

2023-2024 A Guide to Respiratory Virus Infection and Outbreak Management in Long-Term Care Facilities

Revised December 21, 2023



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Document Updates

The Guide to Respiratory Virus Infection and Outbreak Management in Long-Term Care Facilities (LTCF) was created in September 2022 as a comprehensive respiratory virus guidance document to assist LTCF to respond COVID-19, influenza, and RSV infections and outbreaks. Notable revisions have included:

- Updated information on masking guidance.
- Changes to COVID-19 testing guidance.
- Changes to immunization requirements.
- New outbreak definitions.
- Updated information on use of Point of Care Tests (POCT).
- Updated information on eligibility for COVID-19 Therapeutics.

This newly revised 2023-2024 document will remain evergreen, and revisions will be summarized here. Ensure you use the most recent version.

Date Changed	Item	Page Number
December 21, 2023	Link to IPAC LTCF Guidance Website rather than specific posters and videos	Throughout document
December 21, 2023	Addition of Respiratory Virus Algorithm	Pg 35

Glossary

Active Screening: a process whereby an individual is asked screening questions by a facility representative to ensure symptoms or established risk factors for a respiratory infection are not currently present.

Additional Precautions: extra measures when routine practices alone may not interrupt transmission of an infectious agent. They are used in addition to routine practices (not in place of) and are initiated both on condition/clinical presentation (syndrome) and on specific etiology (diagnosis).

Case: a person who has an infection with a viral respiratory pathogen such as SARS-CoV-2, influenza A or B, or RSV.

Contact: a person exposed (generally within 2 meters for at least 15 minutes and without respiratory protection) to a case during the infectious period.

Designated Caregivers (DCGs): designated family member(s) or support person(s) with established pattern(s) of providing care or support for a resident. A DCG is a partner in care providing essential support for a resident's physical, mental, and emotional wellbeing.

Epidemiologically Linked Case: a case in which the individual has or has had contact with one or more persons who have/had the disease, and transmission of the agent by the usual modes of transmission is plausible. Epidemiologically linked means they shared time together (e.g. on the same unit, at the same table, at bingo together); situations that may vary depending on facility size and layout.

Essential Visitors: health care workers not employed by the service provider, such as but not limited to student learners, paramedics, occupational therapists, physiotherapists, and primary care providers. Essential visitors also include delivery services and service vendors.

Immunocompromised: individuals who have an impaired or weakened immune system either by drugs or illness. Immunocompromised individuals are generally more susceptible to infections and may have more severe disease. Each immunocompromised person is different, and the relative degree of immunodeficiency depends on the underlying condition, progression of disease and use of immunosuppressive agents.

Incubation Period: the period between the infection of an individual by a pathogen and the manifestation of the illness and associated symptoms.

Infectious Period: the timeframe during which the case can transmit the infection to other individuals.

Influenza-like Illness (ILI): Acute onset* of respiratory illness with fever AND cough with one of the listed symptoms *distinct change from normal status to respiratory illness over 1-3 days, based on clinical judgement, sore throat, arthralgia, myalgia, prostration which is likely due to influenza. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Lab Confirmed COVID-19 Outbreak: Two or more laboratory-confirmed resident cases, AND at least one is a facility acquired case, with all cases epidemiologically linked within the LTCF in a 10-day period.

Lab Confirmed Influenza Outbreak: Two or more resident cases of ILI (influenza-like illness), where at least one is a laboratory confirmed case of influenza, within the LTCF in a 7-day period.

Lab Confirmed Respiratory Syncytial Virus (RSV) Outbreak: Two or more symptomatic residents where at least one is a laboratory confirmed case of RSV, epidemiologically linked within the LTCF in a 7-day period.

National Advisory Committee on Immunization (NACI): a national advisory committee of experts in the fields of pediatrics, infectious diseases, immunology, pharmacy, nursing, epidemiology, pharmaco-economics, social science and public health. NACI makes recommendations for the use of vaccines currently or newly approved for use in humans in Canada, including the identification of groups at risk for vaccine-preventable diseases for who vaccine should be targeted.

Passive Screening: steps taken by an individual prior to or upon entering a facility to self-assess that symptoms or established risk factors for a respiratory infection are not currently present.

PCR Testing: diagnostic method that identifies the presence of a pathogen by detecting small amounts of nucleic acid through a method that is amplified millions of times to the point it can be detected by an analyzer. Because this method detects the presence of nucleic acid it cannot differentiate between an active infection and left-over fragments of nucleic acid from a “dead” pathogen.

Personal Protective Equipment (PPE): equipment (i.e. gloves, gowns, masks, respirators, and/or eye/facial protection) worn by workers to minimize exposure to blood, body fluids, secretions, and/or excretions (e.g. feces, sputum, nasal discharge, wound drainage).

Point of Care Risk Assessment (PCRA): an activity whereby the health care worker in any health care setting evaluates the likelihood of exposure to an infectious agent from every patient/resident encounter and chooses the appropriate actions/PPE needed to minimize the risk of exposure for the specific patient/resident, other patients/residents in the environment, the Health Care Worker (HCW), other staff, visitors, contractors, etc.

Point of Care Testing (POCT): medical diagnostic testing performed outside the clinical laboratory in close proximity to where the individual is receiving care or testing. Rapid antigen tests (RATs) are a type of POCT. POCT tests are not as sensitive at detecting SARS-CoV-2.

Residents: individuals residing in a LTCF and meeting the eligibility criteria at: https://novascotia.ca/dhw/ccs/policies/policyManual/Service_Eligibility_Policy.pdf.

Respiratory Infection Outbreak: Unidentified/Other Pathogen Three or more cases with new onset respiratory illness, epidemiologically linked within the LTCF in a 4-day period.

Routine Practices: a comprehensive set of IPAC measures that have been developed for use in the routine care of all patients/residents at all times in all healthcare settings to prevent transmission of infection.

Specialized Workers: individuals offering specialized skills/services such as, but not limited to hairstylist, legal counsel, and financial/banking.

Staff: compensated employees of licensed/funded LTCF.

Suspect Respiratory Infection Outbreak: Two individuals with new onset respiratory symptoms, epidemiologically linked within the LTCF, in a 72-hour period.

OR

One laboratory confirmed case of a known respiratory pathogen in a resident with or without a second symptomatic resident.

Universal Masking (UM): always wearing a well-fitting medical mask while within the long-term care facility, except when eating/drinking with physical distancing.

Visitors: family members and friends of residents.

Volunteers: individuals providing recreation and social programming for residents as well as contributing to the enhancement of their well-being and quality of life.

Important Contact Information

	Monday to Friday (business hours)	After Hours
Public Health	Zonal Nova Scotia Public Health Offices	8:00 am – 8:00 pm Public Health Nurse for Zone through Central Zone Locating 1-902-473-2222
Infection Prevention and Control	IPAC can be contacted 7 days per week at: 1-833-736-0880 or IPAC.longtermcare@nshealth.ca	
Occupational Health Safety and Wellness	OHSW can be contacted 7 days per week at: OHSWContCareID@nshealth.ca For LTCF or staff: report positive staff COVID-19 tests at KICS - Form Entry (nshealth.ca)	
COVID-19 testing	Visit a COVID-19 testing site	
COVID-19 Report and Support	https://www.nshealth.ca/reportandsupport	
COVID-19 therapeutics	The Non-Severe Therapy Pharmacist Consult Team (available 7 days a week 9 am to 5 pm: Phone: 1-833-714-2784) to assess residents with COVID-19 for therapy.	
COVID-19 lab results	https://c19results.nshealth.ca/ If unable to obtain results, LTCF can access results by contacting Public Health in their zone.	
Department of Seniors and Long-Term Care	LTC@novascotia.ca	

1.0 Introduction

This document provides guidance for Long-Term Care Facilities (LTCFs) and elevated risk congregate-living settings to prevent and control viral respiratory infections (VRIs) and outbreaks within their facility.

This guideline is intended for health care professionals and administrators who are responsible for preventing, managing, advising on, and overseeing respiratory virus infections and outbreaks in the following settings:

- Department of Seniors and Long-Term Care (DSLTC) licensed LTCFs (nursing homes and residential care facilities (RCFs)).
- **Department of Community Services (DCS) licensed Adult Residential Centres (ARC) and Regional Rehabilitation Centres (RRC).**

The goal of outbreak prevention and control in LTCF is to minimize the extent and clinical impacts of viral respiratory infection and/or outbreaks, utilizing risk-proportionate measures while holistically balancing resident health and wellness.

Recommendations contained in this document are intended to protect the health of the residents, visitors, volunteers, and staff. The information contained in this document should be used by facilities to develop their own policies, procedures, and plans to prevent and manage viral respiratory infections and outbreaks in advance of their occurrence.

Given that viral respiratory infections are transmitted and prevented by similar means, the scope of the influenza guidance document was broadened to include strategies for prevention and control of SARS-CoV-2 (virus causing COVID-19), respiratory syncytial virus (RSV), and other respiratory viruses. Non-viral respiratory pathogens such as bacteria, fungi, and parasites are not covered in this document. While influenza and RSV have typically been seasonal infections, other respiratory virus infections may occur year-round. This document should be used throughout the year in conjunction with surveillance information.

Facilities should routinely observe for early signs and symptoms of viral respiratory infections in residents and staff **paying particular attention during respiratory season or when there is a lot of respiratory viruses circulating within the community**. LTCF are responsible for timely reporting of respiratory disease outbreaks to public health according to [It's the Law](#)

Facilities can consult with Public Health (PH), Infection Prevention and Control (IPAC), and Occupational Health Safety and Wellness (OHSW) as needed. Outbreak control instructions provided by Public Health must be followed.

This guideline, whenever possible, is based on research findings. In areas where there is insufficient published research, a consensus of experts in the field provided recommendations.

All DSLTC licensed facilities (including Nursing Homes and Residential Care Facilities [RCFs]), are to follow this guidance document.

DCS licensed ARCs and RRCs are also to follow this guidance document given the resident population is complex and includes those at higher risk of severe disease outcome.

All other DCS licensed facilities (including DCS licensed small option homes, group homes, developmental residences and RCFs, regardless of capacity, are to follow the Congregate Living Settings guidance document located at <https://novascotia.ca/dhw/cdpc/documents/guidance-respiratory-viruses-congregate-living-settings.pdf>

2.0 Background

LTCF residents are predisposed to Acute Respiratory Infections (ARIs) due to age, impaired immune defenses and underlying medical comorbidities (chronic lung or neurological diseases which impair their ability to clear secretions from their lungs and airways). In addition, many viral and bacterial respiratory pathogens are easily transmitted within an institutional environment. Viral respiratory infections can impact a LTCF resident's mobility capacity and ability to carry out everyday activities, can exacerbate chronic diseases, and weaken their overall health status. Respiratory infections in residents of LTCFs are a significant cause of hospitalization and death (Watson & Wilkinson, 2021).

LTCF staff need to be vigilant to prevent the spread of respiratory viral pathogens (including COVID-19, influenza viruses and RSV) within their facility. Respiratory infections are generally transmitted by droplets or aerosols in the air or that have contaminated the environment. The symptoms of a respiratory virus infection are quite similar for the different viruses.

While LTCFs may not immediately know which respiratory virus is causing illness, immediately instituting Droplet and Contact Precautions once a respiratory infection is suspected in a resident is critical to slowing virus spread. Droplet and Contact precautions are effective against all respiratory viruses.

It is important to recognize that the elderly may present with atypical symptoms of a respiratory infection. Therefore, a high index of suspicion is required, and testing should be done as soon as staff recognize a change in a resident's baseline condition (including confusion/delirium) that could be due to a respiratory infection. This is particularly important during respiratory season or when respiratory viruses are circulating within the community. It is particularly important to maintain vigilance for clusters of ill residents from the same area of the LTCF over a short time-period. Droplet and Contact Precautions are warranted while the clinical suspicion of an infectious virus remains including COVID-19 or influenza or other respiratory virus infections.

LTCF staff should be prepared to monitor residents for respiratory symptoms/infections and promptly initiate infection control measures to limit the spread of respiratory viruses within facilities.

Masking will be based on a Point of Care Risk Assessment by health care workers, or a self assessment for staff, designated care givers, visitors, patients and residents upon entry into long-term care facilities. Public Health may require universal masking, physical distancing/cohorting, or other measures during a respiratory virus outbreak in a facility given the vulnerability of the population.

Long-term care facilities are encouraged to implement "mask friendly" policies including accommodating staff who prefer to wear a mask beyond minimum requirement, or residents/substitute decision-makers who request that a staff member wear a mask when providing care.

Both COVID-19 and influenza immunization offer a safe and effective way to reduce illness and limit severe disease and death. However, influenza and COVID-19 outbreaks can still occur among vaccinated LTCF residents.

Staff should not report to work if feeling unwell and the option of coming to work and wearing a mask when sick is not acceptable.

3.0 Summary of Respiratory Virus Infections

Many viruses that cause respiratory tract infection can circulate concurrently or at different times. They have similar symptoms and as such cannot be differentiated based on clinical presentation alone.

COVID-19, influenza, and RSV infections are highlighted in this document as they have been shown to lead to significant morbidity and mortality in the elderly and, in the case of COVID-19 and influenza, preventative and/or therapeutic interventions are available. There is less evidence regarding the impact of other respiratory viruses on morbidity and mortality in the elderly, but this area has likely been understudied.

3.1 Influenza

Seasonal influenza is caused by the influenza A and B viruses and presents an ongoing disease burden in Canada during the fall and winter months. During the 2022-2023 season, the predominant influenza strain circulating in Nova Scotia was influenza A ([Nova Scotia Respiratory Watch Week 30-24](#))

The amount of influenza-associated illness and death vary based on factors such as the type of circulating viruses in the season and the populations affected. Every year individuals with influenza and influenza-related complications increase pressure on the healthcare system during the fall and winter months.

During the 2022-2023 respiratory season there were 622 laboratory-confirmed influenza outbreaks across the country with 53% of them in LTCF [Canadian Flu Watch Report Week 30-34](#) Nova Scotians aged 65 years and older were more likely to be hospitalized, be admitted to ICU and to die from influenza ([Nova Scotia Respiratory Watch Week 30-24](#)).

The clinical presentation of influenza in the elderly may be non-specific with broader symptom range including, but not limited to, confusion, headache, chills, loss of appetite, fatigue and diarrhea. There may be an absence of fever. Most people recover from influenza within a week to 10 days, but some, like the elderly, are at risk of severe complications such as pneumonia or death. Influenza can cause significant functional decline in older adults, with many becoming temporarily bedbound or housebound, and worsen conditions like heart and lung disease (Watson & Wilkinson, 2021).

The annual influenza vaccine is an important way to prevent influenza illness and decrease the risk of influenza-related complications. Antiviral medications are available to prevent progression to severe disease for those with influenza, to prevent infection in exposed individuals at risk of severe disease (post exposure prophylaxis) and prevent outbreaks in LTCFs – See [Section 8.6.2](#) and [Appendix B](#).

3.2 COVID-19

COVID-19 is caused by the SARS-CoV-2 virus. Some populations are at higher risk of exposure to the virus due to living or occupational situations. Individuals with COVID-19 can be asymptomatic.

The virus has evolved into new variants during the pandemic which have been more transmissible than the ancestral strain. Further virus evolution is likely. Emerging evidence suggests shorter incubation periods for COVID-19 variants of concern.

The risk of severe illness and death from COVID-19 increases with age. Several studies demonstrate that in elderly patients, outcomes are better predicted using a clinical frailty scale than by age itself, therefore frailty, comorbidities, gender and disease severity need to be considered (Prendiki, Tiseo & Falcone, 2022).

Cohen et al. (2022) found that adults aged 65 years and older (even if not hospitalized for COVID-19) had an excess risk for persistent and new COVID-19 related sequelae that required medical attention, including chronic respiratory failure, cardiac issues, neurological issues (including dementia and stroke), kidney injury, diabetes and anaemia.

COVID-19 therapeutics are available to eligible LTCF residents. For information on how to access COVID-19 treatment for residents see [Section 8.6](#).

3.3 Respiratory syncytial virus (RSV)

Respiratory syncytial virus is a common seasonal virus that causes respiratory tract infections. Many have mild cold-like symptoms such as a runny nose, coughing, sneezing, and fever 4-6 days after infection.

As with other respiratory viruses, the elderly may not have the typical respiratory symptoms with RSV. Older adults (≥ 65 years) and immune-compromised individuals are more susceptible to developing severe disease such as bronchiolitis and pneumonia. RSV can make chronic health problems like heart and lung disease worse and cause death in elderly populations. While no RSV vaccines are currently publicly funded in Nova Scotia, there are many being developed by manufacturers.

3.4 Other Respiratory Viruses

Other respiratory viruses including human metapneumovirus (HMPV); human rhinovirus (HRV), and human parainfluenza virus (HPIV) can infect the elderly, particularly those living in congregate settings such as a LTCF. While the LTCF is unlikely to have laboratory confirmation of these other viruses in their facility, the same infection prevention and control measures are effective and should be applied.

3.5 Timing of Incubation, Infectious, Symptomatic Periods

When individuals contract a respiratory viral infection, they proceed through a series of stages. During the **incubation period**, the virus is replicating (copying) itself in the person. In the early stage of the incubation period, the individual does not have enough virus in their body to be infectious and may not have symptoms. Towards the end of the **incubation period**, they become **infectious** and can spread the virus to others even if asymptomatic. Early in the **symptomatic** period, the individual continues to shed the virus and can spread it to others. As they proceed toward recovery, they shed less virus and are not as likely to infect others.

Figure 1: Timing of Incubation, Infectious, Symptomatic Periods

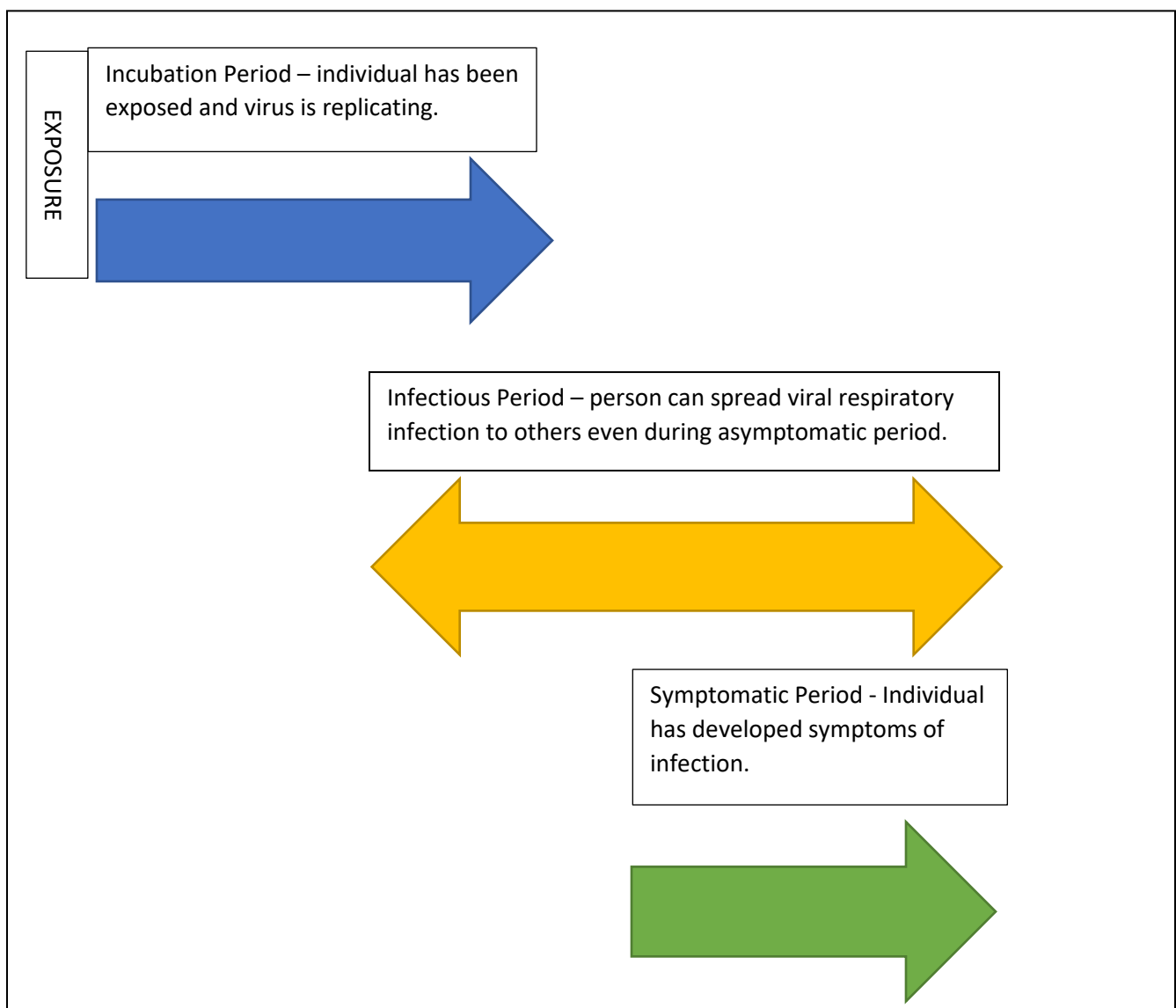


TABLE 1. Comparison of key features of viral respiratory infections

	Influenza	COVID-19	RSV	Other
Virus	Influenza A & B	SARS-CoV-2	Respiratory syncytial virus	Adenovirus, human metapneumovirus, parainfluenza virus, rhinovirus
Laboratory testing for LTCF	Testing available	Testing available	Testing available	Testing generally not available (may be requested by PH).
Incubation Period (time from exposure until symptoms develop)	1-4 days	1-14 days; median: 5-6 days	3-7 days	2-10 days
Infectious Period (time when the virus can be spread to others) *may be longer in immune compromised individuals*	1 day before until about 5-7 days after onset of symptoms (peaks 1-2 days after symptom onset)	2-3 days prior to symptoms to about 7-10 days after symptom onset	1-2 days before until 7 days after symptom onset	May be communicable a few days before symptoms develop and while symptomatic
Vaccine Available	Yes	Yes	Yes (on private market for individuals 60+)	No
Antiviral Prophylaxis or Treatment	Prophylaxis and treatment	Treatment	Not routinely recommended	No

4.0 Overview of Strategies for Prevention and Control of Viral Respiratory Infections in LTCFs

Respiratory infections can occur in LTCFs throughout the year. Planning for their prevention and control should engage all staff including leaders and physicians. This document is designed to be used to guide facilities to develop facility-specific plans. Facility plans should include respiratory infection prevention and control and be communicated to all staff, physicians, designated care givers (DCG), and volunteers.

The key strategies for the prevention and control of viral respiratory infections in LTCFs are:

- Planning, education, and communication of respiratory infection guidance protocols and procedures ([Section 4.1](#))
- Immunization of residents and staff against influenza and COVID-19 ([Section 4.2](#))
- Routine Practices ([Section 4.3](#))
- Screening for respiratory infections ([Section 5](#))
- Prompt testing for influenza/RSV and COVID-19 ([Section 4](#)) and Initiation of Droplet and Contact Precautions in symptomatic residents ([Section 7.0](#))
- Outbreak Management ([Sections 8.0](#) and [9.0](#))

4.1 Planning:

Table 2: Facilities should undertake the following LTCF Policy and Procedure Development in advance of an outbreak:

- Review **2023-2024 A Guide to Respiratory Virus Infection and Outbreak Management in Long-Term Care Facilities.**
- Engage with Public Health, IPAC, OHSW, and other partners as needed to clarify content of this document and address facility specific questions related to respiratory virus infection prevention and control so facilities can make plans accordingly.
- Ensure there are facility-specific policies and procedures that include all respiratory viruses (influenza, RSV, SARS-CoV-2, and others) and the associated clinical presentations.
- Ensure that facility infection prevention and control resources are up-to-date:
 - Tools
 - Posters
 - Line Lists
 Stored in a place easily accessed by staff.
- Develop policies and procedures for environmental management of respiratory viruses.
 - Develop a process for **routinely** replacing soap, alcohol-based hand rub (ABHR), and refilling towel dispensers.
 - Include information on cleaning and disinfecting reusable equipment such as goggles if applicable.
 - Place handwashing posters around the facility.
<https://library.nshealth.ca/IPAC-LTC>
- Develop a communication plan for all staff and each unit that incorporates information on how to prevent transmission of respiratory viruses, facility respiratory virus infection prevention and control policies and procedures, key contact numbers, and relevant management tools (e.g. PCRA, PPE, and hand hygiene posters/reminders) and line lists.
- Ensure a copy of floor plans with resident room numbers noted is available to send to Public Health for outbreak control.
- Work with the Department of Seniors and Long-Term Care and related partners (EMO) to establish and refine contingency plans for low staffing scenarios in the context of a respiratory virus outbreak and disseminate to decision-makers (incorporate a regular review process based on staffing situation).

Table 3: Readiness for Respiratory Virus Infection Prevention and Control

<input type="checkbox"/> Ensure sufficient PPE supply is available on units for routine operations and initial outbreak response and clear process to order more when needed.
<input type="checkbox"/> Ensure that regular N95 mask fit testing for staff is conducted.
<input type="checkbox"/> Ensure the facility has an adequate supply of respiratory virus testing swabs and transport media and the up-to-date testing protocol available as well as shipping instructions (check expiry dates).
<input type="checkbox"/> Ensure lab requisitions are readily available, and staff know how to complete them.
<input type="checkbox"/> Have standing order policies permitting health care providers to administer influenza and COVID-19 vaccines to residents as per NACI and provincial guidance.
<input type="checkbox"/> Review CAN Immunize (Clinic Flow) updating resident list and review with staff the process for COVID-19 and influenza vaccine administration documentation.
<input type="checkbox"/> Have signed standing orders for influenza treatment and/or prophylaxis, taking into consideration the need for yearly measurement of renal function (Appendix B) (Resident serum creatinine measured within the last 6 months, height, and weight recorded in chart).
<input type="checkbox"/> Have contact information and procedure for staff to access COVID-19 Non-Severe Therapy Pharmacist Consult Team to assess COVID-19 positive residents for therapeutics (available 7 days a week, 9 am to 5 pm: Phone: 1-833-714-2784). Long Term Care Non-Severe COVID-19 Therapeutics Referral Form
<input type="checkbox"/> Obtain resident or substitute decision-maker consent for COVID-19 and influenza vaccines and treatments if not already available.
<input type="checkbox"/> Have up-to-date (within 6 months) frailty score and Goals of Care documented for each resident.
<input type="checkbox"/> Vaccine program planning and staff education/training completed.
<input type="checkbox"/> Plan convenient and accessible locations and times for staff influenza and COVID-19 vaccination clinics.
<input type="checkbox"/> Post a copy of guide/respiratory plan available to units and checklist (Appendix C).
<input type="checkbox"/> Ensure partners such as pharmacies are involved in planning the fall influenza and COVID-19 immunization campaign should the facility not administer their own vaccines.

Table 4: Infection Prevention and Control (IPAC) Topics for Staff Education

Education includes imparting knowledge and teaching, observing, and assessing skills in relation to infection, prevention, and control measures for viral respiratory infections. Topics that should be covered regularly with both new and existing staff:

- Educate staff on how to conduct a **Point of Care Risk Assessment (PCRA)**.
([See Section 4.3.1](#))
Point of Care Risk Assessment (PCRA)
https://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=76565
- Hand hygiene
- Respiratory hygiene
- Buddy system to practice safely putting on (donning) and taking off (doffing) Personal Protective Equipment (PPE).
- Use of universal masking (UM) during outbreaks.
- Use of face shield and goggles and reprocessing instructions for reusable goggles.
- Droplet, Contact, and Airborne Precautions.
- Educate staff on proper collection technique for obtaining nasopharyngeal swabs (direction, depth, duration and dialing). A useful video demonstrating the correct technique is found at: <https://vimeo.com/516853275/c67017fd3a>

Table 5: Resident, Visitor, Family, Designated Care Giver and Volunteer Education on Public Health Measures

- Stay home when sick.
- Frequent handwashing/use of hand sanitizer.
- Proper respiratory hygiene practices (turn away from others when coughing or sneezing, cough into sleeve, dispose of tissues, wash hands after sneezing or coughing or blowing nose, etc.).
- Masking recommendations where appropriate, when additional precautions are in place including during outbreaks.
- Physical distancing when appropriate and feasible.

Table 6: Education on Vaccine Management and Delivery

- Proper vaccine ordering, storage, and monitoring vaccine fridge temperatures.
- Influenza and COVID-19 vaccine administration.
- Ensure staff understand how to utilize CAN Immunize to document resident and staff immunizations against Influenza and COVID-19.

Table 7: Communication

- Document staff influenza and COVID-19 vaccine status.
- Communicate regularly with residents, families, and staff regarding the state of readiness of the facility for managing respiratory virus infection outbreaks and the role they can play in this process.
- Ensure vaccine providers have all the information they need to appropriately answer resident, family, and staff questions and concerns about influenza and COVID-19 vaccines.
- Communicate resident and staff influenza and COVID-19 immunization rates to regulatory authorities as required, as well as to staff, residents, and families.

4.2 Immunization

Document LTCF resident and staff Influenza and COVID-19 immunizations in CAN Immunize as well as the MAR.

4.2.1 Influenza Immunization

The national goal of the annual influenza program is to prevent serious illness caused by influenza and its complications, including death. Publicly funded influenza vaccines used in Nova Scotia are safe and well-tolerated. Influenza vaccines cannot cause influenza because they do not contain live virus.

Healthcare providers should offer the seasonal influenza vaccine in the fall as seasonal influenza activity may occur as early as October in the Northern Hemisphere

The National Advisory Committee on Immunization (NACI) recommends that influenza vaccine should be offered annually to anyone 6-months and older who does not have a contraindication

to the vaccine with a focus on the groups for whom influenza vaccination is particularly recommended. Within the LTCF setting, these groups include:

- People at high risk of severe disease, influenza-related complications, or hospitalization.
- People capable of transmitting influenza to those at high risk.

All Nova Scotia residents **65 years of age and older** are eligible to receive inactivated high dose quadrivalent influenza vaccine (IIV4-HD). If a resident 65 years and older refuses high dose influenza vaccine, they should be offered standard dose influenza vaccine.

LTCF residents and staff **under 65 years of age** will be offered inactivated standard dose quadrivalent influenza (IIV4-SD) vaccine.

Staff Influenza Immunization:

Vaccination of staff against influenza decreases the risk of influenza in LTCF residents. The National Advisory Committee on Immunization (NACI) continues to recommend, in the absence of contraindications, that staff in facilities and community settings should be vaccinated annually against influenza. NACI considers receipt of influenza vaccination to be an essential component of the standard of care for all health care workers and other care providers for their own protection, as well as protection of residents.

For more information on administering the annual Influenza vaccination program see: <https://novascotia.ca/dhw/CDPC/documents/Publicly-Funded-Seasonal-Inactivated-Influenza-Vaccine-Information.pdf>

4.2.2 COVID-19 Immunization

NACI recommends a fall/winter 2023 dose of the new formulation of COVID-19 vaccine for individuals 6 months and older who previously received COVID-19 vaccine if it has been 168 days after their last dose or a known COVID-19 infection. A dose of COVID-19 XBB 1.5 vaccine during is particularly important for individuals who have not been previously infected with COVID-19 and only have immunity from vaccination.

Moderna, Pfizer and Novavax have received authorization for the updated COVID-19 vaccine formulation based on the Omicron XBB.1.5 subvariant which is expected to provide better protection against circulating variants. LTCFs will receive Moderna XBB.1.5 COVID-19 vaccines. The ancestral and bivalent vaccines will no longer be used.

Immunization is particularly important for those at increased risk of COVID-19 infection or severe disease. For example:

- Adults 65 years and older
- People living in long-term care or other congregate living settings including chronic care homes.
- People who are pregnant
- People living with certain high-risk medical conditions.

- Individuals in or from First Nations, Métis and Inuit communities
- Members of racialized and other equity-deserving communities.
- People who provide essential community services.

For more information on administering COVID-19 vaccinations please see: the Information for Health Care Professionals: <https://novascotia.ca/dhw/cdpc/info-for-professionals.asp>

Staff COVID-19 Immunization

People who work or volunteer in continuing care are encouraged to receive a fall/winter 2023 dose of the XBB.1.5 formulation of COVID-19 vaccine. Vaccination remains one of the best ways for people to protect themselves, their co-workers, and vulnerable residents/clients from severe disease, hospitalization, and death.

Individual service providers may still require proof of primary series COVID-19 vaccination and/or masking for their staff, volunteers and/or students on placement. It is important that facilities communicate individual facility policies with their staff, families, and residents.

Effective May 23, 2023, in alignment with the end of the Health Protection Order and the Mandatory Vaccination Protocol for High-Risk Settings, proof of the primary series COVID-19 vaccination was no longer required by the Department of Seniors and Long-Term Care for people who work or volunteer in Long-term Care Facilities licensed by SLTC, or Home Care/Home Support Agencies and Adult Day Programs funded by SLTC.

Employers and operators of high-risk settings will be responsible for setting immunization policies for COVID-19, including whether employees, outside service providers and volunteers need to be vaccinated. Employees and others who have questions about an organization's vaccine policy should contact the organization directly.

4.2.3 Co-Administration of COVID-19 vaccine with other vaccines

COVID-19 vaccines may be given at the same time or any time before or after non-COVID-19 vaccines (including live and non-live vaccines). Individuals can receive COVID-19, influenza (including influenza vaccine nasal spray), and pneumococcal vaccines at the same time. For more information see:

<https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2023-2024/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2023-2024.pdf>

It is recommended that individuals receive both COVID-19 and influenza vaccines at the same time.

4.3 Routine Practices

Infection prevention and control (IPAC) best practices used by health care workers can reduce the risk of transmitting infections to and from clients, patients, residents, and staff in all health care settings. Routine practices refer to **minimum practices** that should be used with all

clients, patients or residents. Additional precautions refer to specific actions that should be taken with individuals that are at risk of transmitting or acquiring disease.

4.3.1 A key element of routine practices is Point-of-care risk assessment (PCRA)

The **PCRA** is an evaluation of the anticipated interaction between the HCW, the resident, and the resident's environment related to the potential for exposure to infectious agents and risks for transmission. It considers the clinical situation (including the resident's clinical condition, physical, emotional and mental state), existing facility, engineering and administrative controls and availability and use of PPE.

All staff have a responsibility to consistently assess the infectious risk from any diagnosed or undiagnosed infection posed to themselves and to other residents, visitors, and HCWs. All staff should conduct a **PCRA** prior to each interaction with a LTCF resident to determine the risk of exposure and **appropriate routine practices and additional precautions required for safe care**.

PCRA questions to determine additional precautions include:

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

All staff should have easy access to adequate hand hygiene and PPE (gowns, masks, face shields, gloves) at all times. This includes supplies on units and hand hygiene options at the point-of-care <https://library.nshealth.ca/IPAC-LTC>

4.3.2 Universal Masking

With the end of the Health Protection Act Order and the COVID-19 Management in Long-Term Care Facilities Directive, SLTC and PH will no longer require universal masking (masking all the time while in the facility) by people who work or volunteer in LTCFs licensed by SLTC, or Home Care/Home Support Agencies and Adult Day Programs funded by SLTC. However, masking is still recommended as an infection prevention and control measure based on a **PCRA** by the health care provider. Additionally universal masking during respiratory virus activity is a proven tool to help stop the spread. IPAC/Public Health will continue to recommend universal masking when deemed necessary as a control measure during facility outbreaks. Once Public Health declares the outbreak is over, and there are no further staff cases, universal masking can be removed. Please reach out to IPAC/Public Health for any assistance or questions.

Universal masking may also be considered in times of staffing shortages, or when community prevalence of viral respiratory infections is high, at the discretion of the facility.

Some individuals prefer to wear a mask even when it is not required. This is a personal decision and appropriate supplies should be provided by the facility.

4.3.3 Admissions, Re-admissions and Transfers

Residents can be admitted, readmitted to the facility, or transferred to other facilities unless otherwise indicated as part of an outbreak control strategy.

If a LTCF must transfer a potentially or known infectious resident ensure that the receiving hospital/acute care facility or LTCF is notified, as well as Emergency Health Services (EHS), of the person's condition so they can take appropriate precautions.

New admissions or transfers in or out of LTCF do not require a COVID test before being transferred.

It is important for residents and families to provide informed consent if they or their loved one is being transferred into a facility with an outbreak.

5.0 Screening and Management of Symptomatic Individuals

Elderly individuals may not exhibit fever or the same respiratory symptoms as younger people. Therefore, the diagnosis of a respiratory virus infection should be considered in any older adult **with a change in baseline**, including new confusion/delirium.

Even if a resident has a confirmed viral respiratory infection, LTCF staff should maintain a high index of suspicion for the possibility of more than one circulating viral pathogen. This is especially true if residents demonstrate varying clinical presentations or additional residents develop symptoms despite interventions for the identified pathogen, such as influenza antiviral prophylaxis.

5.1. Screening and Initial Management of Symptomatic Residents

Routine active screening of residents is not required. When LTCF staff notice that a resident has a change from baseline that may be the result of a respiratory virus, active screening should be conducted, and documented at least once daily. Temperature check is only required when clinical assessment indicates.

The goal of active resident screening when a resident has a change from baseline is to have **a low threshold** for detection of viral respiratory infections. Widespread asymptomatic testing is no longer recommended.

If any one of the following symptoms is present, follow the steps below:

New, worsening, or unexplained:

Cough

Fever (temperature of 37.8°C or greater, chills, sweats) Note that elderly individuals may not show signs of fever

Shortness of breath or difficulty breathing

Loss or change in sense of smell or taste

Sore throat

Runny nose/nasal congestion/excessive sneezing

Headache

Extreme fatigue/tiredness

Atypical respiratory symptoms, including but not limited to: muscle aches, nausea, vomiting, or diarrhea

OR any change in baseline including confusion/delirium.

**Residents only having chronic stable symptoms (cough, sneeze, runny nose, nasal congestion etc.) due to medical condition(s) (asthma, allergies etc.) should not be tested or put on Droplet and Contact Precautions and are permitted to participate in visits, outings or facility programs/activities.*

Step 1: Immediately place symptomatic resident and roommate(s) on Droplet and Contact Precautions and refer to [Table 9](#) for guidance regarding roommates. See [Appendix C](#) for Long-Term Care Symptomatic Resident and Outbreak Management Checklist.

Step 2: Swab resident (and any roommate(s) who is symptomatic ([See Table 9](#)) for a PCR COVID-19 and Influenza/RSV ([Section 4](#)).

Point of care tests (POCT) are less sensitive and may take longer to become positive in someone infected with SARS-CoV-2. **The first three symptomatic residents need to have PCR testing for COVID-19. After the outbreak pathogen is determined to be COVID-19, POCT tests can be used for residents.** Contacts of the resident do not have to be tested unless they develop symptoms.

Step 3: Report to Public Health and obtain an Outbreak # if there is a Suspect Respiratory Virus Infection Outbreak ([See definition in Section 8.1](#)).

Step 4: Ensure Outbreak # is on all specimens collected for this outbreak.

5.2 Screening and Management of Symptomatic Non-Residents (e.g. staff, DCG, visitors, etc.)

Signage should be posted indicating that all staff, visitors, essential workers, DCGs, volunteers, and specialized workers should monitor themselves for signs and symptoms of respiratory viruses prior to entering the LTCF. **Do not enter the LTCF if you are ill.**

5.2.1. Symptomatic Staff

Staff should not report to work if feeling unwell. The option of coming to work and wearing a mask when sick is not acceptable.

COVID-19

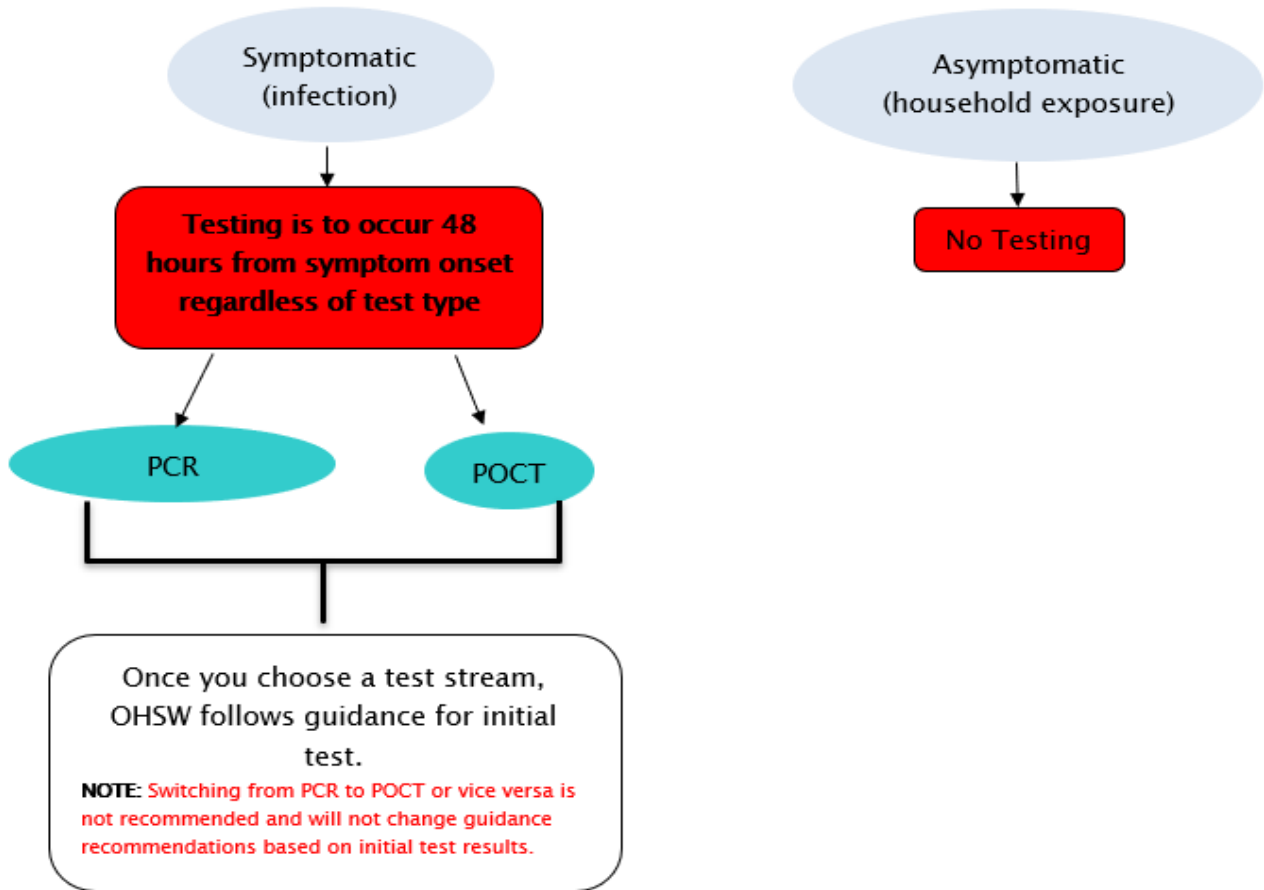
Testing options for long-term care staff have changed in alignment with Nova Scotia Health, Occupational Health Safety and Wellness (OHSW) testing policy for health care workers. In late November 2022, OHSW initiated health care worker access to POCT testing for **at home symptomatic testing**. Check the POCT test for expiry dates.

Symptomatic LTCF staff or staff with exposure risks should notify their supervisor immediately and complete the [KICS - Form Entry \(nshealth.ca\)](#) for OHSW guidance.

If a PCR test is required, staff can follow the Nova Scotia Health link [Visit a COVID-19 testing site](#).

Symptomatic employees should follow the same testing method throughout their illness unless otherwise directed. Once an employee chooses an initial testing method, that testing method will continue as the testing pathway. PCR testing remains the preferred method of testing when available.

Figure 2:
The diagram below outlines the current OHSW testing for COVID-19 which apply to both acute and long-term care sector health care workers.



- Staff with symptoms of viral respiratory illness will be directed to choose a testing stream, either PCR (preferred) or POCT as per diagram above. The first test must be conducted **at least 48 hours following initial symptom onset** to be considered valid. **Ensure the POCT test has not expired before using the test.**
- Staff who are **symptomatic and test positive using a POCT test** do not require further testing or a confirmatory PCR and are considered a positive case of COVID-19 for case counting and outbreak management purposes.
- Staff who are **symptomatic and negative** on either test are NOT permitted to return to work on the basis of the COVID-19 test result alone. Symptoms must have improved or resolved before return to work, including absence of fever for the previous 24 hours. In the case of a negative POCT, OHSW will provide direction on repeat testing requirements. In addition, there are several viral respiratory pathogens of significance circulating, and most staff do not have access to influenza or RSV testing in the community.

Influenza/RSV

Symptomatic staff will not be routinely tested for Influenza/RSV, though this may be occasionally tested in other healthcare settings (i.e. family physician, emergency department).

Symptomatic staff with 1) confirmed influenza or RSV or 2) a household member with confirmed influenza or RSV should follow the isolation guidance for that virus ([Table 10](#)).

If there is an influenza or RSV outbreak in a LTCF, it can be assumed that any staff member with a similar illness has the same virus and should follow the isolation guidance for that virus using [Table 10](#) unless testing confirms a different virus.

Symptomatic staff with an influenza-like illness for which there is no laboratory diagnosis or any of their ill household contacts can return to work once improving for 24 hours with no fever (off antipyretics).

Staff working in LTCF not under the Department of Seniors and Long-Term Care should follow their own internal policies and procedures based on Public Health best practices and procedures to mitigate respiratory virus infections.

Symptomatic Staff in the Workplace

If staff become symptomatic while in the LTCF, they should immediately perform hand hygiene, ensure they are wearing a well-fitting medical mask, inform their supervisor or nurse manager, avoid further resident and staff contact, and leave the workplace. After testing positive, they should complete the [KICS - Form Entry \(nshealth.ca\)](#) webform to notify OHSW. COVID-19 PCR tests are available at [Visit a COVID-19 testing site](#).

Staff should notify all LTCF and other congregate settings where they have worked during their infectious period of their viral respiratory infection.

5.2.2 Asymptomatic Staff:

If you are an asymptomatic **household contact** (i.e. family member, roommate) of a known case of COVID-19 or other viral respiratory infection, work exclusion and PCR testing is not required. Work isolation is recommended for 7 days after the last known unprotected contact with the positive case of COVID-19, due to the higher risk of spread of infection in the household.

If you are an asymptomatic **workplace contact** of a known case of COVID-19, work exclusion and PCR testing is not required. Work isolation is not required, but close monitoring for symptoms is recommended for 7 days after the last known unprotected contact with the positive case of COVID-19.

Work Isolation includes:

- **ZERO** unmasked interactions with others (no eating or drinking in shared spaces).
- Screen for symptoms of COVID-19 daily prior to starting shift.
- Donning personal protective equipment while in the workplace:
 - Medical face masks **MUST** be worn **AT ALL TIMES** unless alone in a room.
 - Additional PPE, including gloves, gowns, and eye protection may be required based on the clinical patient point of care risk assessment.
- Frequent hand hygiene.
- Where possible have a dedicated washroom assigned to staff participating in work isolation protocols.

Staff who are a close contact of a person with confirmed influenza or RSV, but have not developed any symptoms, may continue to work but should screen for symptoms and wear appropriate PPE.

Staff should not report to work if feeling unwell and the option of coming to work and wearing a mask when sick is not acceptable.

5.3 Symptomatic Visitors, Essential Workers, DCGs, Volunteers or Specialized Workers

DCGs, visitors, essential visitors, specialized workers, and volunteers will not routinely be tested for influenza/RSV, but if a positive test result is known, they should be excluded from the facility while infectious.

COVID-19

If a visitor, essential worker, DCG, volunteer, or specialized worker becomes symptomatic for a viral respiratory infection while in the LTCF, they should immediately perform hand hygiene, ensure they are wearing a well-fitting medical mask, inform a staff member, avoid further resident and staff contact, go home and access COVID-19 testing by doing a rapid POCT test or accessing [Visit a COVID-19 testing site.](#)

If notified of a positive test result, the DCG, visitor, essential visitor, specialized worker or volunteer should notify all LTCF visited and complete the online webform: [COVID-19 Report and Support.](#)

6.0 Managing Testing and Testing Results

Do a PCR test for COVID-19, influenza, and RSV (if available) on the **first three** symptomatic residents in an unknown pathogen outbreak or if directed by Public Health.

6.1.1 COVID-19 testing and managing results.

Test all symptomatic residents for COVID-19, (with or without influenza/RSV testing) ([Table 8](#)) so that they can receive COVID-19 therapeutics if eligible.

Staff, visitors, essential workers, DCGs, volunteers, and specialized workers will only be tested for COVID-19.

Completing the COVID-19 Report and Support for positive residents is essential for timely access to COVID-19 therapeutics. A positive test result will not automatically generate a referral within the symptom onset window. A positive POCT COVID-19 test **will fulfill therapeutics access testing criteria** (and may exempt that person from needing COVID PCR testing). See [Section 8.6](#) for more information on therapeutics.

Whenever a **new** (first-time positive, or **more than 90 days** since last time positive) COVID-19 case occurs in a resident or staff, the LTCF must submit a **notification** via the online webform [KICS - Form Entry \(nshealth.ca\)](#) and begin the **Resident Outbreak Line List**.

The first positive COVID-19 resident result(s) initiating a new outbreak declaration in a LTCF must also be reported by phone to Public Health.

Monday – Friday notify Public Health 8:30-4:30 in your zone.
After hours (8:00 am – 8:00 pm) phone QEII locating at 902-473-2222 and ask for the CDC nurse-on call for your zone.

After **one** COVID-19 case is reported and outbreak measures are initiated, the LTCF does not need to continue reporting COVID-19 resident cases through this portal.

The Resident Line List is submitted to Public Health daily. See [Section 8.2](#) for detailed information about Line Lists.

If criteria are met for a confirmed outbreak (whether COVID-19, influenza, RSV or other), then **subsequent residents** who develop symptoms can be tested for COVID-19 using a POCT. Ensure the expiry date on the POCT has been checked.

A symptomatic resident who has a negative POCT test will need to be followed up with a PCR test the same day. The LTCF needs to continue to follow Droplet/Contact precautions for a symptomatic resident with a negative test.

Recognizing that while POCT tests are quick, and if positive, are likely a true indication that the resident has COVID-19, it should be noted that the test is less sensitive than a PCR test.

A PCR test may indicate a positive result earlier in a person's infectious process, while a POCT test may take longer to indicate a COVID-19 infection. **Check POCT Expiry Date before use.**

A newly symptomatic individual who tested positive for COVID-19 in the **previous 90 days** is unlikely to have COVID-19. Testing for COVID-19 is generally not indicated during the 90 days following COVID-19 infection unless otherwise directed by Public Health.

6.1.2 Influenza/RSV testing

Testing for influenza and RSV is appropriate for newly symptomatic LTCF residents who had COVID-19 **within the previous 90 days** if within the parameter of the 3 tests for RSV/influenza during the initial stages of an unknown viral pathogen outbreak.

Additional testing for influenza outbreak not necessary once an influenza outbreak has been confirmed, unless directed by Public Health. Additional testing may be recommended when:

- A resident develops new or worsening symptoms while on treatment/prophylaxis.
- For identification of resistant influenza virus.
- A resident with no epidemiological link to the outbreak presents with symptoms.

The laboratory should be notified by Public Health when additional testing is being requested to look for antiviral resistant influenza virus or new non-outbreak related influenza cases. Repeat specimens from an institution with confirmed influenza will not be processed within a two-week period unless directed by Public Health.

Influenza typing to identify Influenza A or B is routinely conducted by the lab.

POCT tests are not suitable for influenza or RSV testing.

LTCF should report the first positive case of influenza/RSV to Public Health.

6.2 Testing

Detection of respiratory viruses depends on the collection of high-quality specimens, their rapid transport to the lab, and appropriate storage.

6.2.1 Viral Collection Kits

- The standard viral collection kits contain two swabs. In addition to the regular swab that was used in the past, the kit contains a smaller caliber, more flexible swab with a flocked head that should make collecting a nasopharyngeal sample easier.
- The alternate collection kits utilize a larger more rigid more swab for posterior oropharynx and anterior nares (throat/nares) collections.
- A poster that shows both swabs can be found at: <https://library.nshealth.ca/IPAC-LTC>.

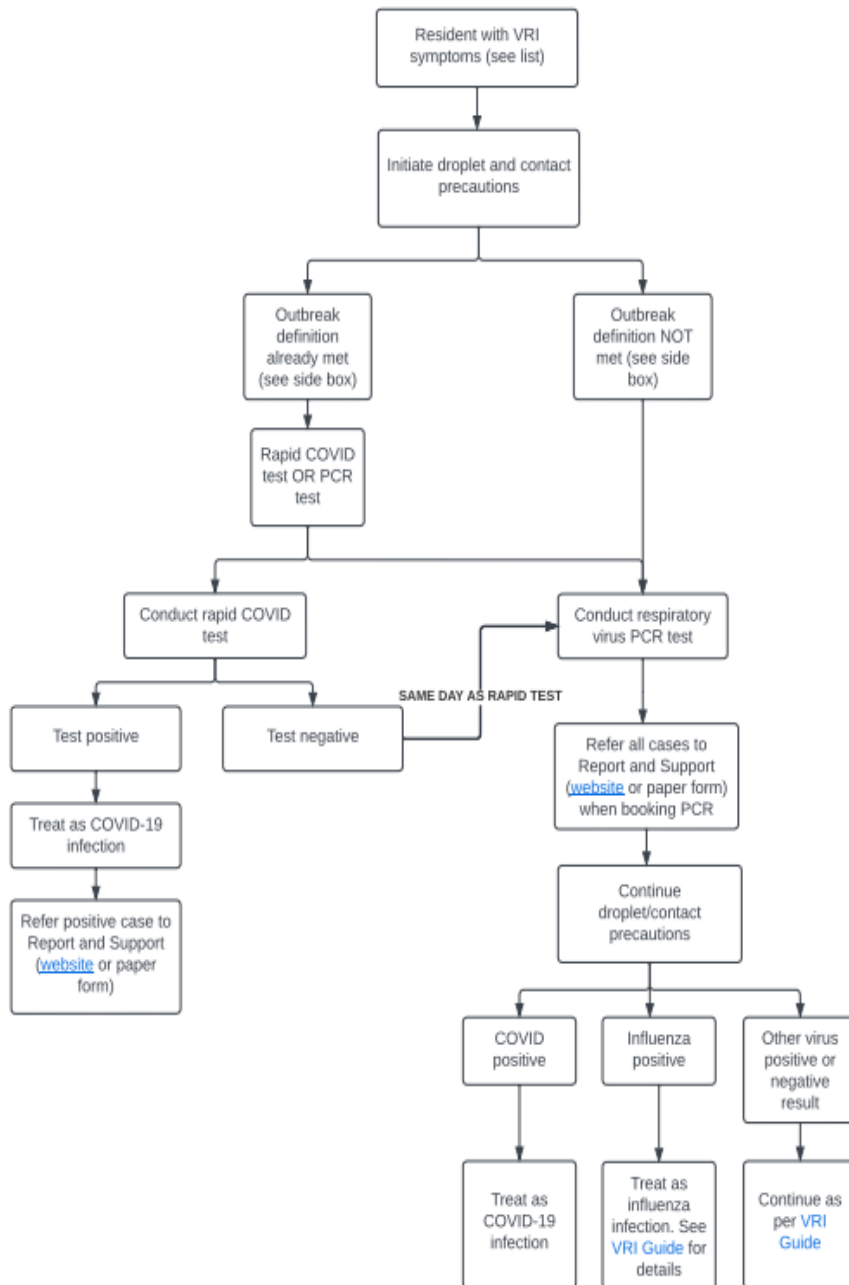
6.2.2 Specimen Collection and Handling (See [Appendix D](#) for important details)

To support diagnosing respiratory viruses is it important for health care professionals to comply with the specific laboratory requirements listed below:

- Residents should be swabbed for COVID-19, influenza/RSV and as soon as a viral respiratory infection is suspected.
- During this procedure, adhere strictly to Droplet and Contact Precautions.
- Ensure the Outbreak Number is on the requisition. If there is no outbreak number yet, put “Suspect Viral Respiratory Infection” on the requisition.
- The facility medical director is the ordering physician for LTCF residents for influenza/RSV and COVID-19. The results will be sent back to the facility medical director.
- Testing for other respiratory viruses (e.g. rhinovirus, adenovirus, human metapneumovirus) will only be performed when requested by Public Health.

Viral Respiratory Testing Algorithm for Long-term Care Residents

October 2023



VRI Symptoms
New, worsening or unexplained:

- Cough
- Fever (temperature of 37.8C or greater, chills, sweats). Note that elderly individuals may not show signs of fever
- Shortness of breath or difficulty breathing
- Loss or change in sense of smell or taste
- Sore throat
- Runny nose/nasal congestion/excessive sneezing
- Headache
- Extreme fatigue/tiredness
- Atypical respiratory symptoms, including but not limited to: muscle aches, nausea, vomiting, or diarrhea

OR any change in baseline including confusion/delirium

Outbreak Definitions

- **Lab-confirmed COVID-19 Outbreak:** Two or more PCR-confirmed cases, where at least one is a resident case AND at least one is a facility acquired case (non-resident or resident), with all cases epidemiologically linked to the LTCF in a 10-day period
- **Lab-confirmed Influenza Outbreak:** Two or more cases of influenza-like illness within a 7-day period, including at least one PCR-confirmed case of influenza within a surveillance setting
- **Lab-confirmed RSV Outbreak:** Two or more symptomatic residents, epidemiologically linked in the facility within a 7-day period, where at least one is a PCR-confirmed case of RSV

• For details, please refer to Section 8.1 of the VRI Guide ([link](#))

Glossary

Rapid COVID test: Point-of-care COVID test
 RSV: Respiratory Syncytial Virus
 VRI Guide: Guide to Respiratory Virus Infection and Outbreak Management in Long-term Care Facilities ([link](#))

Table 8: Testing Residents for Influenza/RSV and/or COVID-19		
	Influenza/RSV	COVID-19*
Resident	<ul style="list-style-type: none"> When a suspect respiratory virus outbreak begins, test 3 different symptomatic residents for influenza/RSV. Once an influenza or RSV outbreak has been confirmed, there is no need to test additional residents (symptomatic or not) unless directed by Public Health. 	<ul style="list-style-type: none"> When a suspect respiratory virus outbreak begins, use a PCR test for the first three symptomatic residents.* After the first 3 PCR tests, do a POCT test on every newly symptomatic resident for COVID-19 even after influenza or RSV is detected. Once a COVID-19 outbreak is declared, continue testing all newly symptomatic residents with a POCT to determine eligibility for therapeutics.
Preferred testing method	<ul style="list-style-type: none"> NP swab using flocced head swab from the standard viral collection kit 	<ul style="list-style-type: none"> NP swab using flocced head swab from the standard viral collection kit
Alternate testing method	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Throat/nares swab using alternate collection kit (should be used only when influenza/RSV testing not required)

* Swab if resident has not had COVID-19 within the last 90 days; Consult with PH if there are questions about need for testing in a resident who had COVID-19 in the prior 60-90 days

Consult with Public Health for further guidance if clinical presentations suggest the presence of cocirculating viruses.

6.2.3 Test result inquiry

COVID-19 Test Results

- Results for COVID-19 PCR tests should be available within 48 hours of receipt in the testing laboratory (outside extreme periods of surge activity).
- Result inquiries may be directed to the local or regional laboratory.
- Various processes are utilized to disseminate results including email, auto-call, online, and phone call. COVID-19 results can be accessed through the online result portal link found at: <https://c19results.nshealth.ca/>
- If unable to obtain results, LTCF can call Public Health to access results at by contacting Public Health in their zone.
- Employers **must not** access lab results for employees without explicit permission as this is a breach of the Personal Health Information Act (PHIA).
<https://novascotia.ca/dhw/phia/>

Influenza/RSV Test Results

- Direct result inquiries to your local/regional lab. Turnaround time for results may be 1-2 business days during the height of the influenza season.

Table 9: Managing Resident Influenza/RSV and/or COVID-19 Test Results			
Affected individual	COVID-19 /Influenza/RSV PCR test result	Clinical status	Guidance
Resident	Negative for all viruses	Continues to be symptomatic	Repeat COVID-19 PCR test 48 hours after the first test and keep on Droplet and Contact Precautions until 2nd test result known and symptoms are improving.
Resident	Negative for all viruses	Symptoms have resolved in the first 48 hours	No further testing required. Discontinue Droplet and Contact Precautions.
Resident	Positive	Symptomatic or asymptomatic	Maintain Droplet and Contact Precautions (See Section 7.0)
Roommate	No testing for influenza/RSV *or COVID-19 as long as roommate remains asymptomatic.	Asymptomatic	Keep roommate in room and put on Droplet and Contact Precautions for 48 hours -can be discontinued after 48 hours if roommate remains asymptomatic. Continue Active Screening twice per day until symptomatic roommate is off precautions.

Table 10: Guidance for DCGs, Visitors, Specialized Workers, Volunteers COVID-19 Test Results/Symptoms			
Affected individual	COVID-19 PCR or POCT test result	Clinical status	Guidance
DCGs/Visitors/Specialized Workers/Volunteers	Positive	Symptomatic	Exclude from LTCF for 7 days from symptom onset or positive test result, whichever is longer. Medical masking mandatory at all times between day 7 – day 10 (eating and drinking allowed in the facility).
DCGs/Visitors/Specialized Workers/Volunteers	Negative	Symptomatic	Exclude from LTCF until improving for 24 hours and with no fever.
DCGs/Visitors/Specialized Workers/Volunteers	Indeterminate	Asymptomatic	Repeat PCR test at least 24 hours after the 1st one and exclude from facility until 2nd test result known.

7.0 Managing the Symptomatic Resident and Case

7.1 Infection Prevention and Control Measures

Do not wait for confirmation of pathogen involved to implement outbreak control measures.

- Wear appropriate personal protective equipment (PPE) when providing care to ill residents and ensure adequate and frequent hand washing.
- Keep roommate in room and put on Droplet and Contact Precautions **for 48 hours** - can be discontinued after 48 hours if roommate remains asymptomatic. Continue Active Screening twice per day until symptomatic roommate is off precautions.
- Post signs at the facility entrances and affected units. Post visible signage on the isolated resident's door or bed space indicating the resident requires Droplet and Contact Precautions. The sign should **not** disclose the resident's presumed or confirmed diagnosis.
- Modify activities on affected units as appropriate.
- Perform Active Screening of roommates of cases and asymptomatic residents twice daily.
- Notify internal and external partners of outbreak (including volunteers).

7.2 Residents on Droplet and Contact Precautions

- Must stay and receive meals in their room.
- May be allowed up to one hour of outdoor time (e.g., walking, exercising, etc.) daily, with sufficient supervision to prevent potential transmission to others. When moving through the facility to get outdoors, the resident must wear a well-fitting medical mask and take the shortest route possible or that best minimizes encounters with others.
- Should **not** participate in any LTCF group activities / events / gatherings.
- Should **not** attend non-essential appointments.
- Should wear a well-fitting medical mask (when tolerated) when staff, DCG, visitor, essential visitor, specialized worker, or volunteer is in the room. N95 masks are not required to be worn by LTCF residents.
- Infection Prevention and Control (IPAC) are available for guidance and can be contacted at **1-833-736-0880** or IPAC.longtermcare@nshealth.ca.

8.0 Outbreak Management

8.1 Definitions

Outbreaks in LTCFs are declared by Public Health Professionals based on a variety of factors. The outbreak definitions provide a standard approach to surveillance of respiratory infections across place and time (e.g. within Nova Scotia). Some additional interpretation specific to the LTCF context has been provided. Consult with Nova Scotia Health, Public Health for further clarification.

Suspect Respiratory Infection Outbreak

Two individuals with new onset respiratory symptoms, epidemiologically linked within the LTCF, in a 72-hour period.

OR

One laboratory confirmed case of a known respiratory pathogen in a resident with or without a second symptomatic resident

Lab Confirmed COVID-19 Outbreak

Two or more laboratory-confirmed resident cases, AND at least one is a facility acquired case, with all cases epidemiologically linked within the LTCF in a 10-day period

Lab Confirmed Influenza Outbreak

Two or more resident cases of ILI (influenza-like illness), where at least one is a laboratory confirmed case of influenza, within the LTCF in a 7-day period

Lab Confirmed Respiratory Syncytial Virus (RSV) Outbreak

Two or more symptomatic residents where at least one is a laboratory confirmed case of RSV, epidemiologically linked within the LTCF in a 7-day period

For the purposes of suspect and confirmed RSV, influenza, and COVID-19 outbreaks, the two or more resident cases must be epidemiologically linked to one another. Epidemiologically linked means they shared time together in the same space (e.g., on the same unit, at the same table, at bingo together). Situations may vary depending on facility size and layout.

Respiratory Infection Outbreak: Unidentified/Other Pathogen

Three or more cases with new onset respiratory illness, epidemiologically linked within the LTCF in a 4-day period

Communicable disease outbreaks (respiratory, gastrointestinal, or other infections) in LTCFs are reportable to Nova Scotia Health, Public Health^[1]. When a facility, within a four-day period, has three or more residents that can be epidemiologically linked to one another (e.g. on the

^[1] When residents exhibit symptoms that are primarily nausea/vomiting/diarrhea and are not associated with a viral respiratory infection follow IPAC protocols and contact NSH Public Health to contain an enteric outbreak

same unit, share the same dining table), with a similar respiratory symptoms (but not COVID-19 or influenza/RSV), they should consider themselves to be in an **unidentified outbreak**.

8.2 Line Lists

The line list is an important tracking tool that contains key information about resident outbreak cases. Each row represents a case and documents relevant dates, demographic information, resident room, resident symptoms, and testing information. It allows quick identification of trends and creation of an epidemic (epi) curve, which indicates the status of the outbreak.

Consider starting a list of resident contacts to facilitate tracking if they become symptomatic – do not submit to Public Health.

Influenza: Once **the first** resident tests positive for influenza - call Public Health and immediately begin a resident line list. Every day add all subsequent symptomatic and influenza positive residents and submit to Public H.

COVID-19: Once **the first** resident tests positive for COVID-19 – call Public Health and immediately begin a resident line list. Every day add all subsequent symptomatic and or COVID-19 positive residents and submit daily to Public Health. Staff cases do not need to be entered into a line list but all staff case need to be entered into the [KICS - Form Entry \(nshealth.ca\)](https://www.health.gov.on.ca/nr/kics/kics_form_entry.asp)

Printable paper version (preferably on legal size paper) is available in [Appendix F](#).

Best practices for creating Line Lists:

- Start your line list as soon as you identify a resident with symptoms of a viral respiratory infection.
- Use of the electronic line list is preferred. However, if you do not have access to a computer, use the paper version of the line list.
- Make sure you add any new cases daily – **do not remove any of the earlier cases**.
- You do not have to go back to previous entries and add new symptoms as they develop/resolve in residents.
- There should be one line list per outbreak. Include the room number and section where the resident resides. This means that each unit/floor does not need their own line list. For larger facilities where this may be impractical, seek guidance from the Public Health Nurse (PHN).

8.3 Contact Management

An individual may be a contact if exposed to a case's respiratory secretions (e.g. kissing, sharing food/drinks/cosmetics, sharing cigarettes/vaping devices) including the case's caregiver, intimate partner, child receiving care from the case, etc. At the MOH's discretion, sustained outdoor face to face contact may be assessed as an exposure.

8.3.1 Resident Contacts

Keep roommate in room and put on Droplet and Contact Precautions **for 48 hours** - can be discontinued after 48 hours if roommate remains asymptomatic. Continue Active Screening twice per day until symptomatic roommate is off precautions.

Resident contacts will not be treated differently according to vaccination status. Encourage residents to be up-to-date with their COVID-19 and influenza vaccinations.

- Non-roommate resident contacts should be monitored for symptoms for 72 hours post exposure.
- The resident contact (non-roommate) does not have to be isolated as long as they remain asymptomatic unless Public Health determines otherwise.
- Resident contacts should not move between facility units until the end of the outbreak to minimize possible transmission in the facility.
- If asymptomatic, resident contacts may leave the facility for off-site visits and essential appointments with the informed consent of the person/people to be visited.
- Resident contacts should wear a well-fitting medical mask (when tolerated) when staff, DCG, visitor, essential visitor, specialized worker is in their room.
- Resident contacts are recommended to utilize risk reduction measures such as masking (when tolerated) and/or physical distancing from others when out of their room.
- The asymptomatic resident contact should avoid group activities for 72 hours after initial exposure.

8.3.2 Residents who are NOT Contacts

- Isolation of residents in their room is **not** required.
- Restriction of residents to unit is **not** required unless PH restricts unit mixing as part of a facility outbreak control strategy.
- Individual resident testing is **not** required if asymptomatic.
- Residents are recommended to wear a well-fitting medical mask when outside of their room.

8.3.3 Staff, DCGs, volunteers, essential workers, volunteers

Staff, DCGs, essential workers or volunteers may be deemed contacts because they have provided direct physical care to a resident with a viral respiratory infection or handled a respiratory virus specimen without consistent, appropriate use of the recommended PPE and infection prevention and control practices or interacted with the case to a sufficient degree that a higher risk exposure likely occurred.

The facility will be responsible for notifying staff contacts of their testing (COVID-19 only) and work exclusion requirements with the assistance of OHSW. For information regarding assessment of staff exposures, work exclusion, and testing requirements email OHSWContCareID@nshealth.ca or visit [KICS - Form Entry \(nshealth.ca\)](https://www.nshealth.ca/kics)

8.4 Staff Measures

The following additional measures should be implemented for LTCF experiencing staffing issues during outbreaks:

- Implement universal masking for the duration of the outbreak in affected areas or buildings as advised by Public Health.
- Cohorting of staff/assignments should be considered to maximize utilization of existing staff.
- If feasible, staff who are not contacts should exclusively work with residents who are not contacts and staff contacts should exclusively work with resident contacts.
- External staff may be deployed to work in the facility, utilizing cohorting of staff/assignments as needed.
- Facilities are encouraged to connect with IPAC/OHSW to onboard staff, whether their own or temporary replacements, during outbreaks.
- Facilities are encouraged to connect with OHSW to support staff returning to their “home facility” once staffing levels have normalized and it is safe to return after helping out.
- If external staff are required to manage an outbreak, the following approaches are to be taken:
 - The temporary assignment should occur for a continuous series of days at only one facility, not randomly between two or more facilities.
 - Education and assessment of PPE/IPAC principles occurs/reoccurs.
 - OHSW practices (PPE, safer approaches to meals and breaks etc.) are taught/retaught.
 - Where possible, external staff should provide care for residents not confirmed to have a respiratory virus infection at the LTCF experiencing an outbreak.
 - Continue **screening for symptoms and wearing PPE.**

8.5 Case Management

Create an individualized plan of care to address specific patient needs – utilize the Dementia Isolation Tool Kit where necessary to obtain ideas and resources for safe, compassionate care of individuals with dementia <https://dementiaisolationtoolkit.com/>

Communicate with families of affected residents.

Refer to [Section 7.0](#) Managing the Symptomatic Resident and Case.

8.6 COVID-19 Therapeutics for LTCF Residents

Non-Severe Therapy Consult Service: Long-Term Care Referral Information

1. [Report and Support](#) This is the preferred referral mechanism for LTCF residents to be assessed for COVID medication. Online form is to be completed by a family member or long-term care facility staff member. Complete online at: <https://c19hc.nshealth.ca/self-report/s2.php>

or by phone: 1-833-797-7772. Please complete the shaded sections on the [Long Term Care Non-Severe COVID-19 Therapeutics Referral Form](#) (page 2) and email: CovidTreatment@nshealth.ca (preferred) or fax: 902- 492-5604.

OR

2. Complete the entire long-term care referral form (and email: CovidTreatment@nshealth.ca (preferred) or fax: 902- 492-5604.

Please also provide a list of the resident's active medications or a copy of the medication administration record (MAR).

The following link outlines information regarding the referral of individuals with non-severe COVID-19 living in a long-term care facility for treatment assessment by the [COVID-19 Non-Severe Therapy Pharmacist Consult Service](#).

To assess resident(s) in a timely and efficient manner, only refer resident(s) who meet the referral criteria.

Please do NOT refer residents if:

- They are **currently asymptomatic**.
- Symptom onset was **more than 7 days ago**.
- COVID treatment options are **NOT within goals of care** for the patient and/or substitute decision-maker (SDM)
- They received their COVID vaccine booster recently, **greater than 2 weeks but less than 90 days ago or less than 90 days since last COVID infection***

**Please still refer if immunocompromised*

Obtain consent from the resident and/or their SDM before the assessment is completed. The COVID-19 Non-Severe Therapy Consult Service will not contact residents and/or SDMs individually for consent. Patient information sheets are available to guide these discussions:

- [Nirmatrelvir/ritonavir \(Paxlovid\)](#)
- [Remdesivir](#)
 - Please note: remdesivir infusions are coordinated through Continuing Care with the goal of IV administration on-site facilitated by VON. The resident does not need to be an existing client of VON.

8.7 Antiviral Prophylaxis and Treatment for Influenza

The rationale for prophylaxis is to prevent spread of influenza throughout the facility. Antiviral prophylaxis should be given to residents whether vaccinated or not. In outbreak control, antiviral prophylaxis should be continued until the outbreak is over. If residents develop influenza-like symptoms while on pre-exposure prophylaxis, they should be changed from the prophylaxis dose to the treatment dose, which is higher.

- If influenza is suspected, testing should be done immediately so that the diagnosis can be made promptly. Once there is a positive influenza test, treatment can begin for symptomatic

LTCF residents who present clinically as having influenza, and antiviral prophylaxis begun in asymptomatic residents.

- The Medical Officer of Health (MOH) will make a recommendation to the Medical Director regarding the need for antiviral medication and which antiviral drug to use (See [Appendix B](#)). **NOTE: If there is just one resident with influenza and the LTCF physician has decided to treat this individual and no other residents have ILI symptoms, the MOH or local Public Health does not have to become involved.**
- When the decision to use antiviral medication for outbreak control has been made Public Health will notify the provincial Pharmacare Program to ensure payment for Pharmacare beneficiaries.
- Veterans Affairs Canada will provide financial coverage for antiviral medications for veterans residing in a LTCF when prophylaxis or treatment are recommended by Public Health.
- In situations where the antiviral may need to be changed (based on subtyping or difficulty controlling the outbreak), the MOH will make recommendations based on current information.
- During an outbreak, the actual ordering of antiviral medications is the responsibility of the facility.

IMPORTANT: While antiviral medication is most beneficial when symptoms have been present for less than 48 hours; it can still be used after that time. Antivirals also make the individual less infectious. Antiviral treatment is usually continued for a maximum of 5 days but can occasionally be extended for an additional 5 days of severe illness. Antiviral prophylaxis is continued until the outbreak is declared over.

8.8 Facility Management during an Outbreak

The use of stricter public health measures (masking, physical distancing) particularly during respiratory season may be different in LTCF than in the wider community due to the vulnerability of this sector.

8.8.1 Outbreak control measures (including facility)

- Ensure use of Droplet and Contact Precautions with all residents who are symptomatic and/or test positive for a respiratory virus infection.
- Implement universal masking for the duration of the outbreak as advised by Public Health and MOH.
- Non-essential visits should be postponed.
- Visitors and DCGs should participate in universal masking, and not remove mask on outbreak unit, even when in the resident's room.

8.8.2 Physical Distancing during an Outbreak:

- In any LTCF common area, it is advised that residents, staff, visitors, essential visitors, DCGs, volunteers, and specialized workers physically distance from others. Staff and DCGs are exempt from physical distancing requirements while providing resident care.
- Staff should maintain a physical distance as much as possible from each other when unmasked in places like break rooms. Well-fitting medical masks may be removed when eating/drinking and physically distanced in designated staff break rooms or when on the grounds outside the facility. When unmasked, staff should physically distance. Staff should not eat/drink in resident care areas.

8.8.3 Cohorting of non-affected units

- Cohorting can help to prevent the spread of a viral respiratory infection throughout a LTCF.
- These guidelines should be followed:
 - Maintain consistent groups of residents in the same cohort.
 - Participation in multi-person group activities such as dining, recreation outings, and social activities.
 - Participation in group activities (e.g. faith services; activities), but physically separate each cohort from the other as much as possible.
- At their discretion, an MOH may advise cohorting as an outbreak control measure.

8.8.4 Environmental Management

- Enhanced environmental cleaning and disinfection regimens are important. This includes frequent (twice daily) cleaning and disinfection of high touch surfaces.
- Hospital-grade disinfectants with a drug identification number (DIN) are effective in killing Influenza and COVID-19 and other respiratory viruses if used according to manufacturers' instructions.
- Follow laundry and waste disposal protocols according to facility routine practices.

8.8.5 Resident Care Equipment

- Any equipment that is shared between residents must be cleaned and disinfected, as per facility routine practices before use on or by another resident.

8.8.6 Licensed Hair Salon Services

- Facility-based hairdressing, hair styling, hair cutting and hair salon services, whether exclusive only to residents or open to the public can be provided to **asymptomatic** residents/staff (unless specifically restricted by Public Health and/or IPAC).

8.8.7 Pets Residing in or Visiting LTCF

It is highly recommended that you include direction for pet care during an outbreak in your existing written pets (residing or visiting) LTCF protocols. This should include:

- Facility-owned pets should be confined to their assigned area in the LTCF, so that they don't roam freely. Ensure that these animals do not have access to the rooms of residents with COVID-19, Influenza, RSV (or other infectious diseases).
- Animal caregivers should follow similar precautions with pets as they would interacting with residents including appropriate PPE and hand hygiene during an outbreak.
- If a pet develops any signs of illness consult a veterinarian.
- Visiting pets should be healthy and should not come into the LTCF during an active respiratory virus outbreak.

8.8.8 Signage:

Signage must be posted at all entrances and exits throughout the facility to advise staff and essential visitors that an outbreak has been declared in the unit/facility.

Signage must include instruction for cleaning hands when entering and exiting the facility, reminders that unwell visitors must not enter the facility, and that visitor restrictions are in effect (e.g. non-essential visits must be postponed). Alcohol-based hand rub should be available at the entrance and exit of the facility.

8.8.9 Compassionate Exceptions

LTCF should allow visitation – of any form or with any number of visitors- for compassionate exceptions (e.g. palliative and end of life visits). The following measures should be in place:

- Visitors passively screen and are asymptomatic.
- Visitation occurs only with the specific resident(s).
- Staff support visitors in selecting and appropriately using PPE.

9.0 Discontinuing Resident Precautions, Staff Return to Work and Closing the Viral Respiratory Outbreak

9.1 Discontinuing resident precautions and staff return to work guidance.

The timing for discontinuation of precautions does not change based on anyone’s vaccination status.

Table 11: Discontinuing Resident Droplet and Contact Precautions and Staff Return to Work Guidance	
Respiratory Virus	Recommended Duration of Precautions / Work Exclusion
Confirmed influenza	At least 5 days and clinically improving for 24 hours with no fever (off antipyretics) and is not moderately – severely immunocompromised*
Confirmed COVID-19	At least 7 days and clinically improving for 24 hours with no fever (off antipyretics) and is not moderately – severely immunocompromised*
Confirmed RSV	At least 7 days and clinically improving for 24 hours with no fever (off antipyretics) and is not moderately – severely immunocompromised*
Suspect Respiratory Pathogen	Improving for 24 hours with no fever

* Droplet and Contact Precautions for moderately -severely immunocompromised individuals may extend for a longer timeframe and discontinuation for those individuals should be done after discussion with IPAC and Public Health

9.2 Closing the Viral Respiratory Outbreak

Public Health declares a respiratory virus infection outbreak over. The LTCF will receive a letter from Public Health declaring the outbreak over.

Table 12: Closing a Viral Respiratory Outbreak	
Respiratory Virus	Declaring the Outbreak Over*
Confirmed influenza	7 days
Confirmed COVID-19	10 days
Confirmed RSV	7 days
Outbreak: Unidentified /Other Respiratory Pathogen	7 days
Suspect OB	48 hours

* From the period of communicability following the last known exposure to an infectious person in the affected unit/area.

Appendix A: Resources

COVID-19 Therapeutics:

Non-Severe Therapy Pharmacist Consult Service: Long-Term Care Referral Information
[COVID-19 Non-Severe Therapy Pharmacist Consult Service](#)

[Long Term Care Non-Severe COVID-19 Therapeutics Referral Package](#)

Non-Severe COVID-19 Treatment

https://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.Id=93180&documentRender.GenericField=

Order Set

https://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.Id=90889%20&documentRender.GenericField=

Dementia Isolation Tool Kit:

<https://dementiaisolationtoolkit.com/>

Immunization:

Influenza

<https://novascotia.ca/dhw/CDPC/documents/Publicly-Funded-Seasonal-Inactivated-Influenza-Vaccine-Information.pdf>

COVID-19

<https://novascotia.ca/dhw/cdpc/info-for-professionals.asp>

For nurses working in Nova Scotia Health facilities:

Immunization Course:

[Nova Scotia Health Immunization Course - Pandemic Immunizer Education - LibGuides at Nova Scotia Health \(nshealth.ca\)](#)

Immunization Resource page:

[CDPC- Information for Professionals | novascotia.ca](#) – click on Immunization tab.

Infection Prevention and Control:

Point of Care Routine Assessment (PCRA)

https://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.Id=76565&documentRender.GenericField=

<https://library.nshealth.ca/IPAC-LTC>

Report and Support

<https://www.nshealth.ca/reportandsupport>

Slowing the Spread of Respiratory Illness

<https://novascotia.ca/coronavirus/docs/slowing-the-spread-of-respiratory-illness-en.pdf>

Testing: Video describing correct technique for obtaining nasopharyngeal swabs

<https://vimeo.com/516853275/c67017fd3a>

Appendix B: Antivirals for Influenza Prophylaxis and Treatment

It is possible that a LTCF experiences both COVID-19 and influenza infections at the same time. Essentially, residents who have both influenza and COVID at the same time should receive oseltamivir in addition to meds for SARS-CoV-2 (including remdesivir if it is appropriate).

What antiviral medications are available for use against Influenza?

In Canada, two neuraminidase inhibitors (oseltamivir and zanamivir) are licensed for use as treatment and prophylaxis against influenza. Over the past few years, the predominant circulating strains of influenza have been sensitive to oseltamivir and zanamivir, but it is important to be aware of the potential for antiviral resistance to occur. The choice of drug depends on the resistance patterns of the type of influenza detected in your facility. The effectiveness of antivirals is determined each season and recommendations may change as new information becomes available. PH will help guide the choice of antiviral agent in this situation.

How are antiviral medications used in LTCFs?

Antiviral medications can be used for the prevention and control of influenza outbreaks among residents in two ways:

- For the presumptive treatment of residents with influenza-like illness, while awaiting laboratory confirmation.
- For the prevention of influenza among residents once an outbreak has been confirmed (i.e. prophylaxis).

LTCF residents do not need to have a high risk condition for prophylaxis to be used.

Who decides when to use antiviral medication in the LTCF?

It is the responsibility of the Medical Officer of Health (MOH), working closely with PH and the Provincial Public Health Laboratory Network (PPHLN), to ensure that a surveillance system for influenza is in place. In this way, the MOH knows the level of influenza activity in the community and can make recommendations about outbreak management and about antiviral medication use in the LTCF.

Therefore, it is the MOH who recommends the use of antiviral medication when:

- Two or more residents have a respiratory illness that meets the case definition for influenza.
- An outbreak investigation has recently been or is currently being carried out.

Please note: If there is just one resident suspected of having influenza and the physician has decided to treat this individual, the MOH doesn't need to become involved.

- Influenza has been identified from viral nasopharyngeal swabs taken from residents, or there is a communitywide outbreak occurring.

The MOH would make a recommendation to the facility. It is then up to the facility to implement the use of antiviral medication in consultation with the medical director.

Antiviral medication use in an outbreak situation should begin as early as possible after the outbreak begins in order to be effective in interrupting the outbreak.

What can you do to prepare for the possible use of antiviral medication?

Each LTCF should have a contingency plan in place that would allow for the rapid administration of antiviral medication if an influenza outbreak occurs:

- A recent serum creatinine is not required before starting oseltamivir prophylaxis, unless there is a reason to suspect significant renal impairment. For those with significant renal impairment, prior to the influenza season, document an up-to-date serum creatinine, weight and age. Up-to-date means within 12 months for residents who are medically stable, or since any significant change in medical status; using these data, work with your pharmacist to calculate an oseltamivir dose for those residents.
- Develop a mechanism to obtain physicians' orders on short notice (consider a pre-approved antiviral order).
- For adverse events and considerations on each antiviral drug, please see [Table C](#).

Which residents do you treat with antiviral medication in the outbreak situation?

While antiviral medication is most beneficial when symptoms have been present for less than 48 hours; it can still be used after that time. Antivirals also make the individual less infectious. Antiviral treatment is usually continued for a maximum of 5 days but can occasionally be extended for an additional 5 days. Antiviral prophylaxis is continued until the outbreak is declared over.

In consultation with the medical director and MOH, presumptive treatment can be stopped if influenza is not identified as the cause of the ILI (e.g. laboratory test is negative for influenza).

Which residents do you put on antiviral prophylaxis in an outbreak situation?

After discussion with the Medical Officer of Health, residents who do not have influenza-like illness should be put on antiviral prophylaxis regardless of influenza vaccination status. Prophylaxis should be continued until the outbreak is declared over. If influenza is ruled out as the cause of the ILI after prophylaxis has begun, then prophylaxis should be stopped.

If large numbers of residents continue to become ill despite antiviral prophylaxis, the outbreak may be caused by another virus or antiviral resistance may have emerged. Consult with PH for further recommendations.

Can the same antiviral medication be used for both treatment and prophylaxis?

Yes, but the treatment dose is higher than the prophylaxis dose.

Who pays for antiviral medications?

If residents have private or veterans' drug insurance plans, coverage should be preferentially billed to these plans. The Pharmacare Programs cover antiviral medications for influenza treatment or prophylaxis for LTCF residents who meet the clinical criteria (listed below) and are Pharmacare beneficiaries.

Note: Co-payments and/or deductibles may apply depending on what program the resident is enrolled in. For example, Seniors' Pharmacare has a 30% co-payment per prescription up to a co-payment maximum of \$382.00 annually.

Oseltamivir and zanamivir are Exception Status Benefits under the Nova Scotia Pharmacare Program. LTCF residents who are covered by one of the Pharmacare Programs (Family, Seniors < 65 LTC, or Community Services) and meet the exception status criteria will have access to oseltamivir and zanamivir. Please note that the decision to use zanamivir during outbreak situations will occur on a case-by-case basis.

The Pharmacare Exception Status Benefit criteria are:

- For treatment of long-term care residents with lab-confirmed influenza.
- For clinically suspected cases, it is covered for the treatment of residents with influenza-like illness where there is lab confirmed influenza circulating in the facility or community.
- For use as a prophylaxis of residents when the facility has an influenza outbreak.

Note: Oseltamivir and Zanamivir are covered by the Pharmacare programs in LTCF based on the recommendation of a MOH. Veterans Affairs Canada will provide financial coverage for antiviral medications for veterans residing in a LTCF when prophylaxis or treatment are recommended by PH due to an outbreak of flu-like illness or confirmed influenza.

When the decision to initiate the use of antivirals is made, in consultation with the MOH, a letter will be sent to the facility on behalf of local PH ([Appendix E](#)). PH will also fax a letter to Pharmacare at 902- 496-4440 **and** to the dispensing pharmacy identified by the LTCF. This should be done as soon as possible, or the next business day if after hours, since Pharmacare will need to provide billing information to the pharmacy that will dispense the medication. In the event of an outbreak, the facility will need to work closely with the pharmacy to advise them of the MOH recommendation to initiate therapy.

How does a LTCF go about getting a supply of antivirals?

A prescription for antiviral medication written by the resident's doctor is filled in the same way as any other prescription. There are supplies of antiviral medications, including oseltamivir, in community pharmacies; however, that supply is limited. To ensure there is a supply within the community for confirmed cases, physicians are encouraged NOT to prescribe antiviral medications unless it is within the recommended guidelines.

Recommended doses of antiviral drugs:

Table A: Recommended Adult Doses of Oseltamivir and Zanamivir for the Prophylaxis and Treatment of Influenza

Oseltamivir ¹ (Tamiflu)		
No Renal Impairment		
Dosage		
Prophylaxis ^{2,3}	Treatment	
75 mg once a day	75 mg twice a day for 5 days	
Renal Impairment		
Creatinine clearance (mL/min)	Dosage	
	Prophylaxis until the outbreak is over	Treatment (5 days)
> 60 mL/min	75 mg once daily	75 mg twice daily
> 30-60 mL/min	30 mg once daily (preferred if available) OR 75 mg on alternate days if the 30 mg dosage form is unavailable.	75 mg once daily or 30 mg twice daily
10-30 mL/min	30 mg on alternate days	30 mg once daily
< 10 mL/min (renal failure)*	No data	Single 75 mg dose for the duration of illness
Dialysis patients*	Low-flux HD: 30 mg before dialysis on Day 1 of prophylaxis, then 30mg after alternate dialysis sessions until OB is over. High-flux HD: No data CAPD dialysis: 30 mg before dialysis then 30 mg once weekly until OB is over. CRRT High-flux dialysis: No data	Low-flux HD: 30 mg at onset of influenza symptoms then 30mg after each dialysis session High-flux HD: 75 mg after each dialysis session CAPD dialysis: 30 mg once before the start of dialysis CRRT High-flux dialysis: 30 mg daily (preferred if available) or 75 mg every second day

*Experience with the use of oseltamivir in patients with renal failure is limited. These regimens have been suggested based on the limited available data. Consultation with an infectious disease physician or

Zanamivir	
No Renal Impairment	
Dosage	
Prophylaxis 2,3	Treatment
10 mg (two 5 mg inhalations) once a day	10 mg (two 5 mg inhalations) twice a day for 5 days A total dose of 10 mg twice daily approximately 12 hours apart. A second dose should be taken on the first day of treatment whenever possible, provided there is at least 2 hours between doses. On subsequent days should be 12 hours apart at approximately the same time each day.
Renal Impairment	
Dosage	
No dosage adjustment necessary for prophylaxis or treatment	

1. Oseltamivir is administered orally without regard to meals, although administration with meals may improve gastrointestinal tolerability. Oseltamivir is available in 30 mg, 45 mg, and 75 mg capsules and as a powder for oral suspension that is reconstituted to provide a final concentration of 6 mg/mL. When dispensing commercially manufactured Oseltamivir (Tamiflu) Powder for Oral Suspension (6 mg/mL), pharmacists should ensure the units of measure on the prescription instructions match the dosing device.
2. If residents develop ILI symptoms while on the prophylactic dose they should be switched to the treatment dose.
3. Prophylaxis should be continued until 7 days after symptom onset in the last case (symptom onset is Day 1).

Table B. Recommended Antiviral Doses in Children

Oseltamivir ¹ (Tamiflu)			
Dosage			
Age	Weight	Prophylaxis	Treatment (5 days)
< 3 months		Not recommended unless situation is critical due to limited data in this age group	3 mg/kg/dose twice daily
3 months to < 12 months		3 mg/kg/dose once daily	3 mg/kg/dose twice daily
> 12 months	< 15 kg (33 lbs)	30 mg once daily	30 mg twice daily
	> 15 to 23 kg (> 33 to 51 lbs)	45 mg once daily	45 mg twice daily
	> 23 to 40 kg (> 51-88 lbs)	60 mg once daily	60 mg twice daily
	> 40 kg (88 lbs)	75 mg once daily	75 mg twice daily

Zanamivir		
Dosage		
Age	Prophylaxis	Treatment
> 7 years old	10 mg (two 5 mg inhalations) once daily	10 mg (two 5 mg inhalations) twice daily

Adverse Reactions

Table C: Adverse Reactions of Antiviral Drugs

Adverse Reaction	Oseltamivir	Zanamivir
Gastrointestinal	<ul style="list-style-type: none">• Nausea• Vomiting (less severe if taken with food)	
Respiratory		<ul style="list-style-type: none">• Bronchospasm• Exacerbation of underlying chronic respiratory disease• Have a short-acting bronchodilator on hand as per AMMI document

Adverse reactions to antiviral therapy should be reported to Health Canada:

- By calling toll-free at 1-866-234-2345
- Online at www.healthcanada.gc.ca/medeffect
- By completing a Canada Vigilance Reporting Form which you can send by fax toll-free to 1-866-678-6789.

Appendix C: Check List for Suspect Respiratory Virus Infection Outbreak in LTCF

Checklist for Suspect Respiratory Virus infection Outbreak
<p>Suspect Respiratory Infection Outbreak: Two individuals with new onset respiratory symptoms, epidemiologically linked within the LTCF, in a 72-hour period.</p> <p>OR One laboratory confirmed case of a known respiratory pathogen in a resident with or without a second symptomatic resident.</p> <p><input type="checkbox"/> Report to Public Health by phone and obtain an Outbreak #.</p> <ul style="list-style-type: none"> • Ensure Outbreak # is put on all specimens collected for this outbreak. • Put Suspect Respiratory Virus Infection on the swab.
<p><input type="checkbox"/> Immediately implement additional precautions and outbreak control measures.</p> <ul style="list-style-type: none"> • Isolate symptomatic residents and place resident on Contact and Droplet Precautions • Place roommate on Contact and Droplet Precautions. Precautions can be removed after 48 hours if roommate remains asymptomatic. Testing is not required as long as roommate remains asymptomatic. Continue Active Screening of roommate until symptomatic resident is removed from precautions. • Enhanced resident screening. • Mobilize staffing resources. • Identify close contacts of symptomatic residents – See Table 7: Exposure Risk.
<p>Lab specimens (See Section 5.0)</p> <p><input type="checkbox"/> Collect viral nasopharyngeal (NP) swabs on first 3 symptomatic residents (check expiry dates) for influenza/RSV * and PCR COVID-19 testing. Even after residents test positive for influenza or RSV, continue to test all symptomatic residents for COVID-19.</p> <p><input type="checkbox"/> Correctly label swab and requisition with the same 2 unique identifiers (resident name/DOB plus one other - provincial health card number, medical record number or private insurance policy number).</p> <p><input type="checkbox"/> Include specimen source, collection date and time, whether specimen to be tested for Influenza/RSV and/or COVID-19 and Public Health Outbreak number. Include resident's Family Physician and/or medical director, as well as the Medical Officer of Health (MOH) name provided by Public Health.</p>
<p><input type="checkbox"/> Start a resident line list (Section 8.2)</p> <p><input type="checkbox"/> Continue to update line list with symptomatic residents and send to Public Health daily until otherwise instructed. Add only those who meet case definition and add new cases. Do not remove any names. Respiratory Virus Outbreak Line Listing for Long Term Care Residents.</p>

Appendix D: Lab Testing for COVID-19, Influenza and RSV

1. Completing the Requisition

Complete ALL required sections on paper requisitions or webform submissions.

- Ensure each specimen and requisition label indicates **the name of the facility involved and the outbreak number from PH**. If an outbreak number is not available, clearly indicate ‘**suspect viral respiratory infection**’ on the requisition.
- Ensure that each specimen label and requisition contain the same **exactly matching** two unique identifiers for the individual who has been tested.
- One identifier **MUST** be the individual’s legal name as well as the date of birth.
- The other identifier can be the individual’s provincial health card number/registered health care equivalent, hospital medical record number (MRN), passport number, or private insurance policy number.
- **Specimens lacking a second unique identifier or those with identifiers not exactly matching the requisition will NOT be processed.**
- Ensure the specimen label includes the collection date and time.
- Indicate the virus being tested for – COVID-19 only or COVID-19 and influenza/RSV.
- Additional tests beyond 3 residents for influenza/RSV will be at the discretion of Public Health.
- The ordering provider for the influenza/RSV and COVID-19 swab is the physician/nurse practitioner associated with the Long-Term Care facility.
- Results should be copied to the Medical Director/Facility designate and the individual’s family practitioner/nurse practitioner.

2. Shipping COVID-19 or Influenza/RSV Specimens

- Specimens must be collected and transported to the QEII laboratory or to the local/regional hospital laboratory as soon as possible and within 24 hours.
- Specimens must always remain at 4°C.
 - To facilitate priority testing at the laboratory, rack/batch samples as described below in the “**Off-Site COVID Sample Packaging for Transport**” policy) The LTCF name must be indicated on the outer bag surrounded by the rack/batch.
 - The samples in the batch should be clearly labelled with the name of the LTCF, the outbreak number, in addition to resident (and staff where applicable) identifiers.

3. Important Considerations

- Order viral collection kits from your local lab.

- **Regularly check the expiry dates on viral collection kits and set up a replacement plan before they expire.**
- Follow specimen collection instructions.
- Swabbing must continue for all symptomatic residents during a COVID-19 outbreak.
- Should the facility have challenges around obtaining testing materials or arranging testing of staff, contact Public Health.
- Symptomatic staff are encouraged to continue to use Point of Care Tests (POCT) to test for illness associated with COVID-19 and to test 48 hours after symptom onset. Testing is not required for asymptomatic individuals.

INSTRUCTIONS FOR THE COLLECTION OF NASOPHARYNGEAL SWABS FOR RESPIRATORY VIRUSES

Container		Store Before Collection	Store After Collection
Nasopharyngeal Swab Collection kit		Room Temperature	*Refrigerate

HOW TO COLLECT THE SAMPLE

Follow the 4Ds to obtain a quality swab [The 4Ds of NPS collection](#) or view online [Nasopharyngeal swabbing for respiratory viruses – the 4 D's \(vimeo.com\)](#)

1. Use the flexible swab supplied with the viral transport media ([Sample Collection kit poster](#)).
2. Explain the procedure to the patient.
3. When collecting the specimens, wear eye protection, gloves, gown and a mask. Change gloves and wash your hands between each patient.
4. If the patient has a lot of mucus in the nose, this can interfere with the collection of cells. Either ask the patient to use a tissue to gently clean out visible nasal mucus or clean the nostril yourself with a cotton swab (e.g. Q-Tip).
5. How to estimate the distance to the nasopharynx: prior to insertion, measure the distance from the corner of the nose to the front of the ear and insert the shaft **approximately 2/3 of this length (Depth)**.
6. Seat the patient comfortably. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier.
7. Insert the swab provided along the medial part of the septum, along the floor of the nose, until it reaches the posterior nares; gentle rotation of the swab may be helpful. (If resistance is encountered, try the other nostril; the patient may have a deviated septum.) **The Swab is directed toward the ear never upwards (Direction)**
8. Allow the swab to sit in place for 5-10 seconds. **(Duration)**
9. Rotate the swab several times to dislodge the columnar epithelial cells. *Note: Insertion of the swab usually induces a cough. (Dialing)*
10. Withdraw the swab and place it in the collection tube.
11. Place specimen in the refrigerator (4°C).
12. Remove gloves.
13. Wash hands.
14. Attach completed requisition.
15. Transport to the laboratory.



The 4 Ds:
Depth
Direction
Duration
Dialing

Image obtained from <http://www.nlm.nih.gov/medlineplus/ency/imagepages/9687.htm>

MAKE SURE TO LABEL THE SPECIMEN

Use the barcoded label if using the web registration form OR If using a standard requisition make sure the label includes:

- Patient's legal name and date of birth
- Patient's Health Card Number or another unique identifier (as determined by healthcare provider)


USING STANDARD REQUISITION, MAKE SURE THE REQUISITION FORM INCLUDES

- Patient's legal name
- Patient's Health Card Number or another unique identifier (as determined by healthcare provider)
- Date and time of collection
- Patient's date of birth
- Physicians full name, address and physician registration number

Note: If the specimen and requisition are not labelled correctly, the specimen will not be processed.

DELIVER THE SPECIMEN

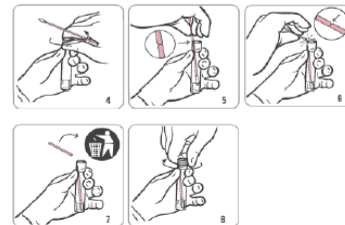
Delivery of sample(s) to the regional laboratory should occur within 4 hours from time of collection. *If transportation is delayed beyond 4 hours, the specimens should be refrigerated and transported to the laboratory using a cooler with ice packs. Transport logistics needs to be maximized to ensure that specimens are received by the QEII laboratory within 24 hours.

INSTRUCTIONS FOR THE ALTERNATE COLLECTION OF THROAT AND NARES SWABS FOR COVID-19								
Container		THROAT/NARES SWABS	Store Before Collection	Store After Collection				
<ul style="list-style-type: none"> • Tube colour, size, and fluid may vary • Use tube packaged with swab • Break off swab at snap line, if applicable • Ensure cap is twisted on firmly, but do not overtighten • Maintain at 4°C and transport to the laboratory as soon as possible <p><small>* NOTE: For rapid testing with GeneXpert®, do not use Aptima transport medium</small></p>		<table border="1"> <thead> <tr> <th>Design</th> <th>Collection Site</th> </tr> </thead> <tbody> <tr> <td>Thick swab Rigid shaft</td> <td>Posterior oropharynx and anterior nares</td> </tr> </tbody> </table> 	Design	Collection Site	Thick swab Rigid shaft	Posterior oropharynx and anterior nares	Room Temperature	*Refrigerate
Design	Collection Site							
Thick swab Rigid shaft	Posterior oropharynx and anterior nares							

DO NOT USE this swab for Nasopharyngeal collection. It is larger and more rigid than the NP swab

HOW TO COLLECT THE SAMPLE (see [video link](#))

1. Explain the procedure to the patient.
2. When collecting the specimen, wear eye protection, gown, gloves, and a mask. Change gloves and wash your hands between each patient. Partially open the swab package and remove the swab. Do not touch the soft tip or lay the swab down. Have the patient tilt their head backwards, open their mouth, and stick out their tongue. Use a tongue depressor to hold the tongue in place.
3. Hold the swab, placing the thumb and forefinger in the middle of the shaft covering the black score line. Do not hold the shaft below the score line.
4. Without touching the sides of the mouth or tongue, use the swab to swab the posterior **oropharynx**. Using the same swab ask the patient to tilt his/her head back. Insert the swab approximately **1-2 cm into each nostril**. Rotate the swab inside of the nostril for 3 seconds, covering all surfaces.
5. While holding the swab in your hand, unscrew the tube cap. Do not spill the tube contents. Immediately place the swab into the transport tube so the black score line with the top edge of the tube and carefully break the shaft. The swab will drop to the bottom of the vial. If your tube has a foil cap, **DO NOT FORCE THE SWAB THROUGH OR DO NOT PUNCTURE THE FOIL**.
6. Discard the top portion of the shaft. Tightly screw the cap onto the tube.
7. Refrigerate immediately.
8. Remove gloves and wash hands.
10. Attach completed requisition and transport to the laboratory.



MAKE SURE TO LABEL THE SPECIMEN

Use the barcoded label if using the web registration form OR If using a standard requisition make sure the label includes:

- Patient's legal name and date of birth
- Patient's Health Card Number or another unique identifier (as determined by healthcare provider)

USING STANDARD REQUISITION, MAKE SURE THE REQUISITION FORM INCLUDES

- Patient's legal name
- Patient's Health Card Number or another unique identifier (as determined by healthcare provider)
- Date and time of collection
- Patient's date of birth
- Physicians full name, address and physician registration number

Note: If the specimen and requisition are not labelled correctly, the specimen will not be processed.

DELIVER THE SPECIMEN

Delivery of sample(s) to the regional laboratory should occur within 4 hours from time of collection. *If transportation is delayed beyond 4 hours, the specimens should be refrigerated and transported to the laboratory using a cooler with ice packs. Transport logistics needs to be maximized to ensure that specimens are received by the QEII laboratory within 24 hours.

Appendix E: Letters Regarding Influenza

Letter to LTCF Director of Care/Medical Director

Date _____

Re: Antiviral Medication for the Control of an Influenza Outbreak at _____

Dear Director of Care/Medical Director:

Influenza has now been confirmed as the cause of the outbreak of respiratory illness at your facility. This letter is intended to provide you with information and guidance around the use of antivirals for the prophylaxis or treatment of your residents during the current outbreak.

In Canada, two neuraminidase inhibitors (Oseltamivir and Zanamivir) are licensed for use as treatment and prophylaxis against influenza. Over the past few years, the predominant circulating strains of influenza have been sensitive to Oseltamivir and Zanamivir, but it is important to be aware of the potential for antiviral resistance to occur. The choice of drug depends on the resistance patterns of the type of influenza detected in your facility. The effectiveness of antivirals is determined each season and recommendations may change as new information becomes available.

A. Chemoprophylaxis:

It is recommended that residents who have not been affected by the current outbreak of influenza-like-illness (ILI) be started on an antiviral medication as soon as possible.

(ILI definition: Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, and prostration which is likely due to influenza. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent. Acute onset is defined as a distinct change from normal status to respiratory illness over 1-3 days, based on clinical judgment).

Antiviral prophylaxis should be given to residents whether vaccinated previously or not. In outbreak control, antiviral prophylaxis should be continued until the outbreak is over, usually 1 to 2 weeks (7 days after the onset of symptoms of the last case). If residents develop influenza-like symptoms while on prophylaxis the dosage should be adjusted to the higher antiviral treatment dose of the same medication.

The decision on whether to place individuals who have already had ILI this season on prophylaxis needs to be done on a case-by-case assessment of the risks of influenza (likelihood that the ILI was true influenza plus risk of severe influenza complications) vs. the risks of antivirals.

B. Treatment:

It is recommended that residents who have been affected by the current outbreak of influenza illness and who are within 48 hours of onset of their illness be started on antiviral medication as soon as possible. Antiviral medication is less likely to benefit residents who have been ill for more than 48 hours. Antiviral treatment is continued for a maximum of 5 days. Unless contraindicated by specific clinical circumstances, the 5-day antiviral treatment course should be completed even if residents are started on antibiotic treatment.

Guidance around the precautions and dosage requirements related to prescribing antiviral medication for chemoprophylaxis or treatment are outlined in [Appendix B: Antivirals for Influenza Prophylaxis and Treatment](#)

Drug recommended (*check all that apply*)

Oseltamivir Zanamivir

Zanamivir recommended due to:

Lab confirmed influenza strain Clinical information ? Resistant

Pharmacy supplier (*name and phone, if available*)

If you have any questions or concerns, please call:

Sincerely,

Public Health Nurse

Letter to Pharmacy and Pharmacare

Pharmacare fax: 902-496-4440

Pharmacare phone: 902-429-6565 or 1-800-544-6191

Name of Pharmacy: _____

Pharmacy Phone: _____

Date _____

Re: Antiviral Medication for the Control of an Influenza Outbreak

Influenza has now been confirmed as the cause of the outbreak of respiratory illness at this facility _____.

In Canada, two neuraminidase inhibitors (oseltamivir and zanamivir) are licensed for use as treatment and prophylaxis against influenza. Over the past few years, the predominant circulating strains of influenza have been sensitive to Oseltamivir and Zanamivir, but it is important to be aware of the potential for antiviral resistance to occur. The choice of drug depends on the resistance patterns of the type of influenza detected in the facility. The effectiveness of antivirals is determined each season and recommendations may change as new information becomes available.

This letter is intended to provide you with the recommendations that were given to the LTCF facility around the use of antivirals for the prophylaxis or treatment of their residents during the current outbreak.

A. Chemoprophylaxis:

It has been recommended that residents who have not been affected by the current outbreak of influenza-like illness be started on an antiviral medication as soon as possible. For outbreak control, antiviral prophylaxis is to be continued until the outbreak is over, usually 1 to 2 weeks (7 days after the onset of symptoms of the last case). If residents develop influenza-like symptoms while on prophylaxis, they will be changed to the treatment dose of the same antiviral.

B. Treatment:

It has been recommended that residents who have been affected by the current outbreak of influenza illness and who are within 48 hours of onset of their illness be started on antiviral medication as soon as possible. Antiviral medication is less likely to benefit residents who have been ill for more than 48 hours. Treatment should be continued for a maximum of 5 days.

Drug recommended:

Oseltamivir Zanamivir

Zanamivir recommended due to: Lab Confirmed Influenza Clinical information ? Resistant

Sincerely,

Public Health Nurse

Letter Confirming the Outbreak Is Over

RE: END OF INFLUENZA OUTBREAK AT _____

Date: _____

Dear Director of Care/Medical Director:

It has now been 7 days since the onset of the last case of influenza-like illness in the residents of your facility.

Therefore, the influenza outbreak can be declared over and outbreak control measures, including antiviral prophylaxis, can be discontinued.

Residents who have been placed on antiviral medication for treatment should remain on it for a maximum of 5 days.

Please do not hesitate to call me at XXXX if you have any questions.

Sincerely,

Medical Officer of Health

Appendix F: Respiratory Virus Outbreak Line Listing for Long Term Care Residents

[Respiratory Virus Outbreak Line Listing for Long Term Care Residents](#)

References

Aoki FY, Allen UD, Mubareka S, Papenburg J, Stiver HG, Evans GA. Use of antiviral drugs for seasonal influenza: Foundation document for practitioners-Update 2019. JAMMI 4(2) <https://jammi.utpjournals.press/doi/pdf/10.3138/jammi.2019.02.08>

Aoki FY, et al. 2021-2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada: <https://pubmed.ncbi.nlm.nih.gov/36340849/>

[Canadian Flu Watch Report Week 30-34](#)

Cohen et al. (2022). Risk of persistent and new clinical sequelae among adults aged 65 years and older during the post-acute phase of SARS-CoV-2 infection: retrospective cohort study. BMJ Retrieved September 11, 2023, from doi: 10.1136/bmj-2021-068414

Moussa, M.B, Buckrell, S., Rahal, A, Schmidt, K., Lee, L, Bastien, N et al. (January 2023). FluWatch Midseason Report 2022-2023. CCDR, 49.1 <https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2023-49/issue-1-january-2023/fluwatch-mid-season-report-2022-2023.html>

Docherty, A.B. Harrison, E.M. Green, C.A. Hardwick, H.E., Pius, R., Norman, L et al. (2020). Features of 20133 UK patients in hospital with COVID-19 using ISARIC WHO clinical characterisation protocol: Prospective observational cohort study. British Medical Journal. <https://doi.org/10.1136/bmj.m1985>

Information for Health Care Providers (COVID-19) <https://novascotia.ca/dhw/CDPC/documents/Information-for-Health-Care-Professionals-COVID-19-Vaccine-Program.pdf>

National Advisory Committee on Immunization Statement on Seasonal Influenza Vaccine for 2023-2024. <https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2023-2024.html>

National Advisory Committee on Immunization. Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2023-2024. <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-10-influenza-vaccine.html>

National Collaborating Centre for Infectious Diseases (retrieved Sept 4, 2022). <https://nccid.ca/debrief/respiratory-syncytial-virus-rsv/>

Prendiki, V., Tiseo, G. & Falcone, M. (2022). Caring for older adults during the COVID-19 pandemic. Clinical Microbiology and Infection 28, p 785-791. Retrieved September 11, 2023. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8912971/pdf/main.pdf>

Publicly Funded Seasonal Inactivated Influenza Vaccine Information for Health Care Providers 2022-2023. <https://novascotia.ca/dhw/cdpc/documents/Publicly-Funded-Seasonal-Inactivated-Influenza-Vaccine-Information.pdf>

[Nova Scotia Respiratory Watch Week 30-24\)](#)

Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Government of Canada. Retrieved October 3, 2022. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections/part-a.html>

Uyeki, T.M, Fry, A.M, Gravenstein, S., Hayden, F.G., Harper, J., Hirshon, M. et al. Clinical Practice Guidelines by the Infectious Diseases Society of America on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal

Influenza. (15 March 2019). *Clinical Infectious Diseases* 68:6 p. e1-47.

<https://www.idsociety.org/practice-guideline/influenza/>

Watson, A. & Wilkinson, T.M.A. (2021) Respiratory viral infections in the elderly. *Therapeutic Advances in Respiratory Disease* 15: p 1-17. Retrieved July 20, 2022.

<https://pubmed.ncbi.nlm.nih.gov/33749408/>