

UNINTENTIONAL CARBON MONOXIDE POISONING 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



UNINTENTIONAL CARBON MONOXIDE POISONING SC TRACKING

SC BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM META DATA

MEASURE SPECIFIC INFORMATION

The prevalence of adults who reported at least one Carbon Monoxide (CO) detector in their household is displayed on the [Unintentional Carbon Monoxide Poisoning Dashboard](#).

Carbon monoxide detector prevalence is captured by asking adults 18 and older, “Do you have a carbon monoxide detector in your home?”. Affirmative responses are summarized and displayed on the dashboard. Demographics shown include race and ethnicity and income levels.

This BRFSS survey question was last collected in 2012. SC Tracking has re-added carbon monoxide detector questions back to the BRFSS survey, with annual questions being asked beginning in 2024.

Data updates will begin annually following the release of the 2024 BRFSS file.

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



UNINTENTIONAL CARBON MONOXIDE POISONING 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 SC DPH 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



UNINTENTIONAL CARBON MONOXIDE POISONING SC TRACKING

SC DEPARTMENT OF PUBLIC HEALTH VITAL STATISTICS META DATA

MEASURE SPECIFIC INFORMATION

The number and rate of unintentional carbon monoxide (CO) poisoning mortality in South Carolina from 2013-2023 is displayed on the [Unintentional Carbon Monoxide Poisoning Dashboard](#). Rates are aggregated into five-year rolling averages.

ICD-10 codes used to compile unintentional carbon monoxide poisoning mortality statistics include T58.0. Mortality records caused by intentional self-harm and assault (i.e., X60-Y09, Y35, and Y36) are excluded.

It is important to note variations may occur between localities in how medical examiners, coroners, and physicians assign intentionality. Thus, an area where the medical examiner, coroner, or physician is disinclined to attribute a CO poisoning to suicide will have higher unintentional CO poisoning death rates than a comparable locale. Finally, CO poisonings that are unrecognized by the medical examiner, coroner, or physician will be attributed to other causes.

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



UNINTENTIONAL CARBON MONOXIDE POISONING 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 people 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



UNINTENTIONAL CARBON MONOXIDE POISONING 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 patient identity 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

This indicator tracks acute, unintentional carbon monoxide (CO) poisoning resulting in hospitalization or an ED visit. CO is an odorless, colorless gas that is the byproduct of combustion, which preferentially binds to hemoglobin and therefore displaces oxygen in the blood stream. CO is the leading cause of acute, unintentional poisoning and death, excluding alcohol and drug-related intoxication.

ICD-10 codes were included for South Carolinians being treated in acute care hospitals if primary diagnosis codes were T58.01, T58.04, T58.11, T58.14, T582X1, T58.8X4, T58.91, and T58.94. The following data is displayed on the [Unintentional Carbon Monoxide Poisoning Dashboard](#):

The number and rate of unintentional CO poisoning hospitalizations and ED visits by region and state in 2019-2023.

Total charges for unintentional CO poisoning hospitalizations and ED visits in 2019-2023 by insurance status and race at both the region and state level.

Data is also available by cause: unintentional fire-related, unintentional non-fire related, and unknown cause.

All rates are per 100,000 population. Data is updated annually and was last updated July 30, 2025.



sctracking@dph.sc.gov



UNINTENTIONAL CARBON MONOXIDE POISONING SC TRACKING

SC REVENUE AND FISCAL AFFAIRS OFFICE META DATA

SUGGESTED CITATION

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

ADDITIONAL RESOURCES

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



sctracking@dph.sc.gov

