

# Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

**Disease: Severe Acute Respiratory Syndrome (SARS)**

Effective: February 2019

# Severe Acute Respiratory Syndrome (SARS)

## 1.0 Provincial Reporting

Confirmed and probable cases of disease

## 2.0 Type of Surveillance

Case-by-case

## 3.0 Case Classification

### 3.1 Confirmed Case

Laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection,

**AND**

- Early presentation of clinically compatible signs and symptoms of SARS with or without radiographic evidence consistent with SARS

**OR**

A deceased person with:

- A history of early presentation of clinically compatible signs and symptoms of SARS (i.e., fever **AND** cough **OR** difficulty breathing resulting in death)

**AND**

- Autopsy findings consistent with SARS, i.e.:
  - Evidence of pneumonia or Acute Respiratory Infection (ARI) without an alternate identifiable cause

**AND**

- Laboratory evidence of SARS-CoV Infection.

### 3.2 Probable Case

In the absence of laboratory evidence, a person with:

- Early presentation of clinically compatible signs and symptoms of SARS with or without radiographic evidence consistent with SARS

**AND**

- An epidemiologic link to a person or place linked to SARS, including:
  - Close contact\* with a confirmed SARS case, within 10 days of onset of symptoms

**OR**

- Close contact with a symptomatic person who has laboratory evidence of SARS-CoV infection, within 10 days of onset of symptoms

**OR**

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\* Close contact means having cared for, lived with or had face-to-face (within two metres) contact with, or having had direct contact with respiratory secretions and/or body fluids of a person with SARS.

- Residence, recent travel or visit to an “area with recent local transmission of SARS” within the 10 days prior to onset of symptoms

**OR**

- Close contact with a probable case who has been to an “area with recent local transmission of SARS” within the 10 days prior to onset of symptoms; this includes health care workers who were not wearing personal protective equipment.

**OR**

- Laboratory exposure to SARS-CoV where appropriate barriers and personal protective equipment were not in place.

**OR**

A deceased person with:

- A history of early presentation of clinically compatible signs and symptoms of SARS

**AND**

- Autopsy findings consistent with SARS

**AND**

- An epidemiologic link to a person or place linked to SARS

## 4.0 Laboratory Evidence

### 4.1 Laboratory Confirmation

Laboratory results must be verified by the Public Health Ontario Laboratories and/or the National Microbiology Laboratory (NML).

### 4.2 Approved/Validated Tests

- Laboratory Confirmation
  - Detection of SARS-CoV ribonucleic acid (RNA) in appropriate samples (with confirmation by NML or a designated laboratory) or isolation in cell culture from a clinical specimen.

**OR**

  - Serologic detection of SARS-CoV in a convalescent sample taken > 28 days after onset of illness

**OR**

  - Seroconversion between acute and convalescent blood samples collected at least 4 weeks apart.
- Clinical specimens include clotted blood or serum for serology, nasopharyngeal swab (NPS) or Nasopharyngeal aspirate (NPA), bronchoalveolar lavage (BAL)/bronchial washings and stools for viral RNA detection.

### 4.3 Indications and Limitations

Not applicable

## 5.0 Clinical Evidence

Clinically compatible signs and symptoms are characterized by all of the following:

- Fever (> 38 degrees Celsius)
- Cough OR breathing difficulty (i.e., new or worsening cough or shortness of breath)

Radiographic Evidence

- Radiographic evidence is characterized by radiographic evidence of infiltrates consistent with pneumonia or ARI

## 6.0 ICD 10 Code(s)

U04 Severe Acute Respiratory Syndrome (SARS)

U04.9 Suspected Severe Acute Respiratory Syndrome (SARS), unspecified

## 7.0 Comments

**Note:** During an outbreak period, persons without x-ray changes (i.e. those who are not severely ill) may have laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection if tested as part of an outbreak. These individuals will be considered as “confirmed SARS-CoV infection”, while not meeting the clinical criteria for confirmed cases of “Severe Acute Respiratory Syndrome (SARS)”.

## 8.0 Sources

Committee on Infectious Diseases, American Academy of Pediatrics. Section 3: Summaries of Infectious Diseases: Coronaviruses, Including SARS and MERS. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, editors. Red Book: 2018 Report of the Committee on Infectious Diseases. 31 ed. Itasca, IL: American Academy of Pediatrics; 2018.

Health Canada. Public Health Management of SARS Cases and Contacts: Interim Guidelines. Version 7: December 17, 2003. Ottawa, ON: Her Majesty the Queen in Right of Canada; 2003.

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Hoffman C, Kamps BS. SARS Reference - 10/2003. 3 ed: Flying Publisher; 2003.

Public Health Agency of Canada. Severe Acute Respiratory Syndrome (SARS). In: Case Definitions for Communicable Diseases under National Surveillance. Canada Communicable Disease Report. 2009;35S2.

## 9.0 Document History

Table 1: History of Revisions

Revision Date	Document Section	Description of Revisions
January 2014	General	New template. Section 9.0 Document History added.
January 2014	3.1 Confirmed Case	Changed from “Laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection, AND: Early presentation of clinically compatible signs and symptoms of SARS AND Radiographic evidence consistent with SARS” to “Laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection, AND: Early presentation of clinically compatible signs and symptoms of SARS <b>with or without</b> radiographic evidence consistent with SARS”

Revision Date	Document Section	Description of Revisions
January 2014	3.2 Probable Case	<p>First bullet point changed from “In the absence of laboratory evidence, a person with: Early presentation of clinically compatible signs and symptoms of SARS AND Radiographic evidence consistent with SARS” to “In the absence of laboratory evidence, a person with: Early presentation of clinically compatible signs and symptoms of SARS <b>with or without</b> radiographic evidence consistent with SARS”</p> <p>“This includes health care workers who were not wearing personal protective equipment” added to the end of the sixth bullet point.</p> <p>“Where appropriate barriers and personal protective equipment were not in place” added to the end of the seventh bullet point.</p>
January 2014	4.2 Approved/ Validated Tests	Entire section revised.
January 2014	5.0 Clinical Evidence	Radiographic evidence separated from clinically compatible signs and symptoms.
January 2014	7.0 Comments	Face-to-face contact changed from “within one metre” to “within two metres”.
January 2014	8.0 Sources	Updated.
February 2019	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance.

