



Communicable Disease Case Reporting and Investigation Protocol **SEVERE ACUTE RESPIRATORY SYNDROME (SARS-CoV)**

I. IDENTIFICATION AND DEFINITION OF CASES

A. Clinical Description:

- Early illness: Presence of two or more of the following features: fever (might be subjective), chills, rigors, myalgia, headache, diarrhea, sore throat, or rhinorrhea.
- Mild-to-moderate respiratory illness: Temperature of $>100.4^{\circ}\text{F}$ ($>38^{\circ}\text{C}$) **and** one or more clinical findings of lower respiratory illness (e.g., cough, shortness of breath, or difficulty breathing).
- Severe respiratory illness: Meets clinical criteria of mild-to-moderate respiratory illness and one or more of the following findings:
 - Radiographic evidence of pneumonia.
 - Acute respiratory distress syndrome.
 - Autopsy findings consistent with pneumonia or acute respiratory distress syndrome without an identifiable cause.

B. Laboratory Criteria: Tests to detect SARS-CoV are being refined and their performance characteristics assessed. Therefore, criteria for laboratory diagnosis of SARS-CoV are changing. The following are general criteria for laboratory confirmation of SARS-CoV:

- Detection of serum antibody to SARS-CoV by a test validated by the Centers for Disease Control and Prevention (CDC) (e.g., enzyme immunoassay).
- Isolation in cell culture of SARS-CoV from a clinical specimen.
- Detection of SARS-CoV RNA by a reverse transcription polymerase chain reaction test validated by CDC and with subsequent confirmation in a reference laboratory (e.g., CDC).

C. Epidemiologic Criteria:

- Possible exposure to SARS-CoV: One or more of the following exposures in the 10 days before onset of symptoms:
 - Travel to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV.
 - Close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV.
- Likely exposure to SARS-CoV: One or more of the following exposures in the 10 days before onset of symptoms:
 - Close contact with a person with confirmed SARS-CoV disease.
 - Close contact with a person with mild-to-moderate or severe respiratory illness for whom a chain of transmission can be linked to a confirmed case of SARS-CoV disease in the 10 days before onset of symptoms.

D. Exclusion Criteria: A case may be excluded as a SARS report under investigation (SARS RUI), including as a CDC-defined probable SARS Co-V case, if any of the following apply:

- An alternative diagnosis can explain the illness fully.
- Antibody to SARS-CoV is undetectable in a serum specimen obtained >28 days after onset of illness.
- The case was reported on the basis of contact with a person who was excluded subsequently as a case of SARS-CoV disease; then the reported case also is excluded, provided other epidemiologic or laboratory criteria are not present.

E. Wisconsin Surveillance Case Definition:

- SARS-CoV disease
 - **Confirmed:** A clinically compatible illness (i.e., early, mild-to-moderate, or severe) that is laboratory confirmed.

- **Probable:** Meets the clinical criteria for severe respiratory illness and the epidemiologic criteria for likely exposure to SARS-CoV.
- SARS-CoV Report Under Investigation (RUI)
 - Reports in persons from areas where SARS is not known to be active: **SARS RUI-1:** Cases compatible with SARS in groups likely to be first affected by SARS-CoV if SARS-CoV is introduced from a person without clear epidemiologic links to known cases of SARS-CoV disease or places with known ongoing transmission of SARS-CoV.
 - Reports in persons from areas where SARS activity is occurring
 - **SARS RUI-2:** Cases meeting the clinical criteria for mild-to-moderate illness and the epidemiologic criteria for possible exposure.
 - **SARS RUI-3:** Cases meeting the clinical criteria for severe illness and the epidemiologic criteria for possible exposure.
 - **SARS RUI-4:** Cases meeting the clinical criteria for early or mild-to-moderate illness and the epidemiologic criteria for likely exposure to SARS-CoV.

II. REPORTING

- A. **Wisconsin Notifiable Disease Category I – Methods for Reporting:** This disease shall be reported **IMMEDIATELY BY TELEPHONE** to the patient’s local health officer or to the local health officer’s designee upon identification of a case or suspected case, per Wis. Admin. Code § [DHS 145.04 \(3\) \(a\)](#). In addition to the immediate report, complete and fax, mail or electronically report an Acute and Communicable Disease Case Report (DHS [F-44151](#)) to the address on the form, or enter the data into the Wisconsin Electronic Disease Surveillance System (WEDSS), within 24 hours.
- B. **Responsibility for Reporting:** According to Wis. Admin. Code § [DHS 145.04\(1\)](#), persons licensed under Wis. Stat. ch. [441](#) or [448](#), laboratories, health care facilities, teachers, principals, or nurses serving a school or day care center, and any person who knows or suspects that a person has a communicable disease identified in [Appendix A](#).
- C. **Clinical Criteria for Reporting:** Clinically compatible illness.
- D. **Laboratory Criteria for Reporting:** Laboratory evidence of infection by culture or nonculture-based methods, including serologic evidence of antibody to SARS Co-V. All positive results should be reported.

III. CASE INVESTIGATION

- A. **Responsibility for case investigation:** It is the responsibility of the local health department (LHD) to investigate or arrange for investigation of suspected or confirmed cases as soon as is reasonably possible. A case investigation may include information collected by phone, in person, in writing, or through review of medical records or communicable disease report forms, as necessary and appropriate.
- B. **Required Documentation:**
 1. Complete the WEDSS disease incident investigation report, including appropriate, disease-specific tabs
 2. Upon completion of investigation, set WEDSS disease incident process status to “Sent to State.”
- C. **Additional Investigation Responsibilities:**
 1. Contact and work with BCD staff on the investigation.
 2. Conduct case and contact investigation.

IV. PUBLIC HEALTH INTERVENTIONS AND PREVENTION MEASURES

- A. In accordance with Wis. Admin. Code § [DHS 145.05](#), local public health agencies should follow the methods of control recommended in the current editions of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association, and the American Academy of Pediatrics’ *Red Book: Report of the Committee on Infectious Diseases*, unless otherwise specified by the state epidemiologist.

V. CONTACTS FOR CONSULTATION

- A. Local health departments and tribal health agencies: <https://www.dhs.wisconsin.gov/lh-depts/index.htm>
- B. BCD, Communicable Diseases Epidemiology Section: 608-267-9003

C. Wisconsin State Laboratory of Hygiene: 1-800-862-1013

VI. RELATED REFERENCES

- A. Heymann DL, ed. SARS, MERS and other Coronavirus Infections. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 539-549.
- B. Pickering LK, ed. Coronaviruses, Including SARS and MERS. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 306-309.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/SARS/html>