

## 25-ID-03

**Committee:** Infectious Disease

**Title:** Public Health Reporting and National Notification for COVID-19-Associated Pediatric Mortality

☐ Check this box if this position statement is an update to an existing standardized surveillance case definition and include the most recent position statement number here: N/A.

### Synopsis:

- This position statement creates a standardized surveillance case definition for COVID-19-associated pediatric mortality and recommends COVID-19-associated pediatric mortality be made nationally notifiable.
- A standardized surveillance case definition for COVID-19-associated pediatric mortality is needed to estimate the burden of this condition in a consistent manner across jurisdictions. Among jurisdictions where COVID-19-associated pediatric mortality is reportable currently, case definitions vary. A standardized case definition provides a framework for classifying cases consistently, supports understanding the burden of this condition and utilization of preventive strategies, and aligns the public health surveillance approach for COVID-19-associated pediatric mortality with that of influenza- and respiratory syncytial virus (RSV)-associated pediatric mortality. This creates a more consistent approach to the overall surveillance for pediatric mortality associated with respiratory viruses.
- COVID-19-associated pediatric mortality should be nationally notifiable to facilitate timely, complete, and consistent assessment of the most severe COVID-19 outcome in a population of interest nationally.
- Case ascertainment criteria include clinical criteria, laboratory criteria, and vital records criteria for reporting.
- Case classification criteria include clinical criteria, laboratory criteria, and vital records criteria.
- Case classifications include confirmed, probable, and suspect cases.

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## **I. Statement of the Problem**

Since the emergence of SARS-CoV-2 in 2019, the presentation, epidemiology, and surveillance for SARS-CoV-2 infections and COVID-19 have evolved. As COVID-19 case surveillance data declined in reliability and representativeness for national public health decision-making, CSTE removed SARS-CoV-2 infection from the *Nationally Notifiable Conditions* (NNC) List in 2024.<sup>1</sup> However, one goal of COVID-19 surveillance continues to be understanding the burden and nature of severe outcomes in populations of interest, given the availability of preventive and disease mitigation measures.

The burden of COVID-19-associated mortality in one population of interest, pediatrics, was demonstrated to be high compared with other causes of pediatric mortality during the pandemic.<sup>2</sup> However, the current burden of COVID-19-associated pediatric mortality, as well as its relative contribution to overall pediatric mortality associated with respiratory viruses, is unknown. CSTE has developed formal position statements that standardize mortality surveillance among pediatric populations for influenza and among all ages for respiratory syncytial virus (RSV), reflecting the prioritization of monitoring severe outcomes for these diseases.<sup>3-5</sup> A standardized surveillance case definition for COVID-19-associated pediatric mortality will facilitate a consistent approach across jurisdictions and align mortality surveillance for COVID-19 with that for influenza and RSV. Addition of this condition to the NNC is critical to understanding the burden and characteristics of COVID-19-associated pediatric mortality nationally.

## **II. Background and Justification**

COVID-19, the disease caused by the SARS-CoV-2 virus, first emerged in humans in late 2019. To reflect the evolution of the virus as well as the public health response, in 2024, CSTE updated the standardized surveillance case definition for SARS-CoV-2 infection, removed SARS-CoV-2 from the NNC List, and recommended further development of an integrated national surveillance strategy for COVID-19 that more closely aligns with surveillance for influenza and RSV.<sup>1</sup> Alignment among COVID-19, influenza, and RSV surveillance reflects the similarities among these diseases, including clinical presentation, potential for severe outcomes in pediatric populations, availability of preventive interventions, and reliance on surveillance data from multiple sources to understand timing and impact of these conditions. Such alignment includes surveillance efforts focused on severe outcomes, especially in populations of interest, to enhance understanding of the relative burden for each of these pathogens.

In the United States (U.S.), COVID-19 has resulted in more than 1 million deaths.<sup>6</sup> The majority of COVID-19-associated mortality occurs in people aged  $\geq 75$  years, with a generally positive correlation between age and death rate.<sup>7</sup> However, mortality is also known to occur in other populations of interest, including infants, children, and adolescents. From 2021-2022, COVID-19 was the leading cause of death due to infectious or respiratory disease among individuals aged 0 to 19 years in the U.S., according to a vital records analysis of cause of death data.<sup>2</sup> As of April 2025, infants aged  $< 6$  months represent the only age category not eligible to receive COVID-19 vaccinations; this group experiences COVID-19 hospitalization rates comparable to those of adults aged 65-74 years, and are second only to adults aged  $\geq 75$  years.<sup>8</sup> National Center for Health Statistics (NCHS) data for COVID-19-associated mortality indicate over 2,000 COVID-19-associated pediatric deaths have occurred in the U.S. through the end of 2024, with mortality varying over time.<sup>7</sup> The current overall burden of COVID-19-associated pediatric mortality, however, is unknown, as is its relative contribution to pediatric mortality associated with respiratory viruses. The highest number of pediatric influenza deaths reported in the U.S. in a year since standardized national surveillance began is 207 deaths for the 2023-24 season, and RSV is believed to cause an average of 100-300 deaths per year in children  $< 5$  years old.<sup>9-11</sup> Preventive interventions are available for all three diseases, with vaccines approved for use in pediatric populations for COVID-19 and influenza and both a maternal vaccine and infant monoclonal antibodies available for RSV. Data are needed to help inform the use of available interventions to prevent COVID-19 mortality in pediatric populations.

While standardized surveillance case definitions exist for influenza-associated pediatric mortality and RSV-associated mortality,<sup>3-5</sup> no standardized surveillance case definition exists for COVID-19-associated pediatric mortality. Previous CSTE guidance for standardized classification of COVID-19-associated mortality relied heavily on vital records as the primary data source.<sup>12</sup> Vital records are an integral and primary data source for mortality surveillance, but may not fully or completely capture mortality without utilization of complementary data sources.<sup>13</sup> It is also unclear the extent to which existing surveillance efforts allow for the collection of consistent and necessary

data to understand missed opportunities for intervention (i.e., vaccination), distribution of burden, and potential risk factors for mortality among infants, children, and adolescents. Standardized data collection is critical to inform mortality prevention strategies, community outreach, and surveillance decisions in resource-limited settings.

To support standardized collection of pediatric mortality data associated with COVID-19, this position statement creates a standardized COVID-19-associated pediatric mortality surveillance case definition. It also recommends COVID-19-associated pediatric mortality be made nationally notifiable to estimate disease burden, characterize mortality, inform prevention strategies, and enhance coordination of surveillance across COVID-19, influenza, and RSV in this population of interest nationwide.

### **III. Statement of the Desired Action(s) to be Taken**

CSTE recommends the following actions:

1. Implement a standardized surveillance case definition for **COVID-19-associated pediatric mortality**.
  - A. Utilize recommended reporting\* sources for case ascertainment for COVID-19-associated pediatric mortality. Surveillance for **COVID-19-associated pediatric mortality** should use the recommended sources of data to the extent of coverage presented in Section V.
  - B. Utilize standardized criteria for case ascertainment for **COVID-19-associated pediatric mortality** presented in Section VI and Table VI in Technical Supplement.
  - C. Utilize standardized criteria for case classification for **COVID-19-associated pediatric mortality** presented in Section VII and Table VII in Technical Supplement.
2. Utilize standardized criteria for case ascertainment and classification (based on Sections VI and VII and Technical Supplement) for COVID-19-associated pediatric mortality and **add** COVID-19-associated pediatric mortality to the *Nationally Notifiable Condition List* using the following notification\*\* timeframe:
  - ☐ Immediately notifiable, extremely urgent (within 4 hours)
  - ☐ Immediately notifiable, urgent (within 24 hours)
  - ☒ Routinely notifiable
  - ☐ No longer notifiable
3. CSTE recommends that all States and Territories enact laws (statute or rule/regulation as appropriate) to make this disease or condition reportable in their jurisdiction. Jurisdictions (e.g., States and Territories) conducting surveillance (according to these methods) should submit case notifications to CDC.
4. CSTE recommends that all jurisdictions (e.g., States, Localities, or Territories) with legal authority should conduct public health surveillance and use the case classifications included in this standardized surveillance position statement.
5. Expectations for Message Mapping Guide (MMG) development for a newly notifiable condition: the National Notifiable Diseases Surveillance System (NNDSS) is transitioning to HL7-based messages for case notifications; the specifications for these messages are presented in MMGs. When CSTE recommends a new condition be made nationally notifiable, CDC must obtain Office of Management and Budget Paperwork Reduction Act (OMB PRA) approval prior to accepting case notifications for the new condition. Under anticipated timelines, notification using the Generic V2 MMG would support transmission of the basic demographic and epidemiologic information common to all cases and could begin with the new MMWR year following the CSTE annual conference. Input from CDC programs and CSTE would prioritize development of a disease-specific MMG for the new condition among other conditions waiting for MMGs.

6. CDC should publish data on COVID-19-associated pediatric mortality as appropriate (see Section IX). CSTE recommends the following case statuses be included in the CDC Print Criteria:

- ☒ Confirmed
- ☐ Probable
- ☐ Suspect
- ☐ Unknown

\* *Reporting: process of a healthcare provider, laboratory, or other entity submitting a report (case information) of a condition under public health surveillance to local, state, or territorial public health.*

\* *Notification: process of a local or state public health authority submitting a report (case information) of a condition on the Nationally Notifiable Conditions List to CDC.*

#### **IV. Goals of Surveillance**

To monitor burden and trends and describe reports of confirmed COVID-19-associated mortality among children and adolescents <18 years of age; to inform future studies and identify potential risk factors for COVID-19-associated mortality among children and adolescents <18 years of age; and to inform public health recommendations and messaging for healthcare providers and the public, including those for the use of prevention and treatment products.

#### **V. Recommended Data Sources and Methods for Surveillance**

Surveillance for COVID-19-associated pediatric mortality should use the following recommended sources of data and/or methodologies and the extent of coverage listed in Table V.

**Table V. Recommended Sources of Data, Surveillance Methods, and Extent of Coverage for Ascertainment of Cases of COVID-19-Associated Pediatric Mortality.**

Source of Data/Methodology for Case Ascertainment	Coverage	
	Population-Wide	Sentinel Sites
Clinician reporting	X	
Laboratory reporting	X	
Reporting by other entities, specify: <ul style="list-style-type: none"> <li>Hospitals</li> <li>Medical examiners, coroners</li> </ul>	X	
Death certificates	X	
Hospital discharge or outpatient records	X	
Data from electronic medical records	X	
Telephone or online survey		
School-based survey		
Other, specify: N/A		

*[intentionally left blank]*

## VI. Criteria for Case Ascertainment

*Case ascertainment is the process through which public health identifies potential cases of a disease or condition using data reported or provided to public health by healthcare, laboratories, and other reporting entities. This public health reporting is triggered by the case ascertainment criteria (a single criterion or a combination of criteria) included in this position statement, and each initial report sent to public health should include common data elements and disease-specific data elements. Case ascertainment criteria are not intended to be used for clinical diagnosis purposes.*

### A. Narrative: A description of suggested criteria for case ascertainment of a specific condition and recommended reporting procedures.

Recommended reporting procedures for COVID-19-associated pediatric mortality:

- All possible COVID-19-associated deaths in individuals <18 years of age should be reported to public health.
- Reporting should be ongoing and routine.

#### Report the following to public health authorities:

- Any death meeting clinical criteria for reporting **AND** meeting laboratory criteria for reporting; **OR**
- Any death meeting vital records criteria for reporting.

#### A1. Clinical Criteria for Reporting\*

- Death in an individual <18 years of age following an illness clinically compatible with COVID-19.\*\*

\* *Clinical criteria for reporting must be paired with laboratory criteria for reporting to trigger a report to public health.*

\*\* *"Illness clinically compatible with COVID-19" refers to the presence of signs or symptoms associated with COVID-19 or identified as related to COVID-19 by a provider, medical examiner, or coroner. See Appendix A for a limited list of signs and symptoms associated with COVID-19.*

#### A2. Laboratory Criteria for Reporting\*\*\*

- Detection of SARS-CoV-2 nucleic acid in a clinical or post-mortem specimen using a diagnostic molecular test performed by a CLIA-certified provider,<sup>^</sup> **OR**
- Detection of SARS-CoV-2 genomic sequences, **OR**
- Detection of SARS-CoV-2 specific antigen in a clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider.<sup>^</sup>

\*\*\**To support case finding efforts, some jurisdictions may opt to include testing performed by individuals at home using over-the-counter test kits or other testing performed without CLIA oversight.*

<sup>^</sup> *Includes those tests performed under a CLIA certificate of waiver.*

#### A3. Epidemiologic Linkage Criteria for Reporting

- N/A

#### A4. Vital Records Criteria for Reporting

- An individual <18 years of age whose death certificate lists COVID-19 disease or SARS-CoV-2 infection or an equivalent term<sup>^^</sup> as an underlying cause of death or a significant condition contributing to death.

<sup>^^</sup> *See Appendix B for examples of equivalent terms for COVID-19 disease or SARS-CoV-2 infection in death certificate data.*

## B. Disease-Specific Data Elements to be Included in the Initial Report

*Disease-specific data elements should be included in addition to the common data elements that are to be reported for all initial individual case reports (see CSTE Position Statement 09-SI-01 "Common Core Data Elements for Case Reporting and Laboratory Result Reporting" <https://cdn.ymaws.com/www.cste.org/resource/resmgr/PS/09-SI-01.pdf>). Public health authorities do not expect that an initial report will contain all the information necessary for case investigation and case classification.*

- Date of death
- COVID-19 vaccination history in previous 12 months

## VII. Case Definition for Case Classification

*This case definition for case classification is intended solely for public health surveillance purposes and does not recommend criteria for clinical diagnosis purposes. Once a public health agency has ascertained data on potential cases of a disease or condition from reporting entities, the public health agency assigns case statuses based on the case classifications included within this position statement.*

### A. Narrative: A description of criteria to determine how public health should classify a case of COVID-19-associated pediatric mortality.

#### A1. Clinical Criteria

- Death in an individual <18 years of age resulting from an illness clinically compatible with COVID-19,\* **AND**
- There was no period of complete recovery between the COVID-19 illness and death (i.e., COVID-19 illness was NOT followed by full recovery to baseline health status prior to death), **AND**
- There is no alternative agreed-upon cause of death.\*\*

\* "Illness clinically compatible with COVID-19" refers to the presence of signs or symptoms associated with COVID-19 or identified as related to COVID-19 by a provider, medical examiner, or coroner. See Appendix A for a limited list of compatible signs and symptoms associated with COVID-19.

\*\* Alternative causes of death are limited to non-natural manners or external causes of death.

#### A2. Laboratory Criteria\*\*\*,‡

##### Confirmatory Laboratory Evidence:

- Detection of SARS-CoV-2 nucleic acid in a clinical or post-mortem specimen using a diagnostic molecular test (e.g., NAAT) performed by a CLIA-certified provider,<sup>^</sup> **OR**
- Detection of SARS-CoV-2 RNA in a clinical or post-mortem specimen by genomic sequencing,<sup>^^</sup> **OR**
- Detection of SARS-CoV-2 specific antigen by diagnostic immunocytochemistry staining performed by a CLIA-certified provider.<sup>^</sup>

##### Presumptive Laboratory Evidence:

- Detection of SARS-CoV-2 specific antigen in a clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider.<sup>^</sup>

##### Supportive Laboratory Evidence:

- Detection of SARS-CoV-2 nucleic acid or specific antigen using a test performed without CLIA oversight.<sup>^^^</sup>

\*\*\* Note: The categorical labels used here to stratify laboratory evidence are intended to support the standardization of case classifications for public health surveillance. The categorical labels should not be used to interpret the utility or validity of any laboratory test methodology.

‡ In specimens collected in association with the COVID-19 clinically compatible illness

<sup>^</sup> Includes those tests performed under a CLIA certificate of waiver.

<sup>^^</sup> Some genomic sequencing tests that have been authorized for emergency use by the FDA do not require an initial PCR result to be generated. Genomic sequencing results may be all the public health agency receives.

<sup>^^^</sup> Includes at-home tests.

#### A3. Epidemiologic Linkage Criteria

- N/A

#### A4. Vital Records Criteria

- An individual <18 years of age whose death certificate lists COVID-19 disease or SARS-CoV-2 infection or an equivalent term<sup>†</sup> as an underlying cause of death or a significant condition contributing to death.<sup>#</sup>

<sup>†</sup> See Appendix B for examples of equivalent terms for COVID-19 disease or SARS-CoV-2 infection in death certificate data.

<sup>#</sup> Unless after review and consultation, COVID-19 disease or SARS-CoV-2 infection is excluded as a direct or contributing cause of death. See Appendix C.

**A5. Case Classifications****Confirmed:**

- Meets clinical criteria AND confirmed or presumptive laboratory evidence.

**Probable:**

- Meets vital records criteria.

**Suspect:**

- Meets clinical criteria AND supportive laboratory evidence

**B. Criteria to Distinguish a New Case of COVID-19-associated pediatric mortality from Reports or Notifications which Should Not be Enumerated as a New Case for Surveillance**

N/A

**VIII. Period of Surveillance**

Surveillance should be ongoing.

**IX. Data Sharing/Release and Print Criteria**

CSTE recommends the following case statuses\* be included in the 'case' count released outside of the public health agency:

- ☒ Confirmed
- ☐ Probable
- ☐ Suspect
- ☐ Unknown

*\*Which case statuses are included in case counts constitute the "print criteria."*

Jurisdictions (e.g., States and Territories) conducting surveillance under this case definition can voluntarily submit de-identified case information to CDC, if requested and in a mutually agreed upon format.

Production of national data summaries and national data re-release for non-NNCs:

- Prior to release of national data summaries CDC should follow the CDC/ATSDR Policy on Releasing & Sharing Data, issued on April 16, 2003 and referenced in 11-SI-01 and custodians of such data should consult the CDC-CSTE Intergovernmental Data Release Guidelines Working Group report ([www.cste2.org/webpdfs/drgwgreport.pdf](http://www.cste2.org/webpdfs/drgwgreport.pdf)) which contains data release guidelines and procedures for CDC programs re-releasing state, local, or territorial-provided data.
- CDC programs have a responsibility, in collaboration with states, localities, and territories, to ensure that CDC program-specific data re-release procedures meet the needs of those responsible for protecting data in the states and territories.

**X. Revision History**

N/A. This is the first standardized surveillance position statement for COVID-19-associated pediatric mortality.

**XI. References**

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|---|--|

## Technical Supplement

**Table VI. Table of criteria to determine whether a case should be reported to public health authorities.**

Criterion	COVID-19-Associated Pediatric Mortality	
<i>Clinical Criteria for Reporting</i>		
Age <18 years	N	N
Death following an illness clinically compatible with COVID-19*	N	
<i>Laboratory Criteria for Reporting</i>		
Detection of SARS-CoV-2 nucleic acid in a clinical or post-mortem specimen using a diagnostic molecular test performed by a CLIA-certified provider**	O	
Detection of SARS-CoV-2 genomic sequences	O	
Detection of SARS-CoV-2 specific antigen in a clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider**	O	
<i>Epidemiologic Linkage Criteria for Reporting</i>		
N/A		
<i>Vital Record Criteria for Reporting</i>		
Death certificate lists COVID-19 disease or SARS-CoV-2 infection or an equivalent term*** as an underlying cause of death or a significant condition contributing to death.		N

Notes:

N = All "N" criteria in the same column are NECESSARY to report a case.

O = At least one of these "O" (ONE OR MORE) criteria in each category (categories=clinical, laboratory, epidemiologic linkage, vital records, etc.) in the same column—in conjunction with all "N" criteria in the same column—is required to report a case.

\* "Illness clinically compatible with COVID-19" refers to the presence of signs or symptoms associated with COVID-19 or identified as related to COVID-19 by a provider, medical examiner, or coroner. See Appendix A for a limited list of compatible signs and symptoms associated with COVID-19.

\*\* Includes those tests performed under a CLIA certificate of waiver.

\*\*\* See Appendix B for examples of equivalent terms for COVID-19 disease or SARS-CoV-2 infection in death certificate data.

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**Table VII.A. Classification Table: Criteria for defining a case of COVID-19-associated pediatric mortality.**

Criterion	Confirmed	Probable	Suspect
<b>Clinical Evidence</b>			
Age <18 years	N	N	N
Death resulting from an illness clinically compatible with COVID-19*	N		N
There was no period of complete recovery between the COVID-19 illness and death (i.e., COVID-19 illness was NOT followed by full recovery to baseline health status prior to death)	N		N
There is no alternative agreed-upon cause of death**	N		N
<b>Laboratory Evidence</b> ‡			
Detection of SARS-CoV-2 nucleic acid in a clinical or post-mortem specimen using a diagnostic molecular test (e.g., NAAT) performed by a CLIA-certified provider***	O		
Detection of SARS-CoV-2 RNA in a clinical or post-mortem specimen by genomic sequencing^	O		
Detection of SARS-CoV-2 specific antigen by diagnostic immunocytochemistry staining performed by a CLIA-certified provider***	O		
Detection of SARS-CoV-2 specific antigen in a clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider***	O		
Detection of SARS-CoV-2 nucleic acid or specific antigen using a test performed without CLIA oversight.^			N
<b>Epidemiologic Linkage Evidence</b>			
N/A			
<b>Vital Record Evidence</b>			
Death certificate lists COVID-19 disease or SARS-CoV-2 infection or an equivalent term† as an underlying cause of death or a significant condition contributing to death.‡		N	

Notes:

N = All "N" criteria in the same column are NECESSARY to classify a case.

O = At least one of these "O" (ONE OR MORE) criteria in each category (categories=clinical evidence, laboratory evidence, and epidemiologic evidence) in the same column—in conjunction with all "N" criteria in the same column—is required to classify a case.

‡ In specimens collected in association with the COVID-19 clinically compatible illness

\* "Illness clinically compatible with COVID-19" refers to the presence of signs or symptoms associated with COVID-19 or identified as related to COVID-19 by a provider, medical examiner, or coroner. See Appendix A for a limited list of compatible signs and symptoms associated with COVID-19.

\*\* Alternative causes of death are limited to non-natural manners or external causes of death.

\*\*\* Includes those tests performed under a CLIA certificate of waiver.

^ Some genomic sequencing tests that have been authorized for emergency use by the FDA do not require an initial PCR result to be generated. Genomic sequencing results may be all the public health agency receives.

^^ Includes at-home tests.

† See Appendix B for examples of equivalent terms for COVID-19 disease or SARS-CoV-2 infection in death certificate data.

‡ Unless after review and consultation, COVID-19 disease or SARS-CoV-2 infection is excluded as a direct or contributing cause of death. See Appendix C.

**Table VII.B. Classification Table: Criteria to distinguish a new case of COVID-19-associated pediatric mortality from reports or notifications which should not be enumerated as a new case for surveillance.**

Criterion	Confirmed	Probable	Suspect
<b>Criteria to distinguish a new case</b>			
N/A			

**Appendix A: Signs and Symptoms Clinically Compatible with COVID-19**

Below is a list of signs and symptoms considered clinically compatible with COVID-19 per the U.S. Centers for Disease Control and Prevention.<sup>1</sup> This is not an exhaustive list, and jurisdictions should leverage published literature and current understanding of COVID-19 when determining if an illness is clinically compatible with COVID-19.

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Sore throat
- Congestion or runny nose
- New loss of taste or smell
- Fatigue
- Muscle or body aches
- Headache
- Nausea or vomiting
- Diarrhea

**Appendix A References**

1. CDC. Symptoms of COVID-19. COVID-19. April 10, 2025. Accessed April 23, 2025.  
<https://www.cdc.gov/covid/signs-symptoms/index.html>

**Appendix B: COVID-19-associated Death Key Terms for Death Certificate Data**

Below is the International Classification of Diseases, 10<sup>th</sup> Revision (ICD-10) code and a list of key terms that may appear in the cause of death section of a death certificate to indicate COVID-19-associated mortality.<sup>1</sup> This is not an exhaustive list, and jurisdictions should use judgment and awareness of vital records practices when determining if a cause of death key term is referencing COVID-19-associated mortality.

ICD-10 code:

- U07.1 (COVID-19)

Key terms:

- 2019 COVID
- 2019 NOVEL CORONA
- 2019-NOVEL-CORONA
- CORONA VIRUS 19
- CORONA VIRUS 2
- CORONA VIRUS 2019 DISEASE
- CORONA VIRUS COVID 19 INFECTION
- CORONA VIRUS2
- CORONA VIRUS-SARS-2
- CORONAVIRUS 19
- CORONAVIRUS 2019
- CORONA-VIRUS-2
- CORONA-VIRUS-DISEASE-2019
- CORONA-VIRUS-SARS2
- CORONA-VIRUS-SARS-2
- COV2
- COVID
- COVID - 19 VIR
- COVID 19
- DELTA VARIANT
- NCOV
- NOVEL CORONA
- NOVEL CORONA VIRUS
- NOVEL CORONAVIRUS
- NOVEL-CORONAVIRUS
- SAR 2 COVID 19 INFECTION
- SAR 2 COVID INFECTION
- SAR COV 2 COVID
- SAR COVID 19 INFECTION
- SAR COVID INFECTION
- SAR COVID VIRUS
- SARS 2 CORONAVIRUS
- SARS 2 COV
- SARS COV 2
- SARS COV2 INFECTION
- SARS COVID
- SARS COVID 19
- SARS COVID 2

- SARS COVID INFECTION
- SARS COVID19 INFECTION
- SARS-2-CORONAVIRUS
- SARS-2-COV
- SARS-CORONAVIRUS-2019
- SARSCOV2
- SARS-COV-2
- SARSCOV2 INFECTION
- SARS-COV2 VIRUS
- SARS-COV-2019
- SARS-COVID
- SARS-COVID 19
- SARSCOVID INFECTION
- SARS-COVID-19
- SARSCOVID19 INFECTION
- SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS 2019
- WUHAN-CORONA

## Appendix B References

1. CSTE Revised COVID-19-associated Death Classification Guidance for Public Health Surveillance Programs. Published online November 22, 2022. Accessed January 21, 2025. [https://preparedness.cste.org/wp-content/uploads/2022/12/CSTE-Revised-Classification-of-COVID-19-associated-Deaths.Final\\_11.22.22.pdf](https://preparedness.cste.org/wp-content/uploads/2022/12/CSTE-Revised-Classification-of-COVID-19-associated-Deaths.Final_11.22.22.pdf)

**Appendix C: Excluding COVID-19 disease or SARS-CoV-2 infection as a direct or contributing cause of death.**

*[This appendix is under development as of August 2025.]*