

2024-2025

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

Revised January 2025

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

This newly revised 2024-2025 document will remain evergreen, and revisions will be summarized here. Ensure you use the most recent version.

Notable changes from 2023-24 include:

- Isolation period for LTCF residents who refuse to be tested for a respiratory pathogen.
- Treatments for COVID-19
- Information on Respiratory Syncytial Virus (RSV) vaccine and Pneumococcal vaccines
- Staff time off work reduced to 5 days for COVID-19 then work isolation
- Clarification on how to calculate resident isolation period
- Removal of isolation of asymptomatic roommate
- Point of Care Testing/Rapid Testing
- Influenza antivirals

Important Contact Information

Contact	Hours
Public Health	<p>Monday to Friday: 8:30 am - 4:30 pm <u>Zonal Nova Scotia Public Health Offices</u></p> <p>On weekends and holidays: Public Health Nurse for Zone through Central Zone Locating 1-902-473-2222</p>
Infection Prevention and Control	<p>Monday to Friday 9 am to 5 pm 1-833-736-0880 or IPAC.longtermcare@nshealth.ca</p>
Occupational Health Safety and Wellness	<p>Monday to Friday 9 am to 5 pm OHSW.ContCardID@nshealth.ca</p>
COVID-19 testing	<p>Monday to Friday 9 am to 5 pm https://covidbooking.nshealth.ca/qmaticwebbooking/#/</p>
COVID-19 Report and Support	<p>Monday to Friday 9 am to 5 pm https://www.nshealth.ca/reportandsupport</p>
COVID-19 therapeutics	<p>Available 7 days a week 9 am to 5 pm The Non-Severe COVID-19 Treatment Team 1-833-714-2784 to assess residents for COVID -19 medication</p>
COVID-19 lab results	<p>Monday to Friday 9 am to 5 pm https://c19results.nshealth.ca/ Note: It may take up to 72 hours for results to be posted. If unable to obtain results, LTCF can access results by contacting Public Health in their zone.</p>
Department of Seniors and Long-Term Care	<p>LTC@novascotia.ca</p>

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.

It is intended for healthcare professionals and administrators 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).

Facilities should use this document to develop policies, procedures, and plans to prevent and manage viral respiratory infections and outbreaks in advance of their occurrence.

LTCF need to:

- Routinely observe for early signs and symptoms of viral respiratory infections in residents and staff **paying particular attention during respiratory season or when there are a lot of respiratory viruses circulating within the community.**
- Be responsible for timely reporting of respiratory disease outbreaks to public health according to It's the Law.

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.

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 outcomes.

All other DCS licensed facilities (including DCS licensed small option comes, 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 Viral Respiratory Infections (VRIs) due to age, impaired immune defences, 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. VRIs can reduce a LTCF resident's ability to carry out everyday activities, exacerbate chronic diseases, and weaken overall health status. Respiratory infections in residents of LTCFs are a significant cause of hospitalization and death (Andrews et al., 2024, Watson & Wilkinson, 2021).

LTCF staff need to be vigilant to prevent the spread of viral respiratory pathogens within their facility. Respiratory infections are generally transmitted by droplets or aerosols in the air or that have contaminated the environment.

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.

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 might 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.

3.0 Summary of Respiratory Virus Infections

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.

Influenza, COVID-19, and RSV infections are highlighted in this document as they have been shown to result in significant morbidity and mortality in the elderly.

3.1 Influenza

Seasonal influenza is caused by influenza A and B viruses and presents an ongoing disease burden in Canada during the fall and winter months. The amount of influenza-associated illness and death vary annually based on factors such as the circulating 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.

Nova Scotians aged 65 years and older were more likely to be hospitalized, be admitted to ICU die from influenza ([Nova Scotia Respiratory Watch \(week 30-34\)](#)). Influenza can cause significant functional decline in older adults, with many becoming temporarily bedbound or housebound, and worsen conditions like heart and lung disease (Andrew, 2024; Watson & Wilkinson, 2021). For, a small subset of seniors admitted to hospital the functional loss persists and is catastrophic. Influenza and pneumococcal immunization of LTCF residents is critical.

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.

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, Su & Jin, 2023).

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 anemia.

An updated COVID-19 KP.2 vaccine formulation is available in the fall of 2024. Residents who received their last COVID-19 immunization 3 months ago or had a known (POCT or PCR test) COVID-19 infection will be eligible and should receive the vaccine as soon as it (positive POCT or PCR test) is available.

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

3.3 Respiratory syncytial virus (RSV)

RSV is a common seasonal virus that causes respiratory tract infections. 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.

In November 2024 a one dose RSV vaccine will be available individuals 60 years and older in LTCF and in hospital awaiting LTCF placement for the first time. As new residents enter the LTCF, they will become eligible for this vaccine.

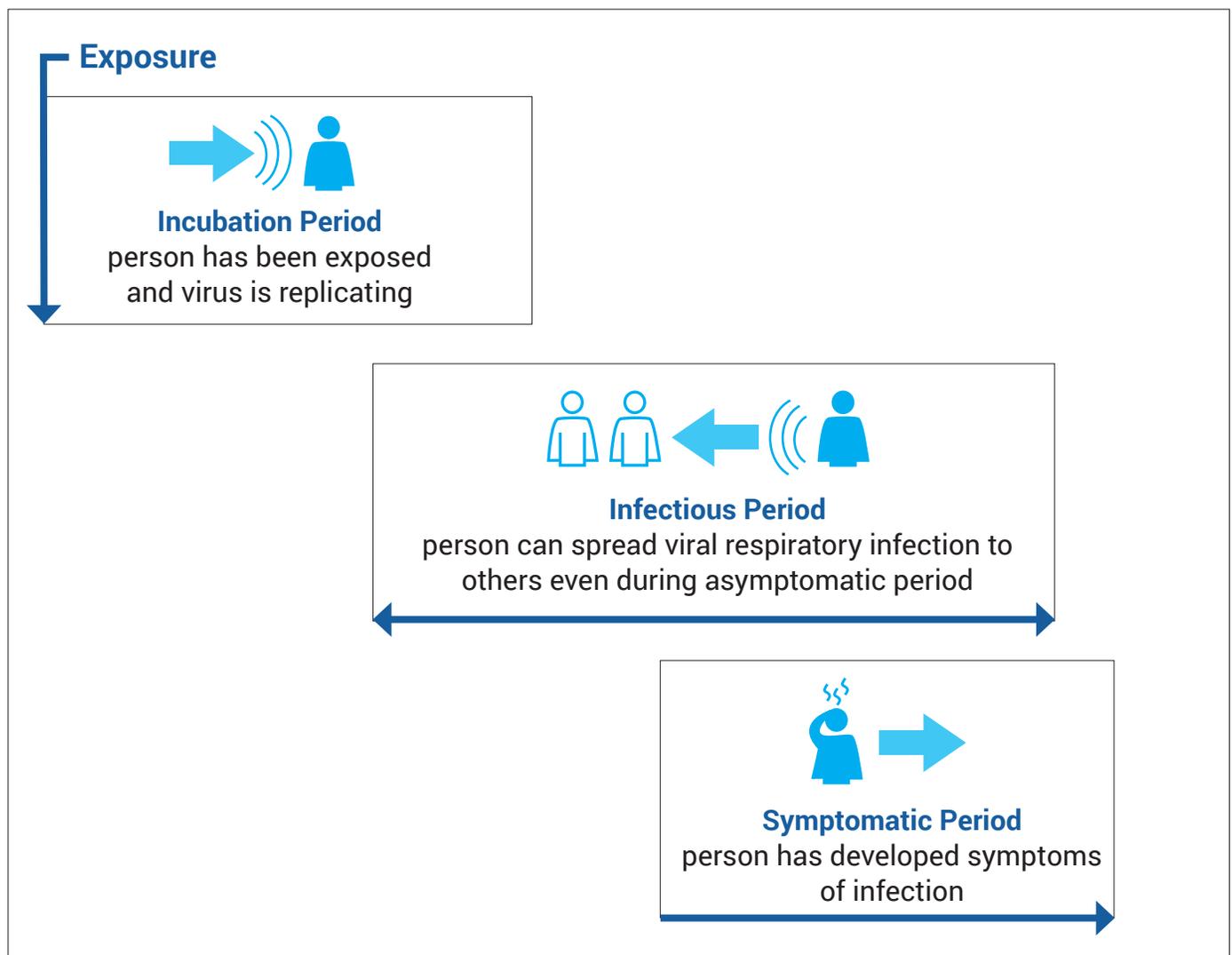
3.4 Other Respiratory Viruses

Other respiratory viruses including human metapneumovirus (HMPV); human rhinovirus (HRV), and human parainfluenza virus (HPIV) can infect the elderly. 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 does not have symptoms. Towards the end of the incubation period, they become infectious (infectious period) 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 less likely to infect others.

Figure 1: Timing of Incubation, Infectious, Symptomatic Periods



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 using facility-specific plans. Facility plans should include respiratory infection prevention and control, and be communicated to all staff, physicians, designated caregivers (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 5](#)) 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 1: LTCF Policy and Procedure Development in advance of an outbreak:

<input type="checkbox"/>	Review 2023-2024 A Guide to Respiratory Virus Infection and Outbreak Management in Long-Term Care Facilities.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Ensure that facility infection prevention and control resources are up-to-date and stored in a place easily accessed by staff: <ul style="list-style-type: none"> • Tools • Posters • Line Lists
<input type="checkbox"/>	Develop policies and procedures for environmental management of respiratory viruses. <ul style="list-style-type: none"> • 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
<input type="checkbox"/>	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.
<input type="checkbox"/>	Ensure a copy of floor plans with resident room numbers is available to send to Public Health for outbreak control.
<input type="checkbox"/>	Work with the Department of Seniors and Long-Term Care and related partners Emergency Management Office (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 2: Readiness for Respiratory Virus Infection Prevention and Control

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"/>	Conduct regular N95 mask fit testing for staff.
<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 healthcare 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, as well as resident serum creatinine measured within the last 6 months, height, and weight recorded in chart (Appendix E).
<input type="checkbox"/>	Have contact information and procedure for staff to access Non-Severe COVID-19 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 on units.
<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 3: 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:	
<input type="checkbox"/>	Educate staff on how to conduct a Point of Care Risk Assessment (PCRA) . ipac.longtermcare@nshealth.ca .
<input type="checkbox"/>	Routine precautions, including hand hygiene and respiratory hygiene.
<input type="checkbox"/>	Additional precautions: Droplet, Contact, and Airborne Precautions.
<input type="checkbox"/>	Safely putting on (donning) and taking off (doffing) Personal Protective Equipment (PPE), including buddy system.
<input type="checkbox"/>	Use of universal masking (UM) during outbreaks.
<input type="checkbox"/>	Reprocessing instructions for reusable PPE (e.g. face shields, goggles).
<input type="checkbox"/>	Educate staff on proper specimen collection technique for obtaining nasopharyngeal swabs (direction, depth, duration and dialing). See video: https://vimeo.com/516853275/c67017fd3a

Table 4: Resident, Visitor, Family, Designated Caregiver and Volunteer Education on Public Health Measures

<input type="checkbox"/>	Stay home when sick.
<input type="checkbox"/>	Frequent/appropriate handwashing and use of hand sanitizer.
<input type="checkbox"/>	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.).
<input type="checkbox"/>	Masking recommendations where appropriate.
<input type="checkbox"/>	Physical distancing when appropriate and feasible.

Table 5: Education on Vaccine Management and Delivery

<input type="checkbox"/>	Proper vaccine ordering, storage, and monitoring vaccine fridge temperatures.
<input type="checkbox"/>	Appropriate vaccine administration procedures.
<input type="checkbox"/>	Ensure staff understand how to utilize CAN Immunize to document resident and staff immunizations against Influenza and COVID-19.
<input type="checkbox"/>	Document staff influenza and COVID-19 vaccine status.
<input type="checkbox"/>	Communicate resident and staff influenza and COVID-19 immunization rates to regulatory authorities as required, as well as to staff, residents, and families.

Table 6: Communication

<input type="checkbox"/>	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.
<input type="checkbox"/>	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.

4.2 Immunization

COVID-19, influenza, RSV and pneumococcal vaccines can be co-administered.

For more information on administering influenza, COVID-19 and RSV vaccination programs see: [Publicly Funded Respiratory Virus Immunizations Information for Health Care Providers 2024-25](#)

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.

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.

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

All Nova Scotia residents **65 years and older** will be offered an adjuvanted trivalent influenza vaccine (Fluad) that provides better protection for individuals 65 years and older than standard dose influenza vaccine. If a substitute decision maker or resident 65 years and older refuses the adjuvanted vaccine, they should be offered standard dose quadrivalent influenza (IIV4-SD) 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. NACI recommends, 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.

4.2.2 COVID-19 Immunization

For 2024-25 an updated KP.2 mRNA formulation will be available and there is no preferential recommendation for any vaccine. Novavax will not be available this year.

Individuals 6 months and older who previously received COVID-19 vaccine can receive the updated formulation if it has been at least 3 months after their last dose or a known (positive POCT or PCR test) COVID-19 infection.

LTCF who experience a COVID-19 outbreak should immunize residents who did not become ill against COVID-19 after the outbreak subsides.

Immunization is particularly important for those at increased risk of COVID-19 infection or severe disease. Within the LTCF setting, these groups include:

- Adults 65 years and older.
- People living in long-term care or other congregate living settings including chronic care homes.
- People who provide essential community services.

Staff COVID-19 Immunization

People who work or volunteer in continuing care are encouraged to receive COVID-19 vaccinations. Vaccination remains one of the best ways for people to protect themselves, co-workers, and vulnerable residents/clients from severe disease, hospitalization, and death.

Employers and operators of high-risk settings are responsible for setting immunization policies for COVID-19, including whether employees, outside service providers and volunteers need to be vaccinated.

4.2.3 Respiratory Syncytial Virus (RSV) vaccine

Adults 60 years of age and older who are residents of nursing homes and other chronic care facilities are among those at highest risk for severe outcomes from RSV disease.

For the 2024-25 respiratory season, individuals 60 years and older, living in Long-Term Care facilities or in hospital awaiting long-term care placement are eligible to receive one dose of RSV vaccine. RSV vaccine is not given annually.

Additional doses will be available on a monthly basis for individuals who move into the facility.

4.2.4 Pneumococcal vaccines

Nova Scotia residents 65 years of age and older and others receive Pneu-C-20 according to the Publicly Funded Vaccine Eligibility for Individuals at High Risk of Acquiring Vaccine Preventable Diseases. Individuals 65 years and older who received Pneumococcal 23 vaccine **are not eligible** to receive one dose of Pneu-C-20 unless they received it because of a high-risk condition.

If the individual does not have record of receiving a pneumococcal vaccine, then the immunization provider should follow the Immunization of persons with inadequate immunization records: Canadian Immunization Guide.

Pneumococcal vaccines may be given, regardless of possible previous receipt of the vaccines, as adverse events associated with repeated immunization have not been demonstrated.

4.3 Routine Practices

Routine Practices refer to minimum practices that should be used with all clients, patients or residents to reduce the risk of transmitting infections. These should be used in addition to Additional Precautions, which refer to specific actions that should be taken with individuals that are at risk of transmitting or acquiring disease.

4.3.1 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), the facility, existing engineering and administrative controls and availability and the use of PPE.

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

Universal masking (masking all the time while in the facility) by staff and volunteers, and residents where possible, during a period of respiratory virus activity is a proven tool to help stop the spread of infection. For long-term care settings masking continues to be recommended, but not required unless required by the facility. 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.

IPAC/Public Health will continue to recommend universal masking when deemed necessary as a control measure during facility outbreaks. Once PH 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.

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.

More information on masking can be found at: [Respiratory Virus Masking Guidance](#)

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.

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. The diagnosis of a respiratory virus infection should be considered in any older adult **with a change in baseline health status**, 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

When LTCF staff notice that a resident has a change from their baseline health status that may be the result of a respiratory virus, isolation precautions and testing should be promptly initiated, with ongoing symptom monitoring documented at least once daily while ill.

Temperature check is only required when clinical assessment indicates.

The goal is to have a **low threshold** for detection of viral respiratory infections. Widespread asymptomatic testing is no longer recommended.

If any one of the new, worsening or unexplained¹ symptoms is present, follow the steps below:

- Cough
- Fever (temperature of 37.8°C or greater) chills, sweats²
- 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.

¹Residents 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.

²Note that elderly individuals may not show signs of fever

5.1.1 Management Steps for Suspected Viral Respiratory Illness

Step 1: Immediately place symptomatic resident on Droplet and Contact Precautions.

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

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 subsequent symptomatic residents. Point of care tests (POCT) are less sensitive and may take longer to become positive in someone infected with SARS-CoV-2. Contacts of the resident do not have to be tested unless they develop symptoms.

If a symptomatic resident refuses a test then staff should assume they are infected with the **respiratory pathogen identified in the LTCF and place them on precautions for the length of time for that respiratory pathogen.** See [Table 8](#).

Step 3: Report to Public Health and obtain an Outbreak # if there is

- a **Suspect Respiratory Virus Infection Outbreak**
- or a **Confirmed Unidentified Pathogen Outbreak** (3 symptomatic within 4 days (see definitions in [Section 8.1](#)).

Step 4: Ensure Outbreak # is on all specimens collected for this suspected or confirmed 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. 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.

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

5.3 COVID-19

5.3.1 Access and Information about POCT tests for LTCF staff and residents.

Nova Scotia Health will be continuing to offer PCR and COVID-19 rapid testing to Long-term Care Facilities, Home Care Agencies, and Equipment Providers. Beginning October 7, 2024, an updated supply of COVID-19 rapid antigen products will be available. Orders for these tests can be placed [here](#). Tests should be delivered within 7 business days of ordering.

Two types of tests are available. For healthcare staff, homecare staff, and equipment providers, you may request BTNX boxes of 25 tests (long swab). For long-term care residents, you may request Swift Swab boxes of 2 tests (short swab). Please note that the test type may be substituted based on available supply. You can request up to 200 tests for staff and (if applicable) 200 tests for residents in each order. You can place additional orders in the future as needed.

BTNX and Swift Swab tests have different swab lengths. For a long swab (BTNX), a throat and nares swab are preferred to enhance the effectiveness of the specimen collection. For a short swab (Swift Swab), only a nares swab can be used due to risk of choking.

Please check the expiry date on the tests you have. If your test is expired, it should not be used. Expired tests can be disposed of per your local waste management guidelines. In long-term care, positive rapid antigen tests should continue to be reported to <https://c19hc.nshealth.ca/self-report/>

To optimize rapid test inventory, we encourage:

- Do not repeat the rapid test if it is positive.
- If the test is negative, test again after 48 hours to be sure.
- Do not continue to test until the test is negative.

General information and instructions for rapid testing can be found [here](#). If you have questions about rapid test use or ordering, please contact communityCOVIDtesting@nshealth.ca

5.3.2 Staff Testing for COVID-19

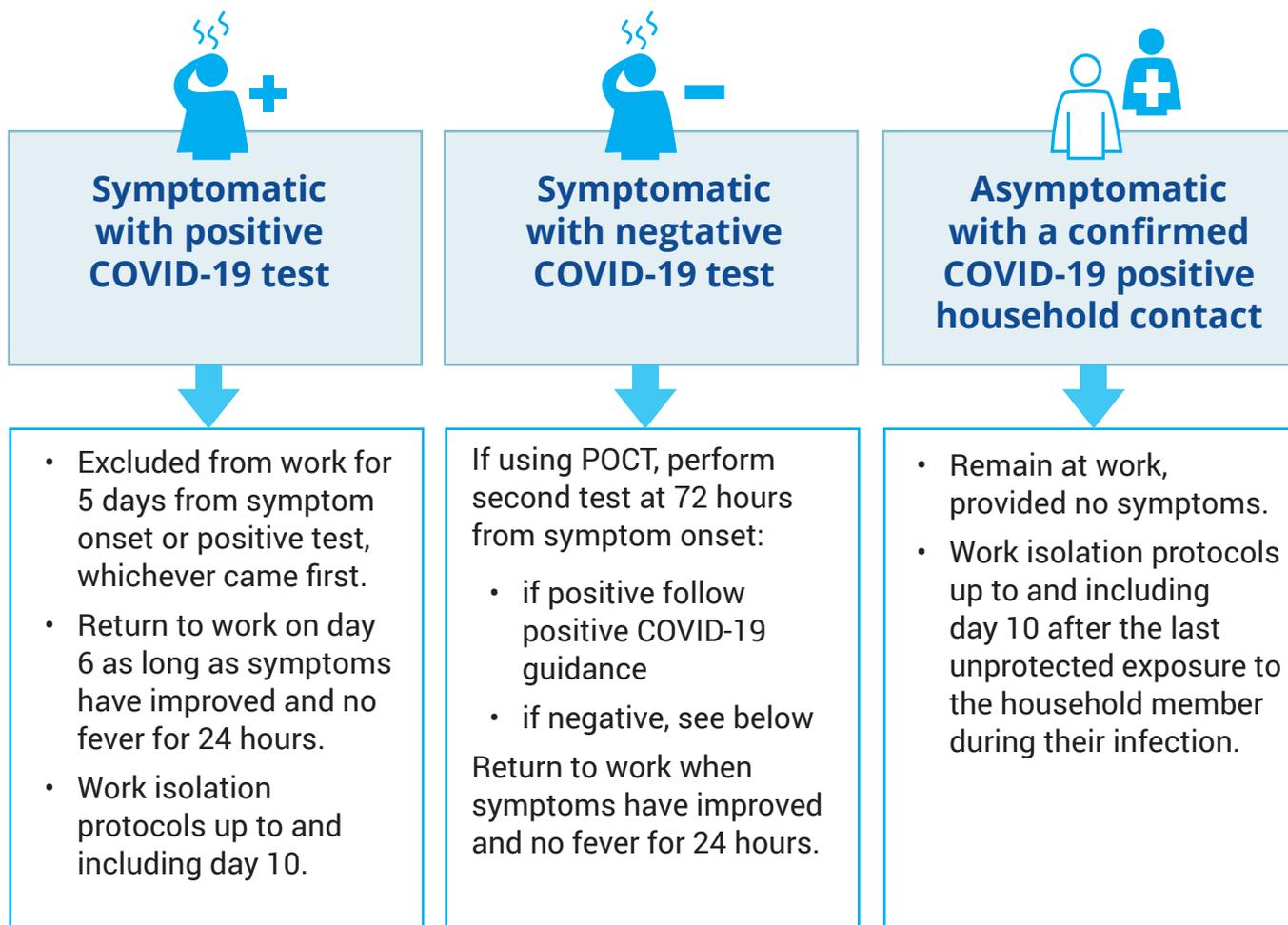
Staff with symptoms of viral respiratory illness will be directed to choose a testing stream, either PCR (preferred) or POCT as per diagram above. The first test must be conducted **at least 48 hours following initial symptom onset** to be considered valid. **Ensure the POCT test has not expired before using the test.**

If a PCR test is required, staff can follow the Nova Scotia Health link [COVID-19 Appointment Testing](#). Switching from PCR to POCT or vice versa is not recommended and does not change guidance based on initial test results. PCR testing remains the preferred method of testing when available.

Figure 2: Staff-COVID-19 Return to Work Guidance

If symptomatic, test for COVID-19 at 48 hours from symptom onset using either a PCR or Point of Care Test (POCT, e.g., rapid test).

Switching from PCR to POCT or vice versa is not recommended and does not change guidance based on initial test results



Work Isolation Protocol:

- Zero unprotected interactions with others (no eating or drinking in shared spaces)
- Masks MUST be worn AT ALL TIMES unless alone in a room
- Self-monitor for symptoms of COVID-19
- Additional personal protective equipment while in the workplace, such as gloves and eye protection based on the patient point of care risk assessment
- Frequent hand hygiene

Updated May 21, 2024

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 negative 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 test follow [Figure 2](#) and perform repeat testing 72 hours from symptom onset. Please contact OHSW as needed if unsure of other testing requirements.

5.4 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 9](#)).

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 9](#) 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.

5.4.1 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 according to [Figure 2](#) up to and including the 10th day 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 10 days after the last known unprotected contact with the positive case of COVID-19.

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

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 and go home. Essential workers should access COVID-19 testing by doing a rapid POCT test or accessing [COVID-19 testing](#)

This group 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.

If notified of a positive COVID-19 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

6.1 Respiratory Virus Testing

6.1.1 COVID-19 testing and managing results.

Test all symptomatic residents for COVID-19, (with or without influenza/RSV testing) ([Table 7](#)) so that they can receive COVID-19 therapeutics if eligible. 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.

See [Appendix D](#) for more information on therapeutics.

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: 8:30 am - 4:30 pm
notify Public Health in your zone.

Weekdays and holidays
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 by phone.

The Resident Line List is submitted to Public Health daily. See [Section 8.2](#) for detailed information about Line Lists. [Respiratory Virus Outbreak Line Listing for Long Term Care Residents](#)

If criteria are met for a confirmed COVID 19 outbreak, 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 (see [Figure 3](#)). The LTCF needs to continue to follow Droplet/Contact precautions for a symptomatic resident with a negative POCT test.

A newly symptomatic individual who tested positive for COVID-19 in the **previous 90 days** is less likely to have reinfection with COVID-19. PCR testing for COVID-19 is not recommended 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 the first 3 newly symptomatic LTCF residents for RSV/influenza during the initial stages of an unknown viral pathogen outbreak. Influenza typing to identify Influenza A or B is routinely conducted by the lab.

Additional testing of residents is 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 potential 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 as repeat specimens from an institution with confirmed influenza will not be processed within a two-week period unless directed by Public Health.

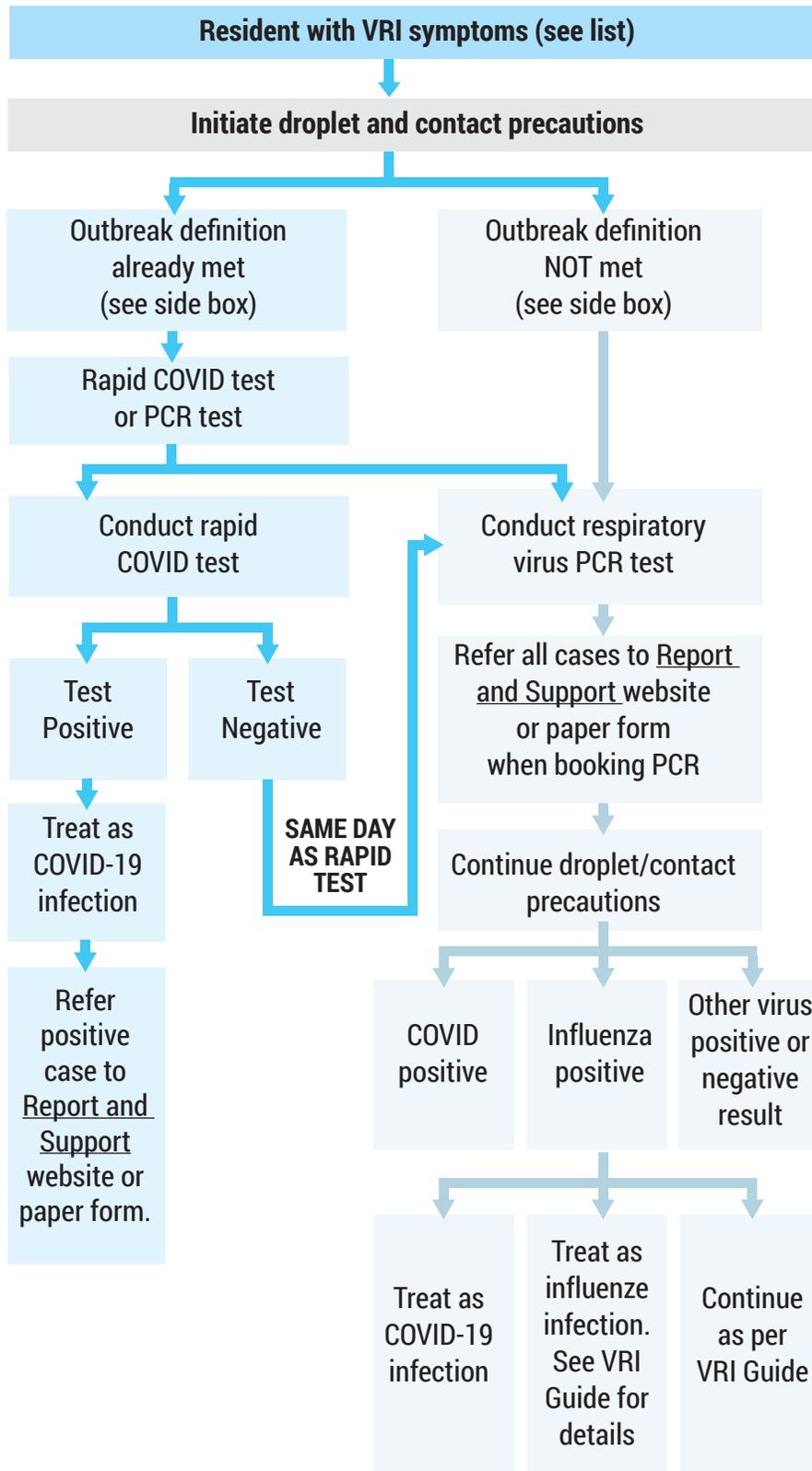
Ongoing testing is also not required in the case of a confirmed RSV outbreak.

POCT tests are not suitable for influenza or RSV testing.

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

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

Figure 3: 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 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 details, please refer to Section 8.1 of the VRI Guide

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

6.2 Testing Best Practices

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

6.2.1 Viral Collection Kits

- The standard viral collection kits contain two swabs. The kit contains a smaller caliber, more flexible swab with a flocced head should be used when collecting a nasopharyngeal sample.
- The larger more rigid more swab can be used when a posterior oropharynx and anterior nares (throat/nares) specimen is preferred.
- 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 F](#) 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 are 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.

Table 7: 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 confirmed influenza or RSV outbreak, no additional testing (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.* 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 	
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*

6.2.3 Test result inquiry

- 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.
- If unable to obtain results, LTCF can obtain them by calling 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/>

Table 8: Managing Resident Influenza/RSV and/or COVID-19 Test Results.

See attached page for modifications.

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 (any virus)	Symptomatic or asymptomatic	Maintain Droplet and Contact Precautions. (See Section 7.0)
Resident	Refuses testing	Symptomatic	Maintain Droplet and Contact Precautions for the same length of time as the pathogen that is prevalent in the LTCF.
Roomate	No testing as long as remains asymptomatic	Asymptomatic	Continue Active Screening twice per day until symptomatic roommate is off precautions.

Table 9: Guidance for DCGs, Visitors, Volunteers COVID-19 Test Results/Symptoms

Affected individual	COVID-19 PCR or POCT test result	Clinical status	Guidance
DCGs/ Visitors/ Volunteers	Positive	Symptomatic	Exclude from LTCF for 5 days from symptom onset or positive test result, whichever is longer. Medical masking mandatory at all times between day 6 – day 10
DCGs/ Visitors/ Volunteers	Negative	Symptomatic	Exclude from LTCF until improving for 24 hours and with no fever.

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.
- 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.
- 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** (toll-free) or IPAC.longtermcare@nshealth.ca.

8.0 Outbreak Management

8.1 Definitions

Communicable disease outbreaks (respiratory, gastrointestinal, or other infections) in LTCFs are reportable to Nova Scotia Health, Public Health^[1]. 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.

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.

According to Nova Scotia Respiratory Watch during the 2023-24 respiratory period there were:

- 32 confirmed LTCF RSV outbreaks.
- 47 confirmed LTCF Influenza outbreaks
- 215 confirmed LTCF COVID-19 outbreaks

The number of these outbreaks reinforce the need for robust outbreak response and updated immunizations for all residents against these pathogens.

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

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

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

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 Health.

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.

RSV: Once the **first resident** tests positive for RSV – call Public Health and immediately begin a resident line list. Every day add all subsequent symptomatic and or RSV positive residents and submit daily to Public Health.

Printable paper version (preferably on legal size paper) is available at [Respiratory Virus Outbreak Line Listing for Long Term Care Residents](#)

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

Roommates of a symptomatic resident are considered contacts due to prolonged shared environment. An individual may also 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 (Roommates and non-roommates) during Outbreak

While an asymptomatic roommate does not require isolation or precautions, continue Active Screening twice per day until symptomatic roommate is off precautions.

Resident contacts will not be treated differently according to vaccination status. Ensure residents are up-to-date with their COVID-19, RSV 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.
- Asymptomatic resident contacts 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 if they have provided direct physical care to, or sufficiently interacted with, a resident with a viral respiratory infection without consistent, appropriate use of the recommended PPE and infection prevention and control practices.

With the assistance of OHSW, the facility will notify staff contacts of their need for testing (COVID-19 only) and work exclusion requirements. For information regarding assessment of staff exposures, work exclusion, and testing requirements email OHSWContCareID@nshealth.ca

8.4 Staff Measures during Outbreak

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 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 as appropriate.

8.5 Resident Case Management

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

See [Appendix D](#)

8.7 Antiviral Prophylaxis and Treatment for Influenza

See [Appendix E](#)

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 or refuse testing 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 whenever feasible.
- 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. 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, 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 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.

8.8.7 Compassionate Exceptions

LTCF should allow visitation, of any form and 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 and Closing the Viral Respiratory Outbreak

9.1 Discontinuing resident precautions*

The timing for discontinuation of precautions does not change based vaccination status.

Table 10: Discontinuing Resident Droplet and Contact Precautions

Respiratory Virus	Recommended Duration of Precautions
Influenza	At least 5 days and clinically improving for 24 hours with no fever (off antipyretics) and not moderately – severely immunocompromised**
COVID-19	At least 7 days and clinically improving for 24 hours with no fever (off antipyretics) and not moderately – severely immunocompromised**
RSV	At least 7 days and clinically improving for 24 hours with no fever (off antipyretics) and not moderately – severely immunocompromised**
Unidentified or Other Respiratory Virus	Improving for 24 hours with no fever

* When determining the date to discontinue precautions, Day 0 is the date of onset of symptoms or the date of positive test.

** 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, OHSW 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 11: 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 Outbreak	48 hours

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

** If this unidentified outbreak has lasted an extensive time, then LTCF staff can bring concerns to public health for discussion.

Appendix A: 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 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 may vary depending on facility size and layout.

Essential Visitors: healthcare 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 infection 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.

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.

Polymerase chain reaction (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 an individual 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 healthcare worker in any healthcare 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 near where the individual is receiving care or testing. Rapid antigen tests (RATs) are a type of POCT. POCT tests may not be as sensitive at detecting a pathogen.

Residents: individuals residing in a LTCF and meeting the eligibility criteria at:
https://www.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.

Appendix B: 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) <i>*may be longer in immune compromised individuals</i>	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

Appendix C: Resources

COVID-19 Therapeutics:

Non-Severe COVID-19 Treatment Team 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.IdType=6&documentRender.GenericField=&documentRender.Id=93180

Order Set

https://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=90889%20

Immunization:

<https://novascotia.ca/dhw/cdpc/documents/publicly-funded-seasonal-inactivated-influenza-vaccine-information.pdf>

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:

Nova Scotia Health Long-Term Care IPAC Resource Website: <https://library.nshealth.ca/IPAC-LTC>

COVID_19 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 D: Non-Severe COVID-19 Treatment Team Long-Term Care Referral Information

COVID-19 Therapeutics for LTCF Residents

Non-Severe COVID Treatment Team: Long-Term Care Referral Information

1. Report and Support This is the preferred referral mechanism for LTCF residents to be assessed for COVID medication including inhaled budesonide (Pulmicort), nirmatrelvir/ritonavir (Paxlovid), and remdesivir (Veklury). 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> 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 Non-Severe COVID Treatment Team.

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 168 days ago or less than 168 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 Non-Severe COVID Treatment Team 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.

Appendix E: Antiviral for use as both treatment and prophylaxis

The rationale for prophylaxis is to prevent spread of influenza throughout the facility. Antiviral prophylaxis should be given to the following 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 prophylaxis, they should be changed from the prophylaxis dose to the treatment dose, which is higher. The duration of a treatment course is typically 5 days.

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

What antiviral medications are available for use against Influenza?

In Canada, two neuraminidase inhibitors (oseltamivir and zanamivir) are licensed for use as both treatment and prophylaxis against influenza. Oseltamivir is administered enterally and recommended as first-line therapy. Zanamivir is administered via inhalation through an inhaler device and is not recommended in those with cognitive or physical limitations. Zanamivir is also not recommended in those with underlying respiratory conditions due to concerns for bronchospasm.

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 the following ways:

- For the presumptive treatment of residents with influenza-like illness, while awaiting laboratory confirmation.
- For the treatment of residents with test-confirmed, symptomatic influenza.
- 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 antiviral medication use in the LTCF.

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.

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.
- 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. 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 Dosage		
Creatinine clearance (mL/min)	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 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	75 mg x 1 dose
Dialysis patients*	Intermittent HD: 30 mg x 1 dose then 30 mg after every second HD until OB is over Peritoneal Dialysis: 30 mg x 1 dose then weekly until OB is over	Intermittent HD: 75 mg x 1 at onset of symptoms, then 75 mg after each dialysis session Peritoneal Dialysis: 30 mg x 1 dose then weekly until OB is over
<i>*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 clinical pharmacist is recommended. Doses may vary from those in product monograph.</i>		

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	

- 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.

- If residents develop ILI symptoms while on the prophylactic dose they should be switched to the treatment dose.
- 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 - <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 ^{2,3}	Treatment
> 7 years old	10 mg (two 5 mg inhalations) once daily	10 mg (two 5 mg inhalations) twice daily

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).

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 F: 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.
- All respiratory swabs get SARS CoV2 and influenza testing. Some assays also include RSV but not all. If RSV is required please ask for it specifically
- 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 viral respiratory 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 4oC.
- 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.
- The first three COVID-19 tests should be a NAAT (PCR) and after that POCT testing may be used. Discuss with public health which residents should continue to be tested for COVID-19 treatment.

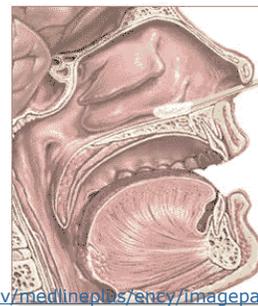
INSTRUCTIONS FOR THE COLLECTION OF NASOPHARYNGEAL SWABS FOR RESPIRATORY VIRUSES

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.



A sterile swab is passed gently through the nostril and into the nasopharynx

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

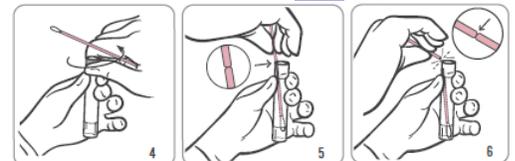
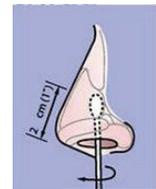
Delivery of sample(s) to the regional laboratory should occur within 4 hours from time of collection. *If transportation is delayed beyond 4 hours, the specimens should be refrigerated and transported to the laboratory using a cooler with ice packs. Transport logistics needs to be maximized to ensure 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		Store Before Collection	Store After Collection
Viral Swab Collection kit	 <p>Use the larger caliber swab with the rigid shaft in the kit for throat and nares collection. The smaller more flexible swab is used for Nasopharyngeal collection.</p>	Room Temperature	*Refrigerate

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. Withdraw the swab and place in the collection tube.
6. Refrigerate immediately.
7. Remove gloves and wash hands.
8. 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.

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