

Influenza

Reporting Obligations

Influenza 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 within **one business day** to the health unit.

REPORTING FORM

Epidemiology

Aetiologic Agent:

Causative agents include three types of influenza virus: A, B, and C. Type A includes 15 subtypes of which 2 (H1 and H3) are associated with widespread seasonal epidemics.

Clinical Presentation:

Influenza is an acute respiratory infection (ARI). Symptoms include, but are not limited to, new or worsening cough, shortness of breath, fever, sore throat, headache, myalgia, and lethargy. Infections in children may also be associated with some gastrointestinal symptoms such as nausea, vomiting and diarrhea, while the elderly may not mount a fever response. In most people, illness resolves within five to seven days, however the very young and old could develop complications such as pneumonia, or middle ear infections. Many individuals infected with the influenza virus are asymptomatic.

Modes of transmission:

Influenza virus particles are predominantly spread via droplets larger than five microns in diameter, which are released or shed from infected persons when they sneeze, cough, or talk. These large droplets do not stay suspended in the air and usually travel less than two meters (six feet). They may enter the host's eyes, nose or mouth or fall onto surfaces in the immediate environment. Some of these viruses may remain viable for extended periods of time, therefore contact transmission can occur by touching contaminated objects or surfaces and then touching one's face or eyes.

Incubation Period:

Usually one to four days.

Period of Communicability:

May become infectious during the 24 hours prior to onset of symptoms; viral shedding in nasal secretions usually peaks during the first 3 days of illness and ceases within 7 days but can be prolonged in young children and the immunocompromised.

Risk Factors/Susceptibility

Vaccine preventable; new vaccine is required annually the components of which depend on circulating strains. Immunity is generally achieved within 2 weeks following immunization.

Risk factors include chronic illness/underlying medical condition, immunocompromised, travel, and not immunized for influenza.

Diagnosis & Laboratory Testing

A confirmed case: clinically compatible signs and symptoms with laboratory confirmation or an epidemiologic link to a laboratory-confirmed case.

Lab Testing: The specimen of choice for seasonal influenza virus is the nasopharyngeal swab (NPS) taken within the first four days of illness. When indicated and possible, lower respiratory tract specimens (e.g., bronchoalveolar lavage) should also be submitted, as these may have greater sensitivity than NPSs.

TESTING INFORMATION & REQUISITION

Treatment & Case Management

The best prevention measure is annual immunization. All Ontario residents aged 6 months and older are eligible to receive publicly funded influenza vaccine yearly.

Treatment is under the direction of the attending Health Care Provider. Advise the individual to stay away from work and school when ill and limit exposure to others, especially those at high risk for complications.

People at high risk of Influenza-related complications or hospitalization include:

- All children 6 to 59 months of age
- Adults (including pregnant women) and children with chronic health conditions including morbid obesity
- People of any age who are residents of nursing homes and other chronic care facilities
- People \geq 65 years of age
- Pregnant women
- Aboriginal peoples

Public Health will follow up as needed.

Patient Information

PATIENT FACT SHEET

References

1. [Ontario. Ministry of Health. Infectious Diseases Protocol, Appendix 1: Influenza.](#) Toronto: Queen's Printer for Ontario; 2022 [cited 2024 Mar 12].

Additional Resources

1. [PHAC. National Advisory Committee on Immunization \(NACI\). Statement on Seasonal Influenza Vaccine.](#)
2. Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
3. [SMDHU HealthSTATS: Influenza.](#)
4. [Influenza. Toronto: PHO; 2024 Jan 29.](#) [cited 2024 Feb].
5. [PHO. Influenza Nov 2022.](#)