COVID-19 Death Categories

Washington State Department of Health

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COVID Death Data Processing

The Washington Department of Health relies on two databases in order to categorize COVID deaths.

First, the Washington Disease Reporting System (WDRS) provides information on COVID testing. For death reporting, a positive PCR or Antigen test is considered a positive test for death classification.

Second, the Washington Health and Life Event System (WHALES) contains death certificate data, which includes the health conditions that contributed to death. For a death to be counted and categorized, the death certificate must be finalized in WHALES. Completing a death certificate typically takes less than a week, so the delay in counting deaths is minimal.

By combing these two information sources, COVID deaths are then classified into the categories described below.

COVID Death Categories:

Confirmed deaths

Confirmed deaths are deaths occurring among those who have a positive COVID-19 test at any time and whose death certificate includes COVID as a cause or contributing factor. Confirmed deaths also include death certificates that mention COVID-like illnesses and have a positive COVID test within 60 days. Death certificates that only mention COVID-like illness are followed up with to rule in or rule out COVID-19 as contributing to death.

Please see the tables below for the specific COVID and COVID-like terms that are included in the criteria. Death certificates that contain these terms are counted as confirmed COVID deaths unless an exclusion criteria (see below) is on the death certificate.

COVID: Confirmed Deaths

COVID	Corona19	Corona Virus
NCOV	COV2	SAR2COV19
Severe acute respiratory syndrome*	SARS*	

^{*}If no other strain is specified.



COVID-like: Confirmed Deaths

Respiratory Distress Respiratory Failure Acute Respiratory

ARDS Viral Illness Pneumonia

Hypoxia Lower Respiratory Infection

Suspect deaths

Suspect deaths are natural deaths that do not include the COVID or COVID-like terms listed above on the death certificate. A suspect death must also have a positive COVID-19 test within 28 days of death. The Department of Health and Local Health Jurisdictions follow up on Suspect deaths to rule in or rule out COVID-19 as a cause or contributor to death.

Please note: Both Confirmed and Suspect deaths are included in the overall COVID death count.

Pending deaths

Pending deaths are deaths whose death certificate is still pending, or deaths that are missing a cause of death on the death certificate. Many of these deaths are very recent deaths, out of state deaths to Washington residents, or complex deaths waiting for additional information from the local medical examiner or coroner.

Non-COVID-19 deaths

Non-COVID-19 deaths include deaths that occur among those who have tested positive for COVID-19, but who have died of unrelated causes. This includes homicides, suicides, overdoses, accidents (without mention of COVID), and natural deaths where COVID-19 has been ruled out as contributing to the death. This includes deaths that occurred more than 60 days after the specimen collection date for the positive COVID-19 test and whose death certificate did not mention COVID-19. Finally, if a death certificate includes one of the following exclusion terms, it is sorted into the non-COVID category.

Exclusion criteria

Non-COVID COVID19 Negative Not COVID

Not related to COVID Not tested for COVID

COVID not thought to be contributing factor

Deaths Probably Due to COVID, but Not Linked to a Positive Test

Probable deaths include deaths where the death certificate lists COVID-19 as a cause or contributor to the death, but do not have a known positive COVID-19 test. At this time, probable deaths are not included in the COVID death count.



Refinements in COVID-19 Death Categorization:

Determining whether COVID-19 caused or contributed to a person's death can be very complex and may take weeks to verify depending on the complexity of the case. As we go through the regular DOH process for finalizing death counts, we will make all warranted adjustments to these data, and numbers are likely to change over time. Past changes include the following:

- April, 2020: As the scale of the pandemic became clearer, we began automatically linking positive COVID-19 test results to deaths in the Electronic Death Registration System, rather than relying solely on manual updates to the Washington Disease Reporting System (WDRS)
- July, 2020: we began sub-dividing deaths into confirmed, suspect, and non-COVID categories.
- For death certificates that don't specifically reference COVID-19, we put a 60 day time limit from last positive PCR test. Deaths that occurred past this limit were automatically categorized as non-COVID unless we received information to the contrary.
- Probable deaths, as defined as deaths that mention COVID-19 on the death certificate, but for which we can find no associated positive PCR test result, were entered into WDRS. We discontinued this process, pending further quality improvements, which have been completed.
- November, 2020: we started reporting deaths among antigen positive cases. Although these are formally probable deaths, in that they have no positive PCR test result, we do process these deaths and use the same categorization criteria that exist for PCR-confirmed cases.
- November, 2020: As it became apparent that we were counting some natural deaths that probably were not related to COVID-19, we further restricted suspect deaths (i.e. natural deaths whose death certificate does not include COVID or a COVID-like illness) to 28 days after the last positive COVID-19 test. We also stopped reporting any death whose cause of death was pending, and any death whose death certificate has not yet been registered. This allows us to report more complete data.
- June 2021: In order to streamline the death follow up process, feedback from Local Health Jurisdictions to rule in or out a COVID death is now being collected through the Washington Disease Reporting System (WDRS) instead of through email.

