

Respiratory outbreaks impact patients' and staff health. Timely response can lessen the negative effects and improve outcomes.

# Respiratory Virus Season: Infection Prevention and Control OUTBREAK MANAGEMENT GUIDELINE

These guidelines assist with the preparation for outbreaks and outlines tasks that should be completed during a respiratory outbreak. These guidelines support infection control professionals, service delivery organizations (SDOs), and health care providers in developing, implementing and evaluating infection prevention and control (IP&C) policies, procedures and programs to improve their outbreak response. They also assist in standardizing IP&C practices throughout the province. Service delivery organizations (SDOs) are expected to develop policies and procedures based on these guidelines. These guidelines have been developed by the Manitoba Provincial IP&C Team.

The information in this guideline was current at the time of development. Scientific knowledge and technology are constantly evolving. Revisions of these guidelines will be necessary as further experience and advances in the field provide new information. Although the guidelines will be updated periodically, professionals are responsible to ensure the most current knowledge and practice is applied for each case.

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# Respiratory Virus Season – Infection Prevention and Control Outbreak Management Guidelines

## Introduction

Respiratory outbreaks occur in all healthcare sectors: acute, long term, and community. These cause significant morbidity and mortality. Through preparedness, planning, and careful management, the number of individuals affected can be stopped or lessened. This is a significant infection prevention and control activity.

Respiratory viral infections are often spread when people cough or sneeze and droplets of their respiratory secretions come into direct contact with the mucous membranes of the eyes, mouth, nose, or airway of another person. Because microorganisms in droplets can survive on other surfaces, droplet-spread infections can also be spread indirectly when people touch contaminated hands, surfaces and objects.

Outbreaks of respiratory viral infections can occur at any time during the year. A number of viruses and several bacteria can cause outbreaks, such as Parainfluenza, Respiratory Syncytial virus (RSV), Coronavirus, Rhinovirus, Human metapneumovirus, or Adenovirus. Influenza is a major cause of respiratory outbreaks and can occur at any time but is largely limited to the period from November 1 – March 30. While no single protocol can cover all of the more detailed aspects that might be necessary for some specific organism outbreaks, all respiratory outbreaks, can initially be managed in a similar fashion with basic measures to prevent further respiratory transmission, at least until the organism is identified and more specific measures can be put into place (e.g., antiviral prophylaxis for influenza).

## Purpose

Provide Infection Prevention and Control (IP&C) best practice/evidence-informed guidance for respiratory virus outbreak response at a provincial level to ensure patients/residents/clients receive the appropriate IP&C management. This document provides guidance related to respiratory virus management outside of COVID-19. For COVID-19 specific-guidance, please refer to the Shared Health, [Provincial COVID-19 resources for health-care providers and staff](#) website.

## Principles

These guidelines are supported by the following principles

- Multiple viruses contribute to the impact of the annual respiratory season
- Influenza morbidity and mortality can have significant impact on the operations of the health care system and is a leading infectious cause of death in North America. Annual immunization with influenza vaccine is the most effective way to prevent or minimize influenza infection or its complications; influenza vaccine protection wanes over time
- Sites, programs and services operate as one system – sharing resources, balancing their needs, and coordinating patient/resident/client care. This is required to meet the demands of the respiratory season, mitigate the various risks that lack of coordination of these services

poses, and to protect public health. Health Care Workers (HCW) with direct patient/resident/client contact should consider it their responsibility to provide the highest standard of care, which includes annual influenza vaccination. In the absence of contraindications, refusal of HCWs who have direct patient/resident/client contact to be immunized against influenza implies failure in their duty of care to patients/residents/clients

- Routine Practices and Additional Precautions are required within all healthcare settings (see Manitoba Health, Seniors and Active Living (MHSAL) [Routine Practices Additional Precautions Preventing the Transmission of Infection in Healthcare document](#)), including, but not limited to:
  - o Hand hygiene with alcohol-based hand rub (ABHR) or soap and water
  - o Cough/respiratory etiquette
  - o Appropriate personal protective equipment (PPE) such as gown, eye/face protection, and gloves
- Preventing transmission of respiratory viruses within the health care delivery settings requires a multi-faceted approach that includes
  - o Offering immunization to patients/residents/clients and staff who meet the criteria established by the National Advisory Committee on Immunization (NACI) and MHSAL
  - o Ensuring Infection Prevention and Control measures are implemented to prevent spread of respiratory viruses
  - o Preparing for an outbreak
  - o Promptly identifying an outbreak
  - o Ensuring Infection Prevention and Control measures are implemented to detect and prevent spread of respiratory viruses
  - o Ensuring facilities have adequate supplies in the event of an outbreak
  - o Providing antiviral chemoprophylaxis and/or treatment as appropriate

## Definitions/Acronyms

ABHR	Alcohol based hand rub
Adenovirus	Common seasonal virus in children that causes common cold symptoms. Incubation period is 1-10 days
AEFI	Adverse Event Following Immunization: A <i>reportable</i> AEFI is one which is temporally associated with an immunizing agent, cannot be attributed to a co-existing condition, AND meets at least one of the following criteria <ul style="list-style-type: none"> <li>- The event is life-threatening, could result in permanent disability, requires hospitalization or urgent medical attention, or for any other reason is considered to be of a serious nature, OR</li> <li>- The event is unusual or unexpected, including, without limitation, an event that has not been previously identified, or an event that has been previously identified but is being reported at an increased</li> </ul>

	<p>frequency, OR</p> <ul style="list-style-type: none"> <li>– At the time of the report there is nothing in the patient's/resident's/client's medical history, such as a recent disease or illness, or the taking of medication, that could explain the event</li> </ul>
Anaphylaxis	An immediate and severe allergic reaction to a substance (e.g., food or drugs). Symptoms of anaphylaxis include breathing difficulties, loss of consciousness and a drop in blood pressure. This condition can be fatal and requires immediate medical attention
ASAP	Attendance Support and Assistance Program: The focus of this program is on improving ability to attend work regularly by addressing any factors affecting attendance. This program is not disciplinary and is meant as to a tool to enable staff to meet their employment obligation to attend work
Boca Virus	Common seasonal virus in children that causes common cold symptoms. Incubation period is not documented
Chain of Infection	Infectious diseases result from the interaction of agent, host, and environment. More specifically, transmission occurs when the agent leaves its reservoir or host through a portal of exit, is conveyed by some mode of transmission, and enters through an appropriate portal of entry to infect a susceptible host
Cleaning	Physical removal of soil, dust or foreign material
Cohort	Cohort refers to physically separating (e.g., in a separate room or ward/unit) two or more patients/residents exposed to or infected with the same microorganism from other patients/residents who have not been exposed to or infected with that microorganism
Confirmed Case	A lab confirmed case of Influenza A, Influenza B, RSV, or any of the respiratory viruses tested as part of the RSV-15 respiratory multiplex panel
Coronavirus (common types; not MERS-CoV, SARS or COVID-19)	Common seasonal virus that causes common cold symptoms. Incubation period is 2-4 days
COVID-19	A specific coronavirus that causes mild to severe illness. Incubation period is assumed to be up to 14 days
Disinfection	A process used on inanimate objects and surfaces to kill microorganisms. Disinfection will kill most disease-causing microorganisms but may not kill all bacterial spores
Enterovirus	Common virus in children that can cause common cold symptoms. Incubation period is 3-5 days
Herd Immunity	When a large percentage of the population is vaccinated in order to prevent

	<p>the spread of certain infectious diseases. Even individuals not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the disease has little opportunity to spread within the community. In terms of influenza immunization, some scientists argue herd immunity is not possible with influenza (due to ability of the virus to change rapidly), rather a “herd effect” can be observed when those immunized do not transmit disease to others</p>
Human Metapneumovirus	Common seasonal virus that causes common cold symptoms. Incubation period is 3-5 days
Influenza	A viral infection of the respiratory system. Symptoms of influenza include acute onset of fever, cough, sore throat, muscle aches, extreme fatigue and headache. Influenza is a significant cause of morbidity and mortality, especially in those over the age of 65, immune compromised and/or have a chronic underlying disease. The incubation period is 1-4 days
Influenza-like Illness (ILI)	<p>Acute/new onset of respiratory illness characterized by:</p> <ul style="list-style-type: none"> <li>– Fever* and (new) cough, AND one or more of the following symptoms:             <ul style="list-style-type: none"> <li>○ Sore throat</li> <li>○ Joint pain (arthralgia)</li> <li>○ Muscle aches (myalgia)</li> <li>○ Severe exhaustion</li> </ul> </li> </ul> <p>In children less than 5 years of age, gastrointestinal symptoms (e.g. nausea, vomiting, diarrhea) may be present. *In clients less than 5 years or greater than or equal to 65 years old, fever may not be prominent. Illness associated with novel influenza viruses may present with other symptoms.</p>
Institutional Outbreak (Non-COVID)	Two or more cases of respiratory illness with similar symptoms (including at least one laboratory-confirmed case) occurring within a seven-day period in an institution/unit/area.
ICP	Infection Control Professional
IP&C/designate	Infection Prevention and Control/designate Person(s) with responsibility for providing IP&C guidance at the site. This may include, but not limited to, ICP, unit manager, educator, director of care, IP&C physicians, or medical officer or health.
LTC	Long Term Care
MHSAL	Manitoba Health, Seniors, and Active Living
MOH	Medical Officer of Health
OH	Occupational Health
Outbreak of Routine	<u>Two or more</u> healthcare associated patient/resident cases of RESPIRATORY

Respiratory Disease (non-COVID-19)	illness with similar symptoms (including at least one laboratory-confirmed case) occurring within a seven-day period in an institution/unit/area. In Manitoba, the only community respiratory outbreak definition is related to a school outbreak which is: greater than 10% absenteeism or absenteeism that is higher than the expected level for that school which is likely due to ILI. It is assumed school ILI reflects ILI levels that are occurring in the community.
Parainfluenza	Common seasonal virus with common cold symptoms. Incubation period is 2-6 days
Pneumococcal Infection	An infection caused by bacteria that can spread easily from one person to another. The bacteria normally live in fluids of the nose, mouth and throat and many people carry them without getting sick; however some people can develop severe disease. There are more than 90 different types of pneumococcal bacteria that can lead to infections of the ears, sinuses, lungs (pneumonia), blood (bacteremia) and covering of the brain (meningitis). Pneumococcal infections may occur following a viral infection like influenza
Pneumonia	Often a secondary bacterial respiratory infection following an acute viral infection
Point of Care Risk Assessment (PCRA)	An activity where a health care worker (in any health care setting across the continuum of care) <ol style="list-style-type: none"> <li>1. Evaluates the likelihood of exposure to an infectious agent <ol style="list-style-type: none"> <li>a. or a specific interaction</li> <li>b. with a specific patient</li> <li>c. in a specific environment (e.g., single room, hallway)</li> <li>d. under available conditions (e.g., no designated hand hygiene sink)</li> </ol> </li> <li>2. Chooses the appropriate actions or PPE needed to minimize the risk of exposure for the specific patient/resident/client, other patients/residents/clients in the environment, the HCW, other staff, visitors or contractors, and so on</li> </ol>
PPE	Personal Protective Equipment. Personal protective equipment are items worn to provide a barrier to help prevent potential exposure to infectious disease
PPH	Population and Public Health
Probable (Clinical) Case	Patient/resident/client without a lab confirmed result but with clinical presentation of Influenza A, Influenza B, RSV, or one of the other respiratory viruses requiring additional precautions
Respiratory Syncytial Virus (RSV)	Common seasonal virus that causes significant illness in children but can also infect adults. It usually causes common cold symptoms. Incubation period is 2-8 days
Respiratory Virus	The following viruses are included in the term respiratory virus:

	<p>Influenza A RSV Human Rhinovirus Human Bocavirus OC43) Human Enterovirus Human Parainfluenza viruses 1,2,3 and 4 Respiratory viruses are a major cause of respiratory illness and are communicable through Droplet and Contact transmission</p>	<p>Influenza B COVID-19 Human Adenovirus Human Coronavirus (229E, NL63, Human Metapneumovirus</p>
Respiratory Virus Season	Respiratory virus season is the season that usually runs from the Fall (~September) until levels of respiratory virus cases returns to baseline again in the Spring	
Rhinovirus	Common seasonal virus that causes common cold symptoms. Incubation period is 2-3 days	
Seasonal Influenza	An acute upper respiratory infection caused by influenza viruses which circulate in all parts of the world (e.g., influenza A H1N1)	
Service Delivery Organization (SDO)	<p>Service delivery organizations (SDOs) focus on the delivery of care locally, participate and contribute to clinical planning to ensure services meet the needs of the local population and support broader provincial efforts to improve quality, equity and patient outcomes through initiatives and investments supported by the clinical and preventive services plan.</p> <p>SDOs include all five of Manitoba's regional health authorities (RHAs), Shared Health as the provincial health authority, and CancerCare Manitoba as the cancer authority. All SDOs are accountable to the Minister of Health, Seniors and Active Living, and subject to the same accountability framework.</p>	
Substitute Decision Maker	A third party identified to participate in decision making on behalf of a person who lacks decision-making capacity concerning immunization. The task of a substitute decision-maker is to faithfully represent the known preference and/or the interests of the incapable person. A Substitute Decision Maker may be legally appointed (Public Trustee, Committee, Advance Health Directive Proxy) or informal (family member, next of kin)	
Vulnerable Population	Individuals within our populations who are more likely to be impacted and infected by seasonal respiratory viruses (e.g., very young or very elderly)	

## Roles and Responsibilities

### Acute Care and Long Term Care

#### 1. Unit Staff

- Monitor for signs and symptoms of respiratory viral illness and document assessment findings
- Initiate Droplet/Contact precautions immediately for those who are ill when a respiratory viral illness is suspected
- Inform physician of respiratory symptoms
- Populate line list with details of the symptoms and other demographics
- Report suspicion of respiratory viral illness to IP&C/designate for the site
- Update line listing and share with IP&C daily
- Post appropriate signage
- Collect nasopharyngeal swab specimens from those identified as symptomatic
- Assist with outbreak communication (e.g., shift report).
- Inform management of concerns of an outbreak
- Once declared, communicate outbreak status to physicians and other staff
- Provide appropriate information sheets as required
- Inform patients/residents, visitors, families, and Powers of Attorney, as necessary. This may be via phone using a telephone script
- Promote hand hygiene, cough/respiratory etiquette, and physical distancing with patients/residents, staff, families, and visitors
- Gather patient/resident information if antivirals are to be administered
- Ensure viral transport media (VTM) is available and NP swabs have not expired

#### 2. Unit Management

- Collaborate with IP&C/designate through the course of the outbreak
- Ensure staff have access to PPE
- Notify site Environmental Services/Housekeeping an outbreak has been declared
- Cohort staff to specific units or patient/resident assignments, if possible (see Cohorting)
- Restrict staff movement in the daily assignments from outbreak affected areas to non-affected areas, if possible
- Update administration and staff
- Communicate outbreak measures required to staff, explain their role in preventing transmission and the importance of following precautions
- Promote hand hygiene, cough/respiratory etiquette, and physical distancing with patients/residents, staff, families and visitors
- Ensure outbreak control strategies are maintained until the outbreak is declared over

### **3. Infection Control Professional/Designate**

- Support direct care staff as they prepare in advance for outbreaks, including providing education as needed
- Act as a resource for facility staff to promote early recognition of possible outbreaks
- Review clinical data being reported to determine if there is a potential outbreak
- Ensure facility is familiar with current outbreak management protocols
- If clinical findings indicate the criteria meet the outbreak definition, discuss information with the MOH/IP&C physician/designate
- Ensure an outbreak code is obtained from Cadham Provincial Laboratory (CPL) or Communicable Disease Coordinator as per established RHA processes
- Ensure appropriate IP&C measures are implemented in a timely manner
- Notify all appropriate stakeholders and departments there is an outbreak; include all pertinent information
- In collaboration with the MOH/IP&C physician/designate, determine the number of nasopharyngeal specimens to be performed (usually up to a maximum of 6)
- Direct outbreak control strategies appropriate to the type and scope of outbreak
- Establish a working outbreak case definition
- Obtain report on the clinical status and identify new cases from unit on a daily basis
- Notify MHSAL of the outbreak by completing an outbreak summary using the Canadian Network for Public Health Intelligence (CNPHI) reporting system
- Ensure increased auditing, as required, for hand hygiene, PPE use and equipment cleaning and disinfection in collaboration with site leadership
- Ensure outbreak control strategies are maintained until the outbreak is declared over following outlined SDO processes

### **4. Support Services (e.g., Housekeeping/Environmental Services)**

- Upon notification that an outbreak has been declared, collaborate with IP&C to plan and arrange for increased cleaning and disinfection of appropriate areas and surfaces using facility-approved disinfectants
- Clean and disinfect all high touch surfaces in outbreak affected area(s) at least twice a day
- The Housekeeping/Environmental Services Manager/designate should
  - Complete an inventory of stock of the appropriate cleaning supplies
  - Inform and update housekeeping/environmental services staff regarding the outbreak
  - Communicate to staff their role in preventing transmission and the importance of following precautions

### **5. MOH/IP&C Physician/Designate**

- Collaborate with IP&C/designate
- Facilitate lab testing by recommending type of specimen to be collected and testing required

- Act as a resource
- Review specimen results
- Where required, in collaboration with IP&C/designate, determine when the outbreak can be declared over

## 6. Senior Leadership/Management

- Maintain operations to provide optimal care and services during an outbreak
- Collaborate with IP&C on outbreak management control strategies
- Support direct care staff and management with their outbreak associated tasks. Examples could include ensuring sufficient staff and supplies for cleaning and disinfection, accommodation for patients when flow may be impacted, assisting with facility communication with visitors and family, and supporting increased hand hygiene and additional precautions auditing
- Enforce appropriate outbreak measures (e.g., hand hygiene and PPE use) as necessary during an outbreak
- Ensure adequate resources are provided to manage the outbreak
- Disseminate information including internal and external updates and media releases as required

## Community

### 1. Communicable Disease Coordinator/IP&C

- Receive call from community site when outbreak suspected. If an outbreak is suspected by Home Care staff, the Home Care case coordinator will be contacted. The Home Care case coordinator would then contact Public Health and both programs would collaborate to collect information on cases. The Communicable Disease Coordinator may also be contacted by PCH IP&C/designate, as indicated above
- Investigate with MOH. MOH will declare outbreak if applicable
- If specimens are taken, ensure line list is maintained
- In collaboration with MOH, provide ongoing direction to the area experiencing the outbreak
- Communicate when the MOH declares the outbreak over

## Process

### Outbreak Preparedness

To prevent spread of an outbreak, prepare in advance with essential supplies and resources at hand

- **ABHR**
- **PPE supplies including**
  - Gloves (including varied sizes)
  - Isolation gowns
  - Medical masks

- Eye/face protection
- **Other:**
  - Clean linen bags
  - Facility-approved disinfectant(s)
  - Specimen collection containers
  - Viral transport medium (VTM) & recommended nasopharyngeal swabs
  - Bags/containers to transport specimens
  - [CPL requisition](#)
- **Information sharing/Notification requirements:**
  - Outbreak signage
  - Letters/information sheets/memos/telephone scripts
- **Documentation templates for recording information including:**
  - Blank line list(s) or outbreak investigation forms
- **Education, ensuring the following aspects of outbreak preparedness are addressed:**
  - PPE
  - Respiratory etiquette
  - Hand hygiene
  - Outbreak management

### Outbreak Identification

There are several types of viral infectious agents that can infect persons receiving care and cause a respiratory illness. The microorganism causing the illness usually cannot be identified from the symptoms as they are often similar. Most cases of respiratory infection result in cough and fever. Once introduced into a population, respiratory viral illnesses can spread rapidly because they are highly contagious and have a relatively short incubation period. The most common causes of facility-based outbreaks are listed below.

Virus	Incubation Period
Influenza	1-4 days
Respiratory syncytial virus (RSV)	2-8 days
Rhinovirus	2-3 days
Parainfluenza	2-6 days
Coronavirus (common)	2-4 days
COVID-19	Up to 14 days
Human Metapneumovirus	3-5 days
Adenovirus	1-10 days
Boca virus	Not documented
Enterovirus	3-5days

## Outbreak Management Planning

### 1. Identify a Respiratory Outbreak

Outbreaks can be caused by many respiratory viruses (e.g., influenza, RSV, rhinovirus, parainfluenza, adenovirus, etc.). Follow positive laboratory reports to determine if there may be an outbreak occurring in one unit/area. If healthcare associated cases start to occur, an investigation is required. Accordingly, if multiple persons receiving care in the same area at the same time have similar respiratory symptoms, it is recommended to treat the cases as a potential outbreak until it is confirmed.

### 2. Responding to a Respiratory Outbreak

Implement initial IP&C measures including

- Droplet/Contact Precautions for symptomatic cases
- Reinforce hand hygiene, cough/respiratory etiquette, review of supplies, and increased requirements for equipment and environmental cleaning and disinfection

Confirm the cause of the outbreak by reviewing clinical features and supporting collection of specimens

- When suspecting a respiratory outbreak, send up to 6 specimens with the same outbreak code to Cadham Provincial Lab. If possible, collect specimens early in the outbreak epi curve. An epi curve is developed by plotting the number of cases per time frame over the course of the disease. Without appropriate collection of specimens, it will be difficult to determine if all cases occurring have the same etiology or if multiple organisms are causing similar symptoms

For small unit or area specific seasonal respiratory outbreaks, form an outbreak management team – team members should represent those disciplines that may have an impact on the outcome (e.g., senior leadership, nursing, housekeeping, physicians, allied health, manager, epidemiologist, director, pharmacy, communications). For large or significant seasonal respiratory epidemics, incident command structure may be used (or already exist) with site leadership and alternative communication/management processes in place.

Establish a working outbreak case definition.

Monitor for continuing transmission through a collaborative approach with appropriate stakeholders.

### 3. Reporting and Notification of an Outbreak

Outbreaks are reported to the Chief Public Health Officer or designate at MHSAL. In Manitoba, respiratory or vaccine preventable outbreaks are reported by IP&C/designate through the CNPHI online outbreak reporting system.

Other notification regarding an outbreak must follow SDO requirements and include patients/residents and family.

- IP&C/designate to provide verbal and/or written reports to stakeholders within the unit/facility and/or SDO (e.g., Senior Leadership, MOH)
- Managers of the specific areas of care to provide verbal and/or written information to their staff regarding outbreak
- Following communication from IP&C/designate, Chief Medical Officer (CMO) or Medical Director to notify physician(s) of outbreak and associated control measures
- Direct care staff to notify persons receiving care and friends/family members as directed by site leadership

## Cohorting

Place symptomatic individuals in single rooms if possible. If this is not possible, consult with IP&C/designate prior to making cohorting decisions.

### **Cohorting Patients/Residents/Clients**

#### Acute Care

Place patients with a high index of suspicion for a respiratory viral illness on Droplet/Contact Precautions using a single room preferably until results are confirmed. Where a single room is not available, ensure appropriate cohorting of patients:

- Do not cohort patients with a high index of suspicion for, or with, a confirmed respiratory viral illness with a patient not suspected of having a respiratory viral illness
- If necessary, cohort patients with a high index of suspicion for a respiratory viral illness (results pending) with another patient with similar presentation

Patients with a low index of suspicion (e.g., absence of fever, cough) do not immediately require isolation Precautions pending results. Ensure appropriate cohorting of patients

- Cohort patients with a low index of suspicion for a respiratory viral illness with a patient not suspected of having a respiratory viral illness, ONLY if the roommate(s) are not at high risk for acquiring an infection. See 'People at high-risk of respiratory virus-related complications' (table above) for more details
- In outbreak situations, follow outbreak guidance for accommodation

#### Additional Maternity/Newborn considerations

- Mother is positive for a viral respiratory illness. Measures include
  - Rooming in
    - Droplet/Contact precautions for newborn and mother
    - Mother/newborn contact is permitted. Mother must wear a medical mask within 2 metres of newborn. Emphasize good hand hygiene and respiratory etiquette
  - NICU
    - Droplet/Contact
    - Mother is not permitted to go to the NICU. If a newborn of a mother with suspected or confirmed viral respiratory illness is housed in the nursery instead

of the mother's room, the mother should not enter the nursery or NICU until 5 days after onset of symptoms and free of respiratory symptoms for 24 hours. For compassionate reasons, exception may be considered on a case-by-case basis. This would require advance planning and IP&C approval, including directions for mother to appropriately use PPE, and assurance this is possible

- Symptomatic caregivers or family members should not visit or enter the nursery or NICU
  - Newborn is positive for a respiratory viral illness. Measures include
    - Droplet/Contact precautions for newborn and mother
    - Mother/newborn contact is permitted
- During outbreak situations, additional precautions and cohorting of newborns may be required.

### LTC

Place residents with a high index of suspicion for a respiratory viral illness on Droplet/Contact Precautions. A single room is preferred, however when not available:

- In a shared room, roommates and all visitors should be aware of the precautions to follow.
- If possible, close the privacy curtain between beds to minimize opportunities for direct contact, with heads of beds facing away from each other and at least 2 metres apart
- In multi-bedded resident rooms, two metre spatial separation between beds is recommended to reduce the opportunities for inadvertent sharing of items between the ill/symptomatic resident and other residents
- Do not cohort residents with a high index of suspicion for, or with, a confirmed respiratory viral illness with a resident not suspected of having a respiratory viral illness

### Community

#### *Primary Care*

Clients shall preferably be placed in a single room or designated space/area. No special air handling and ventilation are necessary. The door may remain open. The room should have dedicated hand hygiene products/facilities. In instances where there are not a sufficient number of single rooms or designated space/area, cohort clients with the same microorganism together. If a single room is not available and cohorting is not possible, maintain a separation of at least two metres between clients.

#### *Ambulatory/Clinic Setting (e.g., outpatient departments, primary care)*

Triage symptomatic client/patient away from waiting area to single room as soon as possible, maintain two-meter spatial separation. Patient to wear mask for duration of visit and perform hand hygiene. Clean and disinfect equipment after visit and use dedicated equipment where possible. Perform routine cleaning and disinfection of high touch surfaces.

Contact clients by telephone if possible 24 hours prior to visit. If client reports respiratory symptoms determine if the appointment is essential or if it can be rescheduled. Consider virtual visits when possible.

#### *In Home Health Care/Visits*

Where possible, contact client by telephone within 24 hours of initial visit to inquire about symptoms of respiratory virus and ask clients to inform home care providers if they develop symptoms. At each following visit, staff should inquire about symptoms prior to entry. If symptomatic, determine if visit is essential. Use Droplet & Contact PPE if clients exhibit respiratory symptoms.

#### **Cohorting Staff**

- Restrict or minimize movement of staff, students, and volunteers between units/floors, common areas as possible
- Cohort staff assignments as much as possible. Where possible, staff should work only with ill or well persons, but not both.

### **Activity Restrictions**

**Isolate symptomatic cases** using Droplet/Contact precautions. Discontinue precautions based on resolution of respiratory symptoms (non-ventilated patients/residents) or clinical improvement (ventilated patients/residents) and not based on duration of treatment or negative laboratory results. Chronic respiratory symptoms or post viral cough do not require maintenance of precautions. Patients/residents should not participate in any group activities or congregate meals during this period.

- Cancel non-essential outings. Transport out of the isolation room for medically essential purposes only. Notify Patient Transport Services and the receiving department regarding the need for precautions in advance of the transport
- Visitation may be restricted
- Cease large group activities. Instead offer small group activities with *those who are well and not symptomatic*. For those symptomatic or recovering, 1:1 activity is appropriate
- Ensure wipeable materials used for any activities (e.g., electronic tablets or other devices, craft supplies, bingo cards, magazines, books, cooking utensils, linens, tools, etc.) are not shared unless appropriately cleaned and disinfected **between each use**. Use only facility approved disinfectant
  - Staff should perform hand hygiene before and after touching the above-mentioned items
  - Do not share items that cannot be easily cleaned and disinfected; discard instead

## Admissions, Intra-facility & Inter-facility Transfers

### Admissions

When a facility is experiencing an outbreak, the decision on whether it is appropriate to accept admissions is determined by the SDO's designated individuals. This may include consultation between the MOH, IP&C, medical advisory, and senior leadership. Consideration must be given to factors that may be encountered such as the microorganism, severity of the illness, extent of the outbreak, and physical layout of the site.

### Intra-facility Transfers

The movement of cases with suspected or confirmed respiratory illness within a health care setting should be restricted to essential tests and procedures. Time spent outside of the room should be minimized.

Ensure advance notification of IP&C measures to receiving department (e.g., laboratory, diagnostic imaging).

All cases coming from a unit where exposure or transmission of the respiratory illness has occurred must be managed using appropriate precautions until the diagnosis is excluded and the incubation period has passed.

When movement is required, use appropriate PPE at all times.

### Inter-facility Transfers

If an individual receiving care requires inter-facility transfer, the outbreak facility must notify the transport team staff and the receiving care facility, in advance, there is a respiratory outbreak at the sending facility. This allows the transport team staff and the receiving site to prepare and ensure appropriate precautions are in place during transfer and upon arrival.

### Discharge to Home/Community

Cases who are to be discharged from hospital should be assessed for the stage of their exposure or disease. Additional measures may be put into place, such as self-monitoring. If the patient has been ill but is well enough to go home and is still within the period of communicability, they will be instructed in appropriate precautions to avoid transmitting the respiratory illness to others. Advice of the appropriate precautions should be provided on discharge.

## Surveillance of Patients/Residents and Staff

Ongoing surveillance is required during an outbreak to quickly detect new cases of respiratory viral illness, in order to take necessary steps to prevent and control further transmission. All health care settings must have a system in place to communicate cases of new/additional infections both internally within departments and externally to receiving facilities, and MHSAL.

Patients/residents must be monitored closely for signs of respiratory viral infection. Outbreak surveillance is undertaken by all staff by continuously monitoring for new respiratory symptoms and reporting any illness to their manager. Those who display respiratory symptoms are to be placed on Droplet/Contact precautions immediately.

Staff working in healthcare settings must also self-monitor for symptoms of respiratory illness. If experiencing respiratory symptoms, staff must stay home from work and notify Occupational Health. Staff members who are feeling unwell at work must report to their supervisor or manager and leave work immediately, remaining off work until cleared to return to work by Occupational Health.

### Housekeeping/Environmental Services

Environmental cleaning and disinfection are intended to remove pathogens or significantly reduce their presence on contaminated surfaces and items, thus breaking the chain of transmission. During a respiratory viral outbreak, there are requirements for additional or enhanced environmental cleaning and disinfection of the health care setting.

Clean and disinfect the room as well as high-touch surface areas (e.g., doorknobs, telephone, call bells, bedrails, hallway handrails, light switches, dining rooms) at least twice daily, and after discontinuing precautions as well as each patient/resident/client discharge from the space.

Following cleaning, a facility approved disinfectant must be used to disinfect all surfaces, achieving the manufacturer's recommended wet contact time to ensure appropriate disinfection. Contact time is the time the surface must remain wet with disinfectant.

After a case is determined to be well or is discharged, isolation room discharge cleaning/disinfection (i.e., terminal cleaning/disinfection) is performed.

### Declaring the Outbreak Over

The normal duration of an outbreak is two times the incubation period of the respiratory virus of concern (e.g., RSV has a 3-day incubation period therefore a RSV outbreak would be declared over after 6 days with no further cases). Outbreaks are declared over by IP&C/designate in collaboration with PPH (including MOH) and others when two incubation periods have passed with no cases.

A debrief session can be used to learn from the outbreak within two weeks of declaring it over. Evaluate your facility's response to and management of the outbreak – What could have been done better? What was done well?

IP&C/designate will complete the final outbreak reports, both for senior management of facility/areas as well as online CNPHI report.

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## Appendix I – Oseltamivir

Oseltamivir (Tamiflu®) is an antiviral medication recommended for treatment and prophylaxis against seasonal influenza during an outbreak. Physician/MOH consultation and orders are required.

The following recommendations and information are suggested for the use of oseltamivir prophylaxis during an influenza outbreak:

1. Use Oseltamivir to **treat** symptomatic seasonal influenza cases even without an outbreak present.
2. Provide Oseltamivir **prophylaxis** to all appropriate adults receiving care who are at risk during an outbreak (i.e., asymptomatic individuals receiving care). Each SDO will determine designated individuals, as appropriate, to arrange to procure oseltamivir. Consultation with, and authorization from the MOH or Medical Director may be required.
3. Monitor the effectiveness of Oseltamivir. While prophylactic oseltamivir is being administered on a unit, record all new influenza-like cases (regardless of prophylaxis status) and all observed side effects on the daily line list and/or chart. If someone develops influenza-like illness while on Oseltamivir prophylaxis, the physician/MOH may consider increased dosing to that used for treatment.
4. The only absolute contraindication to Oseltamivir is known hypersensitivity (allergy). Significant side effects, especially those which result in Oseltamivir discontinuation, should be documented and reported to Public Health (Communicable Disease coordinator) and also be reported as an Adverse Drug Reaction to Health Canada as per established SDO processes.

## Appendix II – Telephone Script Example

If site/SDO leadership determine it is appropriate to phone contacts of persons receiving care who are part of an outbreak (cases or exposed contacts)

- In the event an outbreak is declared, contact Substitute Decision Makers/guardians (e.g., Child and Family Services guardians) and/or family contacts of persons receiving care by phone
- If you are unable to speak directly with the contact person, leave a message or call again. Use check boxes to indicate information that was provided
- At the end of the call, ensure this notification is appropriately documented in the person receiving care's health record.

### PHONE CALL SCRIPT for Family Contacts or Alternative Decision Makers/Substitute Decision Makers

- An outbreak of XXXX, a respiratory illness is taking place in our XXXX (unit/ward/facility)
- To help stop the spread of illness, the following measures have been implemented:  
[INCLUDE ALL THAT APPLY]
  - Patients/Residents affected are being treated with additional precautions and are receiving care by staff dedicated to their needs
  - Visitor restrictions will be evaluated
  - All staff who are in contact with patients/residents will be wearing protective equipment to further prevent any potential transmission between staff members and patients/residents
  - Communal meals and recreation activities for all patients/residents are being modified.
  - Patients/Residents who are symptomatic will be isolated from others and those dining together will be physically distanced from one another at mealtimes.
- Please check back before coming to visit

If you have any questions, please contact: \_\_\_\_\_

## Appendix III – Outbreak Checklist

<input type="checkbox"/>	<p><b>Implement Droplet/Contact Precautions and other outbreak management measures</b></p> <ul style="list-style-type: none"> <li>Place symptomatic case on Droplet/Contact Precautions as required</li> <li>Cohort cases away from those not ill (minimum of 2 metre separation between ill and those without symptoms)</li> <li>Ensure supplies of ABHR, PPE – gowns, gloves, masks and eye protection are available</li> <li>Where possible, increase cleaning and disinfection of frequently touched areas to twice daily</li> <li>Promote hand hygiene measures and cough etiquette with staff, those cared for, family and visitors</li> </ul>
<input type="checkbox"/>	<p><b>Do we have a possible Outbreak?</b></p> <ul style="list-style-type: none"> <li>Inform Staff on duty and those relieving staff on duty</li> <li>Call IP&amp;C/designate; on weekends/after hours leave message for IP&amp;C/designate</li> </ul>
<input type="checkbox"/>	<p><b>Collect Specimens</b></p> <ul style="list-style-type: none"> <li>Collect specimens</li> <li>IP&amp;C/designate to obtain outbreak code. This is to be included on ALL specimen lab requisitions</li> <li>Label specimens URGENT and ask staff to transport as a priority</li> </ul>
<input type="checkbox"/>	<p><b>Document the outbreak symptoms in the health record and create a <a href="#">line list</a> if requested by IP&amp;C/designate</b></p> <ul style="list-style-type: none"> <li>Details of symptoms must be either <u>well documented</u> and/or line listed with demographic information</li> <li>Ensure documentation and/or line lists are updated daily with any new cases with respiratory symptoms</li> <li>Update documentation and/or line lists with any positive specimen results</li> </ul>
<input type="checkbox"/>	<p><b>Notifications</b></p> <ul style="list-style-type: none"> <li>Share line listing with IP&amp;C daily; include any deaths. Deaths associated with an influenza outbreak must be reported to MHSAL via their notification form</li> <li>Notify Materials Management/Logistics that possible increase in supplies may be needed</li> <li>In all sites, IP&amp;C will communicate initial and final update to applicable stakeholders and report as required to the region/Manitoba Health using CNPHI</li> </ul>
<input type="checkbox"/>	<p><b>Interactions between staff and people receiving care</b></p> <ul style="list-style-type: none"> <li>Strive to have individual staff members working with either ill or well persons receiving care. When they must work with both, as much as possible staff should move from non-infected to infected persons ensuring adherence to Additional Precautions required and Routine Practices as appropriate</li> </ul>
<input type="checkbox"/>	<p><b>Sharing of information and education</b></p> <ul style="list-style-type: none"> <li>Inform appropriate facility staff that an outbreak is occurring</li> <li>On the start of an outbreak investigation, check with IP&amp;C/designate regarding placing signage at unit/area/facility entrances</li> <li>Educate those receiving care and visitors regarding outbreak measures</li> </ul>
<input type="checkbox"/>	<p><b>Prepare for possible antiviral treatment if outbreak is influenza</b></p> <ul style="list-style-type: none"> <li>Ensure oseltamivir is ordered and administered (for treatment and/or prophylaxis)</li> <li>If applicable, inform pharmacy for potential increase of antivirals and immunizations</li> </ul>
<input type="checkbox"/>	<p><b>On-going review of clinical management plan</b></p> <ul style="list-style-type: none"> <li>Review plans regularly, modify as necessary</li> </ul>
<input type="checkbox"/>	<p><b>Declaring an outbreak over:</b></p> <ul style="list-style-type: none"> <li>Ensure all line lists are sent to site IP&amp;C staff.</li> <li>IP&amp;C/designate may collaborate with others (e.g., MOH) to declare outbreak over and notify stakeholders</li> </ul>
<input type="checkbox"/>	<p><b>Following outbreak – unit/area debrief (with IP&amp;C as needed)</b></p> <ul style="list-style-type: none"> <li>Unit/area management to debrief with staff</li> </ul>

## Appendix IV – Debrief Template

**Goal:** Determine successes that occurred during outbreak. Determine areas that could be improved for the next outbreak.

IP&C/Manager conducts debrief session with team within two weeks of event.

**Purpose:** To assess the impact of the experience and make recommendations for improvement.

Record on the template and forward to IP&C/designate.

Facility:	Outbreak type:	Date of debrief:	Impact (# of cases, outcomes):
Staff in attendance (include designation):			
Overall experience:			
What went well?	Nursing:	Support Services:	
	Other (physio, OT, recreation, spiritual care, etc.):		
What could be improved?	Nursing:	Support Services:	
	Other (physio, OT, recreation, spiritual care, etc.):		
What was learned?			
Conclusions			

## Appendix V – Line List Information

A line list helps organize information during an outbreak investigation. The data points will help determine if the individual meets the case definition, and how many people may be involved in the outbreak. Update and submit the line list daily. This table is not a legal document and does not become a part of the chart.

A line list may include:

- Case names
- Identifiers (e.g., PHIN, date of birth, unit and room number)
- Symptoms being monitored
- Date of symptom onset
- Outbreak code
- Date of specimen collection
- Specimen type (i.e., nasopharyngeal swab)
- Results
- Any relevant outcomes

### Here are some general tips on how to fill out a line list

1. Print the line list
2. Complete line list with all information on cases found on unit/area
3. Notify IP&C/designate
4. Continue to complete active surveillance for new cases with similar symptoms
5. Continue to add updates and populate the existing line list daily with new information and send to IP&C/designate. **You only need to populate one line list/unit/area/facility as directed by ICP.**

An example of a line list can be found in [here](#).