# HEALTH AND RETIREMENT STUDY 2008 Core Final, Version 3.0 December 2014

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# Data Description and Usage

#### 1. Overview

The 2008 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 AGO9740), 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 us a copy of any publications you produce based on the data. See <a href="Obtaining the">Obtaining the</a>
Data for additional details.

# 1A. The Sample Interviewed in 2008

The data collection period for the 2008 interview was February 2008 through February 2009. 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). For more details about the sample, see our Web site.

# 1B. 2008 Questionnaire Sections

2008 Section	Content
PR	Preload
A	Coverscreen
В	Demographics
C	Physical Health
D	Cognition
E	Family Structure
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
RC	Repeat Cognition
Y	Time Calculations
IO	Interviewer Observations
LB	Leave-Behind Questionnaires
TN	Thumbnails

# 1C. Levels of Files

In the 2008 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 2008 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 2008.

# 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 not able to give an interview). The files contain one record for each respondent or proxy who gave an interview in 2008.

# 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 his/her own parents and siblings. Sibling data are also stored in the preload section, HO8PR\_SB.

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

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

# 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 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 "H08" for HRS 2008, 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.

```
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 H08A\_R includes variables from Section A (coverscreen) at the respondent level, whereas, H08A\_H contains variables from Section A (coverscreen) at the household level.

The following extensions are used for the six 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 39 data files for the 2008 HRS Core (Final, Version 3.0) data release. For example,

```
H08A_R.DA contains respondent data from Section A, H08A_R.SAS contains corresponding SAS program statements, H08A_R.SPS contains corresponding SPSS program statements, H08A_R.DO contains corresponding STATA DO statements, H08A_R.DCT contains corresponding STATA dictionary statements, and H08A_R.TXT contains the ASCII codebook.
```

#### 3. Data Files

The 2008 HRS Core (Final, Version 3.0) data are distributed in 39 data files. The files are listed below along with the number of cases (N), number of variables (NV), and the primary identifiers (IDS). The records in the data files are sorted in order by these primary identifiers.

The 2008 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.

```
Respondent level files, IDS=HHID PN
     H08PR R N=17217 NV= 171
     H08A R N=17217 NV= 34
     H08B R N=17217 NV= 179
     H08C_R N=17217 NV= 229
              N=17217 NV= 155
     H08D_R
     H08RC_R N=17217 NV= 89
     H08F_R N=17217 NV= 195
     H08G R N=17217 NV= 133
     H08I R N=17217 NV= 186
     H08IO_R N=17217 NV= 120
     H08J_R N=17217 NV= 1536
     H08K R N=17217 NV= 255
     H08L R
              N=17217 NV= 436
     H08LB_R N=17217 NV= 374
     H08M1_R N=17217 NV= 269
     H08M2 R N=17217 NV= 453
     H08N_R N=17217 NV= 338
     H08P_R N=17217 NV=70
     H08S R
             N=17217 NV= 115
     H08T_R N=17217 NV= 81
     H08V_R N=17217 NV= 331
     H08W_R N=17217 NV=43
     H08TN R N=17217 NV= 21
     H08Y_R N=17217 NV= 70
Household member and child level files IDS=HHID LSUBHH OPN
     H08PR MC N=69523 NV= 27
     H08E MC N=66128 NV= 28
Sibling level files IDS=HHID PN OPN
     H08PR_SB N=15599 NV= 24
     H08F_SB N=6400 NV= 28
Transfer-to-child-level-file IDS=HHID LSUBHH OPN
     H08E TC N=5521 NV= 24
Transfer-from-child-level-file IDS=HHID LSUBHH OPN
     H08E FC N=926 NV= 22
```

Household and respondent level weight variables for the 2008 sample are available in the HRS cross-wave Tracker file (2008, Version 1.0).

# 4. Identification Variables

Helper level file IDS=HHID PN OPN H08G\_HP N=4678 NV= 30

Identification variables for HRS 2008 are stored in character format.

# 4A. Primary Identification Variables

Several variables, HHID, LSUBHH, PN, and OPN, are used in various combinations to uniquely identify the seven different levels that comprise this data release.

#### 4A1. HHID - Household Identification Number

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. LSUBHH - 2008 Sub-household Identifier

In combination with HHID, LSUBHH uniquely identifies a household at the time of the 2008 data collection. Sub-household identifiers can be different at each wave. LSUBHH 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. PN is 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 2008 data collection HHID, LSUBHH and OPN uniquely identify another person in the household-member-and-child level files; HHID, PN, and OPN uniquely identify another person in the helper-level or sibling level files. OPN has three-digits.

# 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 IDENTIFICATION NUMBER
  - 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER

Two identifiers uniquely identify records in the

- o household-level datasets:
  - 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
  - 2) LSUBHH 2008 SUB HOUSEHOLD IDENTIFICATION NUMBER

Three identifiers uniquely identify records in the

- o helper-level datasets:
  - 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
  - 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
  - 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o household-member-and-child-level datasets:
  - 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
  - 2) LSUBHH 2008 SUB HOUSEHOLD IDENTIFICATION NUMBER
  - 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o sibling-level datasets:
  - 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
  - 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
  - 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 IDENTIFICATION NUMBER
  - 2) LSUBHH 2008 SUB HOUSEHOLD IDENTIFICATION NUMBER
  - 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:

```
LSUBHH 2008 SUB HOUSEHOLD IDENTIFICATION NUMBER
KSUBHH 2006 SUB HOUSEHOLD IDENTIFICATION NUMBER
LPN_SP 2008 SPOUSE/PARTNER PERSON NUMBER
LCSR 2008 WHETHER COVERSHEET RESPONDENT
LFAMR 2008 WHETHER FAMILY RESPONDENT
LFINR 2008 WHETHER FINANCIAL RESPONDENT
```

Secondary Identification Variables for

- o household-level,
- o household-member-and-child-level,
- o transfer-from-child-level and
- o transfer-to-child-level datasets:

```
KSUBHH 2006 SUB HOUSEHOLD IDENTIFICATION NUMBER
LPN_CS PERSON NUMBER OF COVER SCREEN RESPONDENT
LPN_FAM 2008 FAMILY RESP PERSON NUMBER
LPN_NCS 2008 FINANCIAL RESP PERSON NUMBER
LPN_NFAM 2008 NON-FAMILY RESP PERSON NUMBER
LPN_NFIN 2008 NON-FINANCIAL RESP PERSON NUMBER
LPN_NFIN 2008 NON-FINANCIAL RESP PERSON NUMBER
```

# 4D. Datasets Including LSUBHH and OPN as Primary Identifiers

When working with datasets which use LSUBHH and OPN as primary identifiers, such as household-member-and-child-level, transfer-to-child-level and transfer-from-child-level files, 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 <a href="Couple with Children and Siblings Divorces">Couple with Children and Siblings Divorces</a>, where a couple with children divorces; the record where HHID is 890121, LSUBHH is 1, and OPN is 101 is the report about the child from the mother, and the record where HHID is 890121, LSUBHH 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

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relationships to each respondent in a household. It is not always known, or always clarified whether a sibling is a blood sibling or a sibling in-law. Use of HHID and LSUBHH to merge each record in the HO8PR\_SB file to each line in the HO8F\_SB file, will result in a match to each record. Using the PN 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 a couple divorces, one respondent remarries, and both split-off households have new members. In this case, the record where HHID is 901231, LSUBHH is 2, and OPN is 151 is for the original wife's mother, while the record where HHID is 901231, LSUBHH is 1, and OPN is 151 is for the original 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 six smaller .zip files, one .pdf file, and one .txt file, or the eight smaller files available individually for separate download. The combined file is HO8core.zip.

The individual .zip files for separate download are:

Data file

H08da.zip containing data files.

Program statement files

H08sas.zip containing SAS data descriptors. H08sps.zip containing SPSS data descriptors. H08sta.zip containing STATA data descriptors.

Documentation files

H08cb.zip containing the codebook. H08qn.zip containing the questionnaire. H08dd.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:\hrs2008	Files downloaded from Web site
c:\hrs2008\codebook	Unzipped files from H08cb.zip
c:\hrs2008\data	Unzipped files from H08da.zip
c:\hrs2008\qnaire	Unzipped files from H08qn.zip
c:\hrs2008\sas	Unzipped files from H08sas.zip
c:\hrs2008\spss	Unzipped files from H08sps.zip
c:\hrs2008\STATA	Unzipped files from H08sta.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 39 .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 .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 H08A\_R.SAS go with the H08A\_R.DA data file.

# 6A. Using the Files with SAS

In order to create a SAS system file for a particular dataset, two file types must be present:

- .SAS program statement files and
- .DA data files.

To create a SAS system file, load the  $\star$ .SAS file into the SAS Program Editor.

If the \*.SAS file is located in "c:\hrs2008\sas" and the data file is located in "c:\hrs2008\data", you can run the \*.SAS file as is. A SAS system file (\*.SD2 or \*.SAS7BDAT) will be saved to the "c:\hrs2008\sas" directory.

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 program.

#### 6B. Using the Files with SPSS

In order to create an SPSS system file for a particular dataset, two file types must be present:

- .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:\hrs2008\spss" and the data file is located in "c:\hrs2008\data", you can run the \*.SPS file as is. An SPSS system file (\*.SAV) will be saved to the "c:\hrs2008\spss" directory.

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

In order to use STATA with a particular dataset, the following three file types must be present:

- .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, called "do files", which are used 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:\hrs2008\STATA" and the data file is located in "c:\hrs2008\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, go to  $\underline{Edit}$ , then  $\underline{Select\ All}$ , go to Format, Change Case, and select lowercase.

#### 7. Documentation

There are several types of documentation available for use with the 2008 HRS Core (Final, Version 3.0) data release. These include a codebook, a list of "Master Codes" and the 2008 box-and-arrow questionnaire. In addition, 2008 variables have been added to the Online Concordance.

#### 7A. Codebook

The HRS 2008 Codebook is provided as a series of 39 individual ASCII text files, as well as a single 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 all previous releases.

#### 7A1. Variable Names

Variable names begin with a letter designating the wave of data collection (L for 2008), followed by the section letter, and numbers after the section letter. For example, LC001 where L=2008, C=Section C (physical health), and 001 is the variable number. Variables from the preload section contain either "X" or "Z" as prefix letters. The "X" prefix signifies a variable that is updated by data collected in later sections of the questionnaire, whereas the "Z" prefix indicates a variable with preloaded data that were not changed by subsequent answers to questions. For example, LZ077\_(R PREV WAVE R FIN/FAM TYPE) signifies the Family/Financial Type assigned from the previous wave's interview, whereas LX007\_(R RESP FAM/FIN TYPE - UPDATED) indicates the current wave Family/Financial Type, which was updated based on responses in the 2008 interview.

# 7Ala. 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) + (M) + (mention number). For example, LN219M1 through LN219M5 are 2008 variables from Section N with one through 5 mentions.

Variable names for multiple mentions to questions within a loop can take one of two forms:

The first form is: (wave prefix) + (section letter) + (variable number) + (underscore) + (loop iteration) + (M) + (mention number). For example, LQ178\_1M1, is a 2008 variable from Section Q, in the first iteration of the loop, and the first mention.

The second form is: (wave prefix) + (section letter) + (variable number) + (underscore) + (loop iteration) + (letter designating mention number). For example, LN049\_1A, is a 2008 variable from Section N, in the first iteration of the loop, and the first mention.

Simple looped variables, which are not a multiple mention have an underscore (\_)in their name and a suffix that designates the loop, for example LN025\_1 is a 2008 variable from Section N, in the first iteration of the loop.

For variables that have a "W" right after the section designator, the variable names are slightly different. Variable names for multiple mentions of this type take the form: (wave prefix) + (section letter) + (W) + (variable number) + (letter designating loop iteration) + (mention number). For example, LKW097Al is a 2008 variable from Section K, in the first iteration of the loop, and the first mention. Other non-multiple mention variables of this type are named with the letter designating the loop iteration. For example, LKW002A is a 2008 variable from Section K in the first iteration of the loop.

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 was 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. Names, addresses, days of birth, information on geographical location and similar variables are not included in publicly released files. Some of these variables may be made available to analysts as restricted data. See our Web site for details.

Geographical locations are recoded to a level no more detailed than that of the U.S. Census Region and Division. Data on the highest educational degree earned have been grouped together to increase cell sizes. In prior waves, the occupation and industry data was coded using the 1980 Census Codes. However, in the 2008 release these data have been coded using the original three-digit 2000 U.S. Census codes.

The names of variables that were masked for confidentiality end in the capital letter "M"; for example, LX026M (1ST ADDRESS STATE - MASKED)

and LB024M (FATHER USUAL OCCUPATION - MASKED) are both masked variables.

#### 7B. Master Codes

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 2008 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.

# 7D. Other Types of Documentation

In addition to this document, the codebook, the Master Codes, and the Box and Arrow Questionnaire, three additional types of documentation are available.

# 7D1. Overview of HRS Public Data Files for Cross-sectional and Longitudinal Analysis

This is a thorough document that provides a description of structure and content for all HRS public data files and a detailed explanation for handling the longitudinal nature of the survey. It is located here: http://hrsonline.isr.umich.edu/sitedocs/dmgt/OverviewofHRSPublicData.pd f

# 7D2. Cross-Wave Tracker File

The HRS tracker file is created to facilitate the use of HRS data within and across waves. The file contains one record for every person who was ever eligible to be interviewed in any wave. Each record contains basic demographic information, interview status, and if, when and how an interview was conducted in each wave. Also included are cross-sectional weights and information on inter-respondent relationships, which are vital to almost all substantive analyses of the HRS data. The current version of the tracker file (Tracker 2008, Version 1.0) covers all types of interviews (core, exit, and post-exit) through HRS 2008. Please see the Cross-wave Tracker File Data Description for a more detailed description.

# 8. Additional Notes

The following are miscellaneous additional notes regarding HRS 2008 Final Data Release, Version 3.0. If we become aware of additional issues, they will be posted on our Web site in the <a href="Data Alerts">Data Alerts</a> section.

# 8A. Households with No Family or Financial Respondents

As noted earlier in this document, the data collection design was to have asked most questions of all respondents, some questions of just a designated family or financial respondent on behalf of the household. However, occasionally that is not what happened. For some households we

did not obtain an interview from a family or financial respondent. There were 84 households that had no family respondent and 55 households had no financial respondent. 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:

LPN\_FAM - 2008 FAMILY RESP PERSON NUMBER LPN FIN - 2008 FINANCIAL RESP PERSON NUMBER

# 8B. Unfolding Bracket Variables and Imputations

Typically, a series of unfolding bracket questions follow a lead-in question asking for an amount. If a valid amount was not given, a series of "unfolding" questions were asked. The manner in which the unfolding questions were programmed using Blaise for the 2002 through 2008 surveys is different from the way it was programmed in SurveyCraft for the 1993 through 2000 surveys. This change was transparent to the respondents, since exactly the same questions were asked with the new software; but it did have an implication for the data that were stored and subsequently released.

Instead of storing the response to each unfolding question as was done on waves prior to 2002, three summary variables were generated for HRS 2002 and beyond, a 'MINIMUM', a 'MAXIMUM', and a 'RESULT' variable. The minimum and maximum values are stored based on the answers to the unfolding questions. If the last answer a respondent gave in an unfolding sequence was either "Don't Know" or "Refused," that information is stored in the 'RESULT' variable. If the Respondent said "more than" to the unfolding question with the highest value, then the maximum value was stored as 99999996. Greater than Maximum Breakpoint.

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 LZ041 and the unfolding sequence in Section Q that uses the random entry point from LZ041.

Preloa	d Variable from the data file H08pr_h:
	UNFOLD ASSIGN - SELF EMPLOYMENT INCOME Section: PR Level: Household Type: Numeric Width: 1 Decimals: 0 Ref: HH.X041_UnfSEmpInc_V
	UNFOLD ASSIGN - SELF EMPLOYMENT INCOME

```
1. RANDOM ASSIGNMENT1
    3985
    3947
              2. RANDOM ASSIGNMENT2
    3965
              3. RANDOM ASSIGNMENT3
Unfolding Series from Section Q that uses LZ041 to assign an entry
LQ016 R INCOME FROM SELF EMPLOYMENT - MIN
    Section: Q Level: Household Type: Numeric Width: 8 Decimals: 0
    Ref: 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 LZ041
0. Value of Breakpoint
    125
    3
               5000. Value of Breakpoint
               5001. Value of Breakpoint
    12
              10000. Value of Breakpoint
              10001. Value of Breakpoint
    21
              25000. Value of Breakpoint
    2.
    21
              25001. Value of Breakpoint
             100000. Value of Breakpoint
    2
             100001. Value of Breakpoint
             Blank. INAP (Inapplicable); Partial Interview
LQ017 R INCOME FROM SELF EMPLOYMENT - MAX
    Section: Q Level: Household Type: Numeric Width: 10 Decimals: 0
    Ref: SecQ.RIncome.Q017_
4999. Value of Breakpoint
    3
              5000. Value of Breakpoint
              9999. Value of Breakpoint
    12
             10000. Value of Breakpoint
    17
             24999. Value of Breakpoint
             25000. Value of Breakpoint
    2
    15
             99999. Value of Breakpoint
            100000. Value of Breakpoint
    112
          99999996. Greater than Maximum Breakpoint
           Blank. INAP (Inapplicable); Partial Interview
    11694
LQ018 R INCOME FROM SELF EMPLOYMENT - RESULT
    Section: Q Level: Household Type: Numeric Width: 2 Decimals: 0
    Ref: SecQ.RIncome.Q018_
22
               98. DK (Don't Know)
    82
                99. RF (Refused)
    11793
              Blank. INAP (Inapplicable); Partial Interview
```

# 8C. Modules for the 2008 Data Collection

There are 10 modules for 2008 HRS. The module data can be found in the file H08V\_R. Topical areas of the modules include:

Module 1: Verbal Analogies

Module 2: Annuities and Lump Sum Payments

Module 3: Breast and Prostate Cancer Screening

Module 4: Weight History
Module 5: Quality of Care
Module 6: Coping Strategies

Module 7: Transfers

Module 8: Financial Sophistication and Investment Decision Making

Module 9: Retirement Behavior

Module 10: Dental Health and Access to Care and Utilization

# 8C1. Description of Verbal Analogies (Module 1)

Verbal Analogies measures the respondent's ability to reason using lexical knowledge. The task requires listening to three words of an analogy and then completing the analogy with an appropriate fourth word. This test of verbal analogies was adapted from the Woodcock-Johnson III test battery. The sample for this module was a random subsample of the self-respondent sample. More detail about the rationale for, development of, and administration details of this task is available in the Ofstedal, Fisher, & Herzog (2005) <a href="https://doi.org/10.1001/jhrs.cognition">HRS Cognition</a> Documentation Report

Variables available for this module include the overall Verbal Analogies score (LVASCORE), the starting point within the module (LVASTART), the total number of items asked (LVAASK), the number correct (LVACRRCT), and the number incorrect (LVAWRONG). LVASTART has a value of 1 or 2. The value 1 is equal to 4 in the original WJ III and the value 2 is equal to 8 in the original WJ III (which has three sample items, A, B, & C, and 15 test items arranged in order of item difficulty from item 1 to item 15). The starting point for each respondent was determined by level of education such that respondents with at least some college education were initially asked a more difficult test item than respondents with 12 or fewer years of education.

The overall Verbal Analogies score is a standardized score. 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 LVASCORE, represents the respondent's performance on the task where higher scores indicate higher performance on the task. The W scale is a transformation and combination of the Rasch log ability and easy scales. Please refer to the <a href="https://example.com/HRS Cognition Documentation Report">HRS Cognition Documentation Report</a> for more information.

# 8D. Explanation of the Difference between Tracker and 2008 Final Core Data

There are some areas where the Tracker File and the 2008 Final release data are different. Below is a list of these situations.

LSUBHH - The tracker file assigns a '9' for all new spouses in 2008 for the previous wave's SUBHH number. The 2008 Final Release data, however, lists 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.

LPN\_SP - Even if a spouse did not give an interview in 2008, a spouse PN (LPN\_SP) will exist in the core data. Additionally, for a non-

original R's new spouse, we assign a spouse PN (LPN\_SP) and track the spouse's influence on the household with that number, even though we will never interview that person. In contrast, 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 LPN\_FIN, and LPN\_FAM in the household sections. The tracker file will simply list the assignments of the people interviewed. Therefore, for example, the 2008 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 2008 data (LB063) may be different from the marital status variable (xMARST) in the Tracker file. See the <a href="Cross-wave">Cross-wave</a>
<a href="Tracker File Data Description">Tracker File Data Description</a>
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 2008 Core Final data was not changed using outside sources, in order to preserve the flow through the instrument for respondents.

# 8E. 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 original 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 code frame. The text of added codeframes appears in the codebook in sentence case. Double reporting of income or assets in Section Q 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 branchpoint, the branchpoint was not changed.

# 8E1. Changes to 2008 Core, Version 3.0 SAO 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 (LLBRTYPE) 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 (LLBELIG) 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 (LLBCOMP) is very similar to the previous version. An 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: <a href="http://hrsonline.isr.umich.edu/sitedocs/userg/HRS2006-2010SAQdoc.pdf">http://hrsonline.isr.umich.edu/sitedocs/userg/HRS2006-2010SAQdoc.pdf</a>

# 8F. 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, with the other half of the sample selected for 2008. From that point on every household will repeat the enhanced face-to-face portion every other wave. In coupled households, both members of the couple are 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 2008, as in 2006, the Leave-Behind Questionnaire was incorporated into the Enhanced Face-to-Face Interview. The Leave-Behind Questionnaire administered in 2006 and 2008 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 for 2006, and the other half in 2008) and the measurements conducted. The specific measures included in the 2008 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. The <a href="Physical Measures Booklet">Physical Measures Booklet</a> contains the consent forms, as well as instructions and protocols for all of the measurements.

# 8G. Summary of Data Model (DM) Changes during 2008 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. Each data file contains the variable LVDATE, which indicates which version of the data model was used to interview the household.

# Changes Incorporated in Version 2

#### Section PR:

LX004\_R, LX067\_R (R MONTH AND YEAR BORN): The program was out of sync with preloaded data so that most Respondents were getting re-asked date of birth. This has been fixed so that only those Respondents whose values are missing or have some discrepancy in their birth date will be asked.

#### Section I:

LI860, LI865, LI870 (BLOOD PRESSURE): Range changed from 0-140 to 40-140. Entries outside this range will trigger a signal for the interviewer.

LI841 (WEIGHT POUNDS MEASURMENT): Range added for weight measurement: 60-310. Entries outside this range will trigger a signal for the interviewer.

LI907 (WAIST MEASURMENT): Range added for waist measurement: 20-75. Entries outside this range will trigger a signal for the interviewer.

#### Section J:

LJW008, LJW013, LJW018, LJW019, LJW056: Too many Respondents were being skipped out of these questions. Logic was changed to correct this.

LJ664: Respondents who reported DK or RF in LJ812 (% OF PENSION FUNDS INVESTED IN STOCKS) were skipped out of LJ664 (MONEY INVESTED IN COMPANY STOCK). This was fixed so that only Respondents who report 0% in LJ812 skip LJ664.

#### Section P:

LP161: The question text was changed. Old question text: "(If you think there is a large chance that you will be working full-time,) please give your best estimate of what that chance is." New question text:

"(If you think there is a large chance that you will live to [AGE FILL - same as for P159] ) please give your best estimate of what that chance is."

LP106-LP107: Respondents who answered '0' in LP028 were skipped out of these questions. This has been fixed.

#### Section V:

#### (Module 2)

LV052: Changed question text in unfolding variables following LV051 from "Did it amount to..." to "Would it be..."

### (Module 9)

LV455: Respondents who are currently receiving (or who DK if they are receiving) SS benefits (LV479 = 1 or 3) should skip LV455. The wrong variable was used in the logic, so Respondents who were currently working for pay were the ones being skipped out of LV455. This has been fixed.

LV459-LV463 were defined as temporary variables and, thus, not saved. This has been changed so that these fields will appear in the data.

LV466: Original question text for one version of the question was missing "an inheritance totaling" at the end. The question now reads:

IF R SAID THERE IS A CHANCE OF LEAVING AN INHERITANCE ({P059 or P006 or P005} NOT EMPTY):

You said that you would consider spending down wealth faster [after retirement/] in response to a 30 percent cut in Social Security benefits.

In that case, including property and other valuables that you might own, what are the chances that you (and your[husband/wife/partner]) would leave an inheritance totaling

```
IF P059 NOT EMPTY: $500,000 or more?
IF P006 NOT EMPTY: $100,000 or more?
IF P005 NOT EMPTY: $10,000 or more?
```

LV469: Two changes were made to this field: 1) The code frame was expanded to include additional options (red text below indicates changes); 2) Changed to a multiple mention:

(Have you ever contacted the Social Security Administration to learn about your Social Security benefits?)

Why not?

IWER: Enter all that apply.

- 1. It has never occurred to me/It's too far in the future
- 2. I did not know how to do it
- 3. I did not have time
- 4. I had enough information/I had no need for information
- 5. I did not think they had useful information
- I got information from other sources/Someone else checked for me.

# 7. Other (specify)

LV460, LV464, LV477: Field width changed from 2 to 3 to allow 98 and 99 as valid entries; ranges also changed.

#### Changes Incorporated in Version 3

#### Section H:

LH301-LH325: These variables were added to address mortgage/housing market crisis.

#### Section Q:

LQ403: Respondents who reported DK in LQ402 (MONTH HH STARTED RECEIVING FOOD STAMPS) were erroneously skipped over LQ403 (YEAR). This was changed so that RF is the only answer in LQ402 that results in skipping LO403.

#### Section T:

LT006: Non-family respondents were skipped over this question because the variable for # grandchildren (LE046), which is used to direct flow for LT006, is missing for non-family respondents. This has been changed so that LE046 is assigned from preload for non-family respondents.

#### Section V:

#### (Module 6)

LV270, LV272, LV274, LV276, LV278, LV280, LV282, LV284: Changed code value from 5.NOT AT ALL to 4.NOT AT ALL.

#### (Module 9)

LV463: This question was being skipped for respondents who reported '2' in LV461. It was corrected so that it is now asked of everyone who gets LV461.

## Section W:

 ${\tt LW351-LW367}$ : These variables were added to address mortgage/housing market crisis.

#### Changes Incorporated in Version 4

#### Section H:

LH024, LH170: Added interview instruction, 'Do not include reverse mortgages.'

#### Section M1:

LM026: Corrected fill in code 2 so that it references and shows data from both places in Section J where employer name is collected, instead of just one place.

#### Section Q:

LQ084: The Living Proxy version of the question text did not match the core wording. Removed the phrase "income from" in the second sentence so it now reads: "Are you currently receiving any Social Security income?"

#### Section W:

LW359: Added code category options (see bolded text) to the question text. The full text now reads:

"How likely is it that you will fall behind in your mortgage payments during the next 6 months -- is it very likely, somewhat likely, or not likely at

all?

# 9. Obtaining the Data

# 9A. 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 allowing us to continue to collect these important data. 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.

# 9B. Conditions of Use

By registering, you agree to the Conditions of Use governing access to Health and Retirement 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.

#### 9C. 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 with "Attn: Papers and Publications" in the subject line.

# 10. If You Need to Know More

This document is intended to serve as a brief overview and to provide guidelines to using the 2008 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.

# 10A. 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.

# 10B. 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

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

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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 reunited1.

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 010 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

<sup>&</sup>lt;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

#### 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.

Bot

h 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=101 (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; metastisis angiosarcoma; carcinoma; myeloma/multiple myeloma; myelodysplastic syndrome
- 102. Tumors, cysts or growths (except 101); polyps; osteomyelitis; precancer; neuroma; benign tumors; mole removal; warts; subdural hygroma
- 103. Skin conditions—any mention except cancer (101) or tumor (102); dermatitis; eczema; rashes; Paget's disease; skin ulcers; bedsores; bullous pemphigoid; hair loss; pemphigus; subrreic karatosis; 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; osteoarthritis
- 112. Back/neck/spine problems: chronic stiffness, deformity or pain; disc problems; scoliosis; spina bifida; bad back; spinal stenosis; back/neck injuries (also use code 194 if available); back/neck sprain (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; Dupuytren's contracture; sprain of limb (also use code 194 if available)
- 114. Missing legs, feet, arms, hands, or fingers (from amputation or congenital deformity)
- 115. Paralysis--any mention (including from polio)
- 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; polymyositis; scleroderma; chromosome leak into the muscles; bone spurs (location not specified); cellulites; tendonitis (location not specified); temporomandibular joint syndrome (TMJ); trigeminial neuralgia; CREST syndrome/limited scleroderma; polymyalgia/polymyalgia rheumatica; avascular necrosis/osteonecrosis, neural muscular myositis, bone disease, myalgia, myositis, osteopenia; adhesions (location not specified); neuritis; skull bone injuries (also use code 194 if available); vascular necrosis; broken or damaged bones (location not specified) from injuries/accidents (also use code 194 if available); pulled muscle (location not specified -also use code 194 if available); strain (location not specified - also use code 194 if available); tendon damage (location not specified - also use code 194 if available); sprain (location not specified - also use code 194 if available); post-polio syndrome (without mention of paralysis); loss of calcium

# Heart, circulatory and blood conditions

- 121. Heart problems: heart attack (coronary) or failure; arteriosclerosis; heart aneurysms; heart deformities/congenital heart deformities; angina; bad heart; congestive heart disease; cardiomyopathy; atrial fibrillation; myocardial infarction (MI); multiple infarction; myocardinitus, endocarditis; myocardial ischemia; heart murmurs; heart valve blockage; heart valve prolapse; heart valve replacement; arterial blockage; hardening of arteries; heart bypass surgery; mitral valve prolapse; myocardial ischemia; rheumatic heart disease
- 122. High blood pressure / hypertension (HTN); uncontrollable blood pressure; blood pressure problems, not specified high or low
- 123. Stroke; cerebral hemorrhage or accident; hemotoma (if related to brain); transient ischemic attack (TIA);
- 124. Blood disorders: blood disease, anemia; aplastic anemia; hypoplastic anemia; hemophilia; polycythemia vera; bad blood; toxemia; cold agglutin disease; triglycerides or high triglycerides; toxoplasmosis; blood transfusion; sickle cell traite; bone marrow failure; factor VIII/factorVIII deficiency/elevated factor VIII; thrombocytopenia; hemochromatosis;
- 129. Other circulatory problems; phlebitis, clots/blood clots, embolisms; varicose veins; hemorrhoids; low blood pressure; giant cell arteritis; hemotoma (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 location not specified); elasticity of arteries; calcification of limbs; lymphoedema; claudication, plumary hypertension; rheumatic fever; occult cerebral vascular malformation; bleeding (location not specified); blockage in lung; Rendu-Osler-Weber disease/syndrome

# Respiratory system conditions

- 131. Allergies; hayfever; sinusitis; sinus problems; sinus headaches; tonsillitis; celiac disease/sprue (gluten intolerance); hives
- 132. Asthma
- 133. Bronchitis; pneumonia; acute upper respiratory problems; Legionnaire's disease; fungus in chest; respiratory pulmonary disease

- 134. Emphysema; chronic obstructive pulmonary disease (COPD); smoking related lung problems
- 139. Other respiratory/breathing problems; tuberculosis; sarcoidosis; ventilitory insufficiency; pulmonary ideiopathic fibrosis; respiratory failure, NFS; asbestos in lungs; black lung; pleurisy

#### Endocrine, metabolic and nutritional conditions

- 141. Diabetes; pre-diabetic; high blood sugar
- 142. Thyroid trouble; goiter; hyperthyroidism; graves disease; Hashimoto's disease
- 143. Cystic fibrosis
- 144. Nutritional problems; weight problems; eating disorders; high cholesterol; hypercholesterolemia; obesity; iron defiency; overweight; vitamin deficiency
- 145. Sugar problems, NFS; erratic blood sugar
- 149. Other endocrine/metabolic problems; pancreatitis; pituitary problems; gland problems; Addison's disease; gout, nephrotic syndrome; primary adrenal insufficient; parathyroid problems; endocrinology syndrome; amyloidosis; haemochromatosis; hypoglycemia; low blood sugar; loss of calcium; alpha-1 antitrypsin deficiency; acromegaly; hormone problems; hyperpituitarism; hypoglycemia

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

- 151. Stomach and intestinal conditions: acid reflux, reflux disease, heartburn, stomach reflux, GERD, Barrett's esophagus, ulcers (stomach, peptic, duodenal or not further specified); colitis; ulcerative colitis; gastritis; diverticulosis; diverticulitis; appendicitis; Crohn's disease; intestinal adhesions; abdominal adhesions; colostomy; sillicates disease; stomach pains, ileostomy, dumping syndrome; gastroenteritis, Irritable Bowel Syndrome; diarrhaea; bowel incontinence; appendectomy; enteritis; ileitis; peritonitis; stomach removal
- 152. Liver conditions: cirrhosis; hepatitis; benign hepatic hypertrophy; encephalopathy (caused by liver problems or cause not specified); jaundice
- 153. Kidney conditions: kidney stones; kidney failure (including dialysis); nephritis
- 154. Gallbladder conditions; blockage of bile ducts; gallstones; 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; internal bleeding; hemorrhage; esophagus torn, ruptured or bleeding; swallowing difficulty; feeding tube

# Neurological and sensory conditions

- 161. Blindness or vision problems: glaucoma; cataracts; detached/torn retina; macular degeneration; uveitis; ocular myasthenia gravis; 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; amyotrophic lateral sclerosis (ALS) 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; dyslexia
- 169. Other neurological/sensory problems; headaches; migraines; dizziness; blackouts; brain damage, NFS (also use code 194 if available); meningitis; arachnoiditis; Bell's palsy; Charcot-Marie-Tooth disease; Guillain-Barre syndrome; medial nerve palsy; myasthenia gravis/myasthenia (non-ocular); myokymia; reflex sympathetic dystrophy (RSD); restless legs syndrome (RLS); Sjogren's syndrome; spasmodic torticollis; balance problems; closed head injury; coma; paralyzed diaphgram; facial nueralga; hydrocephalus; inclusive body myositis; spinal carebella ataxia; benign/familiar tremors, vertigo; upper motor neuron/motoneuron problems, progressive supranuclear palsy (PSP); thoracic outlet syndrome; dysautonomia; 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; hemorrhaging or complications from birth of child; episiotomy; RH factor
- 172. Infertility; sterilization; vasectomy; tubal ligation
- 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; agoraphobia; bipolar disorder (manic-depression); post-traumatic stress disorder (PTSD)
- 189. Other emotional and psychological problems; mental problems, NFS; nerves; nervous breakdown; stress; stress related problems; night wandering; panic attacks; anxiety; behavioral problems; insomnia; attention deficit disorder (ADD)

#### Miscellaneous

- 191. Alzheimer's disease; senility, dementia; multi-infarct dementia; memory loss; mixed cognitive disease
- 192. Dental and gum conditions--any mention
- 193. Acute infectious diseases; flu; colds; fever; mumps; Dengue fever; Lyme disease; infection, staph infection; methicillin-resistant staphylococcus aureus (MRSA); Epstein-Barr virus; mononucleosis; influenza; measles; rubella; strep throat; virus, NFS; septic shock; toxic shock; sepsis; shingles; polio (without mention of paralysis)

- 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; graft-versus host disease LOW PRIORITY--code resulting chronic or ongoing conditions if possible
- 195. Sleep disorders; sleep apnea; narcolepsy; catpalzy
- 196. Immune system disorders; human immunodeficiency virus (HIV) positive; acquired immunodeficiency syndrome (AIDS); AIDS related complex (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

### Why Admitted

- 701. No other care arrangements available
- 702. Deteriorating health; health condition not specified
- 703. To recover/rehab; for injury/surgery

## Other symptoms

- 595. Old age; everything wore out; bedridden; infirmity; natural causes; failure to thrive in older adults
- 596. Lack of energy/strength; (chronic) fatigue, NFS; don't have get up and go
- 597. Edema; retaining water; retaining fluids; swelling (location not specified)
- 996. None, no health condition(s) mentioned
- 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
- 196. Acquired immunodeficiency syndrome (AIDS)
- 149. Acromegaly
- 193. Acute infectious diseases
- 133. Acute upper respiratory diseases/problems
- 189. ADD (attention deficit disorder)
- 149. Addison's disease
- 119. Adhesions (locatioin not specified)
- 183. Agoraphobia
- 196. AIDS (acquired immunodeficiency syndrome)
- 196. AIDS related complex (ARC)
- 181. Alcoholism
- 131. Allergies
- 103. Alopecia
- 149. Alpha-1 antitrypsin deficiency
- 163. ALS
- 191. Alzheimer's disease
- 114. Amputation of limbs
- 149. Amyloidosis
- 163. Amyotrophic lateral sclerosis
- 124. Anemia
- 121. Aneurysm, heart
- 129. Aneurysm (when not in heart or location not specified)
- 121. Angina
- 101. Angiosarcoma
- 111. Ankylosing spondylitis
- 183. Anxiety
- 124. Aplastic anemia
- 129. APLS Hughes syndrome
- 151. Appendectomy
- 151. Appendicitis
- 169. Arachnoiditis
- 196. ARC (AIDS related complex)
- 121. Arterial blockage
- 121. Arteries, hardening
- 129. Arteries, elasticity
- 121. Arteriosclerosis
- 111. Arthritis
- 139. Asbestos (in lungs)
- 132. Asthma
- 121. Atrial fibrillation
- 165. Attention deficit disorder (ADD)
- 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
- 102. Benign tumors

- 169. Benign tremors
- 154. Bile duct, blockage of
- 183. Bipolar disorder
- 183. Bipolar depression
- 171. Birth of child
- 139. Black lung
- 169. Blackouts
- 156. Bladder control problems
- 155. Bladder conditions (excluding 156)
- 159. Bleeding (location not specified)
- 159. Bleeding (of the digestive tract)
- 161. Blindness
- 129. Blockage in lung
- 154. Blockage of bile ducts
- 129. Blood clots
- 124. Blood disease
- 124. Blood disorders, specific
- 124. Blood disorders, NFS
- 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)
- 151. Bowel incontinence
- 151. Bowel, irritable
- 129. 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 / celiac sprue (gluten intolerance)
- 119. Cellulitis
- 123. Cerebral hemorrhage
- 163. Cerebral palsy
- 169. Charcot-Marie-Tooth disease
- 171. Childbirth/pregnancy problems
- 171. Childbirth, hemorrhaging from
- 171. Childbirth, complications from
- 171. Childbirth
- 144. Cholesterol, high
- 119. Chromosome leak into the muscles
- 134. Chronic obstructive pulmonary disease (COPD)
- 596. Chronic fatigue

- 129. Circulation problems
- 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
- 112. Deformation of back, neck, or spine
- 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
- 113. Dupuytren's contracture
- 169. Dysautonomia
- 165. Dyslexia
- 179. Dysmenorrhea
- 162. Ear conditions, all
- 144. Eating disorders
- 103. Eczema
- 597. Edema
- 129. Elasticity of arteries

- 124. Elevated factor VIII
- 129. Embolisms
- 134. Emphysema
- 152. Encephalopathy caused by liver problems
- 121. Endocarditis
- 149. Endocrinology syndrome
- 179. Endometriosis
- 596. Energy (low)
- 157. Enlarged spleen
- 151. Enteritis
- 163. Epilepsy
- 171. Episiotomy
- 193. Epstein-Barr virus
- 145. Erratic blood sugar
- 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. Familiar tremors
- 596. Fatigue (chronic); lack of energy/strength
- 159. Feeding tube
- 179. Female problems
- 193. Fever
- 118. Fibromyalgia
- 118. Fibromyositis
- 118. Fibrositis
- 193. Flu
- 133. Fungus in chest
- 154. Gallbladder, removal
- 154. Gallbladder conditions
- 154. Gallstones
- 129. Gangrene
- 151. Gastritis
- 151. Gastroenteritis
- 151. GERD (gastroesophageal reflux disease)
- 129. Giant cell arteritis
- 149. Gland problem
- 161. Glaucoma
- 131. Gluten intolerance
- 142. Goiter
- 149. Gout
- 194. Graft-versus host disease
- 142. Grave's disease
- 102. Growths
- 169. Guillain-Barre syndrome
- 192. Gum conditions
- 179. Gynecological problems, NFS
- 103. Hair loss
- 121. Hardening of arteries
- 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 replacement
- 121. Heart valve blockage
- 121. Heart valve prolapse
- 151. Heartburn
- 129. Hematoma, if not related to brain (or location not specified)
- 123. Hematoma, if related to brain
- 124. Hemochromatosis
- 124. Hemophilia
- 159. Hemorrhage
- 129. Hemorrhoids
- 152. Hepatitis
- 116. Hernia, hiatal
- 116. Hiatal hernia
- 141. High blood sugar
- 122. High blood pressure
- 144. High cholesterol
- 124. High triglycerides
- 113. Hip problem/replacement
- 196. HIV (human immunodeficiency virus) positive
- 131. Hives
- 101. Hodgkin's disease
- 149. Hormone problems
- 122. HTN (hypertension / high blood pressure)
- 196. Human immunodeficiency virus (HIV) positive
- 169. Hydrocephalus
- 144. Hypercholesterolemia
- 149. Hyperpituitarism
- 122. Hypertension / high blood pressure (HTN)
- 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
- 193. Infection (location not specified)
- 172. Infertility
- 595. Infirmity
- 193. Influenza
- 194. Injuries, accidental
- 189. Insomnia
- 159. Internal bleeding
- 159. Internal bleeding (of the digestive tract)
- 155. Interstitial cystitis
- 151. Intestinal adhesions
- 151. Intestinal conditions
- 151. Irritable bowel conditions

- 144. Iron deficiency
- 152. Jaundice
- 153. Kidney failure (including dialysis)
- 153. Kidney removal
- 153. Kidney stones
- 113. Knee, bad/problem/replacement
- 194. Lacerations
- 164. Laryngectomy
- 165. Learning disabilities
- 113. Leg cramps
- 133. Legionnaire's disease
- 101. Leukemia
- 152. Liver conditions
- 119. Loss of calcium
- 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, removal
- 101. Melanoma
- 191. 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. Metastisis
- 193. Methicillin-resistant staphylococcus aureus (MRSA)
- 121. MI (myocardial infarction)
- 169. Migraines
- 171. Miscarriage
- 117. Mitochondrial dystrophy
- 117. Mitochondrial myopathy
- 121. Mitral valve prolapse
- 191. Mixed cognitive disease
- 102. Mole removal
- 193. Mononucleosis
- 169. Motor neuron or motoneuron problems

- 193. MRSA (methicillin-resistant staphylococcus aureus)
- 191. Multi-infarct dementia
- 121. Multiple infarctions
- 101. Multiple myeloma
- 163. Multiple sclerosis
- 193. Mumps
- 117. Muscular dystrophy
- 119. Myalgia
- 169. Myasthenia
- 169. Myasthenia gravis
- 101. Myelodysplastic syndrome
- 101. Myeloma / multiple myeloma
- 121. Myocardititis
- 121. Myocardial infarction (MI)
- 121. Myocardial ischemia
- 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 breakdown
- 189. Nervous condition
- 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
- 129. Occult cerebral vascular malformation
- 161. Ocular myasthenia gravis
- 595. Old age
- 111. Osteoarthritis
- 102. Osteomyelitis
- 119. Osteopenia
- 119. Osteoporosis
- 997. Other health condition
- 179. Ovarian problems
- 144. Overweight
- 103. Paget's disease
- 149. Pancreatitis
- 189. Panic attacks
- 115. Paralysis
- 169. Paralyzed diaphragm
- 183. Paranoia
- 149. Parathyroid problems
- 163. Parkinson's disease

- 103. Pemphigus
- 163. Peripheral neurophy
- 151. Peritonitis
- 129. Phlebitis
- 119. Pinched nerve (location not specified)
- 149. Pituitary problems
- 113. Plantar fasciitis
- 139. Pleurisy
- 179. PMS (premenstrual syndrome)
- 133. Pneumonia
- 193. Polio (without mention of paralysis)
- 124. Polycythemia vera
- 124. Polycythemia
- 119. Polymyalgia
- 119. Polymyalgia rheumatica
- 119. Polymyositis
- 102. Polyps
- 119. Post-polio syndrome (without mention of paralysis)
- 183. Post-traumatic stress disorder (PTSD)
- 102. Pre-cancer
- 141. Pre-diabetic
- 171. Pregnancy/childbirth problems
- 179. Premenstrual syndrome (PMS)
- 149. Primary adrenal insufficient
- 169. Progressive supranuclear palsy (PSP)
- 173. Prostate conditions
- 173. PSA, high PSA
- 103. Psoriasis
- 169. PSP (progressive supranuclear palsy)
- 183. Psychological conditions
- 183. Psychosis
- 183. PTSD (post-traumatic stress disorder)
- 119. Pulled muscle; location not specified (also use code 194 if available)
- 129. Pulmonary thrombosis
- 129. Pulmonary hypertension
- 129. Pulmonary embolism
- 139. Pulmonary idiopathic fibrosis
- 103. Rash, skin
- 129. Raynaud's disease
- 116. Rectocele
- 169. Reflex sympathetic dystrophy (RSD)
- 151. Reflux disease
- 111. Reiter's Syndrome
- 129. Rendu-Osler-Weber disease/syndrome
- 179. Reproductive organs, removal of (excluding cancer, tumors)
- 139. Respiratory failure, NFS
- 133. Respiratory pulmonary disease
- 133. Respiratory diseases, acute upper
- 169. Restless legs syndrome (RLS)
- 597. Retaining water/retaining fluids
- 161. Retina, torn
- 161. Retina, detached
- 171. RH factor
- 111. Rheumatism
- 111. Rheumatica

- 121. Rheumatic heart disease
- 129. Rheumatic fever
- 169. RLS (restless legs syndrome)
- 103. Rosacea
- 113. Rotator cuff problems
- 169. RSD (reflex sympathetic dystrophy)
- 193. Rubella
- 139. Sarcoidosis
- 183. Schizophrenia
- 119. Sciatica/sciatic nerve problem
- 119. Scleroderma
- 112. Scoliosis
- 103. Seborrheic keratosis
- 163. Seizures
- 191. Senility
- 193. Sepsis
- 193. Septic shock
- 183. Severe psychological conditions
- 169. Shaky hands
- 169. Shingles
- 113. Shoulder problems
- 124. Sickle cell trait
- 124. Sickle cell anemia
- 194. Side affects 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)
- 112. Spinal stenosis
- 157. Spleen conditions
- 157. Spleen, enlarged
- 119. Sprain; location not specified (also use code 194 if available)
- 112. Sprained back/neck (also use code 194 if available)
- 113. Sprained limb (also use code 194 if available)
- 131. Sprue / celiac sprue (gluten intolerance)
- 193. Staph infection
- 172. Sterilization
- 608. Stillbirth
- 151. Stomach conditions
- 151. Stomach pains
- 151. Stomach reflux

- 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
- 102. Subdural hygroma
- 103. Subrreic karatosis
- 145. Sugar problems; NFS
- 159. Swallowing difficulty
- 597. Swelling, (location not specified)
- 119. Temporomandibular joint syndrome (TMJ)
- 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
- 123. TIA (transient ischemic attack)
- 162. Tinnitus
- 119. TMJ (temporomandibular joint syndrome)
- 131. Tonsillitis
- 124. Toxemia
- 193. Toxic shock
- 124. Toxoplasmosis
- 123. Transient ischemic attack (TIA)
- 119. Trigeminal neuralgia
- 124. Triglycerides / 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)
- 122. Uncontrollable blood pressure
- 169. Upper motor neuron/motoneuron problems
- 155. Urinary infections
- 156. Urinary incontinence/loss/leakage
- 155. Urosepsis
- 161. Uveitis
- 129. Varicose veins
- 129. Vascular disease
- 119. Vascular necrosis
- 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. 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. Constructions 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

### LGL 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. Dieticians 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 Gar
- 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. 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

#### ACCOMODATIONS AND FOOR 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)

- 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