

Severe Acute Respiratory Syndrome (SARS)

Reporting Obligations

SARS infection is designated as a disease of public health significance and is reportable under the *Ontario Health Protection and Promotion Act*. Report all suspect and confirmed cases **immediately by phone** to the health unit.

Epidemiology

Aetiologic Agent:

SARS is caused by a coronavirus similar on electron microscopy to animal coronaviruses; large, enveloped RNA viruses.

Clinical Presentation:

SARS illness generally presents with malaise, myalgia, and fever, quickly followed by respiratory symptoms including cough and shortness of breath. Diarrhea may occur. Symptoms may worsen for several days coinciding with viraemia at 10 days after onset. Nearly all confirmed infected adult cases developed pneumonia or acute respiratory distress syndrome.

Modes of transmission:

SARS is transmitted from person to person by close contact (i.e., within 2 meters) with infectious respiratory secretions or body fluids of a suspected case of SARS.

The SARS virus is thought to be transmitted most readily through respiratory droplets produced when an infected individual coughs or sneezes and possibly through fomites (inanimate objects including surfaces or objects contaminated with infectious droplets).

Incubation Period:

2-10 days (mean 5 days), with isolated reports of longer incubation periods.

Period of Communicability:

Not yet completely understood. Initial studies suggest that transmission does not occur before onset of clinical signs and symptoms and that maximum period of communicability is less than 21 days.

Risk Factors/Susceptibility

Unknown but susceptibility is assumed to be universal.

- Travel outside province in the last 10 days to an area with known cases
- Close contact with case
- Occupational—lab worker
- Chronic illness/underlying medical condition including diabetes

Diagnosis & Laboratory Testing

Laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection; early presentation of clinically compatible signs and symptoms of SARS (fever > 38 degrees Celsius, cough or breathing difficulty, radiographic evidence of infiltrates consistent with pneumonia or respiratory distress syndrome RDS).

TESTING INFORMATION & REQUISITION

Treatment & Case Management

While receiving institutional health care, SARS-infected cases should be placed on “droplet/contact precautions”, preferably in a single room, with a minimum of 12 air exchanges per hour. Appropriate PPE should be worn, and appropriate personal protective measures performed (e.g., hand hygiene) by health care workers caring for patients infected with SARS.

Cases should not go to work, school, or other public areas until 10 days after fever and respiratory symptoms have resolved. During this time, infection prevention and control precautions for SARS patients should be followed.

Refer to the PHAC document, [Public Health Management of SARS Cases and Contacts Interim Guidelines](#).

Contacts will be identified and followed by Public Health staff to provide management of asymptomatic and symptomatic contacts. It will be stressed to the contact that fever is usually the first symptom.

Patient Information

PATIENT FACT SHEET

References

1. [Ministry of Health, Infectious Diseases Protocol - Ontario Public Health Standards, 2022.](#)

Additional Resources

1. Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
2. [PHAC, “Public Health Management of SARS Cases and Contacts Interim Guidelines, 2003.](#)