



Interim Guidance for Public Health Surveillance Programs for Classification of COVID-19-associated Deaths among COVID-19 Cases

Background

This guidance was developed by the Council of State and Territorial Epidemiologists (CSTE) with input from members and in collaboration with the Centers for Disease Control and Prevention (CDC). The guidance provides a consensus-based definition of COVID-19-associated deaths. It is intended to help public health surveillance programs decide whether infections counted as COVID-19 cases in persons who have died should also be counted as COVID-19-associated deaths. While there is an [national case definition for COVID-19 cases](#), currently there is no such standard definition for reporting of associated deaths. This means that jurisdictions may be counting deaths using different methods.

It is important for federal, state, and local decision-makers and the public to have timely and comparable data on COVID-19-associated deaths across U.S. jurisdictions. When health departments across the country use the same criteria to count deaths among fatal COVID-19 cases identified through surveillance, helpful comparisons can be made across communities and the data can contribute to a more meaningful national picture. This guidance is intended for public health departments preparing surveillance reports and sharing timely information for situational awareness and public health response. It is not intended for use by physicians or others assigning causes of death on death certificates. Standard guidance on how to report COVID-19 on death certificates has been made available throughout the pandemic at <https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf>.

This definition may need to be reevaluated in the coming months as new variants, such as Omicron, emerge with different epidemiologic and clinical characteristics. Evaluations could include tracking, over time, of the proportion of deaths meeting each individual criteria listed in the definition. Additional data, including excess deaths, should be considered as complementary measures which can help to assess mortality associated with SARS-CoV-2.

Data Sources Available to Health Departments for Identification and Classification of COVID-19-associated Deaths

Public health agencies use information from laboratory and provider reports, public health case investigations, and death certificates to better understand COVID-19 deaths. Vital registries and the National Center for Health Statistics (NCHS) compile official data regarding causes of death for all deaths, based on information entered on death certificates. This information comes from physicians, medical examiners, and coroners.

- Provisional and final death certificate data are available at <https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm>. Standard guidance on how to report COVID-19 on the death certificates has been made available throughout the pandemic at <https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf>.
- These statistics will not include or count deaths as COVID-19 associated if COVID-19 is not indicated as a cause of death on the death certificate.
- There may also be deaths included in the official NCHS or vital registry statistics that are not due to COVID-19 but where COVID-19 is entered on the death certificate.
- Death certificate cause of death data can take several weeks to become available after the death—this varies by jurisdiction.

COVID-19 case and death surveillance data are often generated, posted publicly, and reported to CDC prior to the availability of vital registry or official NCHS data. The numbers of COVID-19-associated deaths identified through this standardized definition are not expected to match exactly the number of COVID-19 deaths compiled by vital registries or NCHS. Over time, however, the counts and trends are very similar (see <https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2021.306519?journalCode=ajph>). Reasons for the differences in counts may include the sources of information for the data, classification of deaths by residence of the decedent versus location of the death, and/or timeliness of accrual of data. Both sources provide useful information on COVID-19-associated mortality, and valid conclusions can be drawn based on trends or analyses of data offered by each system. The definition is meant primarily for surveillance purposes and for providing data for tracking trends and performing epidemiologic analyses. It will not classify every death correctly.

The criteria defined below are intended to provide useful and timely data for public health decision making. They try to balance the desire for perfect knowledge with the realities of limited public health resources. Where public health agencies have information in addition to the criteria presented below, they should exercise professional judgment about whether to include a death in COVID-19 surveillance counts.

Criteria for identifying COVID-19-associated deaths among COVID-19 cases

CRITERIA FOR USE WITH CONFIRMED CASES:

1. The case meets **the confirmed COVID-19 surveillance case definition**, AND at least ONE of the following criteria is met:
 - a. A case investigation determined that COVID-19 was the cause of death or contributed to the death.
 - b. The death certificate indicates COVID-19 or an equivalent term as one of the causes of death, regardless of the time elapsed since specimen collection of the confirmatory laboratory test used to define the case.
 - c. The death occurred within (and including) 30 days of specimen collection for the confirmatory laboratory test used to define the case and was due to natural causes (e.g., the Manner of Death is coded as “natural” on the death certificate.)

CRITERIA FOR USE WITH PROBABLE CASES:

1. The case meets the **probable COVID-19 case definition** AND a case investigation determined that COVID-19 was the cause of death or contributed to the death.

OR

2. The case meets the **probable COVID-19 surveillance case definition based on presumptive laboratory evidence** AND death occurred within (and including) 30 days of specimen collection and was due to natural causes (e.g., the Manner of Death is coded as “natural” on the death certificate.)

OR

3. The case meets the **probable COVID-19 surveillance case definition based on epidemiologic linkage and meeting clinical criteria**, AND death occurred within (and including) 30 days of symptom onset and was due to natural causes (e.g., the Manner of Death is coded as “natural” on the death certificate.)

OR

4. The case meets the **probable COVID-19 surveillance case definition based only on vital records criteria** (i.e. a death certificate that lists COVID-19 disease or SARS-CoV-2 or an equivalent term as an underlying cause of death or a significant condition contributing to death and there is no confirmatory or presumptive laboratory evidence.)