

HEALTH AND RETIREMENT STUDY  
2006 Core  
Final, Version 4.0  
August 2021

Data Description and Usage



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# Data Description and Usage

## 1. Overview

The 2006 HRS Core (Final, Version 3.0) data release consists of data obtained as part of the Health and Retirement Study (HRS), a national longitudinal study of the economic, health, marital, and family status, as well as public and private support systems, of older Americans. The National Institute on Aging provided funding (NIH U01 AG09740), with supplemental support from the Social Security Administration. The Institute for Social Research (ISR) Survey Research Center (SRC) at the University of Michigan conducted the survey.

By receiving the data, which have been freely provided, you agree to use them for research and statistical purposes only and make no effort to identify the respondents. In addition, you agree to send HRS a copy of any publications you produce based on the data. See [Obtaining the Data](#) for additional details.

### 1A. The Sample Interviewed in 2006

The data collection period for the 2006 interview was March 2006 through February 2007. The HRS sample is comprised of five sub-samples.

The first sub-sample, the HRS sub-sample, consists of people who were born 1931 through 1941 and were household residents of the conterminous U.S. in the spring 1992, and their spouses or partners at the time of the initial interview in 1992 or at the time of any subsequent interview. The HRS sub-sample was interviewed in 1992 and every two years thereafter.

The AHEAD sub-sample consists of people who were born in 1923 or earlier, were household residents of the conterminous U.S. in the spring 1992, and were still household residents at the time of their first interview in 1993 or 1994, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The AHEAD sub-sample was interviewed in 1993-94, 1995-96, 1998 and every two years thereafter.

The War Baby (WB) sub-sample consists of people who were born in 1942 through 1947, were household residents of the conterminous U.S. in the spring 1992, who, at that time, did not have a spouse or partner born before 1924 or between 1931 and 1941, and were still household residents at the time of the first interview in 1998, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The War Baby sub-sample was interviewed in 1998 and every two years thereafter.

The Children of the Depression (CODA) sub-sample consists of people who were born in 1924 through 1930, were household residents of the conterminous U.S. when first interviewed in 1998, and who, at that time, did not have a spouse or partner who was born before 1924 or between 1931 and 1947, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The Children of the Depression sub-sample was interviewed in 1998 and every two years thereafter.

The Early Baby Boomer (EBB) sub-sample consists of people who were born in 1948 through 1953, were household residents of the U.S. when first interviewed in 2004, and who, at that time, did not have a spouse or partner who was born before 1948, and their spouses or partners at the time of the initial interview

or at the time of any subsequent interview. The Early Baby Boomer sub-sample was interviewed in 2004 and every two years thereafter.

Original sample members are those selected as described above and their spouses or partners at the time of the initial interview in 1992 (HRS), 1993 (AHEAD), 1998 (CODA or WB) or 2004 (EBB).

## **1B. 2006 Questionnaire Sections**

The content of the 2006 data collection instrument is roughly equivalent to the content of the HRS 2004 instrument.

2006 Section	Content
PR	Preload
A	Coverscreen
B	Demographics
C	Physical Health
D	Cognition
E	Family Structure (Children)
F	Parents, Siblings and Transfers
G	Functional Limitations and Helpers
H	Housing
I	Physical Measures
J	Employment
K	Last Job
L	Job History
M	Disability
N	Health Services and Insurance
P	Expectations
Q	Assets and Income
R	Asset Change
S	Widowhood and Divorce
T	Wills and Life Insurance
U	Asset Reconciliation
V	Modules
W	Event History, Internet Use and Social Security
TN	Thumbnails
RC	Repeat Cognition
Y	Time Calculations
IO	Interviewer Observations
LB	Leave-Behind Questionnaires

## **1C. Levels of Files**

In the 2006 data collection instrument, most questions were asked of all respondents. Some questions were asked about the household. For two-respondent households, household level questions were asked of one respondent who was designated as the financial respondent, family respondent, or coverscreen respondent (the first respondent interviewed) on behalf of the entire household.

In addition to the familiar household-level and respondent-level files, the 2006 HRS Core (Final, Version 3.0), contains files at five other levels: household-member-and-child, sibling, helper, transfer-to-child and transfer-from-child.

### *1C1. Household Level Files*

Household-level files contain questions that were asked about the household of a designated coverscreen, financial, or family respondent. A coverscreen respondent answered family questions (section A) on behalf of the entire household; the coverscreen respondent may or may not be the family respondent. A family respondent answered family questions (section E) on behalf of the entire household, and a financial respondent answered household-level financial questions (sections H, Q, R and U) on behalf of the entire household. The household-level files contain one record for each household in which at least one interview was obtained in 2006.

### *1C2. Respondent Level Files*

Respondent-level files contain questions that were asked of all respondents about themselves (or asked of a proxy about the respondent if the respondent was unable to give an interview). The files contain one record for each respondent or proxy who gave an interview in 2006.

### *1C3. Sibling Level File*

The sibling file consists of characteristics of the respondent's siblings. If a respondent had at least one living parent, he/she was asked a variety of questions about his/her siblings (Section F). The sibling file contains one record for each sibling of a respondent. Each respondent reports on their own parents and siblings. Sibling data are also stored in the preload section, H06PR\_sb.

### *1C4. Household Member and Child Level Files*

These files contain characteristics about household members and children. The information can come from the preload (updated by the first respondent in Section A) or by family respondent in Section E.

### *1C5. Helper Level File*

This file contains information provided by each respondent about helpers. A helper may be a person or organization that was reported by the respondent as providing help with money management, ADLs or IADLs. The file contains one record for each helper. If a child helped both respondents in a two respondent household, the helper file will contain two records - one of mother's report of the child's helping her and one for father's report of the child's helping him.

### *1C6. Transfer-to-Child-Level File*

This file contains information provided by the family respondent about transfers of money to a child or grandchild. The file contains one record for each transfer to a child or grandchild.

### *1C7. Transfer-from-Child-Level-File*

This file contains information provided by the family respondent about transfers of money from children or grandchildren. The file contains one record for each transfer from a child or grandchild.

## **2. File Naming Conventions**

Files are named beginning with "H06" for HRS 2006, followed by a letter (or two) designating the questionnaire section. A separator, "\_" and then one or two letters designating the level, follows the section letter designator. The following letters designate the level of the data files:



H for household-level  
R for respondent-level  
MC for household-member-and-child-level  
SB for sibling-level  
HP for helper-level  
TC for transfer-to-child-level  
FC for transfer-from-child-level

For example, the file H06A\_R includes variables from section A (coverscreen) at the respondent level. Alternatively, file H06H\_H includes variables from section H (housing) and the data are at the household level.

The following extensions are used for the different types of files that are distributed.

.DA for data files,  
.SAS for SAS program statements,  
.SPS for SPSS program statements,  
.DO for STATA DO statements,  
.DCT for STATA dictionary statements, and  
.TXT for codebook files.

One of each of these file types is provided for each of the 37 data files for the 2006 HRS Core (Final, Version 3.0) data release. For example,

H06A\_R.DA contains respondent data from section A,  
H06A\_R.SAS contains corresponding SAS program statements,  
H06A\_R.SPS contains corresponding SPSS program statements,  
H06A\_R.DO contains corresponding STATA DO statements,  
H06A\_R.DCT contains corresponding STATA dictionary statements, and  
H06A\_R.TXT contains the ASCII codebook.

### 3. Data Files

The 2006 HRS Core (Final, Version 3.0) data are distributed in 40 data files. The files are listed below along with the number of cases (N), number of variables (NV), and the primary identifiers (IDS).

The 2006 HRS Core data are provided in ASCII format, with fixed-length records. Use associated SAS, SPSS or STATA program statements to read the data into the analysis package of your choice.

Household level files, IDS=HHID KSUBHH

H06PR_H	N=12605	NV= 47
H06A_H	N=12605	NV= 42
H06E_H	N=12605	NV= 139
H06H_H	N=12605	NV= 195
H06IO_H	N=12605	NV= 61
H06Q_H	N=12605	NV= 683
H06R_H	N=12605	NV= 113
H06U_H	N=12605	NV= 232

Respondent level files, IDS=HHID PN

H06PR_R	N=18469	NV= 166
H06A_R	N=18469	NV= 34

H06B_R	N=18469	NV= 100
H06C_R	N=18469	NV= 208
H06D_R	N=18469	NV= 157
H06RC_R	N=18469	NV= 96
H06F_R	N=18469	NV= 203
H06G_R	N=18469	NV= 131
H06I_R	N=18469	NV= 180
H06IO_R	N=18469	NV= 116
H06J_R	N=18469	NV=1926
H06K_R	N=18469	NV= 155
H06L_R	N=18469	NV= 412
H06LB_R	N=18469	NV= 311
H06M0_R	N=18469	NV= 30
H06M1_R	N=18469	NV= 268
H06M2_R	N=18469	NV= 461
H06N_R	N=18469	NV= 369
H06P_R	N=18469	NV= 86
H06S_R	N=18469	NV= 111
H06T_R	N=18469	NV= 79
H06V_R	N=18469	NV= 388
H06W_R	N=18469	NV= 23
H06TN_R	N=18469	NV= 15
H06Y_R	N=18469	NV= 70

Household member and child level files IDS=HHID KSUBHH OPN

H06PR_MC	N=72080	NV= 27
H06E_MC	N=63958	NV= 28

Sibling level file IDS=HHID KSUBHH OPN

H06PR_SB	N=17622	NV= 24
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Sibling level file IDS= HHID PN OPN

H06F_SB	N= 7473	NV= 28
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Transfer-to-child-level-file IDS=HHID KSUBHH OPN

H06E_TC	N= 6072	NV= 23
---------	---------	--------

Transfer-from-child-level-file IDS=HHID KSUBHH OPN

H06E_FC	N= 893	NV= 22
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Helper level file IDS=HHID PN OPN

H06G_HP	N= 4926	NV= 30
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#### 4. Identification Variables

Identification variables for HRS 2006 are stored in character format.

##### 4A. Primary Identification Variables

Several variables, HHID, KSUBHH, PN, or OPN are used in various combinations to uniquely identify the seven different level datasets that comprise this data release.

#### 4A1. HHID - Household Identifier

In the initial wave of data collection (in 1992 for the HRS sub-sample, in 1993 for the AHEAD sub-sample, 1998 for the WB and CODA sub-samples, and 2004 for the EBB sub-sample) each sample household was assigned a Household identifier. HHID is stable across waves of data collection and uniquely identifies the original household and any households derived from that household in subsequent waves of data collection. HHID has six-digits.

#### 4A2. KSUBHH - 2006 Sub-household Identifier

In combination with HHID, KSUBHH uniquely identifies a household at the time of the 2006 data collection. Sub-household identifiers can be different at each wave. KSUBHH has one-digit. For more information, see [Examples of Sub-Household and Respondent Person Number and Other Person Number Assignments](#).

#### 4A3. PN - Person Number

In combination with HHID, PN uniquely identifies a respondent or respondent's spouse or partner. PNs are unique within an original household (HHID). The PN assigned to a particular respondent does not change across waves. PN has three-digits.

#### 4A4. OPN - Other Person Number

In the 2006 data collection HHID, KSUBHH and OPN uniquely identify another person in the household member and child files, PR\_SB and transfer-level files; HHID, PN, and OPN uniquely identify another person in the helper or sibling (F\_SB) files. OPN has three-digits. See Datasets Including KSUBHH and OPN as Primary identifiers for additional information.

### **4B. Primary Identification Variables for Datasets at Each of the Seven Levels**

Two identifiers uniquely identify records in the

- o respondent-level datasets:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) PN PERSON NUMBER

Two identifiers uniquely identify records in the

- o household-level datasets:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) KSUBHH 2006 SUB-HOUSEHOLD IDENTIFIER

Three identifiers uniquely identify records in the

- o helper-level datasets:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) PN PERSON NUMBER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o household-member-and-child-level, and
- o sibling-level dataset, PR\_SB:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) KSUBHH 2006 SUB-HOUSEHOLD IDENTIFIER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the  
o sibling-level dataset, F\_SB:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) PN PERSON NUMBER (H06PR\_SB only)
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the  
o transfer-to-child-level, and  
o transfer-from-child-level datasets:

- 1) HHID HOUSEHOLD IDENTIFIER
- 2) KSUBHH 2006 SUB-HOUSEHOLD IDENTIFIER
- 3) OPN OTHER PERSON NUMBER

#### **4C. Secondary Identification Variables**

In addition to the primary identification variables that uniquely identify records in a dataset, secondary identification variables that allow links to other datasets are provided. Two sets of secondary identification variables are provided. They are listed below.

Secondary Identification Variables for

- o Respondent level,
- o sibling level and
- o helper level datasets:

KSUBHH	2006	SUB-HOUSEHOLD IDENTIFIER
JSUBHH	2004	SUB-HOUSEHOLD IDENTIFIER
KPN_SP	2006	SPOUSE/PARTNER PERSON NUMBER
KCSR	2006	WHETHER COVERSCREEN RESPONDENT
KFAMR	2006	WHETHER FAMILY RESPONDENT
KFINR	2006	WHETHER FINANCIAL RESPONDENT

Secondary Identification Variables for

- o household level,
- o household member or child level,
- o transfer-from-child-level,
- o transfer-to-child-level:

JSUBHH	2004	SUB-HOUSEHOLD IDENTIFIER
KPN_CS	2006	COVERSCREEN RESP PERSON NUMBER
KPN_FAM	2006	FAMILY RESP PERSON NUMBER
KPN_FIN	2006	FINANCIAL RESP PERSON NUMBER
KPN_NCS	2006	NON-COVERSCREEN RESP PERSON NUMBER
KPN_NFAM	2006	NON-FAMILY RESP PERSON NUMBER
KPN_NFIN	2006	NON-FINANCIAL RESP PERSON NUMBER

#### **4D. Datasets Including KSUBHH and OPN as Primary Identifiers**

When working with datasets including KSUBHH and OPN as primary identifiers -- household-member-and-child-level, Section PR sibling level file, transfer-from-child-level, or transfer-to-child-level datasets - it is essential to use KSUBHH to distinguish other persons.

Sometimes records with the same HHID and OPN will be separate reports about the same person. For example, see the example using 2000 data [Couple with Children and Siblings Divorces](#), where the couple with children divorces, the record where

HHID is 89012, JSUBHH is 1, and OPN is 101 is the report about the child from the mother, and the record where HHID is 89012, JSUBHH is 2, and OPN is 101 is the report about the same child from the father.

In addition, there are instances within the Section F Sibling level file where the same sibling may have follow up questions from both respondents. This results from some ambiguity involving sibling relationships to each respondent in a household. It is not always known, or always clarified, which respondent a is a blood sibling to each record and which is the in law. If you use HHID and KSUBHH to merge each record in the H06PR\_SB file to each line in the H06F\_SB file, you will get a match to each record. Using the PN of each respondent will make each line unique.

At other times records with the same HHID and OPN will be reports about different persons. For example, see the example using 2000 data [Couple Divorces, One Respondent Remarries, Both Split-off Households Have New Members.](#) - where the couple divorces and both split-off households have new members, the record where HHID is 90123, JSUBHH is 2, and OPN is 151 is for the ex-wife's mother, while the record where HHID is 90123, JSUBHH is 1, and OPN is 151 is for the ex-husband's new stepchild.

## **5. Distribution Files and Directory Structure**

### **5A. Distribution Files**

The files are packaged for download from our Web site in two different ways - as one large .zip file that contains seven smaller .zip files, one .pdf file, and one .txt file, or the nine smaller files available individually for separate download. The combined file is H06core.zip.

The individual .zip files for separate download are:

#### Data file

H06da.zip containing data files.

#### Program statement files

H06sas.zip containing SAS data descriptors.

H06sps.zip containing SPSS data descriptors.

H06sta.zip containing STATA data descriptors.

#### Documentation files

H06cb.zip containing the codebook.

H06qn.zip containing the questionnaire.

H06xref.txt - the HRS 2000 through HRS 2006 cross-reference file

H06dd.pdf - this document.

### **5B. Directory Structure**

While a particular setup is not required for using HRS files, we have traditionally suggested a directory structure. By using this directory structure, you will not have to change the path name in your data descriptor files. If you use a different structure, just change the directory references in the program statement files.

Directory	Contents
c:\hrs2006	Files downloaded from Web site

c:\hrs2006\codebook	Unzipped files from H06cb.zip
c:\hrs2006\data	Unzipped files from H06da.zip
c:\hrs2006\qnaire	Unzipped files from H06qn.zip
c:\hrs2006\sas	Unzipped files from H06sas.zip
c:\hrs2006\spss	Unzipped files from H06sps.zip
c:\hrs2006\stata	Unzipped files from H06sta.zip

Decompress the selected .zip files into the appropriate subdirectories. You will need about 450 MB of free space on your storage device to store the 40 .DA files.

## 6. Program Statements

Each data file comes with associated SPSS, SAS, or STATA program statements to read the data. Files containing SPSS statements are named with a .SPS extension, those with SAS statements with a .SAS extension, and those with STATA statements with .DO and .DCT extensions.

The statement files are named beginning with the same prefix as the corresponding data file. For example, SAS statements in the file H06A\_R.SAS go with the H06A\_R.DA data file.

### 6A. Using the Files with SAS

To create a SAS system file for a particular dataset, two file types must be present for that dataset -- .SAS program statement files and .DA data files.

- To create a SAS system file, load the \*.SAS file into the SAS Program Editor.

If the \*.SAS file is located in "c:\hrs2006\sas" and the data file is located in "c:\hrs2006\data", you can run the file as is. A SAS system file (\*.SD2 or \*.SAS7BDAT) will be saved to directory "c:\hrs2006\sas".

If the files are not located in the specified directories, you will need to edit the \*.SAS file to reflect the proper path names prior to running the file.

### 6B. Using the Files with SPSS

To create an SPSS system file for a particular dataset, two file types must be present for that dataset -- .SPS program statement files and .DA data files.

- To create an SPSS system file, open the \*.SPS file in SPSS as an SPSS Syntax File.

If the \*.SPS file is located in "c:\hrs2006\spss" and the data file is located in "c:\hrs2006\data", you can run the file as is. An SPSS system file (\*.SAV) will be saved to directory "c:\hrs2006\spss".

If the files are not located in the specified directories, you will need to edit the \*.SPS file to reflect the proper path names prior to running the file.

### 6C. Using the Files with STATA

To use STATA with a particular dataset, the following three file types must be present for that dataset -- .DCT files, .DO files, and .DA data files.

Files with the suffix .DA contain the raw data for STATA to read. Files with the suffix .DCT are STATA dictionaries used by STATA to describe the data. Files

with the suffix .DO are short STATA programs ("do files") which you may use to read in the data. Load the .DO file into STATA and then submit it.

If the \*.DO and \*.DCT files are located in "c:\hrs2006\stata" and the data file is located in "c:\hrs2006\data", you can run the .DO file as is.

If the files are not located in these directories, you must edit the \*.DO and \*.DCT files to reflect the proper path names before you run the files.

Note that the variable names provided in the .DCT files are uppercase. If you prefer lower case variable names, you may wish to convert the .DCT files to lower case prior to use. You may do this by reading the .DCT file into a text or word processing program and changing the case. For instance in Microsoft Word, Edit, Select All, Format, Change Case, lowercase.

## 7. Documentation

There are several types of documentation available for use with the 2006 HRS Core (Final, Version 3.0) data release. These include a codebook, a list of "Master Codes", and the 2006 box-and-arrow questionnaire. The HRS 2006 final release variables have been added to the [Online Concordance](#). Additional information can also be found on the HRS website.

### 7A. Codebook

The HRS 2006 Codebook is provided as a series of 40 ASCII text files, as well as a file containing all sections. There is a codebook file corresponding to each data file. Each variable has its own codebook entry. The format of the codebook is, for the most part, consistent with the codebook of 2004.

#### 7A1. Variable Names

Variable names begin with a letter designating the wave of data collection (K for 2006), followed by the section letter, and numbers after the section letter. For example, KC001 where K=2006, C=section C (physical health), 001 variable number. Variables from the preload section of the instrument will have either KX or KZ as prefix letters. The X indicates a variable that is updated by data collected in later sections of the questionnaire, whereas the Z indicates preloaded data that were not changed by subsequent answers to questions. For example:

```
KX007_R    RESP FAM/FIN TYPE - UPDATED
KZ077_R    PREV WAVE R FIN/FAM TYPE
```

#### 7A1a. Multiple-response and Looped Variables

There are two types of variables with multiple mention indicators. First are simple multiple mentions and second are multiple mentions within loops.

Simple multiple mention variables take the form: (wave prefix) + (section letter) + (variable number) + (mention number). For example, KN219M1 through KN219M5 are 2006 variables from section N with one through 5 mentions.

Variable names for multiple mentions to questions within a loop take the form: (wave prefix) + (section letter) + (variable number) + (loop iteration) + (letter designating mention number). For example, KJ425a1, is a 2006 variable from section J, variable number 425 in the first iteration of the loop, and the first mention.

Simple loop variables (not a multiple mention) have an underscore ( \_ ) in their name and a suffix that designates the loop, e.g., KB066\_1.

For variables that have a "W" right after the section designator, the variable names are slightly different. Variable names for multiple mentions to questions within a W-loop take the form: (wave prefix) + (section letter) + ("W") + (variable number) + (letter designating loop iteration) + (mention number). For example, KJW006a1, is a 2006 variable from section J, variable number 006 in the first iteration of the loop, and the first mention. Other non-multiple mention variables within this type of loop are named with the letter designating the loop iteration. For example, KJW001a, is variable number 001 in the first iteration of the loop. In sections where "W" loop variables are present, regular loop variables are designated with a letter to indicate loop iteration. This keeps naming consistent within the section. For example, KJ123a is the first iteration of variable KJ123.

Null multiple mention variables and variables from null loops beyond the first mention or first loop are not included in the data. It is generally the case that one null 'multiple mention' and one null loop are retained.

#### 7A1b. Masked Variables

To protect the confidentiality of the information that respondents provide, a number of variables have been masked or are simply not included in the Final release public dataset. Some of these variables may be made available to analysts as restricted data. See our Web site for details.

Names, addresses, days of birth, information on geographical relocation and similar variables are not included in publicly released files.

Geographical locations are recoded to a level no more detailed than U.S. Census Region and Division. Data on the highest educational degree earned have been further grouped together to increase cell sizes. Industry and occupation codes have been recoded into a limited number of categories from the original three-digit U.S. Census code.

The names of variables that were masked for confidentiality end with the letter "M"; for example, variable KX026M (1ST ADDRESS STATE - MASKED) and variable KB024M (FATHER USUAL OCCUPATION - MASKED).

#### 7A1c. 2000 to 2006 Variable Cross-Reference

The names of the variables in the 2002, 2004 and 2006 datasets are markedly different from the names of variables in prior waves. In the codebook, a "link" to the variable name from 2000, 2002, and 2004 is provided (when there is one for a 2006 variable). In the example below, under the word CAI, the 2000 variable G1229 would be the equivalent to the 2006 variable: KC002

```
KC002          COMPARE HEALTH TO PREVIOUS WAVE
      Section: C      Level: Respondent      Type: Numeric      Width: 1
      Decimals: 0
      CAI: SecC.C002_
      2000 Link: G1229  2002 Link: HC002  2004 Link: JC002
```

#### 7A1d. Rules - conditions

The conditions that allow a respondent to get a question or sequence of questions have been included in the codebook. However, the programming of the instrument actually reused blocks of programming for similar sequences (e.g.,



the questions about people in the household, the pension questions, and the follow up for disability programs). While these questions are similar, sometimes the conditions to get them or the pattern within the sequence itself are not the same. We have eliminated these discrepancies wherever possible but you will find some rules that should not apply to some sequences here and there.

In addition, there can be inconsistencies when a Respondent decides to go back and change an answer that controls flow. In 2006, these flow inconsistencies are not automatically fixed within the program.

We strongly recommend that you also check the Box and Arrow questionnaire whenever you have a question about flow and who should be in a given sequence.

## **7B. Master Code**

A master code file contains detailed codeframes used in several sections of the codebook. The master codes include health conditions, alphabetical list of health conditions, occupation codes, industry codes, and state and country codeframes. The master codes appear in Appendix B.

## **7C. Box and Arrow Questionnaire**

The research community has referred to the type of documentation that describes the questions asked in the interview as a "questionnaire". Since the 2006 HRS data were collected using a CAI program, a traditional hard-copy questionnaire was not produced as part of the data collection phase. However, we have provided a version of the traditional box-and-arrow questionnaire to help document the asking sequence of the questions. The box-and-arrow provides fill designations for the question text where the codebook only displays Blaise code.

## **8. Households with No Coverscreen or Family or Financial Respondents**

As noted earlier in this document, the data collection design was to ask most questions of all respondents, and some questions of a designated coverscreen, or family, or financial respondent on behalf of the household. However, occasionally that is not what happened. For some households an interview was not obtained from a family or financial respondent. There were 92 households that had no family respondent; 47 households had no financial respondent. There are no missing coverscreen respondents in this wave. The household records for these households contain null values for the missing information. Households missing a family or financial respondent can be identified, respectively, by values of "Blank. No family/financial respondent" (in the household record) in the following variables:

KPN\_FAM - 2006 FAMILY RESP PERSON NUMBER  
KPN\_FIN - 2006 FINANCIAL RESP PERSON NUMBER

## **9. Unfolding Bracket Variables and Imputations**

Typically, a series of unfolding bracket questions followed a lead-in question asking for an amount. If an actual amount was not given, a series of "unfolding" questions were asked. The manner in which the unfolding questions were programmed (Blaise) is different for the 2002 through 2006 data compared to the CAI (SurveyCraft) software used for 1993 through 2000. This change was transparent to the respondents, since exactly the same questions were asked with the new software as would have been asked with the old software; but it did have

an implication for the data that were actually stored and also for the data that are released.

Instead of storing the response to each unfolding question, three summary variables were generated: the minimum and maximum values for the amount, given the answers to the unfolding questions, and if the last answer a respondent gave in an unfolding sequence was either "Don't Know" or "Refused," what that answer was. In 2002, if the Respondent said "more than" to the unfolding question with the highest value, then the maximum value was stored as ten times that value. However, in 2004 and 2006, if the Respondent said "more than" to the unfolding question with the highest value, then the maximum value was stored as 99999996. For most analysts, those three variables (and in particular, the minimum and maximum of the possible range) will be sufficient for analyses. For any analyst who needs the more detailed information, it should be noted that the three variables, combined with the information about the unfolding questions provided in the box-and-arrow and codebook, are sufficient to allow the analyst to reconstruct the sequence of questions asked of any respondent, and the answers to each of those questions in many of the unfolding sequences.

For other sequences -- those in which respondents were randomly assigned to one of three "entry" points for the first unfolding question -- the analyst will also need to take into account a fourth variable (located in the preload sections) that specifies the entry point for each respondent. The following example shows the preload variable (KZ041) and the unfolding sequence that uses the random entry point from KZ041.

Example Random Entry Assignment Variable from the Preload data file H06pr\_h:

```
.....
KZ041          UNFOLD ASSIGN - SELF EMPLOYMENT INCOME
Section: PR    Level: Household      Type: Numeric    Width: 1    Decimals: 0
CAI: HH.X041_UnfSEmpInc_V

          UNFOLD ASSIGN - SELF EMPLOYMENT INCOME
.....
          4253          1.  RANDOM ASSIGNMENT 1
          4193          2.  RANDOM ASSIGNMENT 2
          4159          3.  RANDOM ASSIGNMENT 3
```

Unfolding Series from section Q that uses KZ041 to assign respondents an entry point:

```
.....
KQ016          R INCOME FROM SELF EMPLOYMENT - MIN
Section: Q     Level: Household      Type: Numeric    Width:      Decimals: 0
CAI: SecQ.RIncome.Q016_

          Unfolding Procedure: 3Up, 2Up1Down, 1Up2Down (Min)
          Did it amount to ...
          Breakpoints: 5000/10000/25000/100000
          RANDOM ENTRY POINT ASSIGNMENT [1 ($5,000)] or [2 ($10,000)] or
          [{NOT 1 and NOT 2} ($25,000)] AT KZ041
.....
          161          0.  Value of Breakpoint
           9          5000. Value of Breakpoint
           7          5001. Value of Breakpoint
           9          10000. Value of Breakpoint
          21          10001. Value of Breakpoint
           6          25000. Value of Breakpoint
```

```

33      25001.  Value of Breakpoint
1       100000. Value of Breakpoint
12      100001. Value of Breakpoint
12346   Blank.  INAP (Inapplicable); Partial Interview
.....
KQ017      R INCOME FROM SELF EMPLOYMENT - MAX
Section: Q      Level: Household      Type: Numeric      Width: 10      Decimals: 0
CAI: SecQ.RIncome.Q017_

Unfolding Procedure: 3Up, 2Up1Down, 1Up2Down (Max)
Did it amount to ...
Breakpoints: 5000/10000/25000/100000
RANDOM ENTRY POINT ASSIGNMENT [1 ($5,000)] or [2 ($10,000)] or
[ {NOT 1 and NOT 2} ($25,000) ] AT KZ041
.....
45      4999.  Value of Breakpoint
9       5000.  Value of Breakpoint
7       9999.  Value of Breakpoint
9       10000. Value of Breakpoint
20      24999. Value of Breakpoint
6       25000. Value of Breakpoint
31      99999. Value of Breakpoint
1       100000. Value of Breakpoint
131     99999996. Greater than Maximum Breakpoint
12346   Blank.  INAP (Inapplicable); Partial Interview
.....
KQ018      R INCOME FROM SELF EMPLOYMENT - RESULT
Section: Q      Level: Household      Type: Numeric      Width: 2      Decimals: 0
CAI: SecQ.RIncome.Q018_

25      98.   DK (Don't Know); NA (Not Ascertained)
95      99.   RF (Refused)
12485   Blank.  INAP (Inapplicable); Partial Interview
.....

```

**10. Modules**

**10A. Modules for 2006 Data Collection**

There are 10 modules for 2006 HRS. Topical areas of the modules include:

- Module 1: Financial Preparedness
- Module 2: Risk Aversion
- Module 3: Parents and Sibs' Health and Long Term Care Use
- Module 4: The Valuation of Health Insurance Benefits
- Module 5: Medicare Valuation
- Module 6: Characteristics of the Home Environment
- Module 7: Subjective Probabilities
- Module 8: Informed Consent with AD Patients
- Module 9: Number Series
- Module 10: Retrieval Fluency

Please note that the request for respondents to fill out the Leave Behind Psychosocial questionnaire, and the request for pension documents appear at the end of Module 10.

## 10B. Module Assignment Rules

Several rules were used to assign the preload values in KZ009\_R (R Module Assignment) and KZ010\_R (Spouse Module Assignment). The variables KZ009\_R and KZ010\_R are in the data file H06PR\_R.

In 2006, there are two repeat modules -- one is a repeat of Module 4 in 2002 (this is Module 2 in 2006) and the second is a repeat of Module 12 in 2004 (this is Module 9 in 2006). There are a total of 167 respondents who were assigned to both of the repeat modules and who were still in the sample in 2004. These cases are referred to as the "overlap sample" below.

Module 2: Assign all respondents who were assigned to Module 4 in 2002 to Module 2 in 2006, minus 1/2 of the overlap sample. In addition, assign 1/10 of EBB respondents from 2004 to Module 2.

Module 9: Assign 1/2 of all respondents who were assigned to Module 12 in 2004 to Module 9 in 2006, minus 1/2 of the overlap sample. In addition, assign a random sample from the remaining respondents to bring the total sample size for Module 9 in line with that for the other modules.

Module 10: Assign the remaining respondents who were assigned to Module 12 in 2004 (1/2 of the Module 12 sample minus the entire overlap sample) to Module 10 in 2006. In addition, assign a random sample from the remaining respondents to bring the total sample size for Module 10 in line with that for the other modules.

Other modules (Modules 1, 3-8): Distribute the remaining sample randomly across these modules.

## 10C. Description of Number Series (Module 9)

The purpose of this module was to broaden the content domain currently assessed in the HRS to include "fluid intelligence." The specific purpose was to see if we could achieve reasonably informative test scores by using a small subset of items from the Number Series task adapted from the new WJ III using adaptive testing methodology. The task administered in HRS 2006 was identical to the one included in HRS 2004. More detail about the rationale for, development of, and administration details of this task is available in the Ofstedal, Fisher, & Herzog (2005) HRS Cognition documentation report (<http://hrsonline.isr.umich.edu/docs/userg/dr-006.pdf>).

The sampling of respondents for the 2006 number series module was as follows: Respondents who were asked to complete the number series module in 2004 were randomly assigned to either the number series or retrieval fluency modules in 2006. (The only exception to this was a small overlap group of respondents that were assigned to the risk aversion module in 2002 and the number series module in 2004, who were randomly assigned to complete either the 2006 risk aversion module or either the 2006 number series or 2006 retrieval fluency module.) In 2006, a total of 1,230 HRS respondents completed the Number Series module at the end of the standard HRS survey. Of these, 356 respondents (almost 30% of those who completed this in 2006) also completed the Number Series task as part of a module in HRS 2004. The Number Series test was designed so that each respondent would be asked no more than six test items (i.e., the number of items that we estimated could be completed in the three-minute time frame).

The full information in the pattern of responses provided by each respondent was used to create a score on the W-scale (logit metric) based on the scoring method

for the original WJ III test. This variable, called KVNSCORE, represents the respondent's performance on the task where higher scores indicate higher performance on the task. Please refer to the cognition documentation report (<http://hrsonline.isr.umich.edu/docs/userg/dr-006.pdf>) for more information. Other variables include the total number of items asked of each respondent (KVNASK), and the number of items answered correctly (KVNCRRECT), and the starting point within the module (KVNSTART). KVNSTART has a value of A, C, 17, or 23. These values correspond to the item number from the original WJIII test (which has three sample items, A, B, & C, and 47 test items arranged in order of item difficulty from item 1 to item 47). The starting point for each respondent was determined by level of education and performance on the Serial 7s task.

#### **10D. Description of Retrieval Fluency (Module 10)**

The purpose of this module was to broaden the content domain currently assessed in the HRS to include "fluid intelligence." The specific purpose was to see if we could achieve reasonably informative test scores by using a retrieval fluency task adapted from the Woodcock Johnson III test battery. Respondents were given a category and asked to name as many items in that category that they could think of within a 45-second time frame. Interviewers counted everything the respondent said, even if the answer was incorrect or a repeat response (i.e., said the same item twice), but the interviewers were asked to keep track of incorrect or repeated answers. Variables include the total number of items mentioned by the respondent for each category, as well as indicators of whether the interviewer may have recorded any incorrect items named, and if so, how many. This task was repeated two additional times with different categories (i.e., for a total of three distinct trials).

#### **11. Explanation of the difference between Tracker and 2006 Final data**

There are some areas where the tracker file and the 2006 Final release data are different. Below is a list of these situations.

KSUBHH - The tracker file assigns a '9' for all new spouses in 2006 for the previous wave's SUBHH number. The 2006 Final Release data, however, will list the SUBHH number of the household that the new spouse married into, since the new spouse will 'inherit' many of the relationships from that household.

KPN\_SP - There will be a spouse PN in the ID variables for a respondent in the Core data, even if that spouse did not give an interview in 2006, and they will be referenced in the household sections by their KPN\_SP. Also, for a non-original R, we assign a spouse PN even though we will never interview that person, and track the spouse's influence on the household with that number. The tracker file will not reference these spouses.

Family and Financial R assignments - As we keep a record of a non-interviewed spouse in the core data, we also release their assigned role in the household (i.e. family or financial R) with a listing for KPN\_FIN, KPN\_FAM in the household sections. The tracker file will simply list the assignments of the people interviewed. Therefore, for example, the 2006 Core Final data has a blank line in section H for a household where '020' was the non-interviewed financial R. The tracker file would show the same household as not having a financial R.

Marital Status - It is important to note that marital status, as it was assigned in the 2006 data (KB063) may be different from the marital status variable (xMARST) in the Tracker file (see the Tracker file Data Description for a more

complete explanation of how marital status was assigned and the criteria used to reclassify respondents). The marital status variable in the Tracker file was constructed by looking at several different sources of data, whereas the marital status variable in the 2006 Core Final data was not changed, in order to preserve the flow through the instrument for respondents.

## **12. Changes in Data because of Respondent Comments**

The interviewer recorded comments the respondent made during the course of the interview. HRS staff reviewed these comments for selected questions (e.g., other specify, amount and per questions). The coded answer was changed if it was determined that the comment changed the substance of the recorded answer. Occasionally additional codes were added to an existing codeframe. The text of added codeframes appears in the codebook in upper and lower case. Double reporting of income or assets in Section J was corrected wherever possible.

When a change was made as a result of the comment review process, inconsistencies with subsequent variables may result. A limited number of changes for consistency were made to immediately subsequent variables within the section. No consistency changes were made to variables in other sections. If any comment change affected a subsequent branch-point, the branchpoint was not changed.

## **13. Enhanced Face-to-Face Sample Design and Content**

In 2006, HRS initiated what is referred to as an Enhanced Face-to-Face Interview. In addition to the core interview, the Enhanced Face-to-Face Interview includes a set of physical performance measures, collection of biomarkers, and a Leave-Behind Questionnaire on psychosocial topics. A random one-half of households were pre-selected for the enhanced face-to-face interview in 2006. In coupled households, both members of the couple were selected. Selected respondents who completed a self (as opposed to proxy) interview, in-person (at least through Section I - the physical measures and biomarkers section), and who were non-institutionalized at the time of the interview were eligible for the physical measures and biomarkers components. This same group of respondents, plus those for whom an in-person proxy interview was completed, were also eligible for the Leave-Behind Questionnaire.

### *Psychosocial Leave-Behind Questionnaire (Section LB\_R)*

In 2004, HRS added a new feature for data collection in the form of self-administered questionnaires that were left with respondents upon the completion of an in-person Core Interview, referred to as the Leave-Behind Questionnaire. The purpose of the Leave-Behind Questionnaire is to collect additional information from respondents without adding to the interview length. In 2006, the Leave-Behind Questionnaire was incorporated into the Enhanced Face-to-Face Interview. The Leave-Behind Questionnaire administered in 2006 is called the Participant Lifestyle Questionnaire, and it includes questions on participation in general activities, relationships with others, and views on their life in general as well as specific aspects of their life. This is a modified and expanded version of the 2004 Participant Lifestyle Questionnaire, which was one of two Leave-Behind Questionnaires administered in the 2004 wave.

### *Physical Performance Measures and Biomarkers (Section I\_R)*

In 2004, HRS administered a set of physical measures to a random subsample of about 3,300 respondents. In 2006, this effort was expanded in terms of both the size of the sample covered (one-half of the full sample) and the measurements conducted. The specific measures included in the 2006 wave are:

Blood pressure

Breathing test (peak flow)  
 Grip strength  
 Timed walk (8 ft.)  
 Balance tests (semi-tandem, side-by-side, full tandem)  
 Height  
 Weight  
 Waist circumference  
 Saliva (for which DNA was extracted and stored)  
 Dry blood spots (analyzed for Hemoglobin Alc, total cholesterol and HDL cholesterol)

With the exception of the timed walk, which was administered only to respondents 65 years of age or older, the physical measures and biomarkers were conducted on the full enhanced face-to-face sample.

Three separate consents were obtained to cover: 1) all of the physical measures, plus blood pressure; 2) saliva sample; and 3) dry blood spots. The physical measures booklet, which the interviewers used to administer the physical measures and biomarkers, is available on the HRS website: <http://hrsonline.isr.umich.edu/meta/2006/core/gnaire/online/44hr06BioMarker.pdf>. The booklet contains the consent forms, as well as instructions and protocols for all of the measurements.

An extensive review of the Physical Measures data was conducted by an analyst between the early and final release. Out of range values were looked at and corrected where possible. Flag variables are included in the data and denote if a value was changed as a consequence of the review of the data.

**14. Section U: Asset Reconciliation Restructure Notes**

In order to make Section U data easier to use, the structure in the 2006 Final Release (Version 3.0) was changed so that each asset has its own loop. In prior waves, all assets were combined into one loop which made it difficult to assess any one of several assets. The data file, however, in the HRS 2006 Final release, is still at the household level.

The label indicates the asset being reconciled in a particular loop. Loop 2 was purposely left out of the data because Trust Worth is not asked about in this wave. The following examples show what the data looked like prior to the restructuring in the HRS 2006 Final, and how they are currently structured.

2006 Early Structure example:

```
*****
KU007          QUESTION LOOP NUMBER
Section: U     Level: Household   Type: Numeric   Width: 2   Decimals: 0
CAI: SecU.U007_Qcount
.....
12558          0-10.  Actual Value
47             Blank.  INAP (Inapplicable); Partial Interview
*****
KU009_1       U009A ASSET TYPE -1
Section: U     Level: Household   Type: Numeric   Width: 10  Decimals: 0
CAI: SecU.MAIN[1].U009AAssetType
.....
42            1.  DEBTS ASSETS
              2.  TRUSTS ASSETS
305           3.  OTHER ASSETS
```

```

54          4.  TRANSPORTATION ASSETS
187         5.  CD - TBILL ASSETS
235         6.  CHECKING OR SAVING ASSETS
61          7.  BONDS ASSETS
318         8.  STOCKS ASSETS
217         9.  ONE OR MORE IRAS ASSETS
139        10.  BUSINESS OR FARMS ASSETS
174        11.  REAL ESTATE ASSETS
435        12.  MAIN HOME ASSETS
25         13.  MORTGAGE1 ON MAIN HOME
          14.  MORTGAGE2 ON MAIN HOME
1          15.  EQUITY LOAN ON MAIN HOME
6          16.  MOBILE HOME ASSETS
39         17.  SECOND HOME ASSETS
          18.  MORTGAGE OR LOAN ON SECOND HOME
1 367      Blank.  INAP (Inapplicable); Partial Interview
*****

```

```

KU010_1      U010A QUESTION TYPE -1
Section: U    Level: Household Type: Numeric    Width: 10    Decimals: 0 CAI:
          SecU.MAIN[1].U010AQuestionType

```

```

.....
20  1.  PREV WAVE VALUE (MORE) (LESS) THAN $___ - CURRENT VALUE (MORE)
      (LESS) THAN $ _
101 2.  CURRENT VALUE AT LEAST $ _ - DID NOT HAVE ASSET IN PREV WAVE
62  3.  PREV WAVE VALUE ABOUT $ _ - CURRENT VALUE (MORE) (LESS) THAN $ _
52  4.  PREV WAVE VALUE AT LEAST $ _ - DO NOT CURRENTLY HAVE ASSET
46  5.  PREV WAVE VALUE (MORE) (LESS) THAN $    - CURRENT VALUE ABOUT $ _
380 6.  CURRENT VALUE ABOUT $ _ - DID NOT HAVE ASSET IN PREV WAVE
308 7.  PREV WAVE VALUE ABOUT $ _ - DO NOT CURRENTLY HAVE ASSET
763 8.  PREV WAVE VALUE ABOUT $ _ - CURRENT WAVE VALUE ABOUT $ _
      11. PREV WAVE VALUE (MORE) (LESS) THAN $___ - CURRENT VALUE (MORE) (LESS)
          THAN $ _
18  12. CURRENT VALUE AT LEAST $ _ - DID NOT HAVE ASSET IN PREV WAVE
27  13. PREV WAVE VALUE ABOUT $ _ - CURRENT VALUE (MORE) (LESS) THAN $ _
      8 14. PREV WAVE VALUE AT LEAST $ _ - DO NOT CURRENTLY HAVE ASSET
9   15. PREV WAVE VALUE (MORE) (LESS) THAN $    - CURRENT VALUE ABOUT $ _
55  16. CURRENT VALUE ABOUT $ _ - DID NOT HAVE ASSET IN PREV WAVE
75  17. PREV WAVE VALUE ABOUT $ _ - DO NOT CURRENTLY HAVE ASSET
314 18. PREV WAVE VALUE ABOUT $ _ - CURRENT WAVE VALUE ABOUT $ _
10367 Blank.  INAP (Inapplicable); Partial Interview
*****

```

```

KU001_1      U001A_ASSETRECONCILIATION-1
Section: U    Level: Household Type: Numeric    Width: 1    Decimals: 0
          CAI: SecU.MAIN[1].U001AStemQuestion

```

[U001A\_ASSET RECONCILIATION STEM QUESTION -1] According to my records, [U001A\_ASSET RECONCILIATION STEM QUESTION -1] Does this sound right?

ENTER RF to exit asset verification

```

.....
1423       1.  YES
762        5.  NO
31         8.  DK (Don't Know)
18         9.  RF (Refused)
10371     Blank.  INAP (Inapplicable); Partial Interview
*****

```



\*\*\*\*\*  
 Restructured Section U for Final 2006 Release  
 \*\*\*\*\*

KU010\_1 QUESTION TYPE **-DEBTS**  
 Section: U Level: Household Type: Numeric Width: 10 Decimals: 0

- .....
- 1. PREV WAVE VALUE (MORE) (LESS) THAN \$\_\_\_ - CURRENT VALUE (MORE) (LESS) THAN \$\_
  - 3 2. CURRENT VALUE AT LEAST \$\_ - DID NOT HAVE ASSET IN PREV WAVE
  - 1 3. PREV WAVE VALUE ABOUT \$\_ - CURRENT VALUE (MORE) (LESS) THAN \$\_
  - 4. PREV WAVE VALUE AT LEAST \$\_ - DO NOT CURRENTLY HAVE ASSET
  - 5. PREV WAVE VALUE (MORE) (LESS) THAN \$ - CURRENT VALUE ABOUT \$\_
  - 12 6. CURRENT VALUE ABOUT \$\_ - DID NOT HAVE ASSET IN PREV WAVE
  - 12 7. PREV WAVE VALUE ABOUT \$\_ - DO NOT CURRENTLY HAVE ASSET
  - 14 8. PREV WAVE VALUE ABOUT \$\_ - CURRENT WAVE VALUE ABOUT \$\_
  - 11. PREV WAVE VALUE (MORE) (LESS) THAN \$ - CURRENT VALUE (MORE) (LESS) THAN \$\_
  - 12. CURRENT VALUE AT LEAST \$\_ - DID NOT HAVE ASSET IN PREV WAVE
  - 13. PREV WAVE VALUE ABOUT \$\_ - CURRENT VALUE (MORE) (LESS) THAN \$\_
  - 14. PREV WAVE VALUE AT LEAST \$\_ - DO NOT CURRENTLY HAVE ASSET
  - 15. PREV WAVE VALUE (MORE) (LESS) THAN \$ - CURRENT VALUE ABOUT \$\_
  - 16. CURRENT VALUE ABOUT \$\_ - DID NOT HAVE ASSET IN PREV WAVE
  - 17. PREV WAVE VALUE ABOUT \$\_ - DO NOT CURRENTLY HAVE ASSET
  - 18. PREV WAVE VALUE ABOUT \$\_ - CURRENT WAVE VALUE ABOUT \$\_
- 12563 Blank. INAP (Inapplicable); Partial Interview

\*\*\*\*\*

KU001\_1 ASSET RECONCILIATION **-DEBTS**  
 Section: U Level: Household Type: Numeric Width: 1 Decimals: 0

[U001A\_ASSET RECONCILIATION STEM QUESTION -1] According to my records, [U001A\_ASSET RECONCILIATION STEM QUESTION -1] Does this sound right?

- ENTER RF to exit asset verification
- .....
- 26 1. YES
  - 16 5. NO
  - 8. DK (Don't Know); NA (Not Ascertained)
  - 9. RF (Refused)
- 12563 Blank. INAP (Inapplicable); Partial Interview

\*\*\*\*\*

\*

**15. Additional Notes**

The following are miscellaneous additional notes regarding HRS 2006 Final Data Release, (Version 3.0). If we become aware of additional issues, they will be posted on our Web site in the Data Alerts section.

**15A. KSUBHH and PN Changes Between the 2006 Early Release and the 2006 Final Release**

Please be aware of the following changes made between the Early and Final releases:

#1  
 Early Release:  
 HHID=502653 PN=011 KSUBHH=1

HHID=502653 PN=010 KSUBHH=1

Final Release:

HHID=502653 **PN=020 KSUBHH=0**

HHID=502653 PN=010 **KSUBHH=0**

#2

Early Release:

HHID=502153 PN=010 KSUBHH=1

HHID=502153 PN=011 KSUBHH=2

Final Release:

HHID=502153 PN=010 KSUBHH=1

HHID=502153 **PN=020 KSUBHH=2**

#3

Early Release:

HHID=056955 PN=014 KSUBHH=2

HHID=056955 PN=010 KSUBHH=2

Final Release:

HHID=056955 **PN=011 KSUBHH=7**

HHID=056955 PN=010 **KSUBHH=7**

## **15B. Summary of Data Model (DM) Changes during 2006 Production**

During the field period, changes to the instrument need to be made in order to correct errors in the programming or to improve the quality of the data. The following is a summary of these changes below. In all of the data files there is a variable called, *KVDATE*, which tells what version of the data model was used to collect a given interview.

Changes incorporated in Version 2

### Section C:

KC219 - KC122 - Type of arthritis. ReIW (Re-interview) Respondents who did not have arthritis in the prior wave, but have it now, should be asked these questions about the type of arthritis. They were skipped out of these questions in DM V1. This has been fixed in Version 2.

### Section G:

KG203 - starting time stamp for prospective memory. This time stamp was not 'kept' and as a result was getting updated. This is especially a problem for suspended cases, but also appears to have been a problem for non-suspended cases. The original time stamp for all Respondents interviewed with Data model version 1 will need to be retrieved from the ADT files, and will be released in the final core data.

### Section I:

KV933 and KV934 - We added IWER instructions on these screens to instruct INTERVIEWERS how to record the bar code if the R signed the consent form, but did not provide a saliva (V933) or blood (V934) sample. The instructions read:

KV933 - IWER: If a saliva sample was not collected, enter 99999999.  
KV934 - IWER: If a blood spot sample was not collected, enter 99999999.

KI935 - Modified to skip 2<sup>nd</sup> blood sample bar code entry if KI934=99999999.

KI908 - Question on difficulties with waist circumference measurement. In Blaise, '7' was designated for 'other, specify,' whereas in the booklet we use 97. We changed this to '97' in Blaise.

#### Section N:

KN353 - Medicare Part D Plan Name - There was a minor wording change in this question.

Old Q wording: "What is the name of the company or organization that provides your Medicare drug coverage?"

New Q wording: "What is the **plan** name **for** the company or organization that provides your Medicare drug coverage?"

KN353 - Added new IWER instruction on this field:

IWER: Plans other than those provided by AARP should end with a designation such as 'Plus' or 'Premier' or something similar. Probe as needed to get the full plan name.

#### Section Q:

KQ354 - Spanish text was appearing in English for this unfolding. This has been fixed.

#### Section R:

KR039: Respondents who reported that they sold, but did not buy real estate were getting asked KR039 in error. This has been fixed so that KR039 is only asked if KR034=1.

#### Section T:

KT227 - The 'other, specify' question (KT244) is programmed to be asked if 97 is selected in KT221, but instead it should be asked if 97 is selected in KT227.

#### Section V:

KV113-KV116 - Module 4: Data review indicated that the percents used in questions KV113-KV116 are too low. The following changes were made in DATAMODEL VERSION 2:

KV113: change '3 percent' to '5 percent'  
KV114: change '5 percent' to '10 percent'  
KV115: change '10 percent' to '20 percent'  
KV116: change '20 percent' to '30 percent'

KV122-KV125 - Module 4: Data review indicated that the values used in questions KV122-KV125 are too low. The following changes were made in DATAMODEL VERSION 2:

KV122: change '\$1,000' to '\$2,000'

KV123: change '\$2,000' to '\$6,000'  
KV124: change '\$6,000' to '\$10,000'  
KV125: change '\$10,000' to '\$20,000'

KV131-KV134 - Module 4: Data review indicated that the percents used in questions KV131-KV134 are too low. The following changes were made in DATAMODEL VERSION 2:

KV131: change '20 percent' to '30 percent'  
KV132: change '10 percent' to '20 percent'  
KV133: change '5 percent' to '10 percent'  
KV134: change '3 percent' to '5 percent'

KV140-KV143 - Module 4: Data review indicated that the values used in questions KV140-KV143 are too low. The following changes were made in DATAMODEL VERSION 2:

KV140: change '\$1,000' to '\$2,000'  
KV141: change '\$2,000' to '\$6,000'  
KV142: change '\$6,000' to '\$10,000'  
KV143: change '\$10,000' to '\$20,000'

KV188 - KV194 (Module 3) - These fields were formatted to allow (or not disallow) null entries. This has been fixed so that the IWER must enter something (a numeric response or DK or RF) in order to exit the field.

Module assignment - This is an error that was also present in 2004. New spouses of Respondents who were coupled (with someone else) in the previous wave did not get a module assignment, because X009 was emptied out for these new spouses in the Blaise application. These Respondents received KV000 (module introduction), but were then skipped to the end of the interview. Very few Respondents were affected in 2004. We have fixed this so that KX009 is no longer emptied. All Respondents should have module assignments this wave. This fix was implemented in V2.

KV025: In Datamodel V1 there was an error in the logic preceding V025. Respondents who answered DK or RF in KV021 were skipped out of KV025. If they gave a valid bracketed response (i.e., if KV024 NE DK or RF) then they should get asked KV025.

KV324 - KV327 - In data model version 1, all Respondents currently employed by the government were asked the pension documents request, regardless of whether they had a pension on their current job. This has been fixed in version 2 so that government employees are not asked to send their summary plan descriptions.

KV326 - Respondents with only one pension who reported '2' in KV325 (R does not have all SPDs) were skipped out of the rest of the pension documents sequence in DM V1. This has been corrected in V2 so that they get asked KV326 and KV327.

Changes incorporated in Version 3

#### Section I:

KV839 - There was a discrepancy between the physical measures booklet and Blaise for value 6 in the codeframe for this field. In the booklet, code 6=R is not able to stand; in Blaise, code 6=R was too heavy, did not attempt. We changed the codeframe in Blaise to match the booklet.

KV905 - There was a discrepancy between the physical measures booklet and Blaise for value 6 in the codeframe for this field. In the booklet, code 6=R is not able to stand; in Blaise, code 6= R too tall, interviewer could not reach. We changed the codeframe in Blaise to match the booklet.

#### Section J:

KJ286 - An incorrect skip instruction for DK/RF on KJ286. Instead of skipping out of the loop (GO TO END OF J272 LOOP (AFTER J785/J322tcXX)), Respondents answering DK/RF in KJ286 should skip to KJ735 (and followups KJ736, KJ737-KJ739 (unf)). This change was made in version 3.

#### Section N:

KN354, KN390, KN355, KN392 - A design change was made so that Respondents who are not enrolled in Medicare part D will be asked the sequence of questions about applying to Social Security for extra help (KN354, KN390, KN355, KN392). This change applies to self respondents and proxy cases.

The following Branchpoints (BP) and variables were affected:

N356: Respondents that choose "2. Didn't know it was available", "3. Heard about it too late", and "7. Haven't made a decision about whether to enroll" now skip to N354 rather than N358

The N400 BP should now read: If this is a proxy interview (A009 not 1), go to N354

Changes incorporated in Version 4

#### Section N:

The code '20=Did not use any resources' was removed from questions KN398 and N401. These questions ask which resource was most important in helping R make a decision about whether or not to sign up for Medicare Part D if more than one resource was reported. In order to make this change, two new codeframes were created: T\_N398 and T\_N401. T\_N398 is a duplicate of T\_N397, but with code '20' removed. Likewise, T\_N401 is a duplicate of T\_N400, with code '20' removed.

#### Section V:

Module 6: Respondents who reported having only one feature in questions KV254-KV263 and who reported that they had added that feature after they moved into their home (KV289=1) were skipped over questions KV300-KV304. This has been fixed so that anyone who reports having added one or more feature now gets KV300-KV304.

Changes incorporated in Version 5

#### Section J:

KJ029, KJ056, KJ081, KJ261, KJ597: The following codes were added to the codeframe

JAN07	(67)	"JAN 07"
FEB07	(68)	"FEB 07"

MAR07 (69) "MAR 07"  
APR07 (70) "APR 07"

Section N:

KN352: Change Q text (CORE only) from "Have you signed up for the new Medicare prescription drug coverage?" to "Did you sign up to receive Medicare prescription drug coverage in 2006?"

KN394: Change first part of Qtext from "Did you choose your own plan, did someone you know choose for you, or were you enrolled in it automatically?" to "When you first enrolled, did you choose your own plan, did someone you know choose for you, or were you enrolled in it automatically?"

KN356: Change Qtext from "What is the reason that you did not sign up?" to "What is the reason that you did not sign up for coverage in 2006?"

KN353: Change Q text from "What is the plan name for the company or organization that provides your Medicare drug coverage?" to "What is the plan name for the company or organization that provided your Medicare drug coverage in 2006?"

KN404: Change "About how much do you pay per month in premiums for this plan?" to "About how much did you pay per month in premiums for this plan?"

KN358: Change Q text from: "How likely is it that you will sign up for Medicare prescription drug coverage next year?" to "How likely is it that you will sign up for Medicare prescription drug coverage for 2007?"

KN358: Expand the existing codeframe for N358 to include two new codes:

6=already signed up for 2007  
7=will stay with same plan in 2007

Section Q:

KQ404: The following codes were added to the codeframe

JAN07 (67) "JAN 07"  
FEB07 (68) "FEB 07"  
MAR07 (69) "MAR 07"  
APR07 (70) "APR 07"

**15c. Changes to release version 4.0**

The following variables had values changed in the files noted below:

H06A\_H:

- KA076M (CURRENT RESIDENCE STATE - MASKED)
- KA081M (OTHER RESIDENCE STATE - MASKED)

H06B\_R:

- KB003M (STATE BORN - MASKED)
- KB047M (ST/COUNTRY R LIVED DURING SCHOOL-MASKED)

All files:

- KVERSION (2006 DATA RELEASE VERSION)

**15d. Changes to release version 3.0**

SAQ Eligibility:

The SAQ eligibility indicator has been updated to reflect changes in SAQ eligibility rules across waves. There are now two indicators. The first

indicator (KLBRTYPE) identifies aspects of the respondent and/or interview that affect eligibility (enhanced face-to-face status, mode of interview, proxy and nursing home status). This indicator can be used to identify a comparable SAQ sample across all waves. The second indicator (KLBELIG) is a simple binary variable that identifies whether or not the respondent was eligible for the SAQ in that wave, given the eligibility rules that were in operation at the time.

The SAQ completion indicator (KLBCOMP) is very similar to the previous version. The SAQ is considered to be complete if one or more substantive variable contains non-missing data. One change from the previous version is that respondents who were not eligible for the SAQ but who completed it anyway are now assigned a completion status on the LBCOMP variable. In the past they were assigned missing on this variable. The number of such cases is very small.

More information on the SAQ eligibility rules and methodology is provided in the SAQ documentation report at this link:

<http://hrsonline.isr.umich.edu/sitedocs/userg/HRS2006-2010SAQdoc.pdf>

## **16. Obtaining the Data**

### **16A. Registration and Downloading the Data**

HRS data are available for free to researchers and analysts at the HRS Web site. In order to obtain public release data, you must first register at our Web site. Once you have completed the registration process, your username and password will be sent to you via e-mail. Your username and password are required to download any data files.

By registering all users, we are able to document for our sponsors the size and diversity of our user community. Registered users receive user support, information related to errors in the data, future releases, workshops, and publication lists. The information you provide will not be used for any commercial use, and will not be redistributed to third parties.

## **16B. Conditions of Use**

By registering, you agree to the Conditions of Use governing access to the Health and Retirement Study public release data. You must agree to

- o not attempt to identify respondents
- o not transfer data to third parties except as specified
- o not share your username and password
- o include specified citations in work based on HRS data
- o provide information to us about publications based on HRS data
- o report apparent errors in the HRS data or documentation files
- o notify us of changes in your contact information

For more information concerning privacy issues and conditions of use, please read "Conditions of Use for Public Data Files" and "Privacy and Security Notice" at the Public File Download Area of the HRS Web site.

## **16C. Publications Based on Data**

As part of the data registration process, you agree to include specified citations and to inform HRS of any papers, publications, or presentations based on HRS data. Please send a copy of any publications you produce based on HRS data, with a bibliographical reference, if appropriate, to the address below.

Health and Retirement Study  
Attn: Papers and Publications  
The Institute for Social Research, Room 3050  
P.O. Box 1248  
Ann Arbor, MI (USA) 48106-1248

Alternately, you may contact us by e-mail at [hrsquest@isr.umich.edu](mailto:hrsquest@isr.umich.edu) with "Attn: Papers and Publications" in the subject line.

## **17. If You Need to Know More**

This document is intended to serve as a brief overview and to provide guidelines for using the 2006 HRS Core (Final, Version 3.0) data. If you have questions or concerns that are not adequately covered here or on our Web site, or if you have any comments, please contact us. We will do our best to provide answers.

### **17A. HRS Internet Site**

Health and Retirement Study public release data and additional information about the study are available on the Internet. To access the data and other relevant information, point your Web browser to the HRS Web site:

<http://hrsonline.isr.umich.edu/>

### **17B. Contact Information**

If you need to contact us, you may do so by one of the methods listed below.

Internet: Help Desk at our Web site

E-mail: [hrsquest@isr.umich.edu](mailto:hrsquest@isr.umich.edu)

Postal service:

Health and Retirement Study  
The Institute for Social Research, Room 3050



The University of Michigan  
P.O. Box 1248  
Ann Arbor, MI 48106-1248

FAX: (734) 647-1186



## Appendix A

### A. Examples of Sub-Household and Respondent Person Number and Other Person Number Assignments

In the first year of data collection, all households, consisting of either a single respondent or of two married or partnered respondents, were assigned a SUBHH of 0.

In subsequent waves, a SUBHH of 0 indicates that the original household has not split due to divorce or separation of spouses or partners, although one member of a couple may have died or a single respondent may have become married or partnered.

A value of 1 or 2 indicates a household in which the original couple split, divorced or separated. One of the original couple is assigned a SUBHH of 1; the other is assigned a SUBHH of 2.

A value of 5 or 6 indicates a previously split household split a second time. One of the couple from a SUBHH 1 or 2 retains a SUBHH of 1 or 2; the other is assigned a SUBHH 5 or 6.

A value of 7 indicates respondents from split household reunited<sup>1</sup>.

It is important to understand these assignments when you merge records from different waves of the study.

#### A1. Married Couple Stays Married.

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 012345 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

At the time of the second cross-section the two respondents are still married, and each retains their HHID of 012345 and their SUBHH of 0 and his and her PN of 10 and 020, respectively.

Time 1

Household records

HHID=012345 ASUBHH=0

Respondent records

HHID=012345 PN=010 ASUBHH=0

HHID=012345 PN=020 ASUBHH=0

Time 2

Household records

HHID=012345 CSUBHH=0

Respondent records

HHID=012345 PN=010 CSUBHH=0

HHID=012345 PN=020 CSUBHH=0

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<sup>1</sup> In addition, a SUBHH of 3 or 4 indicates the "household" of a deceased respondent who is considered to be in a household of his or her own. These values do not occur in these files because all records in these files are from living respondents.

## **A2. Couple Divorces.**

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 023456 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 023456, but one is assigned a SUBHH of 1 and the other is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=023456 ASUBHH=0

Respondent records

HHID=023456 PN=010 ASUBHH=0

HHID=023456 PN=020 ASUBHH=0

Time 2

Household records

HHID=023456 CSUBHH=1

HHID=023456 CSUBHH=2

Respondent records

HHID=023456 PN=010 CSUBHH=1

HHID=023456 PN=020 CSUBHH=2

## **A3. One or Both Respondents Die.**

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 034567 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

One respondent dies before the next wave. At the next wave, both respondents retain their HHID of 034567. The living respondent retains her SUBHH of 0; the deceased respondent is assigned a SUBHH of 3. (If both respondents die, one would be assigned a SUBHH of 3 and the other would be assigned a SUBHH of 4.) Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=034567 ASUBHH=0

Respondent records

HHID=034567 PN=010 ASUBHH=0

HHID=034567 PN=020 ASUBHH=0

Time 2

Household records

HHID=034567 CSUBHH=0

HHID=034567 CSUBHH=3 (in exit interview)

Respondent records

HHID=034567 PN=010 CSUBHH=3 (in exit interview)

HHID=034567 PN=020 CSUBHH=0

## **A4. Single Respondent Marries.**

A respondent who has never been married is in the first cross-section. The respondent is assigned a HHID of 045678 and a SUBHH of 0 and a PN of 010.

At the time of the second cross-section, the respondent has married. Both the respondent and her new spouse are assigned a HHID of 045678 and a SUBHH of 0 because the household was not divided. The original respondent retains her PN of 010. Her new spouse is assigned PN of 011.

Time 1

Household records

HHID=045678 ASUBHH=0

Respondent records

HHID=045678 PN=010 ASUBHH=0

Time 2

Household records

HHID=045678 CSUBHH=0

Respondent records

HHID=045678 PN=010 CSUBHH=0

HHID=045678 PN=011 CSUBHH=0

#### **A5. Couple Divorces, One Respondent Remarries and Divorces.**

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 056789 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced and he has remarried. Both original respondents retain the HHID of 056789, but she is assigned a SUBHH of 1 and he is assigned a SUBHH of 2. His new spouse is also assigned the HHID of 056789 and the SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively. His new spouse is assigned PN of 011.

By the time of the third cross-section, that new couple has gotten divorced. All respondents retain the HHID of 056789. The original sample member ex-wife has the SUBHH of 1. The original sample member ex-husband has a SUBHH of 2, and the non-original sample member, his second ex-wife, is assigned the SUBHH of 5. Each original respondent retains his and her PN of 010 and 020, respectively. His second ex-wife retains her PN of 011.

Time 1

Household records

HHID=056789 ASUBHH=0

Respondent records

HHID=056789 PN=010 ASUBHH=0

HHID=056789 PN=020 ASUBHH=0

Time 2

Household records

HHID=056789 CSUBHH=1

HHID=056789 CSUBHH=2

Respondent records

HHID=056789 PN=010 CSUBHH=2

HHID=056789 PN=011 CSUBHH=2

HHID=056789 PN=020 CSUBHH=1

Time 3

Household records

HHID=056789 FSUBHH=1

HHID=056789 FSUBHH=2  
HHID=056789 FSUBHH=5

Respondent records

HHID=056789 PN=010 FSUBHH=2  
HHID=056789 PN=011 FSUBHH=5  
HHID=056789 PN=020 FSUBHH=1

### **A6. Couple Divorces and Marries Again.**

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 067890 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 067890, but one is assigned a SUBHH of 1 and the other is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively.

By the time of the third cross-section, the respondents have remarried each other. Both are assigned the HHID of 067890 and the SUBHH of 7. Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=067890 ASUBHH=0

Respondent records

HHID=067890 PN=010 ASUBHH=0  
HHID=067890 PN=020 ASUBHH=0

Time 2

Household records

HHID=067890 CSUBHH=1  
HHID=067890 CSUBHH=2

Respondent records

HHID=067890 PN=010 CSUBHH=1  
HHID=067890 PN=020 CSUBHH=2

Time 3

Household records

HHID=067890 FSUBHH=7

Respondent records

HHID=067890 PN=010 FSUBHH=7  
HHID=067890 PN=020 FSUBHH=7

### **A7. Married Couple with Children and Siblings.**

At the time of the first cross-section, sample household with a HHID of 078901 contains two respondents assigned PNs of 010 and 020, respectively. Associated with the household are three children with OPNs of 101, 102, and 103, and two siblings with OPNs of 051 and 052. All seven persons will keep those same PNs and OPNs across time. A friend who lives with the respondents is assigned an OPN of 080. The friend will keep her OPN of 080 across time only if she is a household member at each wave.

Time 1

Household records

HHID=078901 ASUBHH=0

Respondent records

HHID=078901 PN=010 ASUBHH=0  
HHID=078901 PN=020 ASUBHH=0

Household member/child records

HHID=078901 ASUBHH=0 OPN=101 (child)  
HHID=078901 ASUBHH=0 OPN=102 (child)  
HHID=078901 ASUBHH=0 OPN=103 (child)  
HHID=078901 ASUBHH=0 OPN=051 (sibling)  
HHID=078901 ASUBHH=0 OPN=052 (sibling)  
HHID=078901 ASUBHH=0 OPN=080 (friend)

**A8. Couple with Children and Siblings Divorces.**

At the time of the first cross-section, sample household with a HHID of 089012 contains two respondents assigned PNs of 010 and 020, respectively. Associated with the household are two children with OPNs of 101, and 102, and three siblings, her two brothers with OPNs of 051 and 052 and his sister with an OPN of 061. A friend who lives with the respondents is assigned an OPN of 080.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 089012, but he is assigned a SUBHH of 2 and she is assigned a SUBHH of 1. Each original respondent retains his and her PN of 010 and 020, respectively.

The two children appear both in their father's SUBHH 2 and also in their mother's SUBHH 1 with their respective OPNs, 101, and 102. The three siblings appear in the SUBHH of their respective siblings and maintain their respective OPNs. The ex-wife's brothers appear as part of her SUBHH 1 with their OPNs of 051 and 052, respectively. The ex-husband's sister appears as part of his SUBHH 2 with her OPN of 061. The friend has moved out and does not appear in either household.

**Time 1**

Household records

HHID=089012 ASUBHH=0

Respondent records

HHID=089012 PN=010 ASUBHH=0  
HHID=089012 PN=020 ASUBHH=0

Household member/child records

HHID=089012 ASUBHH=0 OPN=101 (child)  
HHID=089012 ASUBHH=0 OPN=102 (child)  
HHID=089012 ASUBHH=0 OPN=051 (her brother)  
HHID=089012 ASUBHH=0 OPN=052 (her brother)  
HHID=089012 ASUBHH=0 OPN=061 (his sister)  
HHID=089012 ASUBHH=0 OPN=080 (friend)

**Time 2**

Household records

HHID=089012 CSUBHH=1  
HHID=089012 CSUBHH=2

Respondent records

HHID=089012 PN=010 CSUBHH=2  
HHID=089012 PN=020 CSUBHH=1

Household member/child records

HHID=089012 CSUBHH=1 OPN=101 (child)  
HHID=089012 CSUBHH=1 OPN=102 (child)  
HHID=089012 CSUBHH=1 OPN=051 (her brother)  
HHID=089012 CSUBHH=1 OPN=052 (her brother)

HHID=089012 CSUBHH=2 OPN=101 (child)  
HHID=089012 CSUBHH=2 OPN=102 (child)  
HHID=089012 CSUBHH=2 OPN=061 (his sister)

**A9. Couple Divorces, One Respondent Remarries, Both Split-off Households Have New Members.**

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 090123 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. She has moved in with her mother. He has married a woman with two children. At the second cross-section, both original respondents retain the HHID of 090123, but he is assigned a SUBHH of 1 and she is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively. His new spouse and new stepchildren are assigned the HHID of 090123 and the SUBHH of 1. His new spouse is assigned a PN of 011. His new stepchildren are assigned OPNs of 151 and 152. Her mother is assigned the HHID of 090123 and the SUBHH of 2 and an OPN of 151.

**Time 1**

Household records

HHID=090123 ASUBHH=0

Respondent records

HHID=090123 PN=010 ASUBHH=0

HHID=090123 PN=020 ASUBHH=0

**Time 2**

Household records

HHID=090123 CSUBHH=1

HHID=090123 CSUBHH=2

Respondent records

HHID=090123 PN=010 CSUBHH=1

HHID=090123 PN=011 CSUBHH=1 (new wife)

HHID=090123 PN=020 CSUBHH=2

Household member/child records

HHID=090123 CSUBHH=1 OPN=151 (his stepchild)

HHID=090123 CSUBHH=1 OPN=152 (his stepchild)

HHID=090123 CSUBHH=2 OPN=151 (her mom)



## APPENDIX B

### B. Master Codes

Included in this file are the "Master Codes" for HRS. Other areas of the codebook often refer to these lists, as they are too long to replicate at each variable that uses the codes.

The "Master Codes" in order of appearance are:

- Health Conditions - Categorical
- Health Conditions - Alphabetical List
- Occupation Codes
- Industry Codes
- State and Country Codes

### B1. Health Conditions - Categorical

NOTE: If necessary, use individual "Other" categories if system or type of condition is clear; otherwise, code 997.

#### Cancers and tumors; skin conditions

- 101. Cancer - any site or type; leukemia; Hodgkin's disease; melanomas; non-Hodgkin's lymphoma; "tumors" (if specified as malignant); lymphoma; metastasis; angiosarcoma; carcinoma; myeloma/multiple myeloma
- 102. Tumors, cysts or growths (exc. 101); "polyps"; osteomyelitis; pre-cancer; neuroma; benign tumors; mole removal; warts
- 103. Skin conditions - any mention exc. cancer (101) or tumor (102); dermatitis; eczema; "rashes"; Paget's disease; skin ulcers; bed sores; bullous pemphigoid; hair loss; pemphigus; seborrheic keratoses; rosacea; alopecia; psoriasis; burns (also use code 194 if available)

#### Musculoskeletal system and connective tissue

- 111. Arthritis; rheumatism; bursitis; ankylosing spondylitis; Reiter's syndrome; rheumatica; polymyalgia rheumatica; osteoarthritis
- 112. Back/neck/spine problems - chronic stiffness, deformity or pain; disc problems; scoliosis; spina bifida; myelodysplastic syndrome; "bad back"; back/neck injuries (also use code 194 if available)
- 113. Stiffness, deformity, numbness or chronic pain in foot, leg, arm or hand; shoulder or rotator cuff; "bad knee"/hip problems; hip/knee replacement; plantar fasciitis; drop foot; leg cramps; tennis elbow; sprain (location NA) (also use code 194 if available)
- 114. Missing legs, feet, arms, hands, or fingers (from amputation or congenital deformity)
- 115. Paralysis - any mention (incl. from polio - i.e. Post-polio syndrome)
- 116. Hernias; hiatal hernia; rectocele; cystocele
- 117. Muscular dystrophy; mitochondrial myopathy
- 118. Fibromyalgia; fibromyositis; fibrositis; myofascial pain syndrome.
- 119. Other musculoskeletal or connective tissue problems - lupus; osteoporosis; pinched nerve (location not specified); sciatica/sciatic nerve problem; carpal tunnel syndrome; costochondritis; Dupuytren's contracture; polymyositis; scleroderma; spinal stenosis; chromosome leak into the muscles; bone spurs (location not specified); Cellulitis; tendonitis (location not specified); TMJ (temporomandibular joint syndrome); trigeminal neuralgia; CREST syndrome/limited scleroderma; polymyalgia;

avascular necrosis (osteonecrosis); neural muscular myositis; bone disease; myalgia; myasthenia (ocular myasthenia); myositis; osteopenia; neuritis; skull bone injuries (also use code 194 if available); vascular necrosis; broken or damaged bones (location NA) from injuries/accidents (also use code 194 if available); pulled muscle (also use code 194 if available); strain (location NA) (also use code 194 if available); tendon damage (location NA) (also use code 194 if available)

### **Heart, circulatory and blood conditions**

- 121. Heart problems - heart attack (coronary) or failure; arteriosclerosis; heart aneurysms; heart deformities (congenital); heart murmurs; heart valve blockage; heart valve prolapse; heart valve replacement; angina; "bad heart"; congestive heart disease; cardiomyopathy; atrial fibrillation; MI; myocardial infarction; multiple infarction; myocarditis; endocarditis; arterial blockage; hardening of arteries; heart bypass surgery; mitral valve prolapse; myocardial ischemia; rheumatic heart disease
- 122. High blood pressure (hypertension); uncontrollable blood pressure; blood pressure problems (not specified high or low); HTN
- 123. Stroke; cerebral hemorrhage or accident; hematoma (if related to brain)
- 124. Blood disorders - blood disease; anemia; aplastic (hypoplastic) anemia; hemophilia; polycythemia vera; "bad blood"; toxemia; brain aneurysm; TIA; cold agglutinin disease; polycythemia; triglycerides or "high triglycerides"; toxoplasmosis; blood transfusion; sickle cell trait/anemia; hemochromatosis; bone marrow failure; factor VIII; elevated factor VIII; factor VIII deficiency; thrombocytopenia; sepsis; aneurysm (brain)
- 129. Other circulatory problems - phlebitis; (blood) clots; embolisms; varicose veins; hemorrhoids; low blood pressure; giant cell arteritis; hematoma (if not related to brain or location not specified); gangrene; vascular disease; pulmonary thrombosis; pulmonary embolism; Raynaud's disease; APLS Hughes syndrome; aneurysm (when not in heart or brain); elasticity of arteries; calcification of limbs; lymphoedema; claudication; pulmonary hypertension; rheumatic fever; blockage in lung

### **Respiratory system conditions**

- 131. Allergies; hay fever; sinusitis; sinus problems; sinus headaches; tonsillitis; celiac disease, sprue (gluten intolerance); hives
- 132. Asthma
- 133. Bronchitis; pneumonia; "acute upper respiratory problems/diseases"; Legionnaire's disease; Alpha-1 Antitrypsin deficiency; fungus in chest; respiratory pulmonary disease
- 134. Emphysema; COPD (chronic obstructive pulmonary disease); smoking related lung problems
- 139. Other respiratory/breathing problems - tuberculosis; sarcoidosis; ventilatory insufficiency; idiopathic pulmonary fibrosis; respiratory failure; NFS; asbestos (in lungs); black lung; pleurisy

### **Endocrine, metabolic and nutritional conditions**

- 141. Diabetes; high blood sugar
- 142. Thyroid trouble/problems; goiter; hyperthyroidism; graves disease; Hashimoto's disease
- 143. Cystic fibrosis
- 144. Nutritional problems; weight problems; eating disorders; high cholesterol; obesity; overweight; vitamin deficiency
- 145. Sugar problems - NFS; erratic blood sugar

149. Other endocrine/metabolic problems - pancreatitis; pituitary problems; gland problem; Addison's disease; gout; nephrotic syndrome; primary adrenal insufficiency; parathyroid problems; endocrinology syndrome; amyloidosis; acromegaly; hormone problems; Hyperpituitarism; hypoglycemia; low blood sugar

### **Digestive system (stomach, liver, gallbladder, kidney, bladder)**

151. Stomach and intestinal conditions - acid reflux; reflux disease; heartburn; stomach reflux; GERD (gastroesophageal reflux disease); Barrett's esophagus; ulcers (stomach, peptic, duodenal or not further specified); colitis; ulcerative colitis; gastritis; diverticulitis; diverticulosis; appendicitis; Crohn's disease; intestinal adhesions; Rendu-Osler-Weber disease; abdominal adhesions; colostomy; silicates disease; "stomach pains"; ileostomy; dumping syndrome; gastroenteritis; Irritable Bowel Syndrome; diarrhea; appendectomy; enteritis; Ileitis; peritonitis; stomach removal
152. Liver conditions - cirrhosis; hepatitis; benign hepatic hypertrophy; encephalopathy "caused by liver problems"; jaundice
153. Kidney conditions - kidney stones; kidney failure (incl. dialysis); nephritis
154. Gallbladder conditions - gallstones; blockage of bile ducts; gallbladder removal
155. Bladder conditions (except 156) - urinary infections; interstitial cystitis; urosepsis
156. Urinary incontinence; urinary loss/leakage; problems with bladder control
157. Spleen conditions; enlarged spleen
159. Other digestive system problems; bleeding; internal bleeding; hemorrhage; esophagus torn, ruptured or bleeding; swallowing difficulty; bowel incontinence

### **Neurological and sensory conditions**

161. Blindness or vision problems - glaucoma; cataracts; detached/torn retina; macular degeneration; uveitis; conjunctivitis; eye conditions - NFS
162. Deafness; hearing loss or other ear conditions; tinnitus; vestibular disorder; Meniere's disease
163. Multiple sclerosis; cerebral palsy; epilepsy; Parkinson's; ALS (amyotrophic lateral sclerosis or Lou Gehrig's disease); "seizures"; neuropathy; Peripheral neuropathy
164. Speech conditions (any mention) - Congenital speech defects; stuttering; Laryngectomy; speech impediment
165. Mental retardation; mental impairment; learning disabilities; down syndrome; ADD (attention deficit disorder); dyslexia
169. Other neurological/sensory problems - headaches; migraines; dizziness; blackouts; brain damage - NFS (also use code 194 if available); meningitis; memory loss; shingles; arachnoiditis; Bell's palsy; Charcot-Marie-Tooth disease; Guillain-Barre syndrome; Medial nerve palsy; myasthenia gravis; myokymia; reflex sympathetic dystrophy (RSD); restless leg syndrome (RLS); Sjogren's syndrome; spasmodic torticollis; balance problems; closed head injury; coma; paralyzed diaphragm; facial neuralgia; hydrocephalus; inclusive body myositis; spinal cerebella ataxia; benign/familial tremors; vertigo; upper motor neuron/motoneuron problems; progressive supranuclear palsy (PSP); thoracic outlet syndrome; "shaky hands"; spinal cord damage from injuries/accident (also use code 194 if available)

### **Reproductive system and prostate conditions**

- 171. Pregnancy and childbirth problems - miscarriage; stillbirth; hemorrhaging or complications from birth of child; episiotomy; Rh factor
- 172. Infertility; sterilization; vasectomy; tubal ligation; tubes tied
- 173. Prostate conditions; PSA; "high PSA"
- 179. Other problems of reproductive system - hysterectomy; ovarian problems; PMS; menopause; dysmenorrhea; endometriosis; painful menstrual periods; "female problems"; gynecological problems - NFS; removal of reproductive organs (excluding cancer and tumors)

### **Emotional and psychological conditions**

- 181. Alcoholism
- 182. Drug abuse/addiction/dependence
- 183. Other severe psychological conditions - (chronic) depression; schizophrenia; mania; paranoia; autism; psychosis; panic attacks; agoraphobia; bipolar disorder (manic depression); posttraumatic stress disorder (PTSD); anxiety;
- 189. Other emotional and psychological problems; "mental problems" - NFS; "nerves (bad)"; "nervous breakdown"; stress; stress related problems; night wandering; behavioral problems; insomnia;

### **Miscellaneous**

- 191. Alzheimer's disease; "senility"; dementia
- 192. Dental and gum conditions - any mention
- 193. Acute infectious diseases - flu; colds; fever; mumps; Dengue fever; Lyme disease; infection; staph infection; MRSA; Epstein-Barr virus; mononucleosis; influenza; measles; rubella; strep throat; "virus" - NFS
- 194. Injuries and traumas - broken bones; fractures; pulled muscles; strains; tendon damage; burns; lacerations; concussion; side effects/conditions due to surgery; side effects due to medication LOW PRIORITY--code resulting chronic or ongoing conditions if possible
- 195. Sleep disorders - sleep apnea; narcolepsy; catpalexy
- 196. Immune system disorders; HIV positive; AIDS; ARC;

### **Cause of death**

- 601. Suicide
- 602. Murder
- 603. Killed in war/combat
- 604. Motor vehicle accident - incl. as pedestrian
- 605. Industrial/work related accident
- 606. Sporting accident
- 607. Other accidental death; accidental death - NA type of accident
- 608. Still born; died at birth or infancy - NFS

### **Other symptoms**

- 595. Old age; "everything wore out"; bedridden; infirmity; "natural causes"; failure to thrive in older adults
- 596. Lack of energy/strength; fatigue - NFS; chronic fatigue; don't have get up and go
- 597. Edema; retaining water; retaining fluids; swelling; (no specific part of body)
- 996. None
- 997. Other health condition
- 998. DK (Don't Know); NA (Not Ascertained)
- 999. RF (Refused);

## **B2. Health Conditions - Alphabetical List**

- 151. Abdominal adhesions
- 151. Acid Reflux
- 149. Acromegaly
- 193. Acute infectious diseases
- 133. Acute upper respiratory diseases/problems
- 165. ADD (attention deficit disorder)
- 149. Addison's disease
- 183. Agoraphobia
- 196. AIDS
- 181. Alcoholism
- 131. Allergies
- 103. Alopecia
- 133. Alpha-1 Antitrypsin deficiency
- 163. ALS
- 191. Alzheimer's disease
- 114. Amputation of limbs
- 149. Amyloidosis
- 163. Amyotrophic lateral sclerosis
- 124. Anemia
- 129. Aneurysm (location not specified but excl. heart/brain)
- 124. Aneurysm, brain
- 121. Aneurysm, heart
- 121. Angina
- 101. Angiosarcoma
- 111. Ankylosing spondylitis
- 183. Anxiety
- 124. Aplastic (hypoplastic) anemia
- 129. APLS Hughes syndrome
- 151. Appendectomy
- 151. Appendicitis
- 169. Arachnoiditis
- 196. ARC
- 121. Arterial blockage
- 121. Arteries, hardening
- 129. Arteries, elasticity
- 121. Arteriosclerosis
- 111. Arthritis
- 139. Asbestos, (in lungs)
- 132. Asthma
- 121. Atrial fibrillation
- 183. Autism
- 119. Avascular necrosis (osteonecrosis)
  
- 112. Back injuries (also use code 194 if available)
- 112. Back, bad
- 169. Balance problems
- 151. Barrett's esophagus
- 103. Bed sores
- 595. Bedridden
- 189. Behavioral problems
- 169. Bell's palsy
- 152. Benign hepatic hypertrophy
- 169. Benign tremors
- 102. Benign tumors

154. Bile duct, blockage of  
183. Bipolar depression  
183. Bipolar disorder  
171. Birth of child  
139. Black lung  
169. Blackouts  
156. Bladder control problems  
155. Bladder conditions (excl. 156)  
159. Bleeding (of the digestive tract)  
161. Blindness  
154. Blockage of bile ducts  
129. Blood clots  
124. Blood disorders, NFS  
124. Blood disorders, specific  
124. Blood disease  
122. Blood pressure problems, (not specified high or low)  
145. Blood sugar, erratic  
124. Blood transfusion  
119. Bone disease  
124. Bone marrow failure  
119. Bone spurs (location not specified)  
119. Bones, broken/damaged (location not specified) from injuries/accidents  
    (also use code 194 if available)  
159. Bowel incontinence  
151. Bowel, irritable  
124. Brain aneurism  
169. Brain damage, NFS (also use code 194 if available)  
139. Breathing problems  
133. Bronchitis  
103. Bullous pemphigoid  
103. Burns (also use code 194 if available)  
111. Bursitis  
121. Bypass surgery

129. Calcification of limbs  
101. Cancer  
101. Carcinoma  
121. Cardiomyopathy  
119. Carpal tunnel syndrome  
195. Cataplexy  
161. Cataracts  
131. Celiac disease  
119. Cellulitis  
163. Cerebral palsy  
123. Cerebral hemorrhage  
169. Charcot-Marie-Tooth disease  
171. Childbirth  
171. Childbirth/pregnancy problems  
171. Childbirth, complications from  
171. Childbirth, hemorrhaging from  
144. Cholesterol, high  
119. Chromosome leak into the muscles  
134. Chronic Obstructive Pulmonary Disease (COPD)  
596. Chronic fatigue  
129. Circulation  
129. Circulatory system, other specific  
152. Cirrhosis

129. Claudication  
169. Closed head injury  
129. Clots  
124. Cold agglutin disease  
193. Colds  
151. Colitis  
151. Colostomy  
169. Coma  
194. Concussions  
194. Conditions/side effects due to surgery  
164. Congenital speech defects  
121. Congestive heart disease  
161. Conjunctivitis  
134. COPD (Chronic Obstructive Pulmonary Disease)  
121. Coronary  
119. Costochondritis  
119. CREST syndrome/limited scleroderma  
151. Crohn's disease  
143. Cystic fibrosis  
155. Cystitis  
116. Cystocele  
102. Cysts

162. Deafness  
114. Deformation of limbs  
191. Dementia  
193. Dengue fever  
192. Dental conditions  
183. Depression (chronic)  
103. Dermatitis  
161. Detached retina  
141. Diabetes  
153. Dialysis  
151. Diarrhea  
112. Disc, slipped  
112. Disc, worn  
151. Diverticulosis  
169. Dizziness  
165. Down syndrome  
113. Drop foot  
182. Drug addiction/abuse  
182. Drug dependence  
151. Dumping syndrome  
119. Dupuytren's contracture  
165. Dyslexia  
179. Dysmenorrhea

162. Ear conditions, all  
144. Eating disorders  
103. Eczema  
597. Edema  
129. Elasticity of arteries  
129. Embolisms  
134. Emphysema  
152. Encephalopathy "caused by liver problems"  
121. Endocarditis  
149. Endocrinology syndrome

179. Endometriosis  
596. Energy (low)  
151. Enteritis  
163. Epilepsy  
171. Episiotomy  
193. Epstein-Barr virus  
159. Esophagus torn, ruptured, bleeding  
161. Eye conditions, NFS

169. Facial neuralgia  
124. Factor VIII/Factor VIII deficiency/Elevated Factor VIII  
595. Failure to thrive in older adults  
169. Familial tremors  
596. Fatigue (chronic); lack of energy/strength  
179. Female problems  
193. Fever  
118. Fibromyalgia  
118. Fibromyositis  
118. Fibrositis  
193. Flu  
133. Fungus in chest

154. Gallbladder conditions  
154. Gallbladder, removal  
154. Gallstones  
129. Gangrene  
151. Gastritis  
151. Gastroenteritis  
151. GERD  
129. Giant cell arteritis  
149. Gland problem  
161. Glaucoma  
142. Goiter  
149. Gout  
142. Grave's disease  
102. Growths  
169. Guillain-Barre syndrome  
192. Gum conditions  
179. Gynecological problems, NFS

103. Hair loss  
142. Hashimoto's disease  
131. Hay fever  
169. Headaches  
162. Hearing, loss of  
121. Heart aneurysm  
121. Heart attack  
121. Heart bypass surgery  
121. Heart condition, NFS  
121. Heart deformities, congenital  
121. Heart failure  
121. Heart murmurs  
121. Heart valve prolapse  
121. Heart valve replacement  
121. Heart valve blockage  
151. Heartburn  
123. Hematoma, if related to brain



129. Hematoma, if not related to brain (or location NFS)  
124. Hemochromatosis  
124. Hemophilia  
159. Hemorrhage  
129. Hemorrhoids  
152. Hepatitis  
116. Hernia, hiatal  
116. Hiatal hernia  
122. High blood pressure  
141. High blood sugar  
144. High cholesterol  
124. High triglycerides  
113. Hip problem/replacement  
196. HIV positive  
131. Hives  
101. Hodgkin's disease  
149. Hormone problems  
122. HTN  
169. Hydrocephalus  
149. Hyperpituitarism  
122. Hypertension  
142. Hyperthyroidism  
149. Hypoglycemia  
124. Hypoplastic anemia  
179. Hysterectomy

139. Idiopathic pulmonary fibrosis  
151. Ileitis  
151. Ileostomy  
196. Immune system disorders  
169. Inclusive body myositis  
605. Industrial/work related accident  
193. Infection (body part not specified)  
172. Infertility  
595. Infirmary  
193. Influenza  
194. Injuries, accidental  
189. Insomnia  
159. Internal bleeding  
159. Internal bleeding (of the digestive tract)  
155. Interstitial cystitis  
151. Intestinal conditions  
151. Intestinal adhesions  
151. Irritable bowel conditions

152. Jaundice

153. Kidney failure (incl. dialysis)  
153. Kidney removal  
153. Kidney stones  
603. Killed in war/combat  
113. Knee, bad/problem/replacement

194. Lacerations  
164. Laryngectomy  
165. Learning disabilities  
113. Leg cramps

133. Legionnaire's disease  
101. Leukemia  
152. Liver conditions  
163. Lou Gehrig's disease  
149. Low blood sugar  
596. Low strength  
134. Lung problems (smoking related)  
129. Lung, blockage in  
119. Lupus  
193. Lyme disease  
129. Lymphoedema  
101. Lymphoma

161. Macular degeneration  
101. Malignant tumors  
183. Mania  
183. Manic depression  
193. Measles  
169. Medial nerve palsy  
194. Medication, side affects from  
101. Melanoma  
101. Melanoma, removal  
169. Memory loss  
162. Meniere's disease  
169. Meningitis  
179. Menopause  
179. Menstrual periods, painful  
189. Mental health problem, vague  
165. Mental impairment  
189. Mental problems  
165. Mental retardation  
101. Metastasis  
121. MI  
169. Migraines  
171. Miscarriage  
117. Mitochondrial myopathy  
121. Mitral valve prolapse  
102. Mole removal  
193. Mononucleosis  
169. Motor neuron or motoneuron problems  
604. Motor vehicle accident, incl. as pedestrian  
193. MRSA  
163. Multiple sclerosis  
121. Multiple infarctions  
193. Mumps  
602. Murder  
117. Muscular dystrophy  
119. Myalgia  
119. Myasthenia gravis  
119. Myasthenia (ocular myasthenia)  
112. Myelodysplastic syndrome  
101. Myeloma / Multiple myeloma  
121. Myocardial ischemia  
121. Myocardial infarction  
121. Myocarditis  
118. Myofascial pain syndrome  
169. Myokymia

119. Myositis

195. Narcolepsy

595. Natural causes

112. Neck injuries (also use code 194 if available)

153. Nephritis

149. Nephrotic syndrome

119. Nerve, pinched (location not specified)

189. Nerves, bad

189. Nervous condition

189. Nervous breakdown

119. Neural muscular myositis

119. Neuritis

102. Neuroma

163. Neuropathy

189. Night wandering

101. Non-Hodgkin's lymphoma

996. None

144. Nutritional problems

144. Obesity

595. Old age

111. Osteoarthritis

102. Osteomyelitis

119. Osteopenia

119. Osteoporosis

607. Other accidental death; accidental death NA type of accident

997. Other health condition

179. Ovarian problems

144. Overweight

103. Paget's disease

149. Pancreatitis

183. Panic attacks

115. Paralysis (any mention)

169. Paralyzed diaphragm

183. Paranoia

149. Parathyroid problems

163. Parkinson's disease

103. Pemphigus

163. Peripheral neuropathy

151. Peritonitis

129. Phlebitis

119. Pinched nerve (location not specified)

149. Pituitary problems

113. Plantar fasciitis

139. Pleurisy

133. Pneumonia

115. Polio

124. Polycythemia

124. Polycythemia vera

119. Polymyalgia (polymyalgia rheumatica)

119. Polymyositis

102. Polyps

115. Post-polio syndrome

183. Posttraumatic stress disorder (PTSD)

102. Pre-cancer

171. Pregnancy/childbirth problems  
179. Premenstrual syndrome (P.M.S.)  
149. Primary adrenal insufficient  
169. Progressive supranuclear palsy (PSP)  
173. Prostate conditions  
173. PSA, "high PSA"  
103. Psoriasis  
169. PSP (progressive supranuclear palsy)  
183. Psychosis  
119. Pulled muscle; location not specified (also use code 194 if available)  
129. Pulmonary hypertension  
139. Pulmonary idiopathic fibrosis  
129. Pulmonary embolism  
129. Pulmonary thrombosis

103. Rash, skin  
129. Raynaud's disease  
116. Rectocele  
169. Reflex sympathetic dystrophy (RSD)  
151. Reflux disease  
111. Reiter's Syndrome  
151. Rendu-Osler-Weber disease  
179. Reproductive organs, removal of (exc. for cancer, tumors)  
139. Respiratory failure, NFS  
133. Respiratory diseases, acute upper  
133. Respiratory pulmonary disease  
169. Restless legs syndrome (RLS)  
597. Retaining water OR retaining fluids  
161. Retina, torn  
161. Retina, detached  
171. RH factor  
121. Rheumatic heart disease  
129. Rheumatic fever  
111. Rheumatica  
111. Rheumatism  
103. Rosacea  
113. Rotator cuff problems  
193. Rubella

139. Sarcoidosis  
183. Schizophrenia  
119. Sciatica/sciatic nerve problem  
119. Scleroderma  
112. Scoliosis  
103. Seborrhic keratosis  
163. Seizures  
191. Senility  
124. Sepsis  
169. Shaky hands  
169. Shingles  
113. Shoulder problems  
124. Sick cell trait  
124. Sick cell anemia  
194. Side effects from medication  
194. Side effects/conditions due to surgery  
151. Silicates disease  
131. Sinus headaches

131. Sinus problems  
131. Sinusitis  
169. Sjogren's syndrome  
103. Skin conditions  
103. Skin ulcers  
119. Skull bone injuries (also use code 194 if available)  
194. Skull fracture  
195. Sleep apnea  
134. Smoking related lung problems  
169. Spasmodic torticollis  
164. Speech conditions, all  
164. Speech impediment  
112. Spina Bifida  
169. Spinal Cerebellar Ataxia  
169. Spinal cord damage, from injuries/accident (also use code 194 if available)  
119. Spinal stenosis  
157. Spleen conditions  
157. Spleen, enlarged  
606. Sporting accident  
113. Sprain; location not specified (also use code 194 if available)  
131. Sprue (gluten intolerance)  
193. Staph infection  
172. Sterilization  
608. Still born; died at birth or infancy -- NFS  
171. Stillbirth  
608. Stillbirth (as cause of death)  
151. Stomach conditions  
151. Stomach reflux  
151. Stomach pains  
151. Stomach, removal  
119. Strain; location not specified (also use code 194 if available)  
596. Strength (low)  
193. Strep throat  
189. Stress/stress related problems  
123. Stroke  
164. Stuttering  
145. Sugar problems; NFS  
601. Suicide  
159. Swallowing difficulty  
597. Swelling, (no specified part of body)

119. Tendon damage; location not specified (also use code 194 if available)  
119. Tendonitis (location not specified)  
113. Tennis elbow  
169. Thoracic outlet syndrome  
124. Thrombocytopenia  
142. Thyroid problems  
124. TIA  
162. Tinnitus  
119. TMJ (temporomandibular joint syndrome)  
131. Tonsillitis  
124. Toxemia  
124. Toxoplasmosis  
119. Trigeminal neuralgia  
124. Triglycerides OR "high triglycerides"  
172. Tubal ligation  
139. Tuberculosis

172. Tubes tied  
101. Tumor, malignant (or cancerous)  
102. Tumor, NA whether malignant or benign  
102. Tumors, benign

151. Ulcerative colitis  
151. Ulcers (not further specified)  
103. Ulcers, skin  
151. Ulcers, stomach (peptic or duodenal)  
169. Upper motor neuron/motoneuron problems  
155. Urinary infections  
156. Urinary incontinence/loss/leakage  
155. Urosepsis  
161. Uveitis

129. Varicose veins  
119. Vascular necrosis  
129. Vascular disease  
172. Vasectomy  
139. Ventilatory insufficiency  
169. Vertigo  
162. Vestibular disorder  
193. Virus, NFS  
161. Vision problems, NFS  
144. Vitamin deficiency

102. Warts  
144. Weight problems

## **C. Occupation Codes**

Equivalent numeric codes follow the alphabetic codes. Either code may be used, depending on the processing method. Numbers in parentheses following the industry categories are the 1980 Standard Occupational Classification code equivalents. The abbreviation "pt" means "part" and "n.e.c." means "not elsewhere classified."

### **MGR Management Occupations**

1. Chief Executives
2. General and Operations Managers
3. Legislators
4. Advertising and Promotions Managers
5. Marketing and Sales Managers
6. Public Relations Managers
10. Administrative Services Managers
11. Computer and Information Systems Managers
12. Financial Managers
13. Human Resources Managers
14. Industrial Production Managers
15. Purchasing Managers
16. Transportation, Storage, and Distribution Managers
20. Farm, Ranch, and Other Agricultural Managers
21. Farmers and Ranchers
22. Construction Managers
23. Education Administrators
30. Engineering Managers
31. Food Service Managers
32. Funeral Directors
33. Gaming Managers
34. Lodging Managers
35. Medical and Health Services Managers
36. Natural Science Managers
40. Postmasters and Mail Superintendents
41. Property, Real Estate, and Community Association Managers
42. Social and Community Service Managers
43. Managers, All Other

### **BUS Business Operations Specialists**

50. Agents and Business Managers of Artists, Performers, and Athletes
51. Purchasing Agents and Buyers, Farm Products
52. Wholesale and Retail Buyers, Except Farm Products
53. Purchasing Agents, Except Wholesale, Retail, and Farm Products
54. Claims Adjusters, Appraisers, Examiners, and Investigators
056. Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
060. Cost Estimators
062. Human Resources, Training, and Labor Relations Specialists
70. Logisticians
71. Management Analysts
72. Meeting and Convention Planners
73. Other Business Operations Specialists

### **FIN Financial Specialists**

80. Accountants and Auditors
81. Appraisers and Assessors of Real Estate

- 82. Budget Analysts
- 83. Credit Analysts
- 84. Financial Analysts
- 85. Personal Financial Advisors
- 86. Insurance Underwriters
- 90. Financial Examiners
- 91. Loan Counselors and Officers
- 93. Tax Examiners, Collectors, and Revenue Agents
- 94. Tax Preparers
- 95. Financial Specialists, All Other

**CMM Computer and Mathematical Occupations**

- 100. Computer Scientists and Systems Analysts
- 101. Computer Programmers
- 102. Computer Software Engineers
- 104. Computer Support Specialists
- 106. Database Administrators
- 110. Network and Computer Systems Administrators
- 111. Network Systems and Data Communications Analysts
- 120. Actuaries
- 121. Mathematicians
- 122. Operations Research Analysts
- 123. Statisticians
- 124. Miscellaneous Mathematical Scientists and Technicians

**ENG Architecture and Engineering Occupations**

- 130. Architects, Except Naval
- 131. Surveyors, Cartographers, and Photogrammetrists
- 132. Aerospace Engineers
- 133. Agricultural Engineers
- 134. Biomedical Engineers
- 135. Chemical Engineers
- 136. Civil Engineers
- 140. Computer Hardware Engineers
- 141. Electrical and Electronics Engineers
- 142. Environmental Engineers
- 143. Industrial Engineers, including Health and Safety
- 144. Marine Engineers and Naval Architects
- 145. Materials Engineers
- 146. Mechanical Engineers
- 150. Mining and Geological Engineers, Including Mining Safety Engineers
- 151. Nuclear Engineers
- 152. Petroleum Engineers
- 153. Engineers, All Other
- 154. Drafters
- 155. Engineering Technicians, Except Drafters
- 156. Surveying and Mapping Technicians

**SCI Life, Physical, and Social Science Occupations**

- 160. Agricultural and Food Scientists
- 161. Biological Scientists
- 164. Conservation Scientists and Foresters
- 165. Medical Scientists
- 170. Astronomers and Physicists
- 171. Atmospheric and Space Scientists
- 172. Chemists and Materials Scientists
- 174. Environmental Scientists and Geoscientists



- 176. Physical Scientists, All Other
- 180. Economists
- 181. Market and Survey Researchers
- 182. Psychologists
- 183. Sociologists
- 184. Urban and Regional Planners
- 186. Miscellaneous Social Scientists and Related Workers
- 190. Agricultural and Food Science Technicians
- 191. Biological Technicians
- 192. Chemical Technicians
- 193. Geological and Petroleum Technicians
- 194. Nuclear Technicians
- 196. Other Life, Physical, and Social Science Technicians

**CMS Community and Social Services Occupations**

- 200. Counselors
- 201. Social Workers
- 202. Miscellaneous Community and Social Service Specialists
- 204. Clergy
- 205. Directors, Religious Activities and Education
- 206. Religious Workers, All Other

**IGL Legal Occupations**

- 210. Lawyers
- 211. Judges, Magistrates, and Other Judicial Workers
- 214. Paralegals and Legal Assistants
- 215. Miscellaneous Legal Support Workers

**EDU Education, Training, and Library Occupations**

- 220. Postsecondary Teachers
- 230. Preschool and Kindergarten Teachers
- 231. Elementary and Middle School Teachers
- 232. Secondary School Teachers
- 233. Special Education Teachers
- 234. Other Teachers and Instructors
- 240. Archivists, Curators, and Museum Technicians
- 243. Librarians
- 244. Library Technicians
- 254. Teacher Assistants
- 255. Other Education, Training, and Library Workers

**ENT Arts, Design, Entertainment, Sports, and Media Occupations**

- 260. Artists and Related Workers
- 263. Designers
- 270. Actors
- 271. Producers and Directors
- 272. Athletes, Coaches, Umpires, and Related Workers
- 274. Dancers and Choreographers
- 275. Musicians, Singers, and Related Workers
- 276. Entertainers and Performers, Sports and Related Workers, All Other
- 280. Announcers
- 281. News Analysts, Reporters and Correspondents
- 282. Public Relations Specialists
- 283. Editors
- 284. Technical Writers
- 285. Writers and Authors
- 286. Miscellaneous Media and Communication Workers

- 290. Broadcast and Sound Engineering Technicians and Radio Operators
- 291. Photographers
- 292. Television, Video, and Motion Picture Camera Operators and Editors
- 296. Media and Communication Equipment Workers, All Other

**MED Healthcare Practitioners and Technical Occupations**

- 300. Chiropractors
- 301. Dentists
- 303. Dietitians and Nutritionists
- 304. Optometrists
- 305. Pharmacists
- 306. Physicians and Surgeons
- 311. Physician Assistants
- 312. Podiatrists
- 313. Registered Nurses
- 314. Audiologists
- 315. Occupational Therapists
- 316. Physical Therapists
- 320. Radiation Therapists
- 321. Recreational Therapists
- 322. Respiratory Therapists
- 323. Speech-Language Pathologists
- 324. Therapists, All Other
- 325. Veterinarians
- 326. Health Diagnosing and Treating Practitioners, All Other
- 330. Clinical Laboratory Technologists and Technicians
- 331. Dental Hygienists
- 332. Diagnostic Related Technologists and Technicians
- 340. Emergency Medical Technicians and Paramedics
- 341. Health Diagnosing and Treating Practitioner Support Technicians
- 350. Licensed Practical and Licensed Vocational Nurses
- 351. Medical Records and Health Information Technicians
- 352. Opticians, Dispensing
- 353. Miscellaneous Health Technologists and Technicians
- 354. Other Healthcare Practitioners and Technical Occupations

**HLS Healthcare Support Occupations**

- 360. Nursing, Psychiatric, and Home Health Aides
- 361. Occupational Therapist Assistants and Aides
- 362. Physical Therapist Assistants and Aides
- 363. Massage Therapists
- 364. Dental Assistants
- 365. Medical Assistants and Other Healthcare Support Occupations

**PRT Protective Service Occupations**

- 370. First-Line Supervisors/Managers of Correctional Officers
- 371. First-Line Supervisors/Managers of Police and Detectives
- 372. First-Line Supervisors/Managers of Fire Fighting and Prevention Workers
- 373. Supervisors, Protective Service Workers, All Other
- 374. Fire Fighters
- 375. Fire Inspectors
- 380. Bailiffs, Correctional Officers, and Jailers
- 382. Detectives and Criminal Investigators
- 383. Fish and Game Wardens
- 384. Parking Enforcement Workers
- 385. Police and Sheriff's Patrol Officers
- 386. Transit and Railroad Police

- 390. Animal Control Workers
- 391. Private Detectives and Investigators
- 392. Security Guards and Gaming Surveillance Officers
- 394. Crossing Guards
- 395. Lifeguards and Other Protective Service Workers

**EAT Food Preparation and Serving Occupations**

- 400. Chefs and Head Cooks
- 401. First-Line Supervisors/Managers of Food Preparation and Serving Workers
- 402. Cooks
- 403. Food Preparation Workers
- 404. Bartenders
- 405. Combined Food Preparation and Serving Workers, Including Fast Food
- 406. Counter Attendant, Cafeteria, Food Concession, and Coffee Shop
- 411. Waiters and Waitresses
- 412. Food Servers, Non-restaurant
- 413. Dining Room and Cafeteria Attendants and Bartender Helpers
- 414. Dishwashers
- 415. Host and Hostesses, Restaurant, Lounge, and Coffee Shop
- 416. Food Preparation and Serving Related Workers, All Other

**CLN Building and Grounds Cleaning and Maintenance Occupations**

- 420. First-Line Supervisors/Managers of Housekeeping and Janitorial Workers
- 421. First-Line Supervisors/Managers of Landscaping, Lawn Service, and Grounds keeping Workers
- 422. Janitors and Building Cleaners
- 423. Maids and Housekeeping Cleaners
- 424. Pest Control Workers
- 425. Grounds Maintenance Workers

**PRS Personal Care and Service Occupations**

- 430. First-Line Supervisors/Managers of Gaming Workers
- 432. First-Line Supervisors/Managers of Personal Service Workers
- 434. Animal Trainers
- 435. Nonfarm Animal Caretakers
- 440. Gaming Services Workers
- 441. Motion Picture Projectionists
- 442. Ushers, Lobby Attendants, and Ticket Takers
- 443. Miscellaneous Entertainment Attendants and Related Workers
- 446. Funeral Service Workers
- 450. Barbers
- 451. Hairdressers, Hairstylists, and Cosmetologists
- 452. Miscellaneous Personal Appearance Workers
- 453. Baggage Porters, Bellhops, and Concierges
- 454. Tour and Travel Guides
- 455. Transportation Attendants
- 460. Child Care Workers
- 461. Personal and Home Care Aides
- 462. Recreation and Fitness Workers
- 464. Residential Advisors
- 465. Personal Care and Service Workers, All Other

**SAL Sales Occupations**

- 470. First-Line Supervisors/Managers of Retail Sales Workers
- 471. First-Line Supervisors/Managers of Non-Retail Sales
- 472. Cashiers
- 474. Counter and Rental Clerks
- 475. Parts Salespersons
- 476. Retail Salespersons
- 480. Advertising Sales Agents
- 481. Insurance Sales Agents
- 482. Securities, Commodities, and Financial Services Sales Agents
- 483. Travel Agents
- 484. Sales Representatives, Services, All Other
- 485. Sales Representatives, Wholesale and Manufacturing
- 490. Models, Demonstrators, and Product Promoters
- 492. Real Estate Brokers and Sales Agents
- 493. Sales Engineers
- 494. Telemarketers
- 495. Door-to-Door Sales Workers, News and Street Vendors, and Related Workers
- 496. Sales and Related Workers, All Other

**OFF Office and Administrative Support Occupations**

- 500. First-Line Supervisors/Managers of Office and Administrative Support Workers
- 501. Switchboard Operators, Including Answering Service
- 502. Telephone Operators
- 503. Communications Equipment Operators, All Other
- 510. Bill and Account Collectors
- 511. Billing and Posting Clerks and Machine Operators
- 512. Bookkeeping, Accounting, and Auditing Clerks
- 513. Gaming Cage Workers
- 514. Payroll and Timekeeping Clerks
- 515. Procurement Clerks
- 516. Tellers
- 520. Brokerage Clerks
- 521. Correspondence Clerks
- 522. Court, Municipal, and License Clerks
- 523. Credit Authorizers, Checkers, and Clerks
- 524. Customer Service Representatives
- 525. Eligibility Interviewers, Government Programs
- 526. File Clerks
- 530. Hotel, Motel, and Resort Desk Clerks
- 531. Interviewers, Except Eligibility and Loan
- 532. Library Assistants, Clerical
- 533. Loan Interviewers and Clerks
- 534. New Account Clerks
- 535. Order Clerks
- 536. Human Resources Assistants, Except Payroll and Timekeeping
- 540. Receptionists and Information Clerks
- 541. Reservation and Transportation Ticket Agents and Travel Clerks
- 542. Information and Record Clerks, All Other
- 550. Cargo and Freight Agents
- 551. Couriers and Messengers
- 552. Dispatchers
- 553. Meter Readers, Utilities
- 554. Postal Service Clerks
- 555. Postal Service Mail Carriers

- 556. Postal Service Mail Sorters, Processors, and Processing Machine Operators
- 560. Production, Planning, and Expediting Clerks
- 561. Shipping, Receiving, and Traffic Clerks
- 562. Stock Clerks and Order Fillers
- 563. Weighers, Measurers, Checkers, and Samplers, Recordkeeping
- 570. Secretaries and Administrative Assistants
- 580. Computer Operators
- 581. Data Entry Keyers
- 582. Word Processors and Typists
- 583. Desktop Publishers
- 584. Insurance Claims and Policy Processing Clerks
- 585. Mail Clerks and Mail Machine Operators, Except Postal Service
- 586. Office Clerks, General
- 590. Office Machine Operators, Except Computer
- 591. Proofreaders and Copy Markers
- 592. Statistical Assistants
- 593. Office and Administrative Support Workers, All Other

**FFF Farming, Fishing, and Forestry Occupations**

- 600. First-Line Supervisors/Managers/Contractors of Farming, Fishing, and Forestry Workers
- 601. Agricultural Inspectors
- 602. Animal Breeders
- 604. Graders and Sorters, Agricultural Products
- 605. Other Agricultural Workers
- 610. Fishers and Related Fishing Workers
- 611. Hunters and Trappers
- 612. Forest and Conservation Workers
- 613. Logging Worker
- CON Construction Trades**
- 620. First-Line Supervisors/Managers of Construction Trades and Extraction Workers
- 621. Boilermakers
- 622. Brickmasons, Blockmasons, and Stonemasons
- 623. Carpenters
- 624. Carpet, Floor, and Tile Installers and Finishers
- 625. Cement Masons, Concrete Finishers, and Terrazzo Workers
- 626. Construction Laborers
- 630. Paving, Surfacing, and Tamping Equipment Operators
- 631. Pile-Driver Operators
- 632. Operating Engineers and Other Construction Equipment Operators
- 633. Drywall Installers, Ceiling Tile Installers, and Tapers
- 635. Electricians
- 636. Glaziers
- 640. Insulation Workers
- 642. Painters, Construction and Maintenance
- 643. Paperhangers
- 644. Pipelayers, Plumbers, Pipefitters, and Steamfitters
- 646. Plasterers and Stucco Masons
- 650. Reinforcing Iron and Rebar Workers
- 651. Roofers
- 652. Sheet Metal Workers
- 653. Structural Iron and Steel Workers
- 660. Helpers, Construction Trades
- 666. Construction and Building Inspectors
- 670. Elevator Installers and Repairers
- 671. Fence Erectors
- 672. Hazardous Materials Removal Workers

- 673. Highway Maintenance Workers
- 674. Rail-Track Laying and Maintenance Equipment Operators
- 675. Septic Tank Servicers and Sewer Pipe Cleaners
- 676. Miscellaneous Construction and Related Workers

**EXT Extraction Workers**

- 680. Derrick, Rotary Drill, and Service Unit Operators, Oil, Gas, and Mining
- 682. Earth Drillers, Except Oil and Gas
- 683. Explosives Workers, Ordnance Handling Experts, and Blasters
- 684. Mining Machine Operators
- 691. Roof Bolters, Mining
- 692. Roustabouts, Oil and Gas
- 693. Helpers--Extraction Workers
- 694. Other Extraction Workers

**RPR Installation, Maintenance, and Repair Workers**

- 700. First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
- 701. Computer, Automated Teller, and Office Machine Repairers
- 702. Radio and Telecommunications Equipment Installers and Repairers
- 703. Avionics Technicians
- 704. Electric Motor, Power Tool, and Related Repairers
- 705. Electrical and Electronics Installers and Repairers, Transportation Equipment
- 710. Electrical and Electronics Repairers, Industrial and Utility
- 711. Electronic Equipment Installers and Repairers, Motor Vehicles
- 712. Electronic Home Entertainment Equipment Installers and Repairers
- 713. Security and Fire Alarm Systems Installers
- 714. Aircraft Mechanics and Service Technicians
- 715. Automotive Body and Related Repairers
- 716. Automotive Glass Installers and Repairers
- 720. Automotive Service Technicians and Mechanics
- 721. Bus and Truck Mechanics and Diesel Engine Specialists
- 722. Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics
- 724. Small Engine Mechanics
- 726. Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
- 730. Control and Valve Installers and Repairers
- 731. Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- 732. Home Appliance Repairers
- 733. Industrial and Refractory Machinery Mechanics
- 734. Maintenance and Repair Workers, General
- 735. Maintenance Workers, Machinery
- 736. Millwrights
- 741. Electrical Power-Line Installers and Repairers
- 742. Telecommunications Line Installers and Repairers
- 743. Precision Instrument and Equipment Repairers
- 751. Coin, Vending, and Amusement Machine Servicers and Repairers
- 752. Commercial Divers
- 754. Locksmiths and Safe Repairers
- 755. Manufactured Building and Mobile Home Installers
- 756. Riggers
- 760. Signal and Track Switch Repairers
- 761. Helpers--Installation, Maintenance, and Repair Workers
- 762. Other Installation, Maintenance, and Repair Workers

**PRD Production Occupations**

- 770. First-Line Supervisors/Managers of Production and Operating Workers
- 771. Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- 772. Electrical, Electronics, and Electromechanical Assemblers
- 773. Engine and Other Machine Assemblers
- 774. Structural Metal Fabricators and Fitters
- 775. Miscellaneous Assemblers and Fabricators
- 780. Bakers
- 781. Butchers and Other Meat, Poultry, and Fish Processing Workers
- 783. Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
- 784. Food Batchmakers
- 785. Food Cooking Machine Operators and Tenders
- 790. Computer Control Programmers and Operators
- 792. Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- 793. Forging Machine Setters, Operators, and Tenders, Metal and Plastic
- 794. Rolling Machine Setters, Operators, and Tenders, metal and Plastic
- 795. Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
- 796. Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 800. Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 801. Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 802. Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
- 803. Machinists
- 804. Metal Furnace and Kiln Operators and Tenders
- 806. Model Makers and Patternmakers, Metal and Plastic
- 810. Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic
- 812. Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 813. Tool and Die Makers
- 814. Welding, Soldering, and Brazing Workers
- 815. Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
- 816. Lay-Out Workers, Metal and Plastic
- 820. Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
- 821. Tool Grinders, Filers, and Sharpeners
- 822. Metalworkers and Plastic Workers, All Other
- 823. Bookbinders and Bindery Workers
- 824. Job Printers
- 825. Prepress Technicians and Workers
- 826. Printing Machine Operators
- 830. Laundry and Dry-Cleaning Workers
- 831. Pressers, Textile, Garment, and Related Materials
- 832. Sewing Machine Operators
- 833. Shoe and Leather Workers and Repairers
- 834. Shoe Machine Operators and Tenders
- 835. Tailors, Dressmakers, and Sewers
- 836. Textile Bleaching and Dyeing Machine Operators and Tenders
- 840. Textile Cutting Machine Setters, Operators, and Tenders
- 841. Textile Knitting and Weaving Machine Setters, Operators, and Tenders
- 842. Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders

- 843. Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers
- 844. Fabric and Apparel Patternmakers
- 845. Upholsterers
- 846. Textile, Apparel, and Furnishings Workers, All Other
- 850. Cabinetmakers and Bench Carpenters
- 851. Furniture Finishers
- 852. Model Makers and Patternmakers, Wood
- 853. Sawing Machine Setters, Operators, and Tenders, Wood
- 854. Woodworking Machine Setters, Operators, and Tenders, Except Sawing
- 855. Woodworkers, All Other
- 860. Power Plant Operators, Distributors, and Dispatchers
- 861. Stationary Engineers and Boiler Operators
- 862. Water and Liquid Waste Treatment Plant and System Operators
- 863. Miscellaneous Plant and System Operators
- 864. Chemical Processing Machine Setters, Operators, and Tenders
- 865. Crushing, Grinding, Polishing, Mixing, and Blending Workers
- 871. Cutting Workers
- 872. Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
- 873. Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
- 874. Inspectors, Testers, Sorters, Samplers, and Weighers
- 875. Jewelers and Precious Stone and Metal Workers
- 876. Medical, Dental, and Ophthalmic Laboratory Technicians
- 880. Packaging and Filling Machine Operators and Tenders
- 881. Painting Workers
- 883. Photographic Process Workers and Processing Machine Operators
- 884. Semiconductor Processors
- 885. Cementing and Gluing Machine Operators and Tenders
- 886. Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders
- 890. Cooling and Freezing Equipment Operators and Tenders
- 891. Etchers and Engravers
- 892. Molders, Shapers, and Casters, Except Metal and Plastic
- 893. Paper Goods Machine Setters, Operators, and Tenders
- 894. Tire Builders
- 895. Helpers--Production Workers
- 896. Production Workers, All Other

**TRN Transportation and Material Moving Occupations**

- 900. Supervisors, Transportation and Material Moving Workers
- 903. Aircraft Pilots and Flight Engineers
- 904. Air Traffic Controllers and Airfield Operations Specialists
- 911. Ambulance Drivers and Attendants, Except Emergency Medical Technicians
- 912. Bus Drivers
- 913. Driver/Sales Workers and Truck Drivers
- 914. Taxi Drivers and Chauffeurs
- 915. Motor Vehicle Operators, All Other
- 920. Locomotive Engineers and Operators
- 923. Railroad Brake, Signal, and Switch Operators
- 924. Railroad Conductors and Yardmasters
- 926. Subway, Streetcar, and Other Rail Transportation Workers
- 930. Sailors and Marine Oilers
- 931. Ship and Boat Captains and Operators
- 933. Ship Engineers
- 934. Bridge and Lock Tenders
- 935. Parking Lot Attendants
- 936. Service Station Attendants



- 941. Transportation Inspectors
- 942. Other Transportation Workers
- 950. Conveyor Operators and Tenders
- 951. Crane and Tower Operators
- 952. Dredge, Excavating, and Loading Machine Operators
- 956. Hoist and Winch Operators
- 960. Industrial Truck and Tractor Operators
- 961. Cleaners of Vehicles and Equipment
- 962. Laborers and Freight, Stock, and Material Movers, Hand
- 963. Machine Feeders and Off bearers
- 964. Packers and Packagers, Hand
- 965. Pumping Station Operators
- 972. Refuse and Recyclable Material Collectors
- 973. Shuttle Car Operators
- 974. Tank Car, Truck, and Ship Loaders
- 975. Material Moving Workers, All Other

**MIL Military Specific Occupations**

- 980. Military Officer Special and Tactical Operations Leaders/Managers
- 981. First-Line Enlisted Military Supervisors/Managers
- 982. Military Enlisted Tactical Ops and Air/Weapons Specialists and Crew members
- 983. Military, Rank Not Specified (Census only)
- 999. DK; NA; Don't know; Not ascertained

*Source: U.S. Census Bureau, Demographic Surveys Division,  
Created: August 7 2001*

## **D. Industry Codes**

Equivalent numeric codes follow the alphabetic codes. Either code may be used, depending on the processing method. Numbers in parentheses following the industry categories are the SIC definitions. The abbreviation "pt" means "part" and "n.e.c." means "not elsewhere classified."

### **AGRICULTURE, FORESTRY, FISHING, AND HUNTING**

- 17. Crop production
- 18. Animal production
- 19. Forestry except logging
- 27. Logging
- 28. Fishing, hunting, and trapping
- 29. Support activities for agriculture and forestry

### **MINING**

- 37. Oil and gas extraction
- 38. Coal mining
- 39. Metal ore mining
- 47. Nonmetallic mineral mining and quarrying
- 48. Not specified type of mining
- 49. Support activities for mining

### **UTILITIES**

- 57. Electric power generation transmission and distribution
- 58. Natural gas distribution
- 59. Electric and gas and other combinations
- 67. Water, steam, air-conditioning, and irrigation systems
- 68. Sewage treatment facilities
- 69. Not specified utilities

### **CONSTRUCTION**

- 077. Construction

### **MANUFACTURING**

- 107. Animal food, grain, and oilseed milling
- 108. Sugar and confectionery products
- 109. Fruit and vegetable preserving and specialty food Manufacturing
- 117. Dairy product manufacturing
- 118. Animal slaughtering and processing
- 119. Retail bakeries
- 127. Bakeries except retail
- 128. Seafood and other miscellaneous foods n.e.c.
- 129. Not specified food industries
- 137. Beverage manufacturing
- 139. Tobacco manufacturing
- 147. Fiber, yarn, and thread mills
- 148. Fabric mills, except knitting
- 149. Textile and fabric finishing and coating mills
- 157. Carpets and rugs manufacturing
- 159. Textile product mills except carpets and rugs
- 167. Knitting mills
- 168. Cut and sew apparel manufacturing
- 169. Apparel accessories and other apparel manufacturing
- 177. Footwear manufacturing

179. Leather tanning and products, except footwear manufacturing  
 187. Pulp, paper, and paperboard mills  
 188. Paperboard containers and boxes  
 189. Miscellaneous paper and pulp products  
 199. Printing and related support activities  
 207. Petroleum refining  
 209. Miscellaneous petroleum and coal products  
 217. Resin, synthetic rubber and fibers, and filaments manufacturing  
 218. Agricultural chemical manufacturing  
 219. Pharmaceutical and medicine manufacturing  
 227. Paint, coating, and adhesives manufacturing  
 228. Soap, cleaning compound, and cosmetic manufacturing  
 229. Industrial and miscellaneous chemicals  
 237. Plastics product manufacturing  
 238. Tire manufacturing  
 239. Rubber products, except tires, manufacturing  
 247. Pottery, ceramics, and related products manufacturing  
 248. Structural clay product manufacturing  
 249. Glass and glass product manufacturing  
 257. Cement, concrete, lime, and gypsum product manufacturing  
 259. Miscellaneous nonmetallic mineral product manufacturing  
 267. Iron and steel mills and steel product manufacturing  
 268. Aluminum production and processing  
 269. Nonferrous metal, except aluminum, production and processing  
 277. Foundries  
 278. Metal forgings and stampings  
 279. Cutlery and hand tool manufacturing  
 287. Structural metals and tank and shipping container manufacturing  
 288. Machine shops; turned product; screw nut and bolt manufacturing  
 289. Coating, engraving, heat treating and allied activities  
 297. Ordnance  
 298. Miscellaneous fabricated metal products manufacturing  
 299. Not specified metal industries  
 307. Agricultural implement manufacturing  
 308. Construction mining and oil field machinery manufacturing  
 309. Commercial and service industry machinery manufacturing  
 317. Metalworking machinery manufacturing  
 318. Engines, turbines, and power transmission equipment manufacturing  
 319. Machinery manufacturing, n.e.c.  
 329. Not specified machinery manufacturing  
 336. Computer and peripheral equipment manufacturing  
 337. Communications, audio, and video equipment manufacturing  
 338. Navigation, measuring, electrometrical, and control instruments  
 manufacturing  
 339. Electronic component and product manufacturing, n.e.c.  
 347. Household appliance manufacturing  
 349. Electrical machinery, equipment, and supplies manufacturing, n.e.c.  
 357. Motor vehicles and motor vehicle equipment manufacturing  
 358. Aircraft and parts manufacturing  
 359. Aerospace product and parts manufacturing  
 367. Railroad rolling stock manufacturing  
 368. Ship and boat building  
 369. Other transportation equipment manufacturing  
 377. Sawmills and wood preservation  
 378. Veneer, plywood, and engineered wood product manufacturing  
 379. Prefabricated wood buildings and mobile homes manufacturing  
 387. Miscellaneous wood product manufacturing

- 389. Furniture and fixtures
- 396. Medical equipment and supplies manufacturing
- 397. Toys, amusement, and sporting goods manufacturing
- 398. Miscellaneous manufacturing, n.e.c.
- 399. Not specified manufacturing industries

**WHOLESALE TRADE**

- 407. Motor vehicles, parts and supplies wholesalers
- 408. Furniture and home furnishing wholesalers
- 409. Lumber and other construction materials wholesalers
- 417. Professional and commercial equipment and supplies Wholesalers
- 418. Metals and minerals, except petroleum, wholesalers
- 419. Electrical goods wholesalers
- 426. Hardware, plumbing and heating equipment, and supplies wholesalers
- 427. Machinery, equipment, and supplies wholesalers
- 428. Recyclable material wholesalers
- 429. Miscellaneous durable goods wholesalers
- 437. Paper and paper product wholesalers
- 438. Drugs, sundries, and chemical and allied product Wholesalers
- 439. Apparel, fabrics, and notions wholesalers
- 447. Groceries and related product wholesalers
- 448. Farm product raw material wholesalers
- 449. Petroleum and petroleum product wholesalers
- 456. Alcoholic beverage wholesalers
- 457. Farm supplies wholesalers
- 458. Miscellaneous nondurable goods wholesalers
- 459. Not specified wholesale trade

**RETAIL TRADE**

- 467. Automobile dealers
- 468. Other motor vehicle dealers
- 469. Auto parts, accessories, and tire stores
- 477. Furniture and home furnishings stores
- 478. Household appliance stores
- 479. Radio, TV, and computer stores
- 487. Building material and supplies dealers
- 488. Hardware stores
- 489. Lawn and garden equipment and supplies stores
- 497. Grocery stores
- 498. Specialty food stores
- 499. Beer, wine, and liquor stores
- 507. Pharmacies and drug stores
- 508. Health and personal care, except drug, stores
- 509. Gasoline stations
- 517. Clothing and accessories, except shoe, stores
- 518. Shoe stores
- 519. Jewelry, luggage, and leather goods stores
- 527. Sporting goods, camera, and hobby and toy stores
- 528. Sewing, needlework and piece goods stores
- 529. Music stores
- 537. Book stores and news dealers
- 538. Department stores
- 539. Miscellaneous general merchandise stores
- 547. Retail florists
- 548. Office supplies and stationary stores
- 549. Used merchandise stores
- 557. Gift, novelty, and souvenir shops

- 558. Miscellaneous retail stores
- 559. Electronic shopping and mail-order houses
- 567. Vending machine operators
- 568. Fuel dealers
- 569. Other direct selling establishments
- 579. Not specified retail trade

**TRANSPORTATION AND WAREHOUSING**

- 607. Air transportation
- 608. Rail transportation
- 609. Water transportation
- 617. Truck transportation
- 618. Bus service and urban transit
- 619. Taxi and limousine service
- 627. Pipeline transportation
- 628. Scenic and sightseeing transportation
- 629. Services incidental to transportation
- 637. Postal Service
- 638. Courier and messengers
- 639. Warehousing and storage

**INFORMATION**

- 647. Newspaper publishers
- 648. Publishing except newspapers and software
- 649. Software publishing
- 657. Motion pictures and video industries
- 659. Sound recording industries
- 667. Radio and television broadcasting and cable
- 668. Wired telecommunications carriers
- 669. Other telecommunication services
- 677. Libraries and archives
- 678. Other information services
- 679. Data processing services

**FINANCE AND INSURANCE**

- 687. Banking and related activities
- 688. Savings institutions, including credit unions
- 689. Non-depository credit and related activities
- 697. Securities, commodities, funds, trusts, and other financial investments
- 698. Insurance carriers and related activities

**REAL ESTATE AND RENTAL AND LEASING**

- 707. Real estate
- 708. Automotive equipment rental and leasing
- 717. Video tape and disk rental
- 718. Other consumer goods rental
- 719. Commercial, industrial, and other intangible assets rental and leasing

**PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES**

- 727. Legal services
- 728. Accounting, tax preparation, bookkeeping and payroll services
- 729. Architectural, engineering, and related services
- 737. Specialized design services
- 738. Computer systems design and related services
- 739. Management, scientific and technical consulting services
- 746. Scientific research and development services
- 747. Advertising and related services

- 748. Veterinary services
- 749. Other professional, scientific and technical services

**MANAGEMENT, ADMINISTRATIVE AND SUPPORT, AND WASTE MANAGEMENT SERVICES**

- 757. Management of companies and enterprises
- 758. Employment services
- 759. Business support services
- 767. Travel arrangement and reservation services
- 768. Investigation and security services
- 769. Services to buildings and dwellings
- 777. Landscaping services
- 778. Other administrative and other support services
- 779. Waste management and remediation services

**EDUCATIONAL SERVICES**

- 786. Elementary and secondary schools
- 787. Colleges and universities, including junior colleges
- 788. Business, technical, and trade schools and training
- 789. Other schools, instruction, and educational services

**HEALTH CARE AND SOCIAL ASSISTANCE**

- 797. Offices of physicians
- 798. Offices of dentists
- 799. Office of chiropractors
- 807. Offices of optometrists
- 808. Offices of other health practitioners
- 809. Outpatient care centers
- 817. Home health care services
- 818. Other health care services
- 819. Hospitals
- 827. Nursing care facilities
- 829. Residential care facilities, without nursing
- 837. Individual and family services
- 838. Community food and housing, and emergency services
- 839. Vocational rehabilitation services
- 847. Child day care services

**ARTS, ENTERTAINMENT, AND RECREATION**

- 856. Independent artists, performing arts, spectator sports, and related industries
- 857. Museums, art galleries, historical sites, and similar Institutions
- 858. Bowling centers
- 859. Other amusement, gambling, and recreation industries

**Accommodations and Food Services**

- 866. Traveler accommodation
- 867. Recreational vehicle parks and camps, and rooming and boarding houses
- 868. Restaurants and other food services
- 869. Drinking places, alcoholic beverages

**OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)**

- 877. Automotive repair and maintenance
- 878. Car washes
- 879. Electronic and precision equipment repair and maintenance
- 887. Commercial and industrial machinery and equipment repair and maintenance
- 888. Personal and household goods repair and maintenance
- 889. Footwear and leather goods repair

- 897. Barber shops
- 898. Beauty salons
- 899. Nail salons and other personal care services
- 907. Dry cleaning and laundry services
- 908. Funeral homes, cemeteries and crematories
- 909. Other personal services
- 916. Religious organizations
- 917. Civic, social, advocacy organizations, and grantmaking and giving services
- 918. Labor unions
- 919. Business, professional, political, and similar Organizations
- 929. Private households

**PUBLIC ADMINISTRATION AND ACTIVE DUTY MILITARY**

- 937. Executive offices and legislative bodies
- 938. Public finance activities
- 939. Other general government and support
- 947. Justice, public order, and safety activities
- 948. Administration of human resource programs
- 949. Administration of environmental quality and housing programs
- 957. Administration of economic programs and space research
- 959. National security and international affairs
- 967. U.S. Army
- 968. U.S. Air Force
- 969. U.S. Navy
- 977. U.S. Marines
- 978. U.S. Coast Guard
- 979. U.S. Armed Forces, branch not specified
- 987. Military Reserves or National Guard
- 999. DK; NA; Don't know; Not ascertained

## **E. State and Country Codes**

### **E1. STATES**

1. Alaska (AK)
2. Alabama (AL)
53. American Samoa, Guam
3. Arizona (AZ)
4. Arkansas (AR)
  
5. California (CA)
6. Colorado (CO)
7. Connecticut (CT)
  
8. Delaware (DE)
51. Dist. of Columbia (DC)
  
9. Florida (FL)
  
10. Georgia (GA)
53. Guam (GU)
  
11. Hawaii (HI)
  
12. Idaho (ID)
13. Illinois (IL)
14. Indiana (IN)
15. Iowa (IA)
  
16. Kansas (KS)
17. Kentucky (KY)
  
18. Louisiana (LA)
  
19. Maine (ME)
20. Maryland (MD)
21. Massachusetts (MA)
22. Michigan (MI)
23. Minnesota (MN)
24. Mississippi (MS)
25. Missouri (MO)
26. Montana (MT)
  
27. Nebraska (NE)
28. Nevada (NV)
29. New Hampshire (NH)
30. New Jersey (NJ)
31. New Mexico (NM)
32. New York (NY)
33. North Carolina (NC)
34. North Dakota (ND)
  
35. Ohio (OH)
36. Oklahoma (OK)
37. Oregon (OR)



- 53. Panama Canal Zone
- 38. Pennsylvania (PA)
- 52. Puerto Rico (PR)
  
- 39. Rhode Island (RI)
  
- 40. South Carolina (SC)
- 41. South Dakota (SD)
  
- 42. Tennessee (TN)
- 43. Texas (TX)
  
- 44. Utah (UT)
  
- 45. Vermont (VT)
- 53. (U.S.) Virgin Islands
- 46. Virginia (VA)
  
- 47. Washington (WA)
- 51. Washington, D.C. (DC)
- 48. West Virginia (WV)
- 49. Wisconsin (WI)
- 50. Wyoming (WY)

**E2. OTHER U.S.**

- 51. District of Columbia; Washington, D.C.
- 52. Puerto Rico
- 53. Guam, American Samoa, U.S. Virgin Islands, Panama Canal Zone
  
- 59. USA, NA which state

**E3. OTHER COUNTRIES**

- 97. Other Country
  
- 98. DK
- 99. NA