

HEART ATTACK & STROKE SC TRACKING

SC BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM META DATA

BACKGROUND

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest random telephone survey of the noninstitutionalized population aged 18 or older that is used to track health risks, behaviors, and preventative health practices in the United States. South Carolina has been administering the BRFSS survey annually since 1984. SC Tracking obtains BRFSS data from the SC BRFSS program.

DATA LIMITATIONS

BRFSS data is a self-reported and anonymous telephone-based survey. With self-reported data, several biases could influence the data including, self-report bias, recall bias, and non-coverage bias. Response rates for the BRFSS survey have been declining over time. Due to relatively small sample sizes, county and ZIP Code level data is not recommended for analysis at times due to suppression rules. Additionally, county-level estimates often need to aggregate several years' worth of data to show stable rates.

ACCESS CONSTRAINTS

Data is displayed as percentages. Blanks or missing data within maps, tables, or charts may be due to data not being available or BRFSS suppression rules. Data is unavailable when no observations were made for that specific group, and therefore estimates were not available. Suppression is applied in accordance with BRFSS guidelines to protect confidentiality. Data is suppressed when confidence intervals exceed 20%, the denominator is less than 50, county-level data has less than 200 observations for aggregated years, or county-level data has less than 500 observations for single years.

USE CONSTRAINTS

Any user of this data must have reviewed and understood the metadata content before attempting to understand, interpret or use BRFSS data. No attempt should be made to identify survey participants through use of this data set. This is a public dataset and is not for commercial purposes. Any use of this data should contain proper data source acknowledgement to: SC BRFSS.



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM META DATA

MEASURE SPECIFIC INFORMATION

The prevalence of adults 18 and older who have ever been diagnosed with a heart attack, stroke, diabetes, obesity, hypertension, not consuming fruits, not consuming vegetables, and being a current smoker are displayed at the state-level for 2023 on the [Heart Attack and Stroke Dashboard](#). Sex, race and ethnicity, education, age group, and income breakouts are also displayed.

The prevalence of adults who ever had a **heart attack** was captured by asking respondents, “Have you ever been told that you had a heart attack also called a myocardial infarction?” People who replied “Yes” were compiled and analyzed.

The prevalence of adults who have had a **stroke** was captured by compiling results who responded yes to, “Have you ever been told you have had a stroke?”.

The prevalence of adults who have been diagnosed with **diabetes** was captured by compiling results who responded “Yes” to, “Have you ever been told you had diabetes?”.

The BRFSS definition for **obesity** is adults aged 18 or older who have a body mass index (BMI) ≥ 30.0 kg/m² calculated from self-reported height and weight. The following were excluded: height data from respondents measuring < 3 feet or ≥ 8 feet, weight data from respondents weighing < 50 pounds or ≥ 650 pounds and BMI data from respondents with BMI < 12 kg/m² or ≥ 100 kg/m².

Hypertension is captured by asking adults, “Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?” People who responded “Yes” are displayed on the dashboard.

Fruit consumption is captured by asking survey respondents, “During the past month, how often did you eat fruit? Do not include juices. You can tell me times per day, per week, or per month.” People who responded to not consuming any fruit daily are displayed in the dashboard.



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM META DATA

MEASURE SPECIFIC INFORMATION

Vegetable consumption is captured by asking survey respondents a series of questions around their intake of a variety of vegetables, including leafy greens, fried potatoes, other forms of potatoes, and other forms of vegetables. People who responded to not eating vegetables daily are displayed on the dashboard.

To obtain information around **smoking status**, respondents were asked, “Have you smoked at least 100 cigarettes in your entire life?” People who replied “Yes” were then asked a follow-up question of, “Do you now smoke cigarettes every day, some days, or not at all?” Respondents who replied denoting they smoke everyday or some days were categorized as being a current smoker.

Data surrounding heart attack, stroke, diabetes, obesity, and smoking status is updated annually and was last updated July 30, 2025.

Data surrounding fruit consumption, vegetable consumption, and hypertension is collected biannually with survey collection taking place during every odd calendar year (i.e., 2023). The data is updated biannually on this dashboard as available with the last updates occurring on July 30, 2025.

SUGGESTED CITATION

SC Behavioral Risk Factor Surveillance System. [Graphic name]. Available online: www.dph.sc.gov/tracking. Accessed on [date accessed].

ADDITIONAL RESOURCES

Learn more about the National BRFSS program here:
www.cdc.gov/brfss/index.html

Review SC BRFSS historical questions here:
<https://apps.dhec.sc.gov/Health/BRFSSQuestionSearch/default.aspx>



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC DEPARTMENT OF PUBLIC HEALTH VITAL STATISTICS META DATA

BACKGROUND

Vital Records is the state's official records keeper for vital information pertaining to births, deaths, marriages, and divorces occurring in South Carolina. South Carolina law requires the filing of birth and death certificates. This has been in effect since January 1, 1915. Death/mortality data pertains to all deaths that occur to South Carolina residents within and beyond state lines. Death certificates are used to denote the underlying or contributing cause of death.

DATA LIMITATIONS

Data does not include clinical data such as lab tests, or information on a deceased person's health status leading up to death. Additionally, data on vital events, such as deaths, can take a significant amount of time to be finalized and readily available by researchers.

ACCESS CONSTRAINTS

In accordance with standards established by the South Carolina Department of Public Health's (DPH) Bureau of Vital Statistics, numbers less than five are suppressed along with their associated rates to protect patient confidentiality.

USE CONSTRAINTS

Any user of this data must have reviewed and understood the metadata content before attempting to understand, interpret or use DPH Vital Statistics data. No attempt should be made to identify decedents through use of this data set. This is a public dataset and is not for commercial purposes. Any use of this data should contain proper data source acknowledge: DPH Vital Statistics. Additional data requests should be sent to DPH Vital Statistics.



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC DEPARTMENT OF PUBLIC HEALTH VITAL STATISTICS META DATA

MEASURE SPECIFIC INFORMATION

The following data is displayed on the [Heart Attack and Stroke Dashboard](#):

The age-adjusted mortality rate for heart attack and stroke from 2019-2023 at the county-level. Data also available for previous five-year intervals.

The age-adjusted mortality rate for heart attack and stroke from 2019-2023 by race and ethnicity and sex at the county-level.

The single-year age-adjusted mortality rate for heart attack and stroke from 2013-2023 at the state and county-level.

ICD-10 codes used to compile heart attack mortality statistics include I21-I22. ICD-10 codes used to compile stroke mortality statistics include I60-I64, I67, and I69.

Data is updated annually and was last updated July 30, 2025.

SUGGESTED CITATION

SC Department of Public Health Vital Statistics. [Graphic name]. Available online: www.dph.sc.gov/tracking. Accessed on [date accessed].

ADDITIONAL RESOURCES

Learn more about SC DPH Vital Records here:
www.dph.sc.gov/public/vital-records/about-vital-records

The South Carolina Community Assessment Network (SCAN) is an interactive data retrieval system for community assessment, planning, and health practices that can be used to create tables, charts, and maps using select vital record data. This interactive tool can be accessed here:
apps.dhec.sc.gov/Health/scan/scan/index.aspx



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC REVENUE AND FISCAL AFFAIRS OFFICE META DATA

BACKGROUND

The South Carolina Revenue and Fiscal Affairs Office (RFA) provides diverse fiscal and statistical analyses, reports, and other services to various state and local government entities, the private sector, and South Carolinians. RFA collects healthcare data from all civilian hospitals in the the state, including emergency department reports, outpatient surgery report and inpatient reports.

RFA data is stored on the Private Sector Health Care Utilization Database, which contains information from the UB-04 billing system. The database includes all inpatient hospitalizations and emergency department visits from short-term acute care hospitals. The database includes information such as patient demographics, ICD-10 diagnoses and procedures, charges, length of stay, patient disposition, etc. The South Carolina Data Oversight Council, a seventeen member public/private body formed by the state statute with the SC RFA as staff, oversees the collection and release of information from this database.

DATA LIMITATIONS

RFA data is not population-based and does not include information on individuals at hospitals managed by the U.S. Department of Veterans Affairs. Data is based on the county where residents live, not where they are diagnosed.

ACCESS CONSTRAINTS

In accordance with RFA guidelines, numbers less than five are suppressed to protect patient confidentiality. Associated crude rates, inpatient charges, and charges for emergency department visits are suppressed as well. Suppression is not required for age-adjusted rates as personal identity is protected as they are calculated, but may be suppressed when published on SC Tracking dashboards.



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC REVENUE AND FISCAL AFFAIRS OFFICE META DATA

USE CONSTRAINTS

Any user of this data must have reviewed and understood the metadata content before attempting to understand, interpret or use RFA data. No attempt should be made to identify patients through use of this data set. This is a public dataset and is not for commercial purposes. Any use of this data should contain proper data source acknowledgement: SC Revenue and Fiscal Affairs Office, Health and Demographics Section. Additional data requests should be sent directly to SC RFA.

MEASURE SPECIFIC INFORMATION

Acute myocardial infarction or a heart attack is the irreversible death of heart muscle due to prolonged loss of blood supply. ICD-10 primary diagnosis codes I21-I22 were gathered for both ED and hospitalizations for South Carolinians being treated in an acute care hospital.

Stroke, sometimes called a brain attack, occurs when something blocks blood supply to part of the brain or when a blood vessel in the brain bursts. ICD-10 primary diagnosis codes I60-I69 were compiled for both ED and hospitalizations for South Carolinians being treated in acute care hospitals. The following data is displayed on the [Heart Attack and Stroke Dashboard](#):

The age-adjusted rate of heart attack and stroke hospitalizations and ED visits in 2019-2023 at the county-level, with previous five-year intervals also displayed.

The age-adjusted rate of heart attack and stroke hospitalizations and ED visits in 2019-2023 by race and ethnicity and sex at the county-level, with previous five-year intervals also displayed.

The number of heart attack and stroke ED visits in 2019-2023 and associated average and total charges by insurance type at the county and state levels, with previous five-year intervals also displayed.

All rates are per 10,000 population. Data is updated annually and was last updated July 30, 2025.



sctracking@dph.sc.gov



HEART ATTACK & STROKE SC TRACKING

SC REVENUE AND FISCAL AFFAIRS OFFICE META DATA

ADDITIONAL RESOURCES

Learn more about SC Revenue and Fiscal Affairs Office here:
<https://rfa.sc.gov/>

SUGGESTED CITATION

SC Revenue and Fiscal Affairs Office, Health Demographics Section. [Graphic name].
Available online: www.dph.sc.gov/tracking. Accessed on [date accessed].



sctracking@dph.sc.gov

