

24-ID-11

Committee: Infectious Disease

Title: Update to the standardized surveillance case definition for SARS-CoV-2 infection, call for continued refinement of an integrated surveillance strategy in alignment with other endemic respiratory viruses, and discontinuation of national notification

☒ 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: 22-ID-01.

Synopsis:

- This position statement calls for the continued development and refinement of an integrated national surveillance strategy for COVID-19 to support a standardized, coordinated approach across public health jurisdictions for monitoring and responding to influenza, COVID-19, RSV, and other respiratory viruses. This national surveillance strategy is needed as SARS-CoV-2 is now circulating along with other endemic respiratory viruses and being monitored through a variety of surveillance systems.
- This position statement updates the standardized surveillance case definition for SARS-CoV-2 infection and recommends the removal of SARS-CoV-2 infection (COVID-19) from the nationally notifiable condition (NNC) list. Removal from the NNC list is warranted as universal case-based data at the national level are not representative of overall infection trends and, as a result, are no longer being analyzed at the federal level or presented as part of the CDC COVID Tracker.
- Additional updates include:
 - Simplification of laboratory criteria for reporting and case classification.
 - Removal of references to federal documents that are no longer in effect.

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I. Statement of the Problem

Reporting of individual SARS-CoV-2 infections to public health has become increasingly sporadic as testing patterns have changed (including widespread use of at-home testing) and as a higher proportion of infections with the now-endemic virus result in asymptomatic infections and less severe illnesses not requiring medical care. The utility and representativeness of universal case-based surveillance data at the national level has diminished as some jurisdictions have removed SARS-CoV-2 infection from their lists of reportable conditions following the end of the federal Public Health Emergency in May 2023. SARS-CoV-2 infections remain reportable in many jurisdictions, though other surveillance systems have been leveraged or developed to achieve public health surveillance goals. Data obtained through population-based case ascertainment by reports of individual cases from reporting sources (e.g., clinicians, laboratories) to governmental public health agencies are no longer being analyzed at the federal level and are not presented as part of the Centers for Disease Control and Prevention (CDC) COVID Tracker. Removal of SARS-CoV-2 infections from the list of nationally notifiable conditions (NNCs) is thus warranted at this time. However, updates to the SARS-CoV-2 infection case ascertainment and case classification criteria are needed to simplify laboratory criteria for jurisdictions that continue to conduct case-based surveillance for SARS-CoV-2.

II. Background and Justification

In late December 2019, an investigation of a cluster of pneumonia cases of unknown origin in Wuhan, China resulted in the identification of a novel coronavirus, distinct from although closely related to both SARS-CoV and MERS-CoV¹. The novel virus was designated Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) and was found to cause COVID-19 (COVID). This position statement references both SARS-CoV-2 infection and the COVID-19 disease.

Case-based surveillance for SARS-CoV-2 infections played an important role during earlier phases of the pandemic by facilitating rapid case investigations and helping to address key questions about the epidemiology of this novel virus in a fully susceptible population, in the absence of other optimized surveillance systems. Case-based surveillance also supported contact tracing and other containment efforts and provided data to inform public health response actions. However, the utility of universal case investigation and contact tracing for individual cases of COVID-19 diminished in later phases of the pandemic, as recognized in a January 2022 statement released by CSTE and other public health associations².

In October 2022, SARS-CoV-2 infection and COVID-19 surveillance goals for state, tribal, local, and territorial (STLT) public health agencies were articulated by CSTE and the Association of Public Health Laboratories (APHL)³. These goals included: tracking SARS-CoV-2 infection trends; evaluating severity of COVID-19; monitoring spread and detecting and responding to SARS-CoV-2 infection outbreaks in vulnerable populations; conducting and advancing SARS-CoV-2 genomic surveillance; and sharing surveillance data and adapting risk communication. Over the course of the pandemic, several systems have been leveraged or developed to achieve these goals, including: tracking the percent of emergency department visits for COVID-19 or COVID-like illness; monitoring SARS-CoV-2 test positivity through established laboratory surveillance systems; monitoring for severe illness (including COVID-19 hospitalizations and deaths); and tracking concentrations of SARS-CoV-2 in municipal wastewater systems. Surveillance systems have also been established to track emerging SARS-CoV-2 variants and complications of COVID-19, including post-COVID conditions and multisystem inflammatory syndrome in children (MIS-C), and to monitor the effectiveness of vaccinations and other mitigation strategies. While individual SARS-CoV-2 infections remain reportable in many jurisdictions, there is a reduced role for data obtained through population-based case ascertainment by reports of individual cases from reporting sources (e.g., clinicians, laboratories) to governmental public health agencies, and these data are no longer being analyzed at the federal level or presented as part of the CDC COVID Data Tracker.

Additionally, changes to laboratory criteria for reporting and case classification are needed to remove references to outdated federal guidance and adjust language to be inclusive of current or future molecular assays that are not dependent on amplification.

To support these changes and to optimize surveillance approaches, this position statement recommends the removal of SARS-CoV-2 infection from the NNC list, along with the continued development and refinement of an integrated national surveillance strategy for COVID-19, and updates laboratory criteria for reporting and case classification for jurisdictions that opt to continue case-based surveillance of SARS-CoV-2 infections based on jurisdictional needs and surveillance infrastructure.

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

CSTE recommends the following actions:

1. Implement a standardized surveillance case definition for **SARS-CoV-2 infection**.
 - A. Utilize recommended reporting* sources for case ascertainment for **SARS-CoV-2 infection**.
Surveillance for **SARS-CoV-2 infection** should use the recommended sources of data to the extent of coverage presented in Section V.
 - B. Utilize standardized criteria for case ascertainment for **SARS-CoV-2 infection** presented in Section VI and Table VI in Technical Supplement.
 - C. Utilize standardized criteria for case classification for **SARS-CoV-2 infection** 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 **SARS-CoV-2 infection** and **remove** SARS-CoV-2 infection from 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

Note: The above action only calls for discontinuation of national notification to CDC of individual cases. Public health jurisdictions should continue to make determinations about reportability according to jurisdictional priorities and utilize other surveillance methods as outlined in the position statement (Section II) to monitor SARS-CoV-2 trends and severity.

3. CDC, in partnership with CSTE, should continue to develop and refine an integrated national surveillance strategy for COVID-19, which recognizes its current status as an endemic respiratory virus, similar to influenza and RSV. Areas to address include the identification of key stakeholders and partners to provide input, available resources, timelines for development, and the development of a strategy that supports a standardized, coordinated approach across public health jurisdictions for monitoring and responding to influenza, COVID-19, RSV, and other viral respiratory diseases.

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

IV. Goals of Surveillance

To provide a standard case definition for jurisdictions that choose to continue performing case-based surveillance as one component of public health surveillance for SARS-CoV-2 infections. Case-based surveillance performed using this standard case definition could be used to improve understanding of severe outcomes or post-acute sequelae of SARS-CoV-2 infection or to meet other jurisdiction-specific surveillance and response needs.

V. Recommended Data Sources and Methods for Surveillance

Surveillance for SARS-CoV-2 infections should use the following recommended sources of data and/or methodologies and the extent of coverage listed in Table V.

Commercial laboratory reporting is now the most common source of data for SARS-CoV-2 infection case-based surveillance.

[continued]

Table V. Recommended Sources of Data, Surveillance Methods, and Extent of Coverage for Ascertainment of Cases of SARS-CoV-2 Infection.

Source of Data/Methodology for Case Ascertainment	Coverage	
	Population-Wide	Sentinel Sites
Clinician reporting	X	
Laboratory reporting	X	
Reporting by other entities, specify: • Hospitals	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: • Autopsy reports • At-home testing (optional)	X	

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.

A1. Clinical Criteria for Reporting

N/A

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**,
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**

** 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.*

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

A3. Epidemiologic Linkage Criteria for Reporting

N/A

A4. Vital Records Criteria for Reporting

A person whose death certificate lists COVID-19 disease or SARS-CoV-2 or an equivalent term⁴ as an underlying cause of death or a significant condition contributing to death.

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.

Laboratory Information:

- Specimen type

Clinical Information:

- Date of illness onset
- Hospitalization
- COVID-19 vaccination history

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 SARS-CoV-2 infection.

A1. Clinical Criteria

N/A

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**,
OR
- Detection of SARS-CoV-2 RNA in a clinical or post-mortem specimen by genomic sequencing***,
OR
- Detection of SARS-CoV-2 specific antigen by diagnostic immunocytochemistry staining performed by a CLIA-certified provider**.

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**.

Supportive Laboratory Evidence:

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

** 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.*

*** 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.

A3. Epidemiologic Linkage Criteria

N/A

A4. Vital Records Criteria

A death certificate that lists COVID-19 disease or SARS-CoV-2 or an equivalent term⁴ as an underlying cause of death or a significant condition contributing to death.

A5. Case Classifications

Confirmed:

- Meets confirmatory laboratory evidence.

Probable:

- Meets presumptive laboratory evidence.

Suspect:

- Meets supportive laboratory evidence, **OR**
- Meets vital records criteria **AND** no laboratory evidence for SARS-CoV-2 infection.

B. Criteria to Distinguish a New Case of SARS-CoV-2 infection (the virus that causes COVID-19) from Reports or Notifications which Should Not be Enumerated as a New Case for Surveillance

The following should be enumerated as a new case:

- Person was most recently enumerated as a confirmed or probable case with onset date (if available) or first positive specimen collection date for that classification >90 days prior[‡],

OR

- SARS-CoV-2 sequencing results from the new positive specimen and a positive specimen from the most recent previous case in the same individual demonstrate a different lineage,

OR

- Person was previously reported but not enumerated as a confirmed or probable case (i.e., suspect)^{††}, but now meets the criteria for a confirmed or probable case.

[‡]Some individuals, e.g., severely immunocompromised persons, can shed SARS-CoV-2, as detected by molecular amplification tests, >90 days after infection. For severely immunocompromised individuals, clinical judgment should be used to determine if a repeat positive test is likely to result from long-term shedding and, therefore, not be enumerated as a new case. Severe immunocompromise conditions include chemotherapy for cancer, untreated HIV infection with CD4 T lymphocyte count <200, combined primary immunodeficiency disorder, and receipt of prednisone >20mg/day for more than 14 days.

^{††}Repeat suspect cases should not be enumerated.

VIII. Period of Surveillance

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) 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

Position Statement ID	Section of Document	Description of Revision within this Position Statement
24-ID-11	I. Statement of the Problem	- Updated to reference end of the federal Public Health Emergency in May 2023 - Updated to reference removal of SARS-CoV-2 infections from the list of nationally notifiable conditions
24-ID-11	II. Background and Justification	- Updated to reference novel virus designated Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) and that position statement references both SARS-CoV-2 infection and COVID-19 disease. - Updated to reference SARS-CoV-2 infection and COVID-19 surveillance goals for state, tribal, local, and territorial public health agencies articulated in October 2022 by CSTE and APHL
24-ID-11	III. Statement of the Desired Action(s) to be Taken	- Recommends SARS-CoV-2 Infection be removed from the Nationally Notifiable Condition List - Added desired action for CDC, in partnership with CSTE, to continue to develop and refine and integrated national surveillance strategy for COVID-19. - Updated to remove reference of "the virus that causes COVID-19"
24-ID-11	IV. Goals of Surveillance	Updated goals in reference to removal of SARS-CoV-2 infections from list of nationally notifiable conditions
24-ID-11	V. Recommended Data Sources and Methods for Surveillance	Removed "diagnosis codes" in Table V
24-ID-11	VI. Criteria for Case Ascertainment	A2. Laboratory Criteria for Reporting: Removed word "amplification" to be inclusive of genomic testing and simplify guidance
24-ID-11	VII. Case Definition for Case Classification	A2. Laboratory Criteria: - Added "Detection of SARS-CoV-2 specific antigen by diagnostic immunocytochemistry staining performed by a CLIA-certified provider" under confirmatory laboratory evidence - Changed supportive laboratory evidence to "Detection of SARS-CoV-2 nucleic acid or specific antigen using a test performed without CLIA oversight" and added footnote for clarity that this includes at-home tests - Moved genomic sequencing detection from presumptive to confirmatory laboratory evidence A5. Case Classifications - Rephrased suspect case classifications for clarification Removed footnote about suspect case classification
24-ID-11	XII. Coordination	Removed Subject Matter Experts who did not participate in the revision to 22-ID-01
24-ID-11	Appendix: Epidemiological Classification of Work-Relatedness	- Reduced exposure timeframe from 14 days to 7 days throughout appendix - Removed reference to "Proposed Investigation Criteria and Outbreak Definition for COVID-19 in Non-Residential, Non-Healthcare Workplace Settings" - Revised outbreak definition
22-ID-01	N/A	Updated condition name to "SARS-CoV-2 infection (the virus that causes COVID-19)"
22-ID-01	I. Statement of the Problem	Updated to reference the status of the COVID-19 pandemic as of spring 2022
22-ID-01	II. Background and Justification	Updated to reference the status of the COVID-19 pandemic as of spring 2022
22-ID-01	V. Methods for Surveillance	Removed clinician reporting from recommended sources of data
22-ID-01	VI. Criteria for Case Ascertainment	A1. Clinical Criteria for Reporting: Removed A2. Laboratory Criteria for Reporting: - Removed serology criteria - Re-ordered specimen wording for clarity - Added footnote clarifying that tests performed by a CLIA-certified provider includes tests performed under a CLIA certificate waiver A3. Epidemiologic Linkage Criteria for Reporting: Removed A5. Other Criteria for Reporting: Removed
22-ID-01	VI. Criteria for Case Ascertainment	B. Disease-specific data elements to be included in the initial report - Removed the following data elements from clinical information to be included in initial reports to public health: "description of clinical symptoms and signs or illness, or if asymptomatic" and "underlying diseases or co-infections" - Removed epidemiologic-related data elements
22-ID-01	VII. Case Definition for Case Classification	A1. Clinical Criteria: Removed A2. Laboratory Criteria: - Removed serology evidence from supportive laboratory evidence - Re-ordered specimen wording for clarity - Added footnote clarifying that tests performed by a CLIA-certified provider includes tests performed under a CLIA certificate waiver A3. Epidemiologic Linkage Criteria: Removed

		A5. Case Classifications: - Removed probable case classification “Meets clinical criteria AND epidemiologic linkage with no confirmatory or presumptive laboratory evidence for SARS-CoV-2 - Recategorized a case that “meets vital records criteria with no confirmatory or presumptive laboratory evidence for SARS-CoV-2” to a suspect case - Removed “with no prior history of being a confirmed or probable case” from suspect case classification “meets supportive laboratory evidence”
22-ID-01	VII. Case Definition for Case Classification	B. Criteria to distinguish a new case of this disease or condition Re-ordered bullets; content did not change
22-ID-01	XI. References	Updated with relevant references
22-ID-01	NNC Recommendation	Recommends change in CDC notification timeframe from “immediately notifiable, urgent (within 24 hours)” to “routinely notifiable” and added clarifying footnote.
22-ID-01	VII. Case Definition for Case Classification	August 2021 - Removed incorrect parenthetical “(positive serology only)” from suspect case classification footnote: ^{††} <i>For suspect cases (positive serology only), jurisdictions may opt to place them in a registry for other epidemiological analyses or investigate to determine probable or confirmed status.</i> This was also removed from corresponding Table VII footnote.
Interim-20-ID-02	Synopsis	Updated synopsis based final ratification of position statement.
Interim-20-ID-02	I. Statement of the Problem	Updated surveillance methods to include provider reporting and contact tracing and updated necessity of nationwide standardized surveillance to include monitoring effectiveness of COVID-19 vaccinations.
Interim-20-ID-02	II. Background and Justification	- Removed out-of-date information based on evolving science around immunity and reinfection. - Added reference link to complete list of underlying conditions that increase risk of severe COVID-19 disease. - Clarified that significant portion of children infected with SARS-CoV-2 may be asymptomatic OR presymptomatic. - Added brief information about SARS-CoV-2 variants. - Added explanation for updating the case definition before ratification.
Interim-20-ID-02	III. Desired Actions to be Taken	Retained recommendation to add COVID-19 to the NNC List and retained notification timeframe of “immediately notifiable, urgent (within 24 hours); however, added footnote explaining rationale behind retained notification timeframe.
Interim-20-ID-02	IV. Goals of Surveillance	Added examples to goal of informing public health action. Examples included monitoring impact of vaccination; assessing waning immunity and vaccine breakthroughs.
Interim-20-ID-02	V. Methods for Surveillance	Added optional at-home testing as an other source of data for case ascertainment.
Interim-20-ID-02	VI. Criteria for case ascertainment	A1. Clinical Criteria for Reporting: - Clarified that medically-attended includes a person whose symptoms were ascertained telephonically by public health staff, e.g., contact tracers. - Specified that symptoms and signs must be newly acute or worsening. - Added the following to “any one” symptoms or signs list: - confusion of change in mental status, - persistent pain or pressure in the chest, - pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone, - inability to wake or stay awake. A2. Laboratory Criteria for Reporting - Clarified specimen types for detection of SARS-CoV-2 RNA and specific antigen. - Specified that molecular amplification test must be diagnostic and performed by a CLIA-certified provider. - Added SARS-CoV-2 genomic sequence as a new criterion. - Clarified that SARS-CoV-2 specific antigen must be detected using a diagnostic test performed by a CLIA-certified provider. - Specified SARS-CoV-2 antibodies should be nucleocapsid and spike protein receptor binding domain (RBD) specific antibodies. - Clarified SARS-CoV-2 antibodies must be detected by a CLIA-certified provider. - Added footnote related to jurisdictions opting to include testing performed by individuals at home using over-the-counter test kits as laboratory criteria for reporting. A3. Epidemiologic Linkage Criteria for Reporting - Updated member of exposed risk cohort can be defined by public health during either an outbreak OR during high community transmission. - Updated close contact definition to be within 6 feet for at least 15 minutes cumulatively over a 24-hour period. A4. Vital Records Criteria for Reporting

		Clarified that a death certificate could list “an equivalent term” to COVID-19 disease or SARS-CoV-2 as an underlying cause of death or significant condition contributing to death.
Interim-20-ID-02	VI. Criteria for case ascertainment	B. Disease-specific data elements to be included in the initial report Added COVID-19 vaccination history as a clinical data element to be included.
Interim-20-ID-02	VII. Case Definition for Case Classification	A1. Clinical Criteria: - Specified that symptoms and signs must be newly acute or worsening. - Added the following to “any one” symptoms or signs list: - confusion of change in mental status, - persistent pain or pressure in the chest, - pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone, - inability to wake or stay awake. A2. Laboratory Criteria - Added footnote to define “designated authority” for laboratory evidence approval or authorization. - Clarified specimen types for detection of SARS-CoV-2 RNA and specific antigen in confirmatory and presumptive laboratory evidence. - Specified that molecular amplification test must be diagnostic and performed by a CLIA-certified provider in confirmatory laboratory evidence. - Added detection of SARS-CoV-2 by genomic sequencing as new confirmatory laboratory evidence, accompanied by footnote to explain that some genomic sequencing tests that have been authorized for emergency use by the FDA do not require an initial PCR result and therefore genomic sequencing results may be the only results a public health agency may receive. - Clarified that SARS-CoV-2 specific antigen must be detected using a diagnostic test performed by a CLIA-certified provider in presumptive laboratory evidence. - Specified SARS-CoV-2 antibodies should be specific to natural infection (antibody to nucleocapsid protein) in supportive laboratory evidence. - Added detection of SARS-CoV-2 RNA or specific antigen using a test performed without CLIA oversight to supportive laboratory evidence. A3. Epidemiologic Linkage - Updated member of exposed risk cohort can be defined by public health during either an outbreak OR during high community transmission. - Updated close contact definition to be within 6 feet for at least 15 minutes cumulatively over a 24-hour period. A4. Vital Records Criteria - Clarified that a death certificate could list “an equivalent term” to COVID-19 disease or SARS-CoV-2 as an underlying cause of death or significant condition contributing to death. A5. Case Classifications - Specified that a probable case meets clinical criteria and epidemiologic linkage with no confirmatory OR presumptive laboratory evidence for SARS-CoV-2.
Interim-20-ID-02	VII. Case Definition for Case Classification	B. Criteria to distinguish a new case of this disease or condition Updated entire section and added related footnotes based on new data and evolving science.
Interim-20-ID-02	XII. Coordination	Removed Subject Matter Experts who rotated off of agency's COVID-19 response efforts or who did not participate in the ratification of Interim-20-ID-02.
Interim-20-ID-01	N/A	Established first position statement for COVID-19.

XI. References

1. The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) in China]. Zhonghua Liu Xing Bing Xue Za Zhi. 2020;41(2):145–151. DOI:10.3760/cma.j.issn.0254-6450.2020.02.003.
2. Public Health Agencies Transitioning Away from Universal Case Investigation and Contact Tracing for Individual Cases of COVID-19. https://preparedness.cste.org/wp-content/uploads/2022/01/CICT_Partner_Statement_01_24_2022.pdf.
3. Interim CSTE and APHL Strategic Framework for SARS-CoV-2 Infection and COVID-19 Surveillance: Priorities and Approaches for State, Territorial, Local, and Tribal Public Health Agencies
4. CSTE Revised COVID-19-associated Death Classification Guidance for Public Health Surveillance Programs, V2 (updated 11.22.2022). <https://preparedness.cste.org/wp-content/uploads/2022/10/Interim-CSTE-APHL-COVID-Surveillance-Framework.pdf>.

XII. Coordination**Subject Matter Expert (SME) Consultants:****PRIMARY SME**

- (1) CDR Benjamin J. Silk, PhD, MPH
U.S. Public Health Service
Surveillance and Analytics Team Lead
Respiratory Viruses Branch, Division of Viral Diseases
National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention
404-639-0988
bsilk@cdc.gov

ADDITIONAL SMEs

- (2) Alana Sterkel, PhD, D(ABMM), SM(ASCP)^{CM}
Assistant Professor, UW-Madison SMPH
Associate Director, Communicable Disease Division
Wisconsin State Laboratory of Hygiene
608-224-4277
Alana.Sterkel@slh.wisc.edu
- (3) Sandra W. Roush, MT, MPH
Associate Director for Surveillance
National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention
404-639-8741
sroush@cdc.gov

Agencies for Response:

- (1) Centers for Disease Control and Prevention
Mandy Cohen, MD, MPH
Director
1600 Clifton Road NE
Atlanta, GA 30329
(404) 639-7000
Jbc7@cdc.gov

Agencies for Information:

N/A

XIII. Author Information**Submitting and Presenting Author:**

- (1) Zack Moore, MD, MPH (Active Member)
State Epidemiologist and Epidemiology Section Chief
Division of Public Health
North Carolina Department of Health and Human Services
1902 Mail Service Center
Raleigh, NC 27699-1902
919-546-1725
zack.moore@dhhs.nc.gov

[continued]

Co-Authors:

- (1) Kathy Como-Sabetti, MPH (Active Member)
Epidemiologist
Minnesota Department of Health
624 N Robert Street
St. Paul, Minnesota 55164
651-201-5485
kathy.como-sabetti@state.mn.us
- (2) Alicia Cronquist, MPH, RN (Active Member)
COVID-19 Surveillance Program Manager
Colorado Dept of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246
303-916-1891
alicia.cronquist@state.co.us
- (3) Amanda Feldpausch, DVM, MPH
(Active Member)
One Health Epidemiology Director
Georgia Department of Public Health
Atlanta, GA 30334
615-390-1163
amanda.feldpausch@dph.ga.gov
- (4) Mackenzie Fuller, MPH (Active Member)
Epidemiologist
Washington State Department of Health
1610 NE 150th Street, MS: K17-9
Shoreline, Washington 98155
206-418-5500
Mackenzie.fuller@doh.wa.gov
- (5) Ashley Gent, MPH (Active Member)
Surveillance Methods Unit Manager
Florida Department of Health
4025 Esplanade Way
Tallahassee, Florida 32399
850-901-6940
Ashley.Gent@flhealth.gov
- (6) Ellen Lee, MD, MPH (Active Member)
Director, Respiratory Pathogens Unit
New York City Dept of Health & Mental Hygiene
42-09 28th Street, 6th Floor, CN-22A
Long Island City, New York 11101
917-647-4199
Elee4@health.nyc.gov
- (7) Steph Meyer, MPH (Active Member)
Epidemiologist Sr.
Minnesota Department of Health
625 Robert Street North, PO Box 64975
St. Paul, Minnesota 55164
651-201-5824
Stephanie.meyer@state.mn.us
- (8) Charsey Porse, PhD, MPH (Active Member)
Chief, Epidemiology Section, COVID Control
Branch
California Department of Public Health
1616 Capitol Ave
Sacramento, California 95817
Charsey.porse@cdph.ca.gov
- (9) Darpun Sachdev, MD (Active Member)
Branch Chief, COVID Control
California Department of Public Health
1616 Capitol Ave
Sacramento, California 95817
646-326-9288
Darpun.sachdev@cdph.ca.gov
- (10) Kathryn Turner, PhD MPH (Active Member)
Deputy State Epidemiologist and Bureau Chief
Idaho Division of Public Health
450 W State St, 4th Floor
Boise, Idaho 83702
208-334-5870
Kathryn.Turner@dhw.idaho.gov
- (11) Kathleen Winter, PhD, MPH (Active Member)
State Epidemiologist
Kentucky Department for Public Health
275 E Main St
Frankfort, Kentucky 40621
502-892-9895
Kathleen.winter@ky.gov

Technical Supplement

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

Criterion	SARS-CoV-2 Infection
<i>Clinical Criteria for Reporting</i>	
N/A	
<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**	S
Detection of SARS-CoV-2 genomic sequences	S
Detection of SARS-CoV-2 specific antigen in clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider**	S
<i>Epidemiologic Linkage Criteria for Reporting</i>	
N/A	
<i>Vital Record Criteria for Reporting</i>	
A person whose death certificate lists COVID-19 disease or SARS-CoV-2 or an equivalent term ⁴ as an underlying cause of death or a significant condition contributing to death	S

Notes:

S = This criterion alone is SUFFICIENT to report a case.

*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.

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

[continued]

Table VII.A. Classification Table: Criteria for defining a case of SARS-CoV-2 infection.

Criterion	Confirmed	Probable	Suspect
Clinical Evidence			
N/A			
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*	S		
Detection of SARS-CoV-2 specific antigen by diagnostic immunocytochemistry staining performed by a CLIA-certified provider*	S		
Detection of SARS-CoV-2 RNA in a clinical or post-mortem specimen by genomic sequencing**	S		
Detection of SARS-CoV-2 specific antigen in a clinical or post-mortem specimen using a diagnostic test performed by a CLIA-certified provider*		S	
Detection of SARS-CoV-2 nucleic acid or specific antigen using a test performed without CLIA oversight***			S
Absence of SARS-CoV-2 nucleic acid detection			N
Absence of SARS-CoV-2 RNA detection			N
Absence of SARS-CoV-2 specific antigen detection			N
Epidemiologic Linkage Evidence			
N/A			
Vital Record Evidence			
A death certificate that lists COVID-19 disease or SARS-CoV-2 or an equivalent term ⁴ as an underlying cause of death or a significant condition contributing to death			N

Notes:

S = This criterion alone is SUFFICIENT to classify a case.

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

* 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

Table VII.B. Classification Table: Criteria to distinguish a new case of SARS-CoV-2 infection from reports or notifications which should not be enumerated as a new case for surveillance.

Criterion	Confirmed	Probable	Suspect [^]
Criteria to distinguish a new case			
Person was most recently enumerated as a confirmed or probable case with onset date (if available) or first positive specimen collection date for that classification >90 days prior	S	S	S
SARS-CoV-2 sequencing results from the new positive specimen and a positive specimen from the most recent previous case demonstrate a different lineage	S		
Person was previously reported but not enumerated as a confirmed or probable case (i.e., suspect) [^] but now meets the criteria of a confirmed or probable case	S	S	

Notes:

S = This criterion alone is SUFFICIENT to enumerate as a new case.

[^] Suspect cases should not be included in case counts.

Appendix: Epidemiological Classification of Work-Relatedness

The Epidemiological Classification of Work-Relatedness Appendix is a product of the CSTE Occupational Health Subcommittee. Please direct any questions or comments about the appendix to the Subcommittee co-chairs: Ken Rosenman (MI): rosenman@msu.edu and Sara Wuellner (WA): wues235@lni.wa.gov.

Background:

The CSTE Occupational Health Subcommittee created a workgroup to develop standardized surveillance guidance to improve exposure-associated classifications of confirmed or probable COVID-19 cases. This workgroup, representing state and federal occupational health specialists, had weekly conference calls with the goal of supporting identification of work-related COVID-19 transmission to better identify and control workplace clusters, provide critical information about patterns of disease among workers, better understand COVID-19 health disparities, and inform prevention and intervention efforts.

This guidance applies to cases that are classified as confirmed or probable according to the CSTE surveillance case definition for COVID-19.

The classification for work-related cases of COVID-19 may evolve as the epidemiology of and risk factors for SARS-CoV-2 are better understood. How sensitive or specific to make the work-related classification was considered. A more sensitive case definition is more inclusive and allows employers to implement workplace intervention and prevention strategies, which are more likely to be successful than interventions outside the workplace, for example to address crowded housing. A second concern was that information on non-work contacts may be unknown and to require the exclusion of non-work contacts for a case to be classified as likely work-related may be overly specific and exclude work-related cases. For example, given a cluster of cases in a meat packing facility, it would be reasonable to call these cases likely work-related although for any given individual in that cluster an exposure outside of work may have been the actual source of infection.

This classification has been developed for population-based epidemiological purposes and is not intended for use to determine an individual's eligibility for workers' compensation or to assist employers with Occupation Safety and Health Administration (OSHA) record keeping requirements.

Definitions:

"Case" refers to a confirmed or probable case of COVID-19 (see accompanying position statement, Section VII.)

"Work-related" means a case was infected with SARS-CoV-2 from an exposure at work.

Exposure outside of the workplace within 7 days of onset of symptoms or test result that meets confirmatory or presumptive laboratory criteria:

- Contact outside of work with a person that meets the definition of a confirmed or probable case.
- Participation in an event determined to be associated with a COVID-19 cluster (i.e. celebration, funeral)
- Travel on a cruise ship or airplane determined to be associated with a COVID-19 cluster

Face-to-Face Work with Public

This category includes all paid and unpaid workers who have face-to-face contact with the public (i.e. excludes persons who have contact with public only by phone or computer). It also excludes health care workers, who are defined in a separate section.

The US Department of Labor Occupational Information Network (O*NET) database (<https://www.onetonline.org>) was used to identify occupations with face-to-face public contact. We used O*NET survey measures regarding how important it is to work directly with the public or with customers and how closely people work to others in each occupation. We manually reviewed the list of occupations and selected occupations where face-to-face contact with public was expected. An additional O*NET measure on how physically close to other people one works in each

occupation was used for final selections. Since information about industry, but not occupation may only be available, criteria to identify industries where a high percentage of the occupations within the industry were identified using the O*NET data as having face-to-face contact. The final decision on face-to-face contact with the public should be made using all available information. For more information on determining whether an occupation or industry should be classified as Face-to-Face Work with Public, see the addendum, “Documentation of the development of the category of public facing workers (other than healthcare) for applying the CSTE surveillance case definition of work-related COVID-19,” located within the “Occupational Health Subcommittee Epidemiological Classification of COVID-19 Work-Relatedness and Documentation of Public-Facing Occupations” resource at <https://www.cste.org/page/OHPublications>.

Health Care Worker

Health care personnel (HCP) include all paid and unpaid persons working in health care settings, home health care services, or health care occupations within other industries (e.g., school nurses) who have the potential for exposure to patients or infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. HCP include, but are not limited to, physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health care facility, and persons (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing, volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from HCP and patients.

Outbreak definition: Three or more¹ COVID-19 cases (confirmed, probable, or suspect) among workers at a facility with onsets within a 7-day period², who are epidemiologically linked³, do not share a household, and are not a close contact of each other outside of the workplace.

Work-Related Classification:

Work-related classifications are presented in three formats: 1) AND/OR logic statements, 2) a table, 3) and a flow diagram.

Work-Related Classification in AND/OR Logic Statement Format

Likely Work-Related:

- Worked outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection **AND**
- Is a health care worker or work includes face-to face contact with the public **AND**
- Is part of a cluster of COVID-19 illnesses among workers in a facility or has had contact with a co-worker, patient, resident, client, or customer classified as a confirmed or probable case.

OR

- Worked outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection **AND**
- Is a health care worker or work includes face-to face contact with the public **AND**
- Has had no known contact with a confirmed or probable case outside the workplace.

¹ Health departments may consider a higher threshold for defining an outbreak if there is a high case rate in the community (community transmission).

² For onset, use symptom onset date whenever available. If symptom onset date is unknown or if a case is asymptomatic, use specimen collection date for the first specimen that tested positive. The 7-day period refers to the 7 days before the date of first symptom onset or first positive test sample.

³ Health departments should verify to the best extent possible that cases were present in the same setting during the same time period (e.g., same shift/department, same physical work area); that the timing fits with likely timing of exposure; and that there is no other more likely source of exposure for identified cases (e.g., household or close contact to a confirmed case outside of workplace setting).

OR

- Worked outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection **AND**
- Is a non-health care worker and work does not include face-to-face contact with the public **AND**
- Is part of a cluster of COVID-19 illnesses among workers in a facility or has had contact with a co-worker classified as a confirmed or probable case.

Possibly Work-Related:

- Worked outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection **AND**
- Is a health care worker or work includes face-to face contact with the public **AND**
- Is not part of a cluster of COVID-19 illnesses among workers in a facility and has had no contact with a co-worker, patient, resident, client, or customer classified as a confirmed or probable case **AND**
- Has had contact with a confirmed or probable case outside the workplace.

OR

- Worked outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection **AND**
- Is a non-health care worker and work does not include face-to-face contact with the public **AND**
- Is not part of a cluster of COVID-19 illnesses among workers in a facility **AND**
- Has had no contact with a co-worker classified as a confirmed or probable case.

Not Work-Related:

- A patient or resident in congregate care setting or a person incarcerated⁴ in the 7 days prior to onset of illness or date of specimen collection.

OR

- Did not work outside the home for any amount of time in the 7 days prior to onset of illness or date of specimen collection.

Unable to Classify:

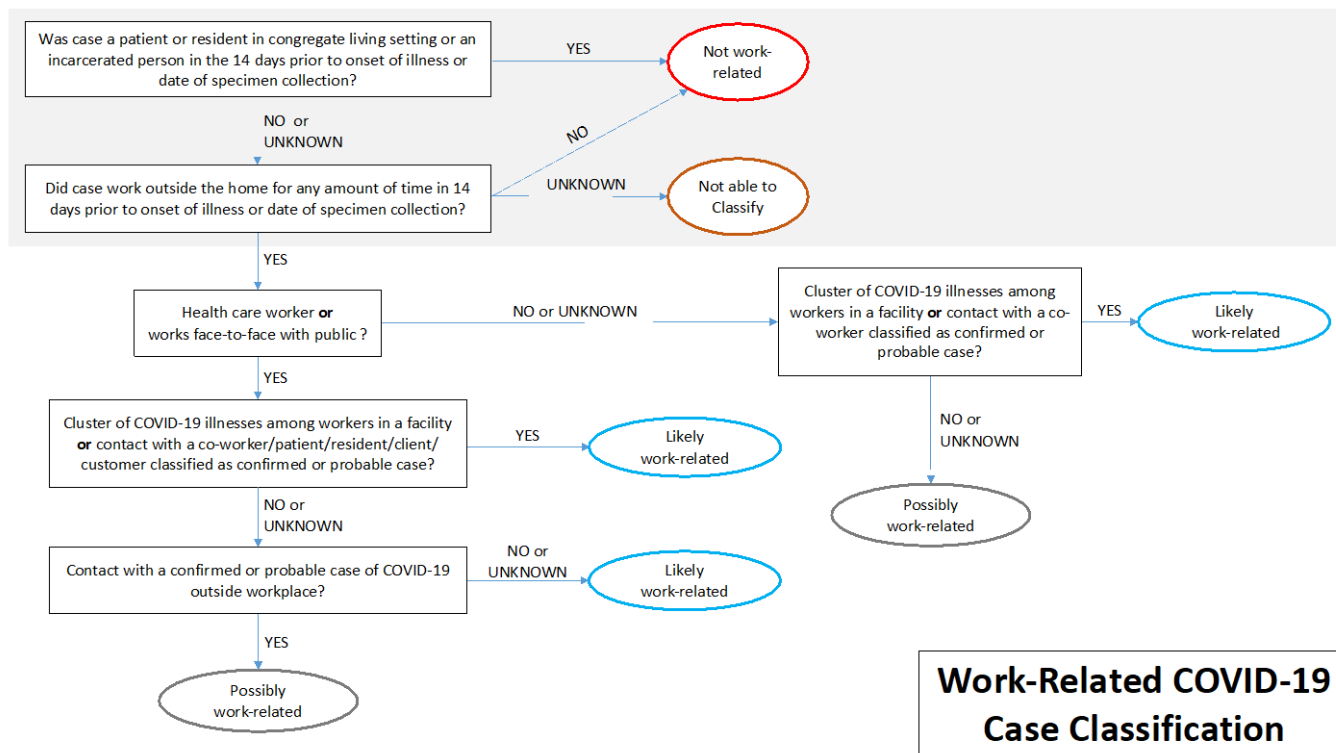
- Not a patient or resident in congregate care setting or an incarcerated⁶ person in the 7 days prior to onset of illness or specimen collection date **AND**
- Unknown if worked outside the home for any amount of time in the 7 days prior to onset of illness or specimen collection date.

⁴ It is possible for a person who is incarcerated and in a work-release program to be exposed to a confirmed or probable case of COVID-19 at their assigned work site, and after case investigation, may be considered likely or possibly work-related.

Work-Related Classification in Table Format

Work-Relatedness Classification	Type of Work			
	Health Care Worker who worked outside the home for any amount of time in the 7 days prior to onset of illness or specimen collection date	Worker with face-to-face public contact who worked outside the home for any amount of time in the 7 days prior to onset of illness or specimen collection date	All Other Workers who worked outside the home for any amount of time in the 7 days prior to onset of illness or specimen collection date	Not working outside the home in 7 days prior to onset of illness or date of specimen collection
Likely Work-Related	Is part of a cluster of COVID-19 illnesses among workers in a facility OR Has had contact with a co-worker, patient, or resident classified as a confirmed or probable case OR Has had no known contact with a confirmed or probable case outside the workplace.	Is part of a cluster of COVID-19 illnesses among workers in a facility OR Has had contact with co-worker, client, or customer classified as a confirmed or probable case OR Has had no known contact with a confirmed or probable case outside the workplace.	Is part of a cluster of COVID-19 illnesses among workers in a facility OR Has had close contact with a co-worker classified as a confirmed or probable case.	N/A
Possibly Work-Related	Not part of a cluster of COVID-19 illnesses among workers in a facility AND Has had no contact with a co-worker, patient, or resident classified as a confirmed or probable case AND Has had contact with a confirmed or probable case outside the workplace.	Not part of a cluster of COVID-19 illnesses among workers in a facility AND Has had no contact with a co-worker, client, or customer classified as a confirmed or probable case AND Has had contact with a confirmed or probable case outside the workplace.	Not part of a cluster of COVID-19 illnesses among workers in a facility AND Has had no close contact with a co-worker classified as a confirmed or probable case	N/A
Not Work-Related	No work outside the home in the 7 days prior to onset of illness or date of specimen collection OR A patient or resident in congregate care setting or a person incarcerated in the 7 days prior to onset of illness or date of specimen collection.	No work outside the home in the 7 days prior to onset of illness (or date of specimen collection) OR A patient or resident in congregate care setting or a person incarcerated in the 7 days prior to onset of illness or date of specimen collection.	No work outside the home in the 7 days prior to onset of illness or date of specimen collection OR A patient or resident in congregate care setting or a person incarcerated in the 7 days prior to onset of illness or date of specimen collection.	No work outside the home in the 7 days prior to onset of illness or date of specimen collection

Work-Related Classification in Flow Chart Format



Use of Data on Death Certificates to Determine Possible Work Relatedness:

Death certificates contain the usual occupation and industry of the deceased. They are readily available in all jurisdictions and the occupation and industry information on the death certificate may be used to determine work-relatedness of COVID-19 deaths. However, the work-related classification states that when it is unknown whether a person worked outside the home in the 7 days prior to the onset of illness or date of specimen collection a case is “not able to be classified.”

Death certificates could be matched to cases to obtain information about recent work outside the home and the occurrence of a work-related cluster. In the absence of this matching, working-aged individuals (18-70 years of age) with a death certificate that meets the vital records criteria in the accompanying position statement whose occupation or industry is 1) health care, 2) requires face-to-face contact with public, or 3) where case clusters have been identified should be evaluated for possible work-related classification. Describing the occupations and industries of all individuals between the ages of 18-70 who die and are confirmed or probable cases might identify work settings of concern.

Limitations include: It might not be known whether the decedent worked outside the home in the 7 days prior to onset of illness, death certificates list usual occupation and industry and not current occupation and industry at the time of death, the individual maybe retired or disabled at the time of the death, and occupation and industry are typically completed by funeral home staff without direct knowledge of the decedent's occupational details.