



Community of Practice:

The Upcoming Respiratory Virus Season

July 2022



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Topics Covered

1. Respiratory Viruses Overview
2. COVID-19
3. Influenza
4. RSV
5. Other Respiratory Viruses



Respiratory Viruses Overview

- Respiratory Season has historically been November through April and is triggered by the initial detection of Influenza cases.
- Respiratory Viruses are a common concern and cause for Outbreaks in congregate settings.
- We have access to vaccines for two of the viruses; COVID-19 and Influenza.
- The severity of the influenza season and circulating strains are challenging to predict.
- It remains unclear how the COVID-19 pandemic will affect the influenza season; however it is evident already that we will have other respiratory viruses circulating in addition to COVID-19 this fall.



Routine Practices

Used with every person, every time.

1. Point of Care Risk Assessment
2. Hand Hygiene
3. Personal Protective Equipment
4. Respiratory Hygiene
5. Antimicrobial Stewardship
6. Aseptic Practice
7. Resident/Person Supported Placement
8. Waste Management



Point of Care Risk Assessment (PCRA)

Before each patient/resident/client interaction, the health care worker completes a 'Point of Care Risk Assessment' (PCRA) by asking the following questions to determine the risk of exposure and appropriate Routine Practices and Additional Precautions required for safe care:

- What are the patient's symptoms?
- What is the degree of contact?
- What is the degree of contamination?
- What is the patient's level of understanding and cooperation?
- What is the degree of difficulty of the procedure being performed and the experience level of the care provider?
- What is my risk of exposure to blood, body fluids, excretions, secretions, non-intact skin and mucous membranes?

Additional Precautions

Droplet/Contact Precautions (mask, eye protection, gown, gloves)

Droplet/Contact Precautions

Clean Your Hands Often

For more information please contact the Care Team or Infection Prevention and Control

In addition to Routine Practices:

Care Team and Visitors

(when **inside** room)

Wear gown

Wear procedure mask and eye protection

Wear gloves

Residents

(if necessary to be **outside** room)

Wear procedure mask

Organism/Disease	Contact	Enhanced Contact	Droplet Contact	Enhanced Droplet Contact	Airborne Contact	Airborne
MRSA						
ESBL						
Norovirus (suspected/confirmed)						
Diarrhea NYD						
Scabies						
Bed bugs /Lice	Routine Practices (conceal personal items in sealed bag)					
C. difficile (confirmed)						
VRE						
CPE/CPD						
C. auris						
Hospitalization outside of Canada in last 1 years						
Influenza/RSV						
Bacterial Meningitis (suspected/confirmed)						
Streptococcal pyogenes (Group A)						
Mumps						
Monkeypox						
Novel Respiratory Virus						
Chicken Pox (Varicella)						
Shingles (localized)	Routine Practices					
Shingles (immunocompromised or disseminated)						
Measles (Rubella)						
TB						



What to do when an Acute Respiratory Illness (ARI) is suspected:

1

Identify person(s) with **signs or symptoms** concerning for respiratory virus via your Routine Screening

2

Initiate *Enhanced Droplet/Contact Precautions* by moving person into a private space/room/area away from others



Use *Enhanced Droplet/Contact Precautions* until COVID-19 is ruled out

3

Collect NP swab for respiratory virus testing and maintain *Enhanced Droplet/Contact Precautions* while awaiting results

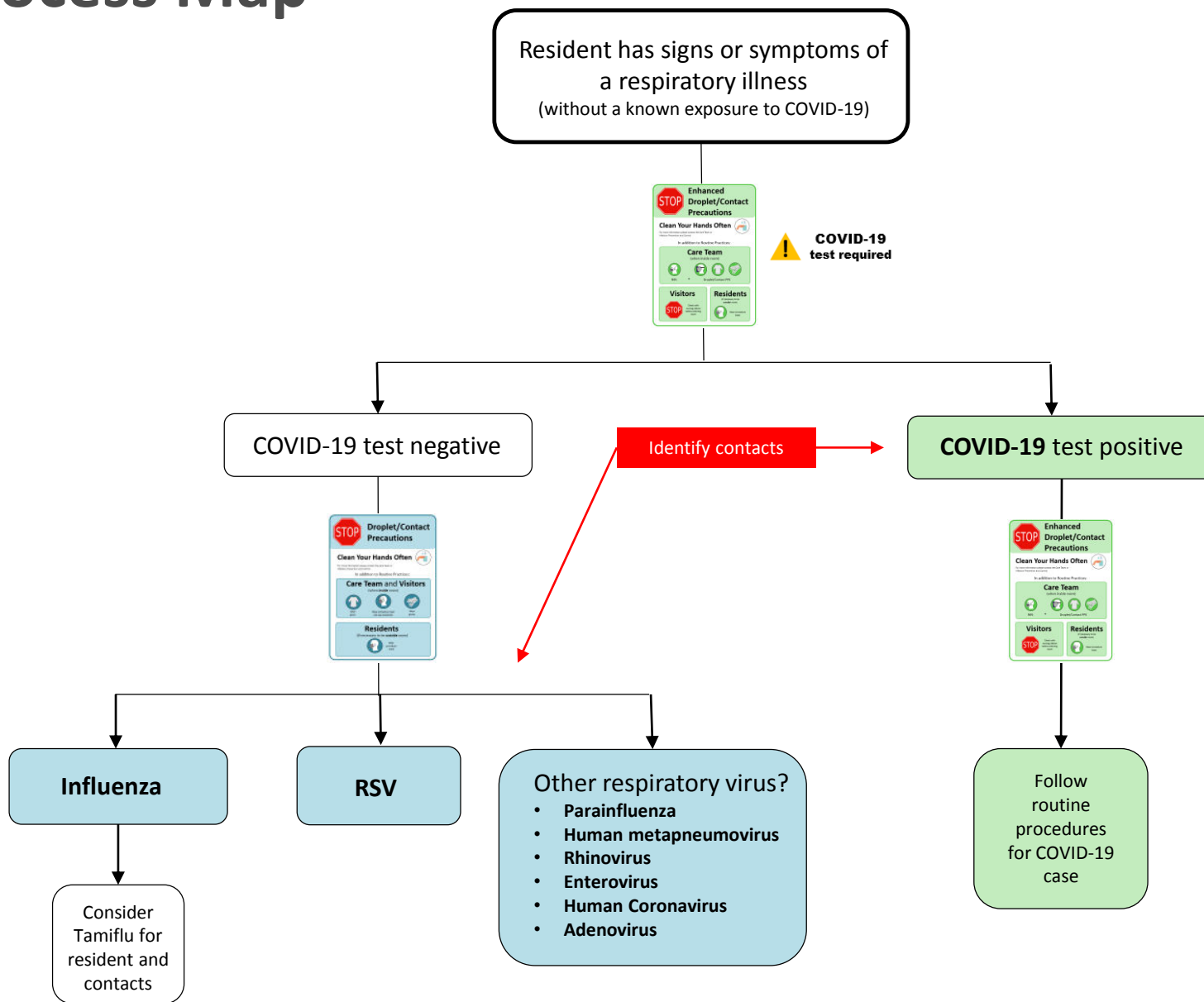


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Process Map



COVID-19






Enhanced Droplet/Contact

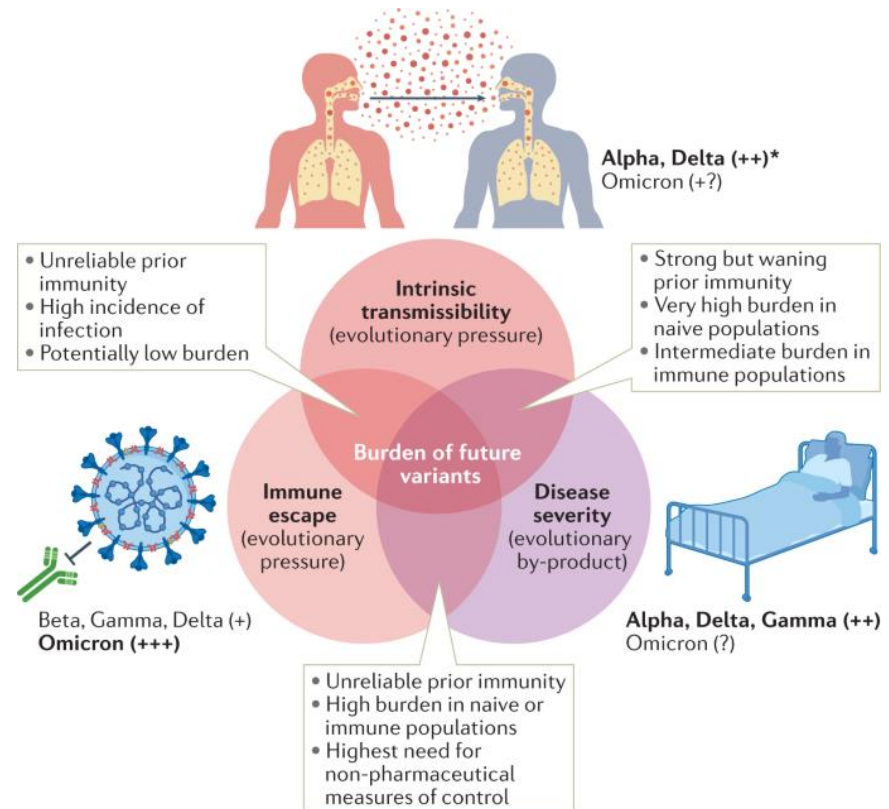
- Simcoe Muskoka has entered a seventh wave of COVID-19, being driven by the new Omicron subvariant BA.5, which has become the dominant strain in our community and the province.
- We are seeing a rise in the rate of transmission through increases in local case counts, active outbreaks, hospitalizations, and waste water signals in some communities.
- The BA.5 subvariant spreads even faster between people than the last strain of COVID-19, has similar severity, and can reinfect those who have previously had COVID-19.
- **COVID-19 booster vaccine** eligibility has been expanded at this time.
- The **bivalent COVID-19 vaccine** is anticipated to be available around Thanksgiving for high risk groups first.
- You can get the COVID-19 vaccine and the Influenza vaccine at the same time



Evolution and Impact of the COVID-19 Virus

Variants of concern

 B.1.1.7 Alpha	 B.1.351 Beta	 P.1 Gamma	 B.1.617.2 Delta	 B.1.1.529 Omicron
May 2020 UK	August 2020 South Africa	November 2020 Brazil	October 2020 India	November 2021 Multiple countries
Spreads more easily	Spreads more easily and some vaccines may be less effective against it	Spreads more easily and some vaccines may be less effective against it	Spreads more easily Symptoms may present differently May reduce vaccine efficacy Still protects against severe disease	Early studies show that it spreads more easily



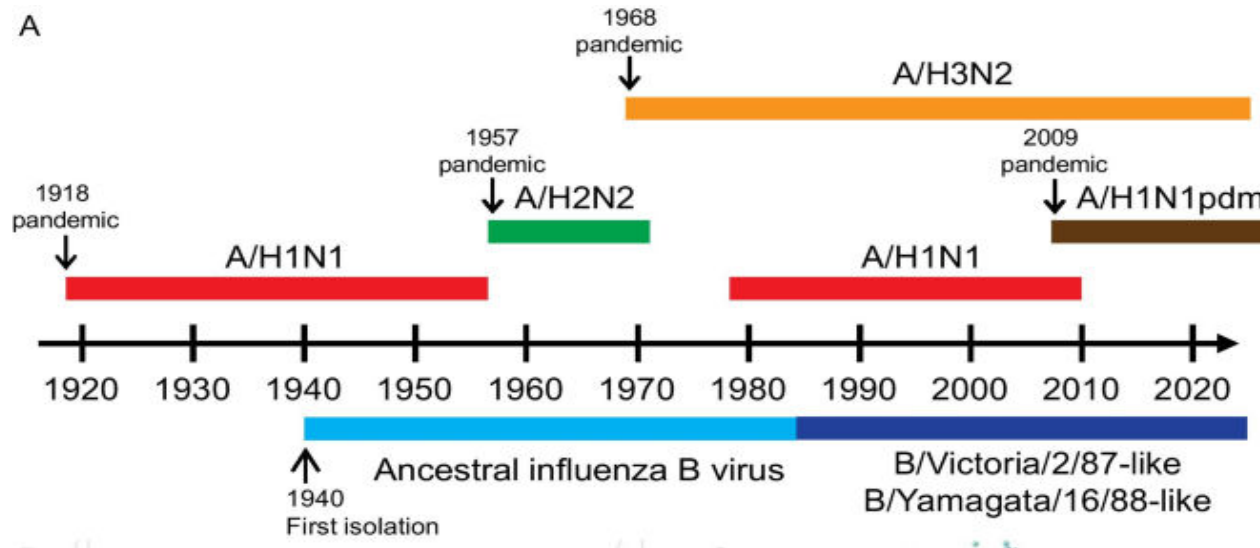
Influenza

Droplet/Contact

- Influenza is contagious: it is spread by direct contact and by droplets expelled during breathing, talking, sneezing or coughing.
- Influenza is common: About one in 20 healthy unvaccinated adults gets infected with influenza each year; as many as 1 in 6 unvaccinated healthcare workers get influenza.
- At least 1 in every 300 adults over the age of 65, and 1 in every 200 children under the age of one are hospitalized due to influenza each year.
- Influenza can be fatal: In Canada, up to 12,200 hospitalizations related to influenza; and approximately 3500 deaths attributable to influenza occur annually.
- As a health-care worker you can help protect yourself and your patients: four randomized control clinical trials found that vaccination of health-care workers reduced the number of deaths in the patients they cared for by 20-40%.



Evolution and Impact of the Influenza Virus



Influenza Resources

PHO Influenza [Webpage](#)

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BEST PRACTICE

Influenza and Respiratory Infection Surveillance Package 2021-22

For the 2021-22 season, influenza and respiratory infection surveillance activities will begin on September 1, 2021. The purpose of this surveillance package is for Public Health Ontario (PHO) to provide public health units (PHUs) with a resource to help with their local surveillance activities.

This package is intended to support PHU entry of high-quality data into the Integrated Public Health Information System (IPHIS). The information PHUs provide helps us understand and describe influenza and respiratory infection activity in Ontario and is published in provincial and national surveillance reports. PHO is committed to the continued dissemination of our surveillance reports that describe the epidemiology of influenza and respiratory infections in Ontario, and cannot do this without the assistance and support of our colleagues in local PHUs who provide high-quality data.

Note: This document does not include guidance on data entry for cases and/or outbreaks of COVID-19. PHUs should follow existing PHO data entry guidance for cases and/or outbreaks of COVID-19.

Summary of Public Health Unit Responsibilities

Influenza is a disease of public health significance in Ontario as per Regulation 135/18 and amendments under the Health Protection and Promotion Act (HPPA).¹

Laboratory-Confirmed Influenza Cases

CASE FOLLOW-UP: 2021-22 SEASON

There is no provincial requirement for PHUs to follow-up any laboratory-confirmed seasonal influenza cases; however, they may choose to do so for their own surveillance needs.

CASE DATA ENTRY PROCESS: 2021-22 SEASON

PHUs are required to report all laboratory-confirmed cases of influenza in accordance with IPHIS Bulletin 17 – Timely entry of cases.²

For the 2021-22 season, data obtained by PHUs during follow-up or as documented on laboratory reports must be collected and entered into IPHIS in accordance with the most recent version of the IPHIS User guide: Outbreak module – respiratory diseases, section 1 – sporadic influenza cases that is accessible on the IPHIS and Cognos Document Repository or by emailing iphisupport.moh@ontario.ca.³

For all laboratory-confirmed seasonal influenza cases, PHUs are only required to enter into IPHIS the information available from the laboratory report. Please enter the specific data elements found on the

Influenza and Other Respiratory Infection Surveillance Package 2021-22 1

Annex B: Best Practices for Prevention of Transmission of Acute Respiratory Infection

In All Health Care Settings

Provincial Infectious Diseases Advisory Committee (PIDAC)

Revised: March 2013

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Testing Indications

Public Health Ontario (PHO) Laboratory utilizes a testing algorithm for influenza and other respiratory viruses.

On July 26, 2021, PHO Laboratory implemented changes to eligibility of multiplex respiratory virus PCR (MRVP) testing for children <18 years old seen in the Emergency Department, hospitalized patients, outbreak-associated patients, and patients in institutions not in outbreak with acute respiratory illness (ARI).

Previously, MRVP testing was routinely available for persons tested in ICU/CCU and remote communities only. Starting July 26, 2021, PHO Laboratory has made the following changes to MRVP testing:

1. To support enhanced respiratory virus surveillance, MRVP testing will be available for symptomatic children (<18 years) seen in the Emergency Department (ED). This testing, which is generally not required for clinical purposes, will be re-evaluated in fall/winter 2021.
2. MRVP testing will be available for all symptomatic hospitalized patients (ward and ICU/CCU).
3. Specimens from the first four symptomatic patients in an outbreak that request respiratory virus testing will be tested by MRVP.
4. Symptomatic patients tested in institutional settings (non-outbreak) will be eligible for MRVP testing when ordered on the PHO Laboratory requisition.

MRVP testing requests for patients with acute respiratory illness (ARI) in the settings described above should be clearly indicated on the requisition by selecting "Respiratory Viruses" or "COVID-19 Virus AND Respiratory Viruses" as appropriate in section 5 – "Test(s) Requested". Only mark one of the three test request options. In addition, the patient's setting and symptoms should be indicated on the requisition.



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RSV (Respiratory Syncytial Virus)

Droplet/Contact

- Respiratory syncytial virus, or RSV, is a **common respiratory virus that usually causes mild, cold-like symptoms.**
- Most people recover in a week or two, but RSV can be serious, especially for infants and older adults.
- RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs) in children younger than 1 year of age.
- When an adult gets RSV infection, they typically have mild cold-like symptoms. But RSV can sometimes lead to serious conditions such as
 - Pneumonia
 - More severe symptoms for people with asthma
 - More severe symptoms for people with chronic obstructive pulmonary disease (COPD)
 - Congestive heart failure (when the heart can't pump blood and oxygen to the body's tissues)

Other Respiratory Viruses

Droplet/Contact

Parainfluenza

Human
Metapneumovirus

Human
Coronavirus

Rhinovirus

Adenovirus



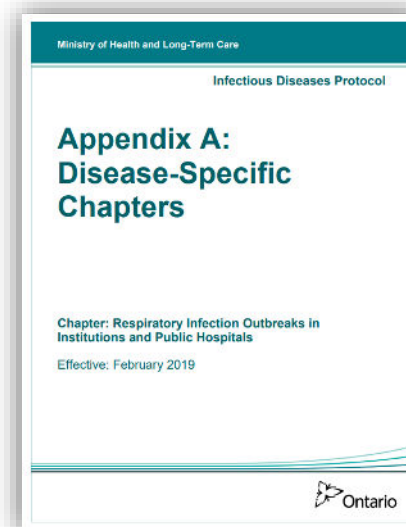
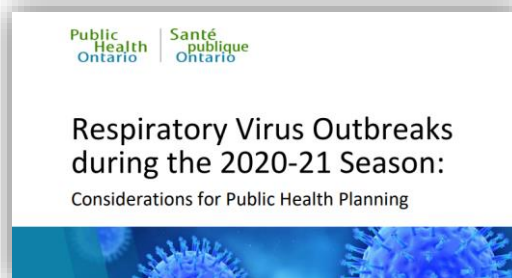
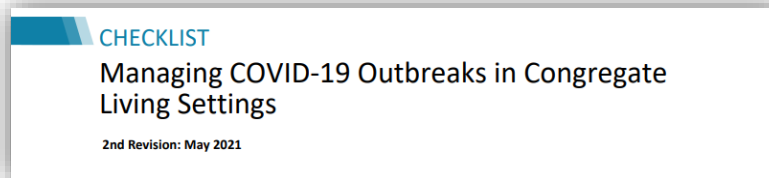
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Outbreak

- Outbreak definitions are established to reflect the disease and circumstances of the outbreak under investigation.
- Outbreak definitions should be developed for each individual outbreak based on its characteristics, reviewed during the course of the outbreak, and modified if necessary.



Questions?



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