 □	1 □	2 □	3 □
h.	I felt hopeful about the future	(383) 0 □	1 □	2 □	3 □
i.	I thought my life had been a failure	(384) 0 □	1 □	2 □	3 □
j.	I felt fearful	(385) 0 □	1 □	2 □	3 □
k.	My sleep was restless	(386) 0 □	1 □	2 □	3 □
l.	I was happy	(387) 0 □	1 □	2 □	3 □
m.	I talked less than usual	(388) 0 □	1 □	2 □	3 □
n.	I felt lonely	(389) 0 □	1 □	2 □	3 □
o.	People were unfriendly	(390) 0 □	1 □	2 □	3 □
p.	I enjoyed life	(391) 0 □	1 □	2 □	3 □
q.	I had crying spells	(392) 0 □	1 □	2 □	3 □
r.	I felt sad	(393) 0 □	1 □	2 □	3 □
s.	I felt that people disliked me	(394) 0 □	1 □	2 □	3 □
t.	I could not get "going"	(395) 0 □	1 □	2 □	3 □

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics,
and Technology
National Center for Health Statistics

SPANISH VERSION

ADULT SAMPLE PERSON
QUESTIONNAIRE (521)
(Ages 12-74 Years)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

WESTAT
ID No:

(100) Stand No.   Segment No.   Serial No.

(107) Family No.

(108) SP No.

NCHS
ID No:

(101) __ __ __ __ __ __ - __

NAME (First, Middle, Last)

(109)

(110) SEX
1 ☐ Male
2 ☐ Female

(111) AGE

INTERVIEWER NAME: NO. (112)

REVIEWER NAME: NO. (113)

LANGUAGE OF INTERVIEW
(106)
1 ☐ English
2 ☒ Spanish

TIME BEGAN
(102)-(103)
__ __:__ __   1 ☐ am   2 ☐ pm

TIME ENDED
(104)-(105)
__ __:__ __   1 ☐ am   2 ☐ pm

DATE OF EXAMINATION
__ __ / __ __ / __ __
Month Day Year

TIME
__ __:__ __   ☐ am
☐ pm

TRANSPORTATION
☐ Taxi
☐ Self

__ __ / __ __ / __ __
Month Day Year

ADULT SAMPLE PERSON SUPPLEMENT
(Ages 12-74 Years)

A1. Durante los siete días pasados, ¿se ha aplicado exterminador de hierbas-malas o productos para controlar las enfermedades de las plantas en su jardín o en la área que rodea su casa?

(114) 1 □ S   2 □ N   9 □ NS

A2. Durante los siete días pasados, ¿se han aplicado insecticidas a su casa, jardín, patio, animales o plantas de casa? Algunos ejemplos de insecticidas son repelentes de mosquitos, exterminadores de hormigas y cucarachas, (tiras contra-insecto/"no pest-strips"), polvos y collares para las pulgas y el polvo insecticida.

(115) 1 □ S   2 □ N   9 □ NS

A3. Durante los siete días pasados, ¿se le ha derramado o rociado algún pesticida en cualquier parte de cuerpo ya sea por accidente o por cualquier motivo?

(116) 1 □ S   2 □ N

A4. Durante los siete días pasados, ¿ha trabajado usted en alguna de estas ocupaciones o negocios:

Planta procesadora de pesticidas? . . . . (117) 1 □ S   2 □ N

Aplicación o rocío de pesticidas? . . . . (118) 1 □ S   2 □ N

Trabajo de (campo/finca) o en agricultura? . . . . . (119) 1 □ S   2 □ N

SECTION B

B1. CHECK ITEM

(120) 1 □ Age 12-19 (B2)
2 □ Age 20+ (C1)

B2. ¿Ha fumado por lo menos 100 cigarrillos en toda su vida?

(121) 1 □ S   2 □ N(B14)

B3. Más o menos, ¿qué edad tenía usted cuando empezó a fumar cigarrillos bastante regularmente?

(122) _____ años de edad
número
00 □ nunca fumó regularmente

B4. ¿Fuma cigarrillos ahora?

(123) 1 □ S(B7)   2 □ N

B5. Más o menos, ¿hace cuánto tiempo que dejó de fumar cigarrillos (bastante regularmente)?

(124) _____ años (B9)
número
00 □ menos de un año

B6. ¿En qué fecha fue eso más o menos?

(125)-(127) _____/_____/_____
mes   día   año

1

B7. Estamos interesados en el número actual de cigarrillos que las personas fuman en un día. ¿Cuántos cigarrillos por día (fuma/fumaba) usted (cuando fumaba regularmente la última vez)?

IF ANSWERS IN PACKS, ASK:
¿Me podría dar el número exacto de cigarrillos?

(128) 00 ☐ menos de uno por día

_____ cigarrillos
número

(129) _____ cajetillas
número

B8. ¿Hubo alguna vez un período cuando fumaba más de (number in B7) cigarrillos por día?

(130) 1 ☐ S   2 ☐ N(B10)

B9. Durante el período cuando fumaba más, ¿cuántos cigarrillos más o menos fumaba por día usualmente?

(131) 00 ☐ menos de uno por día

_____ cigarrillos
número

(132) _____ cajetillas
número

IF 1 YEAR OR MORE IN B5, GO TO B14.

B10. ¿Qué marca de cigarrillos (fuma/fumaba) usted usualmente?

Nombre(s) de la marca(s)

(133) _____

(134) _____

IF MORE THAN ONE BRAND, ASK:

B11. ¿Cuál marca (fuma/fumaba) usted más?

Nombre de la marca

(135) _____

CHECK CARD SUP-1, BRAND LIST. IF BRAND(S) NAMED APPEAR(S) ON LIST ASK:

B12. ¿Esos son X , Y ,o Z ?

INCLUDE ALL NAMES FOR THE BRAND.

(136) _____

B13. ¿Qué clase de cigarillos (brand) son los que usted (fuma/fumaba)? ¿Son:

a. Cigarillos con filtro o sin filtro?. . . . .

(137) 1 ☐ CF   2 ☐ SF   9 ☐ NS

b. Mentolado o sin mentol? . . . .

(138) 1 ☐ M   2 ☐ SM   9 ☐ NS

c. Caja o paquete suave? . . . .

(139) 1 ☐ C   2 ☐ PS   9 ☐ NS

d. Regular, king size, 100 o 120 milímetros? . . . .

(140) 1 ☐ R   2 ☐ KS   3 ☐ 100   4 ☐ 120 9 ☐ NS

e. Altos, medianos, o bajos en nivel de brea y nicotina?. . . . .

(141) 1 ☐ A   2 ☐ M   3 ☐ B   9 ☐ NS

B14. ¿Fuma alguna (otra) persona de su hogar cigarrillos, (puros/cigarros/tabacos), o pipa dentro de su casa?

(142) 1 ☐ S   2 ☐ N

C1. CHECK ITEM	(143) 1 ☐ Female (C2) 2 ☐ Male (D1)
Las siguientes preguntas se tratan sobre condiciones de salud de las mujeres y sobre sus partos. **C2.** ¿Qué edad tenía cuando empezó su regla o períodos menstruales?	(144) oo ☐ no han empezado todavía (D1) _____ años de edad número
C3. ¿Se ha suspendido su regla por completo — sin contar cuando estaba embarazada?	(145) 1 ☐ S(C5) 2 ☐ N
C4. ¿Cuántos días hace que terminó su última regla o período menstrual?	(146) ooo ☐ lo tengo ahora hace _____ días } (C8) número
C5. ¿Qué edad tenía cuando dejó de tener su regla?	(147) _____ años de edad número
C6. ¿Le han hecho una histerectomía? DEFINE IF NECESSARY: ¿Le sacaron la matriz?	(148) 1 ☐ S 2 ☐ N(C8)
C7. ¿Qué edad tenía cuando le (hicieron la histerectomía/sacaron la matriz)?	(149) _____ años de edad número
C8. ¿Le han sacado uno o ambos ovarios (ya sea cuando le sacaron la matriz o en otra ocasión)?	(150) 1 ☐ S 2 ☐ N(C11) 9 ☐ NS(C11)
C9. ¿Le sacaron los dos ovarios o sólo uno?	(151) 1 ☐ ambos 2 ☐ uno 9 ☐ NS
C10. ¿Qué edad tenía cuando le sacaron (el ovario/los ovarios)?	(152) _____ años de edad número
C11. ¿Le han ligado (los tubos/las trompas)—es decir, le han hecho una operación donde le amarran, cortan o queman (los tubos/las trompas) para que no quede embarazada?	(153) 1 ☐ S 2 ☐ N(C13) 9 ☐ NS(C13)
C12. ¿Qué edad tenía cuando le hicieron esta operación?	(154) _____ años de edad número
C13. ¿Ha tomado usted alguna vez píldoras (para el control de la natalidad/anticonceptivas)?	(155) 1 ☐ S 2 ☐ N(C22)

3

C14. ¿Qué edad tenía cuando empezó a tomar píldoras (para el control de la natalidad/anticonceptivas)?	(156) _____ años de edad número
C15. ¿Está tomando las píldoras (para el control de la natalidad/anticonceptivas) ahora?	(157) 1 ☐ S(C18) 2 ☐ N
C16. ¿Hace cuánto tiempo que dejó de tomarlas?	(158)(159) _____ número { 1 ☐ días 2 ☐ semanas 3 ☐ meses 4 ☐ años
C17. ¿Por qué dejó de tomarlas?	DO NOT READ. (160) 1 ☐ CICLO NORMAL (C18) (161) 1 ☐ DEPRESIÓN (162) 1 ☐ OTROS MAL EFECTOS MENTALES/ "MENTAL SIDE EFFECTS" (163) 1 ☐ MAL EFECTOS FÍSICOS } (C22) (164) 1 ☐ LO RECOMENDÓ UN MÉDICO (165) 1 ☐ OTRO 2 _____ ESPECIFIQUE
SHOW CARD SUP-2, ORAL CONTRACEPTIVE CHART. **C18.** Por favor mire esta tarjeta y enséñeme la marca de las píldoras que usted está usando.	(166) _____ número 999 ☐ NS 777 ☐ otro 666 _____ especifique
C19. ¿Hace cuánto tiempo que usted ha estado tomando esta marca de píldoras?	(167)(168) _____ número { 1 ☐ días 2 ☐ semanas 3 ☐ meses 4 ☐ años
C20. ¿Ha tomado usted cualquier otra marca durante el año pasado?	(169) 1 ☐ S 2 ☐ N(C22)
C21. ¿Qué otras marcas ha tomado usted durante el año pasado?	(170)(172) _____, _____, _____ número número número 999 ☐ NS
DO NOT ASK IF "S" IN C3. **C22.** ¿Le han dado una inyección (para el control de la natalidad/anticonceptiva) en los 6 meses pasados?	(173) 1 ☐ S 2 ☐ N
C23. Más o menos, ¿cuánto tiempo hace desde que le hicieron un (análisis Papanicolau/"pap test") para cáncer?	(174) 99 ☐ NS 98 ☐ nunca 00 ☐ menos de un año _____ años número

4

C24. Más o menos, ¿cuánto tiempo hace desde que un médico u otro profesional de salud le examinó los (senos/pechos)?	(175)	99 ☐ NS 98 ☐ nunca 00 ☐ menos de un año _____ años *número*
C25. ¿Ha estado usted <u>alguna</u> vez (embarazada/encinta)?	(176)	1 ☐ S 2 ☐ N(D1)
C26. CHECK ITEM: REFER TO C3, C6, C9, AND C11. MARK FIRST APPLICABLE BOX.	(177)	1 ☐ "S" in any of C3, C6 or C11 (C29) 2 ☐ "Ambos" in C9 (C29) 3 ☐ Other (C27)
C27. ¿Está usted (embarazada/encinta) <u>ahora</u>?	(178)	1 ☐ S 2 ☐ N(C29)
C28. ¿En qué mes de su embarazo está ahora?	(179)	_____ mes
IF AGE 60+, SKIP TO C32. OTHERWISE ASK: C29. (Además de este embarazo) ¿Ha estado embarazada durante los 12 meses pasados?	(180)	1 ☐ S 2 ☐ N(C32)
C30. ¿Hace cuántos meses que terminó ese embarazo?	(181)	1 ☐ hace menos de 4 meses 2 ☐ hace 4 meses — menos de 7 meses 3 ☐ hace 7 *meses* — menos de 10 *meses* 4 ☐ hace 10-12 meses
C31. ¿Le está dando pecho a un niño ahora?	(182)	1 ☐ S 2 ☐ N
C32. ¿Cuántas veces ha estado embarazada? Por favor, no olvide contar todos sus embarazos, es decir los malpartos, nacimientos muertos, abortos, y nacimientos vivos.	(183)	_____ embarazos *número*
C33. ¿Cuál es el número total de (malpartos/abortos espontáneos) que ha tenido?	(184)	00 ☐ ninguno _____ malpartos *número*
C34. ¿Cuántos niños en total ha tenido que nacieron muertos?	(185)	00 ☐ ninguno _____ nacimientos muertos *número*
C35. ¿Cuántos niños en total ha tenido que nacieron vivos?	(186)	00 ☐ ninguno (D1) 01 ☐ un nacimiento vivo *(C36)* _____ nacimientos vivos (C38) *número*
C36. ¿Pesó este niño menos de 5½ libras (2500 gramos) al nacer?	(187)	1 ☐ S 2 ☐ N 9 ☐ NS
C37. ¿Nació este niño con algún problema o defecto físico o mental?	(188)	1 ☐ S (C40) 2 ☐ N(D1)
C38. ¿Cuántos de sus niños (que nacieron vivos) pesaron menos de 5½ *libras* (2500 *gramos) al nacer?*	(189)	00 ☐ ninguno _____ niños *número*

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| C39. ¿Cuántos de sus niños (que nacieron vivos) nacieron con algún problema o defecto físico o mental? | (190) oo ☐ ninguno (D1)
 _____ niños <br> número |

C40. Ahora le voy a preguntar sobre el tipo de problemas que (su niño tuvo/sus niños tuvieron) al nacer. Por favor dígame (el nombre de su niño que nació/los nombres de sus niños que nacieron) con un problema (comenzando con el primer niño que nació con un problema).

LIST NAMES OF CHILDREN BELOW.

El problema o defecto de —— , ¿tuvo que ver con —

READ LIST, MARK RESPONSE FOR EACH CATEGORY FOR FIRST CHILD. THEN, IF ANOTHER CHILD WITH A PROBLEM, SAY:

Ahora piense sobre (INSERT NAME OF (SECOND/...) CHILD WITH PROBLEM).
El problema o defecto de este niño, ¿tuvo que ver con —

El problema o defecto de —— , ¿tuvo que ver con —	Primer o único niño con problema _____ nombre	Segundo niño con problema _____ nombre	Tercer niño con problema _____ nombre
el corazón?	(191) 1 ☐ S 2 ☐ N 9 ☐ NS	(199) 1 ☐ S 2 ☐ N 9 ☐ NS	(207) 1 ☐ S 2 ☐ N 9 ☐ NS
los ojos?	(192) 1 ☐ S 2 ☐ N 9 ☐ NS	(200) 1 ☐ S 2 ☐ N 9 ☐ NS	(208) 1 ☐ S 2 ☐ N 9 ☐ NS
los oídos?	(193) 1 ☐ S 2 ☐ N 9 ☐ NS	(201) 1 ☐ S 2 ☐ N 9 ☐ NS	(209) 1 ☐ S 2 ☐ N 9 ☐ NS
la boca o la garganta?	(194) 1 ☐ S 2 ☐ N 9 ☐ NS	(202) 1 ☐ S 2 ☐ N 9 ☐ NS	(210) 1 ☐ S 2 ☐ N 9 ☐ NS
el estómago o los intestinos?	(195) 1 ☐ S 2 ☐ N 9 ☐ NS	(203) 1 ☐ S 2 ☐ N 9 ☐ NS	(211) 1 ☐ S 2 ☐ N 9 ☐ NS
los riñones o el sistema urinario?	(196) 1 ☐ S 2 ☐ N 9 ☐ NS	(204) 1 ☐ S 2 ☐ N 9 ☐ NS	(212) 1 ☐ S 2 ☐ N 9 ☐ NS
los músculos, los huesos, o las coyunturas?	(197) 1 ☐ S 2 ☐ N 9 ☐ NS	(205) 1 ☐ S 2 ☐ N 9 ☐ NS	(213) 1 ☐ S 2 ☐ N 9 ☐ NS
el cerebro o el sistema de nervios?	(198) 1 ☐ S 2 ☐ N 9 ☐ NS	(206) 1 ☐ S 2 ☐ N 9 ☐ NS	(214) 1 ☐ S 2 ☐ N 9 ☐ NS

SECTION D

D1. Me gustaría hablar con usted sobre el consumo de bebidas alcohólicas. Bebidas alcohólicas incluyen licores, tales como el whiski, ron, ginebra, vodka o tequila, o cerveza, o vino.	
D2. En toda su vida, ¿ha tomado usted por lo menos 12 bebidas alcohólicas de cualquier tipo?	(215) 1 ☐ S 2 ☐ N(D4)
D3. En cualquier año, ¿ha tomado por lo menos 12 bebidas alcohólicas de cualquier tipo?	(216) 1 ☐ S(D5) 2 ☐ N

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D4. ¿Cuál es su razón principal por no tomar?		
	(217) 01 ☐ NO HAY NECESIDAD/NO NECESARIO	⎞
	02 ☐ NO ME GUSTA	
	03 ☐ RAZONES MÉDICAS/DE SALUD	
	04 ☐ RAZONES RELIGIOSAS/MORALES	
	05 ☐ ME ENSEÑARON A NO TOMAR	⎬ (E1)
	06 ☐ CUESTA DEMASIADO	
	07 ☐ MIEMBRO DE FAMILIA ALCOHÓLICO	
	08 ☐ TOMA CON POCA FRECUENCIA	
	09 ☐ OTRO	⎠
	10 _____ especifique	
D5. Sin contar probaditas, ¿qué edad tenía usted cuando empezó a tomar bebidas alcohólicas?	(218) _____ años de edad numero	
HAND CALENDAR CARD. **D6.** ¿Tomó una bebida alcohólica durante el período marcado en rojo?	(219) 1 ☐ S(D8) 2 ☐ N	
D7. ¿Cuándo tomó su última bebida alcohólica? ENTER DATE AND CHECK BOX.	(220)-(222) _____/_____/_____ ⌐ mes día año (223) 1 ☐ before 4-week reference period, less than 1 year from end of reference period (D32) 2 ☐ 1 or more years ago from end of reference period (D64)	
D8. Durante ese período, ¿cuándo tomó una bebida alcohólica por última vez?	(224)-(226) _____/_____/_____ mes día año	
D9. Vamos a hablar sobre las 4 semanas marcadas en rojo. Durante ese período de 4 semanas, ¿en cuántos días tomó cerveza?	(227) 00 ☐ ninguno o nunca (D13) _____ días número	
D10. Durante ese período de 4 semanas, en (el día/los días) que tomó cerveza, ¿cuántas cervezas más o menos tomó (por día)?	(228) _____ cervezas número	
D11. Durante esas 4 semanas, ¿qué fue el número total de cervezas que usted tomó?	(229) _____ cervezas número	
D12. ¿Cuántas onzas contenía la lata o botella o vaso típico que tomó durante ese período?	(230) _____ onzas numero	
D13. Durante ese período de 4 semanas, ¿en cuántos días tomó vino?	(231) 00 ☐ ninguno o nunca (D17) _____ días número	
D14. Durante ese período de 4 semanas, en (el día/los días) que tomó vino, ¿cuántos vasos de vino más o menos tomó (por día)?	(232) _____ vasos número	

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D15. Durante esas 4 semanas, ¿qué fue el número total de vasos de vino que usted tomó?	(233) _____vasos número
D16. ¿Cuántas onzas contenía un vaso típico que usted tomó durante ese período?	(234) _____onzas número
D17. Durante ese período de 4 semanas, ¿en cuántos días tomó usted licor, tal como whiski, ron, ginebra, vodka, o tequila?	(235) 00 ☐ ninguno o nunca (D21) _____días número
D18. Durante ese período de 4 semanas, en (el día/los días) que tomó licor, tal como whiski, ron, ginebra, vodka, o tequila, más o menos, ¿cuántos (tragos/palos) tomó (por día)?	(236) _____tragos número
D19. Durante esas 4 semanas, ¿qué fue el número total de (tragos/palos) que usted tomó?	(237) _____tragos número
D20. ¿Cuántas onzas de licor contenía un vaso típico que usted tomó durante ese período?	(238) _____onzas número
D21. CHECK ITEM: REFER TO QUESTIONS D9, D13 AND D17 AND MARK FIRST APPROPRIATE BOX.	(239) 1 ☐ only one beverage type (D24) 2 ☐ drank every day (D24) 3 ☐ other (D22)
D22. Le he preguntado sobre cerveza, vino, y licor por separado. Ahora quisiera que piense en ellos en conjunto.	////////////////////////////
D23. Durante las 4 semanas marcadas en rojo, ¿cuántos días en total tomó cualquier tipo de bebida alcohólica, es decir cerveza, o vino o licor?	(240) 01 ☐ sólo en día (D29) OR _____días número
D24. Durante esas 4 semanas, ¿tomó más de (largest number in D10, D14, o D18) (trago(s)/palo(s)) de cualquier tipo de bebida alcohólica en su sólo día?	(241) 1 ☐ S 2 ☐ N(D29)
D25. Durante esas 4 semanas, ¿en cuántos días tomó más de (largest number in D10, D14, or D18) (trago(s)/palo(s)) de cualquier tipo de bebida alcohólica, es decir, cerveza, vino o licor?	(242) 01 ☐ sólo un día (D28) _____días número
D26. ¿Cuál fuel el número más grande de (tragos/palos) que tomó en cualquier de esos días?	(243) _____tragos número
D27. ¿En cuántos días durante esas 4 semanas tomó (number in D26) bebidas alcohólicas?	(244) _____días (D29) número

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D28. ¿Cuántos (tragos/palos) tomó ese día?	(245) _____tragos número
D29. ¿Era su consumo de alcohol durante esas 4 semanas típico de su consumo durante los 12 meses pasados?	(246) 1 ☐ S(D31) 2 ☐ N
D30. ¿Durante esas 4 semanas, tomó usted más, o tomó menos, de lo que acostumbra?	(247) 1 ☐ más ⎫ (D51) 2 ☐ menos ⎭
D31. ¿Por cuántos años ha sido esto típico de su modo de tomar?	(248) _____años (D51) número
D32. Vamos a hablar sobre el período de 4 semanas que terminó el día que tomó su último (trago/palo). Durante esas 4 semanas, ¿en cuántos días tomó usted cerveza?	(249) 00 ☐ ninguno o nunca (D36) _____días numero
D33. Durante ese período de 4 semanas, en (el día/los días) cuando tomó cerveza, ¿cuántas cervezas más o menos tomó (por día)?	(250) _____cervezas número
D34. Durante esas 4 semanas, ¿qué fue el número total de cervezas que usted tomó?	(251) _____ cervezas número
D35. Más o menos, ¿cuántas onzas contenía la lata, la botella o el vaso típico de cerveza que tomó durante ese período?	(252) _____onzas número
D36. Durante esas 4 semanas, ¿en cuántos días tomó vino?	(253) 00 ☐ ninguno o nunca (D40) _____días número
D37. Durante ese período de 4 semanas, en (el día/los días) que tomó vino, ¿cuántos vasos de vino más o menos tomó (por día)?	(254) _____ vasos número
D38. Durante esas 4 semanas, ¿qúe fue el número total de vasos de vino que usted tomó?	(255) _____vasos número
D39. Más o menos, ¿cuántas onzas contenía el vaso típico que usted tomó durante ese período?	(256) _____onzas numero
D40. Durante esas 4 semanas, ¿en cuántos días tomó licor tal como whiski, ron, ginebra, vodka o tequila?	(257) 00 ☐ ninguno o nunca (D44) _____días número
D41. Durante ese período de 4 semanas, en (el día/los días) cuando tomó licor, tal como whiski, ron, ginebra, vodka, o tequila, más o menos, ¿cuántos (tragos/palos) tomó (por día)?	(258) _____tragos número

D42. Durante esas 4 semanas, ¿qué fue el número total de (tragos/palos) que tomó?	(259) _____tragos número
D43. Más o menos, ¿cuántas onzas de licor contenía un (trago/palo) típico que usted tomó durante ese período?	(260) _____onzas número
D44. CHECK ITEM: REFER TO QUESTION D32, D36 AND D40 AND MARK FIRST APPROPRIATE BOX.	(261) 1 ☐ only one beverage type (D47) 2 ☐ drank every day (D47) 3 ☐ other (D45)
D45. Le he preguntado sobre cerveza, vino, y licor por separado. Ahora quisiera que piense en ellos en conjunto.	////////////////////////
D46. Durante esas 4 semanas, ¿en cuántos días en total tomó usted <u>cualquier</u> tipo de bebida alcohólica, es decir, cerveza, o vino, o licor?	(262) 01 ☐ sólo un día OR _____ días número
D47. ¿Era su consumo de alcohol durante esas 4 semanas típico de su consumo durante los 12 meses antes de su último (trago/palo)?	(263) 1 ☐ S(D49) 2 ☐ N
D48. ¿Durante esas 4 semanas, tomó usted más, o tomó menos, de lo que acostumbra?	(264) 1 ☐ más } (D50) 2 ☐ menos }
D49. ¿Por cuántos años tomaba usted igual a lo que tomó en las 4 semanas antes de su último (trago/palo)?	(265) _____años número
D50. ¿Cuál es su razón principal por no tomar desde <u>(date in D7)</u>?	DO NOT READ. 01 ☐ NO HAY NECESIDAD/NO NECESARIO 02 ☐ NO ME GUSTA 03 ☐ RAZONES MÉDICAS/DE SALUD 04 ☐ RAZONES RELIGIOSAS/MORALES 05 ☐ ALCOHOLICO/PERSONA TIENE PROBLEMA CON LA TOMADA 06 ☐ CUESTA DEMASIADO 07 ☐ MIEMBRO DE FAMILIA ALCOHÓLICO 08 ☐ TOMA CON POCA FRECUENCIA 09 ☐ OTRO 10 _____ especifique
D51. Ahora piense sobre el período de 12 meses antes de su última bebida. ¿En cuántos de esos meses tomó usted por lo menos un (trago/palo) de cualquier bebida alcohólica, es decir, cerveza o vino o licor?	(267) _____ ___ __meses número

10

D52. Durante esos meses ¿en cuántos días tomó 9 (tragos/ palos) o más de <u>cualquier</u> bebida alcohólica?	(268) ___ ___ días número
D53. ¿En cuántos días tomó por lo menos 5 (tragos/palos) de <u>cualquier</u> bebida alcohólica?	(269) ___ ___ días número
D54. Las siguientes preguntas se refieren a su manera de tomar durante su vida comenzando cuando usted empezó a tomar y terminando cuando usted tomó su último (trago/palo). ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba mucho?	(270) 1 ☐ S 2 ☐ N(D57)
D55. ¿Por cuántos años tomaba mucho?	(271) ___ ___ años número
D56. Cuando usted tomaba mucho, ¿cuántos (tragos/ palos) de bebida alcohólica tomó durante una semana típica?	(272) ___ ___ tragos número
D57. ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba moderadamente?	(273) 1 ☐ S 2 ☐ N(D60)
D58. ¿Por cuántos años tomaba moderadamente?	(274) ___ ___ años número
D59. Cuando usted tomaba moderadamente, ¿cuántos (tragos/palos) de bebida alcohólica tomó durante una semana típica?	(275) ___ ___ tragos número
D60. ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba poco?	(276) 1 ☐ S 2 ☐ N (D63)
D61. ¿Por cuántos años tomaba poco?	(277) ___ ___ años número
D62. Cuando usted tomaba poco, ¿cuántos (tragos/palos) de bebida alcohólica tomó durante una semana típica?	(278) ___ ___ tragos número
D63. ¿Considera ahora que usted toma poco, moderado, o mucho?	(279) 1 ☐ abstinente 2 ☐ poco 3 ☐ moderado (E1) 4 ☐ mucho
D64. Las siguientes preguntas se refieren a su manera de tomar durante su vida comenzando cuando usted empezó a tomar y terminando cuando usted tomó su último (trago/palo). ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba mucho?	(280) 1 ☐ S 2 ☐ N(D67)

11

D65. ¿Por cuántos años tomaba mucho?	(281)	_____ años número
D66. Cuando usted tomaba mucho, ¿cuántos (tragos/palos) de bebida alcohólica tomó durante una semana típica?	(282)	_____tragos número
D67. ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba moderadamente?	(283)	1 ☐ S 2 ☐ N(D70)
D68. ¿Por cuántos años tomaba moderadamente?	(284)	_____años número
D69. Cuando usted tomaba moderadamente, ¿cuántos (tragos/palos) de bebida alcohólica tomó durante una semana típica?	(285)	_____tragos número
D70. ¿Hubo alguna vez un período en su vida cuando consideraba que tomaba poco?	(286)	1 ☐ S 2 ☐ N (D73)
D71. ¿Por cuántos años tomaba poco?	(287)	_____años número
D72. Cuando usted tomaba poco, ¿cuántos (tragos/palos) de bebida alcohólica tomó durante una semana típica?	(288)	_____tragos número

D73. ¿Cuál es su razón principal por no tomar desde (fecha en D7)?

DO NOT READ.

(289)
01 ☐ NO HAY NECESIDAD/NO NECESARIO

02 ☐ NO ME GUSTA

03 ☐ RAZONES MÉDICAS/DE SALUD

04 ☐ RAZONES RELIGIOSAS/MORALES

05 ☐ ALCOHÓLICO/PERSONA TIENE PROBLEMA CON LA TOMADA

06 ☐ CUESTA DEMASIADO

07 ☐ MIEMBRO DE FAMILIA ALCOHÓLICO

08 ☐ TOMA CON POCA FRECUENCIA

09 ☐ OTRO

10 _____
                 especifique

E1. INTRODUCTION.

Ahora tengo algunas preguntas sobre píldoras y otras drogas que usted pueda haber usado.

SHOW CARD SUP-4, SEDATIVE CHART.

Por favor mire bien <u>todas</u> las píldoras en esta tarjeta. Estas píldoras son barbitúricos y otros sedantes.

PAUSE WHILE RESPONDENT LOOKS AT CARD.

Algunas veces los médicos recetan estas píldoras para calmar a las personas durante el día o para ayudarles a dormir durante la noche. Pero aparte de su uso médico, algunas veces hay personas que toman estas píldoras por sí mismo para relajarse o para sentirse bien.

E2. ¿Ha tomado usted <u>alguna vez cualquiera</u> de estos tipos de píldoras sólo para ver cómo era y cómo le afectaba?

(290) 1 ☐ S   2 ☐ N   9 ☐ NS

E3. ¿Ha tomado usted <u>alguna vez cualquiera</u> de estos tipos de píldoras sólo para disfrutar la sensación que le producen?

(291) 1 ☐ S   2 ☐ N   9 ☐ NS

E4. ¿Ha tomado usted <u>alguna vez cualquiera</u> de estas píldoras por <u>otra</u> razón que no fue médica y no porque la necesitaba?

(292) 1 ☐ S   2 ☐ N   9 ☐ NS

E5. CHECK ITEM

(293) 1 ☐ "N" OR "NS" in E2, E3, <u>AND</u> E4 (E7)

2 ☐ Other (E6)

E6. ¿Cuándo fue la vez <u>más reciente</u> en que usted tomó cualquiera de estas por razones que no fueran médicas?

(294)
1 ☐ dentro de la semana pasada
2 ☐ dentro del mes pasado
3 ☐ dentro de los últimos seis meses
4 ☐ seis meses a un año
5 ☐ hace más de un año
6 ☐ hace más de dos años
7 ☐ hace más de 5 años
9 ☐ NS

E7. ¿Qué edad tenía cuando tuvo la primera ocasión de probar la marijuana o el "hashish" si hubiera querido hacerlo?

(295)
_____años de edad
número
99 ☐ NS
00 ☐ nunca tuvo ocasión (E12)

E8. Más o menos, ¿qué edad tenía la primera vez que probó la marijuana o el "hashish"?

(296)
_____años de edad
número
99 ☐ NS
00 ☐ nunca usó (E12)

13

E9. ¿Cuándo fue la vez <u>más reciente</u> en que usted usó la marijuana o el "hashish"?	(297)	1 ☐ dentro de la semana pasada 2 ☐ dentro del mes pasado 3 ☐ dentro de los últimos seis meses 4 ☐ seis meses a un año 5 ☐ hace más de un año 6 ☐ hace más de dos años 7 ☐ hace más de 5 años ⎱ (E11) 9 ☐ NS
E10. En los 30 días pasados, ¿en cuántos días distintos usó marijuana o "hashish"?	(298)	_____ días número
E11. En su vida entera, ¿cuántas veces más o menos ha usado usted la marijuana o el "hashish"?	(299)	1 ☐ 1-2 veces 2 ☐ 3-10 veces 3 ☐ 11-99 veces 4 ☐ 100 veces o más
E12. **CHECK ITEM**	(300)	1 ☐ Age 12-44 (E13) 2 ☐ Age 45+ (F1)
E13. INTRODUCTION. Las siguientes preguntas se refieren a los inhalantes que las personas inhalan o respiran, para disfrutar la sensación que les producen o para ponerse "high." Me refiero a inhalantes tales como fluido para encendedores, aerosoles como "PAM," goma, nitrito amílico, "poppers" o "Locker Room Oderizers."		
E14. ¿Qué edad tenía cuando tuvo la primera ocasión de probar uno de estos inhalantes si hubiera querido hacerlo?	(301)	_____ años de edad número 99 ☐ NS 00 ☐ nunca tuvo ocasión (E18)
E15. Más o menos, ¿qué edad tenía la primera vez que usted usó uno de estos inhalantes?	(302)	_____ años de edad número 99 ☐ NS 00 ☐ nunca usó (E18)
E16. ¿Ha usado alguna vez cualquiera de los siguientes inhalantes para disfrutar la sensación que producen o para ponerse "high"?		
Gasolina o fluido para encendedores	(303)	1 ☐ S 2 ☐ N
Pinturas aerosoles	(304)	1 ☐ S 2 ☐ N
Otros aerosoles	(305)	1 ☐ S 2 ☐ N
"Shoe Shine," goma, toluene.	(306)	1 ☐ S 2 ☐ N
Solventes para lacas y pinturas	(307)	1 ☐ S 2 ☐ N
Nitrito amílico o "poppers"	(308)	1 ☐ S 2 ☐ N
"Halothane," éter, u otros anestésicos	(309)	1 ☐ S 2 ☐ N
Óxido nitroso, "whippets"	(310)	1 ☐ S 2 ☐ N
"Locker Room Odorizers"	(311)	1 ☐ S 2 ☐ N

14

E17. ¿Cuándo fue la vez <u>más reciente</u> que usó uno de estos inhalantes para disfrutar la sensación que producen o para ponerse "high"?

(312)

1 ☐ dentro de la semana pasada
2 ☐ dentro del mes pasado
3 ☐ dentro de los últimos seis meses
4 ☐ seis meses a un año
5 ☐ hace más de un año
6 ☐ hace más de dos años
7 ☐ hace más de 5 años
9 ☐ NS

E18. ¿Qué edad tenía usted cuando tuvo la primera ocasión de probar la cocaína si hubiera querido hacerlo?

(313)

_____ años de edad
número

99 ☐ NS
00 ☐ nunca tuvo la ocasión (F1)

E19. Más o menos, ¿qué edad tenía usted la primera vez que probó la cocaína?

(314)

_____ años de edad
número

99 ☐ NS
00 ☐ nunca probó (F1)

E20. ¿Cuándo fue la vez <u>más reciente</u> que usó la cocaína?

(315)

1 ☐ dentro de la semana pasada
2 ☐ dentro del mes pasado
3 ☐ dentro de los últimos seis meses
4 ☐ seis meses a un año
5 ☐ hace más de un año
6 ☐ hace más de dos años
7 ☐ hace más de 5 años
9 ☐ NS

F1.   CHECK ITEM

(316)   ☐ Age under 20 (END)
        ☐ Age 20+ (F2)

F2.   Durante su vida, ¿alguna vez ha tenido dos semanos o más en las que se sintió triste, melancólico, deprimido, o perdió todo el interés y el gusto en cosas que normalmente le interesaban o le agradaban?

(317)   1 ☐ S
        2 ☐ N

F33.   ¿Durante (este/aquel) episodio cuando se sentía (deprimido/<u>RESPONDENT'S EQUIVALANT</u>), ¿cuáles de estos otros problemas tuvo? Por ejemplo, durante esa temporada,

FOR QUESTIONS F34-F49, READ EACH QUESTION WITH A CHECK IN BOX 5.

F3.   ¿Alguna vez hubo un período (318) S→PROBE de dos semanas o más en el cual <u>perdió el apetito?</u>

☐3
☐5
☐4

1 ☐ N

F34.   ¿Perdió usted el apetito?

(360)   1 ☐ S
        2 ☐ N

F4.   ¿Alguna vez ha <u>perdido peso</u> (319) S→PROBE sin proponérselo — hasta dos libras por semana durante varias semanas (o tanto como 10 libras en total)?

☐3
☐5
☐4

1 ☐ N

F35.   ¿Perdió usted peso sin proponérselo — hasta dos libras por semana durante varias semanas (o tanto como 10 libras en total)?

(361)   1 ☐ S
        2 ☐ N

F5.   ¿Alguna vez ha tenido una (320) S→PROBE temporada durante la cual ha comido mucho más de lo acostumbrado y <u>aumentó</u> tanto como dos libras por semana durante varias semanas (o 10 libras en total)?

☐3
☐5
☐4

1 ☐ N

F36.   ¿Comió mucho más de lo acostumbrado y aumentó tanto como dos libras por semana durante varias semanas (o 10 libras en total)?

(362)   1 ☐ S
        2 ☐ N

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(321)   1 ☐ APPETITE SUMMARY: CHECK BOX IF CODE '5' IN F3, F4, OR F5.

F6.   ¿Alguna vez ha tenido un (322) S→PROBE período de dos semanas o más en el cual tuvo <u>dificultades en conciliar el sueño</u>, en permanecer dormido o en despertarse demasiado temprano?

☐3
☐5
☐4

1 ☐ N

F37.   ¿Tuvo usted dificultades en conciliar el sueño, en permanecer dormido, o en despertarse demasiado temprano?

(363)   1 ☐ S
        2 ☐ N

F7.   ¿Alguna vez ha tenido un (323) S→PROBE período de dos semanas o más en el cual <u>dormía demasiado?</u>

☐3
☐5
☐4

1 ☐ N

F38.   ¿Estaba usted durmiendo demasiado?

(364)   1 ☐ S
        2 ☐ N

16

(324) 1 ☐ **SLEEP SUMMARY:** CHECK BOX IF CODE '5' IN F6 OR F7.

F8. ¿Alguna vez hubo un período de dos semanas o más en el cual se sentía <u>agotado</u> todo el tiempo?

(325) S→PROBE
☐3
☐4
1 ☐ N

☐5

F39. ¿Se sentiá usted agotado todo el tiempo?

(365) 1 ☐ S
2 ☐ N

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(326) 1 ☐ **TIRED OUT SUMMARY:** CHECK BOX IF CODE '5' IN F8.

F9. ¿Alguna vez hubo un período de dos semanas o más en el cual hablaba o se movía <u>más despacio</u> de lo normal para usted?

(327) S→PROBE
☐3
☐4
1 ☐ N

☐5

F40. ¿Hablaba o se movía usted más despacio de lo normal para usted?

(366) 1 ☐ S
2 ☐ N

- -

F10. ¿Alguna vez hubo un período de dos semanas o más en el cual tenía que estar en <u>continuo movi-miento</u>, es decir no podía sentarse y quedarse quieto y tenía que andar de un lado para otro?

(328) S→PROBE
☐3
☐4
1 ☐ N

☐5

F41. ¿Sentía usted que tenía que estar en continuo movi-miento, es decir no podía sentarse y quedarse quieto y tenía que andar de un lado para otro?

(367) 1 ☐ S
2 ☐ N

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(329) 1 ☐ **SLOW, RESTLESS SUMMARY:** CHECK BOX IF CODE '5' IN F9 OR F10.

F11. ¿Hubo alguna vez un período de varias semanas en el cual su <u>interés sexual</u> era mucho menos de lo acostumbrado?

(330) S→ASK A
☐2
☐3
☐4
☐8
1 ☐ N(F12)

☐5

F42. ¿Su interés en el sexo era mucho menos que lo acostumbrado?

(368) 1 ☐ S
2 ☐ N

IF VOLUNTEERS NO INTEREST EVER, MARK BOX 8 AND SKIP TO F12.

A. ¿Le ha (dicho/contado) a un médico u otro pro-fesional acerca de la dis-minución de su interés sexual?

(331) ☐ S→PROBE
1 ☐ N

B. ¿Ha tomado medicina más de una vez para la disminu-ción de su interés sexual?

(332) ☐ S→PROBE
1 ☐ N

C. ¿La disminución de su interés sexual le ha (estor-bado/molestado) demasiado en su vida o en sus actividades?

(333) ☐ S→PROBE
1 ☐ N→MARK BOX 2.

(334) 1☐ SEX SUMMARY: CHECK BOX IF CODE '5' IN F11.

F12. ¿Alguna vez hubo un período de dos semanas o más en el cual se sentía que no valía nada, que era una persona pecadora, o culpable?

(335) S→ ☐5

1 ☐ N

F43. ¿Se sintió usted que no valía nada, que era una persona pecadora, o culpable?

(369) 1 ☐ S
2 ☐ N

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(336) 1☐ WORTHLESS SUMMARY: CHECK BOX IF CODE '5' IN F12.

F13. ¿Alguna vez hubo un período (337) S→PROBE de dos semanas o más en el cual tenía mucha más dificultad en concentrarse de lo que es normal para usted?

☐3
☐5
☐4

1 ☐ N

F44. ¿Tuvo usted mucha más dificultad en concentrarse de lo que es normal para usted?

(370) 1 ☐ S
2 ☐ N

F14. ¿Alguna vez hubo un período (338) S→PROBE de dos semanas o más en el cual sus pensamientos venían mucho más despacio de lo acostumbrado o le parecían confusos?

☐3
☐5
☐4

1 ☐ N

F45. ¿Le vinieron sus pensamientos mucho más despacio de lo acostumbrado o le parecían confusos?

(371) 1 ☐ S
2 ☐ N

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(339) 1☐ TROUBLE THINKING SUMMARY: CHECK BOX IF CODE '5' IN F13 OR F14.

F15. ¿Alguna vez hubo un período de dos semanas o más en el cual pensaba mucho sobre la muerte-ya sea én la suya, en la de alguien más o en la muerte en general?

(340) S→ ☐5

1 ☐ N

F46. ¿Pensó usted mucho sobre la muerte — ya sea en la suya, en la de alguien más o en la muerte en general?

(372) 1 ☐ S
2 ☐ N

F16. ¿Alguna vez hubo un período de dos semanas o más en el cual se sentía como que quería morirse?

(341) S→ ☐5

1 ☐ N

F47. ¿Se sintió usted como que quería morirse?

(373) 1 ☐ S
2 ☐ N

F17. ¿Alguna vez se ha sentido tan decaído que ha pensado en suicidarse?

(342) S→ ☐5

1 ☐ N

F48. ¿Se sintió tan decaído que ha pensado en suicidarse?

(374) 1 ☐ S
2 ☐ N

F18. ¿Alguna vez ha intentado suicidarse?

(343) S→ ☐5

1 ☐ N

F49. ¿Intentó suicidarse?

(375) 1 ☐ S
2 ☐ N

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(344) 1☐ DEATH SUMMARY: CHECK BOX IF ANY '5' CODED IN F15-F18.

GO TO G1.

18

F19. CHECK ITEM. REFER TO SUMMARY BOXES
ON PAGES 16-18.

(345) 1 ☐ FEWER THAN 4 SUMMARY BOXES
CHECKED (G1)

2 ☐ 4 OR MORE SUMMARY BOXES CHECKED,
<u>AND</u> "N" IN F2 (F22)

3 ☐ 4 OR MORE SUMMARY BOXES CHECKED,
<u>AND</u> "S" IN F2 (F20)

F20. Usted ha dicho que tuvo una temporada cuando se había sentido (deprimido/<u>RESPONDENT'S EQUIVA-LENT</u>) y también dijo que había tenido otros problemas como (<u>MENTION ALL QUESTIONS CODED '5' IN F3-F18</u>). ¿Alguna vez hubo una temporada en la cual el sentirse (deprimido/<u>RESPONDENT'S EQUIVALENT</u>) y algunos de estos otros problemas le ocurrieron juntos, es decir, dentro del mismo mes?

(346) 1 ☐ S(F24)   2 ☐ N

F21. ¿Así es que nunca hubo una temporada en la cual se sintió (deprimido/<u>RESPONDENT'S EQUIVALENT</u>) y a la vez tenía algunos de estos problemas?

(347) 1 ☐ ha habido un período (F24)

2 ☐ nunca ha habido un período (G1)

F22. Usted dijo que ha tenido temporadas en las que (<u>MENTION ALL QUESTIONS CODED '5' IN F3-F18</u>). ¿Hubo alguna ocasión cuando varios de estos problemas le ocurrieron juntos dentro del mismo mes?

(348) 1 ☐ S   2 ☐ N(G1)

F23. Cuando tenía algunos de estos problemas más o menos al mismo tiempo, ¿se sentía bien, o se sentía decaído, triste, deprimido o desinteresado en todo?

(349) 1 ☐ sentía bien (G1)

2 ☐ decaído o equivalente

F24. ¿Cuál ha sido la temporada más larga en que se ha sentido (deprimido/<u>RESPONDENT'S EQUIVALENT</u>) y en la que al mismo tiempo ha tenido varios de estos otros problemas?

(350) (351)

_____   1 ☐ semanas
número   2 ☐ meses
            3 ☐ años

F25. CHECK ITEM

(352) 1 ☐ less than 2 weeks in F24 (G1)

2 ☐ other (F26)

F26. ¿Ha tenido más de una temporada en la que se sentía (deprimido/<u>RESPONDENT'S EQUIVALENT</u>) y tenía varios de estos otros problemas al mismo tiempo?

(353) 1 ☐ S   2 ☐ N

F27. ¿(Este episodio ocurrió/Cualquiera de estos episodios ocurrieron) poco después de que alguien cercano a usted murió?

IF VOLUNTEERS BEGAN MORE THAN 2 MONTHS AFTER DEATH, MARK "N" AND SKIP TO F29.

(354) 1 ☐ S   2 ☐ N(F29)

F28. ¿Ha tenido algún episodio de depresión al mismo tiempo que tenía estos otros problemas (tales como <u>MENTION SOME PROBLEMS CODED '5' IN F3-F18</u>) en ocasiones en que no fue debido a la muerte de alguien?	(355) 1 ☐ solamente debido a muerte 2 ☐ otros tiempos o no debido a muerte
F29. ¿Está pasando usted ahora por uno de estos episodios en el cual se siente decaído o desinteresado y tiene algunos de estos otros problemas?	(356) 1 ☐ S(F31) 2 ☐ N
F30. ¿Cuándo terminó el último episodio como ese?	(357) 1 ☐ dentro de las últimas 2 semanas 2 ☐ dentro del último mes 3 ☐ dentro de los últimos 6 meses 4 ☐ dentro del último año 5 ☐ hace más de un año
F31. CHECK ITEM	(358) 1 ☐ "S" in F26 (F32) 2 ☐ more than 52 weeks or more than 1 year in F24 (F32) 3 ☐ other (F33 — page 16)
F32. Ahora quisiera saber acerca de la temporada en la cual se sintió (deprimido/<u>RESPONDENT'S EQUIVALENT</u>) por lo menos 2 semanas y tenía al mismo tiempo el mayor número de estos otros problemas. ¿Qué edad tenía en ese tiempo? (IF CAN'T CHOOSE: Entonces escoja uno de los peores episodios.)	(359) _____años de edad número (F33 — page 16)

SECTION G

G1. Le voy a leer unas frases que describen como usted podría haber sentido. Por favor dígame con que frecuencia se ha sentido de esta manera <u>durante la semana pasada</u>: raramente o ninguna vez; alguna o poca vez; ocasionalmente o una cantidad de tiempo moderada; o la mayor parte o todo el tiempo.

HAND RESPONDENT CARD SUP-5
FOR QUESTION G1.

Durante la semana pasada,
eso es desde (<u>fecha</u>) hasta
el presente:

		Raramente o ninguna vez (Menos de un día)	Alguna o poca vez (1-2 Días)	Ocasionalmente o una cantidad moderada (3-4 Días)	La mayor parte o todo el tiempo (5-7 Días)
a.	Me molestaron cosas que usualmente no me molestan. . . . . (376)	0 ☐	1 ☐	2 ☐	3 ☐
b.	No me sentía con ganas de comer; tenía mal apetito. . . . . (377)	0 ☐	1 ☐	2 ☐	3 ☐
c.	Me sentía que no podía quitarme de encima la tristeza aún con la ayuda de mi familia o amigos. . . . . . (378)	0 ☐	1 ☐	2 ☐	3 ☐
d.	Sentía que yo era tan bueno como cualquiera otra persona. . . . . (379)	0 ☐	1 ☐	2 ☐	3 ☐
e.	Tenía dificultad en mantener mi mente en lo que estaba haciendo . . . (380)	0 ☐	1 ☐	2 ☐	3 ☐
f.	Me sentía deprimido . . . . (381)	0 ☐	1 ☐	2 ☐	3 ☐
g.	Sentía que todo lo que hacía era un esfuerzo . . . . (382)	0 ☐	1 ☐	2 ☐	3 ☐
h.	Me sentía optimista sobre el futuro . . . . (383)	0 ☐	1 ☐	2 ☐	3 ☐
i.	Pensé que mi vida había sido un fracaso . . . . (384)	0 ☐	1 ☐	2 ☐	3 ☐
j.	Me sentía con miedo . . . . (385)	0 ☐	1 ☐	2 ☐	3 ☐
k.	Mi sueño era inquieto. . . . . (386)	0 ☐	1 ☐	2 ☐	3 ☐
l.	Estaba contento . . . . (387)	0 ☐	1 ☐	2 ☐	3 ☐
m.	Hablé menos de lo usual . . . . (388)	0 ☐	1 ☐	2 ☐	3 ☐
n.	Me sentí solo . . . . (389)	0 ☐	1 ☐	2 ☐	3 ☐
o.	La gente no era amistosa. . . . . (390)	0 ☐	1 ☐	2 ☐	3 ☐
p.	Disfruté de la vida . . . . (391)	0 ☐	1 ☐	2 ☐	3 ☐
q.	Pasé ratos llorando. . . . . (392)	0 ☐	1 ☐	2 ☐	3 ☐
r.	Me sentí triste. . . . . (393)	0 ☐	1 ☐	2 ☐	3 ☐
s.	Sentía que no le caía bien a la gente . . . . (394)	0 ☐	1 ☐	2 ☐	3 ☐
t.	No tenía ganas de hacer nada. . . . . . (395)	0 ☐	1 ☐	2 ☐	3 ☐

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Office of Health Research, Statistics
and Technology
National Center for Health Statistics

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

DIETARY QUESTIONNAIRE (525)

WESTAT ID #: (100) _____ _____ _____
Stand #   Segment #   Serial #

(107) _____ Family #

(108) _____ SP #

NCHS ID #: (101) ___ ___ ___ ___ ___ - ___

NAME (First, Middle, Last) (109)

SEX (110)
1 ☐ Male
2 ☐ Female

AGE (111)

Respondent Code (114)
(Mark all that apply)

1 ☐ - Sample Person
2 ☐ - Spouse
3 ☐ - Parent
4 ☐ - Grandparent
6 ☐ - Other 7 _____
                specify

TIME BEGAN (103)
1 ☐ am
(102) _____
2 ☐ pm

TIME ENDED (105)
1 ☐ am
(104) _____
2 ☐ pm

Date of Recall
Mo.   Day
(116)   (117)

Day of Recall (Mark One)
(118) 1 ☐ - Sunday
      2 ☐ - Monday
      3 ☐ - Tuesday
      4 ☐ - Wednesday
      5 ☐ - Thursday
      6 ☐ - Friday
      7 ☐ - Saturday

1

TIME OF DAY (119)	FOOD SOURCE CODE (120)	INGESTION PERIOD (121)	FOOD AND BEVERAGES CONSUMED	
			FOOD ITEM	DESCRIPTION

FOOD SOURCE CODES
01. - Home
02. - School
03. - Restaurant
04. - Fast Food Restaurant
05. - Cafeteria
06. - Vending machine
07. - Someone e'se's home
08. - Other 09 _____
　　　　SPECIFY

INGESTION PERIOD CODES
1. - Breakfast
2. - Lunch
3. - Between meals
4. - Dinner
5. - Total Day

2

PRIMARY FOOD CODE (122)								SECOND-ARY FOOD CODE (123)				WORK AREA FOR COMPUTATIONS (IF NEEDED)	SIZE OF EDIBLE PORTION			LINE CARD NO. (127)
													I (124)	II (125)	III (126)	
		—														01
		—														02
		—														03
		—														04
		—														05
		—														06
		—														07
		—														08
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		—														12
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		—														21
		—														22
		—														23
		—														24
		—														25

3

TIME OF DAY (119)	FOOD SOURCE CODE (120)	INGESTION PERIOD (121)	FOOD AND BEVERAGES CONSUMED	
			FOOD ITEM	DESCRIPTION

FOOD SOURCE CODES
01. - Home
02. - School
03. - Restaurant
04. - Fast Food Restaurant
05. - Cafeteria
06. - Vending machine
07. - Someone else's home
08. - Other 09 _____
              SPECIFY

INGESTION PERIOD CODES
1. - Breakfast
2. - Lunch
3. - Between meals
4. - Dinner
5. - Total Day

4

RECALL

PRIMARY FOOD CODE (122)	SECONDARY FOOD CODE (123)	WORK AREA FOR COMPUTATIONS (IF NEEDED)	SIZE OF EDIBLE PORTION			LINE CARD NO. (127)
			I (124)	II (125)	III (126)	
—						26
—						27
—						28
—						29
—						30
—						31
—						32
—						33
—						34
—						35
—						36
—						37
—						38
—						39
—						40
—						41
—						42
—						43
—						44
—						45
—						46
—						47
—						48
—						49
—						50

5

1. Is what you ate yesterday the way you normally eat?

1. ¿Lo que comió ayer es como normalmente come?

(128)   Yes 1 ☐ Sí

No 2 ☐ No

IF "YES" SKIP TO 3.

2. In what way was what you ate yesterday different from usual?

2. ¿En qué manera es lo que comió ayer diferente de lo come normalmente?

(129) 1 _____

_____

3.   24-HOUR RECALL COMPLETION CODE (MARK ONE)

(130) 1 ☐ - SATISFACTORY
       2 ☐ - UNSATISFACTORY
       3 ☐ - REFUSAL

(131)   COMMENTS 1 ☐

2 _____

_____

4. Are you on a special diet?

4. ¿Está usted en una dieta especial?

(132) Yes 1 ☐ Sí

No 2 ☐ No (Skip to Question 10)

6

5. What is the purpose of this diet? CHECK ALL THAT APPLY.

To lose weight	(133) ₁ ☐	Para bajar de peso
To gain weight	(134) ₁ ☐	Para aumentar de peso
For diabetes	(135) ₁ ☐	Por la diabetes
For kidney failure	(136) ₁ ☐	Por la insuficiencia del riñón/fallo renal
For ulcers	(137) ₁ ☐	Por la úlcera
For diverticulitis	(138) ₁ ☐	Por la diverticulitis
For allergies	(139) ₁ ☐	Por las alergias
For heart trouble	(140) ₁ ☐	Por enfermedad del corazón/problemas cardiacos
For high blood pressure	(141) ₁ ☐	Por la presión alta (alta presión de la sangre)
For pregnancy	(142) ₁ ☐	Por el embarazo
Other	(143) ₁ ☐	Otra

IF "OTHER" DESCRIBE: ₂ _____

5. ¿Cuál es el propósito de esta dieta? CHECK ALL THAT APPLY.

---

6. What kind of diet is it? CHECK ALL THAT APPLY.

High protein	(144) ₁ ☐	Alta en proteínas
High calorie	(145) ₁ ☐	Alta en calorías
Low fat	(146) ₁ ☐	Baja en grasas
Low protein	(147) ₁ ☐	Baja en proteínas
Low salt	(148) ₁ ☐	Baja en sal
Low carbohydrates	(149) ₁ ☐	Baja en carbohidratos
Low sugar	(150) ₁ ☐	Baja en azúcar
Low calorie	(151) ₁ ☐	Baja en calorías
Low cholesterol	(152) ₁ ☐	Baja en colésterol
Vegetarian with eggs, milk, etc.	(153) ₁ ☐	Vegetariana con huevos, leche, etcétera
Vegetarian with no eggs, milk, etc.	(154) ₁ ☐	Vegetariana sin huevos, leche, etcétera
A bland diet	(155) ₁ ☐	Una dieta blanda—sin condimentos
Some other type	(156) ₁ ☐	Alguna otra clase

IF "OTHER TYPE" DESCRIBE: ₂ _____

6. ¿Qué tipo de dieta es? CHECK ALL THAT APPLY.

7. How long have you been on this diet? Specify how many weeks, months, or years.

Weeks (157) ——————— Semanas

Months (158) ——————— Meses

Years (159) ——————— Años

7. ¿Cuánto tiempo ha estado usted en esta dieta? Especifique cuantas semanas, meses o años.

---

8. Was this diet prescribed by a health professional, such as a doctor, dietician or nurse?

(160) Yes ₁ ☐ Sí

No ₂ ☐ No

8. ¿Le dió la dieta un profesional de salud, como un médico, una dietista o enfermera?

---

9. Do you go off this diet often, once in a while, rarely or never?

(161)

Often ₁ ☐ Seguido/a menudo

Once in a while ₂ ☐ De vez en cuando

Rarely or never ₃ ☐ Raramente o nunca

9. ¿Diría usted que se sale de esta dieta (seguido/a menudo), de vez en cuando, raramente o nunca?

---

10. Has your way of eating changed in the past three months?

(162) Yes ₁ ☐ Sí

No ₂ ☐ No

10. ¿Ha cambiado su manera de comer en los tres meses pasados?

IF "NO" SKIP TO INSTRUCTION BOX FOR DIETARY FREQUENCY.

---

11. How has your way of eating changed?

(163) 1

11. ¿Cómo ha cambiado su manera de comer?

---

12. How long ago was this change?

Weeks (164) ——————— Semanas

Months (165) ——————— Meses

12. ¿Hace cuánto tiempo que ocurrió este cambio?

INSTRUCTION BOX FOR DIETARY FREQUENCY

INTERVIEWER: SEE Q. 7 AND Q. 12 AND MARK ONE BOX ONLY.

(166) 1. ☐ SP HAS HAD <u>NO DIET CHANGE.</u> RECALL PERIOD IS PAST 3 MONTHS.

*2. ☐ SP DIET CHANGE IS <u>2 MONTHS OR MORE.</u> RECALL PERIOD IS PAST 2 TO 3 MONTHS.

*3. ☐ SP DIET CHANGE IS <u>LESS THAN 2 MONTHS.</u> RECALL PERIOD IS 3 MONTHS PRIOR TO START OF DIET.

*CHANGE TO APPROPRIATE INTRODUCTION FOR TIME PERIOD COVERED.

INTRODUCTION: Next, I'm going to ask you how often you usually eat certain foods. When answering think about your diet over the past 3 months, _____, _____, _____. Tell me if you ate these foods daily, weekly, less than once a week or never during that time.

INTRODUCTION: Ahora, me gustaría preguntarle con qué frecuencia usualmente usted come ciertos alimentos. Cuando me conteste, piense sobre lo que usted ha comido durante los 3 meses pasados, _____, _____, _____. Dígame, por favor, si usted comió estos alimentos diariamente, semanalmente, menos de una vez por semana o nunca durante ese tiempo.

CODING	NUMBER OF TIMES CODE	INTERVAL CODE
	00—NONE OR NEVER	0—NEVER
	99—UNKNOWN	1—DAILY
	77—LESS THAN ONCE A WEEK	2—WEEKLY
		7—LESS THAN ONCE A WEEK
		9—UNKNOWN

---

13. Now I'm going to ask you about milk used as a beverage and on cereal, and milk products.

Ahora, me gustaría preguntarle sobre leche que usted bebe y que usa con el cereal, y productos lacteos.

  a. Skim milk, lowfat milk, or buttermilk—Leche descremada, leche baja en grasa, o leche agria .... ⑯⑨ ☐☐ ⑰⓪ ☐

  b. Whole milk—Leche (sin descremar/entera) .... ⑯⑦ ☐☐ ⑯⑧ ☐

  c. Ice cream, ice milk—(Helado/nieve/mantecado), "ice milk" .... ⑰① ☐☐ ⑰② ☐

  d. Puddings made with milk—Pudines hechos con leche .... ⑰③ ☐☐ ⑰④ ☐

  e. Cheese including cottage cheese—Queso incluyendo "cottage cheese" .... ⑰⑤ ☐☐ ⑰⑥ ☐

  f. Yogurt .... ⑰⑦ ☐☐ ⑰⑧ ☐

---

14. Mixed dishes prepared with meat, fish, poultry, or cheese, combined with rice, pasta or vegetables, such as spaghetti with meat sauce, tacos, pizza, "burritos," enchiladas, tamales, or paella.

Platillos mixtos preparados con carne, pescado, aves o queso, combinados con arroz, pasta o vegetales, tales como spaghetti con salsa de carne, tacos, pizza, burritos, enchiladas, tamales, o paella .... ⑰⑨ ☐☐ ⑱⓪ ☐

---

15. a. Shellfish, such as shrimp, clams, or oysters, fresh, frozen or canned—

Mariscos de concha, tales como camarones, almejas, u ostiones, frescos, congelados o enlatados .... ⑱① ☐☐ ⑱② ☐

  b. Fish including tuna, fresh, frozen, canned, smoked, or salted—

Pescado incluyendo atún, fresco, congelado, enlatado, ahumado, o salado . ⑱③ ☐☐ ⑱④ ☐

10

16. Organ meats, such as tripe, liver, brain, tongue, heart, kidney—

No. of Times   Interval

Carnes de órganos, como tripa, hígado, seso, lengua, corazón, riñón .... ⑱⑤ ☐☐   ⑱⑥ ☐

---

17. Poultry, such as chicken, turkey, duck—

No. of Times   Interval

Aves, tales como pollo, (guajolote/pavo), pato .... ⑱⑦ ☐☐   ⑱⑧ ☐

No. of Times   Interval

18. a. Luncheon meats and processed meats, for example, salami, sausages, and hot dogs—

Carnes (procesadas/frías), por ejemplo, "salami," chorizos, "hot dogs" ..... ⑱⑨ ☐☐   ⑲⓪ ☐

b. Pork or ham—Carne de puerco o jamón .... ⑲① ☐☐   ⑲② ☐

c. Beef, including hamburger, lamb or veal—

Carne de res, incluyendo hamburguesa, carnero, o ternera .... ⑲③ ☐☐   ⑲④ ☐

No. of Times   Interval

19. Eggs—Huevos .... ⑲⑤ ☐☐   ⑲⑥ ☐

No. of Times   Interval

20. Soups—(Caldos/sopas) .... ⑲⑦ ☐☐   ⑲⑧ ☐

21. How often do you eat these fats and oils not including use in cooking?

¿Con qué frecuencia come usted estas grasas y aceites sin incluir el uso en cocinar?

No. of Times   Interval

a. Margarine, vegetable oil—Margarina, aceite vegetal. .... (199) ☐☐ (200) ☐

b. Butter, cream cheese—Mantequilla, queso crema .... (201) ☐☐ (202) ☐

c. Non dairy coffee creamer—Crema artificial para el café .... (203) ☐☐ (204) ☐

d. Cream, including sour cream and half and half—

Crema de leche, incluyendo (crema agria/"sour cream") y "half and half" .. (205) ☐☐ (206) ☐

e. Bacon, salt pork—Tocino (puerco salado/"salt pork") .... (207) ☐☐ (208) ☐

f. Mayonnaise, salad dressing—Mayonesa, salsa de ensalada .... (209) ☐☐ (210) ☐

g. Peanut butter—(Mantequilla de cacahuate/mantequilla de maní) .... (211) ☐☐ (212) ☐

h. Avocado, olives—Aguacate, aceitunas .... (213) ☐☐ (214) ☐

No. of Times   Interval

22. a. Cold cereals or hot cereals such as oatmeal, cream of rice or wheat—

Cereales fríos o cereales calientes como avena, crema de arroz o de trigo .. (215) ☐☐ (216) ☐

b. Rice and pastas, such as spaghetti or macaroni, and other pastas—

Arroz y pastas, tales como spaghetti o macarrones, y otras pastas .... (217) ☐☐ (218) ☐

c. Bread, corn bread, rolls, crackers, and other grain products—

Pan, pan de maíz, panecillos, galletas saladas y otros productos de grano .. (219) ☐☐ (220) ☐

d. Corn tortillas—Tortillas de maíz .... (221) ☐☐ (222) ☐

e. Flour tortillas—Tortillas de harina .... (223) ☐☐ (224) ☐

23. Legumes, such as pinto or refried beans, white, red, or black beans, blackeyed peas, garbanzos, or nuts, including peanuts or seeds—

Legumbres, tales como (frijoles/habichuelas), garbanzos, nueces, incluyendo (cacahuates/maní) o semillas .... (225) ☐☐   (226) ☐

24. a. All kinds of fruits, fresh, dry, canned, or juices—

Todo tipo de frutas, frescas, secas, enlatadas o jugos .... (227) ☐☐   (228) ☐

b. Citrus fruits or juice, such as oranges or grapefruits—

Frutas or jugos cítricos, tales como (naranjas/chinas) o toronjas .... (231) ☐☐   (232) ☐

c. Deep yellow or orange fruits such as peaches, apricots, melon, cantaloupes, mangos, or papaya—

Frutas amarillas o anaranjadas tal como (duraznos/melocotones), (chavacanes/albaricoques), melones, mangos, (papayas/frutas bombas) ..... (229) ☐☐   (230) ☐

d. All kind of vegetables, fresh, frozen, canned, pickled, or juices—

Todo tipo de vegetales, frescos, congelados, enlatados, en vinagre, o jugos de vegetales .... (233) ☐☐   (234) ☐

e. Bright orange or dark green vegetables such as carrots, squash, hot red peppers, greens, spinach, broccoli—

Vegetales de color naranja o verde oscuro, tales como zanahorias, calabazas, (chiles/ajís) rojos picantes, espinaca, brócoli .... (235) ☐☐   (236) ☐

f. Vegetables such as peppers, tomatoes, salsas, cabbage—

Vegetales tal como (chiles/ajís), tomates, salsas, repollo .... (237) ☐☐   (238) ☐

g. Potatoes—papas .... (239) ☐☐   (240) ☐

h. Bananas or plantains—(bananas/guineos) o plátanos .... (241) ☐☐   (242) ☐

		No. of Times	Interval

25. **a.** **Candy, syrup, jelly, honey or molasses—**

(Dulces/caramelos), siropes, jaleas, miel o (melaza/melado de caña) .... (243) ☐☐ (244) ☐

b. **Sugar added on foods and to all beverages—**

El azúcar añadido a las comidas y a todas las bebidas .... (245) ☐☐ (246) ☐

c. **Sodas excluding diet sodas—**

Sodas excluyendo sodas de dietas .... (247) ☐☐ (248) ☐

		No. of Times	Interval

26. **a.** **Cake, cookies, doughnuts, or pastries—**

(Queque/biscocho), galletas dulces, "donuts," empanadas dulces, o pan dulce .... (249) ☐☐ (250) ☐

b. **Pies, fruit puddings, jello or sherbets—**

Pasteles dulces, pudines de fruta, ("jello"/gelatina), o (sorbetes/nieves) .... (251) ☐☐ (252) ☐

		No. of Times	Interval

27. **a.** **Beer—Cerveza** .... (253) ☐☐ (254) ☐

b. **Wine, sangria—Vino, sangría** .... (255) ☐☐ (256) ☐

c. **Liquor, such as rum, tequila, cognac, whiskey, gin, vodka, etc.—**

Licor, tal como ron, tequila, coñac, whiski, ginebra, vodka, etcétera .... (257) ☐☐ (258) ☐

		No. of Times	Interval

28. **a.** **Decaffeinated coffee—Café descafeinado** .... (259) ☐☐ (260) ☐

b. **Coffee—Café** .... (261) ☐☐ (262) ☐

c. **Herbal teas—Té de hierba** .... (263) ☐☐ (264) ☐

d. **Tea—Té** .... (265) ☐☐ (266) ☐

e. **Diet sodas—Sodas de dietas** .... (267) ☐☐ (268) ☐

f. **Water—Agua** .... (269) ☐☐ (270) ☐

14

29. Potato chips, tortilla chips, cracklings, popcorn, pretzels—

No. of Times   Interval

(Papitas fritas/"potato chips"), (tostadas/"tortilla chips"), chicharrones, (palomitas/rositas de maíz/"popcorn"), "pretzels" .... (271) ⬚ (272) ⬚

No. of Times   Interval

30. a. Cocoa or chocolate added to drinks—

Cocoa o chocolate agregado a bebidas .... (273) ⬚⬚ (274) ⬚

b. Mustard, soy sauce, tabasco sauce, worcestershire or steak sauce—

Mostaza, salsa de soya, salsa tabasco, salsa inglesa o salsa para bistec .... (275) ⬚⬚ (276) ⬚

c. Fruit flavored drinks such as Koolaid, Hi-C or Hawaiian Punch—

Bebidas que tienen sabor a fruta tal como "Koolaid, Hi-C o Hawaiian Punch".. (277) ⬚⬚ (278) ⬚

d. Artificial sweeteners—

Endulsadores artificiales (sacarina) .... (279) ⬚⬚ (280) ⬚

---

31.   DIETARY FREQUENCY COMPLETION CODE (MARK ONE)

(281) 1 ☐- SATISFACTORY

2 ☐- UNSATISFACTORY

3 ☐- REFUSAL

(282) COMMENTS 1 ☐

2

32. How often do you salt your food at the table?

¿Con qué frecuencia le agrega sal a su comida en la mesa?

No. of Times   Interval

(283) ☐☐☐   (284) ☐

33. Including lunch how often do you buy a meal outside the home?

Incluyendo la comida de mediodía, ¿con qué frecuencia compra una comida fuera de la casa?

No. of Times   Interval

(285) ☐☐☐   (286) ☐

34. How often do you eat frozen or canned ready-fixed meals such as TV dinners?

¿Con qué frecuencia come comidas congeladas o enlatadas preparadas de antemano tal como "TV dinners"?

No. of Times   Interval

(287) ☐☐☐   (288) ☐

35. Do you drink any type of herb tea when you don't feel well?

35. ¿Toma alguna clase de té de hierba cuando no se siente bien?

(289) Yes ₁ ☐ Sí
No ₂ ☐ No
(Q37)   (Q37)

36. For what kind(s) of illness do you take herb tea?

36. ¿Para qué tipo(s) de enfermedad(es) toma el té de hierba?

SPECIFY: ₁ _____

(290) SPECIFY: ₁ _____

_____   _____

16

37. Who usually prepares the food at your house?

RELATIONSHIP TO SAMPLE PERSON

(291)

English	Code	Spanish
Self	01 ☐	Persona misma
Self and other	02 ☐	Persona misma y otro
Mother	03 ☐	Madre
Father	04 ☐	Padre
Husband	05 ☐	Esposo
Wife	06 ☐	Esposa
Mother-in-law	07 ☐	Suegra
Daughter	08 ☐	Hija
Daughter-in-law.....................	09 ☐	Nuera
Other 11 _____	10 ☐	Otro 11 _____
SPECIFY		SPECIFY

---

38. What do you usually use when you fry foods?

(292)

English	Code	Spanish
Lard	1 ☐	Manteca
Oil	2 ☐	Aceite
Butter	3 ☐	Mantequilla
Margarine	4 ☐	Margarina
Shortening	5 ☐	Manteca vegetal
Other 7 _____	6 ☐	Otro 7 _____
SPECIFY		SPECIFY
DK	9 ☐	NS

39. How often do you eat breakfast—almost everyday, sometimes, rarely or never?

(293)

Everyday	1 ☐
Sometimes	2 ☐
Rarely or never	3 ☐
Other 5 _____	
SPECIFY	

39. ¿Con qué frecuencia come (desayuno/almuerzo/"breakfast")—casi todos los días, algunas veces, raramente o nunca?

1 ☐	Todos los días
2 ☐	Algunas veces
3 ☐	Raramente o nunca
4 ☐	Otro 5 _____
	SPECIFY

---

40. Including evening snacks, how often do you eat between meals—almost everyday, sometimes, rarely or never?

(294)

Everyday	1 ☐
Sometimes	2 ☐
Rarely or never	3 ☐
Other 5 _____	
SPECIFY	

40. ¿Con qué frecuencia come entre comidas, incluyendo bocadillos de noche—casi todos los días, algunas veces, raramente o nunca?

1 ☐	Todos los días
2 ☐	Algunas veces
3 ☐	Raramente o nunca
4 ☐	Otro 5 _____
	SPECIFY

---

41.   **LANGUAGE OF INTERVIEW.** MARK ONE BOX

(106)
- 1 ☐- ENGLISH
- 2 ☐- SPANISH
- 3 ☐- MIXED

MAKE SURE COVER PAGE INCLUDING "TIME ENDED" IS COMPLETE.

INTERVIEWER NAME	NO. (112)	REVIEWER NAME	NO. (113)

(295)
USE REVERSE FOR COMMENTS 1 ☐

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Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

CONTROL RECORD (500)

HISPANIC HEALTH AND NUTRITION EXAMINATION 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 the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

a. Age
(102)-(103)   1 ☐ Yrs.
_ _   2 ☐ Mos.

b. Sex
(104) 1 ☐ Male
      2 ☐ Female

c. Coordinator
(105) _ _ _

d. Reviewer
(106) _ _ _

e. Examination Date
(107) Mo. (108) Da. (109) Yr.
_ _   _ _   _ _

f. Date of Birth
(110) Mo. (111) Da. (112) Yr.
_ _   _ _   _ _

g. Temperature
(113) _ _ _ . _

h. GTT Priority
(114) _____

i. Name (First, Middle, Last)

Procedure (1)	Age Group (2)	Time In (3)	Time Out (4)	Staff (5)	Procedure or part of overall procedure not done (Enter reason for noncompletion) (6)
1. Physician's Exam.	All	(115) _ _ : _ _	(116) _ _ : _ _	(117) _ _ _	(118)
2. Nutrition Quest.	All	(119) _ _ : _ _	(120) _ _ : _ _	(121) _ _ _	(122) In home 1 ☐ Yes 2 ☐ No
3. Body Measurements	All	(123) _ _ : _ _	(124) _ _ : _ _	(125) _ _ _	(126)
4. Venipuncture I	All	(127) _ _ : _ _	(128) _ _ : _ _	(129) _ _ _	(130)
5. Dental Exam.	All	(135) _ _ : _ _	(136) _ _ : _ _	(137) _ _ _	(138)
6. Tympanic Impedance	All	(139) _ _ : _ _	(140) _ _ : _ _	(141) _ _ _	(142)
7. Audiometry (air)	6-74	(143) _ _ : _ _	(144) _ _ : _ _	(145) _ _ _	(146)
8. Vision Test	6-74	(147) _ _ : _ _	(148) _ _ : _ _	(149) _ _ _	(150)
9. Casual Urine Specimen	6-74	(151) _ _ : _ _	/////////	(153) _ _ _	(154)
10. Sample Person Supp.	12-74	(155) _ _ : _ _	(156) _ _ : _ _	(157) _ _ _	(158)
11. Hair Collection—PM FAST	12-19 20-74	(179) _ _ : _ _	(180) _ _ : _ _	(181) _ _ _	(182)
12. ECG	20-74	(159) _ _ : _ _	(160) _ _ : _ _	(161) _ _ _	(162)
13. Chest X-ray: PA M/F Lat. M/F	20-74 45-74	(163) _ _ : _ _	(164) _ _ : _ _	(165) _ _ _	(166) Pregnant 1 ☐ Yes—DON'T X-RAY 2 ☐ No
14. Glucose Chall.-FAST	20-74	(167) _ _ : _ _	/////////	(169) _ _ _	(170)
15. Venipuncture II-FAST	20-74	(171) _ _ : _ _	(172) _ _ : _ _	(173) _ _ _	(174)
16. Venipuncture III-FAST	20-74	(175) _ _ : _ _	(176) _ _ : _ _	(177) _ _ _	(178)
17. Gallbladder Ultrasound-FAST	20-74	(183) _ _ : _ _	(184) _ _ : _ _	(185) _ _ _	(186)

TIME IN (187)   TIME OUT (188)

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Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

PHYSICIAN'S EXAMINATION (509)
(AGES 6 MONTHS – 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. Examiner	b. Reviewer	c. Age: ☐ Yrs. ☐ Mos.	d. Sex: ₁ ☐ M ₂ ☐ F
(104) — — —	(105) — — —	— —	(106)

EXAMINEE SEATED

A. SKULL AND EARS

		Yes	No
1. Bossing of skull	(107)	₁ ☐	₄ ☐

2. Auditory Canal

		Right	Left		No
a. Otitis externa	(108)-(109)	₁ ☐	₁ ☐	. . . .	₄ ☐
b. Purulent discharge	(110)-(111)	₁ ☐	₁ ☐	. . . .	₄ ☐

3. Ear Drums

		Right	Left		No
a. Not visualized, canal completely occluded	(112)-(113)	₂ ☐	₂ ☐		
b. Not visualized, other		₁ ☐	₁ ☐		No
c. Dull (opaque)	(114)-(115)	₁ ☐	₁ ☐	. . . .	₄ ☐
d. Transparent	(116)-(117)	₁ ☐	₁ ☐	. . . .	₄ ☐
e. Bulging	(118)-(119)	₁ ☐	₁ ☐	. . . .	₄ ☐
f. Retracted	(120)-(121)	₁ ☐	₁ ☐	. . . .	₄ ☐
g. Calcium plaques	(122)-(123)	₁ ☐	₁ ☐	. . . .	₄ ☐
h. Reddened	(124)-(125)	₁ ☐	₁ ☐	. . . .	₄ ☐
i. Other discolorations	(126)-(127)	₁ ☐	₁ ☐	. . . .	₄ ☐
j. Fluid	(128)-(129)	₁ ☐	₁ ☐	. . . .	₄ ☐
k. Scars	(130)-(131)	₁ ☐	₁ ☐	. . . .	₄ ☐
l. Perforated					
(a) With discharge	(132)-(133)	₁ ☐	₁ ☐	. . . .	₄ ☐
(b) Without discharge	(134)-(135)	₁ ☐	₁ ☐	. . . .	₄ ☐

4. Other, describe (136) ₁ _____

EXAMINEE SEATED

B. NARES

		Right	Left	No
1. Obstruction	⑬⑦-⑬⑧	₁ ☐	₁ ☐	₄ ☐
2. Deviated septum	⑬⑨-⑭⓪	₁ ☐	₁ ☐	₄ ☐
3. Swollen turbinates	⑭①-⑭②	₁ ☐	₁ ☐	₄ ☐
4. Inflammation	⑭③-⑭④	₁ ☐	₁ ☐	₄ ☐
5. Polyps	⑭⑤-⑭⑥	₁ ☐	₁ ☐	₄ ☐

6. Other, describe ⑭⑦ ¹_____

C. LIPS AND PHARYNX

		Yes	No
1. Cheilosis	⑭⑧	₁ ☐	₄ ☐
2. Cyanosis of lips	⑭⑨	₁ ☐	₄ ☐
3. Enlarged tonsils	⑮⓪	₁ ☐	₄ ☐

4. Other, describe ⑮① ¹_____

D. EYES

		Yes	No
1. Strabismus	⑮②	₁ ☐	₄ ☐
2. Conjunctival injection	⑮③	₁ ☐	₄ ☐
3. Pale conjunctiva	⑮④	₁ ☐	₄ ☐
4. Xerophthalmia	⑮⑤	₁ ☐	₄ ☐
5. Keratomalacia	⑮⑥	₁ ☐	₄ ☐
6. Pterygium	⑮⑦	₁ ☐	₄ ☐

		Right	Left	No
7. Corneal lesions	⑯④-⑯⑤	₁ ☐	₁ ☐	₄ ☐

		Right	Left	Equal
8. Unequal pupils—Check larger	⑮⑧	₁ ☐	₂ ☐	₄ ☐

		Abnormal	Normal
9. Pupillary light reflex	⑮⑨	₁ ☐	₄ ☐

2

EXAMINEE SEATED

			Right	Left	No
10. Ocular Fundi					
a. Globe absent	(160)-(161)		₁ ☐	₁ ☐ (D11)	
b. Red reflex	(162)-(163)		₁ ☐	₁ ☐	₄ ☐
c. Lens opacities	(166)-(167)		₁ ☐	₁ ☐	₄ ☐
d. Fundus not visualized	(168)-(169)		₁ ☐	₁ ☐ (D11)	
e. Narrow arterioles	(170)-(171)		₁ ☐	₁ ☐	₄ ☐
f. Tortuous arterioles	(172)-(173)		₁ ☐	₁ ☐	₄ ☐
g. AV compression	(174)-(175)		₁ ☐	₁ ☐	₄ ☐
h. Hemorrhage	(176)-(177)		₁ ☐	₁ ☐	₄ ☐
i. Exudate	(178)-(179)		₁ ☐	₁ ☐	₄ ☐
j. Venous engorgement	(180)-(181)		₁ ☐	₁ ☐	₄ ☐
k. Papilledema	(182)-(183)		₁ ☐	₁ ☐	₄ ☐
l. Disc abnormal	(184)-(185)		₁ ☐	₁ ☐	₄ ☐

11. Other, describe   (186) ₁ _____

E. NECK

		Yes	No
1. Enlarged lymph nodes	(187)	₁ ☐	₄ ☐
2. Tender lymph nodes	(188)	₁ ☐	₄ ☐

3. Thyroid evaluation

a. WHO Classification		3	2	1	0
	Groups (189)	☐	☐	☐	☐

		Yes	No
b. Tenderness	(190)	₁ ☐	₄ ☐
c. Nodule	(191)	₁ ☐	₄ ☐

4. Other thyroid, describe   (192) ₁ _____

EXAMINEE SEATED
IF EXAMINEE LESS THAN AGE 6 YEARS, GO TO SECTION G

F. PULSE AND BLOOD PRESSURE

1. Pulse Rate (beats per minute) ⑲ — — —

		Irregular	Regular
2. Pulse Regularity .... ⑭		1 ☐	2 ☐

		Infant	Child	Adult	Large	Thigh
3. Cuff Width .... ⑮		1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

4. Blood Pressure Reading ⑯ _ _ _ / ⑰ _ _ _
                    Systolic   Diastolic

5. Comments ⑱ 1 _____

G. CHEST AND CVA

			Yes	No
1. Inspection				
a. Beading of ribs	⑲		1 ☐	4 ☐
b. Asymmetry	⑳		1 ☐	4 ☐
c. Funnel breast	㉑		1 ☐	4 ☐
d. Pigeon breast	㉒		1 ☐	4 ☐
e. Increased A.P. diameter	㉓		1 ☐	4 ☐
2. CVA tenderness	㉔		1 ☐	4 ☐

3. Auscultation

Circle number(s) for area(s):

			Areas						No
a) Diminished breath sounds	⑳⑧-㉑③		1	2	3	4	5	6	4 ☐ ㉑④
b) Absent breath sounds	㉑⑤-㉒⓪		1	2	3	4	5	6	4 ☐ ㉒①
c) Bronchial breath sounds	㉒②-㉒⑦		1	2	3	4	5	6	4 ☐ ㉒⑧
d) Rales	㉒⑨-㉓④		1	2	3	4	5	6	4 ☐ ㉓⑤
e) Rhonchi ...	㉓⑥-㉔①		1	2	3	4	5	6	4 ☐ ㉔②
f) Wheeze ...	㉔③-㉔⑧		1	2	3	4	5	6	4 ☐ ㉔⑨
g) Other ㉕⓪ 1									

4. Other, describe ㉕① 1 _____

4

FEMALE EXAMINEE SEATED AND SUPINE
MALE EXAMINEE SUPINE ONLY

H. Breast mass(es) (age 10 and over)   Yes   No

    a. Right .... (252)   ₁ ☐   ₄ ☐

    b. Left .... (253)   ₁ ☐   ₄ ☐

    c. Other, describe (254)   ₁ _____

EXAMINEE SUPINE

I. HEART

   1. Carotid Arteries

     a. Right carotid pulsations .... (255)   ₁ ☐ Absent   ₂ ☐ Diminished   ₄ ☐ Normal

     b. Right carotid bruit .... (256)   ₁ ☐ Yes .... ₄ ☐ No·

     c. Left carotid pulsations .... (257)   ₁ ☐ Absent   ₂ ☐ Diminished   ₄ ☐ Normal

     d. Left carotid bruit .... (258)   ₁ ☐ Yes .... ₄ ☐ No

   2. P.M.I. (Age 18 and over) ..... (259)   ₁ ☐ Felt   ₂ ☐ Not felt (I-3)

     a. Interspace .... (260)   ₄ ☐ .... ₅ ☐ .... ₆ ☐ .... ₇ ☐

     b. Midclavicular line .... (261)   ₁ ☐ At   ₂ ☐ Inside   ₃ ☐ Outside

   3. Thrills   Yes   No

     a. Present .... (262)   ₁ ☐   ₄ ☐

                                                 Base   Apex

     b. Location .... (263)   ₁ ☐   ₂ ☐

   4. Heart sounds

     a. 1st heart sound .... (264)   ₁ ☐ Accentuated   ₂ ☐ Diminished   ₄ ☐ Normal

     b. 2nd heart sound aortic .... (265)   ₁ ☐ Accentuated   ₂ ☐ Diminished   ₄ ☐ Normal

     c. 2nd heart sound pulmonic .... (266)   ₁ ☐ Accentuated   ₂ ☐ Diminished   ₄ ☐ Normal

     d. 3rd heart sound .... (267)   ₁ ☐ Yes   ₂ ☐ Maybe   ₄ ☐ No

     f. Systolic click .... (268)   ₁ ☐ Yes   ₄ ☐ No

5

EXAMINEE SUPINE

5. Murmurs

		Yes	No
a. Present		(269) 1 ☐	4 ☐

	Systolic		Diastolic	
	1	2	3	4
b. *Location*	(270)	(273)	(276)	(279)
1) Mitral	1	1	1	1
2) Aortic	2	2	2	2
3) Tricuspid	3	3	3	3
4) Pulmonic	4	4	4	4
c. *Type*	(271)	(274)	(277)	(280)
1) Functional	1	1	1	1
2) Organic	2	2	2	2
3) Don't know	3	3	3	3
d. *Grade*	(272)	(275)	(278)	(281)
1) 1	1	1	1	1
2) 2	2	2	2	2
3) 3	3	3	3	3
4) 4	4	4	4	4
5) 5	5	5	5	5
6) 6	6	6	6	6

6. Other, describe (282) ¹ _____

J. ABDOMEN

		Yes	No
1. Surgical scars		(283) 1 ☐	4 ☐
Circle areas(s) number(s) (284) - (292)	1 2 3 4 5 6 7 8 9		
2. Ascites		(293) 1 ☐	4 ☐
3. Bruit		(294) 1 ☐	4 ☐
Circle area(s) number(s) (505) - (513)	1 2 3 4 5 6 7 8 9		
4. Hepatomegaly		(295) 1 ☐	4 ☐
5. Splenomegaly		(296) 1 ☐	4 ☐
6. Uterine enlargement		(297) 1 ☐	4 ☐
7. Tenderness on palpation		(298) 1 ☐	4 ☐
Circle areas(s) number(s)(299) - (307)	1 2 3 .4 5 6 7 8 9		
8. Mass(es)		(308) 1 ☐	4 ☐
Circle areas(s) number(s)(309) - (317)	1 2 3 4 5 6 7 8 9		

9. Other findings, describe

(318) 1 _____

6

J10. COMPLETE QUESTIONS 10a-c AND 11 FOR FASTING GROUP ONLY (Sample Numbers 800-999):

    a. During the past year has this examinee had any attacks of nausea and/or vomiting lasting more than 2 hours?   (514) ₁ ☐ Yes   ₂ ☐ No   ₉ ☐ DK

    b. During the past five years has this examinee had pain in the gallbladder area which lasted a half hour or more?   (515) ₁ ☐ Yes   ₂ ☐ No   ₉ ☐ DK

       IF "Yes" IN 10b, COMPLETE 10c:

    c. Does this examinee usually feel sick to his/her stomach either before or after getting this pain?   (516) ₁ ☐ Yes   ₂ ☐ No   ₉ ☐ DK

11. What is your opinion of the likelihood of this examinee having gallstones?   (519) ₁ ☐ Definitely has gallstones
                                               ₂ ☐ Probably has gallstones
                                             ₃ ☐ Probably does not have gallstones
                                             ₄ ☐ Definitely does not have gallstones
                                             ₅ ☐ Unable to form opinion

7

EXAMINEE SUPINE

K. TANNER STAGING (Ages 10 through 17)

1. Hair — Male and Female .... ③₁₉ ₁☐ ₂☐ ₃☐ ₄☐ ₅☐

2. Genitals — Male .... ③₂₀ ₁☐ ₂☐ ₃☐ ₄☐ ₅☐

3. Breasts — Female .... ③₂₁ ₁☐ ₂☐ ₃☐ ₄☐ ₅☐

4. Other findings ③₂₂ ¹ _____

L. EXTREMITIES

1. Legs

    a. Abduction of hips (under age 3 only)   Abnormal Normal

       Ortolani's maneuver .... ③₂₃ ₁☐ ₄☐

    b. Pulsations

       (1) Right femoral .... ③₂₄ ₁☐ Absent ₂☐ Diminished ₄☐ Normal

       (2) Right femoral bruit .... ③₂₅ ₁☐ Yes..... ....₄☐ No

       (3) Left femoral .... ③₂₆ ₁☐ Absent ₂☐ Diminished ₄☐ Normal

       (4) Left femoral bruit .... ③₂₇ ₁☐ Yes..... ....₄☐ No

       (5) Right dorsalis pedis .... ③₂₈ ₁☐ Absent ₂☐ Diminished ₄☐ Normal

       (6) Left dorsalis pedis .... ③₂₉ ₁☐ Absent ₂☐ Diminished ₄☐ Normal

    c. Leg ulceration .... ③₃₀-③₃₁ ₁☐ Right... ₁☐ Left ....₄☐ None

	Severe	Moderate	Mild	None
d. Edema .... Right .... ③₃₂	₁☐	.......₂☐	.......₃☐	.......₄☐
Left .... ③₃₃	₁☐	.......₂☐	.......₃☐	.......₄☐

    e. Straight leg-raising test (Age 18 and over)   Abnormal Normal

       (1) Right leg .... ③₃₆ ₁☐ ₄☐

       (2) Left leg .... ③₃₇ ₁☐ ₄☐

       (3) Pain with ankle dorsiflexion   Yes   No

         (a) Right leg .... ③₃₈ ₁☐ ₄☐

         (b) Left leg .... ③₃₉ ₁☐ ₄☐

2. Other, describe ③₄₁ ¹ _____

EXAMINEE SEATED

M. JOINTS (Age 10 and over)

1. Joints	MANIFESTATIONS								
	Tender		Swelling		Deformity		Limitation of motion		Normal
	Right	Left	Right	Left	Right	Left	Right	Left	
a. Hips	④⑤-④⑥ ₁▢	₁▢	④⑦-④⑧ ₁▢	₁▢	④⑨-④⑩ ₁▢	₁▢	④⑪-④⑫ ₁▢	₁▢	④⑬ ₁▢
b. Knees	③⑨⑥-③⑨⑦ ₁▢	₁▢	③⑨⑧-③⑨⑨ ₁▢	₁▢	④⓪⓪-④⓪① ₁▢	₁▢	④⓪②-④⓪③ ₁▢	₁▢	④⓪④ ₁▢
c. Ankles	③⑦⑧-③⑦⑨ ₁▢	₁▢	③⑧⓪-③⑧① ₁▢	₁▢	③⑧②-③⑧③ ₁▢	₁▢	③⑧④-③⑧⑤ ₁▢	₁▢	③⑧⑥ ₁▢
d. Feet	③⑧⑦-③⑧⑧ ₁▢	₁▢	③⑧⑨-③⑨⓪ ₁▢	₁▢	③⑨①-③⑨② ₁▢	₁▢	③⑨③-③⑨④ ₁▢	₁▢	③⑨⑤ ₁▢
e. Shoulders	③④②-③④③ ₁▢	₁▢	③④④-③④⑤ ₁▢	₁▢	③④⑥-③④⑦ ₁▢	₁▢	③④⑧-③④⑨ ₁▢	₁▢	③⑤⓪ ₁▢
f. Elbows	③⑤①-③⑤② ₁▢	₁▢	③⑤③-③⑤④ ₁▢	₁▢	③⑤⑤-③⑤⑥ ₁▢	₁▢	③⑤⑦-③⑤⑧ ₁▢	₁▢	③⑤⑨ ₁▢
g. Wrists	③⑥⓪-③⑥① ₁▢	₁▢	③⑥②-③⑥③ ₁▢	₁▢	③⑥④-③⑥⑤ ₁▢	₁▢	③⑥⑥-③⑥⑦ ₁▢	₁▢	③⑥⑧ ₁▢
h. Hands	③⑥⑨-③⑦⓪ ₁▢	₁▢	③⑦①-③⑦② ₁▢	₁▢	③⑦③-③⑦④ ₁▢	₁▢	③⑦⑤-③⑦⑥ ₁▢	₁▢	③⑦⑦ ₁▢

                                                                     Yes   No

2. Epiphysial enlargement, wrists (under age 18 only) .... ③④⓪   ₁▢   ₄▢

3. Other, specify ₁_____

N. NEUROLOGICAL EVALUATION

                                                                Abnormal   Normal

1. Coordination

    Hand-wrist pronation-supination .... ④⑮-④⑯ ₁▢ Right ..₁▢ Left .... ₄▢

2. Sensory   Arms   Legs

    Vibration .... ④⑱-④㉑ ₁▢ Right ..₁▢ Left   ₁▢ Right ..₁▢ Left .... ₄▢

3. Muscles   Yes   No

    a. Weakness .... ④㉒   ₁▢   ₄▢

    b. Paralysis

      (1) Arms .... ④㉓-④㉔ ₁▢ Right   ₁▢ Left .... ₄▢

      (2) Legs .... ④㉕-④㉖ ₁▢ Right   ₁▢ Left .... ₄▢

EXAMINEE SEATED

4. Speech evaluation

		Yes	No
a. Stuttering	(427)	₁ ☐	₄ ☐

b. Other, specify (428) ¹ _____

| 5. Knee jerks absent .... | (429) | ₁ ☐ | ₄ ☐ |

6. Other, describe (430) ¹ _____

O. SKIN EVALUATION

1. Follicular hyperkeratosis		Yes	No
a. Arms	(431)	₁ ☐	₄ ☐
b. Back	(432)	₁ ☐	₄ ☐
2. Hyperpigmentation, hands and face	(433)	₁ ☐	₄ ☐
3. Dry or scaling skin	(434)	₁ ☐	₄ ☐
4. Perifolliculitis	(435)	₁ ☐	₄ ☐
5. Petechiae	(436)	₁ ☐	₄ ☐

If present, describe (437) ¹ _____

6. Mosaic skin	(438)	₁ ☐	₄ ☐
7. Pellagrous dermatitis	(439)	₁ ☐	₄ ☐
8. Ecchymoses	(440)	₁ ☐	₄ ☐

If yes, describe (441) ¹ _____

9. Spider angioma	(442)	₁ ☐	₄ ☐
10. Eczema	(443)	₁ ☐	₄ ☐
11. Inflammation	(444)	₁ ☐	₄ ☐
12. Impetigo	(445)	₁ ☐	₄ ☐
13. Scars	(446)	₁ ☐	₄ ☐
14. Urticaria	(447)	₁ ☐	₄ ☐
15. Infestation	(448)	₁ ☐	₄ ☐

16. Other, describe (449) ¹ _____

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EXAMINEE SEATED
IF EXAMINEE LESS THAN AGE 6 YEARS, RECORD PULSE ONLY

P. PULSE AND BLOOD PRESSURE

1. Pulse Rate (beats per minute) (450) — — —

	Irregular	Regular
2. Pulse Regularity .... (451)	1 ☐	2 ☐

	Infant	Child	Adult	Large	Thigh
3. Cuff Width .... (452)	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

4. Blood Pressure Reading (453) — — — / (454) — — —
   Systolic   Diastolic

5. Comments (455) 1 _____

EXAMINEE STANDING

Q. BACK		Yes	No
1. Scoliosis .... (456)		1 ☐	4 ☐
2. Kyphosis .... (457)		1 ☐	4 ☐
3. Lordosis .... (458)		1 ☐	4 ☐

4. Tenderness		Right	Left	
a. Sciatic notch .... (459) - (460)		1 ☐	1 ☐	4 ☐
b. Sacroiliac .... (461) - (462)		1 ☐	1 ☐	4 ☐

c. Other—describe (463) 1 _____

5. Lumbar spine limitation of motion		Yes	No
a. Flexion .... (464)		1 ☐	4 ☐
b. Extension .... (465)		1 ☐	4 ☐
c. Right lateral bending .... (466)		1 ☐	4 ☐
d. Left lateral bending .... (467)		1 ☐	4 ☐
e. Right rotation .... (468)		1 ☐	4 ☐
f. Left rotation .... (469)		1 ☐	4 ☐

6. Cervical spine limitation		Yes	No
a. Flexion .... (470)		1 ☐	4 ☐
b. Extension .... (471)		1 ☐	4 ☐

EXAMINEE STANDING

R. GAIT

		Abnormal	Normal
1. Simple walking	(472)	1 ☐	4 ☐

		Yes	No
2. Bowed legs	(473)	1 ☐	4 ☐
3. Knock knees	(474)	1 ☐	4 ☐

			Severe	Moderate	Mild	None
4. Varicose Veins	Right	(334)	1 ☐	2 ☐	3 ☐	4 ☐
	Left	(335)	1 ☐	2 ☐	3 ☐	4 ☐

5. Other, describe (475) 1_____

S. HEALTH STATUS

Would you say the health of this sample person is in general excellent, very good, good, fair, or poor?   (476)

1 ☐ excellent
2 ☐ very good
3 ☐ good
4 ☐ fair
5 ☐ poor

T. NUTRITIONAL STATUS

1. Normal nutrition   (517)   1 ☐

2. Abnormal nutrition   2 ☐

U. WEIGHT STATUS

1. Obesity   (518)   1 ☐

2. Normal weight   2 ☐

3. Underweight   3 ☐

EXAMINEE SEATED

U. DIAGNOSTIC IMPRESSIONS AND HEALTH CARE NEEDS   (519)   None 1 ☐

a. Condition (List suspected conditions and answer questions b-e for each condition)	b. Basis for Judgment	c. Confidence in Assessment	d. Severity of Condition	e. Has a Physician been Consulted Regarding this Condition within the last year?
(478) ——————— ——————— ICD — — — · —	(479) 1 ☐ History 2 ☐ Phy's Exam 3 ☐ Both	(480) 1 ☐ Certain 2 ☐ Likely 3 ☐ Uncertain	(481) 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe	(482) 1 ☐ Y 2 ☐ N 3 ☐ DK
(483) ——————— ——————— ICD — — — · —	(484) 1 ☐ History 2 ☐ Phy's Exam 3 ☐ Both	(485) 1 ☐ Certain 2 ☐ Likely 3 ☐ Uncertain	(486) 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe	(487) 1 ☐ Y 2 ☐ N 3 ☐ DK
(488) ——————— ——————— ICD — — — · —	(489) 1 ☐ History 2 ☐ Phy's Exam 3 ☐ Both	(490) 1 ☐ Certain 2 ☐ Likely 3 ☐ Uncertain	(491) 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe	(492) 1 ☐ Y 2 ☐ N 3 ☐ DK
(493) ——————— ——————— ICD — — — · —	(494) 1 ☐ History 2 ☐ Phy's Exam 3 ☐ Both	(495) 1 ☐ Certain 2 ☐ Likely 3 ☐ Uncertain	(496) 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe	(497) 1 ☐ Y 2 ☐ N 3 ☐ DK
(498) ——————— ——————— ICD — — — · —	(499) 1 ☐ History 2 ☐ Phy's Exam 3 ☐ Both	(500) 1 ☐ Certain 2 ☐ Likely 3 ☐ Uncertain	(501) 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe	(502) 1 ☐ Y 2 ☐ N 3 ☐ DK

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V. SUBSTANTIATING COMMENTS ON DIAGNOSTIC IMPRESSIONS AND HEALTH CARE NEEDS

Level of referral: (504) 1 ☐ Level I
                          2 ☐ Level II
                          3 ☐ Level III

(503) 1 _____

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Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

BODY MEASUREMENTS (501)
(AGES 6 MONTHS – 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION 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 the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

a. Age	b. Sex	c. Examiner No.	d. Recorder No.
☐ Yrs. — — ☐ Mos.	☐ M ☐ F	(102) — — —	(103) — — —

NOTE - Measure left side also if the last digit of examinee's sample number is 3 or 6.

1. Biacromial breadth (cm) .... (105) — — · —
2. Biiliac crest breadth (cm) .... (106) — — · —
3. Bitrochanteric breadth (cm) .... (107) — — · —

	Right Side	Left Side
4. Elbow breadth (cm)	(108) — — · —	(115) — — · —
5. Upper arm girth (cm)	(109) — — · —	(116) — — · —
6. Triceps skinfold (mm)	(110) — — · —	(117) — — · —
7. Subscapular skinfold (mm)	(111) — — · —	(118) — — · —
8. Iliac crest skinfold (mm)	(112) — — · —	(119) — — · —
9. Medial calf circumference (cm)	(113) — — · —	(120) — — · —
10. Medial calf skinfold (mm)	(114) — — · —	(121) — — · —

11. Examinee right/left handed   (122)   1 ☐ Right   2 ☐ Left   3 ☐ Both   4 ☐ Not sure

12. Weight (kilograms)   (123)   — — — · — —

13. Sitting height (cm) (ages 2 and over)   (124)   — — · —

14. Standing height (cm) (ages 2 and over)   (125)   — — — · —

15. Chest circumference - Midpoint
    a. Chest erect (cm) (ages 2 through 7)   (126)   — — · —
    b. Chest supine (cm) (ages 3 and under)   (127)   — — · —

16. Head circumference (ages 7 and under) (cm)   (128)   — — · —

17. Recumbent length (ages 3 and under) (cm)   (129)   — — — · —

18. Crown rump length (ages 3 and under) (cm)   (130)   — — · —

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TYMPANIC IMPEDANCE (503)
(AGES 6 MONTHS - 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. Age	b. Sex	c. Tympanometer No.	d. Examiner No.
⎰ □ Yrs. ⎱ ⎱ □ Mos. — —	□ M □ F	(102) — — — — — —	(103) — — —

START HERE IF SAMPLE NUMBER EVEN	START HERE IF SAMPLE NUMBER ODD
1. RIGHT EAR	**2. LEFT EAR**
a. EARTIP USED	a. EARTIP USED
(105) 1 □ Rock	(118) 1 □ Rock
2 □ Conventional	2 □ Conventional
b. TYMPANOGRAM	b. TYMPANOGRAM
(106) 1 □ Obtained	(119) 1 □ Obtained
2 □ Not obtained - Give reason	2 □ Not obtained - Give reason
_____	_____
c. Physical Volume Test (107) — — · — cc	c. Physical Volume Test (120) — — · — cc
d. Acoustic reflex	d. Acoustic reflex
(131) 1 □ Present	(135) 1 □ Present
2 □ Absent	2 □ Absent
e. Curve shape descriptor	e. Curve shape descriptor
(132) 1 □ Normal	(136) 1 □ Normal
2 □ Rounded peak	2 □ Rounded peak
3 □ Truncated curve	3 □ Truncated curve
4 □ No peak	4 □ No peak
IF "NORMAL" OR "ROUNDED PEAK," COMPLETE	IF "NORMAL" OR "ROUNDED PEAK," COMPLETE
3a–b. OTHERWISE GO TO 5.	4a–b. OTHERWISE GO TO 6.

RIGHT EAR	LEFT EAR
3a. Pressure at maximum compliance (mm H$_2$O)	4a. Pressure at maximum compliance (mm H$_2$O)
(133) ☐ + ☐ − ___ ___ ___	(137) ☐ + ☐ − ___ ___ ___
b. Maximum compliance (cc)	b. Maximum compliance (cc)
(134) __ . __	(138) __ . __

5. Condition Affecting Test Results Mark all that apply	6. Condition Affecting Test Results Mark all that apply
(108) 1 ☐ None	(121) 1 ☐ None
(109) 1 ☐ Cold or sinusitis now	(122) 1 ☐ Cold or sinusitis now
(110) 1 ☐ Ear discharge	(123) 1 ☐ Ear discharge
(111) 1 ☐ Ringing/noises in ear	(124) 1 ☐ Ringing/noises in ear
(112) 1 ☐ Equipment defect	(125) 1 ☐ Equipment defect
(113) 1 ☐ Cold/sinusitis within week	(126) 1 ☐ Cold/sinusitis within week
(114) 1 ☐ Earache within week	(127) 1 ☐ Earache within week
(115) 1 ☐ Hearing aid worn	(128) 1 ☐ Hearing aid worn
(116) 1 ☐ Patent ventilating tube inserted	(129) 1 ☐ Patent ventilating tube inserted
(117) 1 ☐ Other-Describe 2 _____	(130) 1 ☐ Other-Describe 2 _____

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AUDIOMETRY (AIR) (502)
(AGES 6 - 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION 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 the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

a. Age — — Yrs.	b. Sex ☐ M ☐ F	c. Audiometer No. (102) — — — — —	d. Examiner No. (103) — — —

START HERE IF SAMPLE NUMBER EVEN
1. AIR CONDUCTION - RIGHT EAR

START HERE IF SAMPLE NUMBER ODD
2. AIR CONDUCTION - LEFT EAR

Retest R with masking on L* (a)	Frequency (Hz) (b)	Hearing level (c)	Retest L with masking on R* (a)	Frequency (Hz) (b)	Hearing level (c)
(105)	1000	(106)	(124)	1000	(125)
(107)	2000	(108)	(126)	2000	(127)
(109)	4000	(110)	(128)	4000	(129)
(111)	500	(112)	(130)	500	(131)
(113)	1000	(114)	(132)	1000	(133)

3. Condition Affecting Test Results

Mark all that apply

(115) 1 ☐ None
(116) 1 ☐ Cold or sinusitis now
(117) 1 ☐ Ear discharge
(118) 1 ☐ Ringing or other noises in ear
(119) 1 ☐ Equipment defect
(120) 1 ☐ Cold or sinusitis within one week
(121) 1 ☐ Earache within one week
(122) 1 ☐ Hearing aid worn
(143) 1 ☐ Pads out
(123) 1 ☐ Other-Describe 2 _____

4. Condition Affecting Test Results

Mark all that apply

(134) 1 ☐ None
(135) 1 ☐ Cold or sinusitis now
(136) 1 ☐ Ear discharge
(137) 1 ☐ Ringing or other noises in ear
(138) 1 ☐ Equipment defect
(139) 1 ☐ Cold or sinusitis within one week
(140) 1 ☐ Earache within one week
(141) 1 ☐ Hearing aid worn
(144) 1 ☐ Pads out
(142) 1 ☐ Other-Describe 2 _____

*Retest poorer ear with A/C masking on better ear only
if differences in A/C-HL between the two ears is 40 dB
or more

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VISION TEST (507)
(AGES 6 - 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. Age	b. Sex	c. Examiner No.
— — Yrs.	□ M □ F	(102) — — —

CHECK ITEM A: (104) 1 □ Sloan Letters Used

2 □ Landolt Rings Used

I. DISTANCE VISION

CHECK (105)   1 □ Wears glasses for test

ITEM B: 2 □ Wears contact lenses for test

3 □ Forgot (glasses, contact lenses)

4 □ Does not wear either glasses or contact lenses for distance vision

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VISUAL ACUITY

1. Both eyes without correction .... (107) 20/ — — —

START HERE IF SAMPLE NUMBER IS ODD:

2. Left eye with correction if worn .... (109) 20/ — — —

START HERE IF SAMPLE NUMBER IS EVEN:

3. Right eye with correction if worn .... (111) 20/ — — —

4. Both eyes with correction .... (113) 20/ — — —

1

II. BINOCULAR VISION

Test using Random Dot E with both eyes and with glasses/contact lenses (if examinee wears glasses/contact lenses).

Distance
cm   Pass/Fail

50 cm .... (114) ₁ ☐ P   ₂ ☐ F

100 cm .... (115) ₁ ☐ P   ₂ ☐ F

III. NEAR VISION

CHECK   (116) ₁ ☐ Wears glasses for test
ITEM C:
              ₂ ☐ Wears contact lenses for test

              ₃ ☐ Forgot (glasses, contact lenses)

              ₄ ☐ Does not wear either glasses or contact lenses for near vision

VISUAL ACUITY

	30 cm	40 cm	50 cm	60 cm
1. Both eyes without correction	(117) 20/— — —	(118) 20/— — —	(119) 20/— — —	(120) 20/— — —
2. Both eyes with correction	(121) 20/— — —	(122) 20/— — —	(123) 20/— — —	(124) 20/— — —

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Office of Health Research, Statistics, and Technology
National Center for Health Statistics

GLUCOSE CHALLENGE QUESTIONNAIRE (506)
(AGES 20 – 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. LANGUAGE OF INTERVIEW   (105) 1 ☒ English   2 ☐ Spanish

b. Coordinator (102) — — —	**c. Examiner** (103) — — —	**d. Date** (106)-(108) ___/___/___ Mo Day Year

e. Age — — yrs.	**f. Sex** ☐ M ☐ F	**g. Not Scheduled** (109) 1 ☐	**h.** 1 ☐ First visit (Go to 1) (110) 2 ☐ Second visit (Go to 7)

1. Are you currently taking insulin?	(111) 1 ☐ Yes (DO NOT GIVE GTT) 2 ☐ No
2. Are you currently taking diabetes pills?	(112) 1 ☐ Yes 2 ☐ No
3a. At what time did you finish your last meal?	(113) 9999 ☐ DK (114)-(115) { 1 ☐ A.M. 1 ☐ Yesterday — — : — — { 2 ☐ P.M. 2 ☐ Today time
b. Have you had anything at all to eat since (time in 3a)?	(116) 1 ☐ Yes 2 ☐ No (4)
c. At what time did you last have anything at all to eat?	(117) 9999 ☐ DK (118)-(119) { 1 ☐ A.M. 1 ☐ Yesterday — — : — — { 2 ☐ P.M. 2 ☐ Today time
4a. Have you had anything to drink, other than water, after (latest time in 3a or 3c)?	(120) 1 ☐ Yes 3 _____ 2 ☐ No (CHECK ITEM A) specify
b. At what time did you last have anything at all to drink, besides water?	(121) 9999 ☐ DK (122)-(123) { 1 ☐ A.M. 1 ☐ Yesterday — — : — — { 2 ☐ P.M. 2 ☐ Today time
c. How many hours ago did you last drink any water? (Was it less than 10 hours ago or longer?)	(124) _____ hours ago number OR (125) 1 ☐ less than 10 hours ago 2 ☐ 10 or more hours ago
CHECK ITEM A: Refer to LATEST TIME specified in 3a, 3c, or 4b; and refer to Time Chart. MARK APPROPRIATE BOX. RECORD PRIORITY HERE AND ON CONTROL RECORD.	☐ Glucola may be given (5) (126) GTT Priority _____ 4 ☐ Glucola may not be given (6)

NOTES

5a. Time fasting specimen drawn. IF NOT DRAWN, GO TO 6.

(127) __ __ : __ __
time

b. Time glucola given. IF NOT GIVEN, GO TO 6.

(128) __ __ : __ __
time

c. Time one-hour specimen drawn. IF NOT DRAWN, GO TO 6.

(129) __ __ : __ __
time

d. Time two-hour specimen drawn. IF NOT DRAWN, GO TO 6.

(130) __ __ : __ __
time

6. Mark reason for incomplete test:

	First visit (131)	Second visit (132)
a. Arrived late	01 ☐	01 ☐
b. Ill	02 ☐	02 ☐
c. Technical error	03 ☐	03 ☐
d. Did not fast at least 10 hours	04 ☐	04 ☐
e. Fasted more than 16 hours	05 ☐	05 ☐
f. Refused interview	06 ☐	06 ☐
g. Refused glucola	07 ☐	07 ☐
h. Refused specimen	08 ☐	08 ☐
i. Venipuncture unsuccessful	09 ☐	09 ☐
j. Became ill during test	10 ☐	10 ☐
k. Other reason 12 _____ specify	11 ☐	11 ☐

ASK IF SECOND VISIT:

7a. At what time did you finish your last meal?

(133) 9999 ☐ DK (134)-(135) { 1 ☐ A.M.   1 ☐ Yesterday
__ __ : __ __   2 ☐ P.M.   2 ☐ Today
time

b. Have you had anything at all to eat since (time in 7a)?

(136) 1 ☐ Yes
2 ☐ No (8)

c. At what time did you last have anything at all to eat?

(137) 9999 ☐ DK (138)-(139) { 1 ☐ A.M.   1 ☐ Yesterday
__ __ : __ __   2 ☐ P.M.   2 ☐ Today
time

8a. Have you had anything to drink, other than water, after (latest time in 7a or 7c)?

(140) 1 ☐ Yes 3 _____ specify
2 ☐ No (CHECK ITEM B)

b. At what time did you last have anything at all to drink, besides water?

(141) 9999 ☐ DK (142)-(143) { 1 ☐ A.M.   1 ☐ Yesterday
__ __ : __ __   2 ☐ P.M.   2 ☐ Today
time

c. How many hours ago did you last drink any water?

(Was it less than 10 hours ago or longer?)

(144) _____ hours ago
number
OR
(145) 1 ☐ less than 10 hours ago
2 ☐ 10 or more hours ago

CHECK ITEM B: Refer to LATEST TIME specified in 7a, 7c, or 8b; and refer to Time Chart. MARK APPROPRIATE BOX. RECORD PRIORITY HERE AND ON CONTROL RECORD.

(146) ☐ Glucola may be given (5)
GTT Priority _____
4 ☐ Glucola may not be given (6)

NOTES

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SPANISH VERSION

GLUCOSE CHALLENGE QUESTIONNAIRE (506)
(AGES 20 – 74 YEARS)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

NOTICE — La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recogida con la garantía que será mantenida en la más estricta confidencialidad, será usada solo para los propósitos establecidos para este estudio, y no será divulgada o entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con la Sección 308(d) de la Ley del Servicio de Salud Pública-Public Service Act (42 USC 242m).

a. LANGUAGE OF INTERVIEW (105) 1 ☐ English   2 ☒ Spanish

b. Coordinator
(102)
— — —

c. Examiner
(103)
— — —

d. Date
(106)-(108) ____ / ____ / ____
          Mo   Day   Year

e. Age
__ __ yrs.

f. Sex
☐ M ☐ F

g. Not Scheduled
(109) 1 ☐

h. 1 ☐ First visit (Go to 1)
(110) 2 ☐ Second visit (Go to 7)

1. ¿Actualmente está usando insulina?	(111)	1 ☐ Sí (DO NOT GIVE GTT) 2 ☐ No
2. ¿Actualmente está tomando píldoras para la diabetes?	(112)	1 ☐ Sí 2 ☐ No
3a. ¿A qué hora terminó su última comida?	(113) 9999 ☐ NS (114)-(115) __ __ : __ __ hora	{1 ☐ A.M. 1 ☐ Ayer {2 ☐ P.M. 2 ☐ Hoy
b. ¿Ha comido cualquier cosa desde (hora en 3a)?	(116)	1 ☐ Sí 2 ☐ No (4)
c. ¿A qué hora comió usted cualquier cosa por última vez?	(117) 9999 ☐ NS (118)-(119) __ __ : __ __ hora	{1 ☐ A.M. 1 ☐ Ayer {2 ☐ P.M. 2 ☐ Hoy
4a. ¿Ha tomado cualquier bebida, no incluyendo agua, después de (hora más tarde en 3a o 3c)?	(120)	1 ☐ Sí 3 _____ especifique 2 ☐ No (CHECK ITEM A)
b. ¿A qué hora tomó cualquier cosa por última vez, además de agua?	(121) 9999 ☐ NS (122)-(123) __ __ : __ __ hora	{1 ☐ A.M. 1 ☐ Ayer {2 ☐ P.M. 2 ☐ Hoy
4c. ¿Hace cuántas horas tomó agua por última vez? (¿Hace menos de 10 horas o más?)	(124) hace _____ horas número OR 1 ☐ hace menos de 10 horas 2 ☐ hace 10 horas o más	
CHECK ITEM A: Refer to LATEST TIME specified in 3a, 3c, or 4b; and refer to Time Chart. MARK APPROPRIATE BOX. RECORD PRIORITY HERE AND ON CONTROL RECORD.	(126)	☐ Glucola may be given (5) GTT Priority _____ 4 ☐ Glucola may not be given (6)

NOTES

5a. Time fasting specimen drawn. IF NOT DRAWN, GO TO 6.	⑫⑦ — — : — — time	

b. Time glucola given. IF NOT GIVEN, GO TO 6.	⑫⑧ — — : — — time	

c. Time one-hour specimen drawn. IF NOT DRAWN, GO TO 6.	⑫⑦ — — : — — time	

d. Time two-hour specimen drawn. IF NOT DRAWN, GO TO 6.	⑬⓪ — — : — — time	

6. Mark reason for incomplete test:

	First visit ⑬①	Second visit ⑬②
a. Arrived late	..............01 ☐	..............01 ☐
b. Ill	..............02 ☐	..............02 ☐
c. Technical error	..............03 ☐	..............03 ☐
d. Did not fast at least 10 hours	..............04 ☐	..............04 ☐
e. Fasted more than 16 hours	..............05 ☐	..............05 ☐
f. Refused interview	..............06 ☐	..............06 ☐
g. Refused glucola	..............07 ☐	..............07 ☐
h. Refused specimen	..............08 ☐	..............08 ☐
i. Venipuncture unsuccessful	..............09 ☐	..............09 ☐
j. Became ill during test	..............10 ☐	..............10 ☐
k. Other reason 12 _____ Specify	..............11 ☐	..............11 ☐

ASK IF SECOND VISIT: 7a. ¿A qué hora terminó su última comida?	⑬③ 9999 ☐ NS ⑬④-⑬⑤ { 1 ☐ A.M. 1 ☐ Ayer — — : — — { 2 ☐ P.M. 2 ☐ Hoy hora
b. ¿Ha comido cualquier cosa desde (hora en 7a)?	⑬⑥ 1 ☐ Sí 2 ☐ No (8)
c. ¿A qué hora comió cualquier cosa por la última vez?	⑬⑦ 9999 ☐ NS ⑬⑧-⑬⑨ { 1 ☐ A.M. 1 ☐ Ayer — — : — — { 2 ☐ P.M. 2 ☐ Hoy hora
8a. ¿Ha tomado cualquier bebida, no incluyendo agua, después de (hora más tarde en 7a o 7c)?	⑭⓪ 1 ☐ Sí 3 _____ especifique 2 ☐ No (CHECK ITEM B)
b. ¿A qué hora tomó cualquier cosa por última vez, además de agua?	⑭① 9999 ☐ NS ⑭②-⑭③ { 1 ☐ A.M. 1 ☐ Ayer — — : — — { 2 ☐ P.M. 2 ☐ Hoy hora
c. ¿Hace cuántas horas tomó agua por última vez? (¿Hace menos de 10 horas o más?	⑭④ hace _____ horas número OR ⑭⑤ 1 ☐ hace menos de 10 horas 2 ☐ hace 10 horas o más
CHECK ITEM B: Refer to LATEST TIME specified in 7a, 7c, or 8b; and refer to Time Chart. MARK APPROPRIATE BOX. RECORD PRIORITY HERE AND ON CONTROL RECORD.	⑭⑥ ☐ Glucola may be given (5) ⌐ GTT Priority _____ ➤ 4 ☐ Glucola may not be given (6)

NOTES

2

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Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

HAIR COLLECTION QUESTIONNAIRE (514)
AGES 12 – 74 YEARS

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. Name (First, Middle, Last)

b. Sex
☐ M
☐ F

c. Age
— — Yrs.

d. Examiner
(102)
— — —

1. When was the last time your hair was washed?	(104)	1 ☐ Today or yesterday 2 ☐ Two through six days ago 3 ☐ Seven days ago or longer
2. The last time your hair was washed, was it washed at _____	(105)	1 ☐ Home 2 ☐ Beauty shop or barber shop
3. The last time your hair was washed, what brand of shampoo was used?	(106)	Specify brand 01 _____ 99 ☐ Don't know
4a. Is this your regular brand of shampoo?	(107)	1 ☐ Yes 2 ☐ No
b. If no —	(108)	Specify brand 1 _____
5a. When washing your hair do you ever use a conditioner or cream rinse on your hair?	(109)	1 ☐ Yes 2 ☐ No - SKIP TO QUESTION 7a
b. If yes —	(110)	Specify brand 1 _____
6. How often do you use a conditioner or cream rinse?	(111)	1 ☐ Occasionally 2 ☐ Almost always

1

7a. When washing your hair do you ever use a dandruff shampoo?	⑪⑫ 1 ☐ Yes 2 ☐ No—SKIP TO QUESTION 9a
b. If yes—	⑪③ Specify brand 1 _____
8. How often do you use a dandruff shampoo?	⑪④ 1 ☐ Occasionally 2 ☐ Almost always
9a. Do you use any color treatment on your hair?	⑪⑤ 1 ☐ Yes 2 ☐ No—SKIP TO QUESTION 12a
b. If yes—What?	⑪⑥ 1 ☐ Tint 2 ☐ Color rinse 3 ☐ Bleach 4 ☐ Frost ⑪⑦ Specify brand 1 _____
10. How often do you color treat your hair?	⑪⑧ 1 ☐ Weekly 2 ☐ Two or three times a month 3 ☐ Once a month 4 ☐ Less than once a month
11. When was the last time your hair was color treated?	⑪⑨ 1 ☐ Less than one week ago 2 ☐ Two or three weeks ago 3 ☐ One month ago 4 ☐ More than one month ago
12a. Have you had a permanent wave in the last six months?	⑫⓪ 1 ☐ Yes 2 ☐ No
b. If yes—When?	⑫① 1 ☐ Within the last month 2 ☐ Two to three months ago 3 ☐ Four to six months ago
13. LANGUAGE OF INTERVIEW.	⑫② 1 ☒ English 2 ☐ Spanish

2

Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

SPANISH VERSION

HAIR COLLECTION QUESTIONNAIRE (514) AGES 12 - 74 YEARS

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

NOTICE — La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recogida con la garantía que será mantenida en la más estricta confidencialidad, será usada solo para los propósitos establecidos para este estudio, y no será divulgada o entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con la Seccion 308(d) de la Ley del Servicio de Salud Pública - Public Health Service Act (42 USC 242m).

a. Name (First, Middle, Last)	b. Sex ☐ M ☐ F	c. Age — — Yrs.

d. Examiner
(102) — — —

1. ¿Cuándo fue la última vez que se lavó el cabello?	(104) 1 ☐ Hoy o ayer 2 ☐ De dos a seis días 3 ☐ Siete días o más
2. La última vez que su cabello fue lavado, ¿fue lavado en _____?	(105) 1 ☐ Casa 2 ☐ Salón de belleza o barbería
3. La última vez que su cabello fue lavado, ¿que marca de champú se usó?	(106) Especifique la marca 01_____ 99 ☐ No sabe
4a. ¿Es esta la marca de champú que usa regularmente?	(107) 1 ☐ Sí 2 ☐ No
b. Si no—	(108) Especifique la marca 1 _____
5a. Cuándo se lava el cabello, ¿usa alguna vez un acondicionador o enjuague de crema en el cabello?	(109) 1 ☐ Sí 2 ☐ No - SKIP TO QUESTION 7a
b. Si sí—	(110) Especifique la marca 1 _____
6. ¿Con qué frecuencia usa un acondicionador o enjuague de crema?	(111) 1 ☐ Ocasionalmente 2 ☐ Casi siempre

1

7a. Cuándo se lava el cabello, ¿usa alguna vez un champú para la caspa?

(112) 1 □ Sí
2 □ No—SKIP TO QUESTION 9a

b. Si sí—

(113) Especifique la marca 1 _____

8. ¿Con qué frecuencia usa un champú para la caspa?

(114) 1 □ Ocasionalmente
2 □ Casi siempre

9a. ¿Usa algún tratamiento de color en el cabello?

(115) 1 □ Sí
2 □ No—SKIP TO QUESTION 12a

b. Si sí—¿cual?

(116) 1 □ Tinte
2 □ Enjuague de color
3 □ Blanqueador/de-colorante
4 □ "Frost"

(117) Especifique la marca 1 _____

10. ¿Con qué frecuencia se da tratamiento de color en el cabello?

(118) 1 □ Semanalmente
2 □ Dos o tres veces por mes
3 □ Una vez por mes
4 □ Menos de una vez por mes

11. ¿Cuándo fue la última vez que se dió tratamiento de color en el cabello?

(119) 1 □ Hace menos de una semana
2 □ Hace dos o tres semanas
3 □ Hace un mes
4 □ Hace más de un mes

12a. ¿Se ha hecho un permanente en los últimos seis meses?

(120) 1 □ Sí
2 □ No

b. Si sí—¿cuándo?

(121) 1 □ Dentro del último mes
2 □ Hace dos a tres meses
3 □ Hace cuatro a seis meses

13. LANGUAGE OF INTERVIEW.

(122) 1 □ English
2 ☒ Spanish

2

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Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

ULTRASOUND EXAMINATION OF THE GALLBLADDER (504)
(AGES 20 - 74)

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

a. Examiner No. (106) — — —	b. Sex ☐ M ☐ F	c. Age — — years

---

1. Has sample person been given Glucose Questionnaire (506)?

(108) 1 ☐ Yes - TRANSCRIBE RESPONSES TO 2a–c AND 3a–b BELOW FROM GLUCOSE CHALLENGE QUESTIONNAIRE ITEMS 3a–c AND 4a–b.

2 ☐ No - ASK QUESTIONS 2a–c AND 3a–b.

TRANSCRIBE RESPONSES OR ASK SAMPLE PERSON:

2a. At what time did you finish your last meal?

(109) 9999 ☐ DK (110)-(111)   { 1 ☐ A.M.   1 ☐ Yesterday
— — : — —   { 2 ☐ P.M.   2 ☐ Today
time

---

b. Have you had anything at all to eat since (time in 2a)?

(112) 1 ☐ Yes
2 ☐ No (SKIP TO QUESTION 3)

---

c. At what time did you last have anything at all to eat?

(113) 9999 ☐ DK (114)-(115)   { 1 ☐ A.M.   1 ☐ Yesterday
— — : — —   { 2 ☐ P.M.   2 ☐ Today
time

3a. Have you had anything to drink, other than water, after (latest time in 2a or 2c)?

(116) 1 ☐ Yes 3 _____
specify
2 ☐ No (GO TO CHECK ITEM A)

---

b. At what time did you last have anything at all to drink, besides water (EXCLUDE GLUCOLA)?

(117) 9999 ☐ DK (118)-(119)   { 1 ☐ A.M.   1 ☐ Yesterday
— — : — —   { 2 ☐ P.M.   2 ☐ Today
time

CHECK ITEM A: REFER TO LATEST TIME SPECIFIED IN 2a, 2c, OR 3b.

(120) 1 ☐ 6 hours ago or longer
(GO TO QUESTION 4)
2 ☐ less than 6 hours ago (END EXAM)

---

4. Was sample person given glucola? (SEE GLUCOSE CHALLENGE QUESTIONNAIRE QUESTION 5b).	(121) ₁ ☐ Yes ₂ ☐ No

5. Is gallbladder visible within the examinee in the following positions?

	Yes	No	Not Done
a. Supine flat	(122) ₁ ☐	₂ ☐	₃ ☐
b. Left side down	(123) ₁ ☐	₂ ☐	₃ ☐
c. Upright (if necessary)	(124) ₁ ☐	₂ ☐	₃ ☐

CHECK ITEM B	(125) ₁ ☐ <u>ALL</u> "NO" IN 5 (SKIP TO QUESTION 12) ₂ ☐ <u>ANY</u> "YES" IN 5 (TAKE PICTURES OF GALLBLADDER AND PROCEED WITH QUESTIONS 6-11)

6. Dimensions—RECORD FROM A SINGLE POSITION AND ALONG THE TRUE AXIS OF GALLBLADDER.

	mm		Picture Number
a. Maximal length	(126) — — —	(127)	— —
b. Maximal anterior-posterior diameter. ...	(128) — — —	(129)	— —
c. Thickness of anterior wall	(130) — —	(131)	— —

7. Morphology:

a. Is the gallbladder "folded"? (USUALLY PROXIMAL TWO-THIRDS)	(132) ☐ Yes, Picture number — — oo ☐ No
b. Does the gallbladder have a "septum"? (USUALLY DISTAL ONE-THIRD)	(133) ☐ Yes, Picture number — — oo ☐ No

8. Is there an area of wall contour irregularity?

DO NOT INCLUDE A "FOLD" OR "SEPTUM" AS A WALL CONTOUR IRREGULARITY. DO NOT INCLUDE PARTIAL VOLUME EFFECT.

Irregularity:

(134) ₁ ☐ Definitely absent   (135)
₂ ☐ Probably absent
₃ ☐ Probably present ⎫ Picture
₄ ☐ Definitely present ⎭ number — —

2

Echoes:

9a. Are there internal echoes in the lumen? DO NOT INCLUDE "FOLD," "SEPTUM," OR CONTOUR IRREGULARITY. DO NOT INCLUDE NOISE, ESPECIALLY ANTERIOR THIRD OF LUMEN.

(136) 1 ☐ Definitely absent
2 ☐ Probably absent $\Big\}$ CHECK ITEM C
3 ☐ Probably present $\Big\}$ Picture (137)
4 ☐ Definitely present $\Big\}$ number __ __

b. If present, indicate structure.

(138) 1 ☐ Solitary clump
2 ☐ Multiple clump $\Big\}$ 9c
3 ☐ Diffuse layered
4 ☐ Diffuse non-layered $\Big\}$ CHECK ITEM C

c. If clump(s) present and can be measured, record maximal diameters of each.

mm	Picture Number
(139) a. __ __	(140) __ __
(141) b. __ __	(142) __ __
(143) c. __ __	(144) __ __

CHECK ITEM C: REFER TO QUESTIONS 8 AND 9.

(145) 1 ☐ Definitely or probably absent in both 8 and 9 (SKIP TO 11)

2 ☐ Other (TAKE PICTURE WITH EXAMINEE'S POSITION DIFFERENT FROM POSITION FOR QUESTIONS 8 AND 9, AND PROCEED WITH QUESTION 10).

Movement:

10a. Is there movement of (wall contour irregularity/internal echoes within the lumen) with change in examinee position?

(146) 1 ☐ Definitely absent
2 ☐ Probably absent $\Big\}$ 11
3 ☐ Probably present $\Big\}$ Picture (147)
4 ☐ Definitely present $\Big\}$ number __ __

b. If present, record rapidity of movement.

(148) 1 ☐ Fast (within one minute)
2 ☐ Slow (more than one minute)

3

11. Is there any shadowing originating from within the gallbladder?

   INCLUDE DENSELY PACKED GALLBLADDER WITH SHARP ACOUSTIC SHADOW AND LITTLE TO NO GALLBLADDER LUMEN FLUID.

   IF PROBABLY OR DEFINITELY PRESENT, TAKE 2 PICTURES, EACH IN A DIFFERENT TRANSDUCER POSITION.

Shadowing:

(149) 1 ☐ Definitely absent

2 ☐ Probably absent

3 ☐ Probably present ⎫
                    ⎬ (150)   (151)
4 ☐ Definitely present ⎭ Picture numbers
                          _ _ and _ _

SKIP TO QUESTION 14

QUESTIONS 12–13 AND CHECK ITEM D APPLY ONLY IF GALLBLADDER IS NOT VISIBLE (ALL "NO" IN QUESTION 5).

---

12. Can you see:

   a. Liver margin on longitudinal scan, 4 cm. to right of midline? . . . .

   (152) ☐ Yes, Picture no. _ _
   00 ☐ No

   b. Portal vein at liver hilum on transverse scan? . . . .

   (153) ☐ Yes, Picture no. _ _
   00 ☐ No

   c. Intrahepatic right portal vein? . . . .

   (154) ☐ Yes, Picture no. _ _
   00 ☐ No

   d. Is there any visible evidence of a right subcostal cholecystectomy scar? . . . .

   (155) 01 ☐ Yes
   00 ☐ No

CHECK ITEM D: MARK FIRST APPLICABLE BOX.

(156) 1 ☐ "Yes" in 12d (SKIP TO QUESTION 14, MARK BOX 4)

2 ☐ ALL "Yes" in 12a-c (SKIP TO QUESTION 14, MARK BOX 3)

3 ☐ ANY "No" in 12a-c (GO TO QUESTION 13)

---

13. Was visualization hampered by:

(157) 1 ☐ Obesity?

2 ☐ Gas?

3 ☐ Scars?

4 ☐ Liver not seen or high liver?

5 ☐ Other? 6 _____
                    explain

MARK BOX 6 IN QUESTION 14

4

14. Final conclusions. MARK FIRST APPLICABLE BOX OR MARK AS INSTRUCTED IN PREVIOUS QUESTIONS.

(158) 1 ☐ Abnormal gallbladder, gallstones present (if shadowing from gallbladder or if there is movement of intragall-bladder echoes).

2 ☐ Abnormal gallbladder, no definite stones (if wall contour irregularity or internal echoes are present; exclude folds or noise).

3 ☐ Abnormal non-filled gallbladder (gallbladder not found or very small, barely visible gallbladder).

4 ☐ Probable cholecystectomy.

5 ☐ Normal gallbladder.

6 ☐ Inadequate visualization of right upper quadrant.

15. Observations and comments about study or sample person: a. Tenderness noted in gallbladder area during exam?	(159) 1 ☐ Yes 2 ☐ No
b. Other comments.	(160) 1 ☐
ASK SAMPLE PERSON QUESTIONS 16-18. 16. **During the past year have you had any attacks of nausea and/or vomiting lasting more than 2 hours?**	(161) 1 ☐ Yes 2 ☐ No 9 ☐ DK
17. **During the past five years have you had pain in this area (GALLBLADDER AREA) which lasted a half hour or more?**	(162) 1 ☐ Yes 2 ☐ No 9 ☐ DK
IF "YES" IN 17, ASK: 18. **Do you usually feel sick to your stomach either before or after you get this pain?**	(163) 1 ☐ Yes 2 ☐ No 9 ☐ DK
19. **LANGUAGE OF INTERVIEW.**	(164) 1 ☐ English 2 ☐ Spanish

5

2a. ¿A qué hora terminó su última comida?

b. ¿Ha comido cualquier cosa
desde (hora en 2a)?

c. ¿A qué hora comió usted cualquier
cosa por última vez?

3a. ¿Ha tomado cualquier bebida,
no incluyendo agua, después
de (hora más tarde en 2a o 2c)?

b. ¿A qué hora tomó usted cualquier
cosa por última vez, además de agua
(NO INCLUYA GLUCOLA)?

16. Durante el año pasado, ¿ha
tenido cualquier ataque
de náusea y/o vómito
que haya durado más de
2 horas?

17. Durante los cinco años pasados, ¿ha
tenido dolor en esta área
(GALLBLADDER AREA) que duró
media hora o más?

IF "SI" in 17, ASK:

18. Usualmente, ¿se siente usted mal del
estómago antes o después que le viene
este dolor?

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Office of Health Research, Statistics and Technology
National Center for Health Statistics

Hispanic Health and Nutrition Examination Survey

DENTAL EXAMINATION

NCHS SAMPLE NO.

15317

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

DENTAL EXAMINATION

SAMPLE PERSON NUMBER

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

NAME

H0 H1 H2 H3 H4 H5 H6 H7 H8 H9
H0 H1 H2 H3 H4 H5 H6 H7 H8 H9
H0 H1 H2 H3 H4 H5 H6 H7 H8 H9

AGE
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

DECK NUMBER 505   **NO TEETH PRESENT** []   **SEX** M F

PERIODONTAL INDEX

UPPER LEFT		UPPER RIGHT
0 1 2 6 8 9	CENTRAL	0 1 2 6 8 9
0 1 2 6 8 9	LATERAL	0 1 2 6 8 9
0 1 2 6 8 9	CUSPID	0 1 2 6 8 9
0 1 2 6 8 9	1ST BICUS	0 1 2 6 8 9
0 1 2 6 8 9	2ND BICUS	0 1 2 6 8 9
0 1 2 6 8 9	1ST MOLAR	0 1 2 6 8 9
0 1 2 6 8 9	2ND MOLAR	0 1 2 6 8 9
0 1 2 6 8 9	3RD MOLAR	0 1 2 6 8 9

LOWER LEFT		LOWER RIGHT
0 1 2 6 8 9	CENTRAL	0 1 2 6 8 9
0 1 2 6 8 9	LATERAL	0 1 2 6 8 9
0 1 2 6 8 9	CUSPID	0 1 2 6 8 9
0 1 2 6 8 9	1ST BICUS	0 1 2 6 8 9
0 1 2 6 8 9	2ND BICUS	0 1 2 6 8 9
0 1 2 6 8 9	1ST MOLAR	0 1 2 6 8 9
0 1 2 6 8 9	2ND MOLAR	0 1 2 6 8 9
0 1 2 6 8 9	3RD MOLAR	0 1 2 6 8 9

EXAMINER NUMBER

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

RECORDER NUMBER

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

ORAL HYGIENE INDEX

UPPER LEFT MOLAR		UPPER CENTRAL		UPPER RIGHT MOLAR	
DEBRIS	CALCULUS	DEBRIS	CALCULUS	DEBRIS	CALCULUS
0 NONE 0		0 NONE 0		0 NONE 0	
1 1/3 1		1 1/3 1		1 1/3 1	
2 2/3 2		2 2/3 2		2 2/3 2	
3 2/3+ 3		3 2/3+ 3		3 2/3+ 3	
9 NA 9		9 NA 9		9 NA 9	

LOWER LEFT MOLAR		LOWER CENTRAL		LOWER RIGHT MOLAR	
DEBRIS	CALCULUS	DEBRIS	CALCULUS	DEBRIS	CALCULUS
0 NONE 0		0 NONE 0		0 NONE 0	
1 1/3 1		1 1/3 1		1 1/3 1	
2 2/3 2		2 2/3 2		2 2/3 2	
3 2/3+ 3		3 2/3+ 3		3 2/3+ 3	
9 NA 9		9 NA 9		9 NA 9	

THIRD MOLARS

	UPPER LEFT		UPPER RIGHT		LOWER LEFT		LOWER RIGHT	
	S U E Y		S U E Y		S U E Y		S U E Y	
OCC	X 5	0 1	X 5	0 1	X 5	0 1	X 5	0 1
LIN	0 6	2 3	0 6	2 3	0 6	2 3	0 6	2 3
BUC	1 7	4 5	1 7	4 5	1 7	4 5	1 7	4 5
MES	2 8	6 7	2 8	6 7	2 8	6 7	2 8	6 7
DIS	3 9	8 9	3 9	8 9	3 9	8 9	3 9	8 9

ORTHODONTIC TREATMENT

IN PROGRESS   YES NO

PREVIOUS   YES NO ?

SEVERE MAL-OCCLUSION

YES   NO

EDENTULOUS ARCHES DENTURE STATUS

UPPER   ABS   PRES   DEF

LOWER   ABS   PRES   DEF

REVIEWER NUMBER

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

SAMPLE PERSON NUMBER

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

HISPANIC HEALTH AND NUTRITION EXAMINATION SURVEY

DENTAL EXAMINATION

NAME

PHS-6214-6 (8/81)

		S D U E Y	S D U E Y	S D U E Y	S D U E Y	S D U E Y	S U E Y	S U E Y
UPPER LEFT	OCC	0 1	0 1	0 1	X 5 0 1	X 5 0 1	X 5 0 1	X 5 0 1
	LIN	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3
	BUC	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5
	MES	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7
	DIS	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9
UPPER RIGHT	OCC	0 1	0 1	0 1	X 5 0 1	X 5 0 1	X 5 0 1	X 5 0 1
	LIN	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3
	BUC	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5
	MES	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7
	DIS	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9
LOWER LEFT	OCC	0 1	0 1	0 1	X 5 0 1	X 5 0 1	X 5 0 1	X 5 0 1
	LIN	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3
	BUC	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5
	MES	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7
	DIS	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9
LOWER RIGHT	OCC	0 1	0 1	0 1	X 5 0 1	X 5 0 1	X 5 0 1	X 5 0 1
	LIN	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3	0 6 2 3
	BUC	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5	1 7 4 5
	MES	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7	2 8 6 7
	DIS	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9	3 9 8 9
		CENTRAL INCIS	**LATERAL INCIS**	**CUSPID**	**1ST BICUSPID**	**2ND BICUSPID**	**1ST MOLAR**	**2ND MOLAR**

S1 - National Origin and Ancestry

English

Flashcards

1   Mexican/Mexicano

2   Mexican-American

3   Chicano

4   Puerto Rican

5   Boricua

6   Cuban

7   Cuban-American

8   Hispano - specify

9   Other Latin American or Other Spanish - specify

0   Other - specify

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AGE VERIFICATION CHART FOR 1983

INSTRUCTIONS

In using this chart, determine age as follows: Locate the birth year of the person on the chart. If the person has not had a birthday as of the day of interview in 1983, the correct age will be shown in the "No" column. If the person has had a birthday, the correct age will be in the "Yes" column.

Year of birth	Birthday in 1983?			Year of birth	Birthday in 1983?		
	No	AGE	Yes		No	AGE	Yes
1892	90		91	1938	44		45
1893	89		90	1939	43		44
1894	88		89	1940	42		43
1895	87		88	1941	41		42
1896	86		87	1942	40		41
1897	85		86	1943	39		40
1898	84		85	1944	38		39
1899	83		84	1945	37		38
1900	82		83	1946	36		37
1901	81		82	1947	35		36
1902	80		81	1948	34		35
1903	79		80	1949	33		34
1904	78		79	1950	32		33
1905	77		78	1951	31		32
1906	76		77	1952	30		31
1907	75		76	1953	29		30
1908	74		75	1954	28		29
1909	73		74	1955	27		28
1910	72		73	1956	26		27
1911	71		72	1957	25		26
1912	70		71	1958	24		25
1913	69		70	1959	23		24
1914	68		69	1960	22		23
1915	67		68	1961	21		22
1916	66		67	1962	20		21
1917	65		66	1963	19		20
1918	64		65	1964	18		19
1919	63		64	1965	17		18
1920	62		63	1966	16		17
1921	61		62	1967	15		16
1922	60		61	1968	14		15
1923	59		60	1969	13		14
1924	58		59	1970	12		13
1925	57		58	1971	11		12
1926	56		57	1972	10		11
1927	55		56	1973	9		10
1928	54		55	1974	8		9
1929	53		54	1975	7		8
1930	52		53	1976	6		7
1931	51		52	1977	5		6
1932	50		51	1978	4		5
1933	49		50	1979	3		4
1934	48		49	1980	2		3
1935	47		48	1981	1		2
1936	46		47	1982	under 1		1
1937	45		46	1983	NA		under 1

Sample Medicare Card

Health Insurance

SOCIAL SECURITY ACT

NAME OF BENEFICIARY

CLASS NUMBER   SEX

IS ENTITLED TO   EFFECTIVE DATE

SIGN
HERE

Front

1. Carry your card with you when you are away from home.

2. Let your hospital or doctor see your card when you require hospital, medical or health services under "Medicare."

3. Get in touch with your social security office if you have questions about your rights under "Medicare."

4. Your card is good wherever you live in the United States.

WARNING: Issued for the sole use of the holder designated hereon. Intentional misuse of this card is unlawful and will make the offender liable to penalty.

PROPERTY OF UNITED STATES GOVERNMENT. IF FOUND DROP IN NEAREST U.S. MAIL BOX.

Return To: SOCIAL SECURITY ADMINISTRATION
Baltimore, Maryland 21225

FORM SSA-1966 (7-68)

Back

F2 - Reasons for not having Health Insurance Coverage

1.	Care received through Medicaid or Welfare
2.	Unemployed, or reasons related to unemployment
3.	Can't obtain insurance because of poor health, illness, or age
4.	Too expensive, can't afford health insurance
5.	Dissatisfied with previous insurance
6.	Don't believe in insurance
7.	Have been healthy, not much sickness in the family, haven't needed health insurance
8.	Military dependent, (CHAMPUS), Veteran's benefits
9.	Some other reason - Specify

U   . . . . .   20,000 - 24,999

V   . . . . .   25,000 - 29,999

W   . . . . .   30,000 - 34,999

X   . . . . .   35,000 - 39,999

Y   . . . . .   40,000 - 44,999

Z   . . . . .   45,000 - 49,999

ZZ   . . . . .   50,000 and over

F-4

A	. . . . . .	Less than 1,000 (including loss)
B	. . . . .	1,000 - 1,999
C	. . . . .	2,000 - 2,999
D	. . . . .	3,000 - 3,999
E	. . . . .	4,000 - 4,999
F	. . . . .	5,000 - 5,999
G	. . . . .	6,000 - 6,999
H	. . . . .	7,000 - 7,999
I	. . . . .	8,000 - 8,999
J	. . . . .	9,000 - 9,999
K	. . . . .	10,000 - 10,999
L	. . . . .	11,000 - 11,999
M	. . . . .	12,000 - 12,999
N	. . . . .	13,000 - 13,999
O	. . . . .	14,000 - 14,999
P	. . . . .	15,000 - 15,999
Q	. . . . .	16,000 - 16,999
R	. . . . .	17,000 - 17,999
S	. . . . .	18,000 - 18,999
T	. . . . .	19,000 - 19,999

ASP-1

1. Have two or more usual doctors or places depending on what's wrong.

2. Haven't needed a doctor.

3. Previous doctor no longer available.

4. Haven't been able to find the right doctor.

5. Recently moved to area.

6. Other reason - please specify.

Cigarette Brand List

If this Cigarette Brand Name is given in response to either a or b (a)	Then probe, "Is this x, y, or z?" (Include all kinds for the brand) (b)
1. Arctic Lights	Arctic Lights, Arctic Lights 100
2. Belair	Belair, Belair 100
3. Benson and Hedges	Benson and Hedges, Benson and Hedges 100, Benson and Hedges Light 100
4. Cambridge	Cambridge, Cambridge 100
5. Camel	Camel, Camel Lights, Camel Long Lights
6. Carlton	Carlton, Carlton 100, Carlton 120
7. Chesterfield	Chesterfield, Chesterfield 100
8. Decade	Decade, Decade 100
9. Doral	Doral, Doral II
10. Eve	Eve 100, Eve 120
11. Golden Lights	Golden Lights, Golden Light 100
12. Kent	Kent, Kent 100, Kent Micronite II, Kent III, Kent III 100
13. Kool	Kool, Kool International, Kool Milds, Kool Milds 100, Kool Light, Kool Light 100, Kool Super Light, Kool Super Light 100, Kool Ultra, Kool Ultra 100, Kool Super Long 100
	Salem Ultra, Salem Ultra 100
14. L and M	L and M, L and M Lights, L and M Light 100
15. Lark	Lark, Lark Lights, Lark II, Lark 100, Lark Light 100
16. Lucky Strike ("Luckies")	Lucky Strike, Lucky Ten, Lucky 100
17. Marlboro	Marlboro, Marlboro Light, Marlboro 100, Marlboro Light 100
18. Merit	Merit, Merit Ultra Light, Merit 100
19. More	More Light 100, More 120
20. Newport	Newport, Newport Light, Newport 100, Newport Light 100, Newport Red
21. Northwind	Northwind, Northwind 100
22. Now	Now, Now 100
23. Old Gold	Old Gold Straight, Old Gold Filter, Old Gold Light, Old Gold Filter 100
24. Pall Mall	Pall Mall, Pall Mall Light, Pall Mall 100, Paul Mall Extra Light, Paul Mall Light 100
25. Parliament	Parliament Light, Parliament Light 100
26. Philip Morris	Phillip Morris, Phillip Morris Commander, Phillip Morris International 100
27. Raleigh	Raleigh, Raleigh 100, Raleigh Light, Raleigh Light 100
28. Salem	Salem, Salem Light, Salem Light 100, Salem Long Light, Salem 100, Salem Ultra, Salem Ultra 100
29. Tareyton	Tareyton, Tareyton Light, Tareyton 100, Tareyton Ultra Low Tar, Tareyton Long Light 100
30. Triumph	Triump, Triumph 100
31. True	True, True 100
32. Vantage	Vantage, Vantage 100, Vantage Ultra Light, Vantage Ultra Light 100
33. Viceroy	Viceroy, Viceroy Rich Light, Viceroy Rich Light 100, Viceroy Super Long 100
34. Virginia Slim	Virginia Slims, Virginia Slim Light
35. Winston	Winston, Winston Light, Winston Ultra, Winston 100, Winston Light 100, Winston Ultra 100, Winston International 100

Cigarette Brand List (continued)

ASP-3
Chronic Condition List

Allergy, any
Arthritis or rheumatism
Asthma
Cancer
Cleft palate
Club foot
Condition present since birth
Deafness or serious trouble with hearing
Diabetes
Epilepsy
Hardening of the arteries
Hay fever
Heart trouble
Hemorrhoids or piles
Hernia or rupture
High blood pressure
Kidney stones
Mental illness
Missing fingers, hand or arm; toes, foot or leg
Palsy
Paralysis of any kind
Permanent stiffness or deformity of the foot, leg, fingers, arm or back
Prostate trouble
Repeated trouble with back or spine
Rheumatic fever
Serious trouble seeing, even when wearing glasses
Sinus trouble, repeated attacks of
Speech defect, any
Stomach ulcer
Stroke
Thyroid trouble or goiter

Tuberculosis
Tumor, cyst, or growth
Varicose veins, trouble with

ASP-4
Ethnic Identification

Boricuan
Puerto Rican
Cuban
Cuban-American
Mexican/Mexicano
Chicano
Mexican-American
Hispano
Latin American
Other Spanish or Other Hispanic
American
Anglo-American
Other group - specify

CSP-1

1. Has two or more usual doctors or places depending on what's wrong.

2. Hasn't needed a doctor.

3. Previous doctor no longer available.

4. Hasn't been able to find the right doctor.

5. Recently moved to area.

6. Other reason - please specify.

CSP-2
Chronic Condition List

Allergy, any	Tuberculosis
Arthritis or rheumatism	Tumor, cyst, or growth
Asthma	Varicose veins, trouble with
Cancer	
Cleft palate	
Club foot	
Condition present since birth	
Deafness or serious trouble with hearing	
Diabetes	
Epilepsy	
Hardening of the arteries	
Hay fever	
Heart trouble	
Hemorrhoids or piles	
Hernia or rupture	
High blood pressure	
Kidney stones	
Mental illness	
Missing fingers, hand or arm; toes, foot or leg	
Palsy	
Paralysis of any kind	
Permanent stiffness or deformity of the foot, leg, fingers, arm or back	
Prostate trouble	
Repeated trouble with back or spine	
Rheumatic fever	
Serious trouble seeing, even when wearing glasses	
Sinus trouble, repeated attacks of	
Speech defect, any	
Stomach ulcer	
Stroke	
Thyroid trouble or goiter	

Tarjetas Para Mostrar

En Espanol

S1 - Origen Nacional o Ascendencia

1   Mexicano

2   México-Americano

3   Chicano

4   Puertorriqueño

5   Boricua

6   Cubano

7   Cubano-Americano

8   Hispano - especifique

9   Otro Latino-Americano u Otro Español - especifique

0   Otro - especifique

AGE VERIFICATION CHART FOR 1983

INSTRUCTIONS

In using this chart, determine age as follows: Locate the birth year of the person on the chart. If the person has not had a birthday as of the day of interview in 1983, the correct age will be shown in the "No" column. If the person has had a birthday, the correct age will be in the "Yes" column.

Year of birth	Birthday in 1983?			Year of birth	Birthday in 1983?		
	No	AGE	Yes		No	AGE	Yes
1892	90		91	1938	44		45
1893	89		90	1939	43		44
1894	88		89	1940	42		43
1895	87		88	1941	41		42
1896	86		87	1942	40		41
1897	85		86	1943	39		40
1898	84		85	1944	38		39
1899	83		84	1945	37		38
1900	82		83	1946	36		37
1901	81		82	1947	35		36
1902	80		81	1948	34		35
1903	79		80	1949	33		34
1904	78		79	1950	32		33
1905	77		78	1951	31		32
1906	76		77	1952	30		31
1907	75		76	1953	29		30
1908	74		75	1954	28		29
1909	73		74	1955	27		28
1910	72		73	1956	26		27
1911	71		72	1957	25		26
1912	70		71	1958	24		25
1913	69		70	1959	23		24
1914	68		69	1960	22		23
1915	67		68	1961	21		22
1916	66		67	1962	20		21
1917	65		66	1963	19		20
1918	64		65	1964	18		19
1919	63		64	1965	17		18
1920	62		63	1966	16		17
1921	61		62	1967	15		16
1922	60		61	1968	14		15
1923	59		60	1969	13		14
1924	58		59	1970	12		13
1925	57		58	1971	11		12
1926	56		57	1972	10		11
1927	55		56	1973	9		10
1928	54		55	1974	8		9
1929	53		54	1975	7		8
1930	52		53	1976	6		7
1931	51		52	1977	5		6
1932	50		51	1978	4		5
1933	49		50	1979	3		4
1934	48		49	1980	2		3
1935	47		48	1981	1		2
1936	46		47	1982	under 1		1
1937	45		46	1983	NA		under 1

Tarjeta Muestra de Medicare

Health 🏛 Insurance

SOCIAL SECURITY ACT

NAME OF BENEFICIARY

CLAIM NUMBER   SEX

IS ENTITLED TO   EFFECTIVE DATE

SIGN HERE ▷ _____

Frente

1. Carry your card with you when you are away from home.

2. Let your hospital or doctor see your card when you require hospital, medical or health services under "Medicare."

3. Get in touch with your social security office if you have questions about your rights under "Medicare."

4. Your card is good wherever you live in the United States.

WARNING: Issued for the sole use of the holder designated hereon. Intentional misuse of this card is unlawful and will make the offender liable to penalty.

PROPERTY OF UNITED STATES GOVERNMENT. IF FOUND DROP IN NEAREST U.S. MAIL BOX.

Return To: SOCIAL SECURITY ADMINISTRATION
Baltimore, Maryland 21235

FORM SSA-1966 (7-68)

Reverso

F2 - Razones por no tener póliza de Seguro de Salud

1. El cuidado es recibido a través del Medicaid o del Welfare (Bienestar Público).

2. Desempleado, o razónes relacionadas al desempleo.

3. No puede obtener seguro debido a mala salud, enfermedad o edad.

4. Muy caro, no puede pagar seguro de salud.

5. No satisfecho con el seguro previo.

6. No cree en el seguro.

7. Ha estado bien de salud, no ha habido mucha enfermedad en la familia, no ha necesitado seguro de salud.

8. Dependiente militar, (CHAMPUS), beneficios de Veterano.

9. Alguna otra razón - Especifique

F-3	20,000 - 24,999	25,000 - 29,999	30,000 - 34,999	35,000 - 39,999	40,000 - 44,999	45,000 - 49,999	50,000 y más
	U	V	W	X	Y	Z	ZZ

1 -   Tengo dos o más médicos o lugares a los que usualmente voy
       dependiendo del problema que tenga.

2 -   No he necesitado médico.

3 -   El médico que me atendía ya no está disponible.

4 -   No he podido encontrar el médico apropiado.

5 -   Acabo de mudarme al área.

6 -   Otra razón. Especifique por favor.

F-4

Menos de 1,000 (incluyendo ingreso perdido)

A . . . .

B . . . .   1,000 - 1,999

C . . . .   2,000 - 2,999

D . . . .   3,000 - 3,999

E . . . .   4,000 - 4,999

F . . . .   5,000 - 5,999

G . . . .   6,000 - 6,999

H . . . .   7,000 - 7,999

I . . . .   8,000 - 8,999

J . . . .   9,000 - 9,999

K . . . .   10,000 - 10,999

L . . . .   11,000 - 11,999

M . . . .   12,000 - 12,999

N . . . .   13,000 - 13,999

O . . . .   14,000 - 14,999

P . . . .   15,000 - 15,999

Q . . . .   16,000 - 16,999

R . . . .   17,000 - 17,999

S . . . .   18,000 - 18,999

T . . . .   19,000 - 19,999

ASP-2
Cigarette Brand List

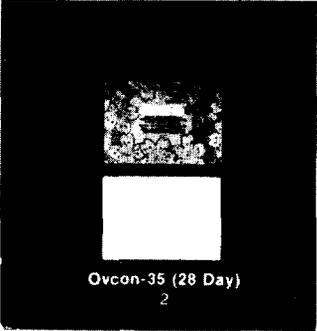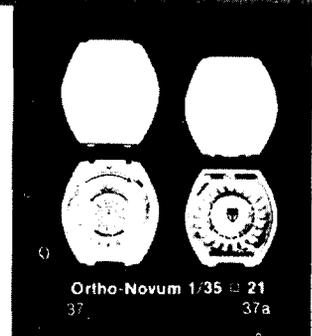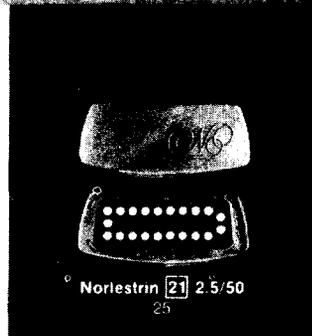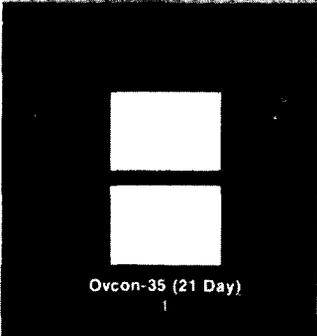| If this Cigarette Brand Name is given in response to either a or b (a)	Then probe, "Is this x, y, or z?" Include all kinds for the brand) (b)
1. Arctic Lights	Arctic Lights, Arctic Lights 100
2. Belair	Belair, Belair 100
3. Benson and Hedges	Benson and Hedges, Benson and Hedges 100, Benson and Hedges Light 100
4. Cambridge	Cambridge, Cambridge 100
5. Camel	Camel, Camel Lights, Camel Long Lights
6. Carlton	Carlton, Carlton 100, Carlton 120
7. Chesterfield	Chesterfield, Chesterfield 100
8. Decade	Decade, Decade 100
9. Doral	Doral, Doral II
10. Eve	Eve 100, Eve 120
11. Golden Lights	Golden Lights, Golden Light 100
12. Kent	Kent, Kent 100, Kent Micronite II, Kent III, Kent III 100
13. Kool	Kool, Kool International, Kool Milds, Kool Milds 100, Kool Light, Kool Light 100, Kool Super Light, Kool Super Light 100, Kool Ultra, Kool Ultra 100, Kool Super Long 100
	Salem Ultra, Salem Ultra 100
14. L and M	L and M, L and M Lights, L and M Light 100
15. Lark	Lark, Lark Lights, Lark II, Lark 100, Lark Light 100
16. Lucky Strike ("Luckies")	Lucky Strike, Lucky Ten, Lucky 100
17. Marlboro	Marlboro, Marlboro Light, Marlboro 100, Marlboro Light 100
18. Merit	Merit, Merit Ultra Light, Merit 100

Cigarette Brand List (continued)

19. More	More Light 100, More 120
20. Newport	Newport, Newport Light, Newport 100, Newport Light 100, Newport Red
21. Northwind	Northwind, Northwind 100
22. Now	Now, Now 100
23. Old Gold	Old Gold Straight, Old Gold Filter, Old Gold Light, Old Gold Filter 100
24. Pall Mall	Pall Mall, Pall Mall Light, Pall Mall 100, Paul Mall Extra Light, Paul Mall Light 100
25. Parliament	Parliament Light, Parliament Light 100
26. Philip Morris	Phillip Morris, Phillip Morris Commander, Phillip Morris International 100
27. Raleigh	Raleigh, Raleigh 100, Raleigh Light, Raleigh Light 100
28. Salem	Salem, Salem Light, Salem Light 100, Salem Long Light, Salem 100, Salem Ultra, Salem Ultra 100
29. Tareyton	Tareyton, Tareyton Light, Tareyton 100, Tareyton Ultra Low Tar, Tareyton Long Light 100
30. Triumph	Triump, Triumph 100
31. True	True, True 100
32. Vantage	Vantage, Vantage 100, Vantage Ultra Light, Vantage Ultra Light 100
33. Viceroy	Viceroy, Viceroy Rich Light, Viceroy Rich Light 100, Viceroy Super Long 100
34. Virginia Slim	Virginia Slims, Virginia Slim Light
35. Winston	Winston, Winston Light, Winston Ultra, Winston 100, Winston Light 100, Winston Ultra 100, Winston International 100

Chronic Condition List

alergia, cualquiera
artritis o reumatismo
asma
cáncer
paladar hendido/fisura palatina
pie deforme, congénito
condición presente desde el nacimiento
sordera o problema (dificultad) seria con el oír
diabetes
epilepsia
endurecimiento de las arterias
fiebre del heno/hayfever
problema del corazón/problema cardiaco
hemorroides o almorranas
hernia o quebradura
alta presión
Cálculos (o piedras) renales (en el riñón)
enfermedad mental/mal de los nervios
falta de dedos, mano o brazo; dedos de los pies,
    pie o pierna
perlesía (o parálisis) C.P.
parálisis de cualquier tipo
rigidez (Tiesura) permanente o deformidad del pie, pierna, dedos, brazo
    o espalda
problema de la próstata
problema repetido cón la espalda o la espina/columna vertebral
fiebre reumática
problema serio con la vista, aún cuando tiene lentes/espejuelos puestos
sinusitus con repitidos ataques
defecto del habla, cualquier
úlcera del estómago
ataque de parálisis, apoplejía, embole
problema de la tiroldes, bocio
tuberculosis
tumor o quiste
venas varicosas, problema con

Identificación Etnica

Boricua

Puertorriqueño

Cubano

Cubano-Americano

Mexicano

Chicano

México-Americano

Hispano (o Hispánico)

Latinoamericano

Otro Español u otro Hispano (Hispánico)

Americano

Angloamericano

Otro grupo - especifique

1 -   Tiene dos o más médicos o lugares a los que usualmente va dependiendo del problema que tenga.

2 -   No ha necesitado médico.

3 -   El médico que le atendía ya no está disponible.

4 -   No ha podido encontrar el médico apropiado.

5 -   Acaba de mudarse al área.

6 -   Otra razón. Especifique por favor.

CSP-2

Chronic Condition List

alergia, cualquiera
artritis o reumatismo
asma
cáncer
paladar hendido/fisura palatina
pie deforme, congénito
condición presente desde el nacimiento
sordera o problema (dificultad) seria con el oír
diabetes
epilepsia
endurecimiento de las arterias
fiebre del heno/hayfever
problema del corazón/problema cardiaco
hemorroides o almorranas
hernia o quebradura
alta presión
Cálculos (o piedras) renales (en el riñón)
enfermedad mental/mal de los nervios
falta de dedos, mano o brazo; dedos de los pies,
    pie o pierna
perlesía (o parálisis) C.P.
parálisis de cualquier tipo
rigidez (Tiesura) permanente o deformidad del pie, pierna, dedos, brazo
    o espalda
problema de la próstata
problema repetido con la espalda o la espina/columna vertebral
fiebre reumática
problema serio con la vista, aún cuando tiene lentes/espejuelos puestos
sinusitus con repitidos ataques
defecto del habla, cualquier
úlcera del estómago
ataque de parálisis, apoplejía, embole
problema de la tiroides, bocio
tuberculosis
tumor o quiste
venas varicosas, problema con

FLASHCARDS FOR ADULT SAMPLE PERSON SUPPLEMENT

Cigarette Brand List

If this Cigarette Brand Name is given in response to either a or b (a)	Then probe, "Is this x, y, or z?" (Include all kinds for the brand) (b)
1. Arctic Lights	Arctic Lights, Arctic Lights 100
2. Belair	Belair, Belair 100
3. Benson and Hedges	Benson and Hedges, Benson and Hedges 100, Benson and Hedges Light 100
4. Cambridge	Cambridge, Cambridge 100
5. Camel	Camel, Camel Lights, Camel Long Lights
6. Carlton	Carlton, Carlton 100, Carlton 120
7. Chesterfield	Chesterfield, Chesterfield 100
8. Decade	Decade, Decade 100
9. Doral	Doral, Doral II
10. Eve	Eve 100, Eve 120
11. Golden Lights	Golden Lights, Golden Light 100
12. Kent	Kent, Kent 100, Kent Micronite II, Kent III, Kent III 100
13. Kool	Kool, Kool International, Kool Milds, Kool Milds 100, Kool Light, Kool Light 100, Kool Super Light, Kool Super Light 100, Kool Ultra, Kool Ultra 100, Kool Super Long 100
	Salem Ultra, Salem Ultra 100
14. L and M	L and M, L and M Lights, L and M Light 100
15. Lark	Lark, Lark Lights, Lark II, Lark 100, Lark Light 100
16. Lucky Strike ("Luckies")	Lucky Strike, Lucky Ten, Lucky 100
17. Marlboro	Marlboro, Marlboro Light, Marlboro 100, Marlboro Light 100
18. Merit	Merit, Merit Ultra Light, Merit 100

Cigarette Brand List (continued)

19. More	More Light 100, More 120
20. Newport	Newport, Newport Light, Newport 100, Newport Light 100, Newport Red
21. Northwind	Northwind, Northwind 100
22. Now	Now, Now 100
23. Old Gold	Old Gold Straight, Old Gold Filter, Old Gold Light, Old Gold Filter 100
24. Pall Mall	Pall Mall, Pall Mall Light, Pall Mall 100, Pall Mall Extra Light, Pall Mall Light 100
25. Parliament	Parliament Light, Parliament Light 100
26. Philip Morris	Phillip Morris, Phillip Morris Commander, Phillip Morris International 100
27. Raleigh	Raleigh, Raleigh 100, Raleigh Light, Raleigh Light 100
28. Salem	Salem, Salem Light, Salem Light 100, Salem Long Light, Salem 100, Salem Ultra, Salem Ultra 100
29. Tareyton	Tareyton, Tareyton Light, Tareyton 100, Tareyton Ultra Low Tar, Tareyton Long Light 100
30. Triumph	Triump, Triumph 100
31. True	True, True 100
32. Vantage	Vantage, Vantage 100, Vantage Ultra Light Vantage Ultra Light 100
33. Viceroy	Viceroy, Viceroy Rich Light, Viceroy Rich Light 100, Viceroy Super Long 100
34. Virginia Slim	Virginia Slims, Virginia Slim Light
35. Winston	Winston, Winston Light, Winston Ultra, Winston 100, Winston Light 100, Winston Ultra 100, Winston International 100

Ovcon-35 (21 Day) 1	**Lo/Ovral** 13	**Norlestrin 21 2.5/50** 25	**Ortho-Novum 1/35 21** 37 37a
Ovcon-35 (28 Day) 2	**Lo/Ovral-28** 14	**Norlestrin Fe 2.5/50** 26	**Ortho-Novum 1/35 28** 38 38a
Ovcon-50 (21 Day) 3	**Ovral** 15	**Brevicon** 27	**Modicon** 39 39a
Ovcon-50 (28 Day) 4	**Ovral-28** 16	**Brevicon 28-day** 28	**Modicon 28** 40 40a

Demulen
5

Ovrette
17

Norinyl 1 + 35 21-day
29

Ortho-Novum 1/50 □ 21
41   41a

Demulen-28
6

Loestrin 21 1/20
18

Norinyl 1 + 35 28-day
30

Ortho-Novum 1/50 □ 28
42   42a

Demulen 1/35-21
7

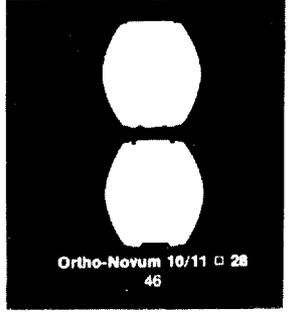Loestrin Fe 1/20
19

Norinyl 1 + 50 21-day
31

Ortho-Novum 1/80 □ 21
43   43a

Demulen 1/35-28
8

Loestrin 21 1.5/30
20

Norinyl 1 + 50 28-day
32

Ortho-Novum 1/80 □ 28
44   44a

Ovulen-21
9

Loestrin Fe 1.5/30
21

Norinyl 1 + 80 21-day
33

Ortho-Novum 10/11 □ 21
45

Ovulen-28
10

Norlestrin 21 1/50
22

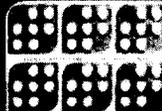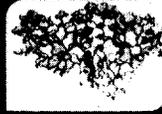Norinyl 1 + 80 28-day
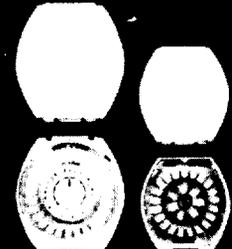34

Ortho-Novum 10/11 □ 28
46

Enovid-E 21
11

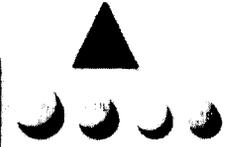Norlestrin 28 1 50

Norinyl 2 mg

Ortho-Novum 2 mg 21
47a

Enovid-E
12

Norlestrin Fe 1/50

Nor-Q.D.

Micronor
48a

1 **BUTISOL°**
2 **BUTICAPS°**
3 **AMYTAL°**
4 **ESKABARB°**
5 **LUMINAL°**
6 **MEBARAL°**
7 AMOBARBITAL
8 PHENOBARBITAL
9 ALURATE°

10 **PLACIDYL**
11 **DORIDEN°**
12 **NOLUDAR°**
13 **SOPOR°**
14 **QUAALUDE°**
15 **PAREST°**
16 **NOCTEC°**
17 METHAQUALONE
18 CHLORAL HYDRATE

19 **NEMBUTAL°**
20 **CARBRITAL°**
21 **SECONAL°**
22 **TUINAL°**
23 PENTOBARBITAL
24 SECOBARBITAL

25 **DALMANE°**

PROBES FOR DIAGNOSTIC INTERVIEW SCHEDULE

"Was (Sx) ever the result of a physical illness or injury?"

NO ──────► "Was (Sx) **ever** the result of using medication, drugs or alcohol?"

YES

NO ──────► MARK BOX 5.

YES ──────► "Was (Sx) **always** the result of using medication, drugs or alcohol?"

NO ──► MARK BOX 5.
YES ──► MARK BOX 3.

"Was (Sx) **always** the result of a physical illness or injury? (such as _____)?"

YES ──────► MARK BOX 4.

NO ──────► "When (Sx) was **not** due to a physical illness or injury, was it **always** the result of using medication, drugs or alcohol?"

NO ──────► MARK BOX 5.

YES ──────► MARK BOX 4.

IF RESPONDENT VOLUNTEERS NERVES, STRESS, DEPRESSION OR EQUIVALENT, MARK BOX 5.

PROBES FOR DIS

"¿Fué (Sx) alguna vez el resultado de enfermedad física o herida?"

NO

"¿Fué (Sx) **alguna vez** el resultado del uso de medicinas, drogas o alcohol?"

NO ──► MARQUE CAJA 5

SI ──► "¿Fué(Sx) **siempre** el resultado del uso de medicinas, drogas o alcohol?"

NO ──► MARQUE CAJA 5
SI ──► MARQUE CAJA 3

SI

"¿Fué (Sx) **siempre** el resultado de una enfermedad física o de una herida?(tal como _____)?"

SI ──► MARQUE CAJA 4

NO ──► "Cuando (Sx) **no fué** a causa de enfermedad física o herida, ¿fué **siempre** el resultado del uso de medicinas, drogas o alcohol?"

NO ──► MARQUE CAJA 5

SI ──► MARQUE CAJA 4

SI EL RESPONDEDOR (LA PERSONA QUE RESPONDE) OFRECE VOLUNTARIAMENTE NERVIOS, TENSION, DEPRESION O SU EQUIVALENTE, MARQUE LA CAJA 5

Rarely or None of the Time (less than 1 day)

Some or a Little of the Time (1-2 days)

Occasionally or a Moderate Amount of Time (3-4 days)

Most or All of the Time (5-7 days)

o Raramente o ninguna vez (menos de un día)

o Alguna o poca vez (1-2 día)

o Ocasionalmente o una cantidad moderada (3-4 días)

o La mayor parte o todo el tiempo (5-7 días)

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