



Community of Practice: Planning and Tools for Respiratory Virus Season

October 2021



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Topics Covered

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



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Quick Video

Understanding
Respiratory
Viruses



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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 now have a vaccine for the most impactful of the two; COVID-19 and Influenza.
- The severity of the influenza season and circulating strains are difficult to predict.
- It remains unclear how the COVID-19 pandemic will affect the influenza season; it is unlikely the influenza season will be as quiet as the 2020-2021.



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



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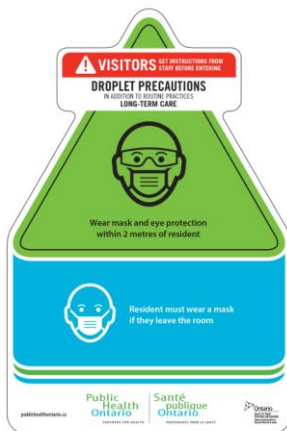


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Additional Precautions

Droplet/Contact Precautions

(mask, eye protection, gown, gloves)



Organism/Disease	CONTACT	DROPLET/ CONTACT	AIRBORNE	AIRBORNE/ CONTACT	AIRBORNE/ DROPLET/ CONTACT
MRSA					
VRE					
CPE/CPO					
Diarrhea NYD					
Norovirus					
<i>C. difficile</i>					
Scabies					
COVID-19					
Influenza					
RSV					
Meningococcal Disease					
Group A Streptococcus					
Tuberculosis					
Measles (Rubeola)					
Chickenpox					
Shingles (disseminated)					
Shingles (localized)	Routine Practices				
Novel Respiratory Illness/Hemorrhagic Fever					



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

3

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



COVID-19

Droplet/Contact

- There have been 13,836 confirmed COVID-19 cases in Simcoe Muskoka since COVID-19 was first identified in Canada.
- There have been 46 new cases reported to the health unit for the current week.
- COVID-19 continues to be a significant concern for transmission and Outbreaks in congregate settings.
- Delta variant is the dominant variant circulating at this time.
- The COVID-19 vaccines continue to be successful at preventing severe illness and lowering the rates of transmission.
- It is important to continue to practice public health measure to prevent the spread of COVID-19.

COVID-19 Case and Vaccine Summary Table, Simcoe Muskoka

COVID-19 Vaccines

Total # Vaccinated with First Dose (% of Population)	457,833 (75.7%)
Total # Vaccinated with Second Dose (% of Population)	433,926 (71.8%)

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%.



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Influenza Vaccine

- The ***influenza vaccine*** is very safe: it has been administered routinely in Canada since 1946. More than 400 million people worldwide get the flu shot every year (about 15 million in Canada). No long-term adverse effects have been recorded
- ***The influenza vaccine works:*** As with any adult vaccine, the flu shot does not provide 100% protection. However, with a good match to circulating strains, influenza vaccination prevents illness in 70-90% of healthy children and adults. Additionally, vaccinated people who do still get influenza experience only mild symptoms
- ***Influenza vaccine is particularly important for pregnant women:*** Pregnant women who are vaccinated are less likely to have babies who are born prematurely or of low birth weight, and their infants are less likely to get influenza during the first six months of life.

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 (PHIS). 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 IPHS 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 IPHS in accordance with the most recent version of the IPHS User guide: Outbreak module – respiratory diseases, section 1 – *sporadic influenza cases* that is accessible on the IPHS and Cognos Document Repository or by emailing phsupport.mso@ontario.ca.³

For all laboratory-confirmed seasonal influenza cases, PHUs are only required to enter into IPHS 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)



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Other Respiratory Viruses

Droplet/Contact

Parainfluenza

Human
Metapneumovirus

Human
Coronavirus

Rhinovirus

Adenovirus



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ARI Comparisons

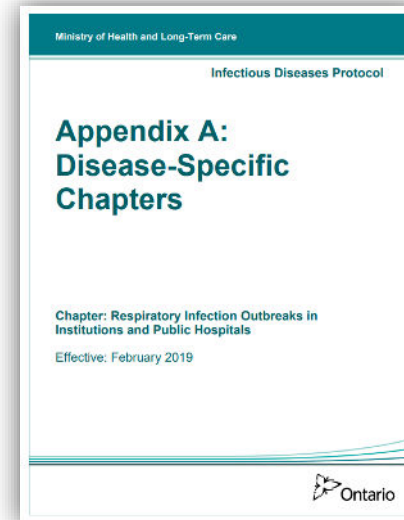
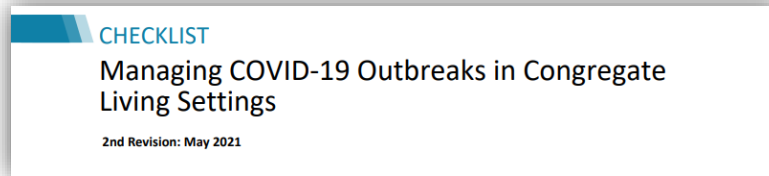
Guiding Procedures - Respiratory Viruses

Respiratory Season 2021/2022

	COVID-19	INFLUENZA	RSV	Other Respiratory Viruses (HMPV, Rhinovirus, Adenovirus, Parainfluenza)
Additional Precautions	Droplet/Contact Precautions	Droplet/Contact Precautions	Droplet/Contact Precautions	Droplet/Contact Precautions
Incubation Period	1-10 days	1-4 days	3-7 days	Varies by organism
Period of Communicability	14 days	3-5 days	3-8 days	Varies by organism
Duration of Droplet/Contact Precautions	Minimum 10 days	7 days after illness onset *or until 24 hours after resolution of fever and respiratory symptoms, whichever is longer	8 days from symptom onset	Varies by organism
Nosocomial (originating in facility)	Consider nosocomial if symptom onset ≥ 5 days after admission . Clinical judgement if between Day 1-5.	Symptom onset ≥72 hours after admission	Symptom onset ≥72 hours after admission	Symptom onset ≥72 hours after admission (or identified at another institutions), and presumptively acquired at SH
Contacts / Exposures	Droplet/Contact Precautions for 10 days from last exposure. COVID-19 test immediately and again @ day 8-9.	Droplet/Contact Precautions for 96 hours *Start Tamiflu based on the recommendation of PH/Outbreak management team for residents and possibly staff.	Droplet/Contact Precautions and monitoring for symptom development for 7 days.	Droplet/Contact Precautions and monitoring for symptom development for 7 days.
Enhanced Surveillance	One case (resident/staff) identified.	One case (resident/staff) identified.	One case (resident/staff) identified.	N/A
Outbreak	Public Health to determine. *One resident/person supported nosocomial case identified.	Public Health to determine. *Two or more nosocomial patient cases are identified, within 72 hours OR 1 noso patient AND 2 or more potentially occupationally acquired	Public Health to determine. *Two or more nosocomial patient cases are identified, within 72 hours	Public Health to determine. *Two or more nosocomial patient cases are identified, within 72 hours
Outbreak Declared Over	Public Health to determine. *Usually no new cases for 14 days	Public Health to determine. *Usually no new cases for 10 days	Public Health to determine. *Usually no new cases for 16 days	Public Health to determine.

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.



Thank you!



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Questions?



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