Third National Health and Nutrition Examination Survey (NHANES III), 1988-94

NHANES III SECOND EXAM FILE DOCUMENTATION

Series 11, No. 3A

July 1999

```
Introduction
Guidelines for Data Users. . . . . . . . . . . . . . . . . . . . . . . .
Survey Description . . . . . . . . . . . . . . . . . . . . . . . . . . .
Sample Design and Analysis Guidelines.
Data Preparation and Processing Procedures . . . . . . . . . . . . . . .
General References
    General Information
    Data File Index
    Data File Item Descriptions, Codes, Counts, and Notes . . . . . . .
```

The National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC) collects, analyzes, and disseminates data on the health status of U.S. residents. The results of surveys, analyses, and studies are made known through a number of data release mechanisms including publications, mainframe computer data files, CD-ROMs (Search and Retrieval Software, Statistical Export and Tabulation System (SETS)), and the Internet.

The National Health and Nutrition Examination Survey (NHANES) is a periodic survey conducted by NCHS. The third National Health and Nutrition Examination Survey (NHANES III), conducted from 1988 through 1994, was the seventh in a series of these surveys based on a complex, multi-stage sample design. It was designed to provide national estimates of the health and nutritional status of the United States' civilian, noninstitutionalized population aged two months and older.

The following table summarizes the NHANES III data which are currently available on CD-ROM, including this release.

Table 1. Available NHANES III CD-ROMs

| CD-ROM Name | Release Date | Size in Megabytes | Data Files / Description |
| :---: | :---: | :---: | :---: |
| NHANES III, 1988-94, Series 11, No. 3A, ASCII Version (this release) | $\left\lvert\, \begin{aligned} & \text { July } \\ & 1999 \end{aligned}\right.$ | 33 | Second exam sample files for dietary recall, examination, laboratory, additional laboratory analytes and documentation |
| NHANES III, 1988-94, Series 11, No. 2A, ASCII Version | $\begin{aligned} & \text { \|April } \\ & \mid 1998 \end{aligned}$ | 407 | Dietary recall (replacement), electrocardiography, laboratory (additional analytes), and vitamins/medicines data files and documentation |
| NHANES III, 1988-94, Series 11, No. 1, Revised SETS Version 1.22a | $\begin{array}{\|l} \text { October } \\ \text { Oct } \\ 1997 \end{array}$ | 285 | Adult and youth household questionnaire, examination, and laboratory data files and documentation, plan and operation, analytic and reporting guidelines, weighting and estimation methodology, field operations, non-response bias |
| NHANES III, 1988-94, Series 11, No. 1A, ASCII Version | $\begin{aligned} & \text { July } \\ & 1997 \end{aligned}$ | 454 | Adult and youth household questionnaire, dietary recall, examination, and laboratory data files and documentation |
| NHANES III, 1988-94, Series 11, No. 1, SETS Version 1.22a * | $\left\lvert\, \begin{aligned} & \text { July } \\ & 1997 \end{aligned}\right.$ | 285 | Adult and youth household questionnaire, examination, and laboratory data files and documentation |
| NHANES III Reference Manuals and Reports October 1996 | $\begin{aligned} & \text { October } \\ & \mid 1996 \end{aligned}$ | 152 | Plan and operation, analytic and reporting guidelines, weighting and estimation methodology, field operations, non-response bias |

* Do not use this CD-ROM It had technical problems and has been superseded by the revised SETS version 1.22a, Series 11, No. 1, released in October 1997.

This CD-ROM, Series 11 No. 3A, contains data obtained from a second exam of selected survey participants who had a primary exam. This release does not replace the previous NHANES III data releases series 11 Nos. 1A and 2A).

Table 2. Location of the interview and examination components in the NHANES III public use data files

Data File

| Topic | HA | HY | EXAM | LAB | DIET | VMS | ECG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample weights | X | X | X | X | - | . | X |
| Age/race/sex | X | X | X | X | . | . | X |
| Ethnic background | X | X | . | . | . | . | - |
| Household composition | X | X | . | . | . | . | . |
| Individual characteristics | X | X | . | . | . | . | - |
| Health insurance | X | X | . | . | . | . | . |
| Family background | X | X | . | . | . | . | - |
| Occupation of family head | X | X | . | . | . | . | . |
| Housing characteristics | X | X | . | . | - | . | . |
| Family characteristics | X | X | - | . | - | . |  |
| Orientation | X | X |  | . | - | . | . |
| Health services | X | X | - | - | - | . | - |
| Selected health conditions | X | X | X | - | - | - | . |
| Diabetes questions | X | . | - | - | - | . |  |
| High blood pressure and cholesterol questions | X | - | - | - | - | - | - |
| Cardiovascular disease questions | X | - | - | - | - | - | - |
| Musculoskeletal conditions | X | - |  |  |  |  |  |
| Physical functioning questions | X | - | - | - | - | - | - |
| Gallbladder disease questions | X | - | . |  |  |  |  |

Table 2. (continued) Location of the interview and examination components in the NHANES III public use data files

Data File

| Topic | HA | HY | EXAM | LAB | DIET | VMS | ECG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kidney conditions | X | . |  | - | . | - | - |
| Respiratory and allergy questions | X | X |  |  | - | - | - |
| Diet questions | X | . |  | - | - | . | . |
| Food frequency | X | . | X | . | . | . | . |
| Vision questions | X | X |  | . | . | . | . |
| Hearing questions | X | X | . | . | - | . | . |
| Dental care and status | X | X |  | . |  |  |  |
| Tobacco | X | . | X | . | - |  | - |
| Occupation | X | . | . | . | - | . | . |
| Language usage | X | X |  | . | - |  | . |
| Exercise | X | . | - | . | - | . | - |
| Social support/residence | X | . | - | - | - | - | - |
| Vitamin/mineral/medicine usage | X | X | X | - | - | - | - |
| Blood pressure measurement | X | . | X | . | - | . | . |
| Birth | - | X | X | . | - | - | . |
| Infant feeding practices/diet |  | X | . | . | . | . | - |
| Motor and social development |  | X | . |  | - | . | - |
| Functional impairment | X | X | . | - | - | - | - |
| School attendance | - | X | - | - | - | - | - |
| Cognitive function | - | X | X | - | - | - | - |

Table 2. (continued) Location of the interview and examination components in the NHANES III public use data files

Data File

| Topic | HA | HY | EXAM | LAB | DIET | VMS | ECG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol and drug use | . | - | X | . | . |  | . |
| Reproductive health | . | . | X | - | - | - | - |
| Diagnostic interview schedule | - |  | X |  |  |  |  |
| Activity | . | . | X | . | . | . | . |
| Physician's examination | . | . | X | . | - | - | . |
| Height and weight | . | . | X | . | . | . | . |
| Body measurements | - | . | X | - | - |  |  |
| Dental examination | . | . | X | . | - | . |  |
| Allergy skin test | - | . | X | . | - |  |  |
| Audiometry | . | . | X | - | . | - |  |
| Tympanometry | - | - | X | . | . | . |  |
| WISC and WRAT | . | . | X | - | . | . |  |
| Spirometry | - | - | X | - | - | . |  |
| Bone densitometry |  | . | X | - | . |  |  |
| Gallbladder ultrasonography | - | - | X | - | . | . |  |
| Central nervous system function evaluation |  | - | X | . |  | . |  |
| Fundus photography |  | - | X |  |  | - |  |
| Physical function evaluation |  | - | X | . | . | - |  |
| Fasting questions |  |  | - | X | - | - | - |

Table 2. (continued) Location of the interview and examination components in the NHANES III public use data files

Data File


Data File Definitions

```
HA - Household Adult Data File
HY - Household Youth Data File
EXAM - Examination Data File
LAB - Laboratory Data File and Second Laboratory Data File
DIET - Dietary Recall Data Files
VMS - Vitamin Mineral Supplement Data File
ECG - Electrocardiography Data File
```

This document includes the documentation for the NHANES III Second Exam File and also contains a general overview of the survey and the use of the data files. The general overview includes five sections. The first section, entitled "Guidelines for Data Users," contains important information about the use of the data files. The second section, "Survey Description," is a brief overview of the
survey plan and operation. The third section, "Sample Design and Analysis Guidelines," describes some technical aspects of the sampling plan and discusses some analytic issues particularly related to the use of data from complex sample surveys. The "Data Preparation and Processing Procedures" section describes the editing conventions and the codes used to represent the data. The last and fifth
section, "General References," includes a reference list for the survey overview sections of the document.

Public Use Data Files for the third National Health and Nutrition Examination Survey will also be available from the National Technical Information Service (NTIS). A list of NCHS public use data tapes available for purchase from NTIS may be obtained from the Data Dissemination Branch at

```
NCHS. Information regarding a bibliography (on disk) of journal articles
citing data from all the NHANES and the availability of NHANES III data in
CD-ROM/SETS software format can be obtained from the Data Dissemination
Branch at:
Data Dissemination Branch
National Center for Health Statistics
Room 1018
6 5 2 5 ~ B e l c r e s t ~ R o a d
Hyattsville, Maryland 20782
Phone: (301)458-4636
URL:http://www.cdc.gov/nchswww
NTIS can be contacted at:
NTIS - Computer Products Office
5285 Port Royal Road
Springfield, Virginia 22161
(703) 487-4807
Copies of all NHANES III questionnaires and data collection forms are
included in the Plan and Operation of the Third National Health and
Nutrition Examination Survey, 1988-94 (NCHS, 1994; U.S. DHHS, 1996). This
publication, along with detailed information on NHANES procedures,
interviewing, data collection, quality control techniques, survey design,
nonresponse, and sample weighting can be found on the NHANES III Reference
Manuals and Reports CD-ROM (U.S. DHHS, 1996). Information on how to order
this CD-ROM is also available from the Data Dissemination Branch at NCHS at
the address and telephone number given above.
```

NHANES III Second Exam Sample

The NHANES III Second Exam Sample was a sub-study of NHANES III, conducted for research purposes. These research files are intended to provide additional data for use with special statistical methods to improve estimates from the main survey data and for methodologic investigations. Following this description of the Second Exam Sample is information on the overall survey which is also relevant for the Second Exam Sample, including: general guidelines for data users, a description of the survey, sample design, analysis guidelines and a description of the data preparation and processing procedures.

Sample design and survey description

No statistical sampling design was applied for the second exam. However, a nonrandom sample of about five percent was obtained by selecting approximately 20
participants from the roughly 400 sample persons examined at each survey location. The following general guidelines were used by the MEC staff to select participants for the second exam:

1) select mainly adults, 2) half between the ages of 20-39 years, and half over 40 years; 3) select about half men and half women. The sample obtained consists of 2,603 persons, with 1,205 males ( 46 percent) and 1,398 females (54 percent).


The second exams were scheduled after the first or primary exams, when possible at the same time of day as the first exam. The second exams were conducted over the same time period as the primary exams for a particular survey location by the
same MEC staff, although priority was given to scheduling and completing primary exams. The second exams were administered following the same protocols as for the primary exam, with the following exceptions: the food frequency questionnaire
was not administered to adolescents $12-16$ years; the WISC/WRAT was not administered to youths 6-16 years, and hand/knee x-rays were not readministered on adults aged 60 and over.

Analytic Issues
Due to the research nature of these data, special caution should be used in
analysis. All analyses should include thorough investigation of the potential selection bias of this small non-random sub-sample. Careful attention to identifying and evaluating differences in important characteristics (e.g., age
and race-ethnicity) between the subsample and the main sample should be considered along with other issues.

The second exam data can be linked to the primary exam data and the household interview data using the unique identifier (SEQN). This is necessary to obtain the demographic data for the sample. NCHS recommends that the survey design variables (e.g., sample weights) not be linked with the second exam data, since the survey design variables were created for the full sample. There are no sample weights or other design variables specifically created for the second exam sample. There are weights labeled as "replicate...weight," but these are Fay's BRR Replicate Interview Weights. These weights are to be applied to the primary exam sample, with software which uses the balanced repeated replication (BRR) method. They should not be used with the
Second Exam Sample.
Because the second exams were identical to the primary exams, with the exceptions
noted above, the file structure for the second exams is the same as for the primary exam files. The variable nomenclature is the same with the following important distinction: the first or primary exam variable names have a 'p' in the
third position while the second or "replicate" exam variable names have a 'r' in the third position (e.g., 'BMPWT' or 'BMRWT').

Please refer to the following important information before analyzing data.

NHANES III Background Documents

- The Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-94, (NCHS, 1994; U.S. DHHS, 1996) provides an overview of the survey and includes copies of the survey forms.
- The sample design, nonresponse, and analytic guidelines documents on the NHANES III Reference Manuals and Reports CD-ROM (U.S. DHHS, 1996) discuss the reasons that sample weights and the complex survey design should be taken into account when conducting any analysis.
- Instruction manuals, laboratory procedures, and other NHANES III reference manuals on the NHANES III Reference Manuals and Reports CD-ROM(U.S. DHHS, 1996) are also available for further information on the details of the survey.

Analytic Data Set Preparation

- Most NHANES III survey design and demographic variables are found only on the Adult and Youth Household Data Files available on the first release. In preparing a data set for analysis, other data files must be merged with either or both of these files to obtain many important analytic variables.
- All of the NHANES III public use data files are linked with the common survey participant identification number (SEQN). Merging information from multiple NHANES III data files using this variable ensures that the appropriate information for each survey participant is linked correctly.
- NHANES III public use data files do not have the same number of records on each file. The Household Questionnaire Files (divided into two files, Adult and Youth) contain more records than the Examination Data File because not everyone who was interviewed completed the examination. The Laboratory Data File contains data only for persons aged one year and older. The Individual Foods Data File based on the dietary recall has multiple records for each person rather than the one record per sample person contained in the other data files.
- For each data file, SAS program code with standard variable names and labels is provided as separate text files on the CD-ROM that contains the data files. This SAS program code can be used to create a SAS data set from the data file.
- Modifications were made to items in the questionnaires, laboratory, and examination components over the course of the survey; as a result, data may not be available for certain variables for the full six years. In addition, variables may differ by phase since some changes were implemented between phases. Users are encouraged to read the Notes
sections of this document carefully for information about changes.
- Extremely high and low values have been verified whenever possible, and numerous consistency checks have been performed. Nonetheless, users should examine the range and frequency of values before analyzing data.
- Some data were not ready for release at the time of this publication due to continued processing of the data or analysis of laboratory specimens. A listing of those data are available in the general information section of each data file.
- Confidential and administrative data are not being released to the public. Additionally, some variables have been recoded to help protect the confidentiality of the survey participants. For example, all age-related variables were recoded to $90+$ years for persons who were 90 years of age and older.
- Some variable names may differ from those used in the Phase 1 NHANES III Provisional Data Release and some variables included in the Phase 1 provisional release may not appear on these files.
- Although the data files have been edited carefully, errors may be detected. Please notify NCHS staff (301-458-4636) of any errors in the data file or the documentation.

Analytic Considerations

- NHANES III (1988-94) was designed so that the survey's first three years, 1988-91, its last three years, 1991-94, and the entire six years were national probability samples. Analysts are encouraged to use all six years of survey results.
- Sample weights are available for analyzing NHANES III data. One of the following three sample weights will be appropriate for nearly all analyses: interviewed sample final weight (WTPFQX6), examined sample final weight (WTPFEX6), and mobile examination center (MEC)- and home-examined sample final weight (WTPFHX6). Choosing which of these sample weights to use in any analysis depends on the variables being used. A good rule of thumb is to use "the least common denominator" approach. In this approach, the user checks the variables of interest. The variable that was collected on the smallest number of persons is the "least common denominator," and the sample weight that applies to that variable is the appropriate one to use for that analysis. For more detailed information, see the Analytic and Reporting Guidelines for NHANES III (U.S. DHHS, 1996).


## Referencing or Citing NHANES III Data

- In publications, please acknowledge NCHS as the original data source. For instance, the reference for the NHANES III Laboratory Data File on this CD-ROM is:
U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. Third National Health and Nutrition

Examination Survey, 1988-1994, NHANES III Second Laboratory Data File (CD-ROM, Series 11, No. 3A). Hyattsville, MD.: Centers for Disease Control and Prevention, 1999.

○
Please place the acronym "NHANES III" in the titles or abstracts of journal articles and other publications in order to facilitate the retrieval of such materials in bibliographic searches.

## SURVEY DESCRIPTION

The third National Health and Nutrition Examination Survey (NHANES III) was the seventh in a series of large health examination surveys conducted in the United States beginning in 1960. Three of these surveys, the National Health Examination Surveys (NHES), were conducted in the 1960's (NCHS, 1965; NCHS, 1967; NCHS, 1969). In 1970, an expanded nutrition component was added to provide data with which to assess nutritional status and dietary practices, and the name was changed to the National Health and Nutrition Examination Survey (Miller, 1973; Engel, 1978; McDowell, 1981). A special survey of Hispanic populations in the United States was conducted during 1982-1984 (NCHS, 1985).

The general structure of the NHANES III sample design was similar to that of the previous NHANES. All of the surveys used complex, multi-stage, stratified, clustered samples of civilian, noninstitutionalized populations. NHANES III was the first NHANES without an upper age limit; in fact, the age range for the survey was two months and older. A home examination option was employed for the first time in order to obtain examination data for very young children and for elderly persons who were unable to visit the mobile examination center (MEC). The home examination included only a subset of the components used in the full MEC examination since it would have been difficult to collect some types of data in a home setting. A detailed description of design specifications and copies of the data collection forms can be found in the Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-1994 (NCHS, 1994; U.S. DHHS, 1996).

NHANES III was conducted from October 1988 through October 1994 in two phases, each of which comprised a national probability sample. The first phase was conducted from October 18, 1988, through October 24, 1991, at 44 locations. The second phase was conducted from September 20, 1991, through October 15, 1994, at 45 different locations. In NHANES III, 39, 695 persons were selected over the six years; of those, 33,994 (86\%) were interviewed in their homes. All interviewed persons were invited to the MEC for a medical examination. Seventy-eight percent $(30,818)$ of the selected persons were examined in the MEC, and an additional 493 persons were given a special, limited examination in their homes.

Data collection began with a household interview. Several questionnaires were administered in the household: Household Screener Questionnaire, Family Questionnaire, Household Adult Questionnaire, and Household Youth Questionnaire.

At the MEC, an examination was performed, and five automated questionnaires or interviews were administered: MEC Adult Questionnaire, MEC Youth Questionnaire, MEC Proxy Questionnaire, 24 -Hour Dietary Recall, and Dietary Food Frequency (ages 12-16 years). The health examination component included a variety of tests and procedures. The examinee's age at the time of the interview and other factors determined which procedures were administered. Blood and urine specimens were obtained, and a number of tests and measurements were performed including body measurements, spirometry, fundus photography, x-rays, electrocardiography, allergy and glucose tolerance tests, and ultrasonography. Measurements were taken of bone density, hearing, and physical, cognitive, and central nervous system
functions. A physician performed a limited standardized medical examination and a dentist performed a standardized dental examination. While some of the blood and urine analyses were performed in the MEC laboratory, most analyses were conducted elsewhere by contract laboratories.

A home examination was conducted for those sample persons aged $2-11$ months and aged 20 years or older who were unable to visit the mobile examination center. The home examination consisted of an abbreviated version of the tests and interviews performed in the MEC. Depending on age of the sample person, the components included body measurements, blood pressure, spirometry, venipuncture, physical function evaluation, and a questionnaire to inquire about infant feeding, selected health conditions, cognitive function, tobacco use, and reproductive history.

## SAMPLE DESIGN AND ANALYSIS GUIDELINES

## Sample Design

The general structure of the NHANES III sample design is the same as that of the previous NHANES. Each of these surveys used a stratified, multi-stage probability design. The major design parameters of the two previous NHANES and the special Hispanic HANES, as well as NHANES III, have been previously summarized (Miller, 1973; McDowell, 1981; NCHS, 1985; NCHS, 1994). The NHANES III sample was designed to be self-weighting within a primary sampling unit (PSU) for subdomains (age, sex, and race-ethnic groups). While the sample was fairly close to self-weighting nationally for each of these subdomain groups, it was not representative of the total population, which includes institutionalized, non-civilian persons that were outside the scope of the survey.

The NHANES III sample represented the total civilian, noninstitutionalized population, two months of age or over, in the 50 states and the District of Columbia of the United States. The first stage of the design consisted of selecting a sample of 81 PSU 's that were mostly individual counties. In a few cases, adjacent counties were combined to keep PSU's above a minimum population size. The PSU's were stratified and selected with probability proportional to size (PPS). Thirteen large counties (strata) were chosen with certainty (probability of one). For operational reasons, these 13 certainty PSU's were divided into 21 survey locations. After the 13 certainty strata were designated, the remaining PSU's in the United States were grouped into 34 strata, and two PSU's were selected per stratum (68 survey locations). The selection was done with PPS and without replacement. The NHANES III sample therefore consists of 81 PSU's or 89 locations.

The 89 locations were randomly divided into two groups, one for each phase. The first group consisted of 44 and the other of 45 locations. One set of PSU's was allocated to the first three-year survey period (1988-91) and the other set to the second three-year period (1991-94). Therefore, unbiased estimates (from the point of view of sample selection) of health and nutrition characteristics can be independently produced for both Phase 1 and Phase 2 as well as for both phases combined.

For most of the sample, the second stage of the design consisted of area segments composed of city or suburban blocks, combinations of blocks, or other area segments in places where block statistics were not produced in the 1980 Census. In the first phase of NHANES III, the area segments were used only for a sample of persons who lived in housing units built before 1980. For units built in 1980 and later, the second stage consisted of sets of addresses selected from building permits issued in 1980 or later. These are referred to as "new construction segments." In the second phase, 1990 Census data and maps were used to define the area segments. Because the second phase followed within a few years of the 1990 Census, new construction did not account for a significant part of the sample, and the entire sample came from the area segments.

The third stage of sample selection consisted of households and certain types of group quarters, such as dormitories. All households and eligible
group quarters in the sample segments were listed, and a subsample was designated for screening to identify potential sample persons. The subsampling rates enabled production of a national, approximately equal-probability sample of households in most of the United States with higher rates for the geographic strata with high Mexican-American populations. Within each geographic stratum, there was a nearly equal-probability sample of households across all 89 stands.

Persons within the sample of households or group quarters were the fourth stage of sample selection. All eligible members within a household were listed, and a subsample of individuals was selected based on sex, age, and race or ethnicity. The definitions of the sex, age, race or ethnic classes, subsampling rates, and designation of potential sample persons within screened households were developed to provide approximately self-weighting samples for each subdomain within geographic strata and at the same time to maximize the average number of sample persons per sample household. Previous NHANES indicated that this increased the overall participation rate. Although the exact sample sizes were not known until data collection was completed, estimates were made. Below is a summary of the sample sizes for the full six-year NHANES III at each stage of selection:

| Number of PSU's | 81 |
| :--- | :--- |
| Number of stands (survey locations) | 89 |
| Number of segments | 2,144 |
| Number of households screened | 93,653 |
| Number of households with sample persons | 19,528 |
| Number of designated sample persons | 39,695 |
| Number of interviewed sample persons | 33,994 |
| Number of MEC-examined sample persons | 30,818 |
| Number of home-examined sample persons | 493 |

More detailed information on the sample design and weighting and estimation procedures for NHANES III can be found in the Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-94 (NCHS, 1994; U.S. DHHS, 1996) and in the Analytic and Reporting Guidelines: Third National Health and Nutrition Examination Survey (NHANES III), 1988-94 (U.S. DHHS, 1996).

Analysis Guidelines
Because of the complex survey design used in NHANES III, traditional methods of statistical analysis based on the assumption of a simple random sample are not applicable. Detailed descriptions of this issue and possible analytic methods for analyzing NHANES data have been described earlier (NCHS, 1985; Yetley, 1987; Landis, 1982; Delgado, 1990). Recent analytic and reporting guidelines that should be used for most NHANES III analyses and publications are contained in Analytic and Reporting Guidelines (U.S. DHHS, 1996). These recommendations differ slightly from those used by analysts for previous NHANES surveys. These suggested guidelines provide a framework to users for producing estimates that conform to the analytic design of the survey. All users are strongly urged to review these analytic and reporting guidelines before beginning any analyses of NHANES III data.

It is important to remember that this set of statistical guidelines is not absolute. When conducting analyses, the analyst needs to use his/her subject matter knowledge (including methodological issues) as well as
information about the survey design. The more one deviates from the original analytic categories defined in the sample design, the more important it is to evaluate the results carefully and to interpret the findings cautiously.

In NHANES III, 89 survey locations were randomly divided into two sets or phases, the first consisting of 44 and the other of 45 locations. One set of PSU's was allocated to the first three-year survey period (1988-91) and the other set to the second three-year period (1991-94). Therefore, unbiased national estimates of health and nutrition characteristics can be independently produced for each phase as well as for both phases combined. Computation of national estimates from both phases combined (i.e., total NHANES III) is the preferred option; individual phase estimates may be highly variable. In addition, individual phase estimates are not statistically independent. It is also difficult to evaluate whether differences in individual phase estimates are real or due to methodological differences. That is, differences may be due to changes in sampling methods or data collection methodology over time. At this time, there is no valid statistical test for examining differences between Phase 1 and Phase 2. Therefore, although point estimates can be produced separately for each phase, no test is available to test whether those estimates are significantly different from each other.

NHANES III is based on a complex, multi-stage probability sample design. Several aspects of the NHANES design must be taken into account in data analysis, including the sample weights and the complex survey design. Appropriate sample weights are needed to estimate prevalence, means, medians, and other statistics. Sample weights are used to produce correct population estimates because each sample person does not have the same probability of selection. The sample weights incorporate the differential probabilities of selection and include adjustments for noncoverage and nonresponse. A detailed discussion of nonresponse adjustments and issues related to survey coverage have been published (U.S. DHHS, 1996). With the large oversampling of young children, older persons, black persons, and Mexican-Americans in NHANES III, it is essential that the sample weights be used in all analyses. Otherwise, a misinterpretation of results is highly likely. Other aspects of the design that must be taken into account in data analyses are the strata and PSU pairings from the sample design. These pairings should be used to estimate variances and test for statistical significance. For weighted analyses, analysts can use special computer software packages that use an appropriate method for estimating variances for complex samples such as SUDAAN (Shah, 1995) and WesVarPC (Westat, 1996).

Although initial exploratory analyses may be performed on unweighted data using standard statistical packages and assuming simple random sampling, final analyses should be done on weighted data using appropriate sample weights. A summary of the weighting methodology and the type of sample weights developed for NHANES III is included in Weighting and Estimation Methodology (U.S. DHHS, 1996).

The purpose of weighting the sample data is to permit analysts to produce estimates of statistics that would have been obtained if the entire sampling frame (the United States) had been surveyed. Sample weights can be considered as measures of the number of persons the particular sample
observation represents. Weighting takes into account several features of the survey: the specific probabilities of selection for the individual domains that were oversampled as well as nonresponse and differences between
the sample and the total U.S. population. Differences between the sample and
the population may arise due to sampling variability, differential undercoverage in the survey among demographic groups, and possibly other types of response errors, such as differential response rates or misclassification errors. Sample weighting in NHANES III was used to:

1. Compensate for differential probabilities of selection among subgroups (i.e., age-sex-race-ethnicity subdomains where persons living in different geographic strata were sampled at different rates);
2. Reduce biases arising from the fact that nonrespondents may be different from those who participate;
3. Bring sample data up to the dimensions of the target population totals;
4. Compensate, to the extent possible, for inadequacies in the sampling frame (resulting from omissions of some housing units in the listing of area segments, omissions of persons with no fixed address, etc.); and
5. To reduce variances in the estimation procedure by using auxiliary information that is known with a high degree of accuracy.

In NHANES III, the sample weighting was carried out in three stages. The first stage involved the computation of weights to compensate for unequal probabilities of selection (objective 1, above). The second stage adjusted for nonresponse (objective 2). The third stage used poststratification of the sample weights to Census Bureau estimates of the U.S. population to accomplish the third, fourth, and fifth objectives simultaneously. In NHANES III, several types of sample weights (see the sample weights table that follows) were computed for the interviewed and examined sample and are included in the NHANES III data file. Also, sample weights were computed separately for Phase 1 (1988-91), Phase 2 (1991-94), and total NHANES III (1988-94) to facilitate analysis of items collected only in Phase 1, only in Phase 2, and over six years of the survey. Three sets of pseudo strata and PSU pairings are provided to use with SUDAAN in variance estimation. Since NHANES III is based on a complex, multi-stage sample design, appropriate sample weights should be used in analyses to produce national estimates of prevalence and associated variances while accounting for unequal probability of selection of sample persons. For example, the final interview weight, WTPFQX6, should be used for analysis of the items or questions from the family or household questionnaires, and the final MEC examination weight, WTPFEX6, should be used for analysis of the questionnaires and measurements administered in the MEC. Furthermore, for a combined analysis of measurements from the MEC examinations and associated medical history questions from the household interview, the final MEC examination weight, WTPFEX6, should be used. We recommend using SUDAAN (Shah, 1995) to estimate statistics of interest and the associated variance. However, one can also use other published methods for variance estimation. Application of SUDAAN and alternative methods, such as the average design effect approach, balance repeated replication (BRR) methods, or jackknife methods for variance estimation, are discussed in Weighting and Estimation Methodology (U.S. DHHS, 1996).

Appropriate Uses of the NHANES III Sample Weights

Final interview weight, WTPFQX6

Use only in conjunction with the sample interviewed at home and with items collected during the household interview.

Final examination (MEC only) weight, WTPFEX6

Use only in conjunction with the MEC-examined sample and with interview and examination items collected at the MEC.

Final MEC+home examination weight, WTPFHX6

Use only in conjunction with the MEC+home-examined sample and with items collected at both the MEC and home.

Final allergy weight, WTPFALG6

Use only in conjunction with the allergy subsample and with items collected as part of the allergy component of the exam.

Final CNS weight, WTPFCNS6

Use only in conjunction with the CNS subsample and with items collected as part of the CNS component of the exam.

Final morning examination (MEC only) subsample weight, WTPFSD6

Use only in conjunction with the MEC-examined persons assigned to the morning subsample and only with items collected in the MEC exam.

Final afternoon/evening examination (MEC only) subsample weight, WTPFMD6
Use only in conjunction with the MEC-examined persons assigned to the afternoon/evening subsample and only with items collected in the MEC exam.

Final morning examination (MEC+home) subsample weight, WTPFHSD6

Use only in conjunction with the MEC- and home-examined persons assigned to the morning subsample and with items collected during the MEC and home examinations.

Final afternoon/evening examination (MEC+home) weight, WTPFHMD6

Use only in conjunction with the MEC- and home-examined persons assigned to the afternoon/evening subsample and with items collected during the MEC and home examinations.

## DATA PREPARATION AND PROCESSING PROCEDURES

Automated data collection procedures for the survey were introduced in NHANES III. In the mobile examination centers, data for the interview and examination components were recorded directly onto a computerized data collection form. With the exception of a few independently automated systems, the system was centrally integrated. This operation allowed for ongoing monitoring of much of the data. Before the introduction of the computer-assisted personal interview (CAPI), the household questionnaire data were reviewed manually by field editors and interviewers. CAPI (1992-1994 only) questionnaires featured built-in edits to prevent entering inconsistencies and out-of-range responses. The multi-level data collection and quality control systems are discussed in detail in the Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-1994 (NCHS, 1994; U.S. DHHS, 1996). All interview, laboratory, and examination data were sent to NCHS for final processing.

Guidelines were developed that provided standards for naming variables, filling missing values and coding conventional responses, handling missing records, and standardizing two-part quantity/unit questionnaire variables. NCHS staff, assisted by contract staff, developed data editing specifications that checked data sets for valid codes, ranges, and skip pattern consistencies and examined the consistency of values between interrelated variables. Comments, collected in both interviews and examination components, were reviewed and recoded when possible. Responses to "Other" and "Specify" were recoded either to existing code categories or to new categories. The documentation for each data set includes notes for those variables that have been recoded and standardized and for those variables that differ significantly from what appears in the original data collection instrument. While the data have undergone many quality control and editing procedures, there still may be values that appear extreme or illogical. Values that varied considerably from what was expected were examined by analysts who checked for comments or other responses that might help to clarify unusual values. Generally, values were retained unless they could not possibly be true, in which case they were changed to "Blank but applicable." Therefore, the user must review each data set for extreme or inconsistent values and determine the status of each value for analysis.

Several editing conventions were used in the creation of final analytic data sets:

1. Standardized variables were created to replace all two-part quantity/unit questions using standard conversion factors. Standardized variables have the same name as the variable of the two-part question with an "S" suffix. For instance, MAPF18S (Months received WIC benefits) in the MEC Adult Questionnaire was created from the two-part response option to question $F 18$, "How long did you receive benefits from the WIC program?," using the conversion factor 12 months per year.
2. Recoded variables were created by combining responses from two or more like variables, or by collapsing responses to create a summary variable for the purpose of confidentiality. Recoded variables have the original variable name with an $R$ suffix. For example, place of birth
variable (HFA6X) in the Family Questionnaire was collapsed to a three level response category (U.S., Mexico, Other) and renamed HFA6XR. Generally, only the recoded variable has been included in the data file.
3. Fill values, a series of one or more digits, were used to represent certain specific conditions or responses. Below is a list of the fill values that were employed. Some of the fill values pertain only to questionnaire data, although 8 -fill and blank-fill values are found in all data sets. Other fill values, not included in this list, are used to represent component-specific conditions.

6-fills = Varies/varied. (Questionnaires only)
7-fills = Fewer than the smallest number that could be reported within the question structure (e.g., fewer than one cigarette per day).
(Questionnaires only)
8-fills = Blank but applicable/cannot be determined. This means that a respondent was eligible to receive the question, test, or component but did not because of refusal, lack of time, lack of staff, loss of data, broken vial, language barrier, unreliability, or other similar reasons.

9-fills = Don't know. This fill was used only when a respondent did not know the response to a question and said, "I don't know."
(Questionnaires only)
Blank fills = Inapplicable. If a respondent was not eligible for a questionnaire, test, or component because of age, gender, or specific reason, the variable was blank-filled. In the questionnaire, if a respondent was not asked a question because of a skip-pattern, variables corresponding to the question were blank-filled. For examination or laboratory components, if a person was excluded by a defined protocol (e.g., screening exclusion questions) and these criteria are included in the data set, then the corresponding variables were blank-filled for that person. For home examinees, variables for examination components and blood tests not performed as part of the home examination protocol were blank-filled.
4. For variables describing discrete data, codes of zero (0) were used to mean "none," "never," or the equivalent. Value labels for which "0" is used include: "has not had," "never regularly," "still taking," or "never stopped using." Unless otherwise labeled, for variables containing continuous data, "zero" means "zero.
5. Where there are logical skip patterns in the flow of the questionnaire or examination component, the skip was indicated by placing the variable label of the skip destination in parentheses as part of the value label of the response generating the skip. For example, in the Physical Function Evaluation, the variable PFPWC (in wheelchair) has a value label, "2 No (PFPSCOOT)" that means that the next item for persons not in a wheelchair would be represented by the variable, PFPSCOOT.

## Variable Nomenclature

A unique name was assigned to every NHANES III variable using a standard convention. By following this naming convention, the origin of each variable is clear, and there is no chance of overlaying similar variables across multiple components. Variables range in length from three to eight characters. The first two variable characters represent the topic (e.g., analyte, questionnaire instrument, examination component) and are listed below alphabetically by topic. For questionnaires administered in the household, the remainder of the variable name following the first two characters indicates the question section and number. For example, data for the response to the Household Adult Questionnaire question B1 are contained in the variable HAB1. For most laboratory and examination variables, as well as some other variables, a "P" in the third position refers to "primary" and the remainder of the variable name is a brief description of the item. For instance, in the Laboratory Data File, information on the length of time the person fasted before the first blood draw is contained in the variable PHPFAST. The variable PHPFAST was derived as follows: characters $1-2$ (PH) refer to "phlebotomy," character 3 (P) refers to "primary," characters 4-8 (FAST) refer to an abbreviation for "fasting."

| CODE | TOPIC |
| :--- | :--- |
| AT | Alanine aminotransferase (from biochemistry profile) |
| AM | Albumin (from biochemistry profile) |
| AP | Alkaline phosphatase (from biochemistry profile) |
| AL | Allergy skin test |
| AC | Alpha carotene |
| AN | Anisocytosis |
| TM | Antimicrosomal antibodies |
| TA | Antithyroglobulin antibodies |
| AA | Apolipoprotein (AI) |
| AB | Apolipoprotein (B) |
| AS | Aspartate aminotransferase (from biochemistry profile) |
| LA | Atypical lymphocyte |
| AU | Audiometry |
| BA | Band |
| BO | Basophil |
| BS | Basophilic stippling |
| BC | Beta carotene |
| BX | Beta cryptoxanthin |
| BL | Blast |
| BU | Blood urea nitrogen (BUN) (from biochemistry profile) |
| BM | Body measurements |
| BD | Bone densitometry |
| C1 | C-peptide (first venipuncture) |
| C2 | C-peptide (second venipuncture) |
| CR | C-reactive protein |
| UD | Cadmium |
| CN | Central nervous system function evaluation |
| CL | Chloride (from biochemistry profile) |
| CO | Cotinine |
| CE | Creatinine (serum) (from biochemistry profile) |
| UR | Creatinine (urine) |


| CODE | TOPIC |
| :---: | :---: |
| DM | Demographic |
| DE | Dental examination |
| MQ | Diagnostic interview schedule |
| DR | Dietary recall (total nutrient intakes) |
| EO | Eosinophil |
| EP | Erythrocyte protoporphyrin |
| FR | Ferritin |
| FB | Fibrinogen |
| RB | Folate (RBC) |
| FO | Folate (serum) |
| FH | Follicle stimulating hormone (FSH) |
| FP | Fundus photography |
| GG | Gamma glutamyl transferase (GGT) (from biochemistry profile) |
| GU | Gallbladder ultrasonography |
| GB | Globulin (from biochemistry profile) |
| G1 | Glucose (first venipuncture) |
| G2 | Glucose (second venipuncture) |
| SG | Glucose (from biochemistry profile) |
| GH | Glycated hemoglobin |
| GR | Granulocyte |
| C3 | HCO3 (Bicarbonate) (from biochemistry profile) |
| HD | HDL cholesterol |
| HP | Helicobacter pylori antibody |
| HT | Hematocrit |
| HG | Hemoglobin |
| AH | Hepatitis A antibody (HAV) |
| HB | Hepatitis B core antibody (anti-HBC) |
| SS | Hepatitis B surface antibody (anti-HBs) |
| SA | Hepatitis B surface antigen (HBsAg) |
| HC | Hepatitis C antibody (HCV) |
| DH | Hepatitis D antibody (HDV) |
| H1 | Herpes 1 antibody |
| H2 | Herpes 2 antibody |
| HX | Home examination (general) |
| HO | Homocysteine |
| HF | Household family questionnaire |
| HA | Household adult questionnaire |
| HQ | Household questionnaire variables (composite) |
| HS | Household screener questionnaire |
| HY | Household youth questionnaire |
| HZ | Hypochromia |
| I1 | Insulin (first venipuncture) |
| I2 | Insulin (second venipuncture) |
| UI | Iodine (urine) |
| FE | Iron |
| SF | Iron (from biochemistry profile) |
| LD | Lactate dehydrogenase (from biochemistry profile) |
| L1 | Latex antibody |
| LC | LDL cholesterol (calculated) |
| PB | Lead |
| LP | Lipoprotein (a) |
| LH | Luteinizing hormone |


| CODE | TOPIC |
| :---: | :---: |
| LU | Lutein/zeaxanthin |
| LY | Lycopene |
| LM | Lymphocyte |
| MR | Macrocyte |
| MC | Mean cell hemoglobin (MCH) |
| MH | Mean cell hemoglobin concentration (MCHC) |
| MV | Mean cell volume (MCV) |
| PV | Mean platelet volume |
| MA | MEC adult questionnaire |
| MX | MEC examination (general) |
| FF | Dietary food frequency (ages 12-16 years) |
| MP | MEC proxy questionnaire |
| MY | MEC youth questionnaire |
| ME | Metamyelocyte |
| MI | Microcyte |
| MO | Monocyte |
| MN | Mononuclear cell |
| ML | Myelocyte |
| IC | Normalized calcium (derived from ionized calcium) |
| OS | Osmolality (from biochemistry profile) |
| PH | Phlebotomy data collected in MEC (e.g., questions) |
| PS | Phosphorus (from biochemistry profile) |
| PF | Physical function evaluation |
| PE | Physician's examination |
| PL | Platelet |
| DW | Platelet distribution width |
| PK | Poikilocytosis |
| PO | Polychromatophilia |
| SK | Potassium (from biochemistry profile) |
| PR | Promyelocyte |
| RC | Red blood cell count (RBC) |
| RW | Red cell distribution width (RDW) |
| RE | Retinyl esters |
| RF | Rheumatoid factor antibody |
| RU | Rubella antibody |
| WT | Sample weights |
| SE | Selenium |
| SI | Sickle cell |
| NA | Sodium (from biochemistry profile) |
| SH | Spherocyte |
| SP | Spirometry |
| SD | Survey design |
| TT | Target cell |
| TE | Tetanus |
| TH | Thyroid Stimulating Hormone (TSH) |
| T4 | Thyroxine |
| TB | Total bilirubin (from biochemistry profile) |
| CA | Total calcium |
| SC | Total calcium (from biochemistry profile) |
| TC | Total cholesterol |
| CH | Total cholesterol (from biochemistry profile) |
| TI | Total iron binding capacity (TIBC) |
| TP | Total protein (from biochemistry profile) |
| TX | Toxic granulation |

```
CODE
TO
PX
TG
TR
TY
UA
UB
VU
VR
VA
VB
VC
VD
VE
WC
WW
TOPIC
O Toxoplasmosis antibody
Transferrin saturation
Triglycerides
Triglycerides (from biochemistry profile)
Tympanometry
Uric acid (from biochemistry profile)
Urinary albumin
Vacuolated cells
Varicella antibody
Vitamin A
Vitamin B12
Vitamin C
Vitamin D
Vitamin E
White blood cell count (WBC)
WISC/WRAT cognitive test
```

Delgado JL, Johnson CL, Roy I, Trevino FM. Hispanic Health and Nutrition Examination Survey: methodological considerations. Amer J Pub Health 80 (suppl.):6-10. 1990 .

Engel A, Murphy RS, Maurer K, Collins E. Plan and operation of the HANES I Augmentation Survey of Adults 25-74 Years, United States, 1974-75. National Center for Health Statistics. Vital Health Stat 1(14). 1978.

Freeman DH, Freeman JL, Brock DB, Koch GG. Strategies in the multivariate analysis of data from complex surveys II: an application to the United States National Health Interview Survey. Int Stat Rev 40(3):317-30. 1976.

Khare M, Mohadjer LK, Ezzati-Rice TM, Waksberg J. An evaluation of nonresponse bias in NHANES III (1988-91). 1994 Proceedings of the Survey Research Methods section of the American Statistical Association. 1994.

Landis JR, Lepkowski JM, Eklund SA, Stehouwer SA. A statistical methodology for analyzing data from a complex survey, the first National Health and Nutrition Examination Survey. National Center for Health Statistics. Vital Health Stat 2(92). 1982.

McDowell A, Engel A, Massey JT, Maurer K. Plan and operation of the second National Health and Nutrition Examination Survey, 1976-80. National Center for Health Statistics. Vital Health Stat 1(15). 1981.

Miller HW. Plan and operation of the Health and Nutrition Examination Survey, United States, 1971-1973. National Center for Health Statistics. Vital Health Stat 1(10a) and (10b). 1973.

National Center for Health Statistics. Plan and initial program of the Health Examination Survey. Vital Health Stat 1(4). 1965.

National Center for Health Statistics. Plan and operation of a health examination survey of U.S. youths 12-17 years of age. Vital Health Stat 1 (8). 1969 .

National Center for Health Statistics. Plan and operation of the Hispanic Health and Nutrition Examination Survey, 1982-84. Vital Health Stat 1(19). 1985.

National Center for Health Statistics. Plan and operation of the Third National Health and Nutrition Examination Survey, 1988-94. Vital Health Stat 1(32). 1994.

National Center for Health Statistics. Plan, operation, and response results of a program of children's examinations. Vital Health Stat 1(5). 1967.

Shah BV, Barnwell BG, Bieler GS. SUDAAN User's Manual: Software for Analysis of Correlated Data. Research Triangle Park, NC: Research Triangle Institute. Release 6.04. 1995.

Skinner CJ. Aggregated analysis: standard errors and significance tests. In: Skinner CJ, Holt D, Smith TMF, eds. Analysis of complex surveys. New York: John Wiley and Sons, Inc. 1989.
U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. NHANES III reference manuals and reports (CD-ROM). Hyattsville, MD: Centers for Disease Control and Prevention, 1996. Available from National Technical Information Service (NTIS), Springfield, VA. Acrobat .PDF format; includes access software: Adobe Systems, Inc. Acrobat Reader 2.1.

Westat, Inc. A User's Guide to WesVarPC. Rockville, MD. Westat, Inc. 1996.

Yetley E, Johnson C. Nutritional applications of the Health and Nutrition Examination Surveys (HANES). Annu Rev Nutr 7:441-63. 1987.

## NHANES III Data File Index

| Description | Variable |  |
| :---: | :---: | :---: |
|  | Name | Positions |
| GENERAL INFORMATION |  |  |
| Respondent identification number | SEQN | 1-5 |
| Overall findings for locomotion (age 3+) | PER1 | 6 |
| Limp or shuffle (age 3+) | PER1A1 | 7 |
| Other gait abnormalities (age 3+) | PER1A2 | 8 |
| Eye globe missing or blind(age 2mo-18yr) | PER2 | 9 |
| Tracks light (age 2mo-4yrs) | PER2A | 10 |
| Strabismus observ un/cover test (age5-18) | PER2B | 11 |
| Overall findings, paralysis...(all ages) | PER3A | 12 |
| Paralysis/paresis of arm (all ages) | PER3A1A | 13 |
| Paralysis/paresis of leg (all ages) | PER3A1B | 14 |
| In a wheelchair or stretcher (all ages) | PER3A2 | 15 |
| Overall findings,amputee/cast (all ages) | PER3B1 | 16 |
| Amputee/cast, left arm (all ages) | PER3LARM | 17-18 |
| Amputee/cast, right arm (all ages) | PER3RARM | 19-20 |
| Amputee/cast, left finger 1 (all ages) | PER3BFL1 | 21 |
| Amputee/cast, left finger 2 (all ages) | PER3BFL2 | 22 |
| Amputee/cast, left finger 3 (all ages) | PER3BFL3 | 23 |
| Amputee/cast, left finger 4 (all ages) | PER3BFL4 | 24 |
| Amputee/cast, left finger 5 (all ages) | PER3BFL5 | 25 |
| Amputee/cast, right finger 1 (all ages) | PER3BFR1 | 26 |
| Amputee/cast, right finger 2 (all ages) | PER3BFR2 | 27 |
| Amputee/cast, right finger 3 (all ages) | PER3BFR3 | 28 |
| Amputee/cast, right finger 4 (all ages) | PER3BFR4 | 29 |
| Amputee/cast, right finger 5 (all ages) | PER3BFR5 | 30 |
| Overall findng, amputee/cast leg(all age) | PER3B2 | 31 |
| Amputee/cast, left leg (all ages) | PER3LLEG | 32-33 |
| Amputee/cast, right leg (all ages) | PER3RLEG | 34-35 |
| Amputee/cast, right great toe | PER3B2TR | 36 |
| Amputee/cast, left great toe (all ages) | PER3B2TL | 37 |
| Overall wrist finding,hand joint (age60+) | PER4A | 38 |
| Wrist: tender on palpation (age 60+) | PER4A1 | 39 |
| Wrist: swelling (age 60+) | PER4A2 | 40 |
| Wrist: pain on passive motion (age 60+) | PER4A3 | 41 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Overall findings, CMC, yrs 4,5,6 (age60+) | PER4CMC | 42 |
| CMC: crepitus, survey yrs 4,5,6(age60+) | PER4CMCC | 43 |
| CMC: tender palpation,yrs 4,5,6 (age60+) | PER4CMCT | 44 |
| CMC:swelling, survey yrs 4,5,6 (age60+) | PER4CMCS | 45 |
| CMC:pain on p-motion,yrs 4,5,6 (age60+) | PER4CMCP | 46 |
| Overall findings, MCP hand joint (age 60+) | PER4B | 47 |
| Rt finger 1, MCP: tenderness (age 60+) | PER4BTR1 | 48 |
| Rt finger 2, MCP: tenderness (age 60+) | PER4BTR2 | 49 |
| Rt finger 3, MCP: tenderness (age 60+) | PER4BTR3 | 50 |
| Rt finger 4, MCP: tenderness (age 60+) | PER4BTR4 | 51 |
| Rt finger 5, MCP: tenderness (age 60+) | PER4BTR5 | 52 |
| Left finger 1, MCP: tenderness (age 60+) | PER4BTL1 | 53 |
| Left finger 2, MCP: tenderness (age 60+) | PER4BTL2 | 54 |
| Left finger 3, MCP: tenderness (age 60+) | PER4BTL3 | 55 |
| Left finger 4, MCP: tenderness (age 60+) | PER4BTL4 | 56 |
| Left finger 5, MCP: tenderness (age 60+) | PER4BTL5 | 57 |
| Right finger 1, MCP: swelling (age 60+) | PER4BSR1 | 58 |
| Right finger 2, MCP: swelling (age 60+) | PER4BSR2 | 59 |
| Right finger 3, MCP: swelling (age 60+) | PER4BSR3 | 60 |
| Right finger 4, MCP: swelling (age 60+) | PER4BSR4 | 61 |
| Right finger 5, MCP: swelling (age 60+) | PER4BSR5 | 62 |
| Left finger 1, MCP: swelling (age 60+) | PER4BSL1 | 63 |
| Left finger 2, MCP: swelling (age 60+) | PER4BSL2 | 64 |
| Left finger 3, MCP: swelling (age 60+) | PER4BSL3 | 65 |
| Left finger 4, MCP: swelling (age 60+) | PER4BSL4 | 66 |
| Left finger 5, MCP: swelling (age 60+) | PER4BSL5 | 67 |
| Rt finger 1, MCP:pain on p-motion(age60+) | PER4BPR1 | 68 |
| Rt finger 2,MCP:pain on p-motion(age60+) | PER4BPR2 | 69 |
| Rt finger 3, MCP:pain on p-motion(age60+) | PER4BPR3 | 70 |
| Rt finger 4,MCP:pain on p-motion(age60+) | PER4BPR4 | 71 |
| Rt finger 5,MCP:pain on p-motion(age60+) | PER4BPR5 | 72 |
| Lft finger1, MCP:pain on p-motion(age60+) | PER4BPL1 | 73 |
| Lft finger2,MCP:pain on p-motion(age60+) | PER4BPL2 | 74 |
| Lft finger3, MCP:pain on p-motion(age60+) | PER4BPL3 | 75 |
| Lft finger4, MCP:pain on p-motion(age60+) | PER4BPL4 | 76 |
| Lft finger5, MCP:pain on p-motion(age60+) | PER4BPL5 | 77 |
| Rt finger 2, PIP: tenderness (age 60+) | PER4CTR2 | 78 |
| Rt finger 3, PIP: tenderness (age 60+) | PER4CTR3 | 79 |
| Rt finger 4, PIP: tenderness (age 60+) | PER4CTR4 | 80 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Rt finger 5, PIP: tenderness (age 60+) | PER4CTR5 | 81 |
| Left finger 2, PIP: tenderness (age 60+) | PER4CTL2 | 82 |
| Left finger 3, PIP: tenderness (age 60+) | PER4CTL3 | 83 |
| Left finger 4, PIP: tenderness (age 60+) | PER4CTL4 | 84 |
| Left finger 5, PIP: tenderness (age 60+) | PER4CTL5 | 85 |
| Right finger 2, PIP: swelling (age 60+) | PER4CSR2 | 86 |
| Right finger 3, PIP: swelling (age 60+) | PER4CSR3 | 87 |
| Right finger 4, PIP: swelling (age 60+) | PER4CSR4 | 88 |
| Right finger 5, PIP: swelling (age 60+) | PER4CSR5 | 89 |
| Left finger 2, PIP: swelling (age 60+) | PER4CSL2 | 90 |
| Left finger 3, PIP: swelling (age 60+) | PER4CSL3 | 91 |
| Left finger 4, PIP: swelling (age 60+) | PER4CSL4 | 92 |
| Left finger 5, PIP: swelling (age 60+) | PER4CSL5 | 93 |
| Rt finger 2,PIP:pain on p-motion(age60+) | PER4CPR2 | 94 |
| Rt finger 3,PIP:pain on p-motion(age60+) | PER4CPR3 | 95 |
| Rt finger 4,PIP:pain on p-motion(age60+) | PER4CPR4 | 96 |
| Rt finger 5,PIP:pain on p-motion(age60+) | PER4CPR5 | 97 |
| Lft finger2,PIP:pain on p-motion(age60+) | PER4CPL2 | 98 |
| Lft finger3,PIP:pain on p-motion(age60+) | PER4CPL3 | 99 |
| Lft finger4,PIP:pain on p-motion(age60+) | PER4CPL4 | 100 |
| Lft finger5,PIP:pain on p-motion(age60+) | PER4CPL5 | 101 |
| Rt finger 1, IP: tenderness (age 60+) | PER4DTR1 | 102 |
| Rt finger 2, DIP: tenderness (age 60+) | PER4DTR2 | 103 |
| Rt finger 3, DIP: tenderness (age 60+) | PER4DTR3 | 104 |
| Rt finger 4, DIP: tenderness (age 60+) | PER4DTR4 | 105 |
| Rt finger 5, DIP: tenderness (age 60+) | PER4DTR5 | 106 |
| Left finger 1, IP: tenderness (age 60+) | PER4DTL1 | 107 |
| Left finger 2, DIP: tenderness (age 60+) | PER4DTL2 | 108 |
| Left finger 3, DIP: tenderness (age 60+) | PER4DTL3 | 109 |
| Left finger 4, DIP: tenderness (age 60+) | PER4DTL4 | 110 |
| Left finger 5, DIP: tenderness (age 60+) | PER4DTL5 | 111 |
| Right finger 1, IP: swelling (age 60+) | PER4DSR1 | 112 |
| Right finger 2, DIP: swelling (age 60+) | PER4DSR2 | 113 |
| Right finger 3, DIP: swelling (age 60+) | PER4DSR3 | 114 |
| Right finger 4, DIP: swelling (age 60+) | PER4DSR4 | 115 |
| Right finger 5, DIP: swelling (age 60+) | PER4DSR5 | 116 |
| Left finger 1, IP: swelling (age 60+) | PER4DSL1 | 117 |
| Left finger 2, DIP: swelling (age 60+) | PER4DSL2 | 118 |
| Left finger 3, DIP: swelling (age 60+) | PER4DSL3 | 119 |

## NHANES III Data File Index

| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Left finger 4, DIP: swelling (age 60+) | PER4DSL4 | 120 |
| Left finger 5, DIP: swelling (age 60+) | PER4DSL5 | 121 |
| Rt fingerl, IP:pain on p-motion (age60+) | PER4DPR1 | 122 |
| Rt finger2,DIP:pain on p-motion (age60+) | PER4DPR2 | 123 |
| Rt finger3, DIP:pain on p-motion (age60+) | PER4DPR3 | 124 |
| Rt finger4, DIP:pain on p-motion (age60+) | PER4DPR4 | 125 |
| Rt finger5, DIP:pain on p-motion (age60+) | PER4DPR5 | 126 |
| Lft finger1, IP:pain on p-motion (age60+) | PER4DPL1 | 127 |
| Lft finger2,DIP:pain on p-motion(age60+) | PER4DPL2 | 128 |
| Lft finger3, DIP:pain on p-motion(age60+) | PER4DPL3 | 129 |
| Lft finger4, DIP:pain on p-motion(age60+) | PER4DPL4 | 130 |
| Lft finger5, DIP:pain on p-motion(age60+) | PER4DPL5 | 131 |
| Bony thickening/spurs CMC joint (age60+) | PER4CMCJ | 132 |
| Overall findings, upr deformities(age60+) | PER4E1 | 133 |
| Heberden's nodes (DIP) (age 60+) | PER4E1A | 134 |
| Bouchard's nodes (PIP) (age 60+) | PER4E1B | 135 |
| Swan neck (age 60+) | PER4E1C | 136 |
| Boutonniere joints (age 60+) | PER4E1D | 137 |
| Ulnar deviation at MCP or wrist (age60+) | PER4E1E | 138 |
| Subcutaneous nodules on forearm(age60+) | PER4E1F | 139 |
| Central pulse rate (beats/min) (2mo-4yrs) | PER5R | 140-142 |
| Cuff size used (age 5+ years) | PER6A | 143 |
| Arm selected (age 5+ years) | PER6B | 144 |
| Had alcohol, etc in past 30 min (age 5+) | PER6C | 145 |
| Pulse rate (beats/min) (age 5+ years) | PER6DR | 146-148 |
| Irregular pulse (age 5+ years) | PER6E | 149 |
| Maximum inflation level (MIL, mmHg) (age5+) | PER6F | 150-152 |
| K1, systolic, for 1st BP (mmHg) (age 5+) | PER6G1 | 153-155 |
| K4, diastolic, for 1st BP (mmHg) (age5-19) | PER6G2 | 156-158 |
| K5, diastolic, for 1st BP (mmHg) (age 5+) | PER6G3 | 159-161 |
| First BP refused (age 5+ years) | PER6G4 | 162 |
| K1, systolic, for 2nd BP (mmHg) (age 5+) | PER6H1 | 163-165 |
| K4, diastolic, for 2nd BP (mmHg) (age5-19) | PER6H2 | 166-168 |
| K5, diastolic, for 2nd BP (mmHg) (age 5+) | PER6H3 | 169-171 |
| Second BP refused (age 5+ years) | PER6H4 | 172 |
| K1, systolic, for 3rd BP (mmHg) (age 5+) | PER6I1 | 173-175 |
| K4, diastolic, for 3rd BP (mmHg) (age5-19) | PER6I2 | 176-178 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| K5, diastolic, for 3rd BP (mmHg) (age 5+) | PER6I3 | 179-181 |
| Third BP refused (age 5+ years) | PER6I4 | 182 |
| Overall average K1, systolic, BP(age 5+) | PERMNK1R | 183-185 |
| Measurements used for average K1 (age5+) | PERNOK1R | 186-187 |
| Overall average K5, diastolic, BP(age5+) | PERMNK5R | 188-190 |
| Measurements used for average K5 (age5+) | PERNOK5R | 191-192 |
| Overall findings, chest section(all ages) | PER7 | 193 |
| Decreased breath in right lung (all ages) | PER7A1R | 194 |
| Decreased breath in left lung (all ages) | PER7A1L | 195 |
| Advent sounds in right lung (all ages) | PER7A2R | 196 |
| Advent sounds in left lung (all ages) | PER7A2L | 197 |
| Overall findings, heart murmurs(all ages) | PER8 | 198 |
| Systolic murmur (all ages) | PER8A | 199-200 |
| Diastolic murmur (all ages) | PER8B | 201-202 |
| Overall findings for dermatitis section | PER9 | 203 |
| Palms: red/inflamed, vesicles (age5-59) | PER9A | 204 |
| Palmar fingers,inflamed vesicle (age5-59) | PER9B | 205 |
| Dorsal:red/inflamed, vesicles (age 5-59) | PER9C | 206 |
| Dorsal fingers,inflamed vesicle(age5-59) | PER9D | 207 |
| Lichenified dermatitis (age 5-59) | PER9E | 208 |
| Overall findings, gt toe, MTP, IP (age60+) | PER10 | 209 |
| Rt great toe, MTP: tender palp (age60+) | PER10MTR | 210 |
| Left great toe, MTP: tender palp (age60+) | PER10MTL | 211 |
| Right great toe, MTP: swelling (age60+) | PER10MSR | 212 |
| Left great toe, MTP: swelling (age60+) | PER10MSL | 213 |
| Rt great toe, MTP:pain on p-motion(age60+ | PER10MPR | 214 |
| Lft great toe, MTP:painon p-motion(age60+ | PER10MPL | 215 |
| Right great toe, IP:tender palp (age60+) | PER10ITR | 216 |
| Left great toe, IP: tender palp (age60+) | PER10ITL | 217 |
| Right great toe, IP: swelling (age60+) | PER10ISR | 218 |
| Left great toe, IP: swelling (age 60+) | PER10ISL | 219 |
| Rt great toe, IP:pain on p-motion(age60+) | PER10IPR | 220 |
| Lft great toe, IP:pain on p-motion(age60+ | PER10IPL | 221 |
| Overall findings, knee joint (age 60+) | PER10B | 222 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Knee: crepitus (age 60+) | PER10B1 | 223 |
| Knee: tender on palpation (age 60+) | PER10B2 | 224 |
| Knee: swelling (age 60+) | PER10B3 | 225 |
| Knee: pain on passive motion (age 60+) | PER10B4 | 226 |
| Rt knee: max limit on p-motion (age60+) | PER10B5 | 227 |
| Lft knee:max limit on p-motion (age60+) | PER10B6 | 228 |
| Overall findings, foot deformities(age60+ | PER10C | 229 |
| Hammer toes (age 60+) | PER10C1 | 230 |
| Bunions (age 60+) | PER10C2 | 231 |
| Rt breast size(lg diameter,mm) (2mo-4yrs) | PER11A1 | 232-234 |
| Lft breast size(lg diameter,mm) (2mo-4yrs | PER11A2 | 235-237 |
| Pubic hair stage (age 8-18) | PER11B1 | 238 |
| Genitalia stage (age 8-18) | PER11B2 | 239 |
| Breast stage,least dev breast (age 8-18) | PER11B3 | 240 |
| Health status (all ages) | PER13A | 241 |
| Evidence disabling impairment (all ages) | PER13B | 242 |
| Possible active infection (all ages) | PER13C | 243 |
| Able communicate appropriately (age 3+yr) | PER13D | 244 |
| Estimated difficulty:walk $1 / 4 \mathrm{mi}(\mathrm{age} 5+)$ | PER13E1A | 245 |
| Prognosis over 1 yr:walk $1 / 4 \mathrm{mi}$ (age 5+) | PER13E1B | 246 |
| Estimated difficulty:run 100 yds (age 5+) | PER13E2A | 247 |
| Prognosis over 1 yr:run 100 yds (age 5+) | PER13E2B | 248 |
| Estimated difficulty: stoop... (age 5+) | PER13E3A | 249 |
| Prognosis over 1 year: stoop... (age 5+) | PER13E3B | 250 |
| Est difficulty:small hand moves (age 5+) | PER13E4A | 251 |
| Prog over 1 yr:small hand moves (age 5+) | PER13E4B | 252 |
| Est difficulty:heavy housework...(age5+) | PER13E5A | 253 |
| Prog over 1 yr:heavy housework...(age5+) | PER13E5B | 254 |
| Estimated difficulty: play (2mo-4yrs) | PER13F1A | 255 |
| Prognosis over 1 year: play (2mo-4yrs) | PER13F1B | 256 |
| Referral level assigned to sample person | PERLEVEL | 257 |
| Examiner number | PERTECH | 258-262 |
| First technician number | BMRTECH1 | 263-267 |
| Weight (kg) (2 months and over) | BMRWT | 268-273 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Weight source flag | BMRWTFLG | 274 |
| Weight (lbs) (2 months and over) | BMRWTLBS | 275-279 |
| Self reported weight (lbs) (12-16 years) | BMRSRWL | 280-283 |
| Body mass index | BMRBMI | 284-287 |
| Standing height (cm) (2 years and over) | BMRHT | 288-292 |
| Standing height source flag | BMRHTFLG | 293 |
| Standing height (in) (2 years and over) | BMRHTIN | 294-298 |
| Recumbent length (cm) (2 months-3 years) | BMRRECUM | 299-302 |
| Recumbent length flag | BMRRECFL | 303 |
| Sitting height (cm) (2 years and over) | BMRSITHT | 304-308 |
| Self reported height (in) (12-16 years) | BMRSRHIS | 309-311 |
| Upper leg length (cm) (2 years and over) | BMRLEG | 312-315 |
| Knee height (cm) ( 60 years and over) | BMRKNEE | 316-319 |
| Upper arm length (cm) (2 months and over) | BMRARML | 320-323 |
| Biacromial breadth(cm) (3 years and over) | BMRBIAC | 324-327 |
| Biiliac breadth (cm) (2 years and over) | BMRBIIL | 328-332 |
| Elbow breadth (cm) (2 years and over) | BMRELB | 333-336 |
| Wrist breadth (cm) (2 years and over) | BMRWRIST | 337-340 |
| Head circumference (cm) ( $2 \mathrm{mos}-7$ yrs) | BMRHEAD | 341-344 |
| Arm circumference (cm) (2 months and over) | BMRARMC | 345-348 |
| Waist circumference (cm) (2+ years) | BMRWAIST | 349-353 |
| Waist circumference comment | BMRWAICD | 354-355 |
| Buttocks circumference (cm) (2+ years) | BMRBUTTO | 356-360 |
| Waist to hip ratio | BMRWHR | 361-364 |
| Thigh circumference (cm) (2 yrs and over) | BMRTHICI | 365-369 |
| Triceps skinfold (mm) (2 months and over) | BMRTRI | 370-373 |
| Subscapular skinfold (mm) (2+ months) | BMRSUB | 374-377 |
| Suprailiac skinfold (mm) (2+ years) | BMRSUP | 378-381 |
| Thigh skinfold (mm) (2 years and over) | BMRTHI | 382-385 |
| Patient Pregnant--cannot obtain BIA | PERPREG | 386 |
| Patient had pacemaker--cannot obtain BIA | PERPACE | 387 |
| BIA resistance (ohms) (12 years and over) | PER12A1 | 388-391 |
| BIA reactance (ohms) (12 years and over) | PER12B1 | 392-395 |
| Age check item used in skip pattern | MPRA1 | 396 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Taken antihistamine in past 2 days | MPRA2 | 397 |
| Taken prescription med in past 24 hours | MPRA3 | 398 |
| Taken vitamins/minerals in past 24 hrs | MPRA 4 | 399 |
| Treated for anemia within past 3 months | MPRB1 | 400 |
| How many infections... in past 4 weeks | MPRB2 | 401-402 |
| Age/sex check item used in skip pattern | MPRB3 | 403 |
| Age when menstrual cycles started | MPRB4 | 404-405 |
| Receive benefits from WIC in last 12 mo | MPRB5 | 406 |
| Receiving benefits from WIC now | MPRB6 | 407 |
| How many months received WIC benefits | MPRB7S | 408 |
| Age check item used in skip pattern | MPRC1 | 409 |
| Had cereal in past month | MPRC2A | 410 |
| Had fruit in past month | MPRC2B | 411 |
| Had yellow/orange vegetables past month | MPRC2C | 412 |
| Had green vegetables in past month | MPRC2D | 413 |
| Had meat in past month | MPRC2E | 414 |
| Had egg yolks or eggs in past month | MPRC2F | 415 |
| Had combo meat/vegetable dinners past mo | MPRC2G | 416 |
| Had yogurt, cottage/other cheese past mo | MPRC2H | 417 |
| Had bread,rolls,crackers,biscuit past mo | MPRC2I | 418 |
| Had desserts in past month | MPRC2 ${ }^{\text {J }}$ | 419 |
| Had breastmilk in past month | MPRC2K | 420 |
| Had formula in past month | MPRC2L | 421 |
| Had regular cow's milk in past month | MPRC2M | 422 |
| Had fruit juices in past month | MPRC2N | 423 |
| Drinks such as Koolaid, etc in past mo | MPRC2O | 424 |
| Check item.Respondent relationship to SP | MPRD1A | 425-426 |
| Examiner number | MPREXMNR | 427-430 |
| Had some part of dental examination | DEREXFLG | 431 |
| Examiner number | DEREXMNR | 432 |
| Upper quadrant periodontal assessments | DERUQUAD | 433 |
| Lower quadrant periodontal assessments | DERLQUAD | 434 |
| Medical exclusion flag | DERMEDXC | 435 |
| Dentate status | DEREDENT | 436 |
| Completion code: coronal caries | DERCCFLG | 437 |
| Completion code: root caries | DERRSFLG | 438 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Completion code: restoration \& condition | DERRCFLG | 439 |
| Completion code: traumatic injuries | DERTRFLG | 440 |
| Completion code: gingival bleeding | DERGNFLG | 441 |
| Completion code: calculus | DERCLFLG | 442 |
| Completion code: cej/fgm | DERCJFLG | 443 |
| Completion code: pocket assessment | DERPCFLG | 444 |
| Completion code: loss of attachment | DERLAFLG | 445 |
| Completion code: denture questionnaire | DERDQFLG | 446 |
| Nursing bottle caries | DERNURSC | 447 |
| Sum of permanent DMFS due to disease | DERDMFS1 | 448-450 |
| Sum of permanent DFMS due to any cause | DERDMFS2 | 451-453 |
| Sum of permanent DFS | DERDFSP | 454-456 |
| Sum of deciduous or primary DFS | DERDFSDC | 457-458 |
| Sum of deciduous or primary DFT | DERDFTDC | 459-460 |
| Sum of permanent DMFT due to disease | DERDMFT1 | 461-462 |
| Sum of permanent DMFT due to any cause | DERDMFT2 | 463-464 |
| Cor.surf: upper left cen incisor: filler | DERCS1 | 465 |
| Cor.surf: upper lft cen incisor: lingual | DERCS2 | 466-467 |
| Cor.surf: upper left cen incisor: buccal | DERCS3 | 468-469 |
| Cor.surf: upper left cen incisor: mesial | DERCS 4 | 470-471 |
| Cor.surf: upper left cen incisor: distal | DERCS5 | 472-473 |
| Cor.surf: upper left lat incisor: filler | DERCS6 | 474 |
| Cor.surf: upper lft lat incisor: lingual | DERCS 7 | 475-476 |
| Cor.surf: upper left lat incisor: buccal | DERCS8 | 477-478 |
| Cor.surf: upper left lat incisor: mesial | DERCS 9 | 479-480 |
| Cor.surf: upper left lat incisor: distal | DERCS10 | 481-482 |
| Cor.surf: upper left cuspid: filler | DERCS11 | 483 |
| Cor.surf: upper left cuspid: lingual | DERCS12 | 484-485 |
| Cor.surf: upper left cuspid: buccal | DERCS13 | 486-487 |
| Cor.surf: upper left cuspid: mesial | DERCS14 | 488-489 |
| Cor.surf: upper left cuspid: distal | DERCS15 | 490-491 |
| Cor.surf: upper left 1bicuspid: occlusal | DERCS16 | 492-493 |
| Cor.surf: upper left 1bicuspid: lingual | DERCS17 | 494-495 |
| Cor.surf: upper left 1bicuspid: buccal | DERCS18 | 496-497 |
| Cor.surf: upper left 1bicuspid: mesial | DERCS19 | 498-499 |
| Cor.surf: upper left 1bicuspid: distal | DERCS20 | 500-501 |
| Cor.surf: upper left 2bicuspid: occlusal | DERCS21 | 502-503 |
| Cor.surf: upper left 2bicuspid: lingual | DERCS22 | 504-505 |
| Cor.surf: upper left 2bicuspid: buccal | DERCS23 | 506-507 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Cor.surf: upper left 2bicuspid: mesial | DERCS24 | 508-509 |
| Cor.surf: upper left 2bicuspid: distal | DERCS25 | 510-511 |
| Cor.surf: upper left lmolar: occlusal | DERCS26 | 512-513 |
| Cor.surf: upper left 1molar: lingual | DERCS27 | 514-515 |
| Cor.surf: upper left 1molar: buccal | DERCS28 | 516-517 |
| Cor.surf: upper left 1molar: mesial | DERCS29 | 518-519 |
| Cor.surf: upper left 1molar: distal | DERCS30 | 520-521 |
| Cor.surf: upper left 2molar: occlusal | DERCS31 | 522-523 |
| Cor.surf: upper left 2molar: lingual | DERCS32 | 524-525 |
| Cor.surf: upper left 2molar: buccal | DERCS33 | 526-527 |
| Cor.surf: upper left 2molar: mesial | DERCS34 | 528-529 |
| Cor.surf: upper left 2molar: distal | DERCS35 | 530-531 |
| Cor.surf: upper rt cen incisor: filler | DERCS36 | 532 |
| Cor.surf: upper rt cen incisor:lingual | DERCS37 | 533-534 |
| Cor.surf: upper rt cen incisor: buccal | DERCS38 | 535-536 |
| Cor.surf: upper rt cen incisor: mesial | DERCS39 | 537-538 |
| Cor.surf: upper rt cen incisor: distal | DERCS40 | 539-540 |
| Cor.surf: upper rt lat incisor: filler | DERCS 41 | 541 |
| Cor.surf: upper rt lat incisor: lingual | DERCS 42 | 542-543 |
| Cor.surf: upper rt lat incisor: buccal | DERCS 43 | 544-545 |
| Cor.surf: upper rt lat incisor: mesial | DERCS 44 | 546-547 |
| Cor.surf: upper rt lat incisor: distal | DERCS 45 | 548-549 |
| Cor.surf: upper right cuspid: filler | DERCS46 | 550 |
| Cor.surf: upper right cuspid: lingual | DERCS 47 | 551-552 |
| Cor.surf: upper right cuspid: buccal | DERCS 48 | 553-554 |
| Cor.surf: upper right cuspid: mesial | DERCS 49 | 555-556 |
| Cor.surf: upper right cuspid: distal | DERCS50 | 557-558 |
| Cor.surf: upper rt 1bicuspid: occlusal | DERCS51 | 559-560 |
| Cor.surf: upper right 1bicuspid: lingual | DERCS52 | 561-562 |
| Cor.surf: upper right 1bicuspid: buccal | DERCS53 | 563-564 |
| Cor.surf: upper right 1bicuspid: mesial | DERCS54 | 565-566 |
| Cor.surf: upper right lbicuspid: distal | DERCS55 | 567-568 |
| Cor.surf: upper rt 2bicuspid: occlusal | DERCS56 | 569-570 |
| Cor.surf: upper rt 2bicuspid: lingual | DERCS57 | 571-572 |
| Cor.surf: upper rt 2bicuspid: buccal | DERCS58 | 573-574 |
| Cor.surf: upper rt 2bicuspid: mesial | DERCS59 | 575-576 |
| Cor.surf: upper rt 2bicuspid: distal | DERCS 60 | 577-578 |
| Cor.surf: upper right 1molar: occlusal | DERCS 61 | 579-580 |
| Cor.surf: upper right lmolar: lingual | DERCS 62 | 581-582 |

## NHANES III Data File Index

| Description |  | Variable <br> Name | Positions |
| :---: | :---: | :---: | :---: |
| Cor.surf: | upper right 1molar: buccal | DERCS 63 | 583-584 |
| Cor.surf: | upper right 1molar: mesial | DERCS 64 | 585-586 |
| Cor.surf: | upper right 1molar: distal | DERCS 65 | 587-588 |
| Cor.surf: | upper right 2molar: occlusal | DERCS66 | 589-590 |
| Cor.surf: | upper right 2molar: lingual | DERCS 67 | 591-592 |
| Cor.surf: | upper right 2molar: buccal | DERCS68 | 593-594 |
| Cor.surf: | upper right 2molar: mesial | DERCS69 | 595-596 |
| Cor.surf: | upper right 2molar: distal | DERCS 70 | 597-598 |
| Cor.surf: | lower left cen incisor: filler | DERCS 71 | 599 |
| Cor.surf: | lower left cen incisor:lingual | DERCS 72 | 600-601 |
| Cor.surf: | lower left cen incisor: buccal | DERCS 73 | 602-603 |
| Cor.surf: | lower left cen incisor: mesial | DERCS 74 | 604-605 |
| Cor.surf: | lower left cen incisor: distal | DERCS 75 | 606-607 |
| Cor.surf: | lower left lat incisor: filler | DERCS 76 | 608 |
| Cor.surf: | lower left lat incisor:lingual | DERCS 77 | 609-610 |
| Cor.surf: | lower left lat incisor: buccal | DERCS 78 | 611-612 |
| Cor.surf: | lower left lat incisor: mesial | DERCS 79 | 613-614 |
| Cor.surf: | lower left lat incisor: distal | DERCS80 | 615-616 |
| Cor.surf: | lower left cuspid: filler | DERCS81 | 617 |
| Cor.surf: | lower left cuspid: lingual | DERCS 82 | 618-619 |
| Cor.surf: | lower left cuspid: buccal | DERCS 83 | 620-621 |
| Cor.surf: | lower left cuspid: mesial | DERCS84 | 622-623 |
| Cor.surf: | lower left cuspid: distal | DERCS85 | 624-625 |
| Cor.surf: | lower left 1bicuspid: occlusal | DERCS86 | 626-627 |
| Cor.surf: | lower left 1bicuspid: lingual | DERCS87 | 628-629 |
| Cor.surf: | lower left 1bicuspid: buccal | DERCS88 | 630-631 |
| Cor.surf: | lower left 1bicuspid: mesial | DERCS89 | 632-633 |
| Cor.surf: | lower left 1bicuspid: distal | DERCS 90 | 634-635 |
| Cor.surf: | lower left 2bicuspid: occlusal | DERCS 91 | 636-637 |
| Cor.surf: | lower left 2bicuspid: lingual | DERCS 92 | 638-639 |
| Cor.surf: | lower left 2bicuspid: buccal | DERCS 93 | 640-641 |
| Cor.surf: | lower left 2bicuspid: mesial | DERCS94 | 642-643 |
| Cor.surf: | lower left 2bicuspid: distal | DERCS 95 | 644-645 |
| Cor.surf: | lower left 1molar: occlusal | DERCS96 | 646-647 |
| Cor.surf: | lower left 1molar: lingual | DERCS 97 | 648-649 |
| Cor.surf: | lower left 1molar: buccal | DERCS 98 | 650-651 |
| Cor.surf: | lower left 1molar: mesial | DERCS 99 | 652-653 |
| Cor.surf: | lower left 1molar: distal | DERCS100 | 654-655 |
| Cor.surf: | lower left 2molar: occlusal | DERCS101 | 656-657 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Cor.surf: lower left 2molar: lingual | DERCS102 | 658-659 |
| Cor.surf: lower left 2molar: buccal | DERCS103 | 660-661 |
| Cor.surf: lower left 2molar: mesial | DERCS104 | 662-663 |
| Cor.surf: lower left 2molar: distal | DERCS105 | 664-665 |
| Cor.surf: lower rt cen incisor: filler | DERCS106 | 666 |
| Cor.surf: lower rt cen incisor: lingual | DERCS107 | 667-668 |
| Cor.surf: lower rt cen incisor: buccal | DERCS108 | 669-670 |
| Cor.surf: lower rt cen incisor: mesial | DERCS109 | 671-672 |
| Cor.surf: lower rt cen incisor: distal | DERCS110 | 673-674 |
| Cor.surf: lower rt lat incisor: filler | DERCS111 | 675 |
| Cor.surf: lower rt lat incisor: lingual | DERCS112 | 676-677 |
| Cor.surf: lower rt lat incisor: buccal | DERCS113 | 678-679 |
| Cor.surf: lower rt lat incisor: mesial | DERCS114 | 680-681 |
| Cor.surf: lower rt lat incisor: distal | DERCS115 | 682-683 |
| Cor.surf: lower right cuspid: filler | DERCS116 | 684 |
| Cor.surf: lower right cuspid: lingual | DERCS117 | 685-686 |
| Cor.surf: lower right cuspid: buccal | DERCS118 | 687-688 |
| Cor.surf: lower right cuspid: mesial | DERCS119 | 689-690 |
| Cor.surf: lower right cuspid: distal | DERCS120 | 691-692 |
| Cor.surf: lower rt 1bicuspid: occlusal | DERCS121 | 693-694 |
| Cor.surf: lower rt 1bicuspid: lingual | DERCS122 | 695-696 |
| Cor.surf: lower rt 1bicuspid: buccal | DERCS123 | 697-698 |
| Cor.surf: lower rt 1bicuspid: mesial | DERCS124 | 699-700 |
| Cor.surf: lower rt 1bicuspid: distal | DERCS125 | 701-702 |
| Cor.surf: lower rt 2bicuspid: occlusal | DERCS126 | 703-704 |
| Cor.surf: lower rt 2bicuspid : lingual | DERCS127 | 705-706 |
| Cor.surf: lower rt 2bicuspid: buccal | DERCS128 | 707-708 |
| Cor.surf: lower rt 2bicuspid: mesial | DERCS129 | 709-710 |
| Cor.surf: lower rt 2bicuspid: distal | DERCS130 | 711-712 |
| Cor.surf: lower right lmolar: occlusal | DERCS131 | 713-714 |
| Cor.surf: lower right 1molar: lingual | DERCS132 | 715-716 |
| Cor.surf: lower right 1molar: buccal | DERCS133 | 717-718 |
| Cor.surf: lower right 1molar: mesial | DERCS134 | 719-720 |
| Cor.surf: lower right lmolar: distal | DERCS135 | 721-722 |
| Cor.surf: lower right 2molar: occlusal | DERCS136 | 723-724 |
| Cor.surf: lower right 2molar: lingual | DERCS137 | 725-726 |
| Cor.surf: lower right 2molar: buccal | DERCS138 | 727-728 |
| Cor.surf: lower right 2molar: mesial | DERCS139 | 729-730 |
| Cor.surf: lower right 2molar: distal | DERCS140 | 731-732 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Cor.tooth call: upper left cen incisor | DERCT1 | 733-734 |
| Cor.tooth call: upper left lat incisor | DERCT2 | 735-736 |
| Cor.tooth call: upper left cuspid | DERCT3 | 737-738 |
| Cor.tooth call: upper left 1bicuspid | DERCT 4 | 739-740 |
| Cor.tooth call: upper left 2bicuspid | DERCT5 | 741-742 |
| Cor.tooth call: upper left 1molar | DERCT6 | 743-744 |
| Cor.tooth call: upper left 2molar | DERCT 7 | 745-746 |
| Cor.tooth call: upper left 3molar | DER3M1 | 747 |
| Cor.tooth call: upper rt central incisor | DERCT8 | 748-749 |
| Cor.tooth call: upper rt lateral incisor | DERCT9 | 750-751 |
| Cor.tooth call: upper right cuspid | DERCT10 | 752-753 |
| Cor.tooth call: upper right 1bicuspid | DERCT11 | 754-755 |
| Cor.tooth call: upper right 2bicuspid | DERCT12 | 756-757 |
| Cor.tooth call: upper right 1molar | DERCT13 | 758-759 |
| Cor.tooth call: upper right 2molar | DERCT14 | 760-761 |
| Cor.tooth call: upper right 3molar | DER3M2 | 762 |
| Cor.tooth call: lower left cent incisor | DERCT15 | 763-764 |
| Cor.tooth call: lower left lat incisor | DERCT16 | 765-766 |
| Cor.tooth call: lower left cuspid | DERCT17 | 767-768 |
| Cor.tooth call: lower left 1bicuspid | DERCT18 | 769-770 |
| Cor.tooth call: lower left 2bicuspid | DERCT19 | 771-772 |
| Cor.tooth call: lower left lmolar | DERCT20 | 773-774 |
| Cor.tooth call: lower left 2molar | DERCT21 | 775-776 |
| Cor.tooth call: lower left 3molar | DER3M3 | 777 |
| Cor.tooth call: lower rt central incisor | DERCT22 | 778-779 |
| Cor.tooth call: lower rt lateral incisor | DERCT23 | 780-781 |
| Cor.tooth call: lower right cuspid | DERCT24 | 782-783 |
| Cor.tooth call: lower right 1bicuspid | DERCT25 | 784-785 |
| Cor.tooth call: lower right 2bicuspid | DERCT26 | 786-787 |
| Cor.tooth call: lower right 1molar | DERCT27 | 788-789 |
| cor tooth call: lower right 2molar | DERCT28 | 790-791 |
| Cor.tooth call: lower right 3molar | DER3M4 | 792 |
| Cor. sealant: upper left central incisor | DERSE1 | 793 |
| Cor. sealant: upper left lateral incisor | DERSE2 | 794 |
| Cor. sealant: upper left cuspid | DERSE3 | 795 |
| Cor. sealant: upper left lbicuspid | DERSE4 | 796 |
| Cor. sealant: upper left 2bicuspid | DERSE5 | 797 |
| Cor. sealant: upper left 1molar | DERSE6 | 798 |
| Cor. sealant: upper left 2molar | DERSE7 | 799 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Cor. sealant: upper rt central incisor | DERSE8 | 800 |
| Cor. sealant: upper rt lateral incisor | DERSE 9 | 801 |
| Cor. sealant: upper right cuspid | DERSE10 | 802 |
| Cor. sealant: upper right 1bicuspid | DERSE11 | 803 |
| Cor. sealant: upper right 2bicuspid | DERSE12 | 804 |
| Cor. sealant: upper right 1molar | DERSE13 | 805 |
| Cor. sealant: upper right 2molar | DERSE14 | 806 |
| Cor. sealant: lower left central incisor | DERSE15 | 807 |
| Cor. sealant: lower left lateral incisor | DERSE16 | 808 |
| Cor. sealant: lower left cuspid | DERSE17 | 809 |
| Cor. sealant: lower left 1bicuspid | DERSE18 | 810 |
| Cor. sealant: lower left 2bicuspid | DERSE19 | 811 |
| Cor. sealant: lower left 1molar | DERSE20 | 812 |
| Cor. sealant: lower left 2molar | DERSE21 | 813 |
| Cor. sealant: lower rt central incisor | DERSE22 | 814 |
| Cor. sealant: lower rt lateral incisor | DERSE23 | 815 |
| Cor. sealant: lower right cuspid | DERSE24 | 816 |
| Cor. sealant: lower right 1bicuspid | DERSE25 | 817 |
| Cor. sealant: lower right 2bicuspid | DERSE26 | 818 |
| Cor. sealant: lower right 1molar | DERSE27 | 819 |
| Cor. sealant: lower right 2molar | DERSE28 | 820 |
| Root surf: upr left cen incisor: lingual | DERRS1 | 821 |
| Root surf: upper lft cen incisor: buccal | DERRS2 | 822 |
| Root surf: upper lft cen incisor: mesial | DERRS3 | 823 |
| Root surf: upper lft cen incisor: distal | DERRS 4 | 824 |
| Root surf:upper left lat incisor:lingual | DERRS5 | 825 |
| Root surf: upper lft lat incisor: buccal | DERRS6 | 826 |
| Root surf: upper lft lat incisor: mesial | DERRS 7 | 827 |
| Root surf: upper lft lat incisor: distal | DERRS8 | 828 |
| Root surf: upper left cuspid: lingual | DERRS9 | 829 |
| Root surf: upper left cuspid: buccal | DERRS10 | 830 |
| Root surf: upper left cuspid: mesial | DERRS11 | 831 |
| Root surf: upper left cuspid: distal | DERRS12 | 832 |
| Root surf: upper left lbicuspid: lingual | DERRS13 | 833 |
| Root surf: upper left 1bicuspid: buccal | DERRS14 | 834 |
| Root surf: upper left 1bicuspid: mesial | DERRS15 | 835 |
| Root surf: upper left 1bicuspid: distal | DERRS16 | 836 |
| Root surf: upper left 2bicuspid: lingual | DERRS17 | 837 |
| Root surf: upper left 2bicuspid: buccal | DERRS18 | 838 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Root surf: upper left 2bicuspid: mesial | DERRS19 | 839 |
| Root surf: upper left 2bicuspid: distal | DERRS20 | 840 |
| Root surf: upper left lmolar: lingual | DERRS21 | 841 |
| Root surf: upper left 1molar: buccal | DERRS22 | 842 |
| Root surf: upper left 1molar: mesial | DERRS23 | 843 |
| Root surf: upper left 1molar: distal | DERRS 24 | 844 |
| Root surf: upper left 2molar: lingual | DERRS25 | 845 |
| Root surf: upper left 2molar: buccal | DERRS26 | 846 |
| Root surf: upper left 2molar: mesial | DERRS27 | 847 |
| Root surf: upper left 2molar: distal | DERRS28 | 848 |
| Root surf: upper rt cen incisor: lingual | DERRS29 | 849 |
| Root surf: upper rt cen incisor: buccal | DERRS30 | 850 |
| Root surf: upper rt cen incisor: mesial | DERRS31 | 851 |
| Root surf: upper rt cen incisor: distal | DERRS32 | 852 |
| Root surf: upper rt lat incisor: lingual | DERRS33 | 853 |
| Root surf: upper rt lat incisor: buccal | DERRS 34 | 854 |
| Root surf: upper rt lat incisor: mesial | DERRS 35 | 855 |
| Root surf: upper rt lat incisor: distal | DERRS36 | 856 |
| Root surf: upper right cuspid: lingual | DERRS37 | 857 |
| Root surf: upper right cuspid: buccal | DERRS38 | 858 |
| Root surf: upper right cuspid: mesial | DERRS39 | 859 |
| Root surf: upper right cuspid: distal | DERRS 40 | 860 |
| Root surf: upper rt 1bicuspid: lingual | DERRS 41 | 861 |
| Root surf: upper right 1bicuspid: buccal | DERRS 42 | 862 |
| Root surf: upper right 1bicuspid: mesial | DERRS 43 | 863 |
| Root surf: upper right lbicuspid: distal | DERRS 44 | 864 |
| Root surf: upper rt 2bicuspid: lingual | DERRS 45 | 865 |
| Root surf: upper right 2bicuspid: buccal | DERRS 46 | 866 |
| Root surf: upper right 2bicuspid: mesial | DERRS 47 | 867 |
| Root surf: upper right 2bicuspid: distal | DERRS 48 | 868 |
| Root surf: upper right 1molar: lingual | DERRS 49 | 869 |
| Root surf: upper right 1molar: buccal | DERRS50 | 870 |
| Root surf: upper right 1molar: mesial | DERRS51 | 871 |
| Root surf: upper right 1molar: distal | DERRS 52 | 872 |
| Root surf: upper right 2molar: lingual | DERRS53 | 873 |
| Root surf: upper right 2molar: buccal | DERRS 54 | 874 |
| Root surf: upper right 2molar: mesial | DERRS 55 | 875 |
| Root surf: upper right 2molar: distal | DERRS 56 | 876 |
| Root surf: lwr left cen incisor: lingual | DERRS 57 | 877 |



| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Root surf: lower rt 1bicuspid: lingual | DERRS 97 | 917 |
| Root surf: lower right 1bicuspid: buccal | DERRS 98 | 918 |
| Root surf: lower right 1bicuspid: mesial | DERRS 99 | 919 |
| Root surf: lower right 1bicuspid: distal | DERRS100 | 920 |
| Root surf: lower rt 2bicuspid: lingual | DERRS101 | 921 |
| Root surf: lower right 2bicuspid: buccal | DERRS102 | 922 |
| Root surf: lower right 2bicuspid: mesial | DERRS103 | 923 |
| Root surf: lower right 2bicuspid: distal | DERRS104 | 924 |
| Root surf: lower right 1molar: lingual | DERRS105 | 925 |
| Root surf: lower right 1molar: buccal | DERRS106 | 926 |
| Root surf: lower right 1molar: mesial | DERRS107 | 927 |
| Root surf: lower right 1molar: distal | DERRS108 | 928 |
| Root surf: lower right 2molar: lingual | DERRS109 | 929 |
| Root surf: lower right 2molar: buccal | DERRS110 | 930 |
| Root surf: lower right 2molar: mesial | DERRS111 | 931 |
| Root surf: lower right 2molar: distal | DERRS112 | 932 |
| Perio:ging bleed, uppr cen incisor:mesial | DERUGN1 | 933 |
| Perio:ging bleed, uppr cen incisor:buccal | DERUGN2 | 934 |
| Perio:ging bleed, uppr lat incisor:mesial | DERUGN3 | 935 |
| Perio:ging bleed, uppr lat incisor:buccal | DERUGN4 | 936 |
| Perio:ging bleed, upper cuspid: mesial | DERUGN5 | 937 |
| Perio:ging bleed, upper cuspid: buccal | DERUGN6 | 938 |
| Perio:ging bleed, upper 1bicuspid: mesial | DERUGN7 | 939 |
| Perio:ging bleed, upper 1bicuspid: buccal | DERUGN8 | 940 |
| Perio:ging bleed, upper 2bicuspid: mesial | DERUGN9 | 941 |
| Perio:ging bleed, upper 2bicuspid: buccal | DERUGN10 | 942 |
| Perio:ging bleed, upper 1molar: mesial | DERUGN11 | 943 |
| Perio:ging bleed, upper 1molar: buccal | DERUGN12 | 944 |
| Perio:ging bleed, upper 2molar: mesial | DERUGN13 | 945 |
| Perio:ging bleed, upper 2molar: buccal | DERUGN14 | 946 |
| Perio:ging bleed,lwr cen incisor:mesial | DERLGN1 | 947 |
| Perio:ging bleed, lwr cen incisor:buccal | DERLGN2 | 948 |
| Perio:ging bleed, lwr lat incisor:mesial | DERLGN3 | 949 |
| Perio:ging bleed,lwr lat incisor:buccal | DERLGN4 | 950 |
| Perio:ging bleed, lower cuspid: mesial | DERLGN5 | 951 |
| Perio:ging bleed, lower cuspid: buccal | DERLGN6 | 952 |
| Perio:ging bleed, lwr lbicuspid: mesial | DERLGN7 | 953 |
| Perio:ging bleed, lwr 1bicuspid: buccal | DERLGN8 | 954 |
| Perio:ging bleed, lwr 2bicuspid: mesial | DERLGN9 | 955 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Perio:ging bleed, lwr 2bicuspid: buccal | DERLGN10 | 956 |
| Perio:ging bleed, lower 1molar: mesial | DERLGN11 | 957 |
| Perio:ging bleed, lower 1molar: buccal | DERLGN12 | 958 |
| Perio:ging bleed, lower 2molar: mesial | DERLGN13 | 959 |
| Perio:ging bleed, lower 2molar: buccal | DERLGN14 | 960 |
| Perio:calculus, upper cen incisor:mesial | DERUCL1 | 961 |
| Perio:calculus, upper cen incisor:buccal | DERUCL2 | 962 |
| Perio:calculus, upper lat incisor:mesial | DERUCL3 | 963 |
| Perio:calculus, upper lat incisor:buccal | DERUCL4 | 964 |
| Perio: calculus, upper cuspid: mesial | DERUCL5 | 965 |
| Perio: calculus, upper cuspid: buccal | DERUCL6 | 966 |
| Perio: calculus, upper lbicuspid: mesial | DERUCL7 | 967 |
| Perio: calculus, upper 1bicuspid: buccal | DERUCL8 | 968 |
| Perio: calculus, upper 2bicuspid: mesial | DERUCL9 | 969 |
| Perio: calculus, upper 2bicuspid: buccal | DERUCL10 | 970 |
| Perio: calculus, upper 1molar: mesial | DERUCL11 | 971 |
| Perio: calculus, upper 1molar: buccal | DERUCL12 | 972 |
| Perio: calculus, upper 2molar: mesial | DERUCL13 | 973 |
| Perio: calculus, upper 2molar: buccal | DERUCL14 | 974 |
| Perio: calculus,lower cen incisor:mesial | DERLCL1 | 975 |
| Perio: calculus,lower cen incisor:buccal | DERLCL2 | 976 |
| Perio: calculus,lower lat incisor:mesial | DERLCL3 | 977 |
| Perio: calculus,lower lat incisor:buccal | DERLCL4 | 978 |
| Perio: calculus, lower cuspid: mesial | DERLCL5 | 979 |
| Perio: calculus, lower cuspid: buccal | DERLCL6 | 980 |
| Perio: calculus, lower 1bicuspid: mesial | DERLCL7 | 981 |
| Perio: calculus, lower 1bicuspid: buccal | DERLCL8 | 982 |
| Perio: calculus, lower 2bicuspid: mesial | DERLCL9 | 983 |
| Perio: calculus, lower 2bicuspid: buccal | DERLCL10 | 984 |
| Perio: calculus, lower 1molar: mesial | DERLCL11 | 985 |
| Perio: calculus, lower 1molar: buccal | DERLCL12 | 986 |
| Perio: calculus, lower 2molar: mesial | DERLCL13 | 987 |
| Perio: calculus, lower 2molar: buccal | DERLCL14 | 988 |
| Perio:FGM/CEJ, upr cen incisor:mesial-mm | DERUMCJ1 | 989-990 |
| Perio:pocket, upper cen incisor:mesial-mm | DERUMPC1 | 991-992 |
| Perio:FGM/CEJ, upr cen incisor:buccal-mm | DERUBCJ1 | 993-994 |
| Perio:pocket, upr cen incisor: buccal-mm | DERUBPC1 | 995-996 |
| Perio:FGM/CEJ, upr lat incisor:mesial-mm | DERUMCJ2 | 997-998 |
| Perio: pocket, upr lat incisor:mesial-mm | DERUMPC2 | 999-1000 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Perio:FGM/CEJ, upr lat incisor:buccal-mm | DERUBCJ2 | 1001-1002 |
| Perio: pocket, upr lat incisor buccal-mm | DERUBPC2 | 1003-1004 |
| Perio: FGM/CEJ, upper cuspid mesial-mm | DERUMCJ3 | 1005-1006 |
| Perio: pocket, upper cuspid: mesial-mm | DERUMPC3 | 1007-1008 |
| Perio: FGM/CEJ, upper cuspid: buccal-mm | DERUBCJ3 | 1009-1010 |
| Perio: pocket, upper cuspid: buccal-mm | DERUBPC3 | 1011-1012 |
| Perio FGM/CEJ, upr 1bicuspid mesial-mm | DERUMCJ4 | 1013-1014 |
| Perio: pocket, upr 1bicuspid: mesial-mm | DERUMPC4 | 1015-1016 |
| Perio: FGM/CMJ, upr 1bicuspid: buccal-mm | DERUBCJ4 | 1017-1018 |
| Perio: pocket, upr 1bicuspid: buccal-mm | DERUBPC4 | 1019-1020 |
| Perio: FGM/CEJ, upr 2bicuspid:mesial-mm | DERUMCJ5 | 1021-1022 |
| Perio: pocket, upr 2bicuspid: mesial-mm | DERUMPC5 | 1023-1024 |
| Perio: FGM/CEJ, upr 2bicuspid: buccal-mm | DERUBCJ5 | 1025-1026 |
| Perio: pocket, upr 2bicuspid: buccal-mm | DERUBPC5 | 1027-1028 |
| Perio: FGM/CEJ, upper 1molar: mesial-mm | DERUMCJ6 | 1029-1030 |
| Perio: pocket, upper 1molar: mesial-mm | DERUMPC6 | 1031-1032 |
| Perio: FGM/CEJ, upper 1molar: buccal-mm | DERUBCJ6 | 1033-1034 |
| Perio: pocket, upper 1molar: buccal-mm | DERUBPC6 | 1035-1036 |
| Perio: FGM/CEJ, upper 2molar: mesial-mm | DERUMCJ7 | 1037-1038 |
| Perio:pocket, upper 2molar: mesial-mm | DERUMPC7 | 1039-1040 |
| Perio: FGM/CEJ, upper 2molar: buccal-mm | DERUBCJ7 | 1041-1042 |
| Perio: pocket, upper 2molar: buccal-mm | DERUBPC7 | 1043-1044 |
| Perio:FGM/CEJ, lwr cen incisor:mesial-mm | DERLMCJ1 | 1045-1046 |
| Perio:pocket,lower cen incisor:mesial-mm | DERLMPC1 | 1047-1048 |
| Perio:FGM/CEJ, lwr cen incisor:buccal-mm | DERLBCJ1 | 1049-1050 |
| Perio:pocket,lower cen incisor:buccal-mm | DERLBPC1 | 1051-1052 |
| Perio:FGM/CEJ, lwr lat incisor:mesial-mm | DERLMCJ2 | 1053-1054 |
| Perio:pocket,lower lat incisor:mesial-mm | DERLMPC2 | 1055-1056 |
| Perio: FGM/CEJ lwr lat incisor:buccal-mm | DERLBCJ2 | 1057-1058 |
| Perio:pocket,lower lat incisor:buccal-mm | DERLBPC2 | 1059-1060 |
| Perio: FGM/CEJ, lower cuspid: mesial-mm | DERLMCJ3 | 1061-1062 |
| Perio: pocket, lower cuspid: mesial-mm | DERLMPC3 | 1063-1064 |
| Perio: FGM/CEJ, lower cuspid: buccal-mm | DERLBCJ3 | 1065-1066 |
| Perio: pocket, lower cuspid: buccal-mm | DERLBPC3 | 1067-1068 |
| Perio:FGM/CEJ,lower 1bicuspid:mesial-mm | DERLMCJ4 | 1069-1070 |
| Perio:pocket,lower 1bicuspid: mesial-mm | DERLMPC4 | 1071-1072 |
| Perio:FGM/CEJ,lower 1bicuspid: buccal-mm | DERLBCJ4 | 1073-1074 |
| Perio:pocket, lower 1bicuspid: buccal-mm | DERLBPC4 | 1075-1076 |
| Perio:FGM/CEJ,lower 2bicuspid: mesial-mm | DERLMCJ5 | 1077-1078 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Perio:pocket, lower 2bicuspid: mesial-mm | DERLMPC5 | 1079-1080 |
| Perio:FGM/CEJ,lower 2bicuspid: buccal-mm | DERLBCJ5 | 1081-1082 |
| Perio:pocket,lower 2bicuspid: buccal-mm | DERLBPC5 | 1083-1084 |
| Perio: FGM/CEJ, lower 1molar: mesial-mm | DERLMCJ6 | 1085-1086 |
| Perio: pocket, lower 1molar: mesial-mm | DERLMPC6 | 1087-1088 |
| Perio: FGM/CEJ, lower 1molar: buccal-mm | DERLBCJ6 | 1089-1090 |
| Perio: pocket, lower 1molar: buccal-mm | DERLBPC6 | 1091-1092 |
| Perio: FGM/CEJ, lower 2molar: mesial-mm | DERLMCJ7 | 1093-1094 |
| Perio: pocket, lower 2molar: mesial-mm | DERLMPC7 | 1095-1096 |
| Perio: FGM/CEJ, lower 2molar: buccal-mm | DERLBCJ7 | 1097-1098 |
| Perio: pocket, lower 2molar: buccal-mm | DERLBPC7 | 1099-1100 |
| Perio:loss-attac, upr cen inci:mesial-mm | DERUMLA1 | 1101-1102 |
| Perio:loss-attac, upr cen inci:buccal-mm | DERUBLA1 | 1103-1104 |
| Perio:loss-attac, upr lat inci:mesial-mm | DERUMLA2 | 1105-1106 |
| Perio:loss-attac, upr lat inci:buccal-mm | DERUBLA2 | 1107-1108 |
| Perio: loss-attac, upr cuspid: mesial-mm | DERUMLA3 | 1109-1110 |
| Perio: loss-attac, upr cuspid: buccal-mm | DERUBLA3 | 1111-1112 |
| Perio:loss-attac,upr 1bicuspid:mesial-mm | DERUMLA4 | 1113-1114 |
| Perio:loss-attac,upr 1bicuspid:buccal-mm | DERUBLA4 | 1115-1116 |
| Perio:loss-attac,upr 2bicuspid:mesial-mm | DERUMLA5 | 1117-1118 |
| Perio:loss-attac,upr 2bicuspid:buccal-mm | DERUBLA5 | 1119-1120 |
| Perio: loss-attac, upr 1molar mesial-mm | DERUMLA6 | 1121-1122 |
| Perio: loss-attac, upr 1molar: buccal-mm | DERUBLA6 | 1123-1124 |
| Perio: loss-attac, upr 2molar:mesial-mm | DERUMLA7 | 1125-1126 |
| Perio: loss-attac, upr 1molar: buccal-mm | DERUBLA7 | 1127-1128 |
| Perio: loss-attac,lwr cen inci:mesial-mm | DERLMLA1 | 1129-1130 |
| Perio: loss-attac,lwr cen inci:buccal-mm | DERLBLA1 | 1131-1132 |
| Perio: loss-attac,lwr lat inci:mesial-mm | DERLMLA2 | 1133-1134 |
| Perio: loss-attac,lwr lat inci:buccal-mm | DERLBLA2 | 1135-1136 |
| Perio: loss-attac, lwr cuspid: mesial-mm | DERLMLA3 | 1137-1138 |
| Perio: loss-attac, lwr cuspid: buccal-mm | DERLBLA3 | 1139-1140 |
| Perio:loss-attac,lwr 1bicuspid:mesial-mm | DERLMLA4 | 1141-1142 |
| Perio:loss-attac,lwr 1bicuspid:buccal-mm | DERLBLA4 | 1143-1144 |
| Perio:loss-attac,lwr 2bicuspid:mesial-mm | DERLMLA5 | 1145-1146 |
| Perio:loss-attac,lwr 2bicuspid:buccal-mm | DERLBLA5 | 1147-1148 |
| Perio: loss attac, lwr 1molar: mesial-mm | DERLMLA6 | 1149-1150 |
| Perio: loss-attac, lwr 1molar: buccal-mm | DERLBLA6 | 1151-1152 |
| Perio: loss-attac, lwr 2molar: mesial-mm | DERLMLA7 | 1153-1154 |
| Perio: loss-attac, lwr 1molar: buccal-mm | DERLBLA 7 | 1155-1156 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Perio:furcations, upper 2bicuspid:mesial | DERUB2MF | 1157 |
| Perio:furcations, upper 2bicuspid:distal | DERUB2DF | 1158 |
| Perio:furcations, upper 1molar: mesial | DERUM1MF | 1159 |
| Perio:furcations, upper 1molar: buccal | DERUM1BF | 1160 |
| Perio:furcations, upper 1molar: distal | DERUM1DF | 1161 |
| Perio:furcations, upper 2molar: mesial | DERUM2MF | 1162 |
| Perio:furcations, upper 2molar: buccal | DERUM2BF | 1163 |
| Perio: furcations, upper 2molar: distal | DERUM2DF | 1164 |
| Perio: furcations, lower 1molar: lingual | DERLM1LF | 1165 |
| Perio: furcations, lower 1molar: buccal | DERLM1BF | 1166 |
| Perio: furcations, lower 2molar: lingual | DERLM2LF | 1167 |
| Perio: furcations, lower 2molar: buccal | DERLM2BF | 1168 |
| Oral soft tissue: number of lesions | DERNUMLS | 1169 |
| Soft tissue lesion 1: location | DERSTLC1 | 1170-1175 |
| Soft tissue lesion 1: clinical diagnosis | DERSTDX1 | 1176-1177 |
| Soft tissue lesion 1: smear required | DERSMRQ1 | 1178 |
| Soft tissue lesion 1: smear taken | DERSMTK1 | 1179 |
| Soft tissue lesion 1: yeast result | DERYEAS1 | 1180 |
| Soft tissue lesion 1: hyphae result | DERHYPH1 | 1181 |
| Soft tissue lesion 1: clin. descrpt. req | DERCDRQ1 | 1182 |
| Soft tissue lesion 1: extent | DERSTXT1 | 1183 |
| Soft tissue lesion 1: length-mm | DERSTLN1 | 1184-1185 |
| Soft tissue lesion 1: width-mm | DERSTWD1 | 1186-1187 |
| Soft tissue lesion 1: height-mm | DERSTHT1 | 1188-1189 |
| Soft tissue lesion 1: surface morphology | DERSTMF1 | 1190 |
| Soft tissue lesion 1: color ..... | DERSTCL1 | 1191-1192 |
| Soft tissue lesion 1: consistency | DERSTCS1 | 1193 |
| Soft tissue lesion 1: pain | DERSTPN1 | 1194 |
| Soft tissue lesion 1: duration | DERSTPD1 | 1195 |
| Soft tissue lesion 1: prior history | DERSTHS 1 | 1196 |
| Soft tissue lesion 2: location | DERSTLC2 | 1197-1200 |
| Soft tissue lesion 2: clinical diagnosis | DERSTDX2 | 1201-1202 |
| Soft tissue lesion 2: smear required | DERSMRQ2 | 1203 |
| Soft tissue lesion 2: smear taken | DERSMTK2 | 1204 |
| Soft tissue lesion 2: yeast result | DERYEAS2 | 1205 |
| Soft tissue lesion 2: hyphae result | DERHYPH2 | 1206 |
| Soft tissue lesion 2: clin. descrpt. req | DERCDRQ2 | 1207 |
| Soft tissue lesion 2: extent | DERSTXT2 | 1208 |

NHANES III Data File Index


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Soft tissue lesion 4: consistency | DERSTCS4 | 1263 |
| Soft tissue lesion 4: pain | DERSTPN4 | 1264 |
| Soft tissue lesion 4: duration | DERSTPD4 | 1265 |
| Soft tissue lesion 4: prior history | DERSTHS 4 | 1266 |
| Soft tissue lesion 6: extent | DERSTXT6 | 1267 |
| Soft tissue lesion 6: length-mm | DERSTLN6 | 1268 |
| Soft tissue lesion 6: width-mm | DERSTWD 6 | 1269 |
| Soft tissue lesion 6: height-mm | DERSTHT6 | 1270 |
| Soft tissue lesion 6: surface morphology | DERSTMF 6 | 1271 |
| Soft tissue lesion 6: color | DERSTCL6 | 1272 |
| Soft tissue lesion 6: consistency | DERSTCS6 | 1273 |
| Soft tissue lesion 6: pain | DERSTPN6 | 1274 |
| Soft tissue lesion 6: duration | DERSTPD 6 | 1275 |
| Soft tissue lesion 6: prior history | DERSTHS6 | 1276 |
| Soft tissue lesion 6: other | DERSTOT6 | 1277 |
| Tooth condition: upper left cen incisor | DERRTC1 | 1278 |
| Tooth condition: upper left lat incisor | DERRTC2 | 1279 |
| Tooth condition: upper left cuspid | DERRTC3 | 1280 |
| Tooth condition: upper left 1bicuspid | DERRTC4 | 1281 |
| Tooth condition: upper left 2bicuspid | DERRTC5 | 1282 |
| Tooth condition: upper left 1molar | DERRTC6 | 1283 |
| Tooth condition: upper left 2molar | DERRTC7 | 1284 |
| Tooth condition: upper right cen incisor | DERRTC8 | 1285 |
| Tooth condition: upper right lat incisor | DERRTC9 | 1286 |
| Tooth condition: upper right cuspid | DERRTC10 | 1287 |
| Tooth condition: upper right lbicuspid | DERRTC11 | 1288 |
| Tooth condition: upper right 2bicuspid | DERRTC12 | 1289 |
| Tooth condition: upper right 1molar | DERRTC13 | 1290 |
| Tooth condition: upper right 2molar | DERRTC14 | 1291 |
| Tooth condition: lower left cen incisor | DERRTC15 | 1292 |
| Tooth condition: lower left lat incisor | DERRTC16 | 1293 |
| Tooth condition: lower left cuspid | DERRTC17 | 1294 |
| Tooth condition: lower left 1bicuspid | DERRTC18 | 1295 |
| Tooth condition: lower left 2bicuspid | DERRTC19 | 1296 |
| Tooth condition: lower left 1molar | DERRTC20 | 1297 |
| Tooth condition: lower left 2molar | DERRTC21 | 1298 |
| Tooth condition: lower right cen incisor | DERRTC22 | 1299 |
| Tooth condition: lower right lat incisor | DERRTC23 | 1300 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Tooth condition: lower right cuspid | DERRTC24 | 1301 |
| Tooth condition: lower right 1bicuspid | DERRTC25 | 1302 |
| Tooth condition: lower right 2bicuspid | DERRTC26 | 1303 |
| Tooth condition: lower right 1molar | DERRTC27 | 1304 |
| Tooth condition: lower right 2molar | DERRTC28 | 1305 |
| Trauma: upper left central incisor | DERUTRA1 | 1306 |
| Trauma: upper left lateral incisor | DERUTRA2 | 1307 |
| Trauma: upper right central incisor | DERUTRA3 | 1308 |
| Trauma: upper right lateral incisor | DERUTRA4 | 1309 |
| Trauma: lower left central incisor | DERLTRA1 | 1310 |
| Trauma: lower left lateral incisor | DERLTRA2 | 1311 |
| Trauma: lower right central incisor | DERLTRA3 | 1312 |
| Trauma: lower right lateral incisor | DERLTRA4 | 1313 |
| Occlusal: upper right canine-lateral-mm | DERUAL1 | 1314-1315 |
| Occlusal: upper right lateral-central-mm | DERUAL2 | 1316-1317 |
| Occlusal: upper right cen-left cen-mm | DERUAL3 | 1318-1319 |
| Occlusal: upper left central-left lat-mm | DERUAL4 | 1320-1321 |
| Occlusal: upper left lat-left canine-mm | DERUAL5 | 1322-1323 |
| Occlusal: lower left canine-lft lat-mm | DERLAL1 | 1324-1325 |
| Occlusal: lower left lateral-left cen-mm | DERLAL2 | 1326-1327 |
| Occlusal: lower lft central-right cen-mm | DERLAL3 | 1328-1329 |
| Occlusal: lower rt central-rt late-mm | DERLAL4 | 1330-1331 |
| Occlusal: lower rt latera-rt canine-mm | DERLAL5 | 1332-1333 |
| Occlusal: maxillary diastema | DERDIAS | 1334 |
| Occlusal: posterior cross bite | DERXBITE | 1335 |
| Occlusal characteristics: overjet-mm | DEROVJET | 1336-1337 |
| Occlusal characteristics: openbite | DEROPB | 1338-1339 |
| Occlusal characteristics: overbite (mm) | DEROVB | 1340-1341 |
| Do you usually wear your upper denture | DERDQU1 | 1342 |
| During past yr, problem w/ upr denture | DERDQU2 | 1343 |
| Need a new upper jaw denture or refit | DERDQU3 | 1344 |
| How long since had upper natural teeth | DERDQU4 | 1345 |
| Do you usually wear your lower denture | DERDQL1 | 1346 |
| During past yr, problem w/ lwr denture | DERDQL2 | 1347 |
| Need a new lower jaw denture or refit | DERDQL3 | 1348 |
| How long since had lower natural teeth | DERDQL4 | 1349 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Prosthesis assessment: upper type | DERUPTYP | 1350 |
| Prosthesis assessment: upper integrity | DERUPAI | 1351 |
| Prosthesis: upper excessive tooth wear | DERUPAW | 1352 |
| Prosthesis: upper reline/cond/dent mat | DERUPARL | 1353 |
| Prosthesis: upper denture stability | DERUPAS | 1354 |
| Prosthesis: upper denture retention | DERUPART | 1355 |
| Prosthesis assessment: lower type | DERLPTYP | 1356 |
| Prosthesis assessment: lower integrity | DERLPAI | 1357 |
| Prosthesis: lower excessive tooth wear | DERLPAW | 1358 |
| Prosthesis ass: lower reline material | DERLPARL | 1359 |
| Prosthesis: lower denture stability | DERLPAS | 1360 |
| Prosthesis: lower denture retention | DERLPART | 1361 |
| Having problems breathing in chest/lungs | ALRQ1 | 1362 |
| Do you usually have breathing problems | ALRQ2 | 1363 |
| Breathing problem worse than usual | ALRQ3 | 1364 |
| Past severe reaction, allergen skin test | ALRQ4 | 1365 |
| Severe eczema or infection on both arms | ALRQ5 | 1366 |
| Negative control - which arm | ALRNEGAR | 1367 |
| Negative control - flare length (mm) | ALRNEGFL | 1368-1370 |
| Negative control - flare width (mm) | ALRNEGFW | 1371-1373 |
| Negative control - confluent | ALRNEGCN | 1374 |
| Negative control - wheal length (mm) | ALRNEGWL | 1375-1377 |
| Negative control - wheal width (mm) | ALRNEGWW | 1378-1380 |
| White oak - which arm | ALRWHIAR | 1381 |
| White oak - flare length (mm) | ALRWHIFL | 1382-1384 |
| White oak - flare width (mm) | ALRWHIFW | 1385-1387 |
| White oak - confluent | ALRWHICN | 1388 |
| White oak - wheal length (mm) | ALRWHIWL | 1389-1391 |
| White oak - wheal width (mm) | ALRWHIWW | 1392-1394 |
| Cat - which arm | ALRCATAR | 1395 |
| Cat - flare length (mm) | ALRCATFL | 1396-1398 |
| Cat - flare width (mm) | ALRCATFW | 1399-1401 |
| Cat - confluent | ALRCATCN | 1402 |
| Cat - wheal length (mm) | ALRCATWL | 1403-1405 |
| Cat - wheal width (mm) | ALRCATWW | 1406-1408 |
| Mite - which arm ....... | ALRMITAR | 1409 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Mite - flare length (mm) | ALRMITFL | 1410-1412 |
| Mite - flare width (mm) | ALRMITFW | 1413-1415 |
| Mite - confluent | ALRMITCN | 1416 |
| Mite - wheal length (mm) | ALRMITWL | 1417-1419 |
| Mite - wheal width (mm) | ALRMITWW | 1420-1422 |
| Alternaria - which arm | ALRALTAR | 1423 |
| Alternaria - flare length (mm) | ALRALTFL | 1424-1426 |
| Alternaria - flare width (mm) | ALRALTFW | 1427-1429 |
| Alternaria - confluent | ALRALTCN | 1430 |
| Alternaria - wheal length (mm) | ALRALTWL | 1431-1433 |
| Alternaria - wheal width (mm) | ALRALTWW | 1434-1436 |
| Rye grass - which arm | ALRRYEAR | 1437 |
| Rye grass - flare length (mm) | ALRRYEFL | 1438-1440 |
| Rye grass - flare width (mm) | ALRRYEFW | 1441-1443 |
| Rye grass - confluent | ALRRYECN | 1444 |
| Rye grass - wheal length (mm) | ALRRYEWL | 1445-1447 |
| Rye grass - wheal width (mm) | ALRRYEWW | 1448-1450 |
| Peanut - which arm | ALRPEAAR | 1451 |
| Peanut - flare length (mm) | ALRPEAFL | 1452-1454 |
| Peanut - flare width (mm) | ALRPEAFW | 1455-1457 |
| Peanut - confluent | ALRPEACN | 1458 |
| Peanut - wheal length (mm) | ALRPEAWL | 1459-1461 |
| Peanut - wheal width (mm) | ALRPEAWW | 1462-1464 |
| Russian thistle - which arm | ALRTHIAR | 1465 |
| Russian thistle - flare length (mm) | ALRTHIFL | 1466-1468 |
| Russian thistle - flare width (mm) | ALRTHIFW | 1469-1471 |
| Russian thistle - confluent | ALRTHICN | 1472 |
| Russian thistle - wheal length (mm) | ALRTHIWL | 1473-1475 |
| Russian thistle - wheal width (mm) | ALRTHIWW | 1476-1478 |
| German cockroach - which arm | ALRCOCAR | 1479 |
| German cockroach - flare length (mm) | ALRCOCFL | 1480-1482 |
| German cockroach - flare width (mm) | ALRCOCFW | 1483-1485 |
| German cockroach - confluent | ALRCOCCN | 1486 |
| German cockroach - wheal length (mm) | ALRCOCWL | 1487-1489 |
| German cockroach - wheal width (mm) | ALRCOCWW | 1490-1492 |
| Bermuda grass - which arm | ALRBERAR | 1493 |
| Bermuda grass - flare length (mm) | ALRBERFL | 1494-1496 |
| Bermuda grass - flare width (mm) | ALRBERFW | 1497-1499 |
| Bermuda grass - confluent ....... | ALRBERCN | 1500 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Bermuda grass - wheal length (mm) | ALRBERWL | 1501-1503 |
| Bermuda grass - wheal width (mm) | ALRBERWW | 1504-1506 |
| Ragweed - which arm | ALRRAGAR | 1507 |
| Ragweed - flare length (mm) | ALRRAGFL | 1508-1510 |
| Ragweed - flare width (mm) | ALRRAGFW | 1511-1513 |
| Ragweed - confluent | ALRRAGCN | 1514 |
| Ragweed - wheal length (mm) | ALRRAGWL | 1515-1517 |
| Ragweed - wheal width (mm) | ALRRAGWW | 1518-1520 |
| Positive control - which arm | ALRPSCAR | 1521 |
| Positive control - flare length (mm) | ALRPSCFL | 1522-1524 |
| Positive control - flare width (mm) | ALRPSCFW | 1525-1527 |
| Positive control - confluent | ALRPSCCN | 1528 |
| Positive control - wheal length (mm) | ALRPSCWL | 1529-1531 |
| Positive control - wheal width (mm) | ALRPSCWW | 1532-1534 |
| Technician number 1 | ALRTECH1 | 1535-1539 |
| Technician number 2 | ALRTECH2 | 1540-1544 |
| Cold or sinus problem within past week | AURA1 | 1545 |
| Cold or sinus problem today | AURA2 | 1546 |
| Exposed to very loud noise past 24 hrs | AURA3 | 1547 |
| How many hours ago did the noise end | AURA 4 | 1548-1549 |
| Music with headphones in past 24 hours | AURA5 | 1550 |
| How many hours ago stop listening | AURA 6 | 1551-1552 |
| Buzzing/ringing or other noises today | AURA7 | 1553 |
| Earache within the past week | AURA8 | 1554 |
| Do you have a tube in right or left ear | AURA9 | 1555 |
| Drainage/discharge from either ear | AURA10 | 1556 |
| Audiometer number | AURAUDO1 | 1557-1560 |
| Left ear air hear level, first, $1000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB1A1 | 1561-1563 |
| Left ear air hearing level, 2000 Hz (dB) | AURB1A2 | 1564-1566 |
| Left ear air hearing level, 3000 Hz (dB) | AURB1A3 | 1567-1569 |
| Left ear air hearing level, 4000 Hz (dB) | AURB1A4 | 1570-1572 |
| Left ear air hearing level, 6000 Hz (dB) | AURB1A5 | 1573-1575 |
| Left ear air hearing level, 8000 Hz (dB) | AURB1A6 | 1576-1578 |
| Left ear air hear lvl, repeat, $1000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB1A7 | 1579-1581 |
| Left ear air hearing level, 500 Hz (dB) | AURB1A8 | 1582-1584 |
| Right ear air hear level, first, $1000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB2A1 | 1585-1587 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Right ear air hearing level, $2000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A2 | 1588-1590 |
| Right ear air hearing level, $3000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A3 | 1591-1593 |
| Right ear air hearing level, $4000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A4 | 1594-1596 |
| Right ear air hearing level, $6000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A5 | 1597-1599 |
| Right ear air hearing level, $8000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A6 | 1600-1602 |
| Right ear air hear lvl, repeat, $1000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2A7 | 1603-1605 |
| Right ear air hearing level, 500 Hz (dB) | AURB2A8 | 1606-1608 |
| Audiometer number for retest | AURAUDO2 | 1609-1612 |
| Left ear hear lvl,first, retest, $1000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB1C1 | 1613 |
| Left ear air hear level, retest, $2000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB1C2 | 1614 |
| Left ear air hear level, retest, $3000 \mathrm{~Hz}(\mathrm{~dB}$ | Aurb1c3 | 1615 |
| Left ear air hear level, retest, $4000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB1C4 | 1616 |
| Left ear air hear level, retest, $6000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB1C5 | 1617 |
| Left ear air hear level, retest, $8000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB1C6 | 1618 |
| Lt ear hear lvl,repeat, retest, $1000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB1C7 | 1619 |
| Left ear air hear level, retest, $500 \mathrm{~Hz}(\mathrm{~dB})$ | AURB1C8 | 1620 |
| Rt ear hear level, first, retest, $1000 \mathrm{~Hz}(\mathrm{~dB}$ | AURB2C1 | 1621-1622 |
| Right ear air hear lvl,retest, $2000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C2 | 1623 |
| Right ear air hear lvl, retest, $3000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C3 | 1624 |
| Right ear air hear lvl, retest, $4000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C4 | 1625 |
| Right ear air hear lvl,retest, $6000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C5 | 1626 |
| Right ear air hear lvl, retest, $8000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C6 | 1627 |
| Rt ear hear lvl, repeat, retest, $1000 \mathrm{~Hz}(\mathrm{~dB})$ | AURB2C7 | 1628-1629 |
| Right ear air hear level, retest, $500 \mathrm{~Hz}(\mathrm{~dB}$ | AURB2C8 | 1630-1631 |
| Examiner number | AURTECH | 1632-1636 |
| Compliance (base-peak diff) left ear(ml) | TYRCMPLL | 1637-1639 |
| Compliance(base-peak diff) right ear(ml) | TYRCMPLR | 1640-1642 |
| Pressure at peak, left ear (daPa) | TYRPRSPL | 1643-1646 |
| Pressure at peak, right ear (daPa) | TYRPRSPR | 1647-1650 |
| Canal volume, left ear (ml) | TYRVOLL | 1651-1653 |
| Canal volume, right ear (ml) | TYRVOLR | 1654-1656 |
| Reflex, left ear (dB) | TYRRFXL | 1657-1659 |
| Reflex, right ear (dB) | TYRRFXR | 1660-1662 |
| Equiv volume at -400 daPa, left ear (ml) | TYRC000L | 1663-1667 |








| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Equiv volume at 170 daPa, right ear (ml) | TYRC114R | 2838-2842 |
| Equiv volume at 175 daPa, right ear (ml) | TYRC115R | 2843-2847 |
| Equiv volume at 180 daPa, right ear (ml) | TYRC116R | 2848-2852 |
| Equiv volume at 185 daPa, right ear (ml) | TYRC117R | 2853-2857 |
| Equiv volume at 190 daPa, right ear (ml) | TYRC118R | 2858-2862 |
| Equiv volume at 195 daPa, right ear (ml) | TYRC119R | 2863-2867 |
| Equiv volume at 200 daPa, right ear (ml) | TYRC120R | 2868-2872 |
| Examiner | TYRTECH | 2873-2877 |
| Surgery on chest or abdomen past 3 weeks | SPRQ1 | 2878 |
| Hospitalized for heart problem past 6 wk | SPRQ2 | 2879 |
| Smoked cigarette, eaten, etc in past hr | SPRQ3 | 2880 |
| Cough cold or other acute illness | SPRQ4 | 2881 |
| Respiratory infections in past 3 weeks | SPRQ5 | 2882 |
| Position for home examination | HXREJ 6A2 | 2883 |
| Examiner \# - from spirometry data file | SPRTECH1 | 2884-2888 |
| \# forced vital cap(FVC) trials attempted | SPRTRIAL | 2889-2890 |
| Peak expiratory flow, largest value (ml) | SPRPEAK | 2891-2895 |
| FEV at 0.5 seconds, largest value (ml) | SPRFEV05 | 2896-2899 |
| FEV1 at 1.0 seconds, largest value (ml) | SPRFEV1 | 2900-2903 |
| FEV3 at 3.0 seconds, largest value (ml) | SPRFEV3 | 2904-2908 |
| FEV6 at 6.0 seconds, largest value (ml) | SPRFEV6 | 2909-2913 |
| FVC, largest value (ml) | SPRFVC | 2914-2918 |
| Max mid-expiratory flow(ml/sec best crv) | SPRMMEF | 2919-2923 |
| Spirometer type | SPRTYPE | 2924 |
| Reproducibility code | SPRREPRO | 2925 |
| Review evaluation | SPRRELIA | 2926 |
| Number of acceptable trials | SPRMANEU | 2927-2928 |
| Time of day test was conducted (hh:mm) | SPRTIME | 2929-2933 |
| Expiratory time trial, largest FVC (sec) | SPREXPIR | 2934-2935 |
| FEF at 75\% of FVC (ml) | SPRFEF75 | 2936-2939 |
| Spirometer internal temperature(Celsius) | SPRTEMP | 2940-2941 |
| Times per week exercise makes you sweat | MYRA1 | 2942-2943 |
| \# teams/exercise programs in past year | MYRA2 | 2944 |
| Hours of TV watched yesterday | MYRA3 | 2945 |


|  | Variable |  |
| :---: | :---: | :---: |
| Description | Name | Positions |


| ve you smoked at least one cigarette | MYRB1 | 2946 |
| :---: | :---: | :---: |
| Age when first smoked cigarette | MYRB2 | 2947-2948 |
| Have you smoked 100+ cigarettes in life | MYRB3 | 2949 |
| Age first smoked cigarettes regularly | MYRB4 | 2950-2951 |
| Do you smoke cigarettes now | MYRB5 | 2952 |
| Cigarettes smoked per day - recoded | MYRB6R | 2953-2954 |
| Years smoked reported amount - recoded | MYRB7R | 2955-2956 |
| Smoked more than \# in B6 for 1+ yrs | MYRB8 | 2957 |
| Cigarettes smoked/day when smoked most | MYRB9S | 2958-2959 |
| Ever quit smoking for 1 year or more | MYRB10 | 2960 |
| Cigarettes smoked in the past 5 days | MYRB11 | 2961-2963 |
| Age last smoked cigarettes regularly | MYRB12 | 2964-2965 |
| Cigarettes usually smoked per day | MYRB13S | 2966-2967 |
| Quit smoking due to health problems | MYRB14 | 2968 |
| Ever tried chewing tobacco or snuff | MYRB15 | 2969 |
| Age first tried chew tobacco or snuff | MYRB16 | 2970-2971 |
| Used 5+ containers chew tobacco or snuff | MYRB17 | 2972 |
| Age started using chew tobacco/snuff reg | MYRB18 | 2973-2974 |
| Now use chewing tobacco or snuff | MYRB19 | 2975 |
| Which use now - chewing tobacco or snuff | MYRB20 | 2976 |
| Containers chewing tobacco used per week | MYRB21AS | 2977 |
| Containers of snuff used per week | MYRB21CS | 2978 |
| Place tobacco in side or front of mouth | MYRB22A | 2979 |
| Put tobacco in top or bottom of mouth | MYRB22B | 2980 |
| Containrs chew tobacco/snuff past 5 days | MYRB23 | 2981 |
| Age last used chew tobacco/snuff reg | MYRB24 | 2982-2983 |
| Which last used - chewing tobacco/snuff | MYRB25 | 2984 |
| Quit chew tobacco/snuff due to health | MYRB26 | 2985 |
| How many pipes smoked in past 5 days | MYRB27A | 2986 |
| How many cigars smoked in past 5 days | MYRB27B | 2987 |
| Age check item used in skip pattern | MYRB28 | 2988 |
| Pieces of nicotine gum used last 5 days | MYRB29 | 2989 |
| Age/sex check item used in skip pattern | MYRC1A | 2990 |
| Age when menstrual cycles started | MYRC2 | 2991-2992 |
| How long ago was your last period | MYRC3 | 2993-2994 |
| Age check item used in skip pattern | MYRC4 | 2995 |
| Ever taken birth control pills | MYRC5 | 2996 |

## NHANES III Data File Index

| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Age began taking birth control pills | MYRC6 | 2997-2998 |
| How many days ago stopped BC pills | MYRC7S | 2999-3000 |
| How many months took birth control pills | MYRC8S | 3001-3002 |
| Brand of birth control pill code | MYRC9R | 3003-3005 |
| Have you ever been pregnant | MYRC10 | 3006 |
| How many times have you been pregnant | MYRC11 | 3007 |
| Total number of live births | MYRC12 | 3008 |
| Age at first live birth - recoded | MYRC13R | 3009-3010 |
| Age at the time of last live birth | MYRC14 | 3011-3012 |
| Did you breastfeed any of your children | MYRC15 | 3013 |
| How many children did you breastfeed | MYRC16 | 3014 |
| Are you now pregnant | MYRC17 | 3015 |
| Month of current pregnancy | MYRC18 | 3016-3017 |
| Have you been pregnant in the last 2 yrs | MYRC19 | 3018 |
| Months since last pregnancy ended | MYRC20 | 3019 |
| Receive benefits from WIC in last 12 mo | MYRC21 | 3020 |
| Receiving benefits from WIC now | MYRC22 | 3021 |
| How many months received WIC benefits | MYRC23S | 3022-3023 |
| C12 check item used in skip pattern | MYRC24 | 3024 |
| Are you now breastfeeding your child | MYRC25 | 3025 |
| Age/sex/pregnancy check item for skip | MYRC26 | 3026 |
| Ever had sexual intercourse - recoded | MYRC27R | 3027 |
| Age at first sexual intercourse | MYRC28 | 3028-3029 |
| Treated for anemia within past 3 months | MYRD1 | 3030 |
| How many colds, flu, etc in past 4 weeks | MYRD2 | 3031-3032 |
| Taken antihistamine in the past 2 days | MYRD3 | 3033 |
| Taken prescription med in past 24 hrs | MYRD 4 | 3034 |
| Taken vitamins/minerals in past 24 hrs | MYRD 5 | 3035 |
| How often do you eat breakfast | MYRE1 | 3036 |
| Are you overweight, under, about right | MYRE2 | 3037 |
| Want to weigh more, less, or stay same | MYRE3 | 3038 |
| Tried to lose weight in last 12 months | MYRE4 | 3039 |
| Currently trying to lose weight | MYRE5 | 3040 |
| Change diet due to health last 12 months | MYRE 6 | 3041 |
| Diet change reason - overweight/obesity | MYRE7A | 3042 |
| Diet change reason - high blood pressure | MYRE7B | 3043 |
| Diet change - high blood cholesterol | MYRE7C | 3044 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Diet change reason - heart disease | MYRE7D | 3045 |
| Diet change reason - diabetes | MYRE7E | 3046 |
| Diet change reason - allergies | MYRE7F | 3047 |
| Diet change reason - ulcer | MYRE7G | 3048 |
| Diet change reason - cancer | MYRE7H | 3049 |
| Diet change reason - pregnancy | MYRE7I | 3050 |
| Diet change reason - health in general | MYRE7J | 3051 |
| Diet change reason - other | MYRE7K | 3052 |
| Had at least 12 drinks alcohol in life | MYRF1 | 3053 |
| Had at least 12 drinks in last 12 months | MYRF2 | 3054 |
| \# of days drank alcohol in past 12 mos | MYRF3S | 3055-3057 |
| Avg drinks per day on drinking day | MYRF 4 | 3058-3059 |
| \# days had 9+ drinks in past 12 mos | MYRF5S | 3060-3062 |
| \# days had 5+ drinksin past 12 mos | MYRF6S | 3063-3065 |
| Have you ever used marijuana | MYRF7 | 3066 |
| Number of times used marijuana in life | MYRF 8 | 3067 |
| \# of days used marijuana past month | MYRF9 | 3068-3069 |
| Have you ever used crack or cocaine | MYRF10 | 3070 |
| Number times used crack/cocaine in life | MYRF11 | 3071 |
| Days used crack/cocaine in last month | MYRF12 | 3072 |
| Check item.Respondent relationship to SP | MYRH1 | 3073 |
| Reason for accepting proxy | MYRH2 | 3074 |
| Was SP present during interview | MYRH3 | 3075 |
| Examiner number | MYREXMNR | 3076-3079 |
| Language of DIS interview | MQRDLANG | 3080 |
| Depression data flag | MQRDPFLG | 3081 |
| Mania data flag | MQRMNFLG | 3082 |
| Hard copy flag | MQRHCFLG | 3083 |
| G1 - DIS data flag | MQRG01 | 3084 |
| G2 Lifetime depressed mood | MQRG02 | 3085 |
| G3 2 years depressed mood | MQRG03 | 3086 |
| G4 Tell doctor about depressed mood | MQRG0 4 | 3087 |
| G05 Lost appetite symptom | MQRG05L | 3088-3089 |
| G05 Tell doctor | MQRG0501 | 3090 |
| G06 Lost weight symptom | MQRG06L | 3091-3092 |
| G06 Tell doctor | MQRG0601 | 3093 |
| G07 Gain weight symptom | MQRG07L | 3094-3095 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| G07 Tell doctor | MQRG0701 | 3096 |
| \# Pos eating symptom-depression lifetime | MQRDGP1L | 3097 |
| G08 Trouble sleep symptom | MQRG08L | 3098-3099 |
| G08 Tell doctor | MQRG0801 | 3100 |
| G09 Sleep too much symptom | MQRG09L | 3101-3102 |
| G09 Tell doctor | MQRG0901 | 3103 |
| \# Pos sleep symptoms-depression lifetime | MQRDGP 2 L | 3104 |
| G10 Tired symptom | MQRG10L | 3105-3106 |
| G10 Tell doctor | MQRG1001 | 3107 |
| G10 Symptom comment flag | MQRG1011 | 3108 |
| \# Pos tired symptoms-depression lifetime | MQRDGP 3L | 3109 |
| G11 Talk/move slowly symptom | MQRG11L | 3110-3111 |
| G11 Tell doctor | MQRG1101 | 3112 |
| G12 Move a lot symptom | MQRG12L | 3113-3114 |
| G12 Tell doctor | MQRG1201 | 3115 |
| \# Pos movement sym-depression lifetime | MQRDGP 4L | 3116 |
| G13 Less sex symptom | MQRG13L | 3117-3118 |
| G13 Tell doctor | MQRG1301 | 3119 |
| G13-D Tell other professional | MQRG1302 | 3120 |
| G13-E Take medication >=1 | MQRG1303 | 3121 |
| G13-F Interfere alot | MQRG1304 | 3122 |
| \# Pos sexual symptom-depression lifetime | MQRDGP 5L | 3123 |
| G14 Worthless,sinful or guilty symptom | MQRG14L | 3124-3125 |
| \# Pos guilt symptoms-depression lifetime | MQRDGP 6L | 3126 |
| G15 Concentrate symptom | MQRG15L | 3127-3128 |
| G15 Tell doctor | MQRG1501 | 3129 |
| G16 Thoughts slow symptom | MQRG1 6L | 3130-3131 |
| G16 Tell doctor | MQRG1601 | 3132 |
| \# Pos think symptoms-depression lifetime | MQRDGP 7L | 3133 |
| G17 Thought alot about death symptom | MQRG17L | 3134-3135 |
| G18 Felt like wanted to die symptom | MQRG18L | 3136-3137 |
| G19 Thought of commiting suicide symptom | MQRG19L | 3138-3139 |
| G20 Attempted suicide symptom | MQRG20L | 3140-3141 |
| \# Pos death symptoms-depression lifetime | MQRDGP 8L | 3142 |
| G21 Check item - ask about dep spells | MQRG21 | 3143 |
| G22 Feel blue \& have problem together | MQRG22 | 3144 |
| G23 Sure never had problem together | MQRG23 | 3145 |
| G24 Not feel blue but problem together | MQRG2 4 | 3146 |
| G25 Problem together \& feeling low | MQRG25 | 3147 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| G26 Depression longest spell in weeks | MQRG26 | 3148-3151 |
| G27 \# depressed spells lifetime | MQRG27 | 3152-3154 |
| G28 Tell doctor about depressed spells | MQRG28 | 3155 |
| G29 Tell profess about depressed spells | MQRG29 | 3156 |
| G30 Take med during depressed spells | MQRG30 | 3157 |
| G31 Depressed spells interfere w/ life | MQRG31 | 3158 |
| G32 Age of first depressed spell | MQRG32 | 3159-3160 |
| G33 Depressed spells after death | MQRG33 | 3161 |
| G34 Depressed spell only due to death | MQRG34 | 3162 |
| G35 Depressed spell now | MQRG35 | 3163 |
| G36 When last depressed spell end | MQRG36 | 3164 |
| G37 Age last depressed spell end | MQRG37 | 3165-3166 |
| G38 Check item - ask about worst spell | MQRG38 | 3167 |
| G39 Age worst depressed spell | MQRG39 | 3168-3169 |
| G05 Lost appetite worst | MQRG05W | 3170 |
| G06 Lost weight worst | MQRG06W | 3171 |
| G07 Gain weight worst | MQRG07W | 3172 |
| G08 Trouble sleep worst | MQRG08W | 3173 |
| G09 Sleep too much worst | MQRG09W | 3174 |
| G10 Tired worst | MQRG10W | 3175 |
| G11 Talk/move slowly worst | MQRG11W | 3176 |
| G12 Move a lot worst | MQRG12W | 3177 |
| G13 Less sex worst | MQRG13W | 3178 |
| G14 Worthless, sinful or guilty worst | MQRG14W | 3179 |
| G15 Concentrate worst | MQRG15W | 3180 |
| G16 Thoughts slow worst | MQRG16W | 3181 |
| G17 Thought alot about death worst | MQRG17W | 3182 |
| G18 Felt like wanted to die worst | MQRG18W | 3183 |
| G19 Thought of committing suicide worst | MQRG19W | 3184 |
| G20 Attempted suicide worst | MQRG20W | 3185 |
| G41 Excited/high symptom | MQRG41L | 3186-3187 |
| G42 More active symptom | MQRG42L | 3188-3189 |
| G43 Spending spree symptom | MQRG43L | 3190-3191 |
| G44 Strongly sexual symptom | MQRG44L | 3192-3193 |
| G45 Talked too fast symptom | MQRG45L | 3194-3195 |
| G46 Thoughts raced symptom | MQRG46L | 3196-3197 |
| G47 Special gifts symptom | MQRG47L | 3198-3199 |
| Example of mania special powers | MQRG47EX | 3200 |
| G48 Slept less symptom ... | MQRG48L | 3201-3202 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| G49 Easily distracted symptom | MQRG49L | 3203-3204 |
| G50 Check item - ask about mania spells | MQRG50 | 3205 |
| G51 Feel high \& have problems together | MQRG51 | 3206 |
| G52 Sure never had problems together | MQRG52 | 3207 |
| G53 Not feel high but problems together | MQRG53 | 3208 |
| G54 Problems together \& irritable | MQRG54 | 3209 |
| G55 Mania longest spell in weeks | MQRG55 | 3210-3213 |
| G56 \# mania spells lifetime | MQRG56 | 3214-3216 |
| G57 Tell doctor about mania spells | MQRG57 | 3217 |
| G58 Tell professional about mania spells | MQRG58 | 3218 |
| G59 Take medicine during mania spells | MQRG59 | 3219 |
| G60 Mania spells interfere w/ life | MQRG60 | 3220 |
| G61 Age of first mania spell | MQRG61 | 3221-3222 |
| G62 Mania spell now | MQRG62 | 3223 |
| G63 When last mania spell end | MQRG63 | 3224 |
| G64 Age last mania spell end | MQRG64 | 3225-3226 |
| G65 Check item - ask about mania spells | MQRG 65 | 3227 |
| G66 Age worst mania spell | MQRG66 | 3228-3229 |
| G42 More active worst | MQRG42W | 3230 |
| G43 Spending spree worst | MQRG43W | 3231 |
| G44 Strongly sexual worst | MQRG44W | 3232 |
| G45 Talked too fast worst | MQRG45W | 3233 |
| G46 Thoughts raced worst | MQRG46W | 3234 |
| G47 Special gifts worst | MQRG47W | 3235 |
| G48 Slept less worst | MQRG48W | 3236 |
| G49 Easily distracted worst | MQRG49W | 3237 |
| \# Pos eating sym-depression worst period | MQRDGP1W | 3238 |
| \# Pos sleep sym- depression worst period | MQRDGP 2W | 3239 |
| \# Pos tired sym-depression worst period | MQRDGP 3W | 3240 |
| \# Pos movement sym-depress worst period | MQRDGP 4W | 3241 |
| \# Pos sexual sym-depression worst period | MQRDGP 5W | 3242 |
| \# Pos guilt sym-depression worst period | MQRDGP 6W | 3243 |
| \# Pos think sym-depression worst period | MQRDGP 7W | 3244 |
| \# Pos death sym-depression worst period | MQRDGP 8W | 3245 |
| Total pos sym depression groups-worst | MQRDGPSW | 3246-3247 |
| Dysphoria for depression | MQRDYSFR | 3248 |
| Total pos sym depress + dysphoria -worst | MQRDPSX1 | 3249-3250 |
| DSMIII major depression | MQRDEP | 3251-3252 |
| Age 1st depressive symptoms w/depress DX | MQRFDDP | 3253-3254 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Age last depressive symptom w/depress DX | MQRLDDP | 3255-3256 |
| Total pos sym dep groups +dysphoria-life | MQRDPSX2 | 3257-3258 |
| Pos hyper-act/sex sym-mania worst period | MQRMNG1W | 3259 |
| Pos speech symptom - mania worst period | MQRMNG2W | 3260 |
| Pos racing thoughts sym-mania worst pd | MQRMNG3W | 3261 |
| Pos special gifts sym-mania worst period | MQRMNG4W | 3262 |
| Pos less sleep sym-mania worst period | MQRMNG5W | 3263 |
| Pos distractibility sym-mania worst pd | MQRMNG6W | 3264 |
| Pos spending symptom-mania worst period | MQRMNG7W | 3265 |
| Total pos symptom mania groups-worst | MQRMNGSW | 3266-3267 |
| One week euphoric/irritable | MQREUFOR | 3268 |
| Tot pos sym mania groups+euphoric-worst | MQRMNSX1 | 3269-3270 |
| DSMIII mania | MQRMANIA | 3271-3272 |
| Age first mania symptoms with mania DX | MQRFDMN | 3273-3274 |
| Age last mania symptoms with mania DX | MQRLDMN | 3275-3276 |
| Tot pos sym mania gps+euphoria-lifetime | MQRMNSX2 | 3277-3278 |
| DSMIII single episode major depression | MQRDEPSE | 3279-3280 |
| Age first dep with single episode dep DX | MQRFDDSE | 3281-3282 |
| Age last dep with single episode dep DX | MQRLDDSE | 3283-3284 |
| DSMIII recurrent major depression | MQRDEPRT | 3285-3286 |
| Age first depressive w/ recurrent dep DX | MQRFDDRT | 3287-3288 |
| Age last depressive w/ recurrent dep DX | MQRLDDRT | 3289-3290 |
| >= 2 years depressive mood | MQRDYSA | 3291 |
| \# Lifetime symptoms for dysthymia | MQRDYSD | 3292-3293 |
| DSMIII dysthymia | MQRDYSTH | 3294-3295 |
| DSMIII bipolar with mania DX | MQRBIPOL | 3296-3297 |
| Age first bipolar symptoms w/ bipolar DX | MQRFDBI | 3298-3299 |
| Age last bipolar symptoms w/ bipolar DX | MQRLDBI | 3300-3301 |
| DSMIII atypical bipolar | MQRBIPII | 3302-3303 |
| Age first depressive with bipolar II DX | MQRFDBII | 3304-3305 |
| Age last depressive with bipolar II DX | MQRLDBII | 3306-3307 |
| Cigarettes smoked in the past 5 days | MARA1 | 3308-3310 |
| Number of pipes smoked past 5 days | MARA2A | 3311-3312 |
| Number of cigars smoked past 5 days | MARA2B | 3313-3314 |
| Containrs chew tobacco/snuff past 5 days | MARA3 | 3315-3316 |
| Pieces of nicotine gum used past 5 days | MARA 4 | 3317-3318 |
| Age check item used in skip pattern | MARB1 | 3319 |
| Three children: 1st story recall .. | MARB2A | 3320 |


| Description | Variab Name | Positions |
| :---: | :---: | :---: |
| House on fire: 1st story recall | MARB2B | 3321 |
| Fireman climbed in: 1st story recall | MARB2C | 3322 |
| Children rescued: 1st story recall | MARB2D | 3323 |
| Minor injuries: 1st story recall | MARB2E | 3324 |
| Everyone well: 1st story recall | MARB2F | 3325 |
| Currently trying to lose weight | MARC1 | 3326 |
| Treated for anemia within past 3 months | MARC2 | 3327 |
| How many colds, flu, etc in past 4 weeks | MARC3 | 3328-3329 |
| Times donated blood in past 12 months | MARC4 | 3330-3331 |
| How long ago was last blood donation-mos | MARC5 | 3332-3333 |
| Taken antihistamine in the past 2 days | MARC 6 | 3334 |
| Taken prescription med in past 24 hrs | MARC7 | 3335 |
| Taken vitamins/minerals in past 24 hrs | MARC8 | 3336 |
| Age check item used in skip pattern | MARD1 | 3337 |
| Three children: 2nd story recall | MARD2A | 3338 |
| House on fire: 2nd story recall | MARD2B | 3339 |
| Fireman climbed in: 2nd story recall | MARD2C | 3340 |
| Children rescued: 2nd story recall | MARD2D | 3341 |
| Minor injuries: 2nd story recall | MARD2E | 3342 |
| Everyone well: 2nd story recall | MARD2F | 3343 |
| Had at least 12 drinks alcohol in life | MARE1 | 3344 |
| Had at least 12 drinks in last 12 months | MARE2 | 3345 |
| \# of days drank alcohol in past 12 mos | MARE3S | 3346-3348 |
| Number of drinks per day on drinking day | MARE 4 | 3349-3350 |
| \# of days had 9+ drinks in past 12 mos | MARE5S | 3351-3353 |
| \# of days had 5+ drinks in past 12 mos | MARE6S | 3354-3356 |
| Ever drink 5+ drinks almost every day | MARE7 | 3357 |
| Age check item used in skip pattern | MARE8 | 3358 |
| Have you ever used marijuana | MARE 9 | 3359 |
| How many times used marijuana in life | MARE10 | 3360 |
| \# of days used marijuana in past month | MARE11 | 3361-3362 |
| Have you ever used crack or cocaine | MARE12 | 3363 |
| Number times used crack/cocaine in life | MARE13 | 3364 |
| Days used crack/cocaine in last month | MARE14 | 3365-3366 |
| Age/sex check item used in skip pattern | MARF1 | 3367 |
| Age when menstrual cycles started - yrs | MARF2 | 3368-3369 |
| Age category menstrual cycles started | MARF3 | 3370 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Have you ever been pregnant | MARF 4 | 3371 |
| How many times have you been pregnant | MARF5 | 3372-3373 |
| Total number of live births | MARF 6 | 3374-3375 |
| Age at first live birth recoded - years | MARF7R | 3376-3377 |
| Age at the time of last live birth - yrs | MARF 8 | 3378-3379 |
| Did you breastfeed any of your children | MARF9 | 3380 |
| How many children did you breastfeed | MARF10 | 3381-3382 |
| Age check item used in skip pattern | MARF11 | 3383 |
| Are you now pregnant | MARF12 | 3384 |
| Pregnancy status recode | MARF12R | 3385 |
| Month of current pregnancy | MARF13 | 3386 |
| Have you been pregnant in the last 2 yrs | MARF14 | 3387 |
| Months since last pregnancy ended | MARF15 | 3388 |
| Receive benefits from WIC in last 12 mos | MARF16 | 3389 |
| Receiving benefits from WIC now | MARF17 | 3390 |
| How many months received WIC benefits | MARF18S | 3391-3393 |
| F6 check item used in skip pattern | MARF19 | 3394 |
| Are you now breastfeeding your child | MARF20 | 3395 |
| Have you had a period in past 12 months | MARF21 | 3396 |
| How long ago was your last period | MARF22 | 3397-3398 |
| How old when had last period - years | MARF23 | 3399-3401 |
| Age category at last period | MARF24 | 3402-3403 |
| Have you had a hysterectomy | MARF25 | 3404 |
| How old when you had hysterectomy | MARF26 | 3405-3407 |
| Have you had one or both ovaries removed | MARF27 | 3408 |
| Were both ovaries removed or only one | MARF28 | 3409 |
| How old when ovary removed - years | MARF29 | 3410-3412 |
| Ever taken birth control pills | MARF30 | 3413 |
| Age began taking birth control pills-yrs | MARF31 | 3414-3415 |
| How many days ago stop taking BC pills | MARF32S | 3416-3418 |
| How many months took birth control pills | MARF33S | 3419-3421 |
| Brand of birth control pills code | MARF34R | 3422-3424 |
| F30-F32 check item used in skip patterns | MARF34CK | 3425 |
| Ever have NORPLANT implant | MARF34A | 3426 |
| Have NORPLANT inplant now | MARF34B | 3427 |
| How many months ago NORPLANT implanted | MARF34CS | 3428-3429 |
| F-section check item for skip pattern | MARF 35 | 3430 |
| Did periods stop due to radiation/chemo | MARF36 | 3431 |
| Ever take estrogen by mouth | MARF37 | 3432 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Age when first took estrogen pills - yrs | MARF38 | 3433-3435 |
| How many months ago stop estrogen pills | MARF39S | 3436-3438 |
| How many years took estrogen pills | MARF 40 | 3439-3440 |
| Ever used estrogen cream, supp, inject | MARF 41 | 3441 |
| Age first used estrogen crm,sup,inj -yrs | MARF 42 | 3442-3444 |
| Months since used estrogen cream, sup,inj | MARF43S | 3445-3447 |
| Years used estrogen cream, supp, inject | MARF 44 | 3448-3449 |
| Ever used female hormone patches | MARF 45 | 3450 |
| Age when first used hormone patches -yrs | MARF46 | 3451-3452 |
| Months since used hormone patches | MARF 47 S | 3453-3455 |
| How many years used hormone patches | MARF 48 | 3456 |
| Age check item used in skip pattern | MARF 49 | 3457 |
| Age at first sexual intercourse - years | MARF50 | 3458-3459 |
| How many different sex partners ever | MARF51 | 3460-3463 |
| Sex/F51 check item used in skip pattern | MARF52 | 3464 |
| Was this partner female or male | MARF53 | 3465 |
| How many partners have been female | MARF54R | 3466-3469 |
| How many partners have been male | MARF55 | 3470-3471 |
| \# of different sex partners in past year | MARF56 | 3472-3473 |
| Has doctor told you had genital herpes | MARF57 | 3474 |
| Check item. Respondent relationship to SP | MARH1 | 3475 |
| Specify other relationship to SP | MARH1OS | 3476 |
| Reason for accepting proxy | MARH2 | 3477 |
| Was SP present during interview | MARH3 | 3478 |
| Instrument used for interview | MARLANG | 3479 |
| Examiner number | MAREXMNR | 3480-3483 |
| Technician number | BDRTECH | 3484-3488 |
| Acceptable or rejected scan | BDRSCAN | 3489 |
| Hip side that was scanned | BDRSIDE | 3490 |
| Bone area of femur neck region - cm sq | BDRFNARE | 3491-3494 |
| Bone mineral content of femur neck - gm | BDRFNBMC | 3495-3499 |
| Bone mineral density femur neck-gm/cm sq | BDRFNBMD | 3500-3504 |
| Bone area of trochanter region - cm sq | BDRTRARE | 3505-3509 |
| BMC of trochanter region - gm | BDRTRBMC | 3510-3514 |
| BMD of trochanter region - gm/cm sq | BDRTRBMD | 3515-3519 |
| Bone area intertrochanter region - cm sq | BDRINARE | 3520-3524 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| BMC of intertrochanter region - gm | BDRINBMC | 3525-3529 |
| BMD of intertrochanter region - gm/cm sq | BDRINBMD | 3530-3534 |
| Bone area Ward's triangle region - cm sq | BDRWTARE | 3535-3539 |
| BMC of Ward's triangle region - gm | BDRWTBMC | 3540-3544 |
| BMD of Ward's triangle region - gm/cm sq | BDRWTBMD | 3545-3549 |
| Bone area of total region - cm sq | BDRTOARE | 3550-3554 |
| Bone mineral content of total region -gm | BDRTOBMC | 3555-3559 |
| Bone minrl density total region-gm/cm sq | BDRTOBMD | 3560-3564 |
| $K$ value for scan | BDRK | 3565-3569 |
| dO value for scan | BDRD 0 | 3570-3574 |
| Age check item used in skip pattern | HXRB1 | 3575 |
| Had cereal in past month | HXRB2A | 3576 |
| Had fruit in past month | HXRB2B | 3577 |
| Had yellow/orange vegetables past month | HXRB2C | 3578 |
| Had green vegetables in past month | HXRB2D | 3579 |
| Had meat in past month | HXRB2E | 3580 |
| Had egg yolk or egg in past month | HXRB2F | 3581 |
| Had combo meat/vegetable dinners past mo | HXRB2G | 3582 |
| Had yogurt/cheese, etc in past month | HXRB2H | 3583 |
| Had bread, rolls, etc in past month | HXRB2I | 3584 |
| Had desserts in past month | HXRB2J | 3585 |
| Had breastmilk in past month | HXRB2K | 3586 |
| Had formula in past month | HXRB2L | 3587 |
| Had regular cow's milk in past month | HXRB2M | 3588 |
| Had fruit juices in past month | HXRB2N | 3589 |
| Had Kool-aid, etc in past month | HXRB2O | 3590 |
| Age check item used in skip pattern | HXRD1 | 3591 |
| Three children: 1st story recall | HXRD2A | 3592 |
| House on fire: 1st story recall | HXRD2B | 3593 |
| Fireman climbed in: 1st story recall | HXRD2C | 3594 |
| Children rescued: 1st story recall | HXRD2D | 3595 |
| Minor injuries: 1st story recall | HXRD2E | 3596 |
| Everyone well: 1st story recall | HXRD 2 F | 3597 |
| Treated for anemia in past 3 months | HXRE1 | 3598 |
| How many infections in the past 4 weeks | HXRE2 | 3599-3600 |
| Times donated blood in past 12 month | HXRE3 | 3601-3602 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| How long since last blood donation | HXRE4 | 3603-3604 |
| Currently trying to lose weight | HXRE5 | 3605 |
| Take antihistamine in past 2 days | HXRE6 | 3606 |
| Take prescription med in past 24 hours | HXRE7 | 3607 |
| Take vitamins/minerals in past 24 hours | HXRE8 | 3608 |
| Age check item used in skip pattern | HXRF1 | 3609 |
| Three children: 2nd story recall | HXRF2A | 3610 |
| House on fire: 2nd story recall | HXRF2B | 3611 |
| Fireman climbed in: 2nd story recall | HXRF2C | 3612 |
| Children rescued: 2nd story recall | HXRF2D | 3613 |
| Minor injuries: 2nd story recall | HXRF2E | 3614 |
| Everyone well: 2nd story recall | HXRF 2 F | 3615 |
| How many cigarettes smoked past 5 days | HXRG1 | 3616-3618 |
| How many pipes smoked in past 5 days | HXRG2A | 3619-3620 |
| How many cigars smoked in past 5 days | HXRG2B | 3621-3622 |
| Containrs chew tobacco/snuff past 5 days | HXRG3 | 3623-3624 |
| Pieces of nicotine gum used past 5 days | HXRG4 | 3625 |
| Sex check item used in skip pattern | HXRH1 | 3626 |
| How old when menstrual cycles started | HXRH2 | 3627-3628 |
| Age category menstrual cycles started | HXRH3 | 3629 |
| Had period in the past 12 months | HXRH 4 | 3630 |
| How long since last period | HXRH5 | 3631-3632 |
| Reason for not having period | HXRH 6 | 3633-3634 |
| How old when you had last period | HXRH7 | 3635-3637 |
| Age category at last period | HXRH8 | 3638 |
| Have you had a hysterectomy | HXRH 9 | 3639 |
| How old when you had hysterectomy | HXRH10 | 3640-3642 |
| Have you had one or both ovaries removed | HXRH11 | 3643 |
| Were both ovaries removed or only one | HXRH12 | 3644 |
| How old when ovary/ovaries were removed | HXRH13 | 3645-3647 |
| Ever taken birth control pills | HXRH14 | 3648 |
| Age first took birth control pills | HXRH15 | 3649-3650 |
| Days since stopped birth control pills | HXRH16S | 3651-3655 |
| How many months took birth control pills | HXRH17S | 3656-3658 |
| Check item used in skip pattern | HXRH18 | 3659 |
| Ever take estrogen in any form | HXRH19 | 3660 |
| Age when first took estrogen | HXRH20 | 3661-3663 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| How many months ago stopped estrogen | HXRH21S | 3664-3667 |
| How many years on estrogen | HXRH22 | 3668-3669 |
| Instrument used for interview | HXRLANG | 3670-3671 |
| Examiner number | HXREXMNR | 3672-3675 |
| Are there any abdominal surgical scars | GURQ7 | 3676 |
| Surgical scar - area 1 | GURQ8A1 | 3677 |
| Surgical scar - area 2 | GURQ8A2 | 3678 |
| Surgical scar - area 3 | GURQ8A3 | 3679 |
| Surgical scar - area 4 | GURQ8A4 | 3680 |
| Surgical scar - area 5 | GURQ8A5 | 3681 |
| Surgical scar - area 6 | GURQ8A6 | 3682 |
| Thickness of gallbladder wall (mm) | GURQ18 | 3683-3684 |
| Adjud. finding - largest echo clump (mm) | GURQ24R | 3685-3686 |
| Technician primary finding - ultra | GURTDX1 | 3687-3688 |
| Sonographer - primary finding | GURTDX1R | 3689-3690 |
| Other nonGB findings - renal - recode | GURQ37R | 3691 |
| Other nonGB find -hepatic/liver -recode | GURQ38R | 3692 |
| Radiologist notes indicate liver cyst | GURLCSTR | 3693 |
| Other nonGB -liver cysts, size(cm,yrs4-6) | GURLCSZE | 3694-3696 |
| Radiologist notes indicate renal cyst | GURRCSTR | 3697 |
| Other nonGB -renal cysts, size(cm,yrs4-6) | GURRCSZE | 3698-3701 |
| Radiologist notes indicate hemangioma | GURLHMGR | 3702 |
| Other nonGB-cav hemangioma, size(cm,y4-6) | GURCHSZE | 3703-3705 |
| Sonographer - secondary finding . | GURTDX2R | 3706-3707 |
| Radiologist ID number - first reading | GURR1ID | 3708 |
| Radiologist first reading - finding 1 | GURR1DX1 | 3709-3710 |
| Radiologist first reading - finding 2 | GURR1DX2 | 3711-3712 |
| Radiologist first reading - confidence | GURR1CNF | 3713 |
| Radiologist first reading - quality | GURR1QLT | 3714 |
| Radiologist ID number - second reading | GURR2 ID | 3715 |
| Final adjudicated primary finding | GURFDX1R | 3716-3717 |
| Final adjudicated secondary finding | GURFDX2R | 3718-3719 |
| Technician number | GURTECH | 3720-3724 |
| Other nonGB - GB polyp, size(mm,yrs 4-6) | GURGBPSZ | 3725-3726 |
| Num of days between 1st exam\&this repeat | MXRRDAYS | 3727-3729 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Date of MEC exam time in: month | MXRTIMO | 3730-3731 |
| Day of week of MEC exam | MXRTIDW | 3732 |
| Num of days between 1st exam\&this repeat | HXRRDAYS | 3733-3735 |
| Date of home exam: month | HXRTIMO | 3736-3737 |
| Day of week of home exam | HXRTIDW | 3738 |
| How much sleep did you get last night | CNRQ01 | 3739 |
| Now feeling energetic, ... exhausted | CNRQ02 | 3740 |
| Familiarity w/ computers: none,some, alot | CNRQ03 | 3741 |
| \# cups caffeine coffee, etc, past 3 hrs | CNRQ04 | 3742 |
| How many drinks of alcohol in past 3 hrs | CNRQ05 | 3743 |
| Which hand prefer to use for this test | CNRQ06 | 3744 |
| Simple Reaction Time Test (SRTT) complete | CNRQ07 | 3745 |
| Symbol Digit Substitution Test (SDST) | CNRQ08 | 3746 |
| Serial Digit Learning Test (SDLT) | CNRQ09 | 3747 |
| How hard tried to perform computer test | CNRQ10 | 3748 |
| Language used for test administration | CNRLANG | 3749 |
| Room temperature (degrees Fahrenheit) | CNRTEMP | 3750-3752 |
| Examiner number | CNRTECH | 3753-3757 |
| LOG: \# of trials with preferred hand | CNRNBPH | 3758 |
| SRTT: Trial 01 reaction time (msec) | CNRRT01 | 3759-3762 |
| SRTT: Trial 02 reaction time (msec) | CNRRT02 | 3763-3766 |
| SRTT: Trial 03 reaction time (msec) | CNRRT03 | 3767-3770 |
| SRTT: Trial 04 reaction time (msec) | CNRRT04 | 3771-3774 |
| SRTT: Trial 05 reaction time (msec) | CNRRT05 | 3775-3778 |
| SRTT: Trial 06 reaction time (msec) | CNRRT06 | 3779-3782 |
| SRTT: Trial 07 reaction time (msec) | CNRRT07 | 3783-3786 |
| SRTT: Trial 08 reaction time (msec) | CNRRT08 | 3787-3790 |
| SRTT: Trial 09 reaction time (msec) | CNRRT09 | 3791-3794 |
| SRTT: Trial 10 reaction time (msec) | CNRRT10 | 3795-3798 |
| SRTT: Trial 11 reaction time (msec) | CNRRT11 | 3799-3802 |
| SRTT: Trial 12 reaction time (msec) | CNRRT12 | 3803-3806 |
| SRTT: Trial 13 reaction time (msec) | CNRRT13 | 3807-3810 |
| SRTT: Trial 14 reaction time (msec) | CNRRT14 | 3811-3814 |
| SRTT: Trial 15 reaction time (msec) | CNRRT15 | 3815-3818 |
| SRTT: Trial 16 reaction time (msec) | CNRRT16 | 3819-3822 |
| SRTT: Trial 17 reaction time (msec) | CNRRT17 | 3823-3826 |
| SRTT: Trial 18 reaction time (msec) | CNRRT18 | 3827-3830 |



| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| SDST: Latency 4, trial 1 (sec) | CNR1LAT 4 | 3992-3996 |
| SDST: Latency 5, trial 1 (sec) | CNR1LAT5 | 3997-4001 |
| SDST: Latency 6, trial 1 (sec) | CNR1LAT6 | 4002-4006 |
| SDST: Latency 7, trial 1 (sec) | CNR1LAT7 | 4007-4011 |
| SDST: Latency 8, trial 1 (sec) | CNR1LAT8 | 4012-4016 |
| SDST: Latency 9, trial 1 (sec) | CNR1LAT9 | 4017-4021 |
| SDST: Total latency, trial 1 (sec) | CNR1TOTL | 4022-4027 |
| SDST: \# correct, latencies 2-9, trial 1 | CNRCORR1 | 4028-4029 |
| SDST: Corrected latency, trial 1 (sec) | CNRCLAT1 | 4030-4035 |
| SDST: Number of errors, trial 2 | CNR2ERR | 4036-4037 |
| SDST: Latency 1, trial 2 (sec) | CNR2LAT1 | 4038-4042 |
| SDST: Latency 2, trial 2 (sec) | CNR2LAT2 | 4043-4047 |
| SDST: Latency 3, trial 2 (sec) | CNR2LAT3 | 4048-4052 |
| SDST: Latency 4, trial 2 (sec) | CNR2LAT 4 | 4053-4057 |
| SDST: Latency 5, trial 2 (sec) | CNR2LAT5 | 4058-4062 |
| SDST: Latency 6, trial 2 (sec) | CNR2LAT 6 | 4063-4067 |
| SDST: Latency 7, trial 2 (sec) | CNR2LAT7 | 4068-4072 |
| SDST: Latency 8, trial 2 (sec) | CNR2LAT8 | 4073-4077 |
| SDST: Latency 9, trial 2 (sec) | CNR2LAT9 | 4078-4082 |
| SDST: Total latency, trial 2 (sec) | CNR2TOTL | 4083-4088 |
| SDST: \# correct, latencies 2-9, trial 2 | CNRCORR2 | 4089-4090 |
| SDST: Corrected latency, trial 2 (sec) | CNRCLAT2 | 4091-4096 |
| SDST: Number of errors, trial 3 | CNR3ERR | 4097-4098 |
| SDST: Latency 1, trial 3 (sec) | CNR3LAT1 | 4099-4103 |
| SDST: Latency 2, trial 3 (sec) | CNR3LAT2 | 4104-4108 |
| SDST: Latency 3, trial 3 (sec) | CNR3LAT3 | 4109-4113 |
| SDST: Latency 4, trial 3 (sec) | CNR3LAT4 | 4114-4118 |
| SDST: Latency 5, trial 3 (sec) | CNR3LAT5 | 4119-4123 |
| SDST: Latency 6, trial 3 (sec) | CNR3LAT 6 | 4124-4128 |
| SDST: Latency 7, trial 3 (sec) | CNR3LAT7 | 4129-4133 |
| SDST: Latency 8, trial 3 (sec) | CNR3LAT8 | 4134-4138 |
| SDST: Latency 9, trial 3 (sec) | CNR3LAT9 | 4139-4143 |
| SDST: Total latency, trial 3 (sec) | CNR3TOTL | 4144-4149 |
| SDST: \# correct, latencies 2-9, trial 3 | CNRCORR3 | 4150-4151 |
| SDST: Corrected latency, trial 3 (sec) | CNRCLAT3 | 4152-4157 |
| SDST: Number of errors, trial 4 | CNR4ERR | 4158-4159 |
| SDST: Latency 1, trial 4 (sec) | CNR4LAT1 | 4160-4164 |
| SDST: Latency 2, trial 4 (sec) | CNR4LAT2 | 4165-4169 |
| SDST: Latency 3, trial 4 (sec) | CNR4LAT3 | 4170-4174 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| SDST: Latency 4, trial 4 (sec) | CNR4LAT4 | 4175-4179 |
| SDST: Latency 5, trial 4 (sec) | CNR4LAT5 | 4180-4184 |
| SDST: Latency 6, trial 4 (sec) | CNR4LAT6 | 4185-4189 |
| SDST: Latency 7, trial 4 (sec) | CNR4LAT7 | 4190-4194 |
| SDST: Latency 8, trial 4 (sec) | CNR4LAT8 | 4195-4199 |
| SDST: Latency 9, trial 4 (sec) | CNR4LAT9 | 4200-4204 |
| SDST: Total latency, trial 4 (sec) | CNR4TOTL | 4205-4210 |
| SDST: \# correct, latencies 2-9, trial 4 | CNRCORR4 | 4211-4212 |
| SDST: Corrected latency, trial 4 (sec) | CNRCLAT 4 | 4213-4218 |
| SDST: Mean, 2 lowest corrected latencies | CNRCBEST | 4219-4223 |
| SDLT: Total 0 trials | CNRT0TRA | 4224 |
| SDLT: Score, trial 1 | CNR1SCOR | 4225 |
| SDLT: Score, trial 2 | CNR2SCOR | 4226 |
| SDLT: Score, trial 3 | CNR3SCOR | 4227 |
| SDLT: Score, trial 4 | CNR4SCOR | 4228 |
| SDLT: Score, trial 5 | CNR5SCOR | 4229 |
| SDLT: Score, trial 6 | CNR6SCOR | 4230 |
| SDLT: Score, trial 7 | CNR7SCOR | 4231 |
| SDLT: Score, trial 8 | CNR8SCOR | 4232 |
| SDLT summary: Trials to criterion | CNRTSTOC | 4233-4234 |
| SDLT summary: Total score | CNRTTSCR | 4235-4236 |
| Photo taken | FPRPHOTO | 4237 |
| Eye color: right eye | FPR1A | 4238 |
| Eye color: left eye | FPR1B | 4239 |
| Pupil size before dilation ... (mm) | FPR2 | 4240-4241 |
| Pupil size on camera monitor (mm) | FPR3 | 4242-4243 |
| Elapsed time:dark room/taking photo (min) | FPR4MIN | 4244-4245 |
| Elapsed time:dark room/taking photo(sec) | FPR4SEC | 4246-4247 |
| Photographer | FPRPHTG | 4248-4252 |
| Eye | FPREYE | 4253 |
| Grader code | FPR1005 | 4254-4256 |
| Fundus | FPR1020 | 4257-4258 |
| Focus | FPR1030 | 4259-4260 |
| Field definition | FPR1041 | 4261-4262 |
| Horizontal field definition | FPR1046 | 4263-4264 |
| Vertical field definition | FPR1047 | 4265-4266 |
| Artifact present | FPR1050 | 4267-4268 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Type of artifact: haze | FPR1051 | 4269-4270 |
| Type of artifact: dust/dirt | FPR1052 | 4271-4272 |
| Type of artifact: lashes | FPR1053 | 4273-4274 |
| Type of artifact: arc | FPR1054 | 4275-4276 |
| Type artifact:uneven illumination, center | FPR1055 | 4277-4278 |
| Type artifact:uneven illumination, edge | FPR1056 | 4279-4280 |
| Type of artifact: central dot | FPR1057 | 4281-4282 |
| Type of artifact: other | FPR1059 | 4283-4284 |
| Gradability | FPR1060 | 4285-4286 |
| Diabetic retinopathy level | FPR1070 | 4287-4289 |
| Hemorrhages or microaneurysms | FPR1080 | 4290-4291 |
| Hard exudates | FPR1090 | 4292-4293 |
| Soft exudates | FPR1100 | 4294-4295 |
| Intraretinal microvascular abnormalities | FPR1110 | 4296-4297 |
| Venous beading | FPR1120 | 4298-4299 |
| New vessels in disc | FPR1130 | 4300-4301 |
| New vessels elsewhere | FPR1140 | 4302-4303 |
| Fibrous proliferation | FPR1150 | 4304-4305 |
| Pre-retinal or vitreous hemorrhage | FPR1160 | 4306-4307 |
| Other abnormalities | FPR1170 | 4308-4309 |
| Degeneration, retinal pigment epithelium | FPR1172 | 4310-4311 |
| Central circle RPE degeneration | FPR1173 | 4312-4313 |
| Geographic atrophy | FPR1174 | 4314-4315 |
| Central circle geographic atrophy | FPR1175 | 4316-4317 |
| Sub-retinal hemorrhage | FPR1176 | 4318-4319 |
| Central circle sub-retinal hemorrhage | FPR1177 | 4320-4321 |
| Sub-retinal fibrous scar | FPR1178 | 4322-4323 |
| Central circle sub-retinal fibrous scar | FPR1179 | 4324-4325 |
| Sensory serous (sub-retinal) detachment | FPR1180 | 4326-4327 |
| Central cir sensory serous subret detach | FPR1181 | 4328-4329 |
| Hyperpigmentation | FPR1182 | 4330-4331 |
| Central circle hyperpigmentation | FPR1183 | 4332-4333 |
| Chorioretinal abnormalities, other | FPR1184 | 4334-4335 |
| Central cir chorioretinal abnormal,other | FPR1185 | 4336-4337 |
| Peripapillary atrophy | FPR1186 | 4338-4339 |
| Branch or central artery occlusion | FPR1188 | 4340-4341 |
| Central circle branch/artery occlusion | FPR1189 | 4342-4343 |
| Branch vein occlusion | FPR1190 | 4344-4345 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Central circle branch vein occlusion | FPR1191 | 4346-4347 |
| Central vein occlusion | FPR1192 | 4348-4349 |
| Central circle central vein occlusion | FPR1193 | 4350-4351 |
| Significant arterio-venous nicking | FPR1194 | 4352-4353 |
| Hollenhorst plaque | FPR1196 | 4354-4355 |
| Central circle hollenhorst plaque | FPR1197 | 4356-4357 |
| Asteroid hyalosis | FPR1198 | 4358-4359 |
| Central circle asteroid hyalosis | FPR1199 | 4360-4361 |
| Nevus | FPR1200 | 4362-4363 |
| Central circle nevus | FPR1201 | 4364-4365 |
| Surface wrinkling retinopathy | FPR1202 | 4366-4367 |
| Central circ surf wrinkling retinopathy | FPR1203 | 4368-4369 |
| Abnormal disc | FPR1204 | 4370-4371 |
| Large cup-to-disc ratio | FPR1205 | 4372-4373 |
| Histoplasmosis (POHS) | FPR1206 | 4374-4375 |
| Central circle histoplasmosis (POHS) | FPR1207 | 4376-4377 |
| Clinically, macular edema, hard exudates | FPR1208 | 4378-4379 |
| Central cir macular edema, hard exudates | FPR1209 | 4380-4381 |
| Retinal detachment | FPR1210 | 4382-4383 |
| Central circle retinal detachment | FPR1211 | 4384-4385 |
| Photocoagulation treatment in arcades | FPR1212 | 4386-4387 |
| Photocoagulation treatmt outside arcades | FPR1214 | 4388-4389 |
| Other miscellaneous abnormalities | FPR1220 | 4390-4391 |
| Other misc central circle abnormalities | FPR1221 | 4392-4393 |
| Answer drusen questions | FPR1228 | 4394-4395 |
| Hard drusen | FPR1230 | 4396-4397 |
| Soft drusen | FPR1240 | 4398-4399 |
| Drusen area: grid | FPR1250 | 4400-4401 |
| Drusen area: outside | FPR1260 | 4402-4403 |
| Drusen area: central circle | FPR1262 | 4404-4405 |
| Drusen area: inner circle | FPR1264 | 4406-4407 |
| Central circle soft drusen | FPR1266 | 4408-4409 |
| Summary diabetic retinopathy score | FPRSURET | 4410-4411 |
| Summary age-related maculopathy score | FPRSUMAC | 4412-4413 |
| Summary drusen score | FPRSUDRU | 4414-4415 |
| Health status screener . | PFRHHS | 4416-4417 |


| Description | Variable <br> Name | Positions |
| :---: | :---: | :---: |
| Right shoulder external rotation | PFRRSER | 4418 |
| Left shoulder external rotation | PFRLSER | 4419 |
| Right shoulder internal rotation | PFRRSIR | 4420 |
| Left shoulder internal rotation | PFRLSIR | 4421 |
| Ability to pick up key--first trial | PFRUKEY | 4422 |
| Ability to hold key--first trial | PFRHKEY | 4423 |
| Time to unlock lock--first trial (sec) | PFRTKEY | 4424-4427 |
| Check item-bedbound (home examinees only) | HXRBED | 4428 |
| Single chair stand, wheelchair (MEC only) | PFRWC | 4429 |
| Can get up from chair/wheelchair by self | PFRUPWC | 4430 |
| Use of arms to scoot forward | PFRSCOOT | 4431 |
| Ability to stand | PFRUSTND | 4432 |
| Time to complete five stands (sec) | PFRTSTND | 4433-4436 |
| Number of stands | PFRNSTND | 4437-4438 |
| Chair height (in) | HXRCHAIR | 4439-4442 |
| Right hip and knee flexion | PFRRFLEX | 4443 |
| Left hip and knee flexion | PFRLFLEX | 4444 |
| Ability to stand without holding on | PFRSTAND | 4445 |
| Time tandem stand held (sec) | PFRTTAND | 4446-4449 |
| Observed walking without help | PFROWALK | 4450 |
| Able to walk alone w/out another person | PFRRWALK | 4451 |
| Time to complete $8 \mathrm{ft} \mathrm{walk--trial} \mathrm{a} \mathrm{(sec)}$ | PFRTWLKA | 4452-4455 |
| Number of steps--trial a | PFRNSTPA | 4456-4457 |
| Time to complete 8 ft walk--trial b(sec) | PFRTWLKB | 4458-4461 |
| Number of steps--trial b | PFRNSTPB | 4462-4463 |
| Pain reported on walking | PFRPAIN | 4464 |
| Type of device used | PFRDEVIC | 4465 |
| Technician number | PFRTECH | 4466-4470 |

## GENERAL INFORMATION

The NHANES III Examination Data File contains data collected in the mobile examination center (MEC) as well as data collected during the home examination. The documentation pertaining specifically to the Examination Data File is divided into four main sections. The first section, "General Information," provides information about the contents of the Examination Data File. The second section, "Data File Index," includes a brief description of all the variables on the data set and shows the standard name of each variable and its position in the data set. The third section, "General Notes, Item Descriptions, Codes, Counts, and Notes" provides for each component, a description, the standard variable name and a brief description of the values that variable can take on, a count of the frequency of occurrence of each value, notes by variable, and appendices as necessary. "References" are provided in the fourth section.

Components administered in both the MEC and the home (e.g., spirometry, body measurements, physical function evaluation) are combined in this file if data collection methods were comparable. The file includes information from all the examination components as well as from all the questionnaires administered in the examination center and during the home examination. As noted earlier in this documentation, the second exams were administered following the same protocols as for the primary exam, with the following exceptions: the food frequency questionnaire was not administered to adolescents $12-16$ years; and the WISC/WRAT was not administered to youths 6-16 years. Data from blood and urine specimens are not contained in this file, but are in separate NHANES III Laboratory Data Files. Data from two examination components, electrocardiography (ECG) and radiography of the hands and knees, are not included in this file. ECG data will be released later with comparable data from NHANES I and NHANES II. The x-ray data will also be released later, after the images have been digitized. See the Table of Contents for a complete list of components included in this NHANES III data release. Since eligibility for examination components was determined by the age of the examinee, the components of this file are in order according to the target group for each component, from youngest to oldest.

Sample persons were examined in the MEC within four weeks of the household interview. However, a home examination was scheduled for those aged 2-11 months or 20 years and over who were frail or unable to come to the MEC. The home examination was designed to gather certain physical and physiological information on sample persons in their own homes through a subset of components normally done in the MEC. These components were: body measurements, venipuncture, spirometry, cognitive testing, and physical performance testing. Interviewed persons who completed at least one test or examination at the home were defined as home-examined.

Staff recorded all examination data directly into an automated data collection system. All staff received intensive initial training, and formal retraining programs were conducted throughout the survey to ensure that high skill levels were maintained. Details on survey instruments and forms, training manuals, and data collection procedures are published elsewhere (U.S. DHHS, 1996b).

```
Data processing and editing were performed to ensure internal data
consistency within components. Processing procedures are described in
each chapter of the this file. Notes are provided for standardized and
recoded variables, and for variables requiring additional information.
In some cases exceptions to the NHANES III conventions made in order to
enable NHANES III results comparisons with results from earlier surveys
or other studies. Such exceptions are described in the introduction to
the affected component or in individual variable notes.
One should note that for components such as the Dental Examination and
Audiometry which include negative value responses, value labels that
include ranges use a hyphen to indicate a range, from negative to
positive. For example, a range of -10 to 105 is written as -10-105.
Since NHANES III is based on a complex, multistage sample design,
appropriate sampling weights should be used in analyses to produce
national estimates of prevalence and associated variances while
accounting for unequal probability of selection of sample persons.
The final MEC examination weight, WTPFEX6, should be used for analysis
of the questionnaires and measurements administered in the MEC (except
for the allergy and central nervous system tests, which were performed
on half-samples and have their own weights), as well as for a combined
analysis of measurements from the MEC examinations and associated
medical history questions from the household interview. The final
MEC+home examination weight, WTPFHX6, should be used only in
conjunction with the MEC+home examined sample, and only with items
collected in both the MEC and the home.
```

NHANES III Examination Data File


## PHYSICIAN'S EXAMINATION

Examinations were conducted on all examinees by a trained physician in the mobile examination center (MEC). The protocol for this component did not detail any medical, safety, or other exclusions.

Because this component was administered in the examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The examination was performed by a board-eligible physician. Depending on the examinee's age, the examination included observation of gait, eye, and limb abnormalities; a joint examination of upper and lower extremities; blood pressure measurements; evaluation of heart and breath sounds; Tanner staging and breast-size measurements; and bioelectrical impedance analysis (BIA) resistance and reactance measurements.

Refer to Chapter 3 of the Physician Examiners Training Manual (U.S. DHHS, 1996b) and Pulse and Blood Pressure Procedures for Household Interviewers (U.S. DHHS, 1996b) for descriptions of data collection procedures and methods.

Although the BIA measures were recorded during the physician's examination, these data are included in the Body Measurements section of this data file.

Three sets of blood pressure measurements were taken in the examination center on examinees aged five years and over. For children and adolescents (aged 5-19 years), three Korotkoff (K) sounds were recorded: K1 (systolic); K4, muffling of pulse sounds (diastolic); and K5, disappearance of pulse sounds (diastolic). For adults (aged 20 years and over), only K1 (systolic) and K5 (diastolic) measurements were obtained. All blood pressure determinations were recorded to the nearest even number. Blood pressure measurements were also taken by trained interviewers during the household interview, on sample persons aged seventeen years and over. These data can be found in the NHANES III Household Adult Data File as part of the Household Adult Questionnaire in variables HAZA1-HAZNOK5R. Both physicians and interviewers took measurements using a mercury sphygmomanometer (W. A. Baum Co., Inc, Copiague, NY) according to the standardized blood pressure measurement protocols recommended by the American Heart Association (Frohlich, 1988).

In addition to taking part in an initial training course specific to the NHANES III examination procedures, examining physicians participated in a formal, annual re-training program. Their work in the field was monitored for quality by consultants and NCHS staff who visited the mobile examination centers; monitoring occurred once a month in the earlier years and every three months during the latter part of the survey.

For additional blood pressure quality control, physicians and household interviewers received a day and a half of initial blood pressure measurement training, were recertified quarterly, and were
retrained annually. Training consisted of instruction in the recognition of Korotkoff sounds using videotaped blood pressure examples, comparison of blood pressure readings with those of instructors using double-headed stethoscopes, and practice with volunteer subjects. Physicians and household interviewers who exhibited end-digit preferences, high/low measurement bias, or lack of consistent measurements repeated the training until their performances were deemed satisfactory for certification. Physicians and household interviewers were given hearing tests at the beginning of their employment and yearly thereafter.

Note that the coded values for "Yes" (2) and "No" (1) responses in the physician's examination vary from the usual coded values for "Yes" (1) and "No" (2) found in most other places in the NHANES III data files. They match the codes found on the Physician's Examination form (U.S. DHHS, 1996b).

Also note that a number of areas (joint examination, dermatitis, chest, and heart examination) in the Physician's Examination allow for multiple responses. For example, on the wrist examination (PER4A, PER4A1, PER4A2, and PER4A3), the examining physician may have found both tenderness and swelling (PER4A1=2 and PER4A2=2). Consequently, the overall positive findings in the detailed questions (PER4A1, PER4A2, and PER4A3) may exceed the number of positive findings reported in the lead question (PER4A).

Moreover, individuals classified as having a positive finding in a lead question may have an 8-fill, "Blank but applicable," in one of the associated detailed questions. The examining physician may have used "Blank but applicable" to account for situations in which he/she was unable to observe or examine the specific abnormality.

When blood pressure measurement data were edited and it was discovered that examinees aged twenty years and over were missing one of a K1/K5 pair of blood pressure measurements, the remaining one was made "Blank but applicable." However, for examinees under twenty years of age who lacked one or two of a set of $\mathrm{K} 1 / \mathrm{K} 4 / \mathrm{K} 5 \mathrm{blood}$ pressure measurements, a different approach was taken. In the majority of these cases, the missing values were for K 4 and K 5 measurements. Because the literature on pediatric blood pressure suggests that systolic blood pressure is the most reliable determination (Uhari, 1991), it was not desirable to delete this value if the associated $K 4$ and/or $K 5$ values were missing. Therefore, $K 1$ values in the data set were retained without the corresponding $K 4$ or $K 5$ values. This accounts for discrepancies in counts between K1 and K5 determinations (between PER6G1 and PER6G3, PER6H1 and PER6H3, and PER6I1 and PER6I3). Finally, when $K 4$ was equal to K5, K4 was coded as "Blank but applicable."

The analyst should be aware of the potential for observer bias when analyzing these data. During the six years of the survey, the number of examinations performed by each physician varied widely among the twelve physicians, from as few as 199 to as many as 9,529.

Data processing and editing were performed to ensure internal data consistency. Notes have been provided for variables requiring additional explanation.

| NHANES III Examination Data File |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SECOND EXAM DATA |  |  |  |  |  |  |  |
| PHYSICIAN'S EXAMINATION |  |  |  |  |  |  |  |
| LOCOMOTION |  |  |  |  |  |  |  |
| Positions Item description |  |  |  |  |  |  | Notes |
| 6 |  | Overall findings for locomotion |  |  |  |  |  |
| PER1 | 1567 | 1 No findings |  |  |  |  |  |
|  | 82 | 2 Yes, findings |  |  |  |  |  |
|  | 209 | 8 Blank but applicable |  |  |  |  |  |
|  | 738 | Blank |  |  |  |  |  |
| 7 |  | Limp or shuffle (3 years and over) |  |  |  |  |  |
| PER1A1 | 1586 | 1 No findings |  |  |  |  |  |
|  | 61 | 2 Yes, limp or shuffle |  |  |  |  |  |
|  | 211 | 8 Blank but applicable |  |  |  |  |  |
|  | 738 | Blank |  |  |  |  |  |
| 8 |  | Other gait abnormalities |  |  |  |  |  |
| PER1A2 |  | (3 years and over) |  |  |  |  |  |
|  | 1623 | 1 No findings |  |  |  |  |  |
|  | 24 | 2 Yes, other gait abnormality |  |  |  |  |  |
|  | 211 | 8 Blank but applicable |  |  |  |  |  |
|  | 738 | Blank |  |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| UPPER EXTREMITIES JOINT EXAMINATION |  |  |  |
| Positions <br> SAS name | Item description |  |  |
| 55 | Left finger 3, MCP joint: tenderness |  |  |
| PER4BTL3 (60 years and over) |  |  |  |
| 4021 No tenderness |  |  |  |
| 82 Tenderness |  |  |  |
| 438 Blank but applicable |  |  |  |
| 2143 Blank |  |  |  |
| 56 | Left finger 4, MCP joint: tenderness (60 years and over) |  |  |
| PER4BTL4 |  |  |  |
|  | 4051 No tenderness |  |  |
|  | 2 Tenderness |  |  |
|  | 438 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| 57 |  | Left finger 5, MCP joint: tenderness |  |
| PER4BTL5 | (60 years and over) |  |  |
|  | 4051 No tenderness |  |  |
|  | 2 Tenderness |  |  |
|  | 448 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| 58 | Right finger 1, MCP joint: swelling$(60$ years and over) |  |  |
| PER4BSR1 |  |  |  |
|  | 407 | 1 No swelling |  |
|  | 32 Swelling |  |  |
|  | 438 Blank but applicable |  |  |
|  | 2143 Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| UPPER EXTREMITIES JOINT EXAMINATION |  |  |  |
| Positions SAS name | ```Item description Counts and code``` |  | Notes |
| 59 |  | Right finger 2, MCP joint: swelling |  |
| PER4BSR2 |  | (60 years and over) |  |
|  | 404 | 1 No swelling |  |
|  | 6 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 60 |  | Right finger 3, MCP joint: swelling |  |
| PER4BSR3 |  | (60 years and over) |  |
|  | 401 | 1 No swelling |  |
|  | 9 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 61 |  | Right finger 4, MCP joint: swelling |  |
| PER4BSR4 |  | (60 years and over) |  |
|  | 407 | 1 No swelling |  |
|  | 3 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 62 |  | Right finger 5, MCP joint: swelling |  |
| PER4BSR5 |  | (60 years and over) |  |
|  | 408 | 1 No swelling |  |
|  | 2 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| UPPER EXTREMITIES JOINT EXAMINATION |  |  |  |
| Positions SAS name | ```Item description Counts and code``` |  | Notes |
| 63 | Left finger 1, MCP joint: swelling |  |  |
| PER4BSL1 | (60 years and over) |  |  |
|  | 406 | 1 No swelling |  |
|  | 3 | 2 Swelling |  |
|  | 44 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 64 | Left finger 2, MCP joint: swelling (60 years and over) |  |  |
| PER4BSL2 |  |  |  |
|  | 403 | 1 No swelling |  |
|  | 7 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 65 |  | Left finger 3, MCP joint: swelling |  |
| PER4BSL3 | (60 years and over) |  |  |
|  | 403 | 1 No swelling |  |
|  | 7 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 66 |  | Left finger 4, MCP joint: swelling |  |
| PER4BSL4 |  | (60 years and over) |  |
|  | 407 | 1 No swelling |  |
|  | 3 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


|  | NHANES III Examination Data File |
| :---: | :---: | :---: |
| SECOND EXAM DATA |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| UPPER EXTREMITIES JOINT EXAMINATION |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| $\begin{gathered} 115 \\ \text { PER4DSR4 } \end{gathered}$ |  | Right finger 4, DIP joint: swelling (60 years and over) |  |
|  | 408 | 1 No swelling |  |
|  | 2 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| PER4DSR5 ${ }^{116}$ |  | Right finger 5, DIP joint: swelling (60 years and over) |  |
|  | 408 | 1 No swelling |  |
|  | 2 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 117 |  | Left finger 1, IP joint: swelling |  |
| PER4DSL1 |  | (60 years and over) |  |
|  | 406 | 1 No swelling |  |
|  | 3 | 2 Swelling |  |
|  | 44 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |
| 118 |  | Left finger 2, DIP joint: swelling |  |
| PER4DSL2 |  | (60 years and over) |  |
|  | 406 | 1 No swelling |  |
|  | 4 | 2 Swelling |  |
|  | 43 | 8 Blank but applicable |  |
|  | 2143 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA




SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| BLOOD PRESSURE |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| 186-187 <br> PERNOK1R | Number of measurements used to compute the overall average K1, systolic, blood pressure from household and examination center measurements (5 years and over) |  |  |
|  |  |  |  |
|  | 5 | 01 |  |
|  | 4 | 02 |  |
|  | 523 | 03 |  |
|  | 5 | 04 |  |
|  | 19 | 05 |  |
|  | 1259 | 06 |  |
|  | 1 | 07 |  |
|  | 37 | 88 Blank but applicable |  |
|  | 743 | Blank |  |
| 188-190 |  | Overall average K 5 , diastolic, blood pressure from household and examination center measurements (5 years and over) |  |
| PERMNK5R |  |  |  |
|  | 1783 | 020-121 |  |
|  | 70 | 888 Blank but applicable |  |
|  | 743 | Blank |  |



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| LOWER EXTREMITIES JOINT EXAMINATION |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| $\begin{array}{r} 217 \\ \text { PER10ITL } \end{array}$ | Left great toe, IP joint: tender on palpation (60 years and over) |  |  |
| 3961 No tenderness |  |  |  |
|  | 82 Tenderness |  |  |
|  | 498 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| PER10ISR | Right great toe, IP joint: swelling (60 years and over) |  |  |
|  | 403 | 1 No swelling |  |
|  | 12 Swelling |  |  |
|  | 498 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| 219 |  | Left great toe, IP joint: swelling |  |
| PER10ISL | (60 years and over) |  |  |
|  | 4041 No swelling |  |  |
|  | 4988 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| 220 Right great toe, IP joint: pain on |  |  |  |
| PER10IPR | passive motion (60 years and over) |  |  |
|  | 395 | 1 No pain |  |
|  | 92 Pain |  |  |
|  | 498 Blank but applicable |  |  |
|  | 2143 Blank |  |  |
| 221 Left great toe, IP joint: pain on |  |  |  |
| PER10IPL | passive motion (60 years and over) |  |  |
|  | 3961 No pain |  |  |
|  | 92 Pain |  |  |
|  | 488 Blank but applicable |  |  |
|  | 2143 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


SECOND EXAM DATA




```
PER11B1: Pubic hair stage
```

A proportion of the "Blank but applicable" data for this variable was due to refusal to participate.

PER11B2: Genitalia stage
A proportion of the "Blank but applicable" data for this variable was due to refusal to participate.

PEP11B3: Breast stage, least developed breast
A proportion of the "Blank but applicable" data for this variable was due to refusal to participate.

PER3A2: In a wheelchair or stretcher
Sitting in a wheelchair did not mean necessarily that the individual was confined to a wheelchair. Examinees deemed frail or physically unable to maneuver in the MEC used a wheelchair while being examined. Information about wheelchair use also can be found in the MEC Physical Function Evaluation.

PER3B2TL, PER3B2TR, PER3LLEG, PER3RLEG: Amputee/cast, great toes and legs findings

These variables were recoded to ensure consistency between the first three and last three years of the survey. Therefore, variable labels differ from those on the Physician's Examination form (U.S. DHHS, 1996b). In the original procedure, the physician entered a finding for a cast anywhere on the leg (hip, knee, or ankle) as a "Cast" finding with no specific site noted (coded as 09) in PER3LLEG and PER3RLEG. In later years, the physician specified where on the leg the cast was located. During data editing, the specific cast locations coded separately were incorporated into PER3LLEG and PER3RLEG as codes "10 Cast hip," "11 Cast knee," and "12 Cast ankle." In addition, if a joint was coded as amputated in PER3LLEG or PER3RLEG, the great toe distal to the amputated joint was coded as "3 Amputated above the toe." For example, if the left leg was amputated below the knee and above the ankle joint (code 06), the great toe variables PER3B2TL and PER3B2TR were coded as "3 Amputated above the toe."

PER3B2TR: Amputee/cast, right great toe
See note for PER3B2TL.

PER3BFL1-PER3BFL5, PER3BFR1-PER3BFR5, PER3LARM, PER3RARM: Amputee/cast,

```
fingers and arms findings
```

These variables were recoded to ensure consistency between the first three and last three years of the survey. Therefore, variable labels differ from those on the Physician's Examination form (U.S. DHHS, 1996b). In the early procedure, the physician entered a finding for a cast anywhere on the arm (shoulder, elbow, or wrist), as a "Cast" finding with no specific site noted (coded as 09) in PER3LARM and PER3RARM. In later years, the physician specified where on the arm the cast was located. During data editing, the specific cast locations coded separately were incorporated into variables PER3LARM and PER3RARM as codes "10 Cast shoulder," "11 Cast elbow," and "12 Cast wrist." If a joint was coded as amputated in PER3LARM or PER3RARM, the fingers distal to the amputated joint were coded as "4 Amputated above the finger." For example, if the left wrist joint was coded as amputated (code 07), the finger variables (PER3BFL1-PER3BFL5) were coded as "4 Amputated above the finger."

PER3LARM: Left arm amputee/cast findings
See note for PER3BFL1.

PER3LLEG: Left leg amputee/cast findings
See note for PER3B2TL.

PER3RARM: Right arm amputee/cast findings
See note for PER3BFL1.

PER3RLEG: Right leg amputee/cast findings

See note for PER3B2TL.

PER5R: Central pulse rate

This variable is a $60-s e c o n d ~ p u l s e ~ r a t e ~ d e r i v e d ~ b y ~ m u l t i p l y i n g ~$ the central pulse count at 30 seconds by two.

PER6DR: Radial pulse rate
This variable is a 60 -second pulse rate derived by multiplying the radial pulse count at 15 seconds by four.

PER6F: Maximum inflation level (MIL)

The MIL was obtained to determine the highest level to which the blood pressure cuff should be inflated. It represents a level 30 $\mathrm{mm} H g$ higher than the point at which the radial pulse disappeared.

Zero is considered a valid observation for diastolic (K5) measurements when pulse sounds continue to be heard down to 0 mm Hg.

PER6H3: Second K5 blood pressure measurement
See note for PER6G3.

PER6I3: Third K5 blood pressure measurement
See note for PER6G3.

PERLEVEL: Medical referral level

Based on the results of the physician's examination, the examinee was placed in one of the following three medical referral categories (U.S. DHHS, 1996b):

Level I -- Major medical emergencies that warranted immediate attention by a health care provider

Level II -- Major medical findings that warranted attention by a health care provider within two weeks

Level III -- All other findings reported to the examinee

PERMNK1R: Average K1, systolic blood pressure
This variable is the arithmetic mean of six or fewer K1 measurements obtained at the household interview (maximum of three) and the MEC examination (maximum of three). If the examinee did not have blood pressure measurements taken in the examination center, this variable was calculated from measurements taken at the household interview. All blood pressure determinations were recorded to the nearest even number. However, since the variable is an arithmetic mean, it may include odd numbers.

PERMNK5R: Average K5, diastolic blood pressure
This variable is the arithmetic mean of six or fewer $k 5$ measurements obtained at the household interview (maximum of three) and the MEC examination (maximum of three). Even if the examinee did not have blood pressure measurements taken in the examination center, this variable was calculated from measurements taken at the household interview. All blood pressure determinations were recorded to the nearest even number. However, since the variable is an arithmetic mean, it may include odd
numbers. The arithmetic mean was calculated using only (K5)
measurements greater than zero. Any $K 5$ measurements of zero were set to missing when calculating the K 5 arithmetic mean.

## BODY MEASUREMENTS

Body measurements were recorded for all examinees by a trained examiner in the mobile examination center (MEC). The protocol for this component did not detail any medical, safety or other exclusions.

The body measurements examination included measures of weight, standing height, lengths, skinfolds, circumferences, and breadths. In cases when examinees had to leave the MEC early and were unable to participate in the complete body measures component, at a minimum, weight and standing height or recumbent length were measured.

Persons aged under one year or 20 years and over who were examined only in their homes were given a subset of the body measures. These measures were taken by trained technicians who used equipment and procedures comparable to those used in the mobile examination centers. Therefore, the home examination body measures were incorporated into the body measures data set.

To determine which subjects were home examinees, the DMPSTAT variable ( $3=$ home-examined) should be used. When analyzing data for combined home-examined and MEC-examined subjects, the combined MEC- plus home-examined sample weights should be used (WTPFHX6). When using only MEC items or measures, the MEC examination sample weight should be used (WTPFEX6). For more information on the use of sample weights in the NHANES III data analysis, refer to the Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The following are the names shown on the Home Examination form in the Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-1994 (original home exam variable name; new name) for home examination body measures (NCHS, 1994, p. 313; U.S. DHHS, 1996b). In the home exam, the only body measures taken were weight (A1; BMRWT), standing height (A2; BMRHT), arm circumference (A6; BMRARMC), and triceps skinfold (A5; BMRTRI). For infants aged less than one year, recumbent length (A3; BMRRECUM) was measured instead of stature, and head circumference (A4; BMRHEAD) was added. For examinees who received only a home examination, the measures listed above are the only body measures available for analysis. Values for all other body measures for these examinees appear as blank.

Bioelectrical impedance analysis (BIA) data are considered a part of body measurements and have been included with the body measurement data. However, the BIA resistance and reactance measures were recorded by the physicians in the physician's examination component, hence the "PER" variable prefix.

For general guidelines on standard procedures that were followed for the anthropometric measures, refer to The Anthropometric Standardization Reference Manual (Lohman, 1988). For specific guidelines, the Anthropometric Procedures Video that demonstrates the NHANES III anthropometric procedures in detail is available from the U.S. Government Printing Office (U.S. DHHS, 1996a).

The MEC health technicians, ultrasonographers, dentists, and home examination health technicians were trained by two trainers to do the anthropometric measurements. The two trainers were cross-standardized initially and then annually during the survey. Group retraining occurred twice during the survey. Periodic visits to the field by each of the trainers assured ongoing quality control in the accuracy and reliability of the procedures.

This data set includes body measurements for women who were pregnant at the time of the exam. Analysts should determine whether it is appropriate to exclude data for these women for a given analysis. Pregnancy status information is found in the variable MARF12R in the MEC Adult Questionnaire and in the variable MYRC17 in the MEC Youth Questionnaire.

Data processing and editing were performed to ensure internal data consistency. Notes have been provided for variables requiring additional explanation.


NHANES III Examination Data File

SECOND EXAM DATA

| BODY MEASUREMENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| WEIGHT |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| 268-273 |  | Weight (kg) |  |
| BMRWT |  | (2 months and over) |  |
|  | 2303 | 011.75-0214.2 |  |
|  | 293 | 888888 Blank but applicable |  |
| 274 |  | Weight source flag | See note |
| BMRWTFLG | 2596 | Blank |  |
| 275-279 |  | Weight (lbs) | See note |
| BMRWTLBS |  | (2 months and over) |  |
|  | 2303 | 025.9-471.2 |  |
|  | 293 | 88888 Blank but applicable |  |
| 280-283 |  | Self-reported weight (lbs) | See note |
| BMRSRWL |  | (12-16 years) |  |
|  | 117 | 0100-0319 |  |
|  | 42 | 8888 Blank but applicable |  |
|  | 2437 | Blank |  |
| 284-287 |  | Body mass index | See note |
| BMRBMI | 2295 | 11.8-78.9 |  |
|  | 301 | 8888 Blank but applicable |  |

NHANES III Examination Data File
SECOND EXAM DATA

| BODY MEASUREMENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| HEIGHTS, LENGTHS |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| 288-292 |  | Standing height (cm) |  |
| BMRHT |  | (2 years and over) |  |
|  | 2389 | 00087-194.2 |  |
|  | 207 | 88888 Blank but applicable |  |
| 293 |  | Standing height source flag | See note |
| BMRHTFLG | 2596 | Blank |  |
| 294-298 |  | Standing height (in) | See note |
| BMRHTIN |  | (2 years and over) |  |
|  | 2389 | 034.3-076.5 |  |
|  | 207 | 88888 Blank but applicable |  |
| 299-302 |  | Recumbent length (cm) | See note |
| BMRRECUM |  | (2 months-3 years) |  |
|  | 1 | 88.3 |  |
|  | 2595 | Blank |  |
| 303 |  | Recumbent length flag | See note |
| BMRRECFL | 2596 | Blank |  |
| 304-308 |  | Sitting height (cm) | See note |
| BMRSITHT |  | (2 years and over) |  |
|  | 1690 | 050.1-103.4 |  |
|  | 168 | 88888 Blank but applicable |  |
|  | 738 | Blank |  |
| 309-311 |  | Self-reported height (in) | See note |
| BMRSRHIS |  | (12-16 years) |  |
|  | 146 | 042-074 |  |
|  | 13 | 888 Blank but applicable |  |
|  | 2437 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA

| BODY MEASUREMENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| HEIGHTS, LENGTHS |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| 312-315 |  | Upper leg length (cm) |  |
| BMRLEG |  | (2 years and over) |  |
|  | 1670 | 19.1-0052 |  |
|  | 188 | 8888 Blank but applicable |  |
|  | 738 | Blank |  |
| 316-319 |  | Knee height (cm) |  |
| BMRKNEE |  | (60 years and over) |  |
|  | 409 | 33.4-61.9 |  |
|  | 44 | 8888 Blank but applicable |  |
|  | 2143 | Blank |  |
| 320-323 |  | Upper arm length (cm) |  |
| BMRARML |  | (2 months and over) |  |
|  | 1675 | 17.5-44.8 |  |
|  | 183 | 8888 Blank but applicable |  |
|  | 738 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA

| BODY MEASUREMENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| BREADTHS |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| 324-327 |  | Biacromial breadth (cm) |  |
| BMRBIAC |  | (3 years and over) |  |
|  | 1672 | 21.6-51.3 |  |
|  | 185 | 8888 Blank but applicable |  |
|  | 739 | Blank |  |
| 328-332 |  | Biiliac breadth (cm) |  |
| BMRBIIL |  | (2 years and over) |  |
|  | 1672 | 014.6-044.5 |  |
|  | 186 | 88888 Blank but applicable |  |
|  | 738 | Blank |  |
| 333-336 |  | Elbow breadth (cm) |  |
| BMRELB |  | (2 years and over) |  |
|  | 1678 | 0004-09.5 |  |
|  | 180 | 8888 Blank but applicable |  |
|  | 738 | Blank |  |
| 337-340 |  | Wrist breadth (cm) |  |
| BMRWRIST |  | (2 years and over) |  |
|  | 1677 | 03.3-07.2 |  |
|  | 181 | 8888 Blank but applicable |  |
|  | 738 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


365-369 Thigh circumference (cm)
BMRTHICI (2 years and over)
1667 025.5-086.3
19188888 Blank but applicable
738 Blank

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICIAN'S EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| SKINFOLDS |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| 386 |  | Examinee pregnant--cannot obtain BIA | See note |
| PERPREG | 15 | 1 Yes |  |
|  | 1413 | 2 No |  |
|  | 223 | 8 Blank but applicable |  |
|  | 2 | 9 Don't know |  |
|  | 943 | Blank |  |
| PERPACE ${ }^{387}$ |  | Examinee had pacemaker--cannot obtain BIA | See note |
|  | 4 | 1 Yes |  |
|  | 1424 | 2 No |  |
|  | 225 | 8 Blank but applicable |  |
|  | 943 | Blank |  |
| 388-391 |  | BIA resistance (ohms) | See note |
| PER12A1 |  | (12 years and over) |  |
|  | 1409 | 0275-0937 |  |
|  | 225 | 8888 Blank but applicable |  |
|  | 962 | Blank |  |
| 392-395 |  | BIA reactance (ohms) | See note |
| PER12B1 |  | (12 years and over) |  |
|  | 1409 | 0029-0151 |  |
|  | 225 | 8888 Blank but applicable |  |
|  | 962 | Blank |  |

BMRBMI: Body mass index
BMRBMI was computed from weight and standing height using the following formula: BMRBMI=BMRWT/((BMRHT/100)**2).

BMPHTFLG, BMPRECFL, BMPWTFLG: Standing height, recumbent length, and weight source flags

Weight, standing height, and recumbent length are fundamental body measures essential to most analyses of other health examination data. Therefore, during data editing, a special procedure was established and followed only for those three variables when the primary measures were missing. This procedure allowed available alternate source data to be substituted for missing primary source data. These substitutions were not made for the Second Exam Sample.

BMRHTIN: Standing height (in)
BMRHTIN is standing height converted to inches from centimeters and was calculated as BMRHTIN=BMRHT/2.54.

BMRSRHIS and BMRSRWL: Self-reported height (in) and weight (lbs)
BMRSRHIS is a derived variable that converts reported height in feet and inches to total inches. It is equal to the reported height in feet multiplied by 12 plus the reported height in inches.

All NHANES III participants were asked to report their current height in feet and inches and their weight in pounds. Reported height (BMRSRHIS) and weight (BMRSRWL) information was obtained from adolescents (aged 12 through 16 years) during the body measures component just prior to the actual measurement of weight (BMRWT) and height (BMRHT). For examinees of all other ages, data for similar reported values can be found in the Household Adult Questionnaire among persons aged over 17 years for height (HAM5S) and weight (HAM6S) and in the Household Youth Questionnaire among persons aged less than 12 years for height (HYB18S) and weight (HYB19S). Note that in the data editing process some unusual values for reported height were observed. For persons aged 12 through 16 years, values less than 3 feet were deleted and recoded as "Blank but applicable" (8888).

BMRSRWL: Self-reported weight (lbs)
See note for BMRSRHIS.

BMRSUB, BMRSUP, BMRTHI, BMRTRI: Skinfolds

For NHANES III, the body measurements protocol specified that skinfolds would be measured at four different anatomic body sites. Independent measures were taken at each body site by two technicians, resulting in a minimum of two skinfold observations for each site.

If the difference between the two measurements at a given site was within a pre-specified tolerance limit, no further measurements were taken at that site. The tolerance limits increased by 2 mm for every 10 mm measured. For the first two measures, the first measure represents the base. Thus, from $0-10$ mm , observations were acceptable if they differed from the base measurement by 2 mm or less; from $10-20 \mathrm{~mm}$, observations were acceptable if they differed from the base measurement by 4 mm or less; from 20-30 mm, observations were acceptable if they differed from the base measurement by 6 mm or less, and so on. If the difference between the two measurements at a given site did exceed the tolerance limit, each technician repeated and recorded a second measurement, resulting in a total of four measurements at that skinfold site.

The summary skinfold values were computed as follows:
If data were available for the third and fourth measurements and the difference between those measurements was within the specified tolerance limit, then the summary value was the mean of the third and fourth measurements. In all other cases, the summary value was the mean of all available skinfold measurements at that site.

Tolerance: Tolerance was defined using the base skinfold measure. For the third and fourth measures, the third measure represents the base.

```
If base > 0 and base <= 10 then tolerance is 2 mm
If base > 10 and base <= 20 then tolerance is 4 mm
If base > 20 and base <= 30 then tolerance is 6 mm
If base > 30 and base <= 40 then tolerance is 8 mm
If base > 40 then tolerance is 10 mm.
```

This approach resulted in a single skinfold value for each of four anatomic locations in the final analytic data. These four locations were reported as triceps (BMRTRI), subscapular (BMRSUB), suprailiac (BMRSUP), and thigh (BMRTHI) skinfolds.

BMRSUP: Suprailiac skinfold (mm)
See note for BMRSUB.

BMRTHI: Thigh skinfold (mm)
See note for BMRSUB.

BMRTRI: Triceps skinfold (mm)
See note for BMRSUB.

BMRWHR: Waist-to-hip ratio
BMRWHR was calculated as BMRWAIST/BMRBUTTO.

BMRWTLBS: Weight (lbs)
BMRWTLBS is weight converted to pounds from kilograms and was calculated as BMRWTLBS=BMRWT x 2.2 .

PER12A1 and PER12B1: BIA resistance and reactance (ohms)
Data for bioelectrical impedance analysis (BIA) are considered a part of body measurements and have been included here with the body measurement data. However, the BIA resistance and reactance measures were recorded by the physicians in the Physician's Examination component, hence the "PER" variable prefix. Analyses that may require the examiner identification for BIA data should use the physician examiner number (PERTECH).

BIA measurements are known to be affected by a variety of factors, including amputations, metal replacements, and pregnancy. Persons who were left-side amputees or had metal pins in their hips with hip replacements were not excluded from receiving the BIA procedure. However, in the data editing process, BIA resistance (PER12A1) and BIA reactance (PER12B1) data for persons with either right- or left-side amputations, who were pregnant, or who had metal pins in their hips were recoded to 8888.

The "Blank but applicable" counts for PER12A1 and PER12B1 reflect cases in which persons were examined by the physician but in which the BIA procedure was not done for various reasons. The balance is accounted for by persons who were not examined by the physician.

PER12B1: BIA reactance (ohms)

See note for PER12A1.

PERPACE and PERPREG: Pacemaker or pregnancy -- cannot obtain BIA
To determine who should be excluded from receiving the BIA procedure as a safety precaution, examinees were asked if they had a pacemaker or were pregnant. PERPREG was a self-reported variable and not an adjudicated assessment of pregnancy status; therefore, it should not be used as the definitive pregnancy variable (analysts are referred to MARF12R and MYRC17 variables
for pregnancy status).

The MEC Proxy Questionnaire was administered in the mobile examination center (MEC) to the parents or guardians of children aged 2 months-11 years. This was the only questionnaire in the MEC for children 2 months to 7 years; children $8-11$ years were administered the MEC Youth Questionnaire, as well. Topics of the Proxy Questionnaire were medicine, and vitamin and mineral usage, selected health conditions, WIC program participation, and the infant food frequency for children. The Home Examination also included the food frequency for infants (2-11 months). For analysis of items from the MEC Proxy Questionnaire, MEC examination weights (WTPFEX6) should be used, while MEC+home examination weights (WTPFHX6) should be used for the analysis of combined MEC and Home Examination questionnaire items. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Analysts should be aware of missing data for this questionnaire. Due to a training miscommunication, interviewers did not administer this questionnaire to children $8-11$ years of age at several survey locations during Phase 1. Therefore, it is possible that missing data for children in this group may introduce bias in analyzing the questions in Section A (MPRQA2, MPRQA3, and MPRQA4) and Section B (MPRB1, MPRB2, and MPRB4). Data processing and editing were performed to ensure consistency of responses within the sections of the questionnaire. A note has been provided for a variable that was standardized. The note references a question, by section and number, from the questionnaire which can be found in Plan and Operation of the National Health and Nutrition Examination Survey, 1988-1994 (NCHS, 1994; U.S. DHHS,1996b).



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NOTE

MPRB7S: Number of months received WIC

This variable was created from the two-part question (quantity and unit) B7 using the conversion factor 12 months/year.

NHANES III Examination Data File

THIS PAGE INTENTIONALLY LEFT BLANK

## DENTAL EXAMINATION

The oral health examination consisted of a visual and tactile oral and dental examination performed on examinees aged 1 year and over by a licensed dentist specially trained in the use of specific epidemiologic indices for oral health.

Because this examination was administered in the mobile examination center (MEC), the MEC examination weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in analysis of NHANES III data, refer to Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The oral and dental examination consisted of a number of separate components applied to different age ranges.

| Component | Ages |
| :---: | :---: |
| Oral mucosal tissue exam | 2 years and over |
| Dental caries exam |  |
| Nursing bottle caries | 12-23 months |
| Coronal caries | 2 years and over |
| Root caries | 18 years and over |
| Presence of third molars | 18 years and over |
| Restorations and tooth conditions | 18-74 years |
| Traumatic injuries | 6-50 years |
| Occlusal characteristics | 8-50 years |
| Periodontal diseases | 13 years and over |
| Prosthesis assessment | 18-74 years |
| If full dentures | 18 years and over |
| Denture questionnaire | 18-74 years |
| If completely edentulous | 18 years and over |

Before NHANES III, most of the measurements had been extensively field-tested and, in some cases, modified to improve examiner consistency and reproducibility and reduce examination time. Others were new for this survey but were pilot tested a number of times before being adapted and modified as necessary (Epidemiology and Oral Disease Prevention Program, National Institute of Dental Research, 1991). IT SHOULD BE NOTED THAT THE DIAGNOSTIC CRITERIA USED ARE INTENTIONALLY CONSERVATIVE. To maximize examiner consistency the general rule was that when a choice existed between two possible diagnoses, the less severe diagnosis was recorded. Protocols for measuring each component are found in the Oral Examination Component manual (U.S. DHHS, 1996b). However a few specific guidelines on certain elements of the oral health examination are included here for clarification.

Medical Exclusion

Before beginning the examination the dentist asked a series of questions about specific heart problems and conditions that might require antibiotics before a dental examination. If there was a positive response to any of the questions, the examinee was excluded from the periodontal and root caries components. Variable DERMEDXC indicates those examinees who were medically excluded. Periodontal and root caries variables for those excluded examinees are blank.

Soft Tissue Lesions
A broad range of soft tissue conditions was of interest in this survey with a focus on cancer, pre-cancer and conditions predisposing to cancer, and pathologies related to denture wearing and tobacco use. Examiners were trained to recognize, classify, and record in a standard manner the clinical characteristics of each condition of interest as well as other conditions that might present problems in differential diagnosis. Diagnosis and location were recorded for all soft tissue abnormalities observed. Clinical descriptions were done for all candidiasis, erythroplakias, leukoplakias, tumors, ulcers, and unknown lesions. The clinical descriptions included size, surface morphology, color/s consistency, pain, duration, and prior history. Smears were taken on candidiasis, erythroplakias, leukoplakias, denture stomatitis, angular cheilitis, and medium rhomboid glossitis of the tongue. Smear results are in the form of counts of yeast and hyphae grouped on an ordinal scale from none to many.

Additional lesion information was collected on occurrence of ulcers or sores (cold sores, canker sores) on lips and in the mouth in the Household Youth Questionnaire and the Household Adult Questionnaire. Extensive questions about use of tobacco including snuff and chewing tobacco are found in the MEC Youth Questionnaire for examinees ages 8-16 years, and in the Household Adult Questionnaire and MEC Adult Questionnaire for those ages 17 and over. These questionnaires are found in the Household Adult Data File and the Household Youth Data File.

Dental Caries
The examiner used a mirror and \#23 explorer for the DMFS/T index (Klein, 1938), which is the sum of the number of decayed, missing or filled permanent tooth surfaces/teeth and is, thus, a summary of cumulative caries experience. If a tooth surface was both carious and filled, only the caries was scored so some history of fillings is not included. For teeth scored as missing, posterior teeth receive a count of five missing surfaces and anterior teeth receive a count of four missing surfaces. The occlusal surface is not counted for anterior teeth. A place-holder variable for these surfaces maintains the five-surface pattern (occlusal, lingual, buccal, mesial, distal) to facilitate systematic surface selection by analysts. Third molars are only indicated as present or absent. The index uses letters for the examiners calls which have been recoded as numbers from 00 to 13. Sealed surfaces have been recoded separately. For children 12 to 23 months of age a brief visual inspection for the presence or absence of
early childhood caries in the maxillary incisors was conducted. From the DMFS/T index, sums or counts per person of decayed, missing or filled permanent or primary surfaces and teeth were made (DERDMFS1, DERDMFS2, DERDFSP, DERDFSDC, DERDFTDC, DERDMFT1, DERDMFT2). Only persons with at least one permanent tooth space code indicated were eligible for permanent DMFS/T counts. Only children with at least one primary tooth space code indicated were eligible for the dfs/t sums.

Root Caries
The area below the cemento-enamel junction, if visible, was also examined for decay and filling on the roots of permanent teeth in adults 18 years and over. Each individual surface, four per tooth, was examined and coded separately.

## Periodontal Measures

For adolescents and adults ages 13 years and over the periodontal measures were done on randomly assigned half-mouths, one upper quadrant and one lower quadrant selected at the beginning of the examination. The buccal and mesial-buccal aspects of each tooth were scored separately for each periodontal measure: gingival bleeding, calculus, gingival recession, and pocket depth. Loss of attachment was derived from two measurements made at each site: (1) the distance from the free gingival margin (FGM) to the cemento-enamel junction (CEJ), and (2) the distance from the FGM to the bottom of the sulcus (pocket depth). When the gingival margin had receded and the CEJ was exposed, the first number was scored as a negative value and was an indication of gingival recession. The loss (level) of attachment variables were calculated by subtracting the recorded distance of the FGM to CEJ (1) from the recorded distance of the FGM to the base of the sulcus (2).

Restorations and Tooth Conditions
To obtain further information on the impact of dental caries and tooth restoration beyond the DMF index, a measure of selected restoration and tooth conditions was applied to the 28 permanent teeth or tooth spaces for dentate adults aged 18 to 74 years. Teeth or tooth spaces were classified based on the following criteria: defective intracoronal restorations, crowns, or bridges; gross loss of tooth structure associated with a restoration; pulpal involvement; or retained roots. This index is hierarchical and only the highest score is recorded for each tooth space. Therefore, a total estimate of individual conditions evaluated cannot be obtained.

Trauma
To obtain an estimate of the prevalence of tooth or dental trauma an index was developed to track the permanent tooth from sound (no evidence of trauma) through "missing due to trauma." The index is based on clinical, non-radiographic evidence of tooth injury and treatment received by the eight, permanent incisors, including a
positive history of injury obtained from the examinee. Problems or biases associated with recall memory, particularly in adults, makes this a very conservative estimate of tooth trauma. The trauma assessment index was applied immediately following the caries examination for dentate participants ages 6 to 50 years with at least one permanent incisor.

Occlusal Characteristics
Occlusal traits were measured on all examinees 8 to 50 years old. Disaggregated measures of the major characteristics of occlusion included were: anterior alignment or irregularity score for maxillary and mandibular incisors, midline diastema, posterior crossbite; overjet, and overbite/openbite. For all individual measurements, an assessment that could not be made (due to missing teeth) was recorded as excluded and 9-filled. Assessment of overbite was made using the right central incisors. If one or both of the right central incisors (upper or lower) were not fully erupted or were missing or fractured, the left permanent central incisors were substituted. If the latter could not be scored, no further substitution was made. Measurements were made to the nearest whole millimeter. For openbite, a single measurement was made of the distance in millimeters from the edge of the lower central incisor to the edge of the upper central incisor. Incisor alignment measured in millimeters the linear displacement of anatomic contact points of each maxillary and mandibular incisor from the adjacent tooth anatomic point. The sum of these five
displacements represents the degree of irregularity in the alignment of incisors in each jaw. Contacts were scored only if both teeth had erupted to the level of the occlusal plane. Presence or absence of crossbite was scored only for posterior primary or permanent teeth that had erupted into occlusal contact. A diastema was scored if a space was present between the maxillary central incisors equal to or greater than two millimeters wide. Overjet was measured from the midpoint of the labial surface of the anterior lower incisor to the midpoint of the labial surface of the anterior upper incisor, parallel to the occlusal plane. The overjet was positive if the upper incisor was ahead of the lower incisor, zero if the upper and lower incisors were end to end and negative if the lower incisor was in front of the upper incisor. Questions on receipt of orthodontic treatment are found in the Household Youth Questionnaire for persons ages 2 months to 16 years and the Household Adult Questionnaire for those ages 17-50.

Prosthesis Assessment
For persons 18 to 74 years of age and all persons over 18 with full dentures, a prosthetic evaluation was done. For prosthetic assessment, the arch-specific presence or absence of a removable prothesis by type (full or partial denture) was recorded. When present the prosthesis was evaluated for five characteristics: integrity; excessive tooth wear; reline material, conditioner, or denture adhesive; stability, and retention. Positive scores were assigned for each characteristic if the prosthesis met the following criteria: 1) integrity--fractures, cracks, or holes of the base material and/or missing or chipped teeth and/or broken clasps, rests, or broken portions of the framework; 2) excessive tooth wear--greater
than one-half of bicuspid and molar teeth lack occlusal anatomy; 3) presence of temporary reline material, tissue conditioner, or denture adhesive; 4) stability--full dentures move 2 mm or more in one direction when the denture is manually moved laterally or partial denture occlusal rests or indirect retainers move 1 mm or more when unilateral or bilateral forces are applied to the denture base and 5) retention--the denture dislodges when the examinee opens the mouth wide without strain. The first three of these were made extraorally; the last two were made with the prosthesis in the mouth. All-resin partial dentures were excluded. Only one partial denture per arch was evaluated. Where two partials were present in a single arch, the partial replacing the most teeth or for equal spans, the one in the right quadrant was selected for evaluation. Tooth or implant-retained overdentures were treated the same as tissue-borne full dentures. Prostheses with a positive score on 3) reline material, conditioner, or denture adhesive, automatically received positive scores for 4) stability and 5) retention. Conversely, fully tooth-supported partial dentures were automatically given scores of "zero" for 2) excessive tooth wear and for 3) reline material, conditioner, or denture adhesive. In addition, during the examination, adults 18 to 74 years of age who were edentulous in one arch and all totally edentulous persons 18 and over were asked four questions about their use of dentures and length of time without natural teeth.

Training and Quality Control
The National Institute of Dental Research (NIDR) and the dental consultant provided extensive training of the dental examiners at their time of hire. One examiner was available for the entire six years and performed about half of the examinations. Three more examiners and one back-up examiner performed the rest of the exams. As part of quality control, a separate "gold standard" examiner visited each dental examiner one or two times a year in the MEC for observation and to perform replicate exams of most indices on approximately 30 persons. Each examiner also performed replicate examinations on selected sample persons within the six week examination period available at each location. For all major components of the examination the intra- and inter-examiner measures were in satisfactory ranges (Brown, 1996a; Brown, 1996b; Brunelle, 1996; Drury, 1996; Kaste, 1996a; Kaste, 1996b; Marcus, 1996; Redford, 1996; Selwitz, 1996; Winn, 1996; White, 1996).

Additional Information

Data processing and editing were performed to ensure internal consistency of data. Notes are provided for variables where additional explanations are necessary. The dental data set differs from other NHANES III data sets in the use of two data processing conventions for variables with categorical responses. They are, however, consistent with dental data from past NHANES and with other dental surveys conducted by NIDR. The first deviation concerns the use of 9 -fills which mean "Could not be assessed" or "Unknown." In other NHANES III files, the 9 -fill means the respondent did not know the answer. The other deviation pertains to the use of "zero" which, in categorical data, usually means "none," "never," or the equivalent.

In the dental data set, however, a zero is a code for something else, for example, "Tooth present but excluded" in the coronal caries examination (surfaces and teeth), "Sound surface" in the root caries examination, or "No treatment needed" in the restorations and tooth conditions section.

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |  |
| Positions <br> SAS name | Counts Item description |  |  |  | Notes |
| CORONAL CARIES, SURFACES |  |  |  |  |  |
| DERCS1 ${ }^{465}$ |  | Coronal caries, surfaces: upper left central incisor, filler |  |  |  |
| $\begin{gathered} 466-467 \\ \text { DERCS2 } \end{gathered}$ |  | Coronal caries, surfaces: upper left central incisor, lingual surface |  |  |  |
|  | 34 | 00 | Tooth present but excluded |  |  |
|  | 31 | 01 | Sound deciduous or primary surface |  |  |
|  | 3 | 02 | Decayed deciduous or primary surface |  |  |
|  | 5 | 04 | Unerupted tooth |  |  |
|  | 1100 | 05 | Sound permanent |  |  |
|  | 21 | 07 | Decayed permanent |  |  |
|  | 127 | 08 | Filled permanent |  |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |  |
|  | 246 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |  |
|  | 5 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |  |
|  | 35 | 13 |  |  |  |
|  | 953 | Blank |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| 475-476 | Coronal caries, surfaces: upper left |  |  |  |
| DERCS 7 | lateral incisor, lingual surface |  |  |  |
|  | 19 | 00 | Tooth present but excluded |  |
|  | 51 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 17 | 04 | Unerupted tooth |  |
|  | 1040 | 05 | Sound permanent |  |
|  | 35 | 07 | Decayed permanent |  |
|  | 162 | 08 | Filled permanent |  |
|  | 40 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 247 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodonic or non-disease) |  |
|  | 26 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  Item description  <br> Counts and code Notes |  |  |  |
| 477-478 | Coronal caries, surfaces: upper left |  |  |  |
| DERCS8 | lateral incisor, buccal surface |  |  |  |
|  | 19 | 00 | Tooth present but excluded |  |
|  | 51 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 17 | 04 | Unerupted tooth |  |
|  | 1127 | 05 | Sound permanent |  |
|  | 32 | 07 | Decayed permanent |  |
|  | 78 | 08 | Filled permanent |  |
|  | 40 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 247 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 26 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  Item description  <br> Counts and code Notes |  |  |  |
| $484-485$ <br> DERCS12 | Coronal caries, surfaces: upper left cuspid, lingual surface |  |  |  |
|  | 11 | 00 | Tooth present but excluded |  |
|  | 153 | 01 | Sound deciduous or primary surface Unerupted tooth |  |
|  | 7 | 04 |  |  |
|  | 1051 | 05 | Sound permanent |  |
|  | 19 | 07 | Decayed permanent |  |
|  | 123 | 08 | Filled permanent |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 228 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease <br> Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 10 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| $\begin{aligned} & 486-487 \\ & \text { DERCS13 } \end{aligned}$ | Coronal caries, surfaces: upper left cuspid, buccal surface |  |  |  |
|  | 11 | 00 | Tooth present but excluded |  |
|  | 150 | 01 | Sound deciduous or primary surface |  |
|  | 2 | 02 | Decayed deciduous or primary surface |  |
|  | 1 | 03 |  |  |
|  | 7 | 04 | Unerupted tooth |  |
|  | 1074 | 05 | Sound permanent |  |
|  | 32 | 07 | Decayed permanent |  |
|  | 87 | 08 | Filled permanent |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 228 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 10 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $\begin{gathered} 488-489 \\ \text { DERCS14 } \end{gathered}$ | Coronal caries, surfaces: upper left cuspid, mesial surface |  |  |  |
|  | 11 | 00 | Tooth present but excluded |  |
|  | 153 | 01 | Sound deciduous or primary surface Unerupted tooth |  |
|  | 7 | 04 |  |  |
|  | 1086 | 05 | Sound permanent |  |
|  | 23 | 07 | Decayed permanent |  |
|  | 84 | 08 | Filled permanent |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 228 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 10 | 13 |  |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  |  |
| $\begin{gathered} 490-491 \\ \text { DERCS15 } \end{gathered}$ | Coronal caries, surfaces: upper left cuspid, distal surface |  |  |  |
|  | 11 | 00 | Tooth present but excluded |  |
|  | 152 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 02 | Decayed deciduous or primary surface |  |
|  | 7 | 04 | Unerupted tooth |  |
|  | 1045 | 05 | Sound permanent |  |
|  | 24 | 07 | Decayed permanent |  |
|  | 124 | 08 | Filled permanent |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 228 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 10 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description and codeNone``` |  |  |  |
| DERCS18 | Coronal caries, surfaces: upper left 1st bicuspid, buccal surface |  |  |  |
|  | 119 | 01 | Sound deciduous or primary surface Decayed deciduous or primary surface |  |
|  | 1 | 02 |  |  |
|  | 3 | 03 | Filled deciduous or primary surface |  |
|  | 3 | 04 | Unerupted tooth |  |
|  | 998 | 05 | Sound permanent |  |
|  | 24 | 07 | Decayed permanent |  |
|  | 85 | 08 | Filled permanent |  |
|  | 84 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 288 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and codeNone``` |  |  |  |
| 498-499 <br> DERCS19 | Coronal caries, surfaces: upper left 1st |  |  |  |
|  | 117 | 01 | Sound deciduous or primary surface |  |
|  | 4 | 02 | Decayed deciduous or primary surface |  |
|  | 2 | 03 | Filled deciduous or primary surface |  |
|  | 3 | 04 | Unerupted tooth |  |
|  | 961 | 05 | Sound permanent |  |
|  | 25 | 07 | Decayed permanent |  |
|  | 121 | 08 | Filled permanent |  |
|  | 84 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 288 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and codeNone``` |  |  |  |
| $500-501$ | Coronal caries, surfaces: upper left 1st |  |  |  |
|  | 110 | 01 | Sound deciduous or primary surface |  |
| 02 Decayed deciduous or primary surface |  |  |  |  |
|  | 4 | 03 | Filled deciduous or primary surface |  |
|  | 3 | 04 | Unerupted tooth |  |
|  | 852 | 05 | Sound permanent |  |
|  | 38 | 07 | Decayed permanent |  |
|  | 217 | 08 | Filled permanent |  |
|  | 84 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 288 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code``` |  |  |  |
| $502-503$ <br> DERCS21 | Coronal caries, surfaces: upper left $2 n d$ bicuspid, occlusal surface |  |  |  |
| DERCS21 | 123 | 01 | Sound deciduous or primary surface Decayed deciduous or primary surface |  |
|  | 13 | 02 |  |  |
|  | 28 | 03 | Filled deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 711 | 05 | Sound permanent |  |
|  | 28 | 07 | Decayed permanent |  |
|  | 320 | 08 | Filled permanent |  |
|  | 116 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 294 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) <br> Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 2 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Item description <br> Counts and code |  |  | Notes |
| $516-517$ | Coronal caries, surfaces: upper left 1st molar, buccal surface |  |  |  |
| DERCS28 | molar, buccal surface <br> 1304 Unerupted tooth |  |  |  |
|  | 13 | 04 |  |  |
|  | 999 | 05 | Sound permanent |  |
|  | 20 | 07 | Decayed permanent |  |
|  | 101 | 08 | Filled permanent |  |
|  | 196 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 312 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 |  | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| $518-519$ <br> DERCS29 |  | Coronal caries, surfaces: upper left 1st molar, mesial surface |  |  |
|  | 13 | 04 | Unerupted tooth |  |
|  | 872 | 05 | Sound permanent |  |
|  | 25 | 07 | Decayed permanent |  |
|  | 223 | 08 | Filled permanent |  |
|  | 196 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 312 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 1 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |
| :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |
| Positions <br> SAS name | ```Item description and code``` |  |
| $\begin{aligned} & 520-521 \\ & \text { DERCS30 } \end{aligned}$ | Coronal caries, surfaces: upper left 1st molar, distal surface |  |
|  | 13 | 04 |
|  | 935 | 05 |
|  | 23 | 07 |
|  | 162 | 08 |
|  | 196 | 10 |
|  | 312 | 11 |
|  | 1 | 12 |
|  | 1 | 13 |
|  | 953 | Blank |
| $522-523$ <br> DERCS31 |  | Coronal caries, surfaces: upper left $2 n d$ molar, occlusal surface |
|  | 178 | 04 |
|  | 514 | 05 |
|  | 61 | 07 |
|  | 451 | 08 |
|  | 164 | 10 |
|  | 272 | 11 |
|  | 2 | 12 |
|  | 1 | 13 |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description Counts and code Notes``` |  |  |  |
| $\begin{gathered} 535-536 \\ \text { DERCS38 } \end{gathered}$ | Coronal caries, surfaces: upper right central incisor, buccal surface |  |  |  |
|  | 28 | 00 | Tooth present but excluded |  |
|  | 31 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 1152 | 05 | Sound permanent |  |
|  | 24 | 07 | Decayed permanent |  |
|  | 86 | 08 | Filled permanent |  |
|  | 33 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 244 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 36 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Item description |  |  |  |
| $\begin{aligned} & 537-538 \\ & \text { DERCS39 } \end{aligned}$ |  | Coronal caries, surfaces: upper right central incisor, mesial surface |  |  |
|  | 28 | 00 | Tooth present but excluded |  |
|  | 29 | 01 | Sound deciduous or primary surface |  |
|  | 2 | 02 | Decayed deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 1072 | 05 | Sound permanent |  |
|  | 34 | 07 | Decayed permanent |  |
|  | 156 | 08 | Filled permanent |  |
|  | 33 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 244 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 36 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ and code $\quad$ Notes |  |  |  |
| 542-543 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS 42 | lateral incisor, lingual surface |  |  |  |
|  | 23 | 00 | Tooth present but excluded |  |
|  | 53 | 01 | Sound deciduous or primary surface |  |
|  | 20 | 04 | Unerupted tooth |  |
|  | 1049 | 05 | Sound permanent |  |
|  | 28 | 07 | Decayed permanent |  |
|  | 149 | 08 | Filled permanent |  |
|  | 41 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 250 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 26 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code Notes``` |  |  |  |
| 544-545 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS43 | lateral incisor, buccal surface |  |  |  |
|  | 23 | 00 | Tooth present but excluded |  |
|  | 53 | 01 | Sound deciduous or primary surface |  |
|  | 20 | 04 | Unerupted tooth |  |
|  | 1124 | 05 | Sound permanent |  |
|  | 31 | 07 | Decayed permanent |  |
|  | 71 | 08 | Filled permanent |  |
|  | 41 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 250 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 26 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| 548-549 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS45 | lateral incisor, distal surface |  |  |  |
|  | 23 | 00 | Tooth present but excluded |  |
|  | 53 | 01 | Sound deciduous or primary surface |  |
|  | 20 | 04 | Unerupted tooth |  |
|  | 1081 | 05 | Sound permanent |  |
|  | 22 | 07 | Decayed permanent |  |
|  | 123 | 08 | Filled permanent |  |
|  | 41 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 250 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 26 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| 550 |  | Coronal caries, surfaces: upper right |  |  |
| DERCS46 |  |  |  |  |
|  | 2596 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description and code Notes``` |  |  |  |
| $551-552$ <br> DERCS47 | Coronal caries, surfaces: upper right cuspid, lingual surface |  |  |  |
|  | 13 | 00 | Tooth present but excluded |  |
|  | 154 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 02 | Decayed deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 1063 | 05 | Sound permanent |  |
|  | 18 | 07 | Decayed permanent |  |
|  | 117 | 08 | Filled permanent |  |
|  | 35 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 224 | 11 | Replacement for missing tooth <br> (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 9 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Item description |  |  |  |
| $\begin{gathered} 553-554 \\ \text { DERCS48 } \end{gathered}$ | Coronal caries, surfaces: upper right cuspid, buccal surface |  |  |  |
|  | 13 | 00 | Tooth present but excluded |  |
|  | 151 | 01 | Sound deciduous or primary surface |  |
|  | 3 | 02 | Decayed deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 1088 | 05 | Sound permanent |  |
|  | 27 | 07 | Decayed permanent |  |
|  | 83 | 08 | Filled permanent |  |
|  | 35 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 224 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 9 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $555-556$ <br> DERCS49 | Coronal caries, surfaces: upper right cuspid, mesial surface |  |  |  |
|  | 13 | 00 | Tooth present but excluded |  |
|  | 154 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 02 | Decayed deciduous or primary surface |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 1087 | 05 | Sound permanent |  |
|  | 19 | 07 | Decayed permanent |  |
|  | 92 | 08 | Filled permanent |  |
|  | 35 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 224 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 9 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  |  |
| 561-562 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS52 | 1st bicuspid, lingual surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 118 | 01 | Sound deciduous or primary surface |  |
|  | 3 | 02 | Decayed deciduous or primarysurface |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 1030 | 05 | Sound permanent |  |
|  | 20 | 07 | Decayed permanent |  |
|  | 75 | 08 | Filled permanent |  |
|  | 78 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 275 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  |  |
| 563-564 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS53 | 1st bicuspid, buccal surface |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
|  | 118 | 01 | Sound deciduous or primary surface |  |
|  | 3 | 02 | Decayed deciduous or primarysurface |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 1014 | 05 | Sound permanent |  |
|  | 25 | 07 | Decayed permanent |  |
|  | 86 | 08 | Filled permanent |  |
|  | 78 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 275 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and codeNone``` |  |  |  |
| 565-566 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS54 1st bicuspid, mesial surface |  |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
|  | 116 | 01 | Sound deciduous or primary surface |  |
|  | 5 | 02 | Decayed deciduous or primarysurface |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 968 | 05 | Sound permanent |  |
|  | 24 | 07 | Decayed permanent |  |
|  | 133 | 08 | Filled permanent |  |
|  | 78 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 275 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description $\quad$ Notes |  |  |  |
| 567-568 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS55 | 1st bicuspid, distal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 110 | 01 | Sound deciduous or primary surface |  |
|  | 9 | 02 | Decayed deciduous or primary surface |  |
|  | 2 | 03 | Filled deciduous or primary surface |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 870 | 05 | Sound permanent |  |
|  | 32 | 07 | Decayed permanent |  |
|  | 223 | 08 | Filled permanent |  |
|  | 78 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 275 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |


| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description and codeNone``` |  |  |  |
| 569-570 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS56 | 2nd bicuspid, occlusal surface |  |  |  |
|  | 129 | 01 | Sound deciduous or primary surface |  |
|  | 12 | 02 | Decayed deciduous or primary surface |  |
|  | 24 | 03 | Filled deciduous or primary surface |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 710 | 05 | Sound permanent |  |
|  | 41 | 07 | Decayed permanent |  |
|  | 321 | 08 | Filled permanent |  |
|  | 113 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 286 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 3 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 2 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description and codeNone``` |  |  |  |
| 573-574 | Coronal caries, surfaces: upper right |  |  |  |
| DERCS58 2nd bicuspid, buccal surface |  |  |  |  |
| 16201 Sound deciduous or primary surfac |  |  |  |  |
| 1 |  | 02 | Decayed deciduous or primary surface |  |
|  | 2 | 03 | Filled deciduous or primary surface |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 950 | 05 | Sound permanent |  |
|  | 21 | 07 | Decayed permanent |  |
|  | 101 | 08 | Filled permanent |  |
|  | 113 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 286 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 3 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 2 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |  |
| Positions SAS name | Item description |  |  |  |  |
| 593-594 | Coronal caries, surfaces: upper right |  |  |  |  |
| DERCS68 | 2nd molar, buccal surface |  |  |  |  |
|  | 183 | 04 | Unerupted tooth |  |  |
|  | 891 | 05 | Sound permanent |  |  |
|  | 27 | 07 | Decayed permanent |  |  |
|  | 111 | 08 | Filled permanent |  |  |
|  | 160 | 10 | Missing (due to caries/periodontal disease) |  |  |
|  | 268 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |  |
|  | 953 | Blank |  |  |  |
| 595-596 |  | Coronal caries, surfaces: upper right |  |  |  |
| DERCS69 |  | 2nd molar, mesial surface |  |  |  |
|  | 183 | 04 | Unerupted tooth |  |  |
|  | 865 | 05 | Sound permanent |  |  |
|  | 23 | 07 | Decayed permanent |  |  |
|  | 141 | 08 | Filled permanent |  |  |
|  | 160 | 10 | Missing (due to caries/periodontal disease) |  |  |
|  | 268 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |  |
|  | 953 | Blank |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| $602-603$ <br> DERCS73 | Coronal caries, surfaces: lower left central incisor, buccal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 11 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 04 | Unerupted tooth |  |
|  | 1398 | 05 | Sound permanent |  |
|  | 4 | 07 | Decayed permanent |  |
|  | 20 | 08 | Filled permanent |  |
|  | 31 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 166 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 7 | 13 |  |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| $604-605$ <br> DERCS74 | Coronal caries, surfaces: lower left central incisor, mesial surface |  |  |  |
| 1 |  | 00 | Tooth |  |
| 11 |  | 01 | Sound |  |
| 1 |  | 04 | Uner |  |
| 1396 |  | 05 | Sound |  |
| 6 |  | 07 | Decay |  |
| 20 |  | 08 | Fill |  |
| 31 |  | 10 | $\begin{aligned} & \text { Miss } \\ & \text { dise } \end{aligned}$ |  |
| 166 |  | 11 | $\begin{aligned} & \text { Repl } \\ & \text { to } \mathrm{C} \end{aligned}$ |  |
| 4 |  | 12 | Miss non- |  |
| 7 |  | 13 | $\begin{aligned} & \text { Repl } \\ & \text { to o } \end{aligned}$ |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ and code $\quad$ Notes |  |  |  |
| 609-610 | Coronal caries, surfaces: lower left |  |  |  |
| DERCS77 | lateral incisor, lingual surface |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
|  | 38 | 01 | Sound deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1371 | 05 | Sound permanent |  |
|  | 8 | 07 | Decayed permanent |  |
|  | 19 | 08 | Filled permanent |  |
|  | 30 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 159 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 7 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 4 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl |  |  |

NHANES III Examination Data File

## SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| 611-612 | Coronal caries, surfaces: lower left |  |  |  |
| DERCS78 |  |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
| 38 |  | 01 | Sound deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1370 | 05 | Sound permanent |  |
|  | 7 | 07 | Decayed permanent |  |
|  | 21 | 08 | Filled permanent |  |
|  | 30 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 159 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 7 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 4 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ and code $\quad$ Notes |  |  |  |
| 613-614 | Coronal caries, surfaces: lower left |  |  |  |
| DERCS79 | lateral incisor, mesial surface |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
|  | 38 | 01 | Sound deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1368 | 05 | Sound permanent |  |
|  | 4 | 07 | Decayed permanent |  |
|  | 26 | 08 | Filled permanent |  |
|  | 30 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 159 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 7 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 4 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| $618-619$ | Coronal caries, surfaces: lower left cuspid, lingual surface |  |  |  |
| DERCS82 100 cuspid, 00 Toth present but excluded |  |  |  |  |
|  |  |  |  |  |
|  | 120 | 01 | Sound deciduous or primary surface |  |
|  | 9 | 04 | Unerupted tooth |  |
|  | 1302 | 05 | Sound permanent |  |
|  | 9 | 07 | Decayed permanent |  |
|  | 39 | 08 | Filled permanent |  |
|  | 25 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 135 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl | Blan |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and codeNone``` |  |  |  |
| $620-621$ <br> DERCS83 | Coronal caries, surfaces: lower left cuspid, buccal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 119 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 9 | 04 | Unerupted tooth |  |
|  | 1285 | 05 | Sound permanent |  |
|  | 19 | 07 | Decayed permanent |  |
|  | 46 | 08 | Filled permanent |  |
|  | 25 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 135 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  Item description Notes |  |  |  |
| $622-623$ <br> DERCS84 | Coronal caries, surfaces: lower left cuspid, mesial surface |  |  |  |
| 100 Tooth present but excluded |  |  |  |  |
|  | 120 | 01 | Sound deciduous or primary surface |  |
|  | 9 | 04 | Unerupted tooth |  |
|  | 1307 | 05 | Sound permanent |  |
|  | 12 | 07 | Decayed permanent |  |
|  | 31 | 08 | Filled permanent |  |
|  | 25 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 135 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl |  |  |


| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| $624-625$ <br> DERCS85 | Coronal caries, surfaces: lower left cuspid, distal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 119 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 03 | Filled deciduous or primary surface |  |
|  | 9 | 04 | Unerupted tooth |  |
|  | 1298 | 05 | Sound permanent |  |
|  | 12 | 07 | Decayed permanent |  |
|  | 40 | 08 | Filled permanent |  |
|  | 25 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 135 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $\begin{gathered} \text { 626-627 } \\ \text { DERCS86 } \end{gathered}$ | Coronal caries, surfaces: lower left 1st bicuspid, occlusal surface |  |  |  |
| 92 |  | 01 | Sound deciduous or primary surface |  |
|  | 8 | 02 | Decayed deciduous or primary surface |  |
|  | 22 | 03 | Filled deciduous or primary surface |  |
|  | 6 | 04 |  |  |
|  | 1045 | 05 | Sound permanent |  |
|  | 23 | 07 | Decayed permanent |  |
|  | 198 | 08 | Filled permanent |  |
|  | 53 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 167 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 29 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  | Notes |
| $636-637$ <br> DERCS91 | Coronal caries, surfaces: lower left 2nd bicuspid, occlusal surface |  |  |  |
|  | 117 | 01 | Sound deciduous or primary surface |  |
|  | 11 | 02 | Decayed deciduous or primary surface |  |
|  | 28 | 03 | Filled deciduous or primary surface |  |
|  | 6 | 04 |  |  |
|  | 811 | 05 | Sound permanent |  |
|  | 25 | 07 | Decayed permanent |  |
|  | 336 | 08 | Filled permanent |  |
|  | 107 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 201 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |


|  | NHANES III Examination Data File |
| :--- | :--- | :--- |
| SECOND EXAM DATA |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $640-641$ <br> DERCS93 | Coronal caries, surfaces: lower left 2nd bicuspid, buccal surface |  |  |  |
|  | 139 | 01 | Sound deciduous or primary surface |  |
|  | 4 | 02 | $\begin{aligned} & \text { Deca } \\ & \text { surf } \end{aligned}$ |  |
|  | 13 | 03 | Filled deciduous or primary surfaceUnerupted tooth |  |
|  | 6 | 04 |  |  |
|  | 1035 | 05 | Sound permanent |  |
|  | 24 | 07 | Decayed permanent |  |
|  | 113 | 08 | Filled permanent |  |
|  | 107 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 201 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $642-643$ <br> DERCS94 | Coronal caries, surfaces: lower left 2nd bicuspid, mesial surface |  |  |  |
|  | 129 | 01 | Sound deciduous or primary surface |  |
|  | 7 | 02 | $\begin{aligned} & \text { Deca } \\ & \text { surf } \end{aligned}$ |  |
|  | 20 | 03 | Filled deciduous or primary surfaceUnerupted tooth |  |
|  | 6 | 04 |  |  |
|  | 1035 | 05 | Sound permanent |  |
|  | 14 | 07 | Decayed permanent |  |
|  | 123 | 08 | Filled permanent |  |
|  | 107 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 201 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and code``` |  |  | Notes |
| $644-645$ <br> DERCS95 | Coronal caries, surfaces: lower left 2nd bicuspid, distal surface |  |  |  |
| DERCS95 | 140 | 01 | Sound deciduous or primary surface Decayed deciduous or primary surface |  |
|  | 2 | 02 |  |  |
|  | 14 | 03 | Filled deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 923 | 05 | Sound permanent |  |
|  | 23 | 07 | Decayed permanent |  |
|  | 226 | 08 | Filled permanent |  |
|  | 107 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 201 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| $646-647$ <br> DERCS96 |  | Coronal caries, surfaces: lower left lst molar, occlusal surface |  |  |
|  | 12 | 04 | Unerupted tooth |  |
|  | 484 | 05 | Sound permanent |  |
|  | 68 | 07 | Decayed permanent |  |
|  | 487 | 08 | Filled permanent |  |
|  | 322 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 268 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description |  |  | Notes |
| $\begin{gathered} 656-657 \\ \text { DERCS101 } \end{gathered}$ |  | Coronal caries, surfaces: lower left $2 n d$ molar, occlusal surface |  |  |
| DERCS101 | 169 | 04 | Unerupted tooth |  |
|  | 439 | 05 | Sound permanent |  |
|  | 68 | 07 | Decayed permanent |  |
|  | 470 | 08 | Filled permanent |  |
|  | 263 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 233 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| $\begin{gathered} 658-659 \\ \text { DERCS102 } \end{gathered}$ |  | Coronal caries, surfaces: lower left $2 n d$ molar, lingual surface |  |  |
|  | 169 | 04 | Unerupted tooth |  |
|  | 848 | 05 | Sound permanent |  |
|  | 21 | 07 | Decayed permanent |  |
|  | 108 | 08 | Filled permanent |  |
|  | 263 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 233 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description |  |  | Notes |
| $\begin{gathered} 664-665 \\ \text { DERCS105 } \end{gathered}$ | Coronal caries, surfaces: lower left 2nd molar, distal surface |  |  |  |
| 16904 Unerupted tooth |  |  |  |  |
|  | 839 | 05 | Sound permanent |  |
|  | 19 | 07 | Decayed permanent |  |
|  | 119 | 08 | Filled permanent |  |
|  | 263 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 233 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |
| 666 |  | Coronal caries, surfaces: lower right central incisor, filler |  |  |
| DERCS106 |  |  |  |  |
|  | 2596 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code Notes``` |  |  |  |
| 678-679 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS113 | lateral incisor, buccal surface |  |  |  |
| 2 |  | 00 | Tooth present but excluded |  |
|  | 34 | 01 | Sound deciduous or primary surface |  |
|  | 11 | 04 | Unerupted tooth |  |
|  | 1370 | 05 | Sound permanent |  |
|  | 13 | 07 | Decayed permanent |  |
|  | 18 | 08 | Filled permanent |  |
|  | 29 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 157 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 5 | 13 |  |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code Notes``` |  |  |  |
| 680-681 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS114 | lateral incisor, mesial surface |  |  |  |
| 2 |  | 00 | Tooth present but excluded |  |
|  | 34 | 01 | Sound deciduous or primary surface |  |
|  | 11 | 04 | Unerupted tooth |  |
|  | 1376 | 05 | Sound permanent |  |
|  | 7 | 07 | Decayed permanent |  |
|  | 18 | 08 | Filled permanent |  |
|  | 29 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 157 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 5 | 13 |  |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| 682-683 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS115 | lateral incisor, distal surface |  |  |  |
| 2 |  | 00 | Tooth present but excluded |  |
|  | 34 | 01 | Sound deciduous or primary surface |  |
|  | 11 | 04 | Unerupted tooth |  |
|  | 1375 | 05 | Sound permanent |  |
|  | 6 | 07 | Decayed permanent |  |
|  | 20 | 08 | Filled permanent |  |
|  | 29 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 157 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 5 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| $684$ |  | Coronal caries, surfaces: lower right cuspid, filler |  |  |
| DERCS116 | 2596 |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $\begin{array}{r} 685-686 \\ \text { DERCS117 } \end{array}$ | Coronal caries, surfaces: lower right cuspid, lingual surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 120 | 01 | Sound deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1306 | 05 | Sound permanent |  |
|  | 11 | 07 | Decayed permanent |  |
|  | 40 | 08 | Filled permanent |  |
|  | 24 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 133 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 1 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| $687-688$ <br> DERCS118 | Coronal caries, surfaces: lower right cuspid, buccal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 117 | 01 | Sound deciduous or primary surface |  |
|  | 1 | 02 | Decayed deciduous or primary surface |  |
|  | 2 | 03 | Filled deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1270 | 05 | Sound permanent |  |
|  | 29 | 07 | Decayed permanent |  |
|  | 58 | 08 | Filled permanent |  |
|  | 24 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 133 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 1 | 13 |  |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $\begin{array}{r} 689-690 \\ \text { DERCS119 } \end{array}$ | Coronal caries, surfaces: lower right cuspid, mesial surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 120 | 01 | Sound deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1314 | 05 | Sound permanent |  |
|  | 14 | 07 | Decayed permanent |  |
|  | 29 | 08 | Filled permanent |  |
|  | 24 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 133 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bl |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| $\begin{gathered} \text { 691-692 } \\ \text { DERCS120 } \end{gathered}$ | Coronal caries, surfaces: lower right cuspid, distal surface |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 120 | 01 | Sound deciduous or primary surface Unerupted tooth |  |
|  | 6 | 04 |  |  |
|  | 1299 | 05 | Sound permanent |  |
|  | 16 | 07 | Decayed permanent |  |
|  | 42 | 08 | Filled permanent |  |
|  | 24 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 133 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| 693-694 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS121 | 1st bicuspid, occlusal surface |  |  |  |
| 94 |  | 01 | Sound deciduous or primary surface |  |
|  | 11 | 02 | Decayed deciduous or primary surface |  |
|  | 15 | 03 | Filled deciduous or primary surface |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 1049 | 05 | Sound permanent |  |
|  | 25 | 07 | Decayed permanent |  |
|  | 190 | 08 | Filled permanent |  |
|  | 60 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 169 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 28 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  Item description  <br> Counts and code  |  |  |  |
| 695-696 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS122 | 1st bicuspid, lingual surface |  |  |  |
| 113 |  | 01 Sound deciduous or primary surface |  |  |
|  | 302 Decayed deciduous or primary surface |  |  |  |
|  | 4 | 03 | Filled deciduous or primary surface |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 1204 | 05 | Sound permanent |  |
|  | 13 | 07 | Decayed permanent |  |
|  | 47 | 08 | Filled permanent |  |
|  | 60 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 169 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 28 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Bla | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  Item description Notes |  |  |  |
| 697-698 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS123 1st bicuspid, buccal surface |  |  |  |  |
| 116 |  | 01 Sound deciduous or primary surface |  |  |
|  | 2 | 02 | Decayed deciduous or primary surface |  |
|  | 2 | 03 | Filled deciduous or primary surface |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 1162 | 05 | Sound permanent |  |
|  | 23 | 07 | Decayed permanent |  |
|  | 79 | 08 | Filled permanent |  |
|  | 60 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 169 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 28 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description and code Notes``` |  |  |  |
| 707-708 | Coronal caries, surfaces: lower right |  |  |  |
| DERCS128 2nd bicuspid, buccal surface |  |  |  |  |
| 137 |  | 01 | Sound deciduous or primary surface |  |
|  | 6 | 02 | Decayed deciduous or primary surface |  |
|  | 12 | 03 | Filled deciduous or primary surface |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1036 | 05 | Sound permanent |  |
|  | 26 | 07 | Decayed permanent |  |
|  | 102 | 08 | Filled permanent |  |
|  | 113 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 203 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and codeNone``` |  |  |  |
| $733-734$ <br> DERCT1 | Coronal tooth calls: upper left central incisor |  |  |  |
|  | 34 | 00 | Tooth present but excluded |  |
|  | 30 | 01 | Sound deciduous or primary tooth |  |
|  | 4 | 02 | Decayed deciduous or primary tooth |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 996 | 05 | Sound permanent |  |
|  | 48 | 07 | Decayed permanent |  |
|  | 170 | 08 | Filled permanent |  |
|  | 34 | 09 | Full crown coverage |  |
|  | 36 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 246 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 35 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| 735-736 | Coronal tooth calls: upper left |  |  |  |
| DERCT2 lateral incisor |  |  |  |  |
| 19 |  | 00 | Tooth |  |
| 48 |  | 01 | Sound |  |
| 3 |  | 02 | Decay |  |
| 1 |  | 03 | Fille |  |
| 17 |  | 04 | Unerup |  |
| 969 |  | 05 | Sound |  |
| 59 |  | 07 | Decay |  |
| 178 |  | 08 | Fille |  |
| 31 |  | 09 | Full |  |
| 40 |  | 10 | Miss dise |  |
| 247 |  | 11 | $\begin{aligned} & \text { Repl } \\ & \text { to } \end{aligned}$ |  |
| 5 |  | 12 | Miss non- |  |
| 26 |  | 13 | $\begin{aligned} & \text { Repl } \\ & \text { to o } \end{aligned}$ |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code Notes``` |  |  |  |
| $739-740$ <br> DERCT4 | Coronal tooth calls: upper left 1 st bicuspid |  |  |  |
|  | 106 | 01 | Sound deciduous or primary tooth |  |
|  | 11 | 02 | Decayed deciduous or primary tooth |  |
|  | 6 | 03 | Filled deciduous or primary tooth |  |
|  | 3 | 04 | Unerupted tooth |  |
|  | 763 | 05 | Sound permanent |  |
|  | 52 | 07 | Decayed permanent |  |
|  | 241 | 08 | Filled permanent |  |
|  | 51 | 09 | Full crown coverage |  |
|  | 84 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 288 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description and code |  |  | Notes |
| $741-742$ <br> DERCT5 | Coronal tooth calls: upper left 2 nd bicuspid |  |  |  |
| DERCT5 | 122 | 01 | Sound deciduous or primary tooth |  |
|  | 16 | 02 |  |  |
|  | 26 | 03 | Filled deciduous or primary tooth Unerupted tooth |  |
|  | 4 | 04 |  |  |
|  | 701 | 05 | Sound permanent |  |
|  | 36 | 07 | Decayed permanent |  |
|  | 252 | 08 | Filled permanent |  |
|  | 70 | 09 | Full crown coverage |  |
|  | 116 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 294 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 2 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |  |
| Positions SAS name | Counts Item description |  |  |  | Notes |
| DER3M1 ${ }^{747}$ | Coronal tooth calls: upper left 3rd molar |  |  |  |  |
| DER3M1 | 377 | 1 | Present |  |  |
|  | 916 | 2 | Absent |  |  |
|  | 1303 | Blank |  |  |  |
| $748-749$ <br> DERCT8 |  | Coronal tooth calls: upper right central incisor |  |  |  |
|  | 28 | 00 | Tooth present but excluded |  |  |
|  | 28 | 01 | Sound deciduous or primary tooth |  |  |
|  | 3 | 02 | Decayed deciduous or primary tooth |  |  |
|  | 1 | 03 | Filled deciduous or primary tooth |  |  |
|  | 4 | 04 | Unerupted tooth |  |  |
|  | 997 | 05 | Sound permanent |  |  |
|  | 64 | 07 | Decayed permanent |  |  |
|  | 163 | 08 | Filled permanent |  |  |
|  | 38 | 09 | Full crown coverage |  |  |
|  | 33 | 10 | Missing (due to caries/periodontal disease) |  |  |
|  | 244 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |  |
|  | 4 | 12 | Missing (due to orthodontic or non-disease) |  |  |
|  | 36 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |  |
|  | 953 | Blank |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| 750-751 | Coronal tooth calls: upper right |  |  |  |
| DERCT9 lateral incisor |  |  |  |  |
| 23 |  | 00 | Tooth |  |
| 52 |  | 01 | Sound |  |
| 1 |  | 02 | Decay |  |
| 20 |  | 04 | Uneru |  |
| 973 |  | 05 | Sound |  |
| 57 |  | 07 | Decay |  |
| 157 |  | 08 | Fille |  |
| 39 |  | 09 | Full |  |
| 41 |  | 10 | Miss dise |  |
| 250 |  | 11 | Repla to |  |
| 4 |  | 12 | Miss non- |  |
| 26 |  | 13 | $\begin{aligned} & \text { Repla } \\ & \text { to o } \end{aligned}$ |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  |  |
| $752-753$ <br> DERCT10 | Coronal tooth calls: upper right cuspid |  |  |  |
|  | 13 | 00 | Tooth present but excluded |  |
|  | 149 | 01 | Sound deciduous or primary tooth |  |
|  | 5 | 02 | Decayed deciduous or primary tooth |  |
|  | 1 | 03 | Filled deciduous or primary tooth |  |
|  | 4 | 04 | Unerupted tooth |  |
|  | 981 | 05 | Sound permanent |  |
|  | 44 | 07 | Decayed permanent |  |
|  | 135 | 08 | Filled permanent |  |
|  | 38 | 09 | Full crown coverage |  |
|  | 35 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 224 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 5 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 9 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | ```Item description Counts and code Notes``` |  |  |  |
| $754-755$ <br> DERCT11 | Coronal tooth calls: upper right 1st bicuspid |  |  |  |
| 1 |  | 00 | Tooth present but excluded |  |
|  | 102 | 01 | Sound deciduous or primary tooth |  |
|  | 16 | 02 | Decayed deciduous or primary tooth |  |
|  | 3 | 03 | Filled deciduous or primary tooth |  |
|  | 5 | 04 | Unerupted tooth |  |
|  | 763 | 05 | Sound permanent |  |
|  | 52 | 07 | Decayed permanent |  |
|  | 250 | 08 | Filled permanent |  |
|  | 60 | 09 | Full crown coverage |  |
|  | 78 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 275 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 37 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description and codeNone``` |  |  |  |
| $756-757$ <br> DERCT12 | Coronal tooth calls: upper right 2 nd |  |  |  |
| DERCT12 | 124 | 01 | Sound deciduous or primary tooth |  |
|  | 16 | 02 | Decayed deciduous or primary tooth |  |
|  | 25 | 03 | Filled deciduous or primary tooth |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 696 | 05 | Sound permanent |  |
|  | 50 | 07 | Decayed permanent |  |
|  | 251 | 08 | Filled permanent |  |
|  | 75 | 09 | Full crown coverage |  |
|  | 113 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 286 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 3 | 12 | Missing (due to orthodontic or non-disease) <br> Replacement for missing tooth (due to orthodontic or non- disease) |  |
|  | 2 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  |  |  | Notes |
| 767-768 | Coronal tooth calls: lower left cuspid |  |  |  |  |
| DERCT17 | 1 | 00 | Tooth present but excluded |  |  |
|  | 118 | 01 | Sound deciduous or primary tooth |  |  |
|  | 2 | 03 | Filled deciduous or primary tooth |  |  |
|  | 9 | 04 | Unerupted tooth |  |  |
|  | 1259 | 05 | Sound permanent |  |  |
|  | 29 | 07 | Decayed permanent |  |  |
|  | 42 | 08 | Filled permanent |  |  |
|  | 20 | 09 | Full crown coverage |  |  |
|  | 25 | 10 | Missing (due to caries/periodontal disease) |  |  |
|  | 135 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |  |
|  | 953 | Blank |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Item description |  |  |  |
| $771-772$ <br> DERCT19 | Coronal tooth calls: lower left 2 nd bicuspid |  |  |  |
| DERCT19 | 117 | 01 | Sound deciduous or primary tooth |  |
|  | 12 | 02 | Decayed deciduous or primary tooth |  |
|  | 27 | 03 | Filled deciduous or primary tooth |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 793 | 05 | Sound permanent |  |
|  | 44 | 07 | Decayed permanent |  |
|  | 275 | 08 | Filled permanent |  |
|  | 60 | 09 | Full crown coverage |  |
|  | 107 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 201 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |
| $773-774$ <br> DERCT20 |  | Coronal tooth calls: lower left 1stmolar |  |  |
|  | 12 | 04 | Unerupted tooth |  |
|  | 448 | 05 | Sound permanent |  |
|  | 82 | 07 | Decayed permanent |  |
|  | 415 | 08 | Filled permanent |  |
|  | 94 | 09 | Full crown coverage |  |
|  | 322 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 268 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 2 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name |  |  |  |  |
| $775-776$ <br> DERCT21 | Coronal tooth calls: lower left 2 nd molar |  |  |  |
|  | 169 | 04 | Unerupted tooth |  |
|  | 408 | 05 | Sound permanent |  |
|  | 90 | 07 | Decayed permanent |  |
|  | 403 | 08 | Filled permanent |  |
|  | 76 | 09 | Full crown coverage |  |
|  | 263 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 233 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 953 |  |  |  |
| 777 |  | Coronal tooth calls: lower left 3rdmolar |  |  |
| DER3M3 | 418 | 1 | Present |  |
|  | 875 | 2 | Absent |  |
|  | 1303 |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Counts Item description |  |  | Notes |
| $778-779$ <br> DERCT22 | Coronal tooth calls: lower right central incisor |  |  |  |
|  | 5 | 00 | Tooth present but excluded |  |
|  | 11 | 01 | Sound deciduous or primary tooth |  |
|  | 1375 | 05 | Sound permanent |  |
|  | 13 | 07 | Decayed permanent |  |
|  | 23 | 08 | Filled permanent |  |
|  | 7 | 09 | Full crown coverage |  |
|  | 31 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 164 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 9 | 12 | ```Missing (due to orthodontic or non-disease) Replacement for missing tooth (due to orthodontic or non-disease)``` |  |
|  | 5 | 13 |  |  |
|  | 953 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name |  |  |  |  |
| $782-783$ <br> DERCT24 | Coronal tooth calls: lower right cuspid |  |  |  |
|  | 1 | 00 | Tooth present but excluded |  |
|  | 117 | 01 | Sound deciduous or primary tooth |  |
|  | 1 | 02 | Decayed deciduous or primary tooth |  |
|  | 2 | 03 | Filled deciduous or primary tooth |  |
|  | 6 | 04 | Unerupted tooth |  |
|  | 1245 | 05 | Sound permanent |  |
|  | 38 | 07 | Decayed permanent |  |
|  | 55 | 08 | Filled permanent |  |
|  | 19 | 09 | Full crown coverage |  |
|  | 24 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 133 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 1 | 12 | Missing (due to orthodontic or non-disease) |  |
|  | 1 | 13 | Replacement for missing tooth (due to orthodontic or non-disease) |  |
|  | 953 | Bla |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Counts Item description $\quad$ Notes |  |  |  |
| $784-785$ <br> DERCT25 | Coronal tooth calls: lower right 1 st bicuspid |  |  |  |
|  | 93 | 01 | Sound deciduous or primary tooth Decayed deciduous or primary tooth |  |
|  | 12 | 02 |  |  |
|  | 15 | 03 | Filled deciduous or primary tooth |  |
|  | 2 | 04 | Unerupted tooth |  |
|  | 1014 | 05 | Sound permanent |  |
|  | 39 | 07 | Decayed permanent |  |
|  | 178 | 08 | Filled permanent |  |
|  | 33 | 09 | Full crown coverage |  |
|  | 60 | 10 | Missing (due to caries/periodontal disease) |  |
|  | 169 | 11 | Replacement for missing tooth (due to caries/periodontal disease) |  |
|  | 28 | 12 | Missing (due to orthodontic or non-disease) |  |
| 953 Blank |  |  |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |
| Positions <br> SAS name | Item description |  | Notes |
|  |  | ROOT CARIES, SURFACES |  |
| 821 |  | Root caries, surfaces: upper left |  |
| DERRS1 | 901 | $0 \quad$ Sound surface |  |
|  | 4 | 1 Caries |  |
|  | 234 | 8 Not present |  |
|  | 54 | 9 Could not be assessed |  |
|  | 1403 | Blank |  |
| 822 |  | Root caries, surfaces: upper left |  |
| DERRS2 |  | central incisor, buccal surface |  |
|  | 885 | 0 Sound surface |  |
|  | 11 | 1 Caries |  |
|  | 9 | 2 Filled |  |
|  | 234 | 8 Not present |  |
|  | 54 | 9 Could not be assessed |  |
|  | 1403 | Blank |  |
| 823 |  | Root caries, surfaces: upper left |  |
| DERRS3 |  | central incisor, mesial surface |  |
|  | 895 | 0 Sound surface |  |
|  | 8 | 1 Caries |  |
|  | 2 | 2 Filled |  |
|  | 234 | 8 Not present |  |
|  | 54 | 9 Could not be assessed |  |
|  | 1403 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions SAS name | Item description <br> Counts and code |  |  | Notes |
| DERRS7 ${ }^{827}$ | Root caries, surfaces: upper left |  |  |  |
|  | lateral incisor, mesial surface |  |  |  |
|  | 894 | 0 Sound surface |  |  |
|  | 12 | Caries |  |  |
|  | 2 | Filled |  |  |
|  | 232 | Not present |  |  |
|  | 53 | Could not be assessed |  |  |
|  | 1403 | Blank |  |  |
| 828 |  | Root caries, surfaces: upper left |  |  |
| DERRS8 |  | lateral incisor, distal surface |  |  |
|  | 893 | 0 | Sound surface |  |
|  | 11 | 1 | Caries |  |
|  | 4 |  | Filled |  |
|  | 232 | 8 | Not present |  |
|  | 53 | 9 | Could not be assessed |  |
|  | 1403 | Blank |  |  |
| 829 |  | Root caries, surfaces: upper left cuspid, |  |  |
| DERRS 9 |  | lingual surface |  |  |
|  | 931 | 0 | Sound surface |  |
|  | 8 | 1 | Caries |  |
|  | 1 | 2 | Filled |  |
|  | 193 | 8 | Not present |  |
|  | 60 | 9 | Could not be assessed |  |
|  | 1403 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


| NHANES III Examination Data File |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SECOND EXAM DATA |  |  |  |  |  |  |
| DENTAL EXAMINATION |  |  |  |  |  |  |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |  |  |
| Positions SAS name | Item description |  |  |  |  |  |
| $\begin{array}{r} 928 \\ \text { DERRSIO8 } \end{array}$ | Root caries, surfaces: lower right 1st |  |  |  |  |  |
| 6490 Sound surface |  |  |  |  |  |  |
| 151 Caries |  |  |  |  |  |  |
| 22 Filled |  |  |  |  |  |  |
| 4758 Not present |  |  |  |  |  |  |
| 529 Could not be assessed |  |  |  |  |  |  |
| 1403 Blank |  |  |  |  |  |  |
| 929 | Root caries, surfaces: lower right 2nd |  |  |  |  |  |
| DERRS109 molar, lingual surface |  |  |  |  |  |  |
| 7360 Sound surface |  |  |  |  |  |  |
| 181 Caries |  |  |  |  |  |  |
| 12 Filled |  |  |  |  |  |  |
| 3858 Not present |  |  |  |  |  |  |
| 539 Could not be assessed |  |  |  |  |  |  |
| 1403 Blank |  |  |  |  |  |  |
| 930 | Root caries, surfaces: lower right $2 n d$ |  |  |  |  |  |
| DERRS110 molar, buccal surface |  |
| 7170 Sound surface |  |  |  |  |  |  |
| 201 Caries |  |  |  |  |  |  |
| 182 Filled |  |  |  |  |  |  |
| 3858 Not present |  |  |  |  |  |  |
| 539 Could not be assessed |  |  |  |  |  |  |
| 1403 Blank |  |  |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description |  |  |  |
| 953 |  | Periodontal assessments: gingival |  |  |
| DERLGN7 |  | bleeding - lower 1st bicuspid, mesial |  |  |
|  | 1017 | 0 No bleeding |  |  |
|  | 55 | 1 Bleeding |  |  |
|  | 229 | 9 Could not be assessed |  |  |
|  | 1295 | Blank |  |  |
| 954 |  | Periodontal assessments: gingival |  |  |
| DERLGN8 |  | bleeding - lower 1st bicuspid, buccal |  |  |
|  | 963 | $0 \quad$ No bleeding |  |  |
|  | 109 | 1 Bleeding |  |  |
|  | 229 | 9 Could not be assessed |  |  |
|  | 1295 | Blank |  |  |
| 955 |  | Periodontal assessments: gingival |  |  |
| DERLGN9 |  | bleeding - lower 2nd bicuspid, mesial |  |  |
|  | 961 | 0 No bleeding |  |  |
|  | 48 | 1 Bleeding |  |  |
|  | 292 | 9 Could not be assessed |  |  |
|  | 1295 | Blank |  |  |
| 956 |  | Periodontal assessments: gingival |  |  |
| DERLGN10 |  | bleeding - lower 2nd bicuspid, buccal |  |  |
|  | 945 | 0 | No bleeding |  |
|  | 64 | 1 | Bleeding |  |
|  | 292 | 9 | Could not be assessed |  |
|  | 1295 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


## CALCULUS

961 Periodontal assessments: calculus score -
DERUCL1 upper central incisor, mesial
6770 Absence of calculus
1161 Supragingival calculus only
2152 Supragingival and subgingival
calculus or subgingival calculus only
2949 Could not be assessed
1294 Blank

962
DERUCL2
Periodontal assessments: calculus score -
upper central incisor, buccal
7660 Absence of calculus
1001 Supragingival calculus only
1432 Supragingival and subgingival
calculus or subgingival calculus
only
2939 Could not be assessed
1294 Blank

963 Periodontal assessments: calculus score -
DERUCL3
upper lateral incisor, mesial
6340 Absence of calculus
1141 Supragingival calculus only
2612 Supragingival and subgingival
calculus or subgingival calculus
only
2939 Could not be assessed
1294 Blank

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  |  | Notes |
| 964 |  | Period | ontal assessments: calculus score | - |
| DERUCL4 |  | upper | lateral incisor, buccal |  |
|  | 753 | 0 | Absence of calculus |  |
|  | 109 |  | Supragingival calculus only |  |
|  | 148 |  | Supragingival and subgingival calculus or subgingival calculus only |  |
|  | 292 | 9 | Could not be assessed |  |
|  | 1294 | Blank |  |  |
| DERUCL5 ${ }^{965}$ |  | Periodontal assessments: calculus score upper cuspid, mesial |  |  |
| DERUCL5 | 644 |  | Absence of calculus |  |
|  | 129 |  | Supragingival calculus only |  |
|  | 279 |  | Supragingival and subgingival calculus or subgingival calculus only |  |
|  | 250 |  | Could not be assessed |  |
|  | 1294 | Blank |  |  |
| 966 |  | Periodontal assessments: calculus score upper cuspid, buccal |  |  |
| DERUCL6 |  |  |  |  |
|  | 760 |  | Absence of calculus |  |
|  | 116 |  | Supragingival calculus only |  |
|  | 176 | $2$ | Supragingival and subgingival calculus or subgingival calculus only |  |
|  | 250 | 9 | Could not be assessed |  |
|  | 1294 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA




NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COMPLETION CODES AND SUMMARY VARIABLES |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and codeNone``` |  |  |  |
| 1162 |  | Periodontal assessments: furcations - |  |  |
| DERUM2MF | 863 | 0 No involvement, explorer cannot enter the furcation |  |  |
|  | 29 |  | Partial involvement, explorer cannot pass completely through the furcation |  |
|  | 2 | 2 | Complete involvement, explorer can pass between the roots through the entire furcation |  |
|  | 295 | 9 | Could not be assessed |  |
|  | 1407 | Blank |  |  |
| 1163 |  | Periodontal assessments: furcations - |  |  |
| DERUM2BF |  | upper 2nd molar, buccal |  |  |
|  | 850 |  | No involvement, explorer cannot enter the furcation |  |
|  | 45 | 1 | Partial involvement, explorer cannot pass completely through the furcation |  |
|  | 1 | 2 | Complete involvement, explorer can pass between the roots through the entire furcation |  |
|  | $\begin{array}{r} 293 \\ 1407 \end{array}$ | Blank | Could |  |

NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESTORATIONS AND TOOTH CONDITIONS |  |  |  |  |
| Positions SAS name | ```Item description Counts and code Notes``` |  |  |  |
| 1286 |  | Restorations and tooth condition: upper |  |  |
| DERRTC9 |  | right lateral incisor |  |  |
|  | 926 | 0 | No treatment needed |  |
|  | 6 | 2 | Missing, partly missing, loose, fractured or temporary restoration |  |
|  | 6 | 3 | Recurrent decay on intra-coronal restoration |  |
|  | 2 | 5 | Missing, loose or temporary crowns or bridges, broken connector and/or missing veneer material on posterior crowns or bridge |  |
|  | 1 | 6 | Fracture of tooth structure associated with a restoration, crown, or bridge |  |
|  | 5 | 7 | Pulpal involvement evident |  |
|  | 7 | 8 | Retained root(s) evident |  |
|  | 206 | 9 | Could not be assessed |  |
|  | 1437 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESTORATIONS AND TOOTH CONDITIONS |  |  |  |  |
| Positions <br> SAS name |  Item description Notes |  |  |  |
| 1287 |  | Restorations and tooth condition: upper |  |  |
| DERRTC10 |  | right cuspid |  |  |
|  | 965 | 0 No treatment needed |  |  |
|  | 1 | 1 | Defective margin or restoration |  |
|  | 3 | 2 | Missing, partly missing, loose, fractured or temporary restoration |  |
|  | 3 | 3 | Recurrent decay on intra-coronal restoration |  |
|  | 2 | 5 | Missing, loose or temporary crowns or bridges, broken connector and/or missing veneer material on posterior crowns or bridge |  |
|  | 7 | 7 | Pulpal involvement evident |  |
|  | 5 | 8 | Retained root (s) evident |  |
|  | 173 | 9 | Could not be assessed |  |
|  | 1437 | Blank |  |  |



|  | NHANES III Examination Data File |
| :--- | :--- | :--- |
| SECOND EXAM DATA |  |


|  | NHANES III Examination Data File |
| :--- | :--- | :--- |
| SECOND EXAM DATA |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESTORATIONS AND TOOTH CONDITIONS |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| 1295 |  | Restorations and tooth condition: lower |  |  |
| DERRTC18 |  | left 1st bicuspid |  |  |
|  | 983 | 0 No treatment needed |  |  |
|  | 5 | 1 | Defective margin or restoration |  |
|  | 5 | 2 | Missing, partly missing, loose, fractured or temporary restoration |  |
|  | 4 | 3 | Recurrent decay on intra-coronal restoration |  |
|  | 2 | 5 | Missing, loose or temporary crowns or bridges, broken connector and/or missing veneer material on posterior crowns or bridge |  |
|  | 1 | 6 | Fracture of tooth structure associated with a restoration, crown, or bridge |  |
|  | 2 | 7 | Pulpal involvement evident |  |
|  | 6 | 8 | Retained root (s) evident |  |
|  | 151 | 9 Blank | Could not be assessed |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESTORATIONS AND TOOTH CONDITIONS |  |  |  |  |
| Positions <br> SAS name | ```Item description Counts and codeNone``` |  |  |  |
| 1303 |  | Restorations and tooth condition: lower |  |  |
| DERRTC26 |  | right 2nd bicuspid |  |  |
|  | 901 | 0 | No treatment needed |  |
|  | 7 | 1 | Defective margin or restoration |  |
|  | 10 | 2 | Missing, partly missing, loose, fractured or temporary restoration |  |
|  | 3 | 3 | Recurrent decay on intra-coronal restoration |  |
|  | 1 | 5 | Missing, loose or temporary crowns or bridges, broken connector and/or missing veneer material on posterior crowns or bridge |  |
|  | 2 | 6 | Fracture of tooth structure associated with a restoration, crown, or bridge |  |
|  | 10 | 7 | Pulpal involvement evident |  |
|  | 6 | 8 | Retained root (s) evident |  |
|  | 219 | 9 | Could not be assessed |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESTORATIONS AND TOOTH CONDITIONS |  |  |  |  |
| Positions <br> SAS name | Counts Item description $\quad$ Notes |  |  |  |
| 1304 |  | Restorations and tooth condition: lower |  |  |
| DERRTC27 |  | right 1st molar |  |  |
|  | 634 | 0 | No treatment needed |  |
|  | 20 | 1 | Defective margin or restoration |  |
|  | 18 | 2 | Missing, partly missing, loose, fractured or temporary restoration |  |
|  | 11 | 3 | Recurrent decay on intra-coronal restoration |  |
|  | 4 | 5 | Missing, loose or temporary crowns or bridges, broken connector and/or missing veneer material on posterior crowns or bridge |  |
|  | 6 | 6 | Fracture of tooth structure associated with a restoration, crown, or bridge |  |
|  | 10 | 7 | Pulpal involvement evident Retained root(s) evident |  |
|  | 7 | 8 |  |  |
|  | $\begin{array}{r} 449 \\ 1437 \end{array}$ | 9 | Could not be assessed |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DENTAL EXAMINATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TRAUMA |  |  |  |  |  |
| Positions SAS name | Counts Item description |  |  |  | Notes |
| 1310 |  | Trauma: lower left central incisor |  |  |  |
| DERLTRA1 | 1031 | 0 | No traumatic injury |  |  |
|  | 9 | 1 | Untreated enamel fracture not involving dentine |  |  |
|  | 11 | 2 | Unrestored fracture involving dentine |  |  |
|  | 1 | 3 | Untreated injury evidenced by dark discoloration, swelling and/or fistula |  |  |
|  | 2 | 4 | Restored fracture |  |  |
|  | 6 | 6 | Tooth missing due to trauma |  |  |
|  | 27 | 9 | Could not be assessed |  |  |
|  | 1509 | Blank |  |  |  |
| 1311 |  | Trauma: lower left lateral incisor |  |  |  |
| DERLTRA2 | 1014 | 0 | No traumatic injury |  |  |
|  | 7 | 1 | Untreated enamel fracture not involving dentine |  |  |
|  | 2 | 2 | Unrestored fracture involving dentine |  |  |
|  | 1 | 4 | Restored fracture <br> Tooth missing due to trauma |  |  |
|  |  | 6 |  |  |  |
|  | 60 | 9 | Could not be assessed |  |  |
|  | 1509 | Blank |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

DERCCFLG: Completion code: coronal caries
This variable was constructed to help the analyst decide whether or not to include an examinee with incomplete or missing data on the coronal caries component in the analysis of that component. Examinees who have no valid or useful data have a completion code of "3 Not assessed."

DERCJFLG, DERCLFLG, DERGNFLG, DERLAFLG, DERPCFLG: Completion codes

These variables were constructed to help the analyst decide whether or not to include an examinee with incomplete or missing data on the periodontal component in the analysis of that component. For examinees who were medically excluded from periodontal components or who were not in the age range to receive these assessments, the periodontal component data and the completion code are blank. Examinees who were completely edentulous or who otherwise have no valid or useful data have a completion code of "3 Not assessed."

DERCLFLG: Completion code: calculus

See note for DERCJFLG.

DERDQFLG: Completion code: denture questionnaire
This variable was constructed to help the analyst decide whether or not to include an examinee with incomplete or missing data on the denture questionnaire in the analysis of that component. For examinees who were not in the age range to receive these assessments, the denture questionnaire data and the completion code are blank.

DERGNFLG: Completion code: gingival bleeding See note for DERCJFLG.

DERLAFLG: Completion code: loss of attachment

See note for DERCJFLG.

DERLQUAD and DERUQUAD: Upper and lower quadrant periodontal assessment indicators

The right and left upper and lower quadrant indicators for the periodontal components were generated by the direct data entry computer program at the beginning of the examination. Therefore, indicators may be present for examinees who did not have measurements or who were edentulous. Note that because the value for the periodontal component is blank, while the quadrant
indicators remained set, there will be a discrepancy between these counts.

DEROVB: Occlusal characteristics: overbite (mm)

Overbite was calculated by subtraction of overlap from crown height. The exact measurement process is fully described in the Oral Examination Component manual (U.S. DHHS, 1996b).

DERPCFLG: Completion code: pocket assessment

See note for DERCJFLG.

DERRCFLG: Completion code: restorations and tooth conditions

This variable was constructed to help the analyst decide whether or not to include an examinee with incomplete or missing data on the restorations and tooth conditions component in the analysis of that component. For examinees who were not in the age range to receive these assessments, the restoration and tooth conditions data and the completion code are blank. Examinees who were completely edentulous or who otherwise have no valid or useful data have a completion code of "3 Not assessed."

DERRSFLG: Completion code: root caries

This variable was constructed to help the analyst decide whether or not to include an examinee with incomplete or missing data on the root caries component in the analysis of that component. For examinees who were medically excluded from the root caries component or who were not in the age range to receive the assessment, the component data and the completion code are blank. Examinees who were completely edentulous or who otherwise have no valid or useful data have a completion code of "3 Not assessed."

DERSE1-DERSE28: Sealants

The code "2 Not eligible for sealants" was used 1) for certain teeth not shaped to hold preventive sealants and 2) for missing, crowned, or filled teeth.

DERSTCL1, DERSTCL2, DERSTCL3, DERSTCL4, DERSTCL5, DERSTCL6: Oral soft tissue lesions: color

More than one color could be indicated for each lesion. Each color is a single digit, so multiple digits indicate combinations of colors. To determine what specific colors were present, one must separate character strings into their single characters.

```
DERSTDX1, DERSTDX2, DERSTDX3, DERSTDX4, DERSTDX5, DERSTDX6:
    Oral soft tissue lesions: clinical diagnosis
    The "unknown" code represents a specific diagnosis of a lesion
    that did not fit into any of the named categories. A lesion of
    "unknown" diagnosis required a clinical description. The "other"
    codes (46 to 59) include identifiable lesions that were different
    from soft tissue lesions of interest. During the examination,
    the dentist wrote in a diagnosis for lesions designated as
    "other." During data processing the 13 most frequently observed
    written-in conditions were grouped and coded separately (codes
    47-59); the remaining rarer conditions were retained in code 46.
DERSTLC1, DERSTLC2, DERSTLC3, DERSTLC4, DERSTLC5, DERSTLC6:
            Oral soft tissue lesions: locations
    More than one location could be indicated for each clinical
        diagnosis. Multiple locations are shown as combined letters and
        numbers. To determine what specific locations were affected, one
        must separate character strings into their single characters.
DERTRFLG: Completion code: traumatic injuries
    This variable was constructed to help the analyst decide whether
    or not to include an examinee with incomplete or missing data on
    the traumatic injuries component in the analysis of that
    component. For examinees who were not in the age range to
    receive these assessments, the traumatic injuries data and the
    completion code are blank. Examinees who were completely
    edentulous or who otherwise have no valid or useful data have a
    completion code of "3 Not assessed."
DERUQUAD: Upper quadrant periodontal assessment indicator
    See note for DERLQUAD.
```

NHANES III Examination Data File

Allergy skin reactivity testing was conducted on all examinees aged 6-19 years and on a random half-sample of examinees aged 20-59 years by a trained examiner in the mobile examination center (MEC).

Before skin testing, screening questions were asked to determine medical safety exclusions. Those excluded from testing were examinees who: usually did not have trouble breathing in their chest or lungs but who were having trouble breathing at the time of the examination (this trouble was NOT due to nasal congestion from a cold), usually had trouble breathing in their chest or lungs and had more trouble breathing at the time of the exam, had a severe response to allergen skin testing previously, or had severe eczema or infection on both arms.

Because this examination was administered to a selected subsample in the examination center, the allergy sample weight (WTPFALG6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The allergy skin test consisted of the evaluation of immediate hypersensitivity reactions to any of 10 licensed, commercially available, FDA-approved, standardized allergens as well as positive and negative controls. The extracts were indoor allergens (Dermatophagoides farinae (house mite), cat, German cockroach), outdoor allergens (short ragweed, perennial rye, Alternaria alternata, Bermuda grass, Russian thistle, white oak), and a food allergen (peanut). The positive control was histamine, and the negative control was the glycerinated diluent. Examiners prepared fresh allergen solutions upon arrival at each MEC site.

Hypersensitivity reactions were evaluated after administering the allergens on an examinee's forearms. Allergens were applied using the prick-puncture technique at 12 skin sites (one for each allergen and the positive and negative controls) determined by a clear, plastic template. The flare and wheal areas were delineated with a marking pen 15 minutes after the skin was punctured and the allergens were applied.

The length and width of the flare and wheal were measured with a 100mm flexible, clear, plastic ruler. Length was defined as the longest diameter of the reaction, and width was defined as the diameter perpendicular to the length at its midpoint. If a reaction had any dimension 3 mm or greater, all four dimensions (length and width of flare and wheal) were measured and recorded. If all four dimensions
were less than 3 mm , zeroes were recorded for all the measurements. Confluence was noted for both allergens if two reactions overlapped. For details of the allergy testing protocol, see the Training Manual for Allergy Component (U.S. DHHS, 1996b).
who were trained to perform the testing. Training occurred before the examination period at special training sessions held at NCHS or at the offices of the contractor responsible for survey operations. The component was monitored on a regular basis by the component consultant, and retraining was conducted annually. In addition to data collection training, the technicians were trained to recognize and respond to generalized hypersensitivity reactions. A physician was in the MEC during all examinations, and drugs for treating systemic allergic reactions were available.

Information on respiratory symptoms related to allergies can be found in the Household Adult Data File (for examinees aged 17 years and over) and the Household Youth Data File (for examinees aged 2 months-16 years).

The allergen data fields are blank for examinees who were excluded for safety reasons. For those examinees who were eligible for the allergy skin test but for whom allergen data were not collected, the allergen measurement fields have " 888 Blank but applicable" values. In most cases, these missing data were due to examinees not participating in the allergy skin test, usually due to time constraints. In other cases, however, data on some but not all allergens were collected. These gaps in the data were due to refusals to continue the testing or to receive specific allergens.

All measurements were taken within the acceptable time of 15 plus or minus 5 minutes except for one examinee who was measured at 23 minutes after the administration of the allergens and the controls. Therefore, the variables indicating the minutes from administration to reading for each allergen were not included on this data file.

Data processing and editing were performed to ensure internal data consistency.


NHANES III Examination Data File

SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| ALLERGY SKIN TEST |  |  |  |
| :---: | :---: | :---: | :---: |
| TEST RESULTS |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| 1451 |  | Peanut - arm |  |
| ALRPEAAR | 733 | 1 Right arm |  |
|  | 2 | 2 Left arm |  |
|  | 174 | 8 Blank but applicable |  |
|  | 1687 | Blank |  |
| $1452-1454$ALRPEAFL | $\begin{aligned} & \text { Peanut - flare length (mm) } \\ & 735 \text { 000-034 } \end{aligned}$ |  |  |
|  |  |  |  |
|  | 174 | 888 Blank but applicable |  |
|  | 1687 |  |  |
| 1455-1457ALRPEAFW |  | Peanut - flare width (mm) |  |
|  |  | 000-024 |  |
| ALRPEAFW | 174 | 888 Blank but applicable |  |
|  | 1687 | Blank |  |
| 1458 |  | Peanut - confluent |  |
| ALRPEACN | 735 | 2 No |  |
|  | 174 | 8 Blank but applicable |  |
|  | 1687 | Blank |  |
| 1459-1461 |  | Peanut - wheal length (mm) |  |
| ALRPEAWL | 735 | 000-012 |  |
|  | 174 | 888 Blank but applicable |  |
|  | 1687 | Blank |  |
| 1462-1464 735 |  | Peanut - wheal width (mm) |  |
| ALRPEAWW | 735 | 000-007 |  |
|  | 174 | 888 Blank but applicable |  |
|  | 1687 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| ALLERGY SKIN TEST |  |  |  |
| :---: | :---: | :---: | :---: |
| TEST RESULTS |  |  |  |
| Positions <br> SAS name | Item description |  |  |
| 1535-1539 |  | Examiner number 1 | See note |
| ALRTECH1 | 725 | 01001-09018 |  |
|  | 199 | 88888 Blank but applicable |  |
|  | 1672 | Blank |  |
| 1540-1544 |  | Examiner number 2 | See note |
| ALRTECH2 | 754 | 01001-09018 |  |
|  | 170 | 88888 Blank but applicable |  |
|  | 1672 | Blank |  |

NOTES

ALPTECH1 and ALPTECH2: Examiners number 1 and 2
Because of the time interval between allergen placement and reading, the examiner number was entered twice. Examiner number 1 placed the allergens, and examiner 2 measured the reactions.

NHANES III Examination Data File

Pure tone air conduction audiometric threshold testing was conducted on all examinees aged 6-19 years by a trained examiner in a soundproof room in the mobile examination center (MEC).

Before threshold testing, a screening questionnaire was administered to determine the need for test exclusions and to assess factors that might affect test results. Examinees who reported having ear drainage (AURA10) were excluded from air conduction testing on the ear(s) with drainage.

Because this examination was administered in the mobile examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Threshold testing was conducted on both ears of examinees at seven frequencies (500, 1000, 2000, 3000, 4000, 6000, and 8000 Hertz (Hz)). The valid range for air conduction threshold values was determined by the effective range of the audiometers (Grason-Stadler, Inc., Model GSI 16 , Littleton, MA), which was from -20 to 105 decibels (dB). Observed values were between -10 and 100 dB . If an examinee did not respond to the signal tone at any level for one or more frequencies and a comment by the examiner indicated known deafness or severe hearing loss, a threshold level of 105 dB was entered. In accordance with the testing protocol, a retest with masking occurred if an examinee had air conduction threshold value(s) at a given frequency that differed by 40 $d B$ or more between both ears. If the lack of response was unilateral with a threshold value of 65 dB or lower for the other ear, a threshold value of 105 dB was entered for the relevant retest with masking value(s).

Before the examinations began at each MEC site, a field output calibration check was performed, and an environmental noise survey was conducted. The audiometer was rechecked weekly, and during examination periods, the tone quality, masking tone quality, hearing level controls, and earphones were checked daily. If a unit did not meet specifications, it was sent for service, and a backup unit was used for examinations. Additionally, laboratory calibration on each unit was performed approximately twice a year. For details of these procedures, analysts should consult the Audiometry and Tympanometry Manual (U.S. DHHS, 1996b).

Air conduction threshold testing alone is not sufficient to fully characterize hearing loss; it only provides information on the severity and the frequencies affected. Because of this, tympanic membrane compliance also was measured to help determine the nature of any hearing loss observed in the audiometry data. Analysts should refer to the Tympanometry section of the Examination Data File for information on this aspect of hearing testing. In addition, questions on hearing status including ear infection history and the use of hearing aids can be found in the Household Youth Data File (2 months-

```
1 6 \text { years of age).}
The audiometry consultant provided extensive training to examiners at
their time of hire, and each examiner's performance was monitored on a
periodic basis. Audiometry and tympanometry were priority components
at three of four annual MEC team retrainings.
Data processing and editing were performed to ensure internal data
consistency. Notes have been provided for variables requiring
additional explanation.
```

NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA



| 1557-1560 | Audiometer number |  |  |  |
| :---: | :---: | :--- | :---: | :---: |
| AURAUDO1 | 51 | 1230 |  |  |
|  | 61 | 1237 |  |  |
|  | 57 | 1240 |  |  |
|  | 80 | 1580 |  |  |
|  | 25 | 1581 |  |  |
|  | 65 | 2048 |  |  |
|  | 58 | 2050 |  |  |
| 28 | 8888 |  |  |  |
|  | 2171 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

AURA10: Drainage/discharge from either ear?
Examinees who reported having ear drainage were excluded from air conduction testing on the ear with drainage and from tympanic membrane compliance testing on both ears. Threshold value fields for excluded ears are blank. Tympanometry data fields for excluded examinees are blank.

AURA9: Tube in right or left ear?

Examinees who reported having a tube in either or both ears were excluded from tympanic membrane compliance testing. However, air conduction threshold testing was performed if there was no report or evidence of drainage (AURA10). Tympanometry data fields for excluded examinees are blank.

AURAUDO2 and AURB1C1-AURB1C8, AURB2C1-AURB2C8: Retest information
When examinees had air conduction threshold values at a given frequency that differed by 40 dB or more between the left and right ears, the ear with the higher threshold value(s) was retested while a masking sound was introduced into the other ear. In cases for which a retest was indicated but for which no retest data existed, the relevant variables were coded "Blank but applicable." If no threshold value differences of 40 dB or more were observed, these variables are blank.

## TYMPANOMETRY

Tympanic membrane compliance was tested for all examinees aged 6-19 years by a trained examiner in a soundproof room in the mobile examination center (MEC).

A screening questionnaire administered before audiometry testing also determined tympanometry test exclusions and can be used to assess factors that might have affected tympanometry results. If an examinee reported that either ear had a tube (AURA9) or drainage (AURA10), tympanometry was not performed, and all tympanometry variables are blank. Analysts should refer to the Audiometry section of the examination data file for information on the screening questionnaire. In addition, questions on hearing status, including ear infection history and the use of hearing aids, can be found in the Household Youth Data File (ages 2 months-16 years).

Because this examination was administered in the mobile examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The tympanometer (Model TA-7A Automatic Impedance Meter, Teledyne Avionics, Charlottesville, VA) produced a paper tympanogram output and was connected to a personal computer for electronic data collection.

Tympanometer function was checked daily. If a unit did not meet specifications, it was sent for service, and a backup unit was used for examinations. Laboratory calibration on each unit was performed approximately twice a year. For details of equipment maintenance procedures, analysts should consult the Audiometry and Tympanometry Manual (U.S. DHHS, 1996b).

Training for tympanometry was combined with that for audiometry. At the time of hire, examiners received extensive instruction from the audiometry consultant, and the examiners' performance was monitored on a periodic basis. Hearing evaluation, which included audiometry and tympanometry, was a priority component at three of four annual MEC team retrainings.

The variables containing equivalent volume at various pressures (TYRC000L-TYRC120L, TYRC000R-TYRC120R) can be used to create tympanogram plots of compliance as a function of pressure. To do so, the analyst must rearrange the data to have 121 observations per examinee (one for each pressure value at which compliance was determined from -400 to 200 daPa in 5 daPa increments) and create a variable to record the associated pressure values. An example of SAS programming code to perform this rearrangement is included in the note for TYRC000L-TYRC120L and TYRC000R-TYRC120R.

This data file includes 242 variables with equivalent volume data for pressure values between -400 and 200 daPa. Many examinees have data for pressure values of -200 daPa or greater but have no data (blanks) for pressure values from -400 to -205 daPa. This is due to variability in a software setting on the tympanometer that toggled an

```
option for continuing readings to -400 daPa or stopping the pressure
at -200 daPa if a compliance peak occurred before -175 daPa. When
plotting tympanogram data, analysts may want to include data points for
pressure values between -400 and -205 daPa. However, in most cases,
this pressure range will not add useful tympanogram information.
Early in the survey, electronic data collection was not fully
operational, and sporadic equipment problems led to data loss
throughout the survey. In these cases, the tympanogram data points
(TYRC000L-TYRC120L, TYRC000R-TYRC120R) are not available. However,
the values for peak compliance (TYRCMPLL, TYRCMPLR), pressure at peak
compliance (TYRPRSPL, TYRPRSPR), canal volume (TYRVOLL, TYRVOLR), and
acoustic reflex (TYRRFXL, TYRRFXR) were entered into the data from the
hard copy tympanograms if they were available.
Data processing and editing were performed to ensure internal
consistency of data. Notes have been provided for variables requiring
additional explanation.
```

NHANES III Examination Data File

SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA









NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 1863-1867 \\ & \text { TYRC040L } \end{aligned}$ |  | Equivalent volume at -200 daPa, left ear (ml) | See note |
|  | 279 | 0.304-4.095 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1868-1872 \\ & \text { TYRC041L } \end{aligned}$ |  | Equivalent volume at -195 daPa, left ear (ml) | See note |
|  | 279 | 0.297-4.099 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1873-1877 } \\ & \text { TYRC042L } \end{aligned}$ |  | Equivalent volume at -190 daPa, left ear (ml) | See note |
|  | 279 | 0.312-4.123 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1878-1882 } \\ & \text { TYRC043L } \end{aligned}$ |  | Equivalent volume at -185 daPa, left ear (ml) | See note |
|  | 279 | 0.319-04.15 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1883-1887 \\ & \text { TYRC044L } \end{aligned}$ |  | Equivalent volume at -180 daPa, | See note |
|  |  | left ear (ml) |  |
|  | 279 | 0.369-4.153 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |



NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 1913-1917 \\ & \text { TYRC050L } \end{aligned}$ |  | Equivalent volume at -150 daPa, left ear (ml) | See note |
|  | 279 | 0.361-4.339 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1918-1922 \\ & \text { TYRC051L } \end{aligned}$ |  | Equivalent volume at -145 daPa, left ear (ml) | See note |
|  | 279 | 0.347-04.36 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1923-1927 } \\ & \text { TYRC052L } \end{aligned}$ |  | Equivalent volume at -140 daPa, left ear (ml) | See note |
|  | 279 | 0.301-04.41 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1928-1932 } \\ & \text { TYRC053L } \end{aligned}$ |  | Equivalent volume at -135 daPa, left ear (ml) | See note |
|  | 279 | 0.308-4.441 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1933-1937 \\ & \text { TYRC054L } \end{aligned}$ |  | Equivalent volume at -130 daPa, | See note |
|  |  | left ear (ml) |  |
|  | 279 | 0.297-4.502 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |



NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 1963-1967 \\ & \text { TYRC060L } \end{aligned}$ |  | Equivalent volume at -100 daPa, left ear (ml) | See note |
|  | 279 | 0.333-4.671 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1968-1972 \\ & \text { TYRC061L } \end{aligned}$ |  | Equivalent volume at -95 daPa, left ear (ml) | See note |
|  | 279 | 0.329-4.715 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1973-1977 } \\ & \text { TYRC062L } \end{aligned}$ |  | Equivalent volume at -90 daPa, left ear (ml) | See note |
|  | 279 | 0.333-4.718 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1978-1982 } \\ & \text { TYRC063L } \end{aligned}$ |  | Equivalent volume at -85 daPa, left ear (ml) | See note |
|  | 279 | 0.347-4.769 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1983-1987 \\ & \text { TYRC064L } \end{aligned}$ |  | Equivalent volume at -80 daPa, | See note |
|  |  | left ear (ml) |  |
|  | 279 | 0.358-4.773 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & \text { 1988-1992 } \\ & \text { TYRC065L } \end{aligned}$ |  | Equivalent volume at -75 daPa, left ear (ml) | See note |
|  | 279 | 0.351-4.796 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 1993-1997 } \\ & \text { TYRC066L } \end{aligned}$ |  | Equivalent volume at -70 daPa, left ear (ml) | See note |
|  | 279 | 0.354-004.8 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 1998-2002 \\ & \text { TYRC067L } \end{aligned}$ |  | Equivalent volume at -65 daPa, left ear (ml) | See note |
|  | 279 | 0.361-04.82 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 2003-2007 } \\ & \text { TYRC068L } \end{aligned}$ |  | Equivalent volume at -60 daPa, left ear (ml) | See note |
|  | 279 | 0.379-04.82 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 2008-2012 } \\ & \text { TYRC069L } \end{aligned}$ |  | Equivalent volume at -55 daPa, left ear (ml) | See note |
|  | 279 | 0.415-004.8 |  |
|  | 147 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |




NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA




| NHANES III Examination Data SECOND EXAM DATA |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMP ANOMETRY |  |  |  |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions SAS name | Counts | em description and code | Notes |
| $\begin{aligned} & \text { 2313-2317 } \\ & \text { TYRC009R } \end{aligned}$ | $\begin{array}{r} 67 \\ 151 \\ 2378 \end{array}$ | ```Equivalent volume at -355 daPa, right ear (ml) 0.713-4.285 8888 Blank but applicable Blank``` | See note |
| $\begin{aligned} & 2318-2322 \\ & \text { TYRC010R } \end{aligned}$ | $\begin{array}{r} 67 \\ 151 \\ 2378 \end{array}$ | Equivalent volume at -350 daPa, right ear (ml) $0.724-4.302$ <br> 88888 Blank but applicable <br> Blank | See note |
| $\begin{aligned} & 2323-2327 \\ & \text { TYRC011R } \end{aligned}$ | $\begin{array}{r} 67 \\ 151 \\ 2378 \end{array}$ | ```Equivalent volume at -345 daPa, right ear (ml) 0.738-4.282 88888 Blank but applicable Blank``` | See note |
| $\begin{aligned} & 2328-2332 \\ & \text { TYRC012R } \end{aligned}$ | $\begin{array}{r} 67 \\ 151 \\ 2378 \end{array}$ | Equivalent volume at -340 daPa, right ear (ml) $0.764-4.265$ <br> 88888 Blank but applicable <br> Blank | See note |
| $\begin{aligned} & 2333-2337 \\ & \text { TYRC013R } \end{aligned}$ | $\begin{array}{r} 67 \\ 151 \\ 2378 \end{array}$ | Equivalent volume at -335 daPa, right ear (ml) $0.743-4.285$ <br> 88888 Blank but applicable <br> Blank | See note |



NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| TYMP ANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 2388-2392 \\ & \text { TYRC024R } \end{aligned}$ |  | Equivalent volume at -280 daPa, right ear (ml) | See note |
|  | 67 | 00.76-04.42 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2393-2397 \\ & \text { TYRC025R } \end{aligned}$ |  | Equivalent volume at -275 daPa, right ear (ml) | See note |
|  | 67 | 0.766-04.42 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2398-2402 \\ & \text { TYRC026R } \end{aligned}$ |  | Equivalent volume at -270 daPa, right ear (ml) | See note |
|  | 67 | 0.777-4.434 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2403-2407 \\ & \text { TYRC027R } \end{aligned}$ |  | Equivalent volume at -265 daPa, right ear (ml) | See note |
|  | 67 | 0.738-4.448 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2408-2412 \\ & \text { TYRC028R } \end{aligned}$ |  | Equivalent volume at -260 daPa, | See note |
|  |  | right ear (ml) |  |
|  | 67 | 0.825-4.488 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |



NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 2438-2442 \\ & \text { TYRC034R } \end{aligned}$ |  | Equivalent volume at -230 daPa, right ear (ml) | See note |
|  | 67 | 0.784-4.613 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2443-2447 \\ & \text { TYRC035R } \end{aligned}$ |  | Equivalent volume at -225 daPa, right ear (ml) | See note |
|  | 67 | 0.677-04.61 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2448-2452 \\ & \text { TYRC036R } \end{aligned}$ |  | Equivalent volume at -220 daPa, right ear (ml) | See note |
|  | 67 | 0.791-4.644 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2453-2457 \\ & \text { TYRC037R } \end{aligned}$ |  | Equivalent volume at -215 daPa, right ear (ml) | See note |
|  | 67 | 0.784-4.685 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $\begin{aligned} & 2458-2462 \\ & \text { TYRC038R } \end{aligned}$ |  | Equivalent volume at -210 daPa, right ear (ml) | See note |
|  | 67 | 0.791-4.708 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> Item description |  |  |  |
| 2463-2467 |  | Equivalent volume at -205 daPa, right ear (ml) | See note |
| TYRC039R | 67 | 0.797-4.735 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2378 | Blank |  |
| $2468-2472$TYRC040R |  | Equivalent volume at -200 daPa, right ear (ml) | See note |
| TYRC040R | 275 | 0.193-4.749 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| 2473-2477TYRC041R |  | Equivalent volume at -195 daPa, right ear (ml) | See note |
| TYRC041R | 275 | 00.22-4.725 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $2478-2482$TYRC042R |  | Equivalent volume at -190 daPa, right ear (ml) | See note |
| TYRC042R | 275 | 0.223-04.79 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $2483-2487$TYRC043R |  | Equivalent volume at -185 daPa, right ear (ml) | See note |
|  |  |  |
| TYRC043R | 275 |  | 0.237-4.817 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 2513-2517 \\ & \text { TYRC049R } \end{aligned}$ |  | Equivalent volume at -155 daPa, right ear (ml) | See note |
|  | 275 | 0.216-4.908 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2518-2522 \\ & \text { TYRC050R } \end{aligned}$ |  | Equivalent volume at -150 daPa, right ear (ml) | See note |
|  | 275 | 0.196-4.952 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2523-2527 \\ & \text { TYRC051R } \end{aligned}$ |  | Equivalent volume at -145 daPa, right ear (ml) | See note |
|  | 275 | 0.237-4.966 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2528-2532 \\ & \text { TYRC052R } \end{aligned}$ |  | Equivalent volume at -140 daPa, right ear (ml) | See note |
|  | 275 | 0.216-4.966 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2533-2537 \\ & \text { TYRC053R } \end{aligned}$ |  | Equivalent volume at -135 daPa, | See note |
|  |  | right ear (ml) |  |
|  | 275 | 0.216-4.922 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Counts Item description |  | Notes |
| $\begin{aligned} & 2563-2567 \\ & \text { TYRC059R } \end{aligned}$ |  | Equivalent volume at -105 daPa, right ear (ml) | See note |
|  | 275 | 0.216-4.884 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2568-2572 \\ & \text { TYRC060R } \end{aligned}$ |  | Equivalent volume at -100 daPa, right ear (ml) | See note |
|  | 275 | 0.243-4.881 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2573-2577 \\ & \text { TYRC061R } \end{aligned}$ |  | Equivalent volume at -95 daPa, right ear (ml) | See note |
|  | 275 | 0.182-4.834 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2578-2582 \\ & \text { TYRC062R } \end{aligned}$ |  | Equivalent volume at -90 daPa, right ear (ml) | See note |
|  | 275 | 0.243-4.827 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & \text { 2583-2587 } \\ & \text { TYRC063R } \end{aligned}$ |  | Equivalent volume at -85 daPa, | See note |
|  |  | right ear (ml) |  |
|  | 275 | 0.196-4.806 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| TYMPANOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| TYMPANOGRAM DATA POINTS: LEFT EAR |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| $\begin{aligned} & 2613-2617 \\ & \text { TYRC069R } \end{aligned}$ |  | Equivalent volume at -55 daPa, right ear (ml) | See note |
|  | 275 | 00.27-04.77 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2618-2622 \\ & \text { TYRC070R } \end{aligned}$ |  | Equivalent volume at -50 daPa, right ear (ml) | See note |
|  | 275 | 0.233-4.781 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2623-2627 \\ & \text { TYRC071R } \end{aligned}$ |  | Equivalent volume at -45 daPa, right ear (ml) | See note |
|  | 275 | 00.21-4.742 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2628-2632 \\ & \text { TYRC072R } \end{aligned}$ |  | Equivalent volume at -40 daPa, right ear (ml) | See note |
|  | 275 | 0.203-4.781 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |
| $\begin{aligned} & 2633-2637 \\ & \text { TYRC073R } \end{aligned}$ |  | Equivalent volume at -35 daPa, | See note |
|  |  | right ear (ml) |  |
|  | 275 | 0.257-4.707 |  |
|  | 151 | 88888 Blank but applicable |  |
|  | 2170 | Blank |  |



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



```
TYRC000L-TYRC120L and TYRC000R-TYRC120R: Equivalent volume at various
            pressures, left and right ears
Use the following SAS code, or a similar process in another
programming language, to obtain plots of compliance (y) versus
pressure (x) for left and right ear data for each examinee
(identified by SEQN) in a data set. Note that the use of name-
range variable lists in the array statements assumes that the
variables are ordered as shown in the data file code book.
Variations in ordering for the specified variables will result in
errors.
ARRAY LCOMPL (121) TYRCOOOL--TYRC120L;
ARRAY RCOMPL (121) TYRC000R--TYRC120R;
    J=200; *start pressure values at 200 daPa;
    DO I=1 TO 121;
    LCOMPLY=LCOMPL(I);
    RCOMPLY=RCOMPL(I);
    PRESSURE=J; *associate a pressure value with compliance;
OUTPUT;
J=J-5; *decrease pressure by 5 daPa for next point;
    END;
PROC SORT; BY SEQN;
PROC PLOT; BY SEQN;
    PLOT LCOMPLY*PRESSURE;
    PLOT RCOMPLY*PRESSURE;
```


## SPIROMETRY

Lung function testing (spirometry) was conducted on examinees aged eight years and older by a trained technician in the mobile examination center (MEC). It also was conducted at the home of examinees aged 60 and over who were unwilling or unable to come to the MEC. Before testing, screening questions were asked to determine medical safety exclusions. Those excluded from testing were examinees who had undergone chest or abdominal surgery within three weeks or had experienced heart problems (myocardial infarction or heart attack, angina or chest pain, congestive heart failure) within six weeks before the MEC exam.

To determine which subjects were home examinees, the DMPSTAT variable (3=home-examined) should be used. When analyzing data for combined home-examined and MEC-examined subjects, the combined MEC- plus home-examined sample weights should be used (WTPFHX6). When using only MEC items or measures, the MEC examination sample weights should be used (WTPFEX6). For more information on the use of sample weights in NHANES III data analysis, refer to the Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Spirometry is a widely used test of lung function that measures both the volume of air in the lung and how quickly a person can move the air out of the lung. A testing session consisted of repeated forced vital capacity (FVC) maneuvers. Each maneuver required the examinee to take the deepest possible breath and exhale into a spirometer as hard, fast, and completely as possible. The spirometer recorded the volume of air exhaled as a function of time from which a number of parameters were measured. Each examinee attempted to perform at least five FVC maneuvers.

The testing procedure was explained and demonstrated to each examinee by a spirometry technician. The computer provided immediate feedback on the examinee's effort, and the technician used that information to actively coach the examinee through each trial.

For a maneuver to be acceptable, it had to be a maximal exhalation free from a cough, excessive hesitation, a leak, an obstructed mouthpiece, variable effort, or early termination. An additional goal was that the examinee have a sufficient number of trials to demonstrate that the FVC and forced expiratory volume (FEV1) values were reproducible.

Aside from using a different type of spirometer flow-type (see SPRTYPE) in home examinations, technicians used procedures comparable to those used in the MEC. Therefore, the home spirometry values were incorporated into the MEC spirometry measures data set. Refer to the Spirometry Examination Manual (U.S. DHHS, 1996b) and the Home Exam Manual (U.S. DHHS, 1996b) for descriptions of data collection procedures and methods. Testing procedures met the recommendations of the American Thoracic Society (American Thoracic Society, 1987).

The National Institute for Occupational Safety and Health (NIOSH) served as the spirometry quality control center. Each spirometry technician received at least one week of formal training and
satisfactorily completed a NIOSH-approved course on spirometry. Additionally, spirometry data were reviewed by the quality control center at the completion of each location, and technicians received continuous feedback on their performance.

Data processing and editing were performed to ensure internal data consistency. Notes have been provided for variables requiring additional explanation.

NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File SECOND EXAM DATA

| HOME EXAMINATION, INTERVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| SCREENING QUESTIONS |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| 2883 |  | Position for home examination |  |
| HXREJ6A2 | 453 | 1 Standing |  |
|  | 31 | 2 Sitting |  |
|  | 249 | 8 Blank but applicable |  |
|  | 1863 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

```
SECOND EXAM DATA
```



NHANES III Examination Data File

SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA

```
SPREXPIR: Expiratory time of the trial with the largest forced vital
                capacity (FVC)(sec)
        The time (seconds) it took to reach the largest FVC.
SPRFEF75: Flow at 75% of FVC (ml/second)
    This was the flow rate (ml/second) at 75% of the FVC. Values
        were obtained from the "best curve" or the curve with the largest
        sum of FEV1 plus FVC.
SPRFEV05: Forced expiratory volume (FEV) at 0.5 seconds (ml)
    The volume (ml) of air exhaled during the first 0.5 second of a
        forced vital capacity maneuver. The volume reported is the
        largest volume achieved from all acceptable FVC maneuvers.
SPRFEV1: Forced expiratory volume at 1 second (ml)
    The volume (ml) of air exhaled during the first second of a
    forced vital capacity maneuver. The volume reported is the
        largest volume achieved from all acceptable FVC maneuvers.
SPRFEV3: Forced expiratory volume at 3 seconds (ml)
    The volume (ml) of air exhaled during the first three seconds of
        a forced vital capacity maneuver. The volume reported is the
        largest volume achieved from all acceptable FVC maneuvers.
SPRFEV6: Forced expiratory volume at six seconds (ml)
    The volume (ml) of air exhaled during the first six seconds of a
    forced vital capacity maneuver. The volume reported is the
    largest volume achieved from all acceptable FVC maneuvers.
SPRFVC: Forced vital capacity, largest value (ml)
    The total volume (ml) of air exhaled during a forced vital
        capacity maneuver. The volume reported is the largest volume
        achieved from all acceptable FVC maneuvers.
SPRMANEU: Number of acceptable trials
    The number of FVC maneuvers that met the ATS acceptability
    criteria.
```

SPRMMEF: Maximum mid-expiratory flow (ml/second best curve)
The mean forced expiratory flow during the middle half of the FVC maneuver. Values were obtained from the "best curve" defined as the curve with the highest sum of FVC and FEV1.

SPRPEAK: Peak expiratory flow (ml/second)
The maximum expiratory flow (ml/sec) observed from all acceptable FVC maneuvers.

SPRRELIA: Test evaluation

All tests were reviewed by two senior quality technicians at the spirometry quality control center and classified for reliability. Tests deemed unreliable should not be used because the quality technicians determined that the results were of insufficient quality to be usable.

SPRREPRO: Reproducibility code
In accordance with ATS guidelines, all unacceptable maneuvers were excluded before the reproducibility calculations were performed. The goal during test performance was to obtain a reproducible FVC (largest FVC and second largest FVC within 5\%) and a reproducible FEV1 (largest FEV1 and second largest FEV1 within $5 \%$ ). The reproducibility code indicates whether a reproducible FVC and/or FEV1 was obtained.

SPRTEMP: Spirometer internal temperature (Celsius)
This was the internal temperature inside the spirometer measured at the end of the FVC maneuver.

SPRTRIAL: Number of forced vital capacity (FVC) trials attempted
This was the total number of forced vital capacity maneuvers attempted by the sample person.

SPRTYPE: Spirometer type
Four different types of spirometers were used; one type was used in MEC spirometry exams, and three different types were used in home spirometry exams. The MEC spirometers (type=1) were customized, Ohio 822 or 827 , dry, rolling-seal spirometers and were interfaced to a microcomputer. For home spirometry, the three types of flow spirometers used were: MultiSpiro (type=2), Riko model AS-600 (type=3), and NIOSH (type=4). The MultiSpiroand Riko-brand spirometers produced paper tracings with digital readings of FVC and FEV1. These spirometers provided neither quality assessments of the subject's effort nor some of the spirometry variables measured in the MEC. The NIOSH flow
spirometer measured all of the parameters measured by the MEC spirometer and provided a display of the subject's flow-volume curve with a computer-determined quality assessment equivalent to the assessment provided by the spirometer used in the MEC.

The MEC Youth Questionnaire was administered to examinees aged 8-16 years in the mobile examination center (MEC). Conducted by a trained interviewer, the automated questionnaire was administered in a private setting to ensure confidentiality due to the sensitive nature of some of the sections. In the Second Exam Sample, the questionnaire included sections on physical activity, tobacco use, reproductive health, selected conditions, medicine/vitamin usage, alcohol/drug use, and the Diagnostic Interview Schedule (DIS). Because this component was administered in the examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Several portions of the questionnaire were asked only of specific age or gender groups, and check items are included as variables in this file to indicate these subgroups. For example, reproductive health was asked of boys aged $15-16$ years and girls aged $10-16$ years. Medicine/vitamin use, and alcohol/drug use were asked of boys and girls aged 12-16 years. The DIS was asked of adolescents aged 15-16 years. The DIS was edited and documented separately (see Diagnostic Interview Schedule).

A subset of questions from the MEC Youth Questionnaire were administered as the MEC Proxy Questionnaire to the parents or guardians of children aged 2 months-11 years. Questions on medicine, vitamin, and mineral usage, selected health conditions, and WIC program participation from the two questionnaires can be combined for an analysis of youths 2 months-16 years of age (see MEC Proxy Questionnaire).

Data processing and editing were performed for consistency of responses within the sections of the questionnaire. Notes have been provided for variables that were standardized or recoded or those that require additional comments. The notes reference the questions, by section and number, from the questionnaires which can be found in the Plan and Operation of the National Health and Nutrition Examination Survey, 1988-1994 (NCHS, 1994; U.S. DHHS, 1996b).



| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION B. TOBACCO |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| MYRB1 2946 |  | Have you smoked at least 1 cigarette? |  |
|  | 63 | 1 Yes |  |
|  | 210 | 2 No (MYRB15) |  |
|  | 17 | 8 Blank but applicable |  |
|  | 2306 | Blank |  |
| 2947-2948 <br> MYRB2 |  | At what age did you smoke your |  |
|  |  | first cigarette? |  |
|  | 63 | 05-15 |  |
|  | 17 | 88 Blank but applicable |  |
|  | 2516 | Blank |  |
| MYRB3 2949 |  | Have you smoked at least 100 |  |
|  |  | cigarettes during your entire life (approximately 5 packs)? |  |
|  | 16 | 1 Yes |  |
|  | 47 | 2 No (MYRB11) |  |
|  | 17 | 8 Blank but applicable |  |
|  | 2516 | Blank |  |
| $\begin{aligned} & 2950-2951 \\ & \text { MYRB4 } \end{aligned}$ |  | How old were you when you first |  |
|  |  | started smoking cigarettes fairly regularly? |  |
|  | 1 | 00 Never smoked regularly |  |
|  | 2 | 11 |  |
|  | 2 | 12 |  |
|  | 4 | 13 |  |
|  | 3 | 14 |  |
|  | 4 | 15 |  |
|  | 17 | 88 Blank but applicable |  |
|  | 2563 | Blank |  |


| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION B. TOBACCO |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| MYRB5 2952 | Do you smoke cigarettes now? |  |  |
|  | 15 | 1 Yes |  |
|  | 1 | 2 No (MYRB12) |  |
|  | 17 | Blank but applicable |  |
|  | 2563 | Blank |  |
| 2953-2954 <br> MYRB6R |  | About how many cigarettes do you smoke per day? | See note |
|  | 1 | 01 |  |
|  | 2 | 02 |  |
|  | 2 | 04 |  |
|  | 4 | 05 |  |
|  | 1 | 06 |  |
|  | 1 | 07 |  |
|  | 1 | 08 |  |
|  | 1 | 10 |  |
|  | 2 | 15 |  |
|  | 17 | 88 Blank but applicable |  |
|  | 2564 | Blank |  |
| 2955-2956 |  | For approximately how many years have | See note |
| MYRB7R |  | you smoked this amount? |  |
|  | 3 | 01 |  |
|  | 5 | 02 |  |
|  | 2 | 03 |  |
|  | 1 | 04 |  |
|  | 4 | 77 Less than one year |  |
|  | 17 | 88 Blank but applicable |  |
|  | 2564 | Blank |  |


| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION B. TOBACCO |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| MYRB8 |  | Was there ever a period of a year or more when you smoked more than (NUMBER IN MYRB6) cigarettes per day? |  |
|  | 6 | 1 Yes |  |
|  | 9 | 2 No (MYRB10) |  |
|  | 17 | 8 Blank but applicable |  |
|  | 2564 | Blank |  |
| 2958-2959 <br> MYRB9S |  | During the period when you were smoking the most, about how many | See note |
|  |  | cigarettes per day did you usually smoke? |  |
|  | 1 | 10 |  |
|  | 3 | 20 |  |
|  | 2 | 40 |  |
|  | 17 | 88 Blank but applicable |  |
|  | 2573 | Blank |  |
| 2960 |  | Have you ever quit smoking for a |  |
| MYRB10 |  | period of one year or longer? |  |
|  | 3 | 1 Yes |  |
|  | 12 | 2 No |  |
|  | 17 | 8 Blank but applicable |  |
|  | 2564 | Blank |  |
| 2961-2963 |  | How many cigarettes have you |  |
| MYRB11 |  | smoked in the past 5 days? |  |
|  | 42 | 000 None (MYRB15) |  |
|  | 20 | 001-100 (MYRB15) |  |
|  | 17 | 888 Blank but applicable |  |
|  | 2517 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION B. TOBACCO |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 2964-2965 \\ & \text { MYRB12 } \end{aligned}$ |  | About how old were you when you last smoked cigarettes (fairly regularly)? |  |
|  | 1 2595 | PROBE: How old were you when you quit smoking cigarettes? <br> 14 <br> Blank |  |
| $2966-2967$ <br> MYRB13S | $\begin{array}{r} 1 \\ 2595 \end{array}$ | About how many cigarettes per day day did you usually smoke? $12$ <br> Blank | See note |
| $\text { MYRB14 } 2968$ | $\begin{array}{r} 1 \\ 2595 \end{array}$ | Did you quit smoking because you had a health problem that was caused or made worse by smoking? $2 \text { No }$ Blank |  |
| $\text { MYRB15 } 2969$ |  | Have you ever tried chewing tobacco or snuff? |  |
|  | $\begin{array}{r} 12 \\ 261 \\ 17 \\ 2306 \end{array}$ | ```Yes No (MYRB27A) Blank but applicable Blank``` |  |
| 2970-2971 <br> MYRB16 |  | At what age did you first try chewing tobacco or snuff? <br> (IF USED BOTH, ENTER EARLIEST AGE) |  |
|  | $\begin{array}{r} 12 \\ 17 \\ 2567 \end{array}$ | ```03-14 88 Blank but applicable Blank``` |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION B. TOBACCO |  |  |  |
| Positions <br> SAS name | ```Item description Counts and code``` |  | Notes |
| 2982-2983 <br> MYRB2 4 | About how old were you when you last used chewing tobacco or snuff (fairly regularly)? (IF BOTH USED, RECORD OLDEST AGE) |  |  |
|  |  |  |  |
| MYRB25 ${ }^{2984}$ | Which did you use - chewing tobacco or snuff? |  |  |
|  | 2595 | 2 Snuff |  |
|  |  | Blank |  |
| MYRB26 2985 | Did you quit using (chewing tobacco/snuff) because you had a health problem that was caused or made worse by using (it/them)? |  |  |
|  |  |  |  |
|  |  |  |  |
|  | 2595 | $2 \text { No }$ |  |
|  |  | Blank |  |
| MYRB27A 2986 | How many pipes have you smoked |  |  |
|  | in the past 5 days? |  |  |
|  | 273 | 0 None |  |
|  | 178 Blank but applicable |  |  |
|  | 2306 | Blank |  |
| 2987 |  | How many cigars have you smoked |  |
| MYRB27B | in the past 5 days? |  |  |
|  | 273 | 0 None |  |
|  | 172306 | 8 Blank Blank but applicable |  |
|  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA
MEC YOUTH QUESTIONNAIRE (EXCEPT DIS)

| SECTION C. REPRODUCTIVE HEALTH |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions |  | Item description |  |
| SAS name | Counts | and code | Notes |

3013 Did you breastfeed (your
MYRC15
child/any of your children)?
11 Yes
22 No (MYRC17)
78 Blank but applicable
2586 Blank

3014 (Did you breastfeed your
MYRC16 child/how many of your children did
you breastfeed) for at least one month?
11
78 Blank but applicable 2588 Blank

3015 MARK BOX IF KNOWN. Are you now MYRC17

3016-3017
MYRC18

21 Yes
32 No (MYRC19)
78 Blank but applicable 2584 Blank

Which month of pregnancy are you in?
103
104
788 Blank but applicable 2587 Blank

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SECTION C. REPRODUCTIVE HEALTH |  |  |  |  |  |
| Positions <br> SAS name | Counts Item description |  |  |  | Notes |
| $3022-3023$ <br> MYRC23S | How many months (did you receive <br> See note have you been receiving) benefits from the WIC program? |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 1 | 07 |  |  |  |
|  | 1 | 12 |  |  |  |
|  | 2594 | Blank |  |  |  |
| 3024 |  | CHECK ITEM. REFER TO MYRC12. |  |  |  |
| MYRC24 | 2 | 1 No live births in MYRC12 (MYRC26) |  |  |  |
|  | 10 | 2 | One or more live birthsin MYRC12 |  |  |
|  |  |  |  |  |  |
|  | 2584 | Blank |  |  |  |
| MYRC25 ${ }^{3025}$ | Are you now breastfeeding |  |  |  |  |
|  | a child? |  |  |  |  |
|  | 32 No |  |  |  |  |
|  | 78 Blank but applicable |  |  |  |  |
|  | 2586 | Blank |  |  |  |
| 3026 |  | CHECK ITEM. REFER TO AGE OF SP |  |  |  |
| MYRC26 | AND TO MYRC10. |  |  |  |  |
|  | 84 | 1 Female 10-14 (MYRD1) |  |  |  |
|  | 5 | 2 15-16 years and "Y" in MYRC10 (MYRC28) |  |  |  |
|  | 23 | $\begin{aligned} & 3 \quad 15-16 \text { years and "N" or "Other" } \\ & \text { in MYRC10 (MYRC27) } \end{aligned}$ |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 2484 Blank |  |  |  |  |

NHANES III Examination Data File
SECOND EXAM DATA
MEC YOUTH QUESTIONNAIRE (EXCEPT DIS)





NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION E. DIET |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |


|  |  | What was the medical reason or health condition? Any others? |
| :---: | :---: | :---: |
| 3042 |  | Diet Change Reason - |
| MYRE7A |  | Overweight/Obesity |
|  | 3 | 1 Yes |
|  | 3 | 2 No |
|  | 10 | 8 Blank but applicable |
|  | 2580 | Blank |
| 3043 |  | Diet Change Reason - |
| MYRE7B | 6 | High Blood Pressure/Hypertension 2 No |
|  | 10 | 8 Blank but applicable |
|  | 2580 | Blank |
| 3044 |  | Diet Change Reason - |
| MYRE7C |  | High Blood Cholesterol |
|  | 6 | 2 No |
|  | 10 | 8 Blank but applicable |
|  | 2580 | Blank |
| 3045 |  | Diet Change Reason - |
| MYRE7D |  | Heart Disease |
|  | 6 | 2 No |
|  | 10 | 8 Blank but applicable |
|  | 2580 | Blank |
| 3046 |  | Diet Change Reason - |
| MYRE7E |  | Diabetes |
|  | 6 | 2 No |
|  | 10 | 8 Blank but applicable |
|  | 2580 | Blank |




| MEC YOUTH QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION F. ALCOHOL/DRUG USE |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
|  |  | The next questions are about drinking alcoholic beverages. Alcoholic beverages include beer, ale, wine, wine coolers, liquor such as whiskey, gin, rum, or vodka, and cocktails and mixed drinks containing liquor. |  |
| MYRF1 3053 |  | In your entire life, have you had at least 12 drinks of any kind of alcoholic beverage? Do not count small tastes. |  |
|  | 37 | 1 Yes |  |
|  | 112 | 2 No (MYRF 7) |  |
|  | 10 | 8 Blank but applicable |  |
|  | 2437 | Blank |  |
| MYRF2 3054 |  | In the past 12 months did you |  |
| MYRF2 |  | have at least 12 drinks of any kind of alcoholic beverage? |  |
|  | 19 | 1 Yes |  |
|  | 18 | 2 No (MYRF7) |  |
|  | 10 | 8 Blank but applicable |  |
|  | 2549 | Blank |  |
| $3055-3057$ <br> MYRF 3 S |  | In the past 12 months, on the average, | See note |
|  |  | how many days in the past year did you drink any alcoholic beverages? |  |
|  | 17 | 012-156 |  |
|  | 12 | 888 Blank but applicable |  |
|  | 2567 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA
MEC YOUTH QUESTIONNAIRE (EXCEPT DIS)


NHANES III Examination Data File

SECOND EXAM DATA
MEC YOUTH QUESTIONNAIRE (EXCEPT DIS)

| SECTION F. ALCOHOL/DRUG USE |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts | Item description and code | Notes |

3067
MYRF 8

3068-3069
MYRF 9

3070
MYRF10

MYRF11

About how many times in your
lifetime have you used marijuana?
1 or 2 times
3 to 10 times
11 to 99 times
100 or more times
Blank but applicable
2564 Blank

During the past month, on how many days did you use marijuana?
00 None in past month
01-20
88 Blank but applicable Blank

Have you ever used crack or cocaine in any form?
41 Yes
1452 No (MYRH1)
108 Blank but applicable 2437 Blank

About how many times in your
lifetime have you used crack or cocaine (in any form)?
$1 \quad 1$ or 2 times
23 to 10 times
311 to 99 times
$14 \quad 100$ or more times
108 Blank but applicable
2582 Blank



MYRB6R: Number of cigarettes smoked per day

This variable was created from the question B6. The actual number of cigarettes smoked per day and a range of cigarettes smoked per day were the allowable answers. The variable includes the mean number of cigarettes smoked per day derived from the range as well as the actual number of cigarettes smoked per day.

MYRB7R: Years smoked this amount in MYRB6R

This variable was created from the question $B 7$ when the data were not missing. If B7 was missing, this variable used the estimated number of years the respondent smoked the amount reported in B6. The number was derived by subtracting the age that the respondent started smoking regularly from the age at the MEC interview.

MYRB9S: Number of cigarettes per day when smoked the most
This variable was created from the two-part question (quantity and unit) B9 using the conversion factor 20 cigarettes/pack.

MYRB13S: Number of cigarettes per day usually smoked when youth smoked regularly

This variable was created from the two-part question (quantity and unit) B13 using the conversion factor 20 cigarettes/pack.

MYRB21AS: Number of containers of chewing tobacco used per week
This variable was created from the two-part question (quantity and unit) B21 using the conversion factor seven containers/week.

MYRB21CS: Number of containers of snuff used per week

This variable was created from the two-part question (quantity and unit) B21 using the conversion factor seven containers/week.

MYRC7S: Months since stopped taking birth control pills
This variable was created from the two-part question (quantity and unit) $C 7$ using the conversion factor 12 months/year.

MYRC8S: Total number of months took birth control pills
This variable was created from the two-part question (quantity and unit) C8 using the conversion factor 12 months/year.

MYRC9R: Birth control pills codes
This recode was derived to include a listing of all birth control pills that were specified in question C9. It includes both birth control pills with original codes from the chart that the respondents were shown as well as those that were not included on the chart but that were specified by the respondents. See the Appendix in the MEC Adult Questionnaire for the code listing.

MYRC13R: Age at time of first live birth

Question C13 (age at time of first live birth) was only asked of women who had more than one live birth. To prevent redundant questions, women who had one live birth were only asked question C14, "Age at the time of the last live birth." This variable, MYRC13R, was created to include responses for women who had only one live birth and women who had multiple births. For women who had only one live birth, their responses to question C14 were coded into MYRC13R. For women who had multiple births, their responses to question C13 were coded into MYRC13R.

MYRC23S: Number of months received WIC benefits

This variable was created from the two-part question (quantity and unit) $C 23$ using the conversion factor 12 months/year.

MYRC27R: Ever had sexual intercourse
This variable was derived from questions C1O and C27. Respondents who reported a pregnancy (question C10) were not asked whether they had ever had sexual intercourse (question C27) as the response was implicit. Therefore, MYRC27R was coded as "Yes" for respondents who reported a pregnancy in C10 and coded as the response in C 27 for all other respondents.

MYRC28: Age at first sexual intercourse
The question did not ask about first consensual sexual experience. Therefore, responses of first intercourse at very young ages were retained after reviewing comments made during the interview (e.g., reports of rape or incest).

MYRF3S: Number of days drank alcohol in past year
This variable was created from the two-part question (quantity and unit) $F 3$ using the conversion factors 7 days/week, 30.4 days/ month, and 365 days/year.

MYRF5S: Number of days drank nine or more drinks of alcohol in past year

This variable was created from the two-part question (quantity and unit) $F 5$ using the conversion factors 7 days/week, 30.4 days/month, and 365 days/year.

MYRF6S: Number of days drank five or more drinks of alcohol in past year

This variable was created from the two-part question (quantity and unit) $F 6$ using the conversion factors 7 days/week, 30.4 days/month, and 365 days/year.

## DIAGNOSTIC INTERVIEW SCHEDULE (DIS)

The mental health component of NHANES III included the depression and mania modules from the Diagnostic Interview Schedule (DIS) originally developed for the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) program. Trained interviewers administered the NHANES III DIS questions in the MEC, using automated data entry, as part of the MEC Youth Questionnaire for examinees $15-16$ years of age and as part of the MEC Adult Questionnaire for examinees $17-39$ years of age. The data from the DIS permit diagnoses based on the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSMIII).

The final MEC examination weight (WTPFEX6) should be used for analysis of the questionnaires and measurements administered in the MEC, as well as for a combined analysis of measurements from the MEC examinations and associated medical history questions from the household interview. The household questionnaire data files include information on survey design and basic demographic variables which may be linked to the examination data file by using the unique survey participant identifier SEQN. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The DIS is a complicated questionnaire with a number of parallel series of questions and many skip instructions. The notes below describe these question series and skip patterns, and analysts are instructed to carefully read these notes in their entirety in order to facilitate analysis of this data. The Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-94, page 362, (NCHS, 1994; U.S. DHHS, 1996b) contains a flow chart of the probe questions and skips from the DIS.

All variable names in the DIS portion of the MEC interviews start with the prefix MQR. The M indicates that it came from the MEC interview, the $Q$ indicates that the data transcend the boundaries of separate adult (A) and youth (Y) interviews (sample persons ranged from ages 15-39) and the $R$ indicates the data came from the replicate or second exam interview.

Any sample person who was age 15 to 39 was eligible to receive this section of the adult or youth MEC questionnaire. A sample person who was not eligible to receive this section of the questionnaire will have all blanks in this section. Note that selected questions may be blank in the DIS section if the question was not applicable for the sample person to answer because of answers they had given to other questions. Also note that many of the questions have combined the "Don't know" and "No" category into a single response and this combination will vary per question in the DIS section.

Approximately 18\% (88/668) of the NHANES III Second Exam sample did not have valid depression and mania sections of the questionnaire. The major reasons for these missing data are that respondents: 1) ran out of time, 2) felt the material was too sensitive, usually
because they were using an interpreter, 3) had comprehension problems due to cognitive impairment, 4) primary language was not English or Spanish, or 5) refused to answer or were not asked critical questions. All of the questions for these sample persons were coded "Blank but applicable."

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
|  |  | The following variables refer to questions on the data collection instruments documented in Ref. No. 1, pages 329-337 and 352-362. Variables MQRG01- MQRG20W and MQRG41L-MQRG49W cover the questions asked in the depression and mania sections, respectively. |  |
| MQRG01 |  | Flag that indicates persons who should have received the DIS portion of the MEC interview. Those absent are those who completed at least one module of the MEC interview, were between 15 and 39 years old, and did not complete any part of the DIS portion of the MEC interview. (See the depression <br> (MQRDPFLG) and mania (MQRMNFLG) section flags for more detailed information). |  |
|  | $\begin{array}{r} 580 \\ 88 \\ 1928 \end{array}$ | 1 Present <br> 2 Absent <br> Blank  |  |
| $M Q R G 02^{3085}$ |  | 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? |  |
|  | $\begin{array}{r} 159 \\ 421 \\ 88 \\ 1928 \end{array}$ | 1 Yes <br> 2 No/Don't know <br> 8 Blank but applicable <br> Blank  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| $M Q R G 03^{308}$ |  | Have you had two years or more in your life when you felt depressed or sad almost all the time, even if you felt OK sometimes? |  |
|  | $\begin{array}{r} 61 \\ 519 \\ 88 \\ 1928 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| $\text { MQRGO } 4^{308^{\prime}}$ |  | (If 'yes' in G3): G4 Did you tell a doctor about G3 symptom? |  |
|  | $\begin{array}{r} 18 \\ 43 \\ 88 \\ 2447 \end{array}$ |  |  |
| 3088-3089 <br> MQRG05L |  | Has there ever been a period of two weeks or longer when you lost your appetite? | See note |
|  | $\begin{array}{r} 64 \\ 507 \\ 9 \end{array}$ | 01 Yes <br> 02 No/Don't know <br> 04 Only due to physical illness or injury |  |
|  | $\begin{array}{r} 88 \\ 1928 \end{array}$ | 88 Blank but applicable Blank |  |



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File
SECOND EXAM DATA





NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 3132 \\ & \text { MQRG1601 } \end{aligned}$ |  | (If 'yes' in G16): Did you tell a doctor about G16 symptom? | See note |
|  | $\begin{array}{r} 13 \\ 47 \\ 90 \\ 2446 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRDGP 3133 |  | Count of yes responses (1's) to trouble thinking group: | See note |
|  |  | Trouble concentrating (MQRG15L) Thoughts slow or mixed up (MQRG16L) |  |
|  | 479 | 0 |  |
|  | 60 | 1 |  |
|  | 41 | 2 |  |
|  | 88 | 8 All blank but applicable |  |
|  | 1928 | Blank |  |
| $\begin{aligned} & 3134-3135 \\ & \text { MQRG17L } \end{aligned}$ |  | Has there ever been a period of two | See note |
|  |  | weeks or more when you thought a lot about death--either your own, someone else's, or death in general? |  |
|  | 142 | 01 Yes |  |
|  | 438 | 02 No/Don't know |  |
|  | 88 | 88 Blank but applicable |  |
|  | 1928 | Blank |  |


| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts Item description |  | Notes |
| $\begin{aligned} & \text { 3136-3137 } \\ & \text { MQRG18L } \end{aligned}$ |  | Has there ever been a period of two weeks or more when you felt like you wanted to die? | See note |
|  | $\begin{array}{r} 72 \\ 508 \\ 88 \\ 1928 \end{array}$ | ```0 1 ~ Y e s 02 No/Don't know 88 Blank but applicable Blank``` |  |
| $\begin{aligned} & \text { 3138-3139 } \\ & \text { MQRG19L } \end{aligned}$ |  | Have you ever felt so low you thought of committing suicide? | See note |
|  | $\begin{array}{r} 104 \\ 476 \\ 88 \\ 1928 \end{array}$ | ```0 1 ~ Y e s 02 No/Don't know 88 Blank but applicable Blank``` |  |
| $\begin{aligned} & \text { 3140-3141 } \\ & \text { MQRG20L } \end{aligned}$ |  | Have you ever attempted suicide? | See note |
|  | 43 | 01 Yes |  |
|  | 537 | 02 No/Don't know |  |
|  | 88 | 88 Blank but applicable |  |
|  | 1928 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts Item description |  | Notes |
| $\begin{aligned} & 3168-3169 \\ & \text { MQRG39 } \end{aligned}$ | (If '3' in G38 or '2-39' in G39): G40 During the spell of (depression/OWN EQUIVALENT) which of these other problems did you have? For instance, during that spell (when you were (AGE in G39) years old) (BEGINNING WITH WORDS IN BRACKETS, READ EACH QUESTION CODED 'yes' (1) in G5-G20) |  |  |
| 61  <br>  89 <br>  2446 <br> 3170  <br> MQRG05W  |  | ```11-38 years old 88 Blank but applicable Blank``` | See note |
|  |  | (If 'yes' in G5): Did you lose your appetite? |  |
|  | 33 7 89 2467 | ```Yes No/Don't know Blank but applicable Blank``` |  |





| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 3182 \\ & \text { MQRG17W } \end{aligned}$ |  | (If 'yes' in G17): Did you think a lot about death--either your own, someone else's, or death in general? | See note |
|  | $\begin{array}{r} 50 \\ 6 \\ 88 \\ 2452 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRG18W |  | (If 'yes' in G18): Did you feel like you wanted to die? | See note |
|  | $\begin{array}{r} 43 \\ 3 \\ 88 \\ 2462 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRG19W |  | (If 'yes' in G19): Did you feel so low you thought of committing suicide? | See note |
|  | $\begin{array}{r} 35 \\ 9 \\ 89 \\ 2463 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRG20W 3185 |  | (If 'yes' in G20): Did you attempt suicide? | See note |
|  | $\begin{array}{r} 11 \\ 6 \\ 88 \\ 2491 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 3190-3191 \\ & \text { MQRG43L } \end{aligned}$ |  | Has there ever been a period of a week or more when you went on spending sprees- spending so much money that it caused you or your family some financial trouble? | See note |
|  | $\begin{array}{r} 43 \\ 533 \\ 4 \\ 88 \\ 1928 \end{array}$ | ```Yes No/Don't know Only due to med/drugs/alcohol Blank but applicable Blank``` |  |
| $\begin{aligned} & \text { 3192-3193 } \\ & \text { MQRG44L } \end{aligned}$ |  | Have you ever had a period of a week or more when your interest in sex was so much stronger than is typical for you that you wanted to have sex a lot more frequently than is normal for you or with people you normally wouldn't be interested in? | See note |
|  | $\begin{array}{r} 61 \\ 518 \\ 1 \\ 88 \\ 1928 \end{array}$ | ```Yes No/Don't know Only due to med/drugs/alcohol Blank but applicable Blank``` |  |

NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| $3194-319$ <br> MQRG45L |  | Has there ever been a period of a week or more when you talked so fast that people said they couldn't understand you? | See note |
|  | $\begin{array}{r} 33 \\ 546 \\ 1 \\ 88 \\ 1928 \end{array}$ | ```0 1 ~ Y e s 02 No/Don't know 03 Only due to med/drugs/alcohol 88 Blank but applicable Blank``` |  |
| $3196-3197$ <br> MQRG46L |  | Have you ever had a period of a week or more when thoughts raced through your head so fast that you couldn't keep track of them? | See note |
|  | $\begin{array}{r} 42 \\ 529 \\ 9 \\ 88 \\ 1928 \end{array}$ | ```Yes No/Don't know Only due to med/drugs/alcohol Blank but applicable Blank``` |  |
| $\begin{aligned} & 3198-319 \\ & \text { MQRG47L } \end{aligned}$ |  | Have you ever had a period of a week or more when you felt that you had a special gift or special powers to do things others couldn't do or that you were a specially important person? | See note |
|  | $\begin{array}{r} 16 \\ 564 \\ 88 \\ 1928 \end{array}$ |  |  |

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| $3228-322$ <br> MQRG66 |  | (If '2' in G65): Now I'd like to know about the time when you were feeling (very happy/excited/manic/high/ OWN EQUIVALENT/irritable) and had the largest number of these other experiences at the same time. How old were you at that time? (If you can't choose, then pick one bad spell). <br> (If '1' in G65 or '5-39' in G66): During the spell of being (very happy/ excited/manic/high/OWN EQUIVALENT/ irritable) which of these experiences did you have? For instance, during that spell (when you were (AGE in G66) years old) (BEGINNING WITH WORDS IN BRACKETS, READ EACH QUESTION CODED 'yes' (1) in G42- G49) |  |
|  | $\begin{array}{r} 14 \\ 88 \\ 2494 \end{array}$ | 14-36 years old <br> 88 Blank but applicable <br> Blank |  |
| MQRG42W |  | (If 'yes' in G42): Were you so much more active than usual that you or your family or friends were concerned about it? |  |
|  | $\begin{array}{r} 3 \\ 3 \\ 88 \\ 2502 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |


| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 323 \\ & \text { MQRG43W } \end{aligned}$ |  | (If 'yes' in G43): Did you go on spending sprees - spending so much money that it caused you or your family some financial trouble? | See note |
|  | $\begin{array}{r} 6 \\ 2 \\ 88 \\ 2500 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRG44W |  | (If 'yes' in G44): At that time was your interest in sex so much stronger than is typical for you that you wanted to have sex a lot more frequently than is normal for you or with people you normally wouldn't be interested in? | See note |
|  | $\begin{array}{r} 9 \\ 3 \\ 88 \\ 2496 \end{array}$ | ```1 ``` |  |
| MQRG45W |  | (If 'yes' in G45): Did you talk so fast that people said they couldn't understand you? | See note |
|  | $\begin{array}{r} 5 \\ 88 \\ 2503 \end{array}$ | $\begin{array}{ll} 1 & \text { Yes } \\ 8 & \text { Blank but applicable } \\ \text { Blank } & \end{array}$ |  |


| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| $323$ <br> MQRG46W |  | (If 'yes' in G46): Did thoughts race through your head so fast that you couldn't keep track of them? | See note |
|  | $\begin{array}{r} 13 \\ 1 \\ 88 \\ 2494 \end{array}$ | ```Yes No/Don't know Blank but applicable Blank``` |  |
| MQRG47W |  | (If 'yes' in G47): Did you feel that you had a special gift or special powers to do things others couldn't do or that you were a specially important person? | See note |
|  | $\begin{array}{r} 1 \\ 88 \\ 2507 \end{array}$ | 1 Yes <br> 8 Blank but applicable <br> Blank  |  |
| $\begin{aligned} & 3236 \\ & M Q R G 48 W \end{aligned}$ |  | (If 'yes' in G48): Did you hardly sleep at all but still didn't feel tired or sleepy? | See note |
|  | $\begin{array}{r} 11 \\ 3 \\ 88 \\ 2494 \end{array}$ | 1 Yes <br> 2 No/Don't know <br> 8 Blank but applicable <br> Blank  |  |


|  | NHANES III Examination Data File |
| :--- | :--- | :--- |
| SECOND EXAM DATA |  |

NHANES III Examination Data File
SECOND EXAM DATA


A scoring program was used to produce a number of scored variables. The set for depression are as follows:

3238
MQRDGP1W

5290
341
142
23
898 All blank but applicable 1928 Blank

During worst episode of depression, how See note many of the following symptoms occurred:

Insomnia (MQRG08W); or
Hypersomnia (MQRG09W) ?
$520 \quad 0$
$51 \quad 1$
92
888 All blank but applicable
1928 Blank

NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts Item description |  | Notes |
| $\begin{aligned} & 3240 \\ & \text { MQRDGP 3W } \end{aligned}$ |  | During worst episode of depression was there fatigue (MQRG10W) ? | See note |
|  | $\begin{array}{r} 547 \\ 33 \\ 88 \\ 1928 \end{array}$ |  |  |
| $\begin{aligned} & 3241 \\ & \text { MQRDGP 4W } \end{aligned}$ |  | During worst episode of depression, how many of the following symptoms occurred: <br> Retarded <br> (MQRG11W) ; or <br> Restless <br> (MQRG12W) ? | See note |
|  | $\begin{array}{r} 554 \\ 20 \\ 5 \\ 89 \\ 1928 \end{array}$ |  |  |
| $\begin{aligned} & 3242 \\ & \text { MQRDGP 5W } \end{aligned}$ |  | During worst episode of depression was there sexual disinterest (MQRG13W) ? | See note |
|  | $\begin{array}{r} 566 \\ 14 \\ 88 \\ 1928 \end{array}$ |  |  |
| $\begin{aligned} & 3243 \\ & M Q R D G P 6 W \end{aligned}$ |  | During worst episode of depression, was there guilt (MQRG14W)? | See note |
|  | $\begin{array}{r} 524 \\ 56 \\ 88 \\ 1928 \end{array}$ |  |  |

NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


| NHANES III Examination Data File SECOND EXAM DATA |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |  |  |  |  |  |
| Positions <br> Item description |  |  |  |  |  |  |  |  |
| $3266-3267$ <br> MQRMNGSW |  | The total number of positive manic <br> See note symptom groups, i.e. groups MQRMNG1W to MQRMNG7W, during the worst episode. |  |  |  |  |  |  |
| 56200 |  |  |  |  |  |  |  |  |
| 101 |  |  |  |  |  |  |  |  |
| 502 |  |  |  |  |  |  |  |  |
| 603 |  |  |  |  |  |  |  |  |
| 304 |  |  |  |  |  |  |  |  |
| 205 |  |  |  |  |  |  |  |  |
| 107 |  |  |  |  |  |  |  |  |
| 88 88 All blank but applicable |  |  |  |  |  |  |  |  |
| 1928 Blank |  |  |  |  |  |  |  |  |
| ```MQREUFOR week euphoric or irritable. This corresponds to the "A" criterion in III.``` |  |  |  |  |  |  |  |  |
| 55200 No |  |  |  |  |  |  |  |  |
| 111 Irritable (MQRG54 = 1 (Yes)) |  |  |  |  |  |  |  |  |
| 172 Euphoric (MQRG41L = 1 (Yes)) |  |  |  |  |  |  |  |  |
| 888 All blank but applicable |  |  |  |  |  |  |  |  |
| 1928 Blank |  |  |  |  |  |  |  |  |



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts Item description |  | Notes |
| $3275-3276$ <br> MQRLDMN |  | The age last manic symptoms occurred (MQRG62 to MQRG64) if ever met criteria for any manic episode (2 <= MQRMANIA <= 3). | See note |
|  | $\begin{array}{r} 4 \\ 2 \\ 1 \\ 2 \\ 88 \\ 2499 \end{array}$ | ```18-23 years old 5 1 ~ L a s t ~ e p i s o d e ~ w i t h i n ~ l a s t ~ 2 ~ w e e k s 53 Last episode 1 to 6 months ago 5 4 ~ L a s t ~ e p i s o d e ~ 6 ~ m o n t h s ~ t o ~ 1 ~ y e a r ~ a g o 88 Blank but applicable Blank``` |  |
| $3277-3278$ <br> MQRMNSX2 |  | The total number of positive mania symptoms ever. This is NOT used for diagnosis. For this count, questions MQRG42L to MQRG49L are grouped into DSMIII groups 1 to 7 and the number of positive groups is counted. The euphoria or irritability symptom (1 <= MQREUFOR <= 2) is also counted. | See note |
|  | 397 | 00 |  |
|  | 85 | 01 |  |
|  | 47 | 02 |  |
|  | 17 | 03 |  |
|  | 16 | 04 |  |
|  | 11 | 05 |  |
|  | 6 | 06 |  |
|  | 1 | 08 |  |
|  | 88 | 88 All blank but applicable |  |
|  | 1928 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code |  | Notes |

The set of scored variables for bipolar disorder are as follows:

3296-3297
MQRBIPOL

The DSM-III diagnosis of bipolar See note
disorder: the diagnosis is made only if there has ever been a manic episode.

57101 No bipolar disorder was diagnosed if there has never been a diagnosis of manic episode.
302 Bipolar disorder if severity and exclusion criteria are met for both a manic and a depressive episode (MQRMANIA=3 and MQRDEP=3).
203 Bipolar disorder if severity and exclusion criteria are met for a manic episode (MQRMANIA=3), but a depressive episode is either absent (MQRDEP=1, 4 or 5) or the diagnosis is missing (MQRDEP=Blank or 88).
3
05 Bipolar disorder if no manic episode met both severity and exclusion criteria (MQRMANIA=2) and a depressive episode is either absent (MQRDEP=1, 4 or 5) or the diagnosis is missing (MQRDEP=Blank or 88).
106 Bipolar disorder if no manic episode met both severity and exclusion criteria (MQRMANIA=2) and the depressive episodes may or may not meet both severity and exclusion criteria (MQRDEP=2 or 3)
88 Blank but applicable
Blank

NHANES III Examination Data File
SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions SAS name | Counts | Item description and code | Notes |
| 3298-329 <br> MQRFDBI |  | The age first manic symptoms occurred (MQRFDMN) when $2<=$ MQRBIPOL <= 6 OR age first depressive symptoms occurred (MQRFDDP) if MQRBIPOL=2, 4 or 6 and <= MQRFDDP <= MQRFDMN. | See note |
|  | $\begin{array}{r} 9 \\ 88 \\ 2499 \end{array}$ | ```13-32 years old 88 Blank but applicable Blank``` |  |
| $3300-330$ <br> MQRLDBI |  | The age last manic symptoms occurred (MQRLDMN) when $2<=$ MQRBIPOL <= 6 OR age last depressive symptoms occurred (MQRLDDP) if MQRBIPOL=2, 4 or 6 and MQRLDDP >= 0 and MQRLDMN <= MQRLDDP <= 54. | See note |
|  | 3 3 1 2 88 2499 | ```18-23 years old 5 1 ~ L a s t ~ e p i s o d e ~ w i t h i n ~ l a s t ~ 2 ~ w e e k s 5 3 ~ L a s t ~ e p i s o d e ~ 1 ~ t o ~ 6 ~ m o n t h s ~ a g o 5 4 ~ L a s t ~ e p i s o d e ~ 6 ~ m o n t h s ~ t o ~ 1 ~ y e a r ~ a g o 88 Blank but applicable Blank``` |  |

NHANES III Examination Data File

SECOND EXAM DATA


The set of scored variables for atypical
bipolar disorder are as follows:

3302-3303 The DSM-III diagnosis of atypical See note
MQRBIPII
bipolar disorder or Bipolar type II
is only made if the respondent:

- Does not meet criteria for bipolar disorder (MQRBIPOL=1).
- Does not meet criteria for mania (MQRMANIA=1).
- Has major depression (MQRDEP=2 or 3).
- Has euphoria or irritability (1 <= MQREUFOR <= 2)
- Has some symptoms of mania (1 <= MQRMNGSW <= 3)

57501 No atypical bipolar disorder if there has ever been a diagnosis of manic episode (2 <= MQRMANIA <= 3) or bipolar disorder ( $2<=$ MQRBIPOL <= 6) and a major depressive episode is absent or missing (MQRDEP=1, 4, 5, 88 or Blank)
102 Non-severe atypical bipolar disorder if a non-severe depressive episode is present (MQRDEP=2) AND the criteria for a manic episode is not met (MQRMANIA=1) but euphoria or irritability is present (1 <=

NHANES III Examination Data File

SECOND EXAM DATA

| DIAGNOSTIC INTERVIEW SCHEDULE (DIS) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Positions |  | Item description |  |  |
| SAS name | Counts | and code |  | Notes |




MQRDLANG: Language used to conduct DIS
MQRDLANG is the language in which the DIS portion of the interview was conducted and it is exactly the same as MQRLANG (the language of the MEC interview) except when a comment indicated that the DIS portion of the interview had been conducted in Spanish. Most Hispanic youth spoke English fluently enough that a Spanish translation was not necessary, therefore, no computerized version of the youth interview was available in Spanish. It was only given on hard copy. MQRDLANG was set to 4, Spanish Youth, only if the variable DMAETHNR was greater than or equal to 3 and MQRLANG was equal to 3, and the examination was given on hard copy (MQRHCFLG=1) or a specific comment was made that indicates the interview was given in Spanish.

MQRDPFLG, MQRMNFLG: Depression and mania completeness flags
When a code of "1" is given to the depression (MQRDPFLG) or mania (MQRMNFLG) completeness flag, the respondent only answered the lifetime symptom questions (16 for depression and 9 for mania) and any appropriate probe questions. It was then determined in MQRG21, a check item, that there were not enough positive symptom groups to continue asking questions (MQRG21=3 or MQRG50=3 for depression and mania, respectively). The diagnosis of major depressive episode (MQRDEP) or manic episode (MQRMANIA), respectively, is set to "No."

When a code of "2" is given to the depression (MQRDPFLG) or mania (MQRMNFLG) completeness flag, the respondent answered not only the lifetime symptom questions (16 for depression and 9 for mania) and any appropriate probe questions but also one or more of the questions concerning clustering of the positive symptom groups. These sample persons can skip out of the section at several different points, but they never answer questions past MQRG26 or MQRG55, respectively, and they cannot have a positive diagnosis for major depressive episode (MQRDEP) or manic episode (MQRMANIA). The diagnosis of major depressive episode or manic episode, respectively, is set to "No."

When a code of "3" is given to the depression (MQRDPFLG) or mania (MQRMNFLG) completeness flag, the respondent answered not only the lifetime symptom questions (16 for depression and 9 for mania) and any appropriate probe questions but also all the questions concerning clustering of the positive symptom groups and the worst episode. These sample persons should have answers to all questions in their respective sections and have the chance for a positive diagnosis for major depressive episode (MQRDEP) or manic episode (MQRMANIA). The diagnosis of major depressive episode ranges from 1-5 and the diagnosis of manic episode ranges from 1-3.

```
When a code of "4" is given, the lifetime symptoms were
completed and the sample person met criteria to continue
answering questions (MQRG21=1 or 2), but the remaining
section of questions needed to make a diagnosis were not
ascertained (blank, but applicable) or were all answered
"don't know." This is not the same as MQRG21=3 or
MQRDPFLG=1 where sample persons only answered the lifetime
symptom questions because they did not have enough positive
symptoms to qualify to answer the remaining questions.
When a code of "5" is given, the depression and/or mania
section should have been given, but was not, so all fields
are filled with 8's (blank but applicable).
Lastly, a blank in this field indicates the sample person
was not in the acceptable age range and was not eligible for
the depression or mania questions.
In short, the flags divide the data into five groups:
1. Lifetime symptoms answered, insufficient number positive to
        ask clustering questions
2. Sufficient lifetime symptoms present but do not
        cluster in spells of sufficient duration
3. Sufficient lifetime symptoms present and cluster
        in spells of sufficient duration, and may or may
        not meet criteria for positive diagnosis
4. Sufficient lifetime symptoms present but no
        information available if cluster in spells of
        sufficient duration - missing diagnosis
5. No information available, but should have been
        collected - missing diagnosis
Blank values appear where the DIS not applicable.
```

MQRHCFLG: Hard copy flag
Although in almost all circumstances the DIS section of the interview was given using the computerized version, there were certain situations where a paper copy was used. This would occur only when there was a computer failure or for youth who required a Spanish version. These interviews are considered valid, but responses to probe questions were not recorded, and are therefore set to 8's (blank but applicable).

MQRG0501-MQRG1301, MQRG05L-MQRG12L, MQRG1501-MQRG1601, MQRG14L-MQRG20L: Lifetime symptoms of depression

The questionnaire inquires whether a symptom has occurred at
any time in life (G5-G20). Each of these DIS symptom questions can take a value of "1-4." The value "2" means the respondent said "No" or "Don't know." If the respondent said "Yes," additional "probe" questions were asked. First, the respondent was asked if they told a doctor about the symptom. The answer to this probe question is included after each respective lifetime symptom. When the interview was given on hard copy (i.e., not by computer - See MQRHCFLG, a flag for hard copy), no probe questions were recorded so the probe questions are filled with 8's (blank but applicable).

The respondent was then asked if the symptom was always due to a physical illness or injury (this included pregnancy). If the respondent said "Yes," then a "4" was coded. If the respondent said "No," then he/she was next asked whether the symptom always occurred when he/she used medicine, alcohol, or drugs. If the respondent said "Yes," then a "3" was coded. If the respondent said "No," then a "1" was coded. A value of "1" indicates that the possibility of this being a symptom of a mental disorder cannot be ruled out. Additional probes were asked for G13. (See notes for MQRG1302-MQRG1304.)

As a word of caution, in the Spanish version of question G 8 , "Have you ever had a period of two weeks or more when you had trouble falling asleep, staying asleep, or with waking up too early?," the phrase used for "falling asleep" really meant "staying asleep" rather than what was intended. Still another phrase was used for the part of the question "staying asleep." Consequently, "staying asleep" was well covered and "falling asleep" was not. There is no way to tell to what extent this affected the number of positive responses.

MQRDGP1L-MQRDGP8L: Summary questions
The lifetime depressive symptom questions (G5-G20) are arranged in eight groups, each of which approximates one of the diagnostic criteria in Section B of the definition of a major depressive episode from the American Psychiatric Association's Diagnostic and Statistical Manual, Third Edition (DSM-III).

MQRDGP1L- MQRDGP8L are the eight summary variables which indicate the number of positive (1's) lifetime symptoms in each of the respective groups.

MQRG13L, MQRG1302-MQRG1304: Decreased interest in sex

If the respondent answered "Yes" to the initial question (G13: decreased interest in sex), a series of additional questions was asked (MQRG1302- MQRG1304). If the respondent answered "No" to all three questions, then a code "6" (yes,
but wasn't bothered) was entered for G13, indicating that the symptom was below the diagnostic threshold. If the respondent answered "Yes" to any one of these three additional questions, then the normal "probe" questions were asked, leading to an assignment of values 1, 3, 4, that is, whether the symptom was always due to physical illness or injury or medicine, alcohol, or drugs; any remaining parts of MQRG1302-MQRG1304 were skipped after a "Yes" response to any one of the probes.

If the respondent volunteered that he/she had never been interested in sex, the value "5" (no interest ever) was coded.

MQRG21-MQRG25: Depression module decision points
Item G21 asks the interviewer whether three or more summary groups of the possible eight had at least one "Yes" response coded. If there were fewer than three, all the remaining DIS depression questions were skipped and the interviewer moved to the mania questions (G41-G49).

If a respondent had three or more DSM-III symptoms during his/her life (G21), the interviewer asked one of two parallel series of questions to determine whether questions pertaining to the worst depressive episode should be asked. The series of questions are explained below:

Series A, Questions G22, G23, and G26: G21 was coded "1" if there were three or more depressive symptoms and the respondent answered "Yes" to the initial question (G2) about two weeks or more of feeling sad, blue, or depressed. The respondent was then asked G22 about having these problems cluster in time, in the same month. If the answer was "Yes," G26 was asked. If the response to G22 was "No" (meaning the problems did not cluster in the same month), then a second question about temporal clustering was asked (G23). If the respondent again denied having problems cluster ("Yes, never been a period"), the remaining depression questions were skipped and the interviewer moved on to the mania questions. If the respondent said "No, has been a period" to G23, then G26 was asked.

Series B Questions G24, G25, and G26: G21 was coded "2" if there were three or more depressive symptoms and the respondent answered "No" to the initial question (G2) about ever having had two weeks or more of feeling sad, blue, or depressed. G24 was then asked to determine if several of the depressive symptoms (G5-G20) were clustered together in the same month. If the answer to this was "No," then the remaining DIS depression questions were skipped and the interviewer moved on to the mania questions. If the answer was "Yes" then G25 was asked, which elicits symptoms of "masked depression." If the respondent indicated that he/she felt "low, gloomy, blue, or uninterested" then he/she was asked G26. If the respondent indicated that he/she felt
"okay," the remaining DIS depression questions were skipped and the interviewer moved on to the mania questions.

MQRG05W-MQRG20W: Worst episode depressive symptoms


#### Abstract

These questions ask about symptoms during the worst episode identified in G40. Each of the questions about a worst depressive episode is parallel to one of the lifetime depression questions: for example, MQRGO5L asks "has there ever been a period of two weeks or longer when you lost your appetite?" The corresponding worst episode question, MQRGO5W, asks, "Did you lose your appetite?" The worst episode question (in this example, MQRGO5W) was only asked if the corresponding lifetime question (in this example, MQRGO5L) was coded "1." The worst episode question was coded "Yes" or "No," indicating the presence or absence of the symptom during the worst depressive episode. A diagnosis of major depressive episode was based on the symptoms during the worst depressive episode (MQRGO5W-MQRG20W) which are transformed into eight DSM-III symptom groups (MQRDGP1W-MQRDGP8W), and is not based on the lifetime depressive symptoms (MQRG05L-MQRG20L).


MQRG41L-MQRG49L: Lifetime symptoms of mania
The questionnaire inquires about whether a symptom has occurred at any time in life (G41-G49). Each of these (DIS) symptom questions can take a value of "1-3." The value "2" means the respondent said "No" or "don't know." If the respondent said "Yes," two additional "probe" questions were asked. The respondent was asked whether the symptom ever occurred when he/she used medicine, alcohol, or drugs. If the respondent said "Yes," then he/she was next asked whether the symptom always occurred when he/she used medicine, alcohol, or drugs. If the respondent said "Yes," then a "3" was coded. If the respondent said "No" to either question, than a "1" was coded. A value of "1" indicates that the possibility of this being a symptom of a mental disorder cannot be ruled out. When the interview was given on hard copy (i.e., not by computer - See MQRHCFLG, a flag for hard copy), responses to probe questions were not recorded so the probe questions are filled with 8's (blank but applicable).

MQRG47EX: Examples of special gift or power
If the respondent answered "Yes" to G47L, possessing a special gift or power, they were asked for an example. Since a high percentage of the examples given had to do with extra sensory perception (ESP), it was decided to code these examples into two categories, ESP and other. There were not enough examples with similar characteristics to code any other group.

The query regarding special gifts or powers is intended to elicit reports of beliefs about the self which are psychotic in nature. If the example did not meet this precept, the symptom (MQRG47L) was coded "No" and the example deleted.

MQRG50-MQRG54: Mania module decision points
Item G50 asks the interviewer whether two or more lifetime symptoms of the possible eight (MQRG42L- MQRG49L) had at least one response of "1" coded. If there was a "Yes" response of one or less lifetime symptoms, all the remaining mania questions were skipped and the interviewer moved to the next section. The remaining DIS questions were coded as blank.

If a respondent had two or more DSM-III symptoms during his/her life, the interviewer asked one of three parallel series of questions to determine whether questions pertaining to the worst episode of mania should be asked or possibly skipped to the next section. The three series are explained below:

Series A, Questions G51, G52, and G55: G50 was coded "1" if there were two or more symptoms of mania and the respondent answered "Yes" to the initial question (G41) about one week or more of feeling high or manic. The respondent was then asked G51 about having these problems cluster in time, in the same month. If the answer was "Yes," G55 was asked. If the response to G51 was "No" (meaning the problems did not cluster in the same month), then a second question about temporal clustering was asked (G52). If the respondent again denied having problems cluster ("Yes, never been a period"), the remaining mania questions were skipped and the interviewer moved on to the next section. If the respondent said "No, has been a period" to G52, G55 was asked.

Series B, Questions G53-G55: G50 was coded "2" if there were three or more symptoms of mania and the respondent answered "No" or "Always due to medication/drugs/alcohol" to the initial question (G41) about ever having had one week or more of feeling high or manic. G53 was then asked to determine if several of the depressive symptoms (G42-G49) were clustered together in the same month. If the answer to this was "No," then the remaining DIS mania questions were skipped and the interviewer moved on to the next section. If the answer was "Yes" then G54 was asked, which elicits symptoms of irritable mood. If the respondent indicated that he/she felt "unusually irritable or likely to fight or argue" then he/she was asked G55. If the respondent indicated that he/she never felt irritable, the remaining DIS mania questions were skipped and the interviewer moved on to the next section.

Series C: G50 was coded "3" if: 1) there were only two symptoms of mania coded "1" and the respondent answered "No" or "Always due to medication/drugs/alcohol" to the initial
question (G41) about ever having had one week or more of feeling high or manic, i.e., responses " 2 " or "3;" or, 2)there was only one or less symptoms of mania coded "1." With these combinations, the remaining DIS mania questions were skipped and the interviewer moved on to the next section.

MQRG42W-MQRG49W: Worst episode symptoms of mania

These questions ask about symptoms during the worst episode of mania identified in G66. Each of the questions about a worst episode of mania is parallel to one of the lifetime mania questions: for example, MQRG42L asks "has there ever been a period of a week or more when you were so much more active than usual that you or your family or friends were concerned about it?" The corresponding worst episode question, MQRG42W, asks, "Were you so much more active than usual that you or your family or friends were concerned about it?" The worst episode question (in this example, MQRG42W) was only asked if the corresponding lifetime question (in this example, MQRG42L) was coded "1." The worst episode question was coded "Yes" or "No," indicating the presence or absence of the symptom during the worst episode of mania. A diagnosis of manic episode was based on the symptoms during the worst episode of mania MQRG42WMQRG49W) which were transformed into seven DSM-III symptom groups (MQRMNG1W-MQRMNG7W), and is not based on the lifetime symptoms of mania (MQRG42L- MQRG49L).

MQRDGP1W-MQRDGP8W, MQRDYSFR, MQRDEP: The diagnostic variable "MQRDEP"

The variable MQRDEP indicates the diagnosis of major depressive episode which is based on Criteria A and B of the DSM-III definition of major depressive episode. Criteria C and D were not assessed, and E was only assessed for bereavement. The minimum severity requirement is that these symptoms cause help-seeking or subjective impairment (at least one "Yes" to G28-G31).

Criterion A for the diagnosis of major depressive episode in DSM- III calls for "dysphoric mood or loss of interest or pleasure in all or almost all usual activities and pastimes." If the respondent said "Yes" to the initial depression question (G2), or if there were at least two weeks of dysphoria combined with some other problems (G26), then the person was said to have "dysphoria," and was considered to have met Criterion A for the diagnosis of major depressive episode (MQRDYSFR=1).

The DSM-III definition of Criterion B for major depressive episode contains eight symptoms, at least four (4 <=MQRDGPSW <= 8) of which must be present during a depressive episode in order to qualify for a diagnosis. These eight symptoms

```
are approximated by the following NHANES III questions
(Note that the DSM-III Symptoms are given in the order that
they are asked in the DIS, rather than the order in the
DSM-III Manual):
DSM-III Symptom NHANES III Questions
1. Appetite or weight change
2. Insomnia or hypersomnia
G08W or G09W
3. Loss or energy, fatigue
4. Agitation or retardation
5. Loss of interest in sex
6. Feeling worthless or guilty
7. Trouble thinking, concentrating
8. Thoughts of death or suicide G17W, G18W, G19W, or
G05W, G06W, or G07W
G10W
G11W or G12W
G13W
G14W
G15W or G16W
G20W
```

MQRDGP1W-MQRDGP8W give the number of positive items per group for the eight corresponding groups above.
Criterion "E" is only assessed by the absence of
uncomplicated bereavement as the cause of depression, i.e.,
depressed spells were never due to the death of someone
close to the respondent or they may have been caused by
things other than death (MQRG34 = 2).
The variable MQRDEP can take seven values:
No diagnosis
Major depressive episode without severity
Major depressive episode with severity
Severe bereavement
Non-severe bereavement
88 Blank but applicable
Blank
MQRDEP = 1. No major depressive episode was diagnosed if
the respondent answered sufficient questions so that
Criteria $A$ and $B$ could be determined and did not qualify for
a diagnosis of major depressive episode or bereavement (as
defined below).
MQRDEP $=2$. Major depressive episode without severity was
diagnosed if Criteria $A, B$ and $E$ were met but without
severity (all no's for G28-G31).
MQRDEP $=3$. Major depressive episode with severity was
diagnosed if Criteria $A, B$, and $E$ were met plus severity (at
least one "Yes" to G28-G31).
MQRDEP $=4$. Severe bereavement meets Criteria $A$ and $B$ plus
severity (i.e., MQRDEP=3), but depressed spells ONLY due to
death of someone close (MQRG34=1).
MQRDEP $=5$. Non-severe bereavement meets Criteria $A$ and $B$
but not severity (i.e., MQRDEP=2), but depressed spells ONLY

```
due to death of someone close (MQRG34=1).
MQRDEP = 88. The major depressive episode variable was
coded a "Blank but applicable" value if the respondent did
not answer sufficient questions so that Criteria A and B
could be determined. The respondent must answer the initial
depression question (MQRGO2) and at least 11 of the lifetime
symptom questions (MQRGO5L-MQRG2OL) as well as the appropriate
worst episode symptom questions (MQRGO5W-MQRG2OW).
MQRDEP = Blank. The major depressive episode variable was
coded a "Blank" if the sample person was not eligible to
receive the depression questions.
```

MQRDPSX1-MQRDPSX2, MQRDGPSW: Total depressive symptom group counts

The two variables MQRDGPSW and MQRDPSX2 report the total number of positive depressive symptom groups in the worst episode (sum of all groups where MQRDGP1W to MQRDGP8W contained at least one positive symptom) and lifetime (sum of all groups where MQRDGP1L to MQRDGP8L contained at least one positive symptom), respectively. The latter also adds dysphoria (MQRDYSFR=1). These variables range from 0-8 and $0-9$, respectively. MQRDGPSW is used in determining the diagnosis of major depressive episode and MQRDPSX2 is used in the total symptom count.

The variable MQRDPSX1 reports the total number of positive symptoms in the worst episode (sum of MQRDGP1W to MQRDGP8W) plus dysphoria (MQRDYSFR=1) with a range of 0-17. (Note that this variable is a sum of positive symptoms, not positive symptom groups.)

MQRFDDP, MQRLDDP: Age of first and last depressive symptoms
The two variables MQRFDDP and MQRLDDP code the age of the respondent the first and last time, respectively, he/she experienced depressive symptoms if he/she ever met criteria for any major depressive episode (2 <= MQRDEP <= 5). MQPFDDP uses the age in MQRG32 and MQRLDDP combine the age and time frame information in MQRG35, MQRG36 and MQRG37.

MQRMNGP1-MQRNMGP7, MQREUFOR, MQRMANIA: The diagnostic variable "MQRMANIA"

The variable MQRMANIA indicates the diagnosis of manic episode which is based on Criteria $A$ and $B$ of the DSM-III definition of manic episode. Criteria $C, D$ and $E$ were not assessed. The minimum severity requirement is that these symptoms cause help-seeking or subjective impairment (at least one "Yes" in MQRG57-MQRG60).

Criterion A for the diagnosis of manic episode in DSM-III

```
calls for "one or more distinct periods with a predominantly
elevated, expansive, or irritable mood." If the respondent
said "Yes" to the initial mania question (MQRG41L=1) then
the respondent was considered euphoric (MQREUFOR=2). If the
respondent said "Yes" (1) to MQRG54 then the respondent was
considered irritable (MQREUFOR=1).
The DSM-III definition of Criterion B for manic episode
requires a duration of at least one week during which, for
most of the time, at least three of the seven symptoms have
persisted (four if the mood is only irritable) and have been
present to a significant degree. These seven symptoms are
approximated by the following NHANES III questions:
DSM-III Symptom
NHANES III Questions
1. Hyperactivity/hypersexuality G42W or G44W
2. Pressure to keep talking G45W
3. Thoughts racing G46W
4. Inflated self-esteem e.g.,
    special gifts or powers G47W
5. Decreased need for sleep G48W
6. Distractibility G49W
7. Excessive involvement in
    activities that have a high
    potential for painful
    consequences which is not
    recognized, e.g., buying sprees G43W
MQRMNG1W-MQRMNG7W give whether the symptom is present or not
for the seven corresponding groups above.
The variable MQRMANIA can take five values:
    No diagnosis
    Manic episode without severity
    Manic episode with severity
88 Blank but applicable
Blank
```

MQRMANIA $=1 . \quad$ No mania episode was diagnosed if the respondent answered sufficient questions so that Criteria A and $B$ could be determined and did not qualify for a diagnosis of manic episode.

MQRMANIA $=2$. Manic episode without severity was diagnosed if Criteria $A$ and $B$ were met but without severity (all no's for MQRG57-MQRG60).

MQRMANIA $=3$. Manic episode with severity was diagnosed if Criteria $A$ and $B$ were met as well as severity (at least one "Yes" for MQRG57-MQRG60).

MQRMANIA $=88$. The manic episode variable was coded a "Blank but applicable" value if the respondent did not answer sufficient questions so that Criteria A and B could be determined. The respondent must answer the initial mania

```
question (MQRG41), or the irritability question (MQRG54),
and at least 6 of the lifetime symptom questions
(MQRG41L-MQRG49L) as well as the appropriate worse episode
symptom questions (MQRG42W-MQRG49W).
MQRMANIA = Blank. The manic episode variable was coded a
"Blank" if the sample person was not eligible to receive the
mania questions.
```

MQRMNGSW, MQRMNSX1-MQRMNSX2: Total manic symptom group counts
The two variables MQRMNGSW and MQRMNSX2 code the total number of positive manic symptom groups in the worst episode (sum of groups MQRMNGP1 to MQRMNGP7 with a "Yes" response) and during lifetime (questions MQRG42L to MQRG49L are grouped into DSM-III groups 1 to 7 and the number of positive groups is counted), respectively. The latter also adds the euphoria or irritability symptom (1 <= MQREUFOR <= 2). These variables range from $0-7$ and $0-8$, respectively. MQRMNGSW is used in determining the diagnosis of manic episode and MQRMNSX2 is used in the total symptom count.

The variable MQRMNSX1 reports the total number of positive symptoms in the worst episode (sum of MQRMNGP1 to MQRMNGP8) plus euphoria or irritable mood (1 <= MQREUFOR <= 2) with a range of $0-8$. (Note that this variable is a sum of positive symptoms, not positive symptom groups).

MQRFDMN, MQRLDMN: Age of first and last manic symptoms

The two variables MQRFDMN and MQRLDMN report the age of the respondent the first and last time, respectively, he/she experienced manic symptoms if he/she ever met criteria for any manic episode ( $2<=$ MQRMANIA <= 3). MQRFDMN uses the age in MQRG61 and MQRLDMN combines the age and time frame information in MQRG62, MQRG63 and MQRG64.

MQRDEPSE: The diagnostic variable "MQRDEPSE"

The variable MQRDEPSE indicates the DSM-III diagnosis of major depression, single episode, and is constructed using MQRDEP and MQRMANIA. The diagnosis of major depression, single episode is not made if the depression is the sole result of severe or non-severe bereavement (MQRDEP= 4 or 5) or if a manic episode is present (MQRMANIA= 2 or 3). There must be only one episode of major depression.

The variable MQRDEPSE can take five values:

No diagnosis
Major depression, single episode without severity
Major depression, single episode with severity
88 Blank but applicable
Blank

```
MQRDEPSE = 1. No major depressive episode was diagnosed
(MQRDEP=1) although there could be severe or non-severe
bereavement (MQRDEP=4 or 5) or some form of mania was
diagnosed (MQRMANIA=2 or 3).
MQRDEPSE = 2. A single episode (MQRG27=1) of major
depression without severity was diagnosed (MQRDEP=2) and no
manic episodes were present (MQRMANIA=1). MQRDEPSE = 3. A
single episode (MQRG27=1) of major depression with severity
was diagnosed (MQRDEP=3) and no manic episodes were present
(MQRMANIA=1) .
MQRDEPSE = 88. The major depression, single episode
variable was coded "Blank but applicable" if one of the
following is true:
1. MQRDEPSE=1 and MQRBIPOL= (Blank or 88) and
    MQRDEP= (Blank or 88)
2. MQRDEPSE=1 and MQRBIPOL= (Blank or 88) and MQRDEP=3
3. MQRDEPSE=1 and MQRBIPOL=1 and MQRDEP= (Blank or 88)
4. MQRDEPSE=1 and MQRBIPOL=1 and MQRDEP=3 and
    MQRG27= (Blank, 888, or 999)
MQRDEPSE = Blank. The major depression, single episode
variable was coded a "Blank" if the sample person was not
eligible to receive the depression/mania questions.
```

MQRFDDSE, MQRLDDSE: Age of first and last depressive symptoms associated with major depression, single episode

The two variables MQRFDDSE and MQRLDDSE code the age of the respondent the first and last time, respectively, he/she experienced depressive symptoms if he/she ever met criteria for a major depression, single episode which was not due solely to bereavement ( $2<=$ MQRDEPSE $<=3$ ). MQRFDDSE uses the age in MQRFDDP and MQRLDDSE uses the age in MQRLDDP.

MQRDEPRT: The diagnostic variable "MQRDEPRT"

The variable MQRDEPRT indicates the DSM-III diagnosis of major depression, recurrent, and is constructed using MQRDEP and MQRMANIA. The diagnosis of major depression, recurrent, is not made if the depression is the sole result of severe or non-severe bereavement (MQRDEP=4 or 5) or if a manic episode is present (MQRMANIA= 2 or 3). There must be more than one episode of major depression.

The variable MQRDEPRT can take five values:

No diagnosis
Major depression, recurrent without severity
Major depression, recurrent with severity
Blank but applicable
Blank

MQRDEPRT = 1. No major depressive episode was diagnosed (MQRDEP=1) although there could be severe or non-severe bereavement (MQRDEP=4 or 5) or some form of mania was diagnosed (MQRMANIA=2 or 3).

MQRDEPRT = 2. Recurrent episodes (2 <= MQRG27 <= (whole life) or don't know how many spells) of major depression without severity were diagnosed (MQRDEP=2) and no manic episodes were present (MQRMANIA=1).

MQRDEPRT = 3. Recurrent episodes (2 <= MQRG27 <= (whole life) or don't know how many spells) of major depression with severity were diagnosed (MQRDEP=3) and no manic episodes were present (MQRMANIA=1).

MQRDEPRT = 88. The major depression, recurrent variable was coded "Blank but applicable" if one of the following is true:

1. MQRDEPRT=1 and MQRBIPOL= (Blank or 88) and MQRDEP= (Blank or 88)
2. MQRDEPRT=1 and MQRBIPOL= (Blank or 88) and MQRDEP=3
3. MQRDEPRT=1 and MQRBIPOL=1 and MQRDEP= (Blank or 88)
4. MQRDEPRT=1 and MQRBIPOL=1 and MQRDEP=3 and MQRG27= (Blank, 888, or 999)

MQRDEPRT = Blank. The major depression, recurrent variable was coded a "Blank" if the sample person was not eligible to receive the depression/mania questions.

MQRFDDRT, MQRLDDRT: Age of first and last depressive symptoms associated with major depression, recurrent

The two variables MQRFDDRT and MQRLDDRT report the age of the respondent the first and last time, respectively, he/she experienced depressive symptoms if he/she ever met criteria for major depression, recurrent, which was not due solely to bereavement ( $2<=$ MQRDEPRT <= 3). MQRFDDRT uses the age in MQRFDDP and MQRLDDRT uses the age in MQRLDDP.

MQRDYSA, MQRDYSD, MQRDYSTH: The diagnostic variable "MQRDYSTH"

The variable MQRDYSTH indicates the diagnosis of dysthymic disorder. The diagnosis of dysthymic disorder is based on Criteria A through D of the DSM-III definition of dysthymic disorder. Criteria E and $F$ were not assessed. This disorder differs from major depressive disorder in that during the past two years, the individual has been bothered most or all of the time by symptoms characteristic of the depressive syndrome but that are not of sufficient severity and duration to meet the criteria for a major depressive episode.

Criteria $A, B$, and $C$ of the DSM-III are encompassed in the variable MQRDYSA. This requires two years or more of

```
predominately depressive mood or marked loss of interest or
pleasure in all, or almost all, usual activities and
pastimes (MQRGO3=1 or 104 weeks <= MQRG26 <= whole life).
The DSM-III definition of Criterion D for dysthymic disorder
contains 13 symptoms, at least three (3 <= MQRDYSD <= 7) of
which must be present during the depressive periods in order
to qualify for a diagnosis. Seven of these symptoms are
covered by the following NHANES III questions.
DSM-III Symptom NHANES III Questions
    1. Insomnia or hypersomnia G08L or G09L
    2. Low energy, chronic tiredness G10L
    3. Feeling inadequate/low self-
    esteem
    G14L
    5. Trouble thinking G15L or G16L
    7. Less interest in pleasurable
        activities G13L
10. Less active or talkative G11L or G12L
13. Recurrent thoughts of death
        or suicide G17L or G18L or G19L
DSM-III symptoms not available in the NHANES III
    4. Decreased effectiveness
    6. Social withdrawal
    8. Irritability
    9. Lack of pleasure in rewards
11. Brooding about the past or self-pity
12. Crying spells
The variable MQRDYSTH can take five values:
    No diagnosis
    Dysthymic disorder with no major depressive
    episode
    3 Dysthymic disorder with major depressive episode
    88 Blank but applicable
Blank
MQRDYSTH = 1. No dysthymic disorder was diagnosed if the
respondent answered sufficient questions so that Criteria A
through D could be determined and did not qualify for a diagnosis
of dysthymic disorder.
MQRDYSTH = 2. Dysthymic disorder was diagnosed if the
respondent met Criteria A through D but did not have a diagnosis
of major depressive episode (MQRDEP not equal to 3).
MQRDYSTH = 3. Dysthymic disorder was diagnosed if the respondent
met Criteria A through D and had a diagnosis of major depressive
episode as well (MQRDEP = 3).
MQRDYSTH = 88. The dysthymic disorder variable was coded a
"Blank but applicable" value if the respondent did not
answer sufficient questions so that Criteria A through D
```

could be determined. The respondent must answer the initial two year depression question MQRGO3 or the length of spell question MQRG26 and at least nine of the 12 lifetime symptom questions listed above for Criterion D plus MQPGO3.

MQRDYSTH = Blank. The dysthymic disorder variable was coded a "Blank" if the sample person was not eligible to receive the depression questions.

MQRBIPOL: The diagnostic variable "MQRBIPOL"

The variable MQRBIPOL indicates the DSM-III diagnosis of bipolar disorder, and is constructed using MQRDEP and MQRMANIA. The diagnosis of bipolar disorder is made only if there has ever been a manic episode.

The variable MQRBIPOL can take eight values:

MQRBIPOL = 1. No bipolar disorder was diagnosed if there has never been a diagnosis of manic episode.

MQRBIPOL = 2. Bipolar disorder is diagnosed if severity and exclusion criteria are met for both a manic and a major depressive episode (MQRMANIA=3 and MQRDEP=3).

MQRBIPOL = 3. Bipolar disorder is diagnosed if severity and exclusion criteria are met for a manic episode (MQRMANIA=3), but a major depressive episode is either absent (MQRDEP=1, 4 or 5 ) or the diagnosis is missing (MQRDEP=Blank or 88).

MQRBIPOL = 4. Bipolar disorder is diagnosed if severity and exclusion criteria are met for a manic episode (MQRMANIA=3), but not for a major depressive episode (MQRDEP=2).
$M Q R B I P O L=5$. Bipolar disorder is diagnosed if no manic episode met both severity and exclusion criteria (MQRMANIA=2) and a major depressive episode is either absent (MQRDEP=1, 4 or 5 ) or the diagnosis is missing (MQRDEP=Blank or 88).

MQRBIPOL = 6. Bipolar disorder is diagnosed if no manic episode met both severity and exclusion criteria (MQRMANIA=2) and the major depressive episodes may or may not meet both severity and exclusion criteria (MQRDEP=2 or $3)$.

MQRBIPOL = 88. The bipolar disorder variable was coded a "Blank but applicable" value if the diagnosis for manic episode is missing (MQRMANIA=Blank or 88).
$M Q R B I P O L=B l a n k . \quad$ The bipolar disorder variable was coded a "Blank" if the sample person was not eligible to receive the depression/mania questions.

MQRFDBI, MQRLDBI: Age of first and last manic symptoms

```
associated with bipolar disorder
```

The two variables MQRFDBI and MQRLDBI report the age of the respondent the first and last time, respectively, he/she experienced manic symptoms if he/she ever met criteria for any bipolar diagnosis (2 <= MQRBIPOL <= 6). MQRFDBI uses age at first manic symptoms (MQRFDMN) when 2 <= MQRBIPOL <= 6 or age at first depressive symptoms (MQRFDDP) if MQRBIPOL=2, 4 or 6 and $0<=$ MQRFDDP <= MQRFDMN. MQRLDBI uses age at last manic symptoms (MQRLDMN) when $2<=$ MQRBIPOL $<=6$ or age at last depressive symptoms (MQRLDDP) if MQRBIPOL=2, 4 or 6 and MQRLDDP >= 0 and MQRLDMN <= MQRLDDP $<=54$.

MQRBIPII: The diagnostic variable "MQRBIPII"
The variables MQRDEP and MQRMANIA report the DSM- III syndromes of major depressive episode and manic episode, respectively, and are used to construct various DSM-III diagnoses. The variable MQRBIPII is the DSM-III diagnosis of atypical bipolar disorder (bipolar disorder, type II). The diagnosis of atypical bipolar disorder is made only if the respondent:

1. Does not meet criteria for bipolar disorder (MQRBIPOL=1)
2. Does not meet criteria for a manic episode (MQRMANIA=1)
3. Has a major depressive episode (MQRDEP=2 or 3)
4. Has euphoria or irritability (1 <= MQREUFOR <= 2)
5. Has some symptoms of mania (1 <= MQRMNGSW <= 3)

The variable MQRBIPII can take five values:
No diagnosis
Atypical bipolar disorder without severity
Atypical bipolar disorder with severity
88 Blank but applicable
Blank

MQRBIPII = 1. No atypical bipolar disorder is diagnosed if there has ever been a manic episode ( $2<=$ MQRMANIA $<=3$ ) or bipolar disorder ( $2<=$ MQRBIPOL <= 6) and a major depressive episode is absent or missing (MQRDEP=1, 4, 5, 88, or Blank).

MQRBIPII = 2. Atypical bipolar disorder without severity is diagnosed if a major depressive episode without severity is present (MQRDEP=2) and the criteria for a manic episode is not met (MQRMANIA=1) but euphoria or irritability is present (1 <= MQREUFOR <= 2) and some manic symptoms are present (1 <= MQRMNGSW <= 3).

```
    MQRBIPII = 3. Atypical bipolar disorder with severity is
    diagnosed if a major depressive episode with severity is
    present (MQRDEP=3) and the criteria for a manic episode is
    not met (MQRMANIA=1) but euphoria or irritability is present
    (1 <= MQREUFOR <= 2) and some manic symptoms are present (1
    <= MQRMNGSW <= 3).
    MQRBIPII = 88. The atypical bipolar disorder variable was
    coded "Blank but applicable" if one of the following is
    true:
    MQRBIPII=1 and MQRDEP= (Blank or 88)
    2. MQRBIPII=1 and MQRMANIA= (Blank or 88) and MQRDEP=3
MQRBIPII = Blank. The atypical bipolar disorder variable
was coded a "Blank" if the sample person was not eligible to
receive the depression/mania questions.
MQRFDBII, MQRLDBII: Age of first and last manic symptoms associated with atypical bipolar disorder
The two variables MQRFDBII and MQRLDBII report the age of the respondent the first and last time, respectively, he/she experienced depressive symptoms if he/she ever met criteria for any atypical bipolar disorder diagnosis (2 <= MQRBIPII<= 3). MQRFDBII uses age at first depressive symptoms (MQRFDDP) and MQRLDBII uses age at last depressive symptoms (MQRLDDP).
```

The MEC Adult Questionnaire was administered to all examinees aged 17 years and older in the mobile examination center (MEC). Conducted by a trained interviewer in a private room to ensure confidentiality, the automated questionnaire included sections on drug, alcohol, and tobacco use, sexual experience, women's reproductive history, and mental health. Because this questionnaire was administered in the examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Several portions of the MEC Adult Questionnaire were asked of examinees within specific age groups, and others were specific to one gender. For example, the cognitive-function section was administered to examinees 60 years and older, and the birth control-use section was administered only to women. Age and sex check items that were part of the questionnaire have been retained in the documentation and can be used to determine these subsets. One portion of the questionnaire (Section G), the Diagnostic Interview Schedule, was edited and documented separately (see Diagnostic Interview Schedule).

A modified MEC Adult Questionnaire was administered to adults 20 years and older during the interview portion of the Home Examination. It included sections on tobacco use, cognitive function, selected medical conditions, reproductive health, and medicine, vitamin, and mineral usage. Questions from the two interviews can be combined for analysis; however, the analyst should be aware of slight differences between the questionnaires. For example, the reproductive health section of the interview administered in the Home Examination was shorter, and skip patterns were not identical to those in the MEC Adult Questionnaire. For analyses of combined data from the MEC Adult and the Home Examination interviews, MEC+home examination weights (WTPFHX6) should be used (see Home Examination, Interview).

Data processing and editing were performed for the consistency of responses within the sections of the questionnaire. Notes have been provided both for standardized and recoded variables and for variables requiring additional explanation. The notes reference the questions, by section and number, from the questionnaires which can be found in the Plan and Operation of the National Health and Nutrition Examination Survey, 1988-1994 (NCHS, 1994; U.S. DHHS, 1996b).

NHANES III Examination Data File

SECOND EXAM DATA
MEC ADULT QUESTIONNAIRE (EXCEPT DIS)


|  |  | First I would like to ask you a few questions about tobacco use. |
| :---: | :---: | :---: |
| 3308-3310 |  | How many cigarettes have you |
| MARA1 |  | smoked in the past 5 days? |
|  | 937 | 000 None |
|  | 400 | 001-400 |
|  | 157 | 888 Blank but applicable |
|  | 1102 | Blank |
| $\begin{aligned} & 3311-3312 \\ & \text { MARA2A } \end{aligned}$ |  | How many pipes have you smoked in the past 5 days? |
|  | 1328 | 00 None |
|  | 9 | 01-30 |
|  | 157 | 88 Blank but applicable |
|  | 1102 | Blank |
| 3313-3314 |  | How many cigars have you smoked in the |
| MARA2B |  | past 5 days? |
|  | 1324 | 00 None |
|  | 13 | 01-25 |
|  | 157 | 88 Blank but applicable |
|  | 1102 | Blank |
| 3315-3316 |  | How many containers of chewing |
| MARA 3 |  | tobacco or snuff have you used in the past 5 days? (IF BOTH USED, ENTER |
|  |  | TOTAL NUMBER.) |
|  | 1308 | 00 |
|  | 22 | 01-11 |
|  | 7 | 77 Less than one container |
|  | 157 | 88 Blank but applicable |
|  | 1102 | Blank |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| MEC ADULT QUESTIONNAIRE (EXCEPT DIS) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| SECTION B. COGNITIVE FUNCTION - PART A |  |  |  |  |
| Positions <br> SAS name | Item description <br> Counts and code |  |  | Notes |
| 3322 |  | Fireman climbed in |  |  |
| MARB2C | 299 |  | Yes, recalled detail |  |
|  | 110 | 2 | No, did not recall |  |
|  | 44 | 8 | Blank but applicable |  |
|  | 2143 | Blank |  |  |
| 3323 |  | Children rescued |  |  |
| MARB2D | 372 |  | Yes, recalled detail |  |
|  | 37 |  | No, did not recall |  |
|  | 44 |  | Blank but applicable |  |
|  | 2143 | Blank |  |  |
| 3324 |  | Minor injuries |  |  |
| MARB2E | 293 | 1 | Yes, recalled detail |  |
|  | 116 | 2 | No, did not recall |  |
|  | 44 | 8 | Blank but applicable |  |
|  | 2143 | Blank |  |  |
| 3325 |  | Everyone well |  |  |
| MARB2F | 179 | 1 | Yes, recalled detail |  |
|  | 230 | 2 | No, did not recall |  |
|  | 44 | 8 | Blank but applicable |  |
|  | 2143 | Blank |  |  |






NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA

| MEC ADULT QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION E. ALCOHOL/DRUG USE |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $3349-3350$ <br> MARE4 |  | On the average, on the days that |  |
|  |  | you drank alcohol, how many drinks did you have a day? (By a drink, I mean a $12-0 z$ beer, a $4-0 z$ glass of wine, or an ounce of liquor.) |  |
|  | 594 | 01-32 |  |
|  | 157 | 88 Blank but applicable |  |
|  | 1 | 99 Don't know |  |
|  | 1844 | Blank |  |
| 3351-3353 |  | In the past 12 months, how many | See note |
| MARE5S |  | days of the year did you have 9 or more drinks on a single day? |  |
|  | 401 | 000 None |  |
|  | 187 | 001-364 |  |
|  | 157 | 888 Blank but applicable |  |
|  | 7 | 999 Don't know |  |
|  | 1844 | Blank |  |
| 3354-3356 |  | In the past 12 months how many days of | See note |
| MARE6S |  | the year did you have 5 or more drinks on a single day? Include all types. (Include the (Number in MARE5S) days you had 9 or more drinks) |  |
|  |  |  |  |
|  |  |  |  |
|  | 266 | 000 None |  |
|  | 318 | 001-364 |  |
|  | 160 | 888 Blank but applicable |  |
|  | 8 | 999 Don't know |  |
|  | 1844 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA

NHANES III Examination Data File

SECOND EXAM DATA
MEC ADULT QUESTIONNAIRE (EXCEPT DIS)

| SECTION E. ALCOHOL/DRUG USE |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions |  | Item description |  |
| SAS name | Counts | and code | Notes |


|  |  | The next few questions are about your experience with drugs. |
| :---: | :---: | :---: |
| 3359 |  | Have you ever used marijuana? |
| MARE9 | 354 | 1 Yes |
|  | 573 | 2 No (MARE12) |
|  | 114 | 8 Blank but applicable |
|  | 1555 | Blank |
| 3360 |  | About how many times in your |
| MARE10 |  | lifetime have you used marijuana? |
|  | 70 | 11 or 2 |
|  | 96 | 23 to 10 |
|  | 80 | 311 to 99 |
|  | 108 | 4100 or more |
|  | 114 | 8 Blank but applicable |
|  | 2128 | Blank |
| 3361-3362 |  | During the past month, on how |
| MARE11 |  | many days did you use marijuana? |
|  | 268 | 00 None in past month |
|  | 86 | 01-31 |
|  | 114 | 88 Blank but applicable |
|  | 2128 | Blank |
| 3363 |  | Have you ever used crack or |
| MARE12 |  | cocaine in any form? |
|  | 123 | 1 Yes |
|  | 804 | 2 No (MARF1) |
|  | 114 | 8 Blank but applicable |
|  | 1555 | Blank |



NHANES III Examination Data File
SECOND EXAM DATA

| MEC ADULT QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION F. REPRODUCTIVE HEALTH |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| MARF1 3367 |  | CHECK ITEM. REFER TO AGE AND SEX OF SP. |  |
|  |  |  |  |
|  | 245 | 1 Male 60 years or older (MARLANG) |  |
|  | 447 | 2 Male less than 60 years old (MARF50) |  |
|  | 802 | 3 Female |  |
|  | 1102 | Blank |  |
|  |  | The next questions ask about your periods or menstrual cycle and about pregnancy history. |  |
| 3368-3369MARF2 |  | How old were you when your periods or menstrual cycles started? (yrs) |  |
|  |  |  |
|  | 704 |  | 08-19 (MARF4) |  |
|  | 93 | 88 Blank but applicable |  |
|  | 5 | 99 Don't know (MARF3) |  |
|  | 1794 | Blank |  |
| 3370 |  | Were you younger than 10, 10 to |  |
| MARF 3 |  | 12, 13 to 15 , or 16 or older? |  |
|  | 2 | $2 \quad 10$ to 12 |  |
|  | 2 | 313 to 15 |  |
|  | 1 | 416 or older |  |
|  | 93 | 8 Blank but applicable |  |
|  | 2498 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA
MEC ADULT QUESTIONNAIRE (EXCEPT DIS)


NHANES III Examination Data File
SECOND EXAM DATA

| MEC ADULT QUESTIONNAIRE (EXCEPT DIS) |  |  |  |
| :---: | :---: | :---: | :---: |
| SECTION F. REPRODUCTIVE HEALTH |  |  |  |
| Positions SAS name | ```Item description and code``` |  | Notes |
| MARF15 3388 | How many months ago did your (last) pregnancy end? |  |  |
|  | 15 | 1 Less than 4 months ago |  |
|  | 11 | ```2 4 months - less than 7 months ago``` |  |
|  | 15 | $\begin{aligned} & 3 \quad 7 \text { months - less than } \\ & 10 \text { months ago } \end{aligned}$ |  |
|  | 11 | 410 - 12 months ago |  |
|  | 31 | 5 13-24 months ago |  |
|  | 2513 | Blank |  |
| 3389 |  | Did you receive benefits from |  |
| MARF16 |  | WIC, that is, Women, Infants, and Children program, in the past 12 months? |  |
|  | 43 | 1 Yes |  |
|  | 51 | 2 No (MARF19) |  |
|  | 5 | 8 Blank but applicable |  |
|  | 2497 | Blank |  |
| 3390 |  | Are you now receiving benefitsfrom the WIC program? |  |
| MARF17 | from the WIC program? |  |  |
|  | 22 | 1 Yes |  |
|  | 21 | 2 No |  |
|  | 5 | 8 Blank but applicable |  |
|  | 2548 | Blank |  |
| 3391-3393 |  | How many months (did you receive/ | See note |
| MARF18S |  | have you been receiving benefits |  |
|  |  | from the WIC program? |  |
|  | 43 | 001-180 |  |
|  | 5 | 888 Blank but applicable |  |
|  | 2548 | Blank |  |




NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA
MEC ADULT QUESTIONNAIRE (EXCEPT DIS)

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



MARB1: Age eligibility for cognitive function test
This test of effective memory (Albert, 1991), given to MEC examinees 60 years and older, was also included as part of the interview in the Home Examination.

MARE3S: Number of days drank alcohol in past year
This variable was created from the two-part (quantity and unit) question E 3 using the conversion factors 52 weeks/year and 12 months/year.

MARE5S: Number of days drank nine or more drinks of alcohol in past year

This variable was created from the two-part (quantity and unit) question E 5 using the conversion factors 52 weeks/year and 12 months/year.

MARE6S: Number of days drank five or more drinks of alcohol in past year

This variable was created from the two-part (quantity and unit) question E 6 using the conversion factors 52 weeks/year and 12 months/year.

MARF7R: Age at time of first live birth
Question $F 7$ (age at time of first live birth) was only asked of women who had more than one live birth. To prevent redundant questions, women who had one live birth were only asked question F8, "Age at the time of the last live birth." This variable, MARF7R, was created to include responses for women who had only one live birth and women who had multiple births. For women who had only one live birth, their responses to question F 8 were coded into MARF7R. For women who had multiple births, their responses to question F 7 were coded into MAPF7R.

```
MARF12R: Pregnancy status recode
    This variable combines responses from self-reported pregnancy
    status (F12) with the results of urine pregnancy test conducted
    in the mobile examination center on women 20-49 years of age. If
    either the self-report or the test result was positive, then
    MARF12R was coded yes. Otherwise, if both the self-report and the
    test result were negative, then MARF12R was coded no. If the
    self-report was don't know and the test result was either
    inconclusive or blank but applicable, then MARF12R was coded don't
    know. If the self-report was blank but applicable and the test
```

result was inconclusive, then $M A R F 12 R$ was also coded don't know. Finally, if both responses were blank but applicable, then MARF12R was coded blank but applicable.

Analysts should note that the age group for this variable was $20-59$ years, not $20-49$ years. Although question F12 was asked of women in the 20 - 49 age group, the recoded variable (pregnancy test and reported pregnancy) MAPF12R includes all women who were given the pregnancy test ( 20-59 years). Note, however, that only one woman above 50 years had a positive pregnancy test.

MARF18S: Number of months received WIC benefits
This variable was created from the two-part question (quantity and unit) F18 using the conversion factor 12 months/year.

MARF23: Age at last period

There were no comments or related responses that could be used to clarify the responses for reported ages of last period that appeared to be extreme. Analysts should review responses when using this variable.

MARF32S: Months since stopped taking birth control pills
This variable was created from the two-part question (quantity and unit) $F 32$ using the conversion factor $12 /$ months per year.

MARF33S: Total number of months took birth control pills

This variable was derived from the two-part question (quantity and unit) F33 using the conversion factors 12 months/year. Analysts should note that the reported length of time on birth control pills may have exceeded the length of time that these products were available in the U.S.

MARF34R: Birth control pill codes

This variable was created to include a listing of all birth control pills that were specified in question $F 34$. It includes both birth control pills that had original codes from the chart that respondents were shown as well as those not included on the chart but specified by the respondent. See the Appendix at the end of this section for code listing.

MARF34CS: Number of months since NORPLANT was implanted

This variable was derived from the two-part question (quantity and unit) $F 34 C$ using the conversion factor 12 months/year. Analysts should be aware that the reported length of time

NORPLANT was used may have exceeded the length of time that this product was available in the U.S.

MARF39S: Number of months since stopped taking estrogen pills
This variable was created from the two-part question (quantity and unit) F39 using the conversion factor 12 months/year.

MARF40: Total years on estrogen pills
Analysts should be aware that the reported length of time for estrogen pill use may have exceeded the length of time that these products were available in the U.S.

MARF43S: Number of months since stopped using estrogen cream, suppository, or injection

This variable was created from the two-part question (quantity and unit) F43 using the conversion factor 12 months/year.

MARF44: Total years used estrogen cream, suppository, or injection

Reported length of time for use of these estrogen products may have exceeded the length of time that they were available in the U.S.

MARF47S: Number of months since stopped using hormone patches
This variable was created from the two-part question (quantity and unit) $F 47$ using the conversion factor 12 months/year.

MARF48: Total years used female hormone patches
Reported length of time for use of hormone patches may have exceeded the length of time that these products were available in the U.S.

MARF50: Age at first sexual intercourse
The question did not ask about first consensual sexual experience. Therefore, responses of first intercourse at very young ages were retained after reviewing comments made during the interview (e.g., reports of rape or incest).

MARF51: Number of sexual partners
The value "990" represents reports of more than 990 sexual partners as well as responses such as "too many to count."

MARF53: Sex of sexual partners

This question was about sexual experience; it was not designed to determine sexual preference.

MARF54R: Number of partners that were female

If the response to this question was that all partners were female, then this variable was recoded as the number of female partners reported in F51.

MARF57: Ever had genital herpes

In Phase 1, this question was asked, "Have you ever had genital herpes?" In Phase 2, the question was changed to, "Has a doctor ever told you that you had genital herpes?"

## APPENDIX

```
MARF34R: Oral contraceptive code list
0 1 0 1 ~ B r e v i c o n ~ 2 1 ~
0102 Brevicon 28
0 1 0 3 ~ D e m u l e n ~ 1 / 3 5 ~ 2 1 ~
0104 Demulen 1/35 28
0105 Demulen 1/50 21
0106 Demulen 1/50 28
0108 Levlen 21
0109 Levlen 28
0 1 1 1 ~ L o e s t r i n ~ 2 1 ~ 1 / 2 0
0112 Loestrin Fe 1.5/30
0113 Loestrin Fe 1/20
0114 Lo/ovral 21
0115 Lo/ovral 28
0 1 1 6 ~ M i c r o n o r ~
0 1 1 7 \text { Modicon 21}
0 1 1 8 \text { Modicon 28}
0 1 1 9 ~ N o r d e t t e ~ 2 1 ~
0 1 2 0 ~ N o r d e t t e ~ 2 8 ~
0 1 2 1 ~ N o r i n y l ~ 1 + 3 5 ~ 2 1 ~
0122 Norinyl 1+35 28
0 1 2 4 ~ N o r i n y l ~ 1 + 5 0 ~ 2 8 ~
0 1 2 6 ~ N o r i n y l ~ 1 + 8 0 ~ 2 8 ,
0128 Norlestrin 21 1/50
0129 Norlestrin 21 2.5/50
0130 Norlestrin 28 1/50
0 1 3 1 ~ N o r l e s t r i n ~ f e ~ 1 / 5 0
0132 Norlestrin fe 2.5/50
0134 Ort-nv 10/11 21
0135 Ort-nv 10/11 28
0136 Ort-nov 1/35 21
0137 Ort-nov 1/35 28
0138 Ort-nov 1/50 21
0139 Ort-nov 1/50 28
0141 Ort-nov 1/80 28
0142 Ortho-novum 2mg
0143 Ort-nov 7/7/7 21
0144 Ort-nov 7/7/7 28
0145 Ovcon 35 21
0146 Ovcon 35 28
0147 Ovcon 50 21
0148 Ovcon 50 28
0149 Ovral 21
0150 Ovral 28
0 1 5 1 ~ O v r e t t e
0152 Ovulen 21
0 1 5 3 ~ O v u l e n ~ 2 8 ~
0154 Tri-levlen 21
0 1 5 5 ~ T r i - l e v l e n ~ 2 8 ~
0156 Tri-norinyl 21
0157 Tri-norinyl 28
0158 Triphasil 21
0159 Triphasil 28
```

```
0201 Eugynon
0 2 0 2 ~ G e n o r a ~
0 2 0 3 ~ L o e s t r i n , ~ N F S
0 2 0 4 ~ M i c r o g y n o n
0205 Microgynon 21
0 2 0 6 ~ N e o g y n o n ~ 2 1 ~
0 2 0 7 \text { Nordet}
0 2 0 8 ~ N o r d e t t e
0209 Nordiol
0210 Norinyl, NFS
0 2 1 1 ~ O r t h o ~ n o v u m ~ 7 7 7 , ~ N F S
0212 Triquilar
0213 Desogen
0 2 1 4 ~ M i c r o g a m ~
0215 Ortho cyclen
0216 Ortho tri-cyclen
0 2 1 7 ~ O r t h o - c e p t
0 2 1 8 \text { Ortho novum 1/35, NFS}
0 2 2 0 ~ S e c u e n t e x ~ 2 1 ~
0 2 2 1 ~ O r t h o ~ n o v u m , ~ N F S
0222 Lo/orval, NFS
NFS = Not further specified
```

Bone density of the proximal femur was measured on men and non-pregnant women aged 20 years and over by a trained examiner in the mobile examination center (MEC). Using dual energy x-ray absorptiometry (DXA), areal bone density (bone mass per unit of area scanned) was measured in five areas of the proximal femur. These were the femoral neck, trochanter, intertrochanter, Ward's Triangle, and total region.

Before the exam, screening questions were asked to determine medical safety exclusions. Those excluded from testing were examinees: who were females below age 60 for whom pregnancy test results were positive or uncertain or for whom there was a possibility of pregnancy; for whom both hips had been fractured or broken previously; or who had hip pins or artificial hips. The flag variable, BDPEXFLR, which indicates whether the examinee was excluded does not exist for the Second Exam subsample.

Because these tests were administered in the mobile examination center, the MEC examination sample weight (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

A rigorous quality control program was used throughout the survey to ensure data quality. Quality control (QC) of each individual DXA instrument was monitored by scanning anthropomorphic phantoms on a frequent basis (daily for spine phantom, weekly for hip phantom). Comparability of the three DXA instruments was assessed by circulating an additional spine phantom between mobile examination centers; this "circulating spine phantom" was scanned once per stand. Every anthropomorphic phantom scan was reviewed individually at the Mayo Clinic, and results were plotted to compare with previous QC scan results. All respondent scans also were reviewed individually at the Mayo Clinic before being added to the database. For a detailed description of the QC program and the results for Phase 1 of NHANES III, see the reference by Wahner (1994). QC results for Phase 2 were similar to those for Phase 1. Additional details about the bone density procedure may be found in the references by Looker (1995) and Hologic (1987).

Data processing and editing were performed to ensure internal data consistency. Notes have been provided for variables requiring additional explanation.


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

## SECOND EXAM DATA



NHANES III Examination Data File

SECOND EXAM DATA

| BONE DENSITOMETRY |  |  |  |
| :---: | :---: | :---: | :---: |
| SCAN RESULTS |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $3555-3559$ <br> BDRTOBMC |  | Bone mineral content of total region (gm) |  |
|  | 1108 | 12.65-70.83 |  |
|  | 222 | 88888 Blank but applicable |  |
|  | 1266 | Blank |  |
| $\begin{aligned} & 3560-3564 \\ & \text { BDRTOBMD } \end{aligned}$ |  | Bone mineral density of total region (gm/cm squared) |  |
|  | 1108 | 0.481-1.698 |  |
|  | 222 | 88888 Blank but applicable |  |
|  | 1266 | Blank |  |
| $\begin{aligned} & 3565-3569 \\ & \text { BDRK } \end{aligned}$ |  | K value for scan |  |
|  | 1108 | 1.196-1.273 |  |
|  | 222 | 88888 Blank but applicable |  |
|  | 1266 | Blank |  |
| $\begin{aligned} & 3570-3574 \\ & \text { BDRD 0 } \end{aligned}$ |  | do value for scan |  |
|  | 1108 | 093.6-132.5 |  |
|  | 222 | 88888 Blank but applicable |  |
|  | 1266 | Blank |  |

NOTES

BDRSCAN: Scan technically acceptable after review at the Mayo Clinic

See 1994 reference by Wahner for rejection criteria.

BDRSIDE: Hip side that was scanned
The left hip was chosen as the default side for the bone density scan because it was easier to scan this side given the position of the DXA scanner in the bone density room. If the left hip had been pinned or fractured previously or was artificial, the right hip was scanned.

BDRWTARE, BDRWTBMC, BDRWTBMD: Bone mineral area, content, and density of Ward's Triangle region

Phases 1 and 2 data for Ward's Triangle are not directly comparable due to a change in the DXA software used to process the data. In Phase 1, the location of Ward's Triangle was variable. The computer algorithm actually searched a specific portion of the femur neck and intertrochanter ( $2.7 \mathrm{~cm} x 3.5 \mathrm{~cm}$ ) for the lowest point of bone mass and then centered a fixed area box $(10.5 \mathrm{~mm} x$ 10.5 mm ) around this point. In Phase 2, however, the location was fixed. The Ward's Triangle position was fixed at a mid-cervical location rather than being the point of lowest bone mineral density. Thus, users should be careful in interpreting observed differences in Ward's Triangle data between Phases 1 and 2. In addition, combining Ward's Triangle data from Phases 1 and 2 may not be appropriate.

BDRWTBMC: Bone mineral content of Ward's Triangle See note for BDRWTARE.

BDRWTBMD: Bone mineral density of Ward's Triangle See note for BDRWTARE.

NHANES III Examination Data File

HOME EXAMINATION, INTERVIEW

The Home Examination interview was administered at the homes of examinees aged $2-11$ months and those aged 20 years and older who were unable to travel to the mobile examination center (MEC). The interview included sections similar to those found in other MEC questionnaires: infant food frequency, cognitive function, selected conditions/medicine, vitamin and mineral usage, tobacco use, and reproductive health. Data from examinations conducted in the home (body measurements, physical function, spirometry, and venipuncture) have been included with the corresponding examination and laboratory data; therefore, they have not been included here. Items from the MEC Adult Questionnaire and the Home Examination interview can be combined for analysis; however, there may be slight differences in the questions the way in which they are administered. For example, the reproductive health section in the interview during the Home Examination was shorter, and the skip patterns were not the same. For analysis of the Home Examination interview data alone or for combined MEC and Home Examination questionnaire data, the MEC+home Examination weights (WTPFHX6) should be used. Separate sample weights were not created for the Home Examination. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

The interview during the Home Examination was brief in comparison to those conducted in the MEC. Like the MEC questionnaires, certain sections were asked only of specific age and gender groups. For instance, reproductive health questions were asked only of females aged 20 years and older. Cognitive function questions were asked of examinees age 60 years and older. Tobacco use was asked of examinees aged 20-60 years. The infant food frequency was asked of a parent or other adult in the household member for each child aged 2-11 months.

Data processing and editing were performed for the consistency of responses within the sections of the questionnaire. Notes have been provided for variables that were standardized or recoded or those that require additional comments.

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


| HOME EXAMINATION, INTERVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| COGNITIVE FUNCTION - PART A |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| 3594 |  | FIREMAN CLIMBED IN |  |
| HXRD 2 C | 218 | 1 Yes, recalled details |  |
|  | 83 | 2 No, did not recall |  |
|  | 19 | 8 Blank but applicable |  |
|  | 2276 | Blank |  |
| 3595 |  | CHILDREN RESCUED |  |
| HXRD 2D | 268 | 1 Yes, recalled details |  |
|  | 33 | 2 No, did not recall |  |
|  | 19 | 8 Blank but applicable |  |
|  | 2276 | Blank |  |
| 3596 |  | MINOR INJURIES |  |
| HXRD 2 E | 173 | 1 Yes, recalled details |  |
|  | 128 | 2 No, did not recall |  |
|  | 19 | 8 Blank but applicable |  |
|  | 2276 | Blank |  |
| 3597 |  | EVERYONE WELL |  |
| HXRD 2 F | 155 | 1 Yes, recalled details |  |
|  | 146 | 2 No, did not recall |  |
|  | 19 | 8 Blank but applicable |  |
|  | 2276 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA


> Now I would like to ask you a few questions about selected health problems and your recent use of medicines, vitamins, and minerals.


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA



NHANES III Examination Data File
SECOND EXAM DATA

| HOME EXAMINATION, INTERVIEW |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COGNITIVE FUNCTION TEST - PART B |  |  |  |  |
| Positions SAS name | Item description Counts and code |  |  | Notes |
| 3613 |  | CHILDREN RESCUED |  |  |
| HXRF2D | 273 |  | Yes, recalled details |  |
|  | 28 | 2 | No, did not recall |  |
|  | 19 |  | Blank but applicable |  |
|  | 2276 | Blank |  |  |
| 3614 |  | MINOR | INJURIES |  |
| HXRF2E | 175 | 1 | Yes, recalled details |  |
|  | 126 | 2 | No, did not recall |  |
|  | 19 | 8 | Blank but applicable |  |
|  | 2276 | Blank |  |  |
| 3615 |  | EVERYONE WELL |  |  |
| HXRF 2F | 148 | 1 | Yes, recalled details |  |
|  | 153 | 2 | No, did not recall |  |
|  | 19 | 8 | Blank but applicable |  |
|  | 2276 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| HOME EXAMINATION, INTERVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| REPRODUCTIVE HEALTH |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| HXRH1 3626 | 325 | ```CHECK ITEM. REFER TO SEX OF SP. 1 Male (HXRLANG) Female Blank``` |  |
|  | 412 |  |  |
|  | 1859 |  |  |
| The next questions ask about your periods or menstrual cycle and about pregnancy. |  |  |  |
| $3627-3628$ <br> HXRH2 | How old were you when your periods or menstrual cycles started? |  |  |
|  | 388 | 09-17 (HXRH4) |  |
|  | 5 | 88 Blank but applicable |  |
|  | 19 | 99 Don't know (HXRH3) |  |
|  | 2184 | Blank |  |
| 3629 |  | Were you younger than 10, 10 to 12, |  |
| HXRH3 | 13 to 15 , or 16 or older? |  |  |
|  | $6 \quad 2 \quad 10$ to 12 |  |  |
|  | 12 | 313 to 15 |  |
|  | 1 | 416 or older |  |
|  | 2577 | Blank |  |
| HXRH4 3630 |  | Have you had a period in the past 12 months? |  |
| HXRH4 | 183 | 1 Yes |  |
|  | 225 | 2 No (HXRH7) |  |
|  | 4 | 8 Blank but applicable |  |
|  | 2184 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA

| HOME EXAMINATION, INTERVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| REPRODUCTIVE HEALTH |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & \quad 3631-3632 \\ & \text { HXRH5 } \end{aligned}$ | 26 | About how long ago was your last period? 01 Having it now (HXRH11) |  |
|  | 131 | 02 Less than 2 months ago (HXRH11) |  |
|  | 8 | 03 2-3 months (HXRH6) |  |
|  | 4 | 04 4-6 months (HXRH6) |  |
|  | 6 | 05 7-9 months (HXRH6) |  |
|  | 6 | 06 10-12 months (HXRH6) |  |
|  | 6 | 88 Blank but applicable |  |
|  | 2409 | Blank |  |
| ASK SP TO LOOK AT CHART AND ASK: |  |  |  |
| 3633-3634 <br> HXRH6 | What is the reason you have not had a period in the past (ANSWER IN HXRH5)? |  |  |
|  | 12 | 01 Pregnant now (HXRH11) |  |
|  | 2 | 02 Breastfeeding (HXRH11) |  |
|  | 4 | 03 Menopausal (HXRH9) |  |
|  | 7 | 05 Other (HXRH9) |  |
|  | 5 | 88 Blank but applicable |  |
|  | 2566 | Blank |  |
| 3635-3637 |  | About how old were you when you had your |  |
| HXRH7 | last period? |  |  |
|  | 192 | 020-060 (HXRH9) |  |
|  | 3 | 888 Blank but applicable |  |
|  | 30 | 999 Don't know (HXRH8) |  |
|  | 2371 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

|  |  | HOME EXAMINATION, INTERVIEW |
| :---: | :---: | :---: |
| REPRODUCTIVE HEALTH |  |  |
| Positions SAS name | Counts | Item description <br> and code <br> Notes |
|  |  | Now I'm going to ask you about your past and current use of female hormones, including birth control pills and estrogen. |
| 3648 |  | Have you ever taken birth control pills for any reason? |
| HXRH14 | 194 | 1 Yes |
|  | 214 | 2 No (HXRH18) |
|  | 4 | 8 Blank but applicable |
|  | 2184 | Blank |
| $3649-3650$ <br> HXRH15 |  | How old were you when you began taking birth control pills? |
|  | 187 | 14-52 |
|  | 10 | 88 Blank but applicable |
|  | 1 | 99 Don't know |
|  | 2398 | Blank |
| $\begin{aligned} & 3651-3655 \\ & \text { HXRH16S } \end{aligned}$ |  | How long ago since you stopped taking |
|  |  | birth control pills (days). |
|  | 32 | 00000 Still taking |
|  | 156 | 00021-14600 |
|  | 9 | 88888 Blank but applicable |
|  | 1 | 99999 Don't know |
|  | 2398 | Blank |
| $\begin{aligned} & 3656-3658 \\ & \text { HXRH17S } \end{aligned}$ |  | How long altogether have you taken/did |
|  |  | you take birth control pills (mos). |
|  | 185 | $001-240$ |
|  | 6 | 777 Less than 1 month |
|  | 7 | 888 Blank but applicable |
|  | 2398 | Blank |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

HOME EXAMINATION, INTERVIEW

| REPRODUCTIVE HEALTH |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions |  | Item description |  |
| SAS name | Counts | and code | Notes |

3672-3675
HXREXMNR

Examiner number
171601
761602
541603
$71 \quad 1604$
2971605
1231606
961607
38888 Blank but applicable
1859 Blank

```
HXRD1: Age eligibility for cognitive function test
```

This test of effective memory, given to examinees 60 years and older, was also included as part of the MEC Adult Questionnaire.

```
HXRH7: Age at last period
```

    There were no comments or related responses that could be
    used to clarify the response for reported ages of last
    periods that appeared to be extreme. Analysts should review
    responses when using this variable.
    HXRH16S: Number of days since stopped taking birth control pills
This variable was created from the two-part question (quantity
and unit) H16 using the conversion factors 7 days/week, 30.4
days/month, and 365 days/year.
HXRH17S: Total number of months took birth control pills
This variable was derived from the two-part question (quantity
and unit) H17 using the conversion factor 12 months/year.
Analysts should be aware that the reported length of time for the
use of birth control pills may have exceeded the length of time
that these products were available in the U.S.
HXRH21S: Number of months since stopped estrogen pills
This variable was created from the two-part question (quantity
and unit) $H 21$ using the conversion factor 12 months/year.
HXRH22: Total years on estrogen pills
Reported length of time for use of estrogen pills may have
exceeded the length of time that these products were available in
the U.S.

## GALLBLADDER ULTRASONOGRAPHY

Gallbladder examinations were conducted on all examinees aged 20 to 74 years by a certified ultrasound technician in the mobile examination center (MEC). The protocol for this component did not detail any medical, safety or other exclusions.

When analyzing these data, the MEC examination sample weight should be used (WTPFEX6). For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Gallbladder examinations were conducted to estimate the prevalence of gallstone disease in the United States. Testing was done on examinees in both supine and left decubitus positions. The main element of the exam was real-time ultrasonography, a non-invasive technique for detecting gallstones.

Although sample persons were asked to fast for at least six hours before the examination, non-fasting persons were not excluded from the examination. The rate of acceptable exams did not differ by fasting status.

Details of the data collection procedures and data collection forms for the Gallbladder Ultrasonography component are included in the Gallbladder Ultrasonography Procedures Manual (U.S. DHHS, 1996b) and the Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-94 (U.S. DHHS, 1996b).

All certified ultrasound technicians received training in the physics of ultrasound, calibration of equipment, and technique of administering the abdominal ultrasound examination. This training was conducted at the time of hire and at least annually thereafter by a radiologist and a physicist who were experts in ultrasonography. All examinations were recorded on videotapes and mailed to consulting radiologists who specialized in abdominal ultrasonography. No written comments or technician findings were disclosed to the radiologists to ensure an independent review of cases except for the "rapid review" cases (in which immediate evaluations were needed due to abnormal findings potentially requiring medical attention).

A diagnosis of gallstones was made using the common criteria of echoes within the gallbladder with shadowing on two views. Diagnoses first were obtained by the ultrasound technician in the MEC and later were confirmed by a radiologist. If a right upper quadrant or epigastric scar was observed and the gallbladder was not seen, it was concluded that a cholecystectomy had been performed previously. Data for other abnormal pathologies observed in the surrounding areas, such as the liver or the right kidney, also were collected and recorded. Persons in wheelchairs received the ultrasound examination while sitting.

The radiologists' diagnoses in GURR1DX1 and GURR1DX2 were compared with the technicians' diagnoses in GURTDX1R and GURTDX2R. If they agreed with each other, then these were used as the final diagnoses (GURFDX1R

```
and GURFDX2R). If the radiologist and the technician disagreed and the
radiologist was not confident of the finding because of the poor quality
of the video, then the technician's diagnosis was used as the final
diagnosis. Also if the radiologist's diagnosis was missing, then the
technician's diagnosis was used as the final diagnosis. However, if the
radiologist and the technician disagreed and the radiologist had
reasonable confidence in his/her findings, then the video taped scan was
given to a senior radiologist for adjudication, and that senior
radiologist's diagnosis was used as the final diagnosis. The level of
agreement between the technician's diagnosis and the radiologist's
diagnosis was measured by the Kappa statistic and was found to be
excellent (Fleiss, 1981).
Analysts should use both final primary and secondary diagnosis
variables in analyses. If gallstones were present (codes 3-5),
it was indicated in the final, primary diagnosis (GURFDX1R).
Data processing and editing were performed to ensure internal
data consistency. Notes have been provided for variables
requiring additional explanation.
Supplemental information was collected during the household
interview. Section J of the Household Adult Questionnaire
included questions on self-reported history of abdominal pain,
previous diagnosis of gallstones, gallbladder surgery, and
medical treatment to dissolve or remove gallstones. A question
on newer methods to dissolve gallstones or remove the gallbladder
was added in Phase 2 of the survey. This information can be found in
the Household Adult Data File.
```

NHANES III Examination Data File
SECOND EXAM DATA

| GALLBLADDER ULTRASONOGRAPHY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Positions <br> SAS name | ts | Item description and code |  | Notes |
| GURQ7 3676 |  | Are there any abdominal surgical scars? 1 Yes |  |  |
|  | 131 |  |  |  |
|  | 1039 | 2 | No (GURQ9) |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 1267 | Blank |  |  |
| 3677 |  | Surgical scar - area 1 |  | See note |
| GURQ8A1 | 93 | 1 | Yes |  |
|  | 38 | 2 | No |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 2306 | Blank |  |  |
| 3678 |  | Surgic | al scar - area 2 | See note |
| GURQ8A2 | 98 | 1 | Yes |  |
|  | 33 | 2 | No |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 2306 | Blank |  |  |
| 3679 |  | Surgic | al scar - area 3 | See note |
| GURQ8A3 | 5 |  | Yes |  |
|  | 126 | 2 | No |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 2306 | Blank |  |  |
| 3680 |  | Surgic | al scar - area 4 | See note |
| GURQ8A4 | 31 | 1 | Yes |  |
|  | 100 | 2 | No |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 2306 | Blank |  |  |
| 3681 |  | Surgical scar - area 5 |  | See note |
| GURQ8A5 | 14 | 1 | Yes |  |
|  | 117 | 2 | No |  |
|  | 159 | 8 | Blank but applicable |  |
|  | 2306 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA

| GALLBLADDER ULTRASONOGRAPHY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Positions SAS name | Item description |  |  | Notes |
| $\begin{aligned} & 3716-3717 \\ & \text { GURFDX1R } \end{aligned}$ |  | Final | primary finding | See note |
|  | 928 | 01 | Normal gallbladder |  |
|  | 1 | 02 | Calcified gallbladder |  |
|  | 35 | 03 | Gallstones, one |  |
|  | 70 | $04$ | Gallstones, multiple |  |
|  | 5 | $05$ | Gallstones, gallbladder filled |  |
|  | 94 | $07$ | Cholecystectomy - right upper quadrant or epigastrum scar, 2 landmarks observed |  |
|  | 2 | $08$ | Cholecystectomy - right upper quadrant scar, less than 2 landmarks observed |  |
|  | 2 | 10 | No conclusion - no scar, no shadow, 2 landmarks observed, SP nonfast |  |
|  | 42 | $13$ | Abnormal gallbladder - focal wall thickness, no shadowing, clumps with no calcification |  |
|  | 2 | $14$ | Abnormal gallbladder - diffuse wall thickness with no calcification |  |
|  | 2 | $16$ | Abnormal bile - no shadowing internal echoes, with movement |  |
|  | 146 | 88 | Blank but applicable |  |
|  | 1267 | Blank |  |  |
| $\begin{aligned} & 3718-3719 \\ & \text { GURFDX2R } \end{aligned}$ |  | Final | secondary finding | See note |
|  | 1 | $13$ | Abnormal gallbladder - focal wall thickness, no shadowing, clumps with no calcification |  |
|  | 2 | $16$ | Abnormal bile - no shadowing internal echoes, with movement |  |
|  | $\begin{array}{r} 146 \\ 2447 \end{array}$ | $88$ | Blank but applicable |  |

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NOTES

GURFDX1R, GURFDX2R: Final primary and secondary diagnoses

The radiologist's diagnoses were compared with the technician's diagnoses to determine agreement and to select cases for adjudication. The final primary and secondary diagnoses were a result of this adjudication. Most examined persons had only a single diagnosis, and the code for that diagnosis was placed in GURFDX1R. For those persons with two diagnoses, the lowest numbered code was placed in GURFDX1R, and the other code was placed in GURFDX2R. However, analysts should check both variables for specific codes of interest.

GURGBPSZ: Size of the largest polyp
GURGBPSZ indicates the size of the largest polyp if a polyp was found during the technician's examination or after the radiologist's review (code 13 in either GURFDX1R or GURFDX2R).

GURLCSTR, GURLCSZE: Flag for liver cyst and the size of the largest cyst

During the examination, the technician scanned the area surrounding the gallbladder for other abnormal pathologies. Liver abnormality is identified in the variable GURQ38R. GURLCSTR indicates the presence of one or more cysts in the liver. GURLCSZE indicates the size of the largest cyst.

GURLHMGR, GURCHSZE: Flag for cavernous hemangioma of liver and size of the largest lesion

During the examination, the technician scanned the area surrounding the gallbladder for other abnormal pathologies. Liver abnormality is identified in the variable GURQ38R. The presence of one or more hemangiomas of the liver is recorded in the variable GURLHMGR. The size of the largest lesion is recorded in the variable GURCHSZE.

## GURQ18: Thickness of gallbladder wall

The gallbladder for a person in a non-fasting state may be contracted and appear to have a thickened wall. In such cases, the gallbladder wall thickness may be greater than 3 mm and, according to the computerized recording of results, would have been recorded as code 14, "Abnormal GB -- Diffuse W.T., With NO Calcification" although the gallbladder appeared to be normal to technicians and radiologists. For those persons in a non-fasting status with a contracted gallbladder, the final adjudicated diagnosis was edited and appropriately coded to indicate a normal gallbladder.

```
GURQ24R: Measurement of largest echo -- clump (mm)
    This variable provides measurement of the largest gallstone
    (codes 3 and 4 in GURFDX1R or GURFDX2R).
GURQ37R: Other non-gallbladder findings -- renal
    This variable is a recode of the response to question Q37.
GURQ38R: Other non-gallbladder findings -- hepatic or liver
    This variable is a recode of the response to question Q38.
GURQ8A1-GURQ8A6: Flag for abdominal scar and its location
    To identify the location of a scar in GURQ8A1-GURQ8A6, refer to the
    upper body illustration (p. 394) of the Plan and Operation of the
    Third National Health and Nutrition Examination Survey, 1988-94
    (NCHS, 1994; U.S. DHHS, 1996b).
GURR1CNF, GURR1QLT: Radiologist's confidence in diagnoses and assessment of quality of the videotape (first reading)
Three levels were used on the quality control form to record the radiologist's confidence in the diagnoses and assessment of the videotape quality. If for either variable, level 3 was marked, diagnoses from the corresponding readings were not used in computing the final, adjudicated primary and secondary diagnoses.
GURR1DX1, GURR1DX2: Radiologists' first reading
All videotaped scans were mailed to a radiologist for evaluation, which was recorded on a quality control form. After reviewing the scanned cases, the radiologist marked a maximum of two diagnoses on the quality control form and then evaluated the quality of the tapes, confidence in the diagnosis, and sometimes provided an optional, written comment explaining the diagnosis. Most examined persons had only a single diagnosis, and their code was placed in GURR1DX1. For those persons with two diagnoses, the lowest numbered code was placed in GURR1DX1, and the other code was placed in GURR1DX2. However, analysts should check both variables for specific codes of interest.
```

GURR1ID, GURR2ID: Radiologists' identification numbers
These are identification numbers for the radiologists reviewing the videotapes. A total of four radiologists
reviewed the videotapes under professional services contracts. After the first reading, all cases with significant disagreements between the technician's diagnosis and the radiologist's diagnosis were reevaluated by the senior radiologist (radiologist number 4).

GURRCSTR, GURRCSZE: Flag for renal cyst and the size of the largest cyst

During the examination, the technician scanned the area surrounding the gallbladder for other abnormal pathologies. Right kidney abnormality is identified in the variable GURQ37R. The presence of one or more cysts in the kidney is identified in the variable GURRCSTR. GURRCSZE indicates the size of the largest cyst.

GURTDX1R, GURTDX2R: Technician's primary and secondary diagnoses
Most examined persons had only a single diagnosis, and the code was placed in GURTDX1R. For those persons with two diagnoses, the lowest numbered code was placed in GURTDX1R, and the other code was placed in GURTDX2R. However, analysts should check both variables for specific codes of interest.

## HXRRDAYS:

"In order to have as much information as possible in the primary exam, there were six instances where even though the Home exam was done before the MEC exam, the MEC exam was reported as the primary exam and the Home exam as a second exam. For these six instances, HXRRDAYS is reported as a positive number. The sequence numbers where this occurs are 02887, 03931, 07680, 09688, 19794, and 47394."

NHANES III Examination Data File

CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION

Computerized neurobehavioral testing was administered to a random half-sample of examinees aged 20-59 years by a trained examiner in a soundproof room in the mobile examination center (MEC). A screening questionnaire was administered to assess factors that might have affected test performance. There were no medical or safety exclusions for this component.

Because this examination was administered on a selected subsample in the examination center, the central nervous system (CNS) sample weight (WTPFCNS6) should be used for data analysis. For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Three computerized tests were used to evaluate central nervous system function. They were: (1) a simple reaction time test (SRTT), a basic measure of motor response speed to a visual stimulus; (2) a symbol-digit substitution test (SDST), a test of coding ability; and (3) a serial-digit learning test (SDLT), a short-term memory test. These tests are components of the Neurobehavioral Evaluation System 2 (NES2) developed by Baker and Letz (1985; Letz, 1990). NES2 is a system of computerized tests designed to assess neurobehavioral function in epidemiological studies of populations with occupational or environmental exposure to chemicals.

The tests were administered on a Compaq 286 DeskPro(TM) personal computer ( $12.5 \mathrm{MHz}, 80286 \mathrm{CPU}$ chip) configured with 640 K RAM, one 1.2MB floppy disk drive, one parallel port, two serial ports, a standard game joystick controller board, and an Ethernet interface board. The system used the standard, detachable keyboard with a custom-made wooden keyboard overlay that left only the top row of digit keys exposed to prevent inadvertent contact with keys not needed in the testing; it also used a standard, monochrome (green) Compaq monitor. In September 1991, between the conclusion of Phase 1 and the initiation of Phase 2 data collection, the monitors were replaced with comparable, new amber monitors due to a deterioration in display performance. A push-button, computer-game joystick (NES2 Joystick by Neurobehavioral Systems, Inc., Winchester, MA) was used to record the SRTT responses.

The tests were administered by health technicians, MEC interviewers, and translators who were trained to perform the testing. Before examinations began, special training sessions were held at NCHS or at the offices of the contractor responsible for survey operations. Training sessions also occurred at MEC sites during the survey, and retraining was done approximately twice per year. The test was conducted in English or Spanish, and examinees who could not speak English or Spanish were not tested. English or Spanish language instructions appeared on the computer screen for each test, and the examiner also gave the instructions verbally.

Translators were trained to administer the testing independently or with a health technician. The training was conducted in the MEC by a Spanish-speaking health technician, Spanish-speaking NCHS staff
member, or Spanish-speaking MEC interviewer trained to administer the CNS test. Training for translators included reviewing the manual with the trainer, performing the tests as an examinee, and administering the examination in Spanish.

Physical comfort may have affected examinees' test results. The air conditioning in the soundproof room used for testing sometimes failed to maintain an optimally comfortable room temperature. Because of this, room temperature (CNPTEMP) was recorded for use as a covariate; however, this practice did not begin until the second year of the survey. The location of the thermometer within the room and the time that temperature was recorded were not consistent throughout the survey. For instance, some examiners entered the temperature at the beginning of the testing session, and others recorded it at the end of the session. This source of error is likely to be small.

Initially, some trials of the SRTT were performed with both the non-preferred hand and the preferred hand. Early in the survey, the procedure was changed to perform all trials only with the preferred hand. As a result, analysts may want to exclude SRTT data from those examinees who used both hands for the test. The affected data have a value of " 2 Non-preferred hand used on trials 31-50" for the variable CNRNBPH (LOG: Number of trials with preferred hand).

During Phase 2 of the survey, reading glasses were available for examinees who forgot to bring their own reading glasses to the MEC. Examinees could select from four pairs of glasses of different diopters or magnifying powers (+1.0 diopter, +1.5 diopters, +2.0 diopters, and +2.5 diopters).

Although all examiners were well-trained in standardized procedures for these tests, performance on neurobehavioral tests may have been subject to an examiner effect. This would have been particularly likely when the examiner encouraged the examinee during the exam, as was the case in NHANES III. Therefore, analysts should consider using the examiner number (CNRTECH) as a covariate in analyses of data from these tests.

For details of the examination protocol, see the Neurobehavioral Testing Procedures Manual (U.S. DHHS, 1996b).

Data processing and editing were performed to ensure internal data consistency. Notes have been provided for variables requiring additional explanation.

NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA








| CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIMPLE REACTION TIME TEST (SRTT) |  |  |  |  |  |  |
| Positions |  | Item description |  |  |  | Notes |
| $\begin{aligned} & 3875-3878 \\ & \text { CNRRT30 } \end{aligned}$ |  | SRTT: Trial 30 reaction time (msec) 0160-0863 <br> 8888 Blank but applicable <br> Blank |  |  |  |  |
|  | 367 |  |  |  |  |  |
|  | 105 |  |  |  |  |  |
|  | 2124 |  |  |  |  |  |
| $\begin{aligned} & \text { 3879-3882 } \\ & \text { CNRRT31 } \end{aligned}$ |  | ```SRTT: Trial 31 reaction time (msec) 0132-0725 888 Blank but applicable Blank``` |  |  |  |  |
|  | 367 |  |  |  |  |  |
|  | 105 |  |  |  |  |  |
|  | 2124 |  |  |  |  |  |
| $\begin{aligned} & 3883-3886 \\ & \text { CNRRT32 } \end{aligned}$ |  | ```SRTT: Trial 32 reaction time (msec) 0130-0670 888 Blank but applicable Blank``` |  |  |  |  |
|  | 367 |  |  |  |  |  |
|  | 105 |  |  |  |  |  |
|  | 2124 |  |  |  |  |  |
| $3887-3890$ <br> CNRRT33 |  | SRTT: Trial 33 reaction time (msec) 0146-1054 |  |  |  |  |
|  | 367 |  |  |  |  |  |
|  | 105 | 8888 Blank but applicable |  |  |  |  |
|  | 2124 | Blank |  |  |  |  |
| 3891-3894 |  | SRTT: Trial 34 reaction time (msec) 0135-0805 |  |  |  |  |
| CNRRT34 | 367 |  |  |  |  |  |
|  | 105 | $0135-0805$ <br> 8888 Blank but applicable |  |  |  |  |
|  | 2124 |  |  |  |  |  |
| 3895-3898 |  | SRTT: Trial 35 reaction time (msec) 0162-0999 |  |  |  |  |
| CNRRT35 | 367 |  |  |  |  |  |
|  | 105 | 8888 Blank but applicable Blank |  |  |  |  |
|  | 2124 |  |  |  |  |  |




NHANES III Examination Data File

SECOND EXAM DATA


SECOND EXAM DATA

| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Item description <br> Counts and code |  | Notes |
| 3975-3976 |  | SDST: Number of errors, trial 1 |  |
| CNR1ERR | 270 | 00 None |  |
|  | 57 | 011 error |  |
|  | 20 | 022 errors |  |
|  | 8 | 033 errors |  |
|  | 7 | 044 errors |  |
|  | 1 | 055 errors |  |
|  | 2 | 066 errors |  |
|  | 1 | 088 errors |  |
|  | 106 | 88 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 3977-3981 } \\ & \text { CNR1LAT1 } \end{aligned}$ |  | SDST: Latency 1, trial 1 (sec) | See note |
|  | 366 | -20.4-021.5 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 3982-3986 } \\ & \text { CNR1LAT2 } \end{aligned}$ |  | SDST: Latency 2, trial 1 (sec) | See note |
|  | 366 | -23.9-020.7 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 3987-3991 } \\ & \text { CNR1LAT3 } \end{aligned}$ |  | SDST: Latency 3, trial 1 (sec) | See note |
|  | 366 | -05.8-028.4 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 3992-3996 } \\ & \text { CNR1LAT4 } \end{aligned}$ |  | SDST: Latency 4, trial 1 (sec) | See note |
|  | 366 | -09.4-00026 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |


| CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| CNR1LAT5 |  | SDST: Latency 5, trial 1 (sec) | See note |
|  | 366 | -08.5-00031 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4002-4006 } \\ & \text { CNR1LAT6 } \end{aligned}$ |  | SDST: Latency 6, trial 1 (sec) | See note |
|  | 366 | -0013-014.9 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4007-4011 } \\ & \text { CNR1LAT7 } \end{aligned}$ |  | SDST: Latency 7, trial 1 (sec) | See note |
|  | 366 | -0006-038.8 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4012-4016 } \\ & \text { CNR1LAT8 } \end{aligned}$ |  | SDST: Latency 8, trial 1 (sec) | See note |
|  | 366 | -10.1-031.3 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4017-4021CNR1LAT9 |  | SDST: Latency 9, trial 1 (sec) | See note |
|  | 366 | -07.1-013.3 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4022-4027 |  | SDST: Total latency, trial 1 (sec) | See note |
| CNR1TOTL | 366 | 012.97-186.44 |  |
|  | 106 | 888888 Blank but applicable |  |
|  | 2124 | Blank |  |



| CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| Positions SAS name | Counts Item description |  | Notes |
| $\begin{aligned} & \text { 4038-4042 } \\ & \text { CNR2LAT1 } \end{aligned}$ |  | SDST: Latency 1, trial 2 (sec) | See note |
|  | 366 | -10.8-030.1 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4043-4047 } \\ & \text { CNR2LAT2 } \end{aligned}$ |  | SDST: Latency 2, trial 2 (sec) | See note |
|  | 366 | -07.4-020.8 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4048-4052 } \\ & \text { CNR2LAT3 } \end{aligned}$ |  | SDST: Latency 3, trial 2 (sec) | See note |
|  | 366 | -06.9-025.3 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4053-4057 } \\ & \text { CNR2LAT4 } \end{aligned}$ |  | SDST: Latency 4, trial 2 (sec) | See note |
|  | 366 | -03.3-019.1 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & 4058-4062 \\ & \text { CNR2LAT5 } \end{aligned}$ |  | SDST: Latency 5, trial 2 (sec) | See note |
|  | 366 | -34.2-012.2 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4063-4067CNR2LAT6 |  | SDST: Latency 6, trial 2 (sec) | See note |
|  | 366 | -06.7-00022 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |

NHANES III Examination Data File

SECOND EXAM DATA



| CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| Positions <br> SAS name | Item description |  | Notes |
|  |  | SDST: Latency 4, trial 3 (sec) | See note |
| CNR3LAT4 | 366 | -07.3-033.8 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4119-4123 |  | SDST: Latency 5, trial 3 (sec) | See note |
| CNR3LAT5 | 366 | -08.3-039.2 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4124-4128 |  | SDST: Latency 6, trial 3 (sec) | See note |
| CNR3LAT6 | 366 | -04.2-028.5 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4129-4133 |  | SDST: Latency 7, trial 3 (sec) | See note |
| CNR3LAT7 | 366 | -05.1-024.9 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4134-4138 |  | SDST: Latency 8, trial 3 (sec) | See note |
| CNR3LAT8 | 366 | -06.9-00019 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4139-4143 |  | SDST: Latency 9, trial 3 (sec) | See note |
| CNR3LAT9 | 366 | -10.8-022.2 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |


| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Item description and code |  | Notes |
|  |  | SDST: Total latency, trial 3 (sec) | See note |
| CNR3TOTL | 366 | 013.93-179.54 |  |
|  | 106 | 888888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4150-4151 |  | SDST summary: Number of correct |  |
| CNRCORR3 |  | responses for latencies 2 through 9, trial 3 |  |
|  | 1 | 03 |  |
|  | 3 | 04 |  |
|  | 5 | 05 |  |
|  | 14 | 06 |  |
|  | 34 | 07 |  |
|  | 309 | 08 |  |
|  | 106 | 88 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4152-4157 |  | SDST summary: Error-corrected latency | See note |
| CNRCLAT3 |  | for trial 3 - total latency/number of correct responses (sec) |  |
|  | 366 | 001.74-022.44 |  |
|  | 106 | 888888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4158-4159 |  | SDST: Number of errors, trial 4 |  |
| CNR4ERR | 296 | 00 None |  |
|  | 40 | 011 error |  |
|  | 16 | 022 errors |  |
|  | 10 | 033 errors |  |
|  | 4 | 044 errors |  |
|  | 106 | 88 Blank but applicable |  |
|  | 2124 | Blank |  |


| SYMBOL DIGIT SUBSTITUTION TEST (SDST) |  |  |  |
| :---: | :---: | :---: | :---: |
| Positions <br> SAS name | Counts Item description |  | Notes |
| 4160-4164 |  | SDST: Latency 1, trial 4 (sec) | See note |
| CNR4LAT1 | 366 | -17.4-010.7 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4165-4169 } \\ & \text { CNR4LAT2 } \end{aligned}$ |  | SDST: Latency 2, trial 4 (sec) | See note |
|  | 366 | -03.8-015.2 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4170-4174 } \\ & \text { CNR4LAT3 } \end{aligned}$ |  | SDST: Latency 3, trial 4 (sec) | See note |
|  | 366 | -11.5-025.9 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4175-4179 } \\ & \text { CNR4LAT4 } \end{aligned}$ |  | SDST: Latency 4, trial 4 (sec) | See note |
|  | 366 | -07.6-013.8 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| $\begin{aligned} & \text { 4180-4184 } \\ & \text { CNR4LAT5 } \end{aligned}$ |  | SDST: Latency 5, trial 4 (sec) | See note |
|  | 366 | -06.2-017.5 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |
| 4185-4189CNR4LAT6 |  | SDST: Latency 6, trial 4 (sec) | See note |
|  | 366 | -03.7-017.7 |  |
|  | 106 | 88888 Blank but applicable |  |
|  | 2124 | Blank |  |




NHANES III Examination Data File
SECOND EXAM DATA

| SERIAL DIGIT LEARNING TEST (SDLT) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Positions SAS name | Item description Counts and code |  |  | Notes |
| 4224 |  | SDLT: Total 0 trials |  |  |
| CNRTOTRA | 334 | 1 | 1 trial 0 |  |
|  | 22 | 2 | 2 trial 0 |  |
|  | 3 | 3 | 3 trial 0 |  |
|  | 2 | 4 | 4 trial 0 |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2124 | Blank |  |  |
| 4225 |  | SDLT: | Score, trial 1 | See note |
| CNR1SCOR | 106 |  | Correct |  |
|  | 90 |  | 2/3 correct |  |
|  | 165 |  | Incorrect |  |
|  | 111 |  | Blank but applicable |  |
|  | 2124 | Blank |  |  |
| 4226 |  | SDLT: | Score, trial 2 | See note |
| CNR2SCOR | 194 | 0 | Correct |  |
|  | 63 |  | 2/3 correct |  |
|  | 104 |  | Incorrect |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2124 | Blank |  |  |
| 4227 |  | SDLT: | Score, trial 3 | See note |
| CNR3SCOR | 149 | 0 | Correct |  |
|  | 45 |  | 2/3 correct |  |
|  | 71 | 2 | Incorrect |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2220 | Blank |  |  |

NHANES III Examination Data File
SECOND EXAM DATA

| CENTRAL NERVOUS SYSTEM FUNCTION EVALUATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| SERIAL DIGIT LEARNING TEST (SDLT) |  |  |  |  |
| Positions SAS name | Item description <br> Counts and code |  |  | Notes |
| $\begin{aligned} & 4228 \\ & \text { CNR4SCOR } \end{aligned}$ |  | SDLT: | Score, trial 4 | See note |
|  | 84 |  | Correct |  |
|  | 38 |  | 2/3 correct |  |
|  | 52 |  | Incorrect |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2311 | Blank |  |  |
| CNR5SCOR ${ }^{4229}$ |  | SDLT: | Score, trial 5 | See note |
|  | 50 |  | Correct |  |
|  | 29 |  | 2/3 correct |  |
|  | 43 | 2 | Incorrect |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2363 | Blank |  |  |
| 4230 |  | SDLT: | Score, trial 6 | See note |
| CNR6SCOR | 37 | 0 | Correct <br> 2/3 correct <br> Incorrect <br> Blank but applicable |  |
|  | 19 | 1 |  |  |
|  | 38 | 2 |  |  |
|  | 111 | 8 |  |  |
|  | 2391 | Blank |  |  |
| 4231 |  | SDLT: | Score, trial 7 | See note |
| CNR7SCOR | 33 | 0 | Correct |  |
|  | 12 | 1 | 2/3 correct |  |
|  | 34 | 2 | Incorrect |  |
|  | 111 | 8 | Blank but applicable |  |
|  | 2406 | Blank | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA


```
CNR1LAT1-CNR1LAT9, CNR2LAT1-CNR2LAT9, CNR3LAT1-CNR3LAT9,
CNR4LAT1-CNR4LAT9: Latencies for trials 1-4
```

A total of five trials were conducted in the Symbol Digit
Substitution Test (SDST), a practice trial (not included in these
data) and four actual trials (trials 1-4). The practice trial was
primarily for training the examinee in the test procedure. It did
not accept incorrect responses, and data from the practice trial
are not included in this file. If the examinee entered an
incorrect digit, a short beep sounded, and no digit was entered on
the screen; to proceed, a correct digit had to be entered. If the
examinee made more than four errors during the practice trial, the
trial was repeated. If the examinee made more than four errors on
the second attempt of the practice trial, the test was
discontinued, and the next test was initiated automatically.
Symbols and digits were paired differently on each trial. Although
incorrect responses were allowed on the four actual trials, more
than four errors resulted in a message emphasizing the need to
avoid errors.

These variables represent the latency to enter each of the nine digits of each trial. Incorrect responses were reported as negative values.

CNR1SCOR-CNR8SCOR: Serial Digit Learning Test (SDLT) score
Note that to allow comparison with NES2 results from other settings the scoring convention for this variable differs from that usually applied to the NHANES III data, where 0 indicates none or never. Examinees received a score of 0 if all eight digits were entered correctly, 1 if six or seven digits were entered correctly, and 2 if fewer than six digits were entered correctly.

```
CNR1TOTL, CNR2TOTL, CNR3TOTL, CNR4TOTL: Total latency, trials 1-4
```

CNR1TOTL represents the time elapsed on trial 1 from the time the first item was answered to the time the ninth item was answered. Therefore, it does not include the latency to respond to the first symbol.

CNR2LAT1-CNR2LAT9: Latencies for trial 2

See note for CNR1LAT1-CNR1LAT9.

CNPRTOTL: Total latency, trial 2
See note for CNR1TOTL.

```
CNR3LAT1-CNR3LAT9: Latencies for trial 3
    See note for CNR1LAT1-CNR1LAT9.
CNR3TOTL: Total latency, trial 3
    See note for CNR1TOTL.
CNR4LAT1-CNR4LAT9: Latencies for trial 4
    See note for CNR1LAT1-CNR1LAT9.
CNR4TOTL: Total latency, trial 4
    See note for CNR1TOTL.
CNRCBEST: Mean of two lowest error-corrected latencies
    This single summary measure for the SDST is the mean of the
    error-corrected latencies (CNRCLAT1-CNRCLAT4) on the two best
    (lowest latency) of the four trials. The units for this summary
    measure are "sec/correct digit."
CNRCLAT1, CNRCLAT2, CNRCLAT3, CNRCLAT4: Error-corrected latency for
            trials 1-4
    The error-corrected latency was calculated for each of the four
    actual trials. It is the mean number of seconds per correct
    digit for each trial, excluding the first item in the trial.
    If the number of correct responses for latencies 2 through 9 was
    0, CNRCLAT1 was set to missing (blank). Otherwise,
    CNRCLAT1=CNR1TOTL/CNRCORR1.
CNRCLAT2: Error-corrected latency for trial 2
    See note for CNRCLAT1.
CNRCLAT3: Error-corrected latency for trial 3
    See note for CNRCLAT1.
CNRCLAT4: Error-corrected latency for trial 4
    See note for CNRCLAT1.
CNRMENRT: Mean reaction time
```

To calculate the mean reaction time, values from the first ten trials (CNRRTO1-CNRRT10) were excluded as well as values from other trials that were greater than or equal to 750 msec or less than or equal to 50 msec . This mean may not be valid if the number of

```
trials included in the average was less than 20.
```

```
CNRSDRT: Standard deviation of the reaction time
    To calculate the standard deviation of the reaction time, values
    from the first ten trials (CNRRTO1-CNRRT10) were excluded as well
    as values from other trials that were greater than or equal to 750
    msec or less than or equal to 50 msec. This statistic may not be
    valid if the number of trials included in the calculation was less
    than 20.
```

FUNDUS PHOTOGRAPHY

A photograph of the ocular fundus of one eye was taken on examinees aged 40 years and over by a trained examiner in the mobile examination center (MEC). The protocol for this component did not detail any medical, safety or other exclusions. However, if the designated eye was unavailable due to an extremely small pupil, severe corneal or lens opacity, complete retinal detachment, or other reason, the other eye was photographed. If both eyes were unavailable, no photograph was taken.

Because the component was administered in the examination center, MEC examination weights (WTPFEX6) should be used for data analysis. For more information on the use of sample weights in the analysis of NHANES III data, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Photographs of the ocular fundus were taken to determine the presence of diabetic retinopathy, age-related maculopathy, and other retinal diseases that are the leading causes of vision loss in the United States. A non-stereoscopic, color, 45-degree photograph, centered between the optic nerve and the macula, was taken of one randomly selected eye. The camera used was a Canon CR4-45NM "non-mydriatic" fundus camera, which incorporated the use of an infrared video camera to allow photographs to be taken in a darkened examination room without the use of dilating drops.

In a darkened room, the sphincter muscle of the iris normally relaxes, allowing for dilation of the pupil, usually to $6-10 \mathrm{~mm}$ in diameter. The technician observed the eye's natural dilation on a special video monitor and took the color photograph with a single flash of white light. If the examinee wore a contact lens, the photograph was taken directly through the contact lens. The entire procedure usually took less than six minutes. Detailed information on the examination procedure is in the Fundus Photography chapter of the Health Technician's Manual (U.S. DHHS, 1996b).

The exposed film was mailed to the University of Wisconsin-Madison, Department of Ophthalmology, where it was processed by a local laboratory into transparencies that were evaluated for photographic quality.

The ocular fundus images on the final transparencies were reviewed by photograph graders to assess the presence of diabetic retinopathy, age-related maculopathy, and other retinal diseases. The grading system used for classifying diabetic retinopathy was based on a modification of the Airlie House Classification Scheme (Diabetic Retinopathy Study Group, 1981; Klein, 1984; Klein, 1986; The Early Treatment Diabetic Retinopathy Study Group, 1991).

The Modified Airlie House Classification of Diabetic Retinopathy slide standards consist of 27 stereo pairs of color fundus photographs of diabetic retinopathy and one slide depicting poor photographic quality. The standard slides show diabetic proliferative disease and are used for grading the severity of diabetic retinopathy. The set is available with a detailed chapter outlining its use and a sample grading form. Additional information is available from The Fundus Photograph Reading

```
Center, c/o Michael Neider, WARF Building Room 450, 610 Walnut Street,
Madison, WI 53705.
The fundus photography consultant provided extensive training to
technicians at their time of hire, and each technician's performance
was monitored in the field on a periodic basis.
Two sources of nonsampling or measurement error were monitored
throughout the survey, the picture taking procedure and the image
grading procedure. To ensure that adequate photographs were taken,
the technicians' performance was monitored by a review of photographs
at the University of Wisconsin and by review and retraining field
visits. To evaluate the grading procedure, 1500 transparencies were
chosen at random for use in assessing inter- and intra-grader
reliability. The Kappa statistic was chosen to assess agreement
(Fleiss, 1981). The measures of agreement were generally good to
excellent and improved across time.
Data processing and editing were performed to ensure internal data
consistency. Notes have been provided for variables requiring
additional explanation.
```

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA

| FUNDUS PHOTOGRAPHY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FINDINGS |  |  |  |  |
| Positions <br> SAS name | Item description and code |  |  | Notes |
| $\begin{aligned} & \text { 4287-4289 } \\ & \text { FPR1070 } \end{aligned}$ | Diabetic retinopathy level |  |  | See note |
|  | 639 | 010 | No retinopathy |  |
|  | 10 | 011 | Questionable retinopathy |  |
|  | 3 | 012 | Non-diabetic retinopathy |  |
|  | 1 | $014$ | Hard exudates, soft exudates, intraretinal microvascular abnormalities (IRMA), without microaneurysms |  |
|  | 8 | 015 | Hemorrhages only, no microaneurysms Microaneurysms only |  |
|  | 23 | 020 |  |  |
|  | 5 | 031 | Early non-proliferative diabetic retinopathy |  |
|  | 9 | 041 | Moderate non-proliferative diabetic retinopathy |  |
|  | 1 | 051 | Severe non-proliferative diabetic retinopathy |  |
|  | 19 | 088 | Can't grade |  |
|  | 127 | 888 | Blank but applicable |  |
|  | 1751 | Blank |  |  |
| 4290-4291 |  | Hemorrhages or microaneurysms |  |  |
| FPR1080 | 641 | 00 | None ${ }^{\text {Questionable }}$ |  |
|  | 9 | 01 |  |  |
|  | 49 | 02 | Less than DRS 2A |  |
|  | 19 | 08 | Can't grade |  |
|  | 127 | 88 | Blank but applicable |  |
|  | 1751 | Blank |  |  |

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File

SECOND EXAM DATA




NHANES III Examination Data File

SECOND EXAM DATA

| FUNDUS PHOTOGRAPHY |  |  |  |
| :---: | :---: | :---: | :---: |
| FINDINGS |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| 4408-4409 |  | Central circle soft drusen | See note |
| FPR1266 | 659 | 00 None |  |
|  | 6 | 01 Questionable |  |
|  | 20 | 02 Yes |  |
|  | 33 | 08 Can't grade |  |
|  | 127 | 88 Blank but applicable |  |
|  | 1751 | Blank |  |




NOTES

FPR1020: Fundus

When the fundus was absent (FPP1020=00), the grader was instructed to stop. All ensuing fields, FPP1030 through FPP1270, were then left blank by the grader. During data processing, the blank fields were recoded "88 Blank but applicable."

FPR1060: Gradability status
Not all photographs were gradable. The principal reasons were related to the camera (e.g., malfunction, poor focus, dirty lens) and to the examinee (e.g., cataracts, eye movement, corneal change, poor pupil dilation, lens implants). The grader was instructed to stop when the entire field was ungradable (FPR1060=06), at which point the remaining fields were left blank. During data processing, the blank fields were recoded "88 Blank but applicable."

FPR1070: Diabetic retinopathy level
This variable represents the current state of severity of retinopathy in the eye. As such, it differs from the summary diabetic retinopathy score (FPRSURET) which represents the combination of current and past retinopathy status.

FPR1230-FPR1266: Drusen details

Drusen vary in appearance, merging at one end of the spectrum with the normal fundus background and at the other end with diffuse degeneration of the retinal pigment epithelium. Typical small drusen usually appear as individual, round, flat spots in the plane of the retinal pigment epithelium. They may be pale yellowish-white, contrasting sharply with the surrounding retinal pigment epithelium, or only slightly more pale than the retinal pigment epithelium and easily overlooked, even with careful examination of well-focused photographs. Larger drusen typically are yellow-white in color and often have visible thickness. Some have sharp margins and a solid, nodular appearance, whereas others have indistinct margins and a softer, more liquid appearance. Drusen may be distributed as individual spots or may appear to merge with adjacent drusen.

In NHANES III, two characteristics of drusen type (hard or soft) and area were graded in a semi-quantitative fashion within and outside the grid. Small punctate drusen (usually less than 95 microns in diameter) were classified as hard drusen; larger drusen were classified as soft. No attempt was made to further characterize soft drusen by appearance as soft distinct or indistinct.

Drusen area was estimated within a central circle of the grid,
within the grid, and outside the grid. The area covered by drusen was estimated by mentally moving together all hard or soft drusen as if they were confluent and comparing this area with those of standard circles. The estimate of drusen area was classified into one of four categories: smaller than a circle with a diameter of 95 microns (comparable to the 63-micron diameter circle used in a 30 -degree field), smaller than a circle with a diameter of 375 microns (250-micron diameter in a 30 -degree field), smaller than a circle with a diameter of 960 microns (640-micron diameter in a 30 -degree field), or equal to or larger than a circle with a diameter of 960 microns.

FPRPHOTO: Photographic status

Fundus photographs were not taken on all examinees who came to the mobile examination center. The principal reasons were refusal to cooperate, equipment failure, physical inability, and insufficient time.

FPRSUDRU: Summary drusen score
The summary drusen score was derived from a combination of values from several variables.

Definite drusen present: FPR1230, hard drusen, and/or FPR1240, soft drusen, were coded "02 Yes."

Questionable drusen present: Definite drusen were not present, and FPR1230, hard drusen, and/or FPR1240, soft drusen, were/was coded "01 Questionable."

No drusen present: Neither definite nor questionable drusen was present, and FPR1230, hard drusen, and/or FPR1240, soft drusen, were/was coded "00 None."

Cannot grade drusen: FPR1230, hard drusen, and FPR1240, soft drusen, were both coded "08 Can't grade."

Blank but applicable: FPR1060, gradability, was coded "06 Entire field ungradable," or FPR1020, fundus, was coded "00 Absent" or "88 Blank but applicable."

FPRSUMAC: Summary age-related maculopathy score
The summary age-related maculopathy score was derived from a combination of values from several variables. A detailed description of lesions as defined by the Wisconsin Age-Related Maculopathy Grading System is available (Klein, 1991; NTIS, 1991).

Late age-related maculopathy: At least one of the following variables was coded "02 Yes."

FPR1174, geographic atrophy

FPR1176, sub-retinal hemorrhage
FPR1178, sub-retinal fibrous scar
FPR1180, sensory serous (sub-retinal) detachment
Early age-related maculopathy: At least one of the following three sets of conditions was met.

FPR1172, degeneration of retinal pigment epithelium (RPE), was coded "02 Yes," and (FPR1230, hard drusen, and/or FPR1240, soft drusen, were/was coded "02 Yes").

FPR1182, hyperpigmentation, was coded "02 Yes," and (FPR1230, hard drusen, and/or FPR1240, soft drusen, were/was coded "02 Yes").

FPR1240, soft drusen, was coded "02 Yes," and FPR1250, grid area, was coded 02-04 (equal to or greater than a circle 95 microns in diameter).

```
No age-related maculopathy: Early and late age-related
maculopathy definitions were not met, and FPR1240, soft drusen,
was coded 00-02 (gradable).
"Cannot grade" age-related maculopathy: Early and late
age-related maculopathy definitions were not met, and FPR1240,
soft drusen, was coded "08 Can't grade."
Blank but applicable: FPR1060, gradability, was coded "06
Entire field ungradable," or FPR1020, fundus, was coded "00
Absent" or "88 Blank but applicable."
```

FPRSURET: Summary diabetic retinopathy score
The summary diabetic retinopathy score was derived from a combination of values from several variables. That is, it combines the diabetic retinopathy level variable (FPR1070) and history of treatment for proliferative diabetic retinopathy (using the photocoagulation treatment outside the arcades variable (FPR1214) as a marker). A detailed description of lesions as defined by The Early Treatment Diabetic Retinopathy Study (ETDRS) is available in the ETDRS report \#10 (The Early Treatment Diabetic Retinopathy Study, 1991). The NHANES III fundus photo grading protocol (NTIS, 1995) describes methods of assigning diabetic levels.

Proliferative diabetic retinopathy: At least one of the following two sets of conditions was met.

FPR1070, diabetic retinopathy level, was coded 060-070.

FPR1070, diabetic retinopathy level, has a code of anything other than "012 Non-diabetic retinopathy," and FPR1214, photocoagulation treatment outside arcades, was coded "02 Yes."

```
retinopathy level, was coded "041 Moderate non-proliferative" or
"051 Severe non-proliferative."
Mild non-proliferative retinopathy: FPR1070, diabetic
retinopathy level, was coded "020 Microaneurysms only" or "031
Early non-proliferative."
No diabetic retinopathy: FPR1070, diabetic retinopathy level,
was coded 010-015.
"Cannot grade" diabetic retinopathy: FPR1070, diabetic
retinopathy level, was coded "088 Can't grade."
Blank but applicable: FPR1060, gradability, was coded "06
Entire field ungradable," or FPR1020, fundus, was coded "00
Absent" or "88 Blank but applicable."
```


## PHYSICAL FUNCTION EVALUATION

Physical function (PF) was evaluated on examinees aged 60 years and over by a trained examiner using a battery of physical performance measures in the mobile examination center (MEC) and at examinees' homes. The protocol for this component did not detail any medical, safety or other exclusions.

To determine which sample persons were home examinees, the DMPSTAT variable ( $3=$ home-examined) should be used. When analyzing data for combined home-examined and MEC-examined persons, the combined MEC- plus home-examined sample weight should be used (WTPFHX6). When using only MEC items or measures, the MEC examination sample weight should be used (WTPFEX6). For more information on the use of sample weights in NHANES III data analysis, refer to the NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996b).

Physical function was tested using certain movements that represent musculoskeletal activities needed to carry out daily activities. Gross shoulder joint movement, fine motor hand movement, lower extremity motor functions, and integrated movement of balance and gait were determined. Upper extremity functions were evaluated using Jette and Branch (1984) right and left shoulder, external and internal rotations (PFRRSER, PFRLSER, PFRRSIR, and PFRLSIR). The fine motor function examination was a modification of a manual ability examination in which a key was inserted into a lock and then was turned (PFRTKEY) (Williams, 1982). The lower extremity motor, balance, and gait evaluation items included time to get up from an armless chair five times (PFRTSTND), a full tandem stand with the heel of one foot directly in front of the toes of the other foot for a maximum time of 10 seconds (PFRTTAND), and left and right knee flexing (PFRLFLEX and PFRRFLEX). An eight-foot walk performed twice at the usual walking speed (PFRTWLKA, PFRTWLKB, PFRNSTPA, and PFRNSTPB) was used also (Jette, 1985; Tinetti, 1986; Nevitt, 1989).

Items were scored by measuring the time required to perform the maneuver (lock and key, chair rising, tandem stand, eight-foot walk), by using scoring rules (shoulder rotation, knee flexing), and by counting steps (eight-foot walk).

Examinees who were unable to perform a specific maneuver either because they felt that it would have been unsafe or because they knew they were unable to do it for reasons related to physical limitations or health conditions were not required to make an attempt. For example, if an examinee was in a wheelchair and was not able to stand up, he/she skipped the following maneuvers: time to complete five chair stands (PFRTSTND), right and left knee-hip flexion (PFRRFLEX and PFRLFLEX), and tandem stand (PFRTTAND). The examinee was then asked, "Are you able to walk alone without holding on to another person? You may use a cane or walker." If he/she answered affirmatively, the examinee did the measured walking (PFRTWLKA, PFRTWLKB, PFRNSTPA, and PFRNSTPB); otherwise, he/she skipped the measured walking and ended the test. In the data set, examinees unable to complete the maneuver for these reasons were coded as "Blank," whereas examinees who did not perform the test for reasons unrelated to physical limitations were coded as "8 Blank but applicable."

```
Persons aged 60 and over who refused or were unable to come to the
mobile examination center (MEC) were tested in their homes. Persons
found to be bedbound were excluded from the lower extremities part of
the PF evaluation (HXRBED). Aside from using an accessible, armless
chair in the examinees' homes (HXRCHIR), technicians used equipment and
procedures comparable to those used in the MEC.
Because technicians used equipment and procedures in examinees' homes
that were comparable to those used in the MEC, the home PF values were
incorporated into the MEC PF measures data set.
Refer to the Physical Function Examination Manual (U.S. DHHS, 1996b)
and the Home Examination Manual (U.S. DHHS, 1996b) for descriptions of
data collection procedures and methods.
At the time of hire, MEC and home examination health technicians were
trained to conduct the physical function evaluation. During annual site
visits, examination administration was observed, and re-training took
place. Applicable parts of the National Institute on Aging video
"Assessing Physical Performance in the Home-Part 1" were used to
demonstrate the PF procedures during initial training and re-training
(NIA, 1988).
Data processing and editing were performed to ensure internal data
consistency. Notes have been provided for variables requiring
additional explanation.
```

NHANES III Examination Data File

SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA


NHANES III Examination Data File
SECOND EXAM DATA
PHYSICAL FUNCTION EVALUATION

| PHYSICAL FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| KEY IN LOCK TIMED MANEUVER |  |  |  |
| Positions <br> SAS name | Counts | Item description and code | Notes |
| $4422$ <br> PFRUKEY |  | Ability to pick up key | See note |
|  | 723 | 1 Yes |  |
|  | 4 | 2 No (PFRWC) |  |
|  | 43 | 8 Blank but applicable |  |
|  | 1826 | Blank |  |
| 4423 |  | Ability to hold key |  |
| PFRHKEY | 718 | 1 Yes |  |
|  | 5 | 2 No (PFRWC) |  |
|  | 43 | 8 Blank but applicable |  |
|  | 1830 | Blank |  |
| $4424-4427$ <br> PFRTKEY |  | Time to unlock lock (sec) | See note |
|  | 710 | 0002-0060 |  |
|  | 51 | 8888 Blank but applicable |  |
|  | 1835 | Blank |  |
| H428 |  | Check item--bedbound |  |
|  |  | (home exam only) |  |
| HXRBED | 2 | 1 Yes (PFRTECH) |  |
|  | 315 | 2 No |  |
|  | 2279 | Blank |  |

NHANES III Examination Data File
SECOND EXAM DATA




NHANES III Examination Data File
SECOND EXAM DATA

| PHYSICAL FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| TANDEM STAND TIMED MANEUVER |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $4445$ <br> PFRSTAND | Are you able to stand by yourself |  |  |
|  |  |  |  |
|  | 694 | 1 Yes |  |
|  | 17 | 2 No (PFROWALK) |  |
|  | 46 | 8 Blank but applicable |  |
|  | 1839 | Blank |  |
| 4446-4449PFRTTAND |  | Time (sec) tandem stand held | See note |
|  |  | 0001-0010 |  |
| PFRTTAND | 58 | 8888 Blank but applicable |  |
|  | 1856 | Blank |  |


| PHYSICAL FUNCTION EVALUATION |  |  |  |
| :---: | :---: | :---: | :---: |
| MEASURED WALK |  |  |  |
| Positions SAS name | Counts | Item description and code | Notes |
| $\begin{aligned} & 4450 \\ & \text { PFROWALK } \end{aligned}$ |  | Observed walking without help |  |
|  | 710 | 1 Yes (PFRTWLKA) |  |
|  | 9 | 2 No |  |
|  | 49 | 8 Blank but applicable |  |
|  | 1828 | Blank |  |
| $\begin{aligned} & 4451 \\ & \text { PFRRWALK } \end{aligned}$ |  | Are you able to walk alone without |  |
|  |  | holding on to another person? |  |
|  | 7 | 1 Yes |  |
|  | 7 | 2 No (PFRTECH) |  |
|  | $44$ | 8 Blank but applicable |  |
|  | $2538$ | Blank |  |
| $\begin{aligned} & \text { 4452-4455 } \\ & \text { PFRTWLKA } \end{aligned}$ |  | Time to complete 8-foot walk, trial A (sec) |  |
|  | 693 | 0002-0054 |  |
|  | 68 | 8888 Blank but applicable |  |
|  | 1835 | Blank |  |
| $4456-4457$ <br> PFRNSTPA |  | Number of steps, trial A |  |
|  | 717 | $03-24$ |  |
|  | 44 | 88 Blank but applicable |  |
|  | 1835 | Blank |  |
| $4458-4461$ <br> PFRTWLKB |  | Time to complete 8 -foot walk, trial B (sec) |  |
|  | 683 | 0002-54.8 |  |
|  | 78 | 8888 Blank but applicable |  |
|  | 1835 | Blank |  |


NHANES III Examination Data File
SECOND EXAM DATA

```
PFRTKEY: Time to unlock lock (sec)
    If the examinee was not able to open the lock within 60 seconds,
    the maneuver was terminated, and his/her time was entered as 60
    seconds.
PFRTSTND and PFRUSTND: Time to complete five stands (sec) and ability
            to stand
        A standardized wooden cube, 50-cm in height, was used as a prop
        for the armless chair maneuvers in the MEC.
PFRTTAND: Time tandem stand held (sec)
    The examiner stopped timing after 10 seconds even if the examinee
    was able to maintain the tandem stand for a longer period of time,
    and the examinee's time was entered as 10 seconds.
PFRUKEY: Ability to pick up key
    The examinee had a maximum of 30 seconds to pick up the key. If
        the examinee was not able to pick up the key within 30 seconds, the
        maneuver was terminated, and the examinee proceeded to the next
        item (PFRWC).
PFRUPWC: Can you get up from your chair/wheelchair by yourself?
    This question was asked during the MEC and home exam; PFRWC was
    recorded by the technician from observation in the MEC only.
PFRUSTND: Ability to stand
    See note for PFRTSTND.
```

Albert M, Smith L, Scherr P, Taylor J, Evans D. Use of brief cognitive tests to identify individuals in the community with clinically diagnosed Alzheimer's Disease. Int J Neurosc, 57:167-178. 1991.

American Psychiatric Association: Diagnostic and statistical manual of mental disorders (DSM-III), third edition. Washington, D.C. APA. 1980 .

American Thoracic Society. Standardization of spirometry: 1987
update. Am Rev Respir Dis 136:1286-1296. 1987.

Baker EL, Letz R, Fidler AT. A computer-based neurobehavioral evaluation system for occupational and environmental epidemiology: rationale, methodology and pilot study results. J Occup Med, 27:206-12. 1985.

Brown LJ, Brunelle JA, Kingman A. Periodontal status in the United States, 1988-1991: prevalence, extent, and demographic variation. J Dental Res 75(S):672-683. 1996.

Brown LJ, Winn DM, White BA. Dental caries, restoration and tooth conditions in U.S. adults, 1988-1991: National Health and Nutrition Examination Survey. J Am Dental Asso 127:1315-1325. 1996.

Brunelle JA, Bhat M, Lipton JA. Prevalence and distribution of selected occlusal characteristics in the U.S. population, 1988-1991. J Dental Res 75(S):706-713. 1996.

Diabetic Retinopathy Study Group. Report \#7. A modification of the Airlie House classification of diabetic retinopathy. Invest Ophthalmology Vis Sci 21:210-26. 1981.

Drury TF, Winn DM, Snowden CB, Kleinman D, Lewis B. An overview of the oral health component of the 1988-91 National Health and Nutrition Examination Survey (NHANES III -- Phase 1). J Dent Res 75(S):620-630. 1996.

The Early Treatment Diabetic Retinopathy Study (ETDRS) Group. Report \#10. Grading diabetic retinopathy from stereoscopic color fundus photographs -- an extension of the Airlie House Classification Scheme. Ophthalmology 98:786-806. 1991.

Epidemiology and Oral Disease Prevention Program. Oral health surveys of the National Institute of Dental Research: diagnostic criteria and procedures. NIH Publication No. 91-2870. 1991.

Fleiss JL. Statistical methods for rates and proportions, second edition. New York: John Wiley and Sons, Inc. 1981.

Frohlich ED, Grim C, Labarthe DR, Maxwell MH, Perloff D, Werdman W. Recommendations for human blood pressure determination by sphygmomanometers. Hypertension 11:210A-222A. 1988.

Hologic, Inc. Hologic QDR-1000 x-ray bone densitometer operator's manual and user guide. Waltham, MA: Hologic, Inc. 1987.

Jastak S, Wilkinson GS. The Wide Range Achievement Test -- revised administration manual. Jastak Associates Inc. 1984.

Jette AM, Branch LG. Impairment and disability in the aged. J Chronic Dis 38(1):59-65. 1985.

Kaste LM, Gift HC, Bhat M, Swango PA. Prevalence of incisor trauma in persons 6 to 50 years of age: United States 1988-1991. J Dental Res 75(S):696-705. 1996.

Kaste LM, Selwitz RH, Oldakowski RJ, Brunelle JA, Winn DM, Brown LJ. Caries in the primary and permanent dentition of children and adolescents 1-17 years of age: United States, 1988-1991. J Dental Res 75(S):631-641. 1996.

Kaufman AS. Intelligence testing with the WISC-R. John Wiley \& Sons Inc. 1979.

Klein BEK, Davis MD, Segal P, et al. Diabetic retinopathy: assessment of severity and progression. Ophthalmology 91:10-17. 1984.

Klein R, Klein BEK, Magli YL, et al. An alternative method of grading diabetic retinopathy. Ophthalmology 93:1183. 1986.

Klein R, Davis MD, Magli YL, et al. The Wisconsin age-related maculopathy grading system. Ophthalmology 98:1128-34. 1991.

Klein R, Davis MD, Magli YL, et al. Wisconsin age-related maculopathy grading system. Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine, Madison. U.S. Department of Commerce, 1991. Available from National Technical Information Service (NTIS), Springfield, VA. NTIS Accession PB 91-184267.

Klein R, Meuer SM, Hoyer CJ. NHANES III fundus photograph grading protocol. Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine. U.S. Department of Commerce, 1995. Available from National Technical Information Service (NTIS), Springfield, VA. NTIS Accession PB 95-262523.

Klein H, Palmer CE, and Knutson JW: Studies on dental caries. Publ Health Rep 53:751-765, 1938.

Kramer R, Allen L, Gergen P. Health and social characteristics and children's cognitive functioning: results from a national cohort. Am J Publ Health 85(3):312-318. 1995.

Letz, R. The Neurobehavioral Evaluation System 2 user's manual. Winchester, Massachusetts: Neurobehavioral Systems, Inc. 1990.

Lohman TG, Roche AF, Martorell R, eds. Anthropometric standardization reference manual. Champaign, IL: Human Kinetics Books. 1988.

Looker AC, Wahner HW, Dunn WL, Calvo MS, Harris TB, Heyse SP, Johnston CC, Lindsay RL. Proximal femur bone mineral levels of U.S. adults.

Osteoporosis Int 5:389-409. 1995.
Marcus SE, Drury TF, Brown LJ, Zion GR. Tooth retention and tooth loss in the permanent dentition of adults: United States, 1988-1991. J Dent Res 75(S):684-695. 1996.

National Center for Health Statistics. Plan and operation of the Third National Health and Nutrition Examination Survey, 1988-94. Vital Health Stat 1(32). 1994.

National Institute on Aging (NIA), MacArthur Foundation, and EPH. Assessing physical performance in the home -- part 1. New Haven, CT: Biomedical Communications, Yale University School of Medicine. 1988.

Nevitt MC, Cummings SR, Kidd S, Black D. Risk factors for recurrent nonsyncopal falls: a prospective study. JAMA 261:2663-2668. 1989.

Redford M, Drury TF, Kingman A, Brown LJ. Denture use and the technical quality of dental prostheses among persons 18-74 years of age: United States, 1988-1991. J Dent Res 75(S):714-725. 1996.

Selwitz RH, Winn DM, Kingman A, Zion GR. The prevalence of dental sealants in the U.S. population: findings from NHANES III, 1988-1991. J Dent Res 75(S):652-660. 1996.

Tanner JM. Growth at adolescence. Second edition. Oxford: Blackwell Scientific Publications. 1962.

Tinetti ME, Williams TF, Mayewski R. Fall risk index for elderly patients based on number of chronic disabilities. Am J Med 80:429434. 1986.

Uhari M, Nuutinen M, Turtinen J, Pokka T. Pulse sounds and measurement of diastolic blood pressure in children. Lancet 338:159-161. 1991.

University of Minnesota, Nutrition Coordinating Center. Nutrient database versions 15-25. Minneapolis, MN. 1996.
U.S. Department of Agriculture, Agricultural Research Service. Survey nutrient data bases for NHANES III, Phase 1 (1993) and Phase 2 (1995). Riverdale, MD.
U.S. Department of Health and Human Services (DHHS). NHANES III anthropometric procedures video. National Center for Health Statistics, Centers for Disease Control and Prevention, 1996a. Available from Government Printing Office, Washington, DC. Stock Number 017-022-01335-5.
U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. Third National Health and Nutrition Examination Survey, 1988-94, Reference manuals and reports (CD-ROM). Hyattsville, MD: Centers for Disease Control and Prevention, 1996b. Available from the National Technical Information Service (NTIS), Springfield, VA. Acrobat .PDF format; includes access software: Adobe Systems Inc. Acrobat Reader 2.1.

```
U.S. Department of Health and Human Services (DHHS). National Center
for Health Statistics (NCHS). Data from NHANES III, Phase 1: 1988-91.
Centers for Disease Control and Prevention, 1995. Available from
NCHS, Hyattsville, MD.
Wahner HW, Looker AC, Dunn WL, Hauser MF, Walters LC, Novak C.
Quality control of bone densitometry in a national health survey
(NHANES III) using three mobile examination centers. J Bone Miner
Res 9:951-960. 1994.
Wechsler D. Manual for the Wechsler Intelligence Scale for Children --
revised. The Psychological Corporation. 1974.
White BA, Albertini TF, Brown LJ, Larach-Robinson D, Redford M,
Selwitz RH. Selected restorations and tooth conditions: United
States, 1988-1991. J Dent Res 75(S):661-671. 1996.
Williams ME, Hadler NM, Earp JA. Manual ability as a marker of
dependency in geriatric women. J Chron Dis 35:115-122. 1982.
Winn DM, Brunelle JA, Brown LJ, Kaste LM, Selwitz RJ, Oldakowski R.
Coronal and root caries in the dentition of adults in the United
States, 1988-1991. J Dent Res 75(S):642-651. 1996.
```

