

2019 Health Survey  
Early, Version 1.0  
February, 2022

Data Description and Usage

### Conditions of Use

By registering for access to HRS Public Release data, the User agrees to all of the following:

- Make no attempts to identify study participants.
- Not to transfer HRS Public Release data to any third party other than staff or students for whom you are directly responsible except as indicated below.
- Not to allow others to use your username and password to access this site.
- To certify the destruction of any downloaded Public Release data file as well as any data files derived from the downloaded file when requested to do so by the Health and Retirement Study.
- To include the following citation in any research reports, papers, or publications based on Public Release data:

*In text:*

"The HRS (Health and Retirement Study) is sponsored by the National Institute on Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan."

*In references:*

"Health and Retirement Study, 2019 Health Survey dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009740). Ann Arbor, MI, (year)."

- To include the following citation in any research reports, papers, or publications based on any Public Release data file tagged as "Early" or "Preliminary":

"This analysis uses Early Release data from the Health and Retirement Study, 2019 Health Survey, sponsored by the National Institute on Aging (grant number NIA U01AG009740) and conducted by the University of Michigan. These data have not been cleaned and may contain errors that will be corrected in the Final Release version of the dataset."

- Please note that although it is necessary to include the above citations to the HRS in any publications, it is not necessary to associate your publications with the HRS grant in [PubMed](#).
- Provide information regarding any research product (dissertation, thesis, journal article, book, book chapter, report, etc.) based on data obtained from the Health and Retirement Study by sending an electronic copy to [hrspublications@umich.edu](mailto:hrspublications@umich.edu).
- Report immediately to the Health and Retirement Study at [hrsquestions@umich.edu](mailto:hrsquestions@umich.edu) any disclosure of study participant identity as well as any discovery of flaws or errors in the data or documentation files.
- Notify the Health and Retirement Study through use of the update function provided at this site or by electronic mail directed to [hrsquestions@umich.edu](mailto:hrsquestions@umich.edu) of changes in your electronic mail address, postal address, telephone number, organizational affiliation or organizational status.

# Table of Contents

<b>Table of Contents</b> .....	ii
<b>1. Introduction</b> .....	1
1A. Health Survey Sample.....	1
1B. 2019 Health Survey Sections.....	1
1C. File Structure.....	3
1D. Data Quality.....	3
<b>2. Distribution Files</b> .....	4
<b>3. Program Statements</b> .....	5
3A. Using the Files with SAS.....	5
3B. Using the Files with SPSS.....	6
3C. Using the Files with Stata.....	6
<b>4. Linking Respondents across Time</b> .....	7
<b>5. Registration and Downloading the Data</b> .....	7
5A. Registration.....	7
5B. Conditions of Use.....	7
5C. Publications Based on Data.....	7
<b>6. If You Need to Know More</b> .....	8
6A. HRS Internet Site.....	8
6B. Contact Information.....	8



# Data Description and Usage

## 1. Introduction

The Health and Retirement Study (HRS) is a longitudinal panel study that surveys a representative sample of approximately 20,000 people in America, supported by the National Institute on Aging and the Social Security Administration. The Institute for Social Research (ISR) Survey Research Center (SRC) at the University of Michigan conducts the study.

The HRS 2019 Health Survey was administered to a sub-sample of respondents to gather information about their health care access, health conditions, medications, and food consumption. It includes both novel content and questions that have been asked in previous mail surveys.

By receiving the dataset, you agree to use it for research and statistical purposes only and will make no effort to identify respondents. In addition, you agree to send us a copy of publications you produce based on the data.

### 1A. Health Survey Sample

In November 2019, questionnaires were mailed to a subsample of HRS respondents (n=6,159) who (1) were not in the random half-sample assigned to receive the Consumption and Activities Mail Survey (CAMS); (2) were born before 1960; and (3) had already completed a Life History Mail Survey (LHMS). The survey was available in English and Spanish. The field period was November 2019 through May 2020.

The data file for the 2019 Health Mail Survey contains data for 5,089 respondents. The response rate is 83%.

### 1B. 2019 Health Survey Sections

The questionnaire has the following sections:

**A. Health Care Access:** Questions asked respondents to describe their current health and recent health care experiences. Many of the questions in this section were also asked in the [HRS 2011 Health Care Mail Survey](#) and the [HRS 2013 Health Care and Nutrition Study](#).

**B. Health Conditions:** The goal of this section was to a) ask respondents about whether a health professional ever told them about the presence of general problems with their immune system, b) determine if participants had been told that they had any specific medical conditions that are known to negatively affect the immune system, and c) ascertain if they had received any medical procedures or treatments, such as splenectomy or organ transplant, that can negatively affect the immune system.

Some items in Section B were adapted from existing surveys. Items B1 through B6, concerning whether a doctor had discussed immune problems with the participant, were derived from the 2013 US National Health Interview Survey (NHIS)<sup>1</sup>. Item B10, which asks about the frequency of 25 different symptoms and health conditions, builds on a different measure in the literature, the Immune Function Questionnaire (IFQ)<sup>2</sup>. Other items in Section B, such as health conditions and procedure lists (Items B7-B8) were created by HRS investigators based on prior studies and clinical experience. Note that item B7, which asks respondents about specific health conditions, contains both 26 conditions deemed by HRS investigators to be immune-related based on prior studies and clinical experience (items B7.a through B7.z), as well as an additional 9 conditions affecting older Americans that are not necessarily immune-related but have not been asked about in other HRS surveys (items B7.aa through B7.ai).

**C and D: Medications:** Respondents were asked to provide information about different medications taken, specifically all medications prescribed, including those only taken occasionally. If the respondent was taking more than fifteen medications, they were asked to provide information for the fifteen medications they considered most important. Section D captured information for any other medications. These sections captured information similar to what was collected in the HRS Prescription Drug Studies in [2005](#) and [2007](#), as well as the HRS [2009 Health and Well-Being Study](#).

---

<sup>1</sup> The following publication provides more information on the NHIS measures: Harpaz, R., Dahl, R.M. and Dooling, K.L., 2016. Prevalence of immunosuppression among US adults, 2013. *JAMA*, 316(23), pp.2547-2548.

<sup>2</sup> The IFQ, a nineteen-item inventory, is described in Reed, P., Vile, R., Osborne, L.A., Romano, M. and Truzoli, R., 2015. Problematic internet usage and immune function. *PloS one*, 10(8), p.e0134538.

**E. Special Foods:** Respondent were asked about food supplements taken or foods consumed for general health improvement.

**F. Comments:** Respondents indicated who answered the questions; amount of time to complete the questionnaire and had opportunity to provide general comments.

### **1C. File Structure**

The 2019 Health Survey (Early, Version 1.0) data are at the respondent level. Respondent-level files contain questions that were asked of all respondents about themselves or their household (or were answered by a proxy for the respondent if the respondent was not able to fill out the questionnaire). The data file contains one record for each respondent or proxy who returned a questionnaire. Question F1 indicates who answered the survey questions. This allows analysts can determine if the respondent to whom the questionnaire was sent completed the questionnaire, or if the spouse or partner of the respondent, or some other proxy completed the questionnaire.

The medication data (Sections C & D of the questionnaire) are currently in preparation and will contain detailed medication information for each respondent who completed these sections of the questionnaire. This content will be added in the next version of these data.

The data file is named HM19\_R, loosely translated as: Health Survey 2019, with the "\_R" designating the file is at the respondent level.

The data file contains 5,089 cases and 217 variables.

The primary Identification variables (IDs) are:

HHID	HOUSEHOLD IDENTIFIER
PN	PERSON NUMBER

Records in the data files are sorted in order by HHID and PN. The variable PN refers to the respondent to whom the questionnaire was mailed. Identification variables in the HRS 2019 Health Survey Early Release are stored in character format.

### **1D. Data Quality**

### **Recoded or Constructed variables**

Most of the variables in the 2019 Health Survey data mirror the questions in the Health Survey questionnaire. However, questions that allowed for multiple mentions have been recoded. Respondents were instructed to check "all that apply" for A7, A31, A33, A34, A36, A37, A40, A41 and E1. These questions have been recoded into one variable for each mention (for example A36M1, A36M2, etc).

### **Consistency**

The data will have some inconsistency. Respondents did not always follow the correct skip patterns and in most instances their "incorrect" answers were preserved. Likewise, there were times when respondents interpreted questions involving percentages in different ways.

### **Extreme values and missing data**

While cleaning the data, when extreme or unlikely values were encountered, the hard copies of the questionnaires were checked to determine if errors were introduced during the data entry process. If the respondent reported the extreme value, the extreme value appears unchanged in the data.

### **Data Under Review**

At the time that this data was published, HRS was still reviewing cases that fell into the following categories:

- instances where the respondent provides a response that does not conform with the scanning software "rules." These scenarios are reviewed and addressed on a case-by-case basis.
- cases flagged for additional review
- open-ended text responses

Any changes impacted by this review will be reflected in the next version of these data.

## **2. Distribution Files**

The following extensions are used for the different types of distribution files:

.da for data files,  
.sas for SAS program statements,  
.sas7bdat for "ready-to-use" SAS files,  
.sps for SPSS program statements,  
.sav for "ready-to-use" SPSS files,



.do for Stata DO statements,  
.dct for Stata dictionary statements,  
.dta for "ready-to-use" Stata files, and  
.txt for codebook files.

For example,

HM19\_R.da contains ASCII data from Sections A, B, E and F.  
HM19\_R.sas contains corresponding SAS program statements,  
HM19\_R.sas7bdat contains "ready-to-use" data in SAS format,  
HM19\_R.sps contains corresponding SPSS program statements,  
HM19\_R.sav contains "ready-to-use" data in SPSS format,  
HM19\_R.do contains corresponding Stata DO statements,  
HM19\_R.dct contains corresponding Stata dictionary statements,  
HM19\_R.dta contains "ready-to-use" data in Stata format, and  
HM19\_R.txt contains the ASCII codebook.

The 2019 HRS Heath Mailer (Early, Version 1.0) data are provided in ASCII format, with fixed-length records, in addition to "ready-to-use" formats. Use the associated SAS, SPSS or Stata program statements to read the data into the analysis package of your choice. In addition, you are encouraged to download the codebook file (HM19\_R.txt) and the data description (this document).

### **3. Program Statements**

The data are provided as SAS (.sas7bdat), SPSS (.sav) and Stata (.dta) "ready-to-use" files and in ASCII format. Each ASCII data file comes with associated SPSS, SAS, or STATA program statements to read the data. Files containing SPSS statements are named with a .sps extension, those with SAS statements with a .sas extension, and those with STATA statements with .do and .dct extensions.

#### **3A. Using the Files with SAS**

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

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

If the \*.SAS file is located in "c:\hm2019\sas" and the data file is located in "c:\hm2019\data", you can run the file as is. A SAS system file (\*.SAS7BDAT) will be saved to directory "c:\hm2019\sas".

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

### **3B. Using the Files with SPSS**

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

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

If the \*.SPS file is located in "c:\hm2019\spss" and the data file is located in "c:\hm2019\DATA", you can run the file as is. An SPSS system file (\*.SAV) will be saved to directory "c:\hm2019\spss".

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

### **3C. Using the Files with Stata**

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

Files with the suffix .DA contain the raw data for Stata to read. Files with the suffix .DCT are Stata dictionaries used by Stata to describe the data. Files with the suffix .DO are short Stata programs ("do files") which you may use to read in the data. Load the .DO file into Stata and then submit it.

If the \*.DO and \*.DCT files are located in "c:\hm2019\stata" and the data file is located in "c:\hm2019\data", you can run the .DO file as is.

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

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

instance in Microsoft Word, Edit, Select All, Format, Change Case, lowercase.

#### **4. Linking Respondents across Time**

Respondent records in the 2019 Health Survey (Early, version 1.0) can be linked to respondent records from HRS 2018 and prior waves by HHID and PN.

#### **5. Registration and Downloading the Data**

##### **5A. Registration**

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.

##### **5B. Conditions of Use**

By registering, you agree to the [Conditions of Use](#) governing access to Health and Retirement public release data.

##### **5C. 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  
P.O. Box 1248  
Ann Arbor, MI (USA) 48106-1248

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

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

This document is intended to serve as a brief overview and to provide guidelines for using the 2019 Health Survey (Early, version 1.0) data. If you have questions or concerns that are not adequately covered here or on our Web site, please contact us. We will do our best to provide answers.

### **6A. HRS Internet Site**

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

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

### **6B. 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: [hqsquestions@umich.edu](mailto:hqsquestions@umich.edu)

Postal service:

Health and Retirement Study  
The Institute for Social Research  
The University of Michigan  
P.O. Box 1248  
Ann Arbor, MI 48106-1248

FAX: (734) 647-1186