

NATIONAL CENTER FOR HEALTH STATISTICS

# **Technical Notes**

Round 3: Data collected January-February 2024



Last revised August 7, 2024



## Introduction

The National Center for Health Statistics (NCHS) Rapid Surveys System (RSS) is a platform that utilizes commercially available probability-based online panels to provide time-sensitive data about emerging and priority health concerns. RSS began fielding in 2023, and has a different questionnaire administered each round of data collection.

To provide timely access to selected point estimates based on RSS content, a dashboard may be released following each round of data collection. Percentages are shown by selected population subgroups such as age group, gender, race and Hispanic origin, education, household income as a percentage of the federal poverty level, region, and urbanicity.

#### **Methods**

#### **Data source**

The target population of RSS Round 3 (RSS-3) is all U.S. adults aged 18 and older. Data were collected in January-February 2024 from two commercial panel providers using the same questionnaire

(<u>www.cdc.gov/nchs/data/rss/round3/questionnaire.pdf</u>). Data were collected from 8,375 adult participants this round using two panels – Amerispeak (conducted by NORC at the University of Chicago) and KnowledgePanel (conducted by Ipsos). The combined completion rate for both panels was 39.7% (1).

Both panel providers collect profile information from their panelists on a regular basis, including several sociodemographic and geographic characteristics. As these data were already available for RSS respondents as part of their panel profile data, questions about these characteristics were not re-asked on the RSS questionnaire. These measures were harmonized into common categories, but the information was collected separately from RSS, at different times and using different questions in each panel.

Details on data collection, sampling methods, response rates, weighting methodologies, and other data processing components can be found in the Survey Description <u>www.cdc.gov/nchs/data/rss/round3/survey-description.pdf</u>) and the Quality Profile (<u>https://www.cdc.gov/nchs/data/rss/round3/quality-profile.pdf</u>).

#### **Estimation procedures**

The RSS-3 questionnaire included several variables which were used to calibrate survey weights to NHIS population totals. These final calibrated weights were used to generate the estimates in the released dashboard. All estimates shown meet the <u>NCHS</u> <u>Data Presentation Standards for Proportions</u>.

Cases with missing data are excluded from the analysis, unless otherwise mentioned. Data would be considered missing for a variable if, for example, the respondent refused or didn't know how to respond, or if they skipped the question on the web. These are henceforth referred to as nonresponse. Overall, item nonresponse rates were low, averaging <2% per item in the combined file. Several of the sociodemographic characteristics used in the dashboard have very low or no missing values, as they were imputed when missing for weighting purposes. Only one variable related to a measure in the RSS-3 dashboard had an item nonresponse higher than 5% in the combined dataset: GEN\_HRTTST (5.1%; ever had a genetic test to determine if you are at greater risk of getting heart disease). Data users using this variable, or others on the combined file with higher item nonresponse are encouraged to consider the impact of nonresponse, if applicable to their analysis/research. Please see the Quality Profile (<u>https://www.cdc.gov/nchs/data/rss/round3/quality-profile.pdf</u>) for more information.

#### **Data limitations**

While faster to produce compared to traditional household surveys, web-based panel surveys are subject to issues regarding accuracy and usability. Web-based panel surveys often have lower response rates than large-scale national surveys and may underrepresent certain subpopulations. This can lead to biased estimates when attempting to make inferences to the national population. RSS's smaller sample sizes and greater potential for coverage and nonresponse bias may result in lower precision, especially for subgroups. Panel survey nonresponse occurs at many stages, including panel recruitment, panel retention, and at the individual survey level. RSS aims to compensate for nonresponse through calibration and weighting of the RSS to gold standard NCHS surveys. However, the effectiveness of these weighting adjustments for nonresponse may vary across survey estimates and will depend on the availability of appropriate gold standard survey data. RSS also includes a benchmarking component, which allows comparison of estimates to those from the same questions on other surveys, to facilitate bias assessments for a wide array of health-related estimates. These bias assessments provide context on the effectiveness of the weighting adjustments and quality of estimates generated from RSS. For an evaluation of the quality of RSS-3 data, including the calibration of weights and benchmark analysis, please see the Quality Profile (https://www.cdc.gov/nchs/data/rss/round3/qualityprofile.pdf).

Another limitation of RSS is that some of the sociodemographic and geographic variables are drawn from panel profile variables, which are collected separately from RSS, and are collected at different times than the RSS health topic content and using different questions in each panel. Although they are updated regularly, it is not known whether any of these characteristics had changed between the last time the panel collected the information and the respondent completed the RSS-3 questionnaire.

The Rapid Surveys System is particularly well suited for time sensitive data needs, measuring public health attitudes, developmental work to improve concept measurement, and methodological studies, but is intended to complement and not replace the current household survey systems at NCHS, including the National Health Interview Survey.

#### Variance estimation and statistical reliability

All estimates shown meet the NCHS standards of reliability as specified in *National Center for Health Statistics Data Presentation Standards for Proportions* (2). Unreliable estimates are indicated with an asterisk (\*) and are not shown. Reliable estimates with an unreliable complement are shown but are indicated with two asterisks (\*\*). Complements are calculated as 100 minus the percentage. The standards are applied directly for percentages. Two-sided 95% confidence intervals are calculated using the Clopper-Pearson method adapted for complex surveys by Korn and Graubard (2). Standard errors used in this calculation were obtained using SUDAAN software, which takes into account the complex sampling design of RSS. The Taylor series linearization method was used for variance estimation.

# **Definitions of selected terms**

# Sociodemographic and geographic characteristics from panel profile data

The following sociodemographic and geographic characteristics used as covariates in these dashboards and tables were collected as part of the panel profile information (not RSS questionnaire) and harmonized between the two panels.

Age – Age is recorded in single years and grouped into categories for the dashboard.

*Education* – Categories of education are based on years of school completed or highest degree obtained. GED is General Educational Development high school equivalency diploma.

*Gender* – Respondents are classified as Male or Female.

*Hispanic origin and race* – Hispanic origin and race are collected as two separate and distinct concepts by the two panels. Hispanic persons may be of any race. Hispanic origin and race is divided into Hispanic and Not Hispanic. Not Hispanic is further divided into Black or African American only, non-Hispanic; White only, non-Hispanic; and Other single or multiple races, non-Hispanic.

*Household income as a percentage of the federal poverty level* – Categories presented are Less than 100% FPL, 100% to less than 200% FPL, and 200% FPL and greater. FPL is federal poverty level.

*Region* – In the geographic classification of the U.S. population, states are grouped into four regions used by the U.S. Census Bureau:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont *Midwest*: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin *South*: Alabama, Arkansas, Delaware, District of Columbia, Kentucky, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia *West*: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

*Urbanicity* – Based on the 2013 NCHS Urban-Rural Classification Scheme for Counties (3) which groups U.S. counties and county-equivalent entities into six categories: large central metropolitan, large fringe metropolitan, medium metropolitan, small metropolitan, micropolitan, and non-core. For the RSS dashboards, medium and small metropolitan are combined into a single group, and micropolitan and non-core are combined into a single group (nonmetropolitan).

### Select outcomes collected on questionnaire

Estimates for most measures are generated from a single question on the questionnaire. For exact wording of questions, please see the questionnaire (<u>www.cdc.gov/nchs/data/rss/round3/questionnaire.pdf</u>). Below are additional details on some of the outcomes shown in the dashboard.

*Family health history* – The question set asking about family health history was preceded by an explanation that a family health history includes illnesses, past diagnoses, and health problems that their relatives have had. Respondents were also instructed to not include relatives who are related by marriage or adoption, but to include biological parents, brothers, sisters, children, and grandparents. A question asking about importance of knowing their family health history to their own health had the following answer categories: Very important, Somewhat important, or Not at all important. A series of questions asked about how much respondents knew about the health history of their biological mother, father, maternal grandparents, and paternal grandparents, with the following answer categories: A lot, Some, or Nothing at all. A question asking how difficult it is to collect information about the health history of biological relatives had the following answer categories: Very difficult, Somewhat difficult, or Not at all difficult. Questions about select reasons why it might be difficult collecting family health history were not mutually exclusive, and respondents could have selected multiple reasons.

Genetic testing – The question set asking about genetic testing was preceded by an explanation that genetic testing is when blood or saliva is tested to see if they are at high risk for getting certain diseases in the future due to their genes, and does not include tests to determine if they have the disease now. Respondents were instructed to include genetic testing done by a health care provider or genetic counselor or from a home test, such as 23andMe or Color Genomics. Two separate questions asked about whether adults had ever had a genetic test for risk of cancer, or for risk of heart disease. Each question had an on-screen option to select "Don't know" which was selected by 4-5% of respondents. The dashboard includes a measure which combines responses to these two questions, and includes those who responded "Don't know" in the denominator. Adults who had not had a genetic test for higher risk of cancer or skipped the question, refused to answer or didn't know how to answer were asked if they were interested in getting such a test in the future, and a similar question was asked about genetic tests for higher risk of heart disease. The dashboard includes a measure which combines responses to these two questions, among adults who have not previously had a genetic test for higher risk of cancer or heart disease. Questions about select reasons why adults might have had a genetic test for risk of cancer or heart disease were not mutually exclusive, and respondents could have selected multiple reasons.

Sexual health – The question set asking about sexual health was preceded by an explanation that sexual health means being comfortable in your body, having a healthy sex life that satisfies you, and being in relationships that feel safe and supportive. A

question asked about receipt of any sexual health services, which was defined as services like sexually transmitted infection (STI) or HIV testing, STI treatment, HIV PrEP (pre-exposure prophylaxis), or birth control. Questions on locations where adults received sexual health services were not mutually exclusive – respondents could have selected multiple locations. Similarly, sources for where adults turn to for information on sexual health were not mutually exclusive, and respondents could have selected multiple sources.

# **Further information**

Data users can obtain the latest information about RSS by periodically checking the website (<u>https://www.cdc.gov/nchs/rss/rapid-surveys-system.html</u>). This website will feature downloadable public-use data and documentation for RSS, as well as important information about any modifications or updates to the data or documentation.

# References

1. National Center for Health Statistics. Rapid Surveys System (RSS): Round 3 survey description. 2024.

Available from: <u>www.cdc.gov/nchs/data/rss/round3/survey-description.pdf</u>.

- 2. Parker JD, Talih M, Malec DJ, Beresovsky V, Carroll M, Gonzalez JF Jr, et al. National Center for Health Statistics data presentation standards for proportions. National Center for Health Statistics. Vital Health Stat 2(175). 2017.
- 3. National Center for Health Statistics. NCHS urban–rural classification scheme for counties. Available from:

https://www.cdc.gov/nchs/data\_access/urban\_rural.htm#2013\_Urban-Rural\_Classification\_Scheme\_for\_Counties.

# **Suggested citation**

Recommended citations for specific tables and charts are included in the notes at the end of each page. The citation for the Technical Notes is as follows, although it should also include the date accessed as it may be edited periodically when new tables are added.

Technical Notes. NCHS Rapid Surveys System. Round 3. August 2024. National Center for Health Statistics. Available from: www.cdc.gov/nchs/data/rss/round3/technical-notes.pdf.