

WARNING - DATA USE RESTRICTIONS! Read Carefully Before Use

The Public Health Service Act (Section 308 (d)) provides that the data collected by the National Center for Health Statistics (NCHS) may be used only for the purpose of health statistical reporting and analysis.

Any effort to determine the identity of any reported case is prohibited by this law.

NCHS does all it can to assure that the identity of data subjects cannot be disclosed. All direct identifiers, as well as any characteristics that might lead to identification, are omitted from the data files. Any intentional identification or disclosure of a person or establishment violates the assurances of confidentiality given to the providers of the information. Therefore, users will:

1. Use the data in these data files for statistical reporting and analysis only.
2. Make no use of the identity of any person or establishment discovered inadvertently and advise the Director, NCHS, of any such discovery (301-458-4500).
3. Not link these data files with individually identifiable data from other NCHS non-NCHS data files.

By using these data, you signify your agreement to comply with the above-stated statutorily based requirements.

INTRODUCTION

The National Health Interview Survey (NHIS) is conducted annually by the National Center for Health Statistics (NCHS). The NHIS administers face-to-face interviews in a nationally representative sample of households. Each month a probability sample of the civilian non-institutionalized population of the United States is interviewed by personnel of the U.S. Bureau of the Census. Information is obtained about the health and other characteristics of each member of the household.

2018 NHIS STRUCTURE

The NHIS contains many similar questions every year. The repeated items are called "core questions". Beginning with a new NHIS design in 1997, these core questions were divided into three components -- Family, Sample Adult, and Sample Child. In most years, the NHIS also has supplemental questions/modules.

The 2018 NHIS contains the core questions, enhanced questions on health care access and utilization, and additional supplemental questions in the Family questionnaire on the subject of food security, Sample Child questionnaire on the subjects of asthma, immunization, and mental health, and in the Sample Adult questionnaire on the subjects of asthma, cancer screening, e-cigarettes and use

of tobacco products, functioning and disability, heart disease and stroke prevention, immunization, and internet access and email usage.

The 2018 NHIS data release consists of five questionnaires, five core data files, and a paradata file. See the Survey Description document for more details.

The following chart shows the output data files for the 2018 NHIS components:

| Component | Questionnaire | Output Data File |
|---------------------|---------------|------------------|
| ----- | ----- | ----- |
| Family Module | Household | Household |
| " | Family | Family |
| " | " | Person |
| Sample Adult Module | Sample Adult | Sample Adult |
| Sample Child Module | Sample Child | Sample Child |
| -- | Cover | Family |
| -- | -- | Paradata |

2018 NHIS FILES AND DOCUMENTATION

The various files listed below comprise the 2018 National Health Interview Survey (NHIS) public use data release.

2018 NHIS SURVEY QUESTIONNAIRES, ETC.

The 2018 NHIS consists of five questionnaires - Household, Family, Adult, Child, and Cover. The questionnaires that are provided with the release of the 2018 NHIS are not identical to the versions that were utilized in the field. The questionnaires provided here reflect the minor changes in data presentation that occurred during the editing process.

Both English and Spanish versions of the questionnaires are released. The Spanish versions contain interviewer instructions in English.

Prior to 2004, one household equaled one "case". Beginning in 2004, each family is considered a separate case. For multiple-family households, there is a "parent" case designated for the first family identified, and each subsequent family becomes a "spawned" case from the parent, with its own unique case id.

Flashcards were handed to the respondents to facilitate their ability to answer certain questions - these are referenced in the questionnaires. The Field Representative Manual contains the guidelines and instructions on the survey process and topic areas covered by the NHIS and was provided to the Field Representatives (also known as interviewers). Also included is a flowchart that shows how a respondent would move through the various questionnaires.

The survey questionnaires, flashcards, and Field Representative Manual are in Adobe Portable Document Form (PDF) format and can be viewed with Adobe Acrobat software. The Adobe Acrobat Reader software can be downloaded from the Adobe Acrobat Web site at:

<http://www.adobe.com/prodindex/acrobat/readstep2.html>

2018 NHIS DATA FILES

The 2018 NHIS is divided into 6 data files, each available in two formats: a column delimited text (ASCII) format, and a comma-separated values (CSV) format. Each format is released in its own compressed ZIP file. The names of the zip file containing both the ASCII and CSV files are as shown below:

| File Name | Description | Format |
|-----------------|--------------|------------------|
| FAMILYXX.ZIP | Family | Compressed ASCII |
| FAMILYXXCSV.ZIP | Family | Compressed CSV |
| HOUSEHLD.ZIP | Household | Compressed ASCII |
| HOUSEHLDCSV.ZIP | Household | Compressed CSV |
| PERSONSX.ZIP | Person Data | Compressed ASCII |
| PERSONSXCSV.ZIP | Person Data | Compressed CSV |
| SAMADULT.ZIP | Sample Adult | Compressed ASCII |
| SAMADULTCSV.ZIP | Sample Adult | Compressed CSV |
| SAMCHILD.ZIP | Sample Child | Compressed ASCII |
| SAMCHILDCSV.ZIP | Sample Child | Compressed CSV |
| PARADATA.ZIP | Paradata | Compressed ASCII |
| PARADATACSV.ZIP | Paradata | Compressed CSV |

Note that the zip file containing the CSV file has the suffix "CSV" in its name, e.g., HOUSEHLDCSV.ZIP. Once decompressed, the CSV and ASCII files will have the same name, e.g., HOUSEHLD, but with the CSV and DAT extensions respectively, e.g., HOUSEHLD.CSV and HOUSEHLD.DAT.

Once the relevant ZIP file is downloaded from the NCHS website to a local folder of your choosing, say C:\NHIS2018, the contents can then be extracted by double clicking on the file name, or by right-clicking to bring up the appropriate application for decompression, e.g., Winzip.

NOTE: the 2018 NHIS files are fairly large in size. Please ensure that there is plenty of disk space before extraction.

2018 NHIS SAS, SPSS AND STATA INPUT STATEMENTS

Sample SAS, SPSS, and STATA input statement programs are provided for each data file. By using the ASCII data files as input to these programs, datasets native to the SAS, SPSS, or STATA environments can be created. Note that STATA programs were not provided prior to the 2002 data year.

| File Name | Description | Format |
|--------------|---------------------------|--------|
| FAMILYXX.SAS | Family SAS program | ASCII |
| HOUSEHLD.SAS | Household SAS program | ASCII |
| PERSONSX.SAS | Person SAS program | ASCII |
| SAMADULT.SAS | Sample Adult SAS program | ASCII |
| SAMCHILD.SAS | Sample Child SAS program | ASCII |
| PARADATA.SAS | Paradata SAS program | ASCII |
| FAMILYXX.SPS | Family SPSS program | ASCII |
| HOUSEHLD.SPS | Household SPSS program | ASCII |
| PERSONSX.SPS | Person SPSS program | ASCII |
| SAMADULT.SPS | Sample Adult SPSS program | ASCII |
| SAMCHILD.SPS | Sample Child SPSS program | ASCII |
| PARADATA.SPS | Paradata SPSS program | ASCII |

| | | |
|-------------|----------------------------|-------|
| FAMILYXX.DO | Family Stata program | ASCII |
| HOUSEHLD.DO | Household Stata program | ASCII |
| PERSONSX.DO | Person Stata program | ASCII |
| SAMADULT.DO | Sample Adult Stata program | ASCII |
| SAMCHILD.DO | Sample Child Stata program | ASCII |
| PARADATA.DO | Paradata Stata program | ASCII |

Alternatively, the CSV files can be loaded directly into different environments such as Microsoft Excel, SAS, R, Stata, SPSS, etc. Steps on how to do this are shown below:

Excel:

The default viewer for a CSV file in the Windows environment is Excel. Double clicking on the CSV file should bring it up in a spreadsheet. Alternatively, start Excel and, in a new workbook, go to the "Data" tab and select "Get External Data" and then select "From text". Follow the instructions of the import wizard and select "Delimited" data and check the "My data has headers" check box. Next, pick Comma as the delimiter and put the data in the cell \$A\$1.

SAS:

SAS can read CSV files directly with the import procedure (proc import) that is part of Base SAS. For example, the following command will read the CSV file, c:\NHIS2018\familyxx.csv to a dataset family:

```
proc import datafile="c:\NHIS2018\familyxx.csv" out=family dbms=csv replace;
    getnames=YES;
run;
```

For some files, you may need to use the guessingrows option to correctly set the length and type of the imported variables.

Stata:

You can import CSV data into Stata using the Graphical User Interface (GUI). Select File->Import->Text data created by a spreadsheet. Type in the path to the file, e.g., C:\NHIS2018\familyxx.csv, choose comma-delimited as the delimiter and hit OK. This should generate the following command which imports the data into Stata.

```
insheet using "C:\NHIS2018\familyxx.csv", comma clear
```

R:

R also provides a function to read data directly from CSV files either via the user interface or by typing in the read.csv command. Either UNIX or DOS style path separators can be used in the first argument. When the path separator is the DOS '\', escape each '\' character with a preceding '\\'. The command to read the family.csv into a data frame called family is:

```
family=read.csv("C:/NHIS2018/familyxx.csv", header=TRUE) or
family=read.csv("C:\\NHIS2018\\familyxx.csv", header=TRUE)
```

SPSS:

CSV data can be imported into SPSS with the text input wizard. Indicate that the file is delimited and that variable names are included in the top of the file.

2018 NHIS DATA FILE DOCUMENTATION FILES

There is a Survey Description document which contains general information about the 2018 NHIS. There are three documentation files associated with each subject matter file (summary, layout, frequency report).

The documentation files are in PDF format and can be viewed with Adobe Acrobat software. The Adobe Acrobat Reader software can be downloaded from the Adobe Acrobat Web site at:

<http://www.adobe.com/prodindex/acrobat/readstep2.html>

| File Name | Description | Format |
|----------------------|------------------------------------|--------|
| SRVYDESC.PDF | Survey Description Document | PDF |
| FAMILYXX_SUMMARY.PDF | Family File Variable Summary | PDF |
| HOUSEHLD_SUMMARY.PDF | Household File Variable Summary | PDF |
| PERSONSX_SUMMARY.PDF | Person File Variable Summary | PDF |
| SAMADULT_SUMMARY.PDF | Sample Adult File Variable Summary | PDF |
| SAMCHILD_SUMMARY.PDF | Sample Child File Variable Summary | PDF |
| PARADATA_SUMMARY.PDF | Paradata File Variable Summary | PDF |
| FAMILYXX_LAYOUT.PDF | Family File Layout | PDF |
| HOUSEHLD_LAYOUT.PDF | Household File Layout | PDF |
| PERSONSX_LAYOUT.PDF | Person File Layout | PDF |
| SAMADULT_LAYOUT.PDF | Sample Adult File Layout | PDF |
| SAMCHILD_LAYOUT.PDF | Sample Child File Layout | PDF |
| PARADATA_LAYOUT.PDF | Paradata File Layout | PDF |
| FAMILYXX_FREQ.PDF | Family File Frequency Report | PDF |
| HOUSEHLD_FREQ.PDF | Household File Frequency Report | PDF |
| PERSONSX_FREQ.PDF | Person File Frequency Report | PDF |
| SAMADULT_FREQ.PDF | Sample Adult File Frequency Report | PDF |
| SAMCHILD_FREQ.PDF | Sample Child File Frequency Report | PDF |
| PARADATA_FREQ.PDF | Paradata File Frequency Report | PDF |

NOTE: The numeric portion of the variable labels included in the SAS programming code and frequency documents are provided as a link to the file layout document but do not necessarily link to the question numbers on the survey instrument, especially for recode variables. The recode variables may be based on other recodes or more than one question.

2018 NHIS DATA FILES' RECORD SEQUENCE

All records in the NHIS data files have first been sorted by the Household Serial Number (HHX).

The Family file has been sorted by combining the Household Serial Number (HHX) and the Family Serial Number (FMX).

The person-level files (Person, Sample Adult, Sample Child) have been sorted by combining the Household Serial Number (HHX), Family Sequence Number (FMX) and Person Sequence Number (FPX).

MERGING 2018 NHIS DATA FILES

To merge data from the Household file into the Family file, or into any of the person-level files (Person, Sample Adult, Sample Child), merge by variable HHX.

To merge the Family file information into a person-level file merge by HHX and FMX.

To merge any person-level file with another person-level file, merge by variables HHX, FMX and FPX.

NOTE: An asterisk in the summary and/or frequency documents means that there is additional information for the variable in the Notes section of the file's layout document.

CONTACT INFORMATION

Updates about new data releases, publications, or errors will be sent to members of the NHIS Listserv. To join, visit the website at:

https://www.cdc.gov/nchs/nhis/nhis_listserv.htm

For additional information on NHIS data products:

Phone : 301-458-4901
FAX : 301-458-4035
E-mail : nhislist@cdc.gov.
Internet: <https://www.cdc.gov/nchs/nhis.htm>

For additional information on other NCHS data products:

Phone : 800-CDC-INFO (800-232-4636)
E-mail : <https://www.cdc.gov/dcs/ContactUs/Form>
Internet: <https://www.cdc.gov/nchs>

STATEMENT OF AUTHENTICITY

This material has been cleared for public distribution by CDC/ATSDR and will be authentic if obtained directly from ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/. CDC/ATSDR makes all effort to assure the authenticity of electronically distributed documents. However, in all instances where the electronic and official agency record differ, the authenticity of the official agency record is controlling.