Interior Health

Communicable Disease

CD722SP

RESPIRATORY INFECTION OUTBREAK TOOLKIT: LONG-TERM CARE FACILITIES

October 2023

Supersedes October 2022

Outbreaks of respiratory infections (RI) in Long-term care (LTC) facilities can occur at any time during the year, and can be caused by a number of viruses and bacteria. While outbreaks can and do occur anytime of the year, some viruses like Influenza tend to cause illness between approximately November to March. This toolkit outlines steps to take and identifies resources to prepare for the identification and management of outbreaks in LTC facilities.

The **Most Responsible Person** at the facility, normally the **LTC Site Manager/Director of Care**, will ensure that pre-outbreak activities and outbreak activities are in place and completed.

Before there is an outbreak these are the things you want to ensure are in place (TOOL I) (e.g. Sept/Oct or sooner):

- Follow Outbreak Prevention Principles (TOOL A) year round.
- Designate an Outbreak Management Team (OMT) (TOOL E).
  - Review Roles and responsibilities (TOOL B), control measures to be implemented for enhanced measures (TOOL L) or an outbreak (TOOL M) with all staff (care staff, environmental services , dietary, etc.)
  - Prepare a binder/folder (keep records, procedures, supply lists (TOOL C) and contact lists (TOOL F), etc.) or set up bookmarks for online access, review with all staff.
- Provide initial and ongoing respiratory education and training for staff, volunteers and residents (TOOL I) (case/reporting threshold definitions, reporting a threshold, hand and respiratory hygiene, routine practices and additional precautions, information on influenza vaccines,donning/doffing PPE, facility policies, etc.).
- Ensure there are adequate levels of supplies (TOOL C), re-order as necessary.
- Ensure Health Care Workers meet policy requirements for reporting and vaccination as applicable.
- Provide immunizations to residents (TOOL G), and maintain immunization records.
- Consider staff levels needed to work in an outbreak.
- Ensure Order Sets for residents are prepared for Oseltamivir (TOOL H).
- Maintain surveillance line list tools (TOOL D) in order to identify when a Reporting Threshold has been met. See Case and Reporting threshold definitions(TOOL J)
- Anyone with symptoms should be placed on Droplet and Contact precautions (807904).

How to Identify an Outbreak:

- Use surveillance line list tools (TOOL D) to determine if a reporting threshold is met
  - See Case and Reporting Threshold Definitions (TOOL J)
- Contact the CD Unit or IP (TOOL K)
- Enhanced Measures (TOOL L) may be implemented OR the MHO declares an outbreak.
- Report (TOOL K) the threshold and required detail as soon as possible.

Once an Outbreak has been declared:

- Bring together the Outbreak Management Team (OMT) (TOOL E) to discuss the state of the outbreak.
  - This occurs 5 days a week (Mon-Fri). This is an ongoing process: review ongoing surveillance cases, assess precautions, status of the outbreak. Meeting Template.
    - Submit daily reports (form 823076) to the CD Unit, and if IH, IPAC(TOOL K).
  - Notify partners (TOOL F) that an outbreak has been declared
- Implement control measures (TOOL M) and oseltamivir (TOOL H) (if required) as directed;
- Collect Samples (TOOL N)
- Admission/Re-admission/Repatriations (TOOL M) require consultation with the MHO by the Outbreak Response Lead from the facility OMT Lead.

To declare the outbreak over:

- See Outbreak over definitions (TOOL Q)
- Contact the CD Unit or IP (TOOL K)
- Once over, organize site Outbreak Debrief (TOOL P)

After the Outbreak, return to normal activities of using Outbreak Prevention Principles (TOOL A)

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Toolkit Table of Contents

Links and Tools

A list of all facility outbreaks within Interior Health can be viewed on the public website for Interior Health.

NOTE: Some links in this document are available only to IH sites. If you need access to a document available only to IH sites please contact the CD Unit.

Reference Tools

- Common Viral and Bacterial Pathogens that cause RI Outbreaks See Appendix 5.

Surveillance Forms

- RI and GI Outbreak Report Form (823076) *Download and open this form using Adobe application to use the **Submit by Email** button or **Date** fields.
- Master Respiratory Illness Surveillance Line List Tool
- Respiratory Illness Line List Worksheet

Lab Forms and Tools

- Elsevier Performance Manager Clinical Skills – Specimen Collection: Nose and Throat Specimens for /Culture
- How To Guide: Nasopharyngeal Flocked Swabs and UTM
- Public Health Laboratory Sample Container Order Form
- PHSA Laboratories Virology Requisition
- Respiratory Virus Testing Long term Care – IH Lab update with ordering information and how to fill out a requisition.

Oseltamivir Order Sets and Letters

- Oseltamivir Prophylaxis of Influenza A and B (form 829559)
- Oseltamivir Treatment of Influenza A and B Infections (form 829561)
- Oseltamivir Influenza Prophylaxis – Physician Letter
- Compendium of Pharmaceuticals and Specialties

Immunization Program

- Information on: Immunization & Vaccines | Interior Health
- Information for : Community Vaccine Providers | Immunization & Vaccines | IH (interiorhealth.ca)
- Report of Influenza Immunization – Long-term Care Facility (form 821550)
- Facility Order From for Publically Funded Influenza Vaccine
- Influenza Immunization – Health Care Worker Record
- Influenza Immunization – Resident Record

OMT

- OMT Agenda and Notes Template

Signs

- STOP – We are experiencing an Outbreak (807909)
- Droplet and Contact Precautions (807904)
- Donning PPE - Droplet and Contact Precautions(IH)
- Doffing PPE – Droplet and Contact Precautions (IH)
- BCCDC Signage & Posters

Transfer to LTC

- LTC Transfer Algorithm for Outbreaks

- LTC Transfer Risk Assessment Form for Outbreaks

Education – Staff

- Seasonal Influenza Campaign
- Routine Practices Information Sheet
- Point of Care Risk Assessment
- Four Moments of Hand Hygiene

Education – Family Resources

- Outbreak Information Pamphlet (810203)
- Long-term Care Resident and Family Handbook (810321)

Infection Prevention and Control (IPAC)

- IH Infection Prevention and Control Contact List
- IH Infection Prevention and Control – Health Care Facility surveillance and consultation
- IH Infection Prevention and Control IPC Manual

Other Policies and Programs

- Licensing: Community Care Reportable Incident Form
- IH AV1300 Staff Respiratory Infection Outbreak Management Policy
- AV1350 Influenza Prevention Policy
- BC Health Care Worker Influenza Control Policy
- IH Occupational Health
- IH Communicable Disease Unit – Reportable communicable disease surveillance and management

BC Laws

- Hospital Act
- Community Care and Assisted Living Act
- Residential Care Regulation

Introduction and Application

Respiratory infections (RI) are spread when people cough or sneeze and the resulting droplets come into direct contact with the mucous membranes of the eyes, mouth, nose, or airway of another person. Because micro-organisms 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 RI can occur ***at any time during the year***. A number of viruses and several bacteria can cause institutional RI outbreaks, such as *Influenza, Parainfluenza, Respiratory Syncytial virus (RSV), Coronavirus (COVID-19 as well as other subtypes), Rhinovirus, Human metapneumovirus, Adenovirus, Streptococcus pneumoniae* or *Bordetella Pertussis*. 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. Once the organism is identified, more specific measures can be put into place (e.g. oseltamivir prophylaxis for influenza).

The purpose of this document is to provide current best practice/evidence based guidelines for outbreak control and management of RI in LTC facilities with the information and tools required to *prevent*, *identify* and *control* outbreaks of RI in a way that balances resident and staff protection with the least possible interference on facility function and resident well-being.

The guidelines apply to Interior Health (IH), private and contracted adult LTC facilities that are licensed through the Hospital Act or Community Care and Assisted Living Act. The principles in these guidelines may also be useful in assisted living settings.

NOTE: For policy direction ofstaff in IH facilities during an RI outbreak please refer to AV1300 *Staff Respiratory Infection Outbreak Management Policy*.

For non-IH facilities, follow your facility's Influenza Immunization Policy or, for licensed facilities, the Residential Care Regulation.

Tool A: Outbreak Prevention Principles

Understanding illness transmission and using routine practices everyday prevents the spread of illness. This Tool is an overview of the principles for infection control activities that need to be in place. For more detailed information please contact your organizational Infection Prevention and Control department.

Mode of Transmission for RI

Respiratory illness is transmitted through droplets, created by coughing and sneezing of infected people. It is spread to another person by those droplets coming into contact with mucous membranes of the eyes, mouth, nose, or airway of another person. Respiratory illness can also be transmitted by indirect means, which occurs from touching contaminated hands, surfaces, and objects, and then touching their own mucous membranes.

Aerosol Generating Medical Procedures (AGMP's) can make these droplets from infected persons smaller as well, requiring a fit-tested N95 respirator or equivalent for these procedures, depending on the organism.

It is important for staff to understand how illness is spread so that they can critically think about their actions and the environment to prevent transmission.

Infection Prevention and Control Principles

Use Routine Practices for interactions with **all** residents at **all** times, symptomatic or not.

Environmental Best Practices

By implementing these best practices at all times, an environment is created that is easy to navigate and prevents opportunities for transmission to occur.

- A clutter free environment means that there are no unnecessary items that can become contaminated and transmit illness.
- Consistent, regular environmental cleaning and tidying of the environment and surfaces, including disinfection, removes any infectious material that was deposited by infected individuals.
- Cleaning and disinfection of all shared equipment in between uses removes the risk of cross-contamination and transmission of illness.
- Ensure heating, ventilation and air conditioning systems (HVAC) systems are maintained in accordance to standards.

Routine Practices

- Always complete a Point of Care Risk Assessment (PCRA)
- These are designed to reduce the risk of blood and body fluid exposures to healthcare workers and to prevent transmission of microorganisms in all healthcare settings.
- Hand hygiene is the most effective way to prevent transmission of micro-organisms.
- It's important to remind visitors to do hand hygiene upon arrival to facility and when leaving resident's room.
- Use routine practices for any interaction with the resident. This includes assessing resident's symptoms and cognitive ability, the type of interaction that will occur, the necessary Personal Protective Equipment (PPE), the area in which care is being provided, and potential for contamination of equipment or environment.
- Routine Practices Information Sheet.

Additional Precautions

- Additional Precautions are used when Routine Practices are not enough.
- Residents and their visitors should be educated on Additional Precautions being used.

- Healthcare workers should have quick and easy access to PPE and cleaning and disinfecting products required when providing care, including supporting items, like hands free linen hampers and waste cans.

Personal Protective Equipment

See Links and Tools for signs and posters.

- Always complete a Point of Care Risk Assessment (PCRA).
- **Gloves: Gloves are not a substitute for hand hygiene.** Gloves must be changed between tasks, contact with different residents, and hand hygiene completed prior to donning and after doffing gloves.
- **Gowns:** Must be worn when providing direct care to a resident on Contact and/or Droplet Precautions Gowns must be changed after caring for an individual resident and must be doffed after leaving a resident's room.
- **Medical Masks and Eye Protection**: a medical mask with eye protection or a face shield is used to protect mucus membranes.
- **Respirator:** use N95 respirators and eye protection for AGMP's when patient is on Droplet Precautions

Note: . PPE must be doffed at least 2m away from resident upon completion of task.

***** Staff with any breaches in PPE while working with an infectious resident or when they were potentially infectious prior to illness must report the breach to the manager and monitor for symptoms.***

Resident Illness

- Active routine daily screening for symptoms, including fever, is required.
- Complete a PCRA. Assess resident's symptoms and cognitive ability, the type of interaction that will occur, necessary Personal Protective Equipment (PPE), and potential for contamination of equipment or environment.
    - Point of Care Risk Assessment
- Ill Residents need to be isolated and Droplet and Contact precautions used.
- See testing guidance for recommended criteria for viral respiratory testing (see Tool J for Testing Guidance).
- Residents need to be isolated while symptomatic. Negative tests **do not mean** isolation can be lifted as de-isolation is based on signs and symptoms. IPAC (IH facilities) or CD Unit (contracted partner or private facilities) can help provide direction. Confinement of residents even for an extra few days could have adverse effects on their well-being. It is important not to socially isolate residents and to keep the period of confinement to a minimum.

Staff illness

- Any staff who develop symptoms of RI (i.e. fever, cough, other RI symptoms) while at work need to don a medical mask and report to their supervisor to arrange being able to leave work.
- Any staff with symptoms that suggest RI should be excluded from work while ill. If a known agent is found to be circulating among residents before an outbreak is declared, or the staff person is diagnosed with a specific agent, a timeframe specific to that organism should be used for exclusion. Staff should to be vigilant in self-assessment of symptoms, particularly those working in multiple sites.
- Staff should not be coming to work while ill.

Tool B: Roles and Responsibilities

Facility Administrator / Manager or Director of Care or Most Responsible Person	
Roles	**Responsibilities**

Site Outbreak Management Team (OMT) Lead
 	
If there is more than one manager with staff at the site, identify one manager to be the Site Outbreak Management Team Lead. All communication and direction will flow through this single OMT lead.
	• At the beginning of the season, designates an outbreak management team (OMT) and prepares for an outbreak and reviews roles and responsibilities and outbreak control measures with team.
	• Consults with IP (IH facilities) or CD Unit (contracted partner or private) when reporting threshold is met.
	• Organizes and facilitates site OMT meetings for all outbreaks, except for the first initial OMT.
	  ○ For IH facilities, IP will facilitate the first OMT.
	  ○ For contracted partner and private sites, the CD Unit will organize and facilitate the first OMT
	  ○ Ensures OMT discussions and actions are documented and distributed to the OMT.
	• Receives direction on implementing outbreak control measures from IH IP (IH facilities) or the CD Unit (contracted partner or private facilities).
	• Coordinates with all department leads to ensure:
	  ○ that residents and staff are in a safe environment and
	  ○ outbreak control measures as outlined in the guidelines and/or as directed by an IP/CDU have been put into place and
	  ○ that these measures are being followed by ALL staff in the outbreak areas.
	• Ensures additional resources including staff (including coordinating with all department leads), supplies and enhanced cleaning and disinfection are available and implemented during the outbreak.
	• Reviews ongoing RI Line List Worksheet to ensure cases identified meet case definitions and maintains Master RI Surveillance Line List Tool.
	• Completes the RI and GI Outbreak Report form (823076) and sends it to the CD Unit (all facilities) and the IP (for IH Facilities):
	  ○ when the outbreak is declared,
	  ○ daily, Monday to Friday, and
	  ○ when the outbreak is declared over.
	• Submit a Community Care Reportable Incident Form to Licensing via the online portal when a threshold is met **and** when an outbreak is declared.
	• When outbreak is declared over, organize and facilitate an Outbreak Debrief (Tool P).

Education	• Coordinates with all department leads to ensure all staff have received outbreak education at the beginning of the season and understand what to look for to identify cases, how to respond to cases, and how to communicate between departments regarding

	concerns. • Other areas of education to ensure all staff have received includes Hand Hygiene, Donning & Doffing of PPE, Routine Practices and Additional Precautions, and reporting of breaches in PPE.
Communication	• Notifies facility partners of outbreak (Tool F). • Notifies other facilities where staff work, as well as hospitals to which residents have been transferred within at least the last 72 hrs. • Ensures ongoing communication with all staff in facility regarding outbreak situation. • Ensures ongoing communication with residents and families regarding outbreak situation. • When necessary, collaborates with Communication representative in the event that media statements are needed.

Medical Health Officer

Roles	**Responsibilities**
Outbreak Direction	• Declares the outbreak, directs which scenario or control measures are to be used, and declares the outbreak over. • Provides direction, recommendations and guidance on outbreak control measures, surveillance and reporting, and overall outbreak response. • Determines repatriation of residents, admissions and transfers of individuals into the LTC facility under outbreak. • Attends first OMT, and thereafter as requested by ICP (IH facilities) or CD Unit (contracted partner or private facilities).

Communicable Disease Unit

Roles	**Responsibilities**
Outbreak Assessment	• For all facilities, compiles an initial assessment of the facility that has met the Reporting Threshold to review with the MHO. • For IH facilities, includes as part of the initial assessment to the MHO the assessment from IP regarding facility IPAC measures and compliance. • For all facilities, consults with MHO regarding outbreak declaration and outbreak over declaration.
Outbreak Response Lead/Facilitation	For contracted partner or private LTC facilities: • Provides outbreak precaution direction and implementation recommendations to the site Outbreak Management Team lead (Most Responsible Person).

	• Reviews the outbreak situation and facilitates the first OMT, provides documentation of action items and MHO direction. • Consults with the MHO to obtain direction when deviations to control measures outlined in guidelines as needed, including getting approval from MHO on admissions, transfers, and repatriations.

Surveillance and Reporting	For all LTC sites:
	• Collects data from all outbreaks to support surveillance.
	• Receives the RI and GI Outbreak Report Form (823076) from all facilities:
	  ○ when the outbreak is declared,
	  ○ daily, Monday to Friday, and
	  ○ when the outbreak is declared over
	• Requests from site Outbreak Management Team lead the Master RI Surveillance Line List Tool as necessary.
	• Provides direction on surveillance definitions to the outbreak management team (e.g. case, outbreak, hospitalization, deaths)
	• For IH LTC sites, attends first OMT, and then as requested.

Communication	• Notifies regional and public health stakeholders of an outbreak declaration, relevant lab results, and when an outbreak is declared over.
Education	In collaboration with IPAC, provide pre-season preparedness training to LTC facilities.

Infection Preventionist (IP)

Roles	**Responsibilities**
Outbreak Assessment	Provides initial assessment of situation and IPAC measures and compliance to the CD Unit for IH facilities when reporting thresholds are met.
Outbreak Response Lead/Facilitation	For IH LTC Facilities • Provides outbreak precaution direction and implementation recommendations to the site Outbreak Management Team lead (Most Responsible Person). • Reviews the outbreak situation and facilitates the first OMT, provides documentation of action items and MHO direction. • Consults with MHO regarding deviations to control measures from the outbreak guidelines including getting approval from MHO on admissions, transfers, and repatriations. • Completes IPAC Outbreak Summary Report and sends to facility Manager/Director of Care and IPAC Directors, Managers and Epidemiologist.
Education	• In collaboration with CD Unit, provide pre-season preparedness training to all LTC facilities.

	• Provide outbreak education prior to outbreak season for IH owned and operated facilities • Provide ongoing IPAC outbreak support and education to facility staff for IH facilities. • For contracted partner and private sites, provides Infection Prevention and Control (IPAC) support when requested by the MHO/CD Unit as resources permit. • Provides outbreak education prior to outbreak season using Outbreak Management Practice Assessment.

Site Nursing Staff

Roles	**Responsibilities**
Outbreak Identification	• Works collaboratively with all staff interacting with residents to ensure early recognition of RI illness and implement appropriate Additional Precautions. • Works with site Outbreak Management Team lead (manager/most responsible person) and facility IP (IH facilities) or the CDU (contracted partner or private facilities) to ensure early recognition of RI illness in residents and possible outbreaks occurring. • Collects specimens and completes specimen requisitions. • Assess and identifies potential RI cases and reports to leadership (site OMT Lead).
Outbreak Management	• Ensures timely implementation of control measures and adherence to control measures. • Collects necessary specimens and sends them to the local IH lab with completed requisition forms. • Works collaboratively with any staff working with residents to ensure early recognition of RI illness and possible outbreaks. • Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, Additional Precautions, waste management and environmental controls.
Communication	• Communicates new cases and challenges to leadership/OMT Lead (e.g. lack of supplies).
Data Collection	• Provides details of resident RI cases on the RI Line List Worksheet and reviews with the site OMT lead (Most Responsible Person) and OMT for inclusion into the Master RI Surveillance Line List Tool.

All Staff Departments (Managers and Staff) that interact with Residents *(i.e. nursing, care aides, recreation, volunteers, and allied health personnel, etc.)*	
Roles	**Responsibilities**
Identification	• Works collaboratively with all staff interacting with residents to ensure early recognition of RI illness. • Communicates with nursing staff to ensure awareness of early recognition of RI illness and implementation of precautions. • Ensure immediate implementation of Droplet and Contact Precautions.
Outbreak Management	• Ensures immediate implementation of control measures and Additonal Precautions. • Working as a team (department managers and staff) with all staff to ensure additional resources including staffing (clinical and environmental services), supplies and enhanced cleaning and disinfecting supplies are available and implemented during the outbreak. • Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, Additional Precautions, waste management and environmental controls.
Communication	• Report RI illness to their supervisor, and do not work for the duration of their illness and for the specified time after symptom resolution. • For IH Staff, report RI illness to the Provincial Workplace Health Contact Centre for an assessment of exposure and reporting of the incident 1-866-922-9464. • Report any breaches in PPE when working with an infectious resident or when they were potentially infectious prior to illness to the manager and monitor for symptoms.
Data Collection	• Provides details of resident RI cases on the RI Line List Worksheet and reviews with the site OMT lead (Most Responsible Person) and OMT for inclusion into the Master RI Surveillance Line List Tool.

Support Services Managers and Staff *(i.e. Environmental Services, laundry, dietary, and maintenance personnel)*	
Roles	**Responsibilities**
Outbreak Management	• Ensures additional resources including staffing, supplies and enhanced cleaning and disinfecting supplies are available and implemented during the outbreak. • Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, Additional Precautions, waste management and environmental controls.

Access and Flow	
Roles	**Responsibilities**
Outbreak Management	• Contributes information regarding repatriation of residents to their LTC facility. • Follows OMT guidance on admissions and transfers.

Communication Representative	
Roles	**Responsibilities**
Communication	• Works collaboratively with the OMT representative (i.e. the Facility Director), the MHO and other key players involved in the outbreak to provide consistent, timely and accurate information

Licensing	
Roles	**Responsibilities**
Protection	• Promotes and protects the well-being of in licensed care facilities using a regulatory framework. • Utilizes inspection and investigation system to monitor and assess operations to identify and prevent risks of harm to residents.

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Tool C: Supply Checklist Template

LTC Facilities to use and modify/add to this Supply Checklist template as needed for their own use. It may be helpful to make note of ordering numbers (e.g. eRex) as reference on this template and ensure it is updated annually.

Specimen Collection swabs - Not expired		
	Order from Public Health Laboratory or IH labs minimum 6 viral swabs on all units by **Sept 15 annually** and maintain at all times.	
	Sample Requisitions "How to fill out a requisition"	
	PHSA Lab Virology requisitions	
Anti-viral Order Sets		
	Oseltamivir Prophylaxis of Influenza A and B (829559)	
	Oseltamivir Treatment of Influenza A and B (829561)	
Cleaning Supplies - easily accessible, adequate supply		
	Cleaner and Disinfectant	
	Alcohol-based hand rub	
	Hand soap and paper towels	
Outbreak Signage		
	"STOP – We are Experiencing an Outbreak" (form 807909 printed on red)	
	Droplet and Contact Precautions (form 807904)	
	Any other signage needed	
Outbreak Documents - bookmarked on computer or printed in a binder/folder easily accessible		
	IH RI Outbreak Guideline Toolkit	
	Quick Reference Guide (first page/landing page of Toolkit)	
	Master Respiratory Illness Surveillance Line List Tool	
	Respiratory Illness Line List Worksheet	
	RI and GI Outbreak Report Form (823076)	
Personal Protective Equipment (PPE) - Easily accessible, adequate supply- sufficient in sizes and volume		
	PPE carts or holders	
	Impervious disposable or reusable gowns	
	Medical Masks	
	N95 respirators	
	Eye Protection (ie. Face Shields)	
	Gloves • Small: • Medium: • Large: • Extra Large:	
Outbreak Supplies		
	Linen	
	Linen Cart	
	Laundry Hampers	
	Garbage cans- hands free	
Other		

Tool D: Surveillance in LTC Facilities

In order to identify when an outbreak may be developing, as well as to monitor the status of an outbreak, a line list of symptomatic residents **and** staff must be maintained. The Outbreak Management Team Lead will maintain a Master Line List using the Master Respiratory Illness Surveillance Line List tool.

A PDF Line List Worksheet is available for front line nurses to keep track of new cases, that can be used to update the Master Line List.

- Use these surveillance line list tools within your facility year round, tracking symptomatic residents and staff to help identify when the facility meets a reporting threshold. Residents should be monitored daily for symptoms of illness.
- Use these surveillance line list tools within your facility during an outbreak to identify new cases. This is used by the OMT to inform the status of the outbreak and the effectiveness of the control measures.
- Use these surveillance line list tools during the outbreak to identify new cases and to inform the completion of the daily report form, the RI and GI Outbreak Report Form (823076). **Cases reported on the RI and GI Outbreak Report Form must meet a case definition.**
- While staff may not be included in the reportable counts, staff cases need to be tracked in case the MHO requires that information during an outbreak.
- The Outbreak Management Team Lead may add additional columns in the Master RI Surveillance Line List Tool if there are additional variables they want to track during an outbreak.

Master Respiratory Illness (RI) Surveillance Line List Tool Template

Respiratory Illness (RI) Line List Worksheet

Tool E: Outbreak Management Team

All facilities are to have a designated site **Outbreak Management Team** (OMT) responsible for preparing for outbreaks and ensuring measures are in place for preventing, managing, and controlling outbreaks.

- This structure provides a systematic means to support coordinated communication and resolve issues.
- The OMT works to prepare and stay prepared for possible outbreaks.
- The OMT functions by reviewing the status of the outbreak and evaluating and modifying control measures needed so the outbreak can be declared over as soon as possible.
- OMT members should have decision making authority for their discipline within the facility or unit.

The designated **Most Responsible Person**, the person with the highest level of administrative authority, is the site Outbreak Management Team Lead and begins the outbreak management process.
This is typically the LTC Site Manager/Director of Care (or designate).

Before any outbreak occurs*:*

On an annual basis, **ideally prior to October of each year**, the OMT should be designated to ensure they are prepared for an outbreak. This includes providing education, reviewing roles and responsibilities, precautions, documentation and resources, ensuring adequate supplies in place, staffing levels considerations, and more, for the entire season. See Tool I: Outbreak Preparedness Considerations.

Education for the facility staff includes:

- Testing guidance, case definitions, and reporting thresholds
- The process of identifying and reporting a threshold
- Hand and respiratory hygiene
- Routine Practices and Additional Precautions, and reporting of breaches in PPE
- Practicing donning and doffing of PPE
- Information on influenza and COVID-19 vaccines, and oseltamivir treatment and prophylaxis for staff and residents
- Facility Policies and procedures

During any outbreak:

The Outbreak Management Team (OMT) meets Monday-Friday (excluding stats) with the first occurring within 1-2 business days of outbreak declaration. The first OMT will be led by the Outbreak Response Lead which is the IP (IH Facilities) or the CD Unit (contracted partner or private sites); ongoing OMT's will be led by the Most Responsible Person/site Outbreak Management Team Lead. The IP (IH facilities) CD Unit (contracted partner or private facilities) will work with the site Outbreak Management Team Lead to review situation daily.

OMT Meeting Topics:

Use the OMT Daily Meeting Agenda and Notes as a template. Below is a list of information that is typically reviewed during an OMT, and remember to review the status of pending action items from prior meetings for each topic :

- New and Total Cases are reviewed in residents and staff:

  - Completion of the daily RI and GI Outbreak Report form (823076).
- Review precautions and if they are implemented appropriately
  - Any changes or Additional Precautions needed?
  - Any equipment needs? (swabs, PPE, garbage cans, etc)
- Sample collection and testing
- Program reports
  - Any issues that need to be addressed?
  - Staffing issues
- Communications
  - Initial outbreak notification to partners (Tool F)
  - Other ongoing communications
- If control measures appear to be failing (e.g. after a few days of control measures, new cases should reduce but don't seem to be) the OMT should review possible reasons for ongoing cases.
  - See Section 20 of the PICNet RI outbreak guidelines for ideas to investigate (Problem solving When Control Measures Appear to be Failing).
- If an MHO is attending an OMT, ensure the OMT is prepared with questions that require MHO input or direction.

Membership to the OMT:

Mandatory:

Site **Outbreak Management Team Lead** - LTC Manager/Director of Care (or Designate)	
Site **Outbreak Response Lead** (IH IP for IH facilities and CD Unit for contracted partner and private facilities)	
Medical Health Officer (MHO) (attend first meeting and as required)	LTC Coordinator/Charge Nurse
IH Clinical Operations Director, Long-term Care for area (first meeting and then only as required)	Environmental Services representative
Licensing, (attend first meeting only, and then only if required by the MHO).	Organization infection control representative (contracted partner or private sites)
Communicable Disease (CD) Specialist (for IH sites – first meeting and then only as required)	Administrative Support
IH IP (for contracted partner or private sites – first meeting and then only as required)	Workplace Health and Safety

Membership to the OMT only if required, otherwise outbreak updates should be communicated to these departments by the site Outbreak Management Team lead:

Acute Care Representative	Allied Health
Area Division of Family Practice Representative	Community Representative
Epidemiology/ surveillance	Facilities Access Coordinators
Facilities Maintenance Operations (FMO) (Plant Services)	Finance/Business Support
Food Services	Human Resources
IH Director Population Health, Clinical Prevention & Pandemic Response	IMIT
Laboratory Representative	Laundry Services/(Contacted Services)

Medical Imaging	Pharmacy (initial OMT and then only as required)
Recreation/ Volunteers	Staffing Services
Stores/Logistics	Transition Liaison Representative
	Other stakeholders as required by outbreak circumstances

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Tool F: Notification of Partners

The site Outbreak Management Team Lead will notify their partners that an outbreak is occurring once it has been declared by the MHO and the control measures required (e.g. Scenario). This tool can be used as a template to record contact information for partners specific to the facility to facilitate the notification process.

This includes, but is not limited to:

- The Director, Clinical Operations on Call (IH) or equivalent (for private/contracted facilities)
- The Communicable Disease Unit
- The facility Infection Preventionist (IH IP for IH facilities or contracted/private facilities equivalent)
- Residents, staff, and families – they should be notified within 24 hours of outbreak declaration
- Others as appropriate, for example:
    - Site Outbreak Management Team members
    - Service providers such as Patient Transport Office, oxygen services, laboratory services, BC Emergency Health Services (BCEHS) , hemodialysis units, etc.
    - Public Health Laboratory for specimens tested as part of outbreak
    - Staffing/scheduling office (if ill staff) to arrange for adequate relief staff
    - Medical Director of the facility and physicians of the residents
    - Licensing Officer
    - Hospital facilities to which residents have recently been transferred within at least 72 hours.
    - Other external service providers, e.g. therapist, home health, foot care, respite support, volunteers, students, paid companions, etc.

LTC Facilities to use and modify/add to this Contact List template as needed for their own use and ensure it is updated annually.

Department	**Contact Information**
Director, Clinical Operations on Call (IH) or private/contracted facilities Equivalent	
Communicable Disease Unit	CDOutbreak@interiorhealth.ca or 1-866-778-7736
IPAC/IP (IH facilities) or contracted partner/private facilities organizational equivalent	IPAC@interiorhealth.ca (IH facilities) Or site infection prevention and control department (contracted partner/private)
Patient Transport Office	
Oxygen Services	
Lab Services	
BCEHS	
Hemodialysis	
Medical Director	
Licensing Officer	LicensingDirect@interiorhealth.ca or 1-877-980-5118
Pharmacist	
HandyDART	
Medical gas/oxygen provider	
Hairdresser	
Physiotherapist	
Admin Respite Support	

Tool G: Influenza Vaccine Delivery

Influenza remains a significant cause of illness and death amongst the elderly and frail residents of care facilities. **Influenza vaccination of both residents and health care workers is the most effective measure for reducing the impact of influenza in Healthcare facilities.** It reduces the risk of severe illness or death from influenza infection in individuals and it reduces the risk of influenza outbreaks. Immunization of Health Care Workers (HCW) is critical to the care of vulnerable residents in order to achieve the best protection for them. Even during seasons of suboptimal vaccine effectiveness, some cross-protection may be provided by vaccination depending on multiple agent host-factors.

Immunization of Health Care Workers (HCW)

A HCW is any person carrying out paid or unpaid work in a healthcare facility. Persons who volunteer or undergo training in a health care facility for any period of time between October to April and all HCWs are **eligible for free vaccine.** Influenza immunization of people capable of transmitting influenza to residents is considered a part of the duty of care for residents. Besides influenza, it is important to encourage immunization against those diseases that are recommended for Health Care Workers by BCCDC.

Vaccinations of HCWs should commence each year as soon as the vaccine becomes available.

- To ensure vaccine distribution is prioritized for facilities sites must complete the Facilities Influenza Vaccine Order Form, located on the Public Website Influenza immunization program
- Completed forms should be forwarded to the local public health office and emailed to Vaccines@interiorhealth.ca by August 31st each year.
    - Facilities should base initial vaccine orders on 100% update.
- The vaccine will be available for re-order throughout the season.
- Managers should ensure that staff have reported according to their organizational Workplace Health & Safety requirements as being either vaccinated or committed to using masks when appropriate as per the AV1350 Influenza Prevention Policy or BC Health Care Worker Influenza Control Policy when in a patient care location during the months October through April.
- Staff may be vaccinated at their community pharmacy or pharmacy-led on site clinic, through Public Health, or by their family physician. All persons receiving the vaccine should be screened for contraindications. Influenza vaccine should not be given to people who have had an anaphylactic reaction to a previous dose of influenza vaccine.

It is important for each facility to keep an up-to-date record of who has received influenza vaccine in order to provide immunization rates if requested. All staff are encouraged to keep their own record of immunization, regardless of where they were immunized if requested, especially when employed at multiple sites.

The Most Responsible Person in the facility should review the immunization rates by the end of December. If staff rates are less than 60% and resident rates are less than 90%, the facility should develop a plan to increase immunization rates or mitigate the effect should an influenza outbreak be declared.

- IH Administrative Policy Manual AV1350 Influenza Prevention Policy
- IH Administrative Policy Manual AV1300 Staff Respiratory Infection Outbreak Management Policy
- Ministry of Health Health Care Worker Influenza Control Policy Communique

Immunization of Residents of Adult LTC Facilities

Residents of any age are eligible for free influenza vaccine and require vaccination annually. Unvaccinated residents who catch influenza can become very ill and can spread the virus to other residents and staff in the facility. Immunization helps prevent illness and reduces shedding of the virus.

In addition residents are eligible for pneumococcal vaccine if in a risk group or over age 65. Facilities are encouraged to screen for vaccine eligibility on admission.

Immunization of Visitors

Provide family and visitors with information regarding the need for influenza and pneumococcal immunization and locations where they can receive immunization.

Reporting and Records

Facilities need to maintain annual records of HCW influenza vaccination status and have these records available in the event of an influenza outbreak.

All LTC Facilities will need to send reports on vaccine coverage to the local PH center using the Report of Influenza Immunization – Facilities located on the public website Influenza Immunization Program.

IH Staff should refer to the IH Influenza Protection Program (IH Occupational Health) webpage for more information .

Influenza Immunization – Health Care Worker Record – Use this template if needed. Organizations may have other mechanisms for tracking and accessing this information.

Influenza Immunization – Resident Record – Use this template if needed.

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Tool H: Oseltamivir

Long-term Care Facilities

When the RI outbreak has been identified as an influenza outbreak (by lab confirmation, or based on the assessment of the MHO), oseltamivir is initiated for treatment and/or for prevention of illness (prophylaxis). It is important to work with the facility pharmacist and the Medical Director to ensure facilities are ready to provide oseltamivir medication as soon as possible after the influenza outbreak has been declared. The oseltamivir is effective against both Influenza A and B.

Prior to the end of October each year the facility should:

- Identify individuals with a contraindication to oseltamivir, such as an oseltamivir allergy or severe intolerance. Oseltamivir should not be administered to residents with an oseltamivir allergy or intolerance, or who refuse treatment. Inform the patient's health care provider (physician or nurse practitioner) that the patient has a possible contraindication to oseltamivir.
- Oseltamivir dose adjustments are required for residents with renal dysfunction. Find the latest serum creatinine (Scr) and estimated glomerular filtration rate (eGFR). Note that the eGFR is automatically reported for each creatinine.
    - Scr retesting is not required if the estimated GFR (eGFR) was 60 mL/minute in the last 12 months and no renal dysfunction is suspected by the physician, if a recent creatinine is available (in the previous 4 weeks), or if the resident receives chronic hemodialysis or peritoneal dialysis.
    - Scr Testing is recommended if there has been no creatinine tested in the last 12 months or if the eGFR is less than 60 ml/minute or renal dysfunction is suspected by the physician.
    - If Scr retesting is required, contact the resident's health care provider (physician or nurse practitioner) for an order.
- Obtain Oseltamivir Order Sets:
    - Oseltamivir Prophylaxis Influenza A and B (829559)
    - Oseltamivir Treatment Influenza A and B Infection (829561)

  Ask the patient's health care provider (physician or nurse practitioner) to review, complete and sign both Order Setss and then place the completed orders on the residents' charts prior to the start of outbreak season.

  NOTE: If the resident is receiving peritoneal dialysis or hemodialysis, fax oseltamivir Order Sets to the renal program and/or dialysis unit for their records.
- Ensure facilities' pharmacies can supply the volume of oseltamivir required for prophylaxis all facility residents.

When to use Oseltamivir Medication

Oseltamivir is not effective against other viral respiratory infections, including COVID-19. Therefore, it is important to base decisions about their use on appropriate epidemiologic, clinical, and laboratory data about the etiology of prevalent infection(s).

When the causative agent has been lab-identified as influenza or when a Scenario A outbreak has been declared by the MHO, the oseltamivir **prophylaxis** (prevention) and **treatment** is effective in controlling outbreaks due to influenza in LTC facilities.

Oseltamivir prophylaxis does not replace annual influenza vaccination. Vaccination remains the primary tool for the prevention of influenza infection and illness.

Oseltamivir should be used as follows:

Residents:

For **prophylaxis** of influenza:

- All symptom-free residents should receive prophylaxis once a Scenario A outbreak has been declared and it should continue a minimum of 10 days or until outbreak is declared over, whichever is longer.

For **treatment** of Influenza:

- All residents with influenza symptoms should receive treatment provided the medication can be started within 48 hours of onset of symptoms. Treatment should continue for 5 days.

Health Care Workers (HCWs):

- Oseltamivir prophylaxis may be recommended for staff during an RI outbreak regardless of immunization status and for their own individual benefit.
- Oseltamivir prophylaxis should continue for a minimum of 10 days or for the duration of the outbreak, whichever is longer.
- Staff seeking oseltamivir for prophylaxis or treatment should obtain a prescription from their physician or nurse practitioner.
- A sample letter for staff to take to their physician is available.

Surveillance of Side Effects from Oseltamivir:

In general, oseltamivir is well tolerated, with the most common adverse effects being nausea, vomiting and diarrhea. Document oseltamivir adverse side effects in the resident's health record. Report serious or unusual adverse effects to the resident's health care provider, the Director of Care, and the Medical Director.

More detailed information on the use of oseltamivir including indications for use, dosage, potential side effects can be found in the most current Compendium of Pharmaceuticals and Specialties (e-CPS).

Return to top: Oseltamivir

Tool I: Outbreak Preparedness Considerations

Outbreak Preparedness

The following list of activities is a guide on what to do to prepare the LTC facility for the event of an outbreak. These are activities that need to be done ***before*** an outbreak occurs and it is recommended to complete these preparation activities in October of each year, in anticipation of respiratory illness season. Routine monitoring and assessment of routine practices and PPE use should be done to determine where ongoing education should be targeted.

The Most Responsible Person in the facility, the manager or director of care who would be designated the Outbreak Management Team Lead, will ensure that the facility is prepared for an outbreak.

Review with ALL staff (care staff, environmental services, dietary, etc):		
	Roles and responsibilities (Tool B)	
	Testing guidance, case, and reporting threshold definitions (Tool J)	
	The process of reporting a threshold (Tool K)	
	Control measures for Enhanced Measures (Tool L) or Outbreak (Tool M)	
Provide Education – initial and ongoing for all staff, volunteers, and residents		
	Testing guidance, case definitions, and reporting thresholds (Tool J)	
	The process of reporting a reporting threshold (Tool K)	
	Hand and respiratory hygiene	
	Routine Practices	
	Reporting of breaches in PPE	
	Practicing donning and doffing of PPE	
	Information on influenza vaccines, oseltamivir treatment and prophylaxis (Tool H) for residents and staff.	
	Facility policies	
Maintain surveillance line lists (Tool D) routinely in order to identify when a reporting threshold has been met. See Testing Guidance, Case Definiton, and Reporting Threshold (Tool J) definitions		
Ensure Order Sets for residents are prepared for oseltamivir. See Tool H.		
Encourage/provide immunizations to staff and residents, and maintain immunization records for staff and residents. See Tool G.		
Prepare a binder/ folder/box to contain updated annual outbreak information, including records, procedures, contact lists, line lists, supply lists etc., or set up bookmarks for online access, and review with the OMT and all staff. See Tool C for a supply checklist template to maintain as part of this.		
Ensure there are adequate levels of supplies that will be needed in an outbreak. See Tool C for supply checklist template.		
	Plan for processes on ensuring staff have easy and immediate access to supplies. Re-order as necessary.	
Consider and plan for the staffing levels needed to work in an outbreak.		
Designate an Outbreak Management Team (OMT). See Tool E for membership lists and outbreak preparation tasks. This team will work throughout respiratory season on outbreak preparedness activities.		
	Ensure facility staff on the OMT have decision-making capabilities.	
	CD Unit, MHO, and IH Clinical Operations Directors may not be included in these OMT preparedness activities.	

Tool J: Testing Guidance, Case and Reporting Threshold Definitions

Testing Guidance

Residents are monitored for symptoms of illness. Testing may be indicated when the symptomology meet the criteria as follows, or at the direction of the resident's MRP.	Acute onset of respiratory illness with new or worsening cough **OR** fever or temperature that is abnormal for that person **AND** one or more of the following symptoms: • Chills • Shortness of breath • Runny or stuffy nose (ie. Congestion) or sneezing • Sore throat or hoarseness or difficulty swallowing • Loss of sense of smell or taste • Swollen or tender glands in the neck (ie. Cervical lymphadenopathy) • Headache • Arthralgia, myalgia • Severe weakness or fatigue

Case Definitions

Lab Confirmed respiratory organism case	Resident exhibiting signs compatible with a respiratory illness and subsequently tests PCR positive by lab (i.e. Influenza, Respiratory Syncitial Virus (RSV), Human Metapneumovirus (HMNV) etc.)

Symptomatic Respiratory Infection (RI) Resident Case:
 	
The IP/CD Unit/MHO should be consulted if you have an unusual cluster of illness in your facility that does not meet the case definition.
 	
(Implement Droplet & Contact Precautions (807904) when providing direct care to symptomatic residents).
	A case of RI is defined as:
	• **new or worsening cough**, OR
	• **a fever greater than 38 °C or a temperature that is abnormal for that person, *AND***
	• **one or more of the following:**
	  • Chills
	  • Shortness of breath
	  • Runny or stuffy nose (ie. Congestion) or sneezing
	  • Sore throat or hoarseness or difficulty swallowing
	  • Loss of sense of smell or taste
	  • Swollen or tender glands in the neck (ie. Cervical lymphadenopathy)
	  • Headache
	  • Arthralgia, myalgia
	  • Severe weakness or fatigue
	
	Note: A temperature of less than 35.6 °C or greater than 37.4°C in the elderly may be an indication of infection.
	
	Note: Young children, the elderly, the immune-compromised, or those taking medications such as steroids, NSAIDS, or ASA may not develop a fever, or may have a lowered temperature as a result of the infection.

Reporting Thresholds

Reporting to CD Unit	**Two** or more lab confirmed Influenza Cases with symptom onsets within a 7 day period. **OR** **Four*** or more symptomatic respiratory illness resident cases or lab confirmed respiratory pathogen cases of any kind, with symptom onsets within a 7 day period. * If there are concerns related to a significant risk of transmission, such as multi-bed rooms, inability to effectively isolate infectious residents, etc., and numbers are below threshold, facilties should report to the IP (IH facilities) or CD Unit (contracted partner or private facilities)
Threshold not met - No reporting to CD Unit Needed The purpose of taking action at this time is to prevent an outbreak from occurring.	If the threshold to report to the CD Unit has not been met, the LTC facility should take the following preventative actions: • Isolate cases of RI on precautions • Be on the alert for more cases with increased monitoring and recording • Be ready to possibly implement full unit-wide control measures if more cases are detected and an outbreak is declared by the MHO Consult facility infection control with intention of preventing outbreak

Outbreak Definition

Outbreak definition	An outbreak may be declared by the Medical Health Officer when either: • there is an unexpected increase in respiratory illness resident cases OR • there is evidence, or significant risk, of ongoing transmission within the facility OR • usual prevention and control measures have not been able to interrupt transmission.

Return to Top: Testing Guidance, Case and Reporting Threshold Definitions

Tool K: Contact Information for Reporting Thresholds

1) Contact Information:

Who do you contact first?			
When you have cases but don't meet the Reporting Threshold	Business hours, Monday to Friday	IH Facilities	IH IPAC
		Contracted Partner and Private Facilities	Facility's organizational Infection Control department
When you meet the Reporting Threshold *also includes unusual cluster of illness that does not meet case definitions or when Enhanced Measures are in place	Business hours, Monday to Friday	IH Facilities	IH IPAC
	Business hours, Monday to Friday 8:30 am – 4:30 pm	Contracted Partner and Facilities	CD Unit: CDOutbreak@interiorhealth.ca or 1-866-778-7736
	Weekends and Holidays	All Facilities	MHO on Call: 1-866-457-5648

2) Reporting Thresholds:

ALL sites ***must*** report that a threshold has been met to the MHO.

- IH facilities are to report to the IH IP first, who will review and notify the CD Unit.
- Contracted Partner and Private facilities will report to the CD unit.

The CD Unit will consult with IH Infection Control and the Medical Health Officer (MHO); the outbreak will be declared by the MHO.

Weekdays (M – F: 8:30 – 4:30): email CDOutbreak@interiorhealth.ca or call 1-866-778-7736.

Weekend and Holidays: contact the MHO on call (1-866-457-5648)

Information required by the CD Unit/MHO includes:	
• Total number of residents ill, the date of symptom onset, and the most recent symptom onset	• Any general respiratory illness control measures initiated
• total number of staff ill	• staff immunization rates
• location of cases in facility	• resident immunization rates
• number of swabs sent	• known test results in cases

3) Daily Outbreak Case Reporting

Once an outbreak is declared by the MHO, daily reporting of cases is required. Use the RI and GI Outbreak Report form (823076). Only those that meet case definition should be reported on this form.

	On the day of Outbreak Declaration	Ongoing Daily Reporting
ALL sites	Complete the top portion and Section A of the IH **RI and GI Outbreak Report Form** (823076). Email the form to the CD Unit at CDOutbreak@interiorhealth.ca	Complete Section B of the **IH RI and GI Outbreak Report Form** (823076) Daily. Email it to CDOutbreak@interiorhealth.ca
IH Facilities	Also email IPAC a copy of the completed **RI and GI Outbreak Report Form** (823076).	Also email IPAC a copy of the completed **RI and GI Outbreak Report From** (823076) prior to 0900

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Tool L: Enhanced Measures:

Reduce transmission with Enhanced Measures

Once the Reporting Threshold has been met, the IH IP or CD Unit will provide direction and support on implementing Enhanced Measures if appropriate. See Tool K for who to contact.

The first step is to investigate and identify the source of illness so that it can be stopped/reduced if possible.

Daily Reporting is NOT required. **Measures to Implement:**
Enhanced cleaning and disinfection as outlined in Tool M.
Isolate Ill Residents as outlined in Tool M
Continue IPAC Measures as outlined in Tool M, including monitoring residents, performing PCRA's, hand and respiratory hygiene, Routine Practices and Additional Precautions.
Provide Education as outlined in Tool M
Exclude ill staff as outlined in Tool M.
Cohort staff if not already occurring as outlined in Tool M
Do not transfer well residents into multi-bed rooms with ill residents.
Consider **removing common touch items** in shared areas (salt and pepper shakers, sugar bowls, table cloths).
Ensure there are no food items open in/near common and resident areas (e.g. also including nursing stations).
Ensure staff moving between sites (e.g. physio, lab, etc.) have increased vigilance in PPE use and hand hygiene.
For residents on precautions **that require necessary or urgent visits to other health care sites,** ensure the requirements for precautions have been communicated to the receiving site so they can be taken there.
Enhanced Measures can be stood down after 7 days with no new cases. Contact IPAC (IH Facilities) or CD Unit (contracted partner or private facilities) before standing these measures down. **If Enhanced Measures have been in place for more than 2 weeks, or there are 10 cases, or there are other concerns regarding high levels of transmission (eg. a 50% attack rate for small facililties) or spread between units, the Enhanced Measures may not be working to reduce transmission. Contact as per Tool K**

Any more restrictive measures ***must have MHO approval to implement.***

Discuss with IP (IH Facilities) or CD Unit (contracted and private sites) (Tool K).

More restrictive measures may include closing dining rooms, limiting visitors, stopping group activities, restricting transfers and admissions, cohorting ill residents from multi-bed rooms, isolating well residents (even contacts), etc.

- While cohorting or isolation of residents may not be recommended, limiting residents between floors or units may be an option to review with the MHO.
- If investigation links transmission to a common area or group activities, may consider closing or limiting for an incubation period, to determine if other cases are going to occur or not, at the discretion of the MHO.

Tool M: Measures for Managing an Outbreak:

Outbreak Precautions by Scenario.

Details describing the outbreak precaution found below the table in the next pages. Links to the precaution found in the table.

Outbreak Infection Control Precautions	Scenario A More Severe RI known or suspected to be due to Influenza	Scenario B More severe RI known or suspected to be due to a non-influenza or bacterial cause
Continue IPAC Practices:	√	√
Medical Masking	√	√
Isolate Ill Residents:	√	√
Cohort Staff:	√	√
Cohort Residents:	√	√
Exclude Ill Staff:	√	√
Initiate Oseltamivir for Treatment and Prophylaxis	√	N/A
Common Areas	√	√
Restrict Admissions and Transfers:	√ Consult IP/CDU (MHO) for these issues	√ Consult IP/CDU (MHO) for these issues
Restrict Group Activities:	√ suspend group activities within the affected area	√ Consider cancelling or modifying
Visitor Restrictions:	√	√
Enhanced Cleaning and Disinfection:	√	√
Education:	√	√
Outbreak Signage:	√	√

Outbreak Precaution Details

Continue Infection Prevention and Control Practices

- Point of Care Risk Assessment (PCRA)
  - Must be done for any interaction with the resident: assess resident's symptoms and cognitive ability, type of interaction that will occur, necessary Personal Protective Equipment (PPE) and potential for contamination of equipment or environment.
- Hand Hygiene
  - Practice 4 moments of hand hygiene
  - Use soap and warm water or alcohol based hand rub (ABHR). If hands are visibly soiled use soap and water.
  - Assist residents with hand hygiene, particularly after toileting, before meals, and before handling food.
  - Provide ABHR at all entrances and exits with signage on how to use.
  - Practice hand hygiene before and after contact with each resident and resident environment.
- Respiratory Hygiene
  - Remind residents, visitors and staff to cover the nose and mouth when sneezing and coughing and to perform hand hygiene after coughing, sneezing or using tissues.
- Routine Practices and Additional Precautions
  - Use Routine Practices for interaction with all residents.
  - PPE and cleaning supplies should always be readily accessible for use.
  - Use Droplet and Contact Precautions (807904) for interaction with residents showing symptoms of RI.
  - Ensure personal care supplies are patient specific.
  - Ensure no shared food or drink (i.e. Nursing station, lounges)
  - Ill residents should not access the patient kitchen or public lounge.
  - Clean and disinfect all equipment between uses and for different residents. This is a shared responsibility between all staff
- Monitoring
  - Monitor residents for symptoms during outbreak daily. Immediately swab resident if they meet the testing criteria (Tool J).
  - Maintain Master Respiratory Illness Surveillance Line List Tool and the Respiratory Illness Line List Worksheet.

Medical Masking

- All staff are recommended to practice universal masking for the duration of the outbreak.

Ill Residents

- Isolate ill residents in their room while potentially infectious.
  - Confinement of residents can have adverse effects on their well-being. It is important to *keep the period of confinement to a minimum.*
- Provide meal tray service in room.
- Ensure staff and visitors use appropriate Routine Practices and Additional Precautions
  - Use Droplet and Contact Precautions (807904) for entire isolation period.
- If residents require hospitalization, notify the receiving facility and transportation services that an outbreak is in progress.
- Keep well residents away from affected floors/wings/areas where the outbreak is occurring.
- Residents who are not ill may attend other facilities for medically necessary appointments. Notify the receiving facility and transportation services that an outbreak is in progress.

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Cohort Staff

- Staff cohorting to specific units should be used where practical.
- Staff members should be cohorted to work with either ill residents or well residents. If this is not possible, staff should work with asymptomatic residents first and then with symptomatic residents.
- Staff working in an outbreak area should not work in a non-outbreak area within the facility or in another facility until the outbreak is over. Where this may jeopardise staffing levels, the MHO may provide alternative recommendations.
- Healthcare providers entering the facility/area during an outbreak (e.g. laboratory staff or physicians) will be expected to provide care or services in the non-affected areas of the facility or with well residents first.
- Staff handling, providing, and or delivering food should not enter rooms of residents on droplet and contact precautions or outbreak units.

Cohort Residents

- Moving residents in a LTC facility to achieve cohorting is not appropriate as displacement of residents from their own rooms will often cause anxiety and disorientation.
- Limiting transmission is achieved by restricting the movement of residents between an area of the facility known to have RI cases (such as a pod or "neighbourhood") and areas that do not have RI cases, for the duration of the outbreak.

Exclude Ill Staff

- Follow IH policies for symptomatic staff to return to work (AV1300). Contracted Partner and private sites will follow the same guidance during a declared outbreak.

Initiate Oseltamivir

- Scenario A Outbreaks only:
  - Initiate the recommended anti-viral treatment and prophylaxis (see When to use Oseltamivir Medication).

Common Areas

- All shared items should be removed from the shared areas (e.g. salt and pepper shakers, sugar bowls, table cloths). Remove and discard food in refrigerators found in common areas or nourishment areas and clean and disinfect these appliances.
- Open or shared food items (candy, cookings, fruit, etc) should not be kept in shared resident areas, staff lounges, or staff workspaces (eg. nursing station). Staff should avoid sharing food. Food should be contained to staff room only.
- Ill residents should not access the patient kitchen or public lounge.

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Restrict Admissions and Transfers

Admissions and Transfers should be postponed until the outbreak is over. If transfers or admissions are required, an assessment must be completed.

Considerations/Requirements:

Resident/decision maker and attending physician must provide informed consent to admit into an outbreak
Recommend isolation of incoming residents with pre-existing conditions that make them vulnerable to viral illness
Receiving Facilities' ability to provide suitable accommodation during the outbreak to prevent exposure (eg. room in separate wing not affected by outbreak, private room).
Must be considered essential
NOTE: • In general, the re-admission of residents who met the case definition for RI prior to discharge/transfer is reasonable provided appropriate accommodations and care can be provided. • The re-admission of residents who did not meet the case definition for RI prior to discharge/transfer is not advisable during an outbreak. • However, if a resident who is not a case, leaves the facility for a short period of time during an outbreak (eg. medical appointment, ER visit, or family visit) it is acceptable for them to return to the facility without MHO/CDU/IP consultation. A short period of time is defined as a few hours, not more than one day, and less than one incubation period if the causative organism is known. • Should a transfer to an acute care facility be medically required, notify the receiving facility of the outbreak, causative organism, Additional Precaution, and expected isolation period.

The Most Responsible Person/Director of Care in the LTC facility will consult the Outbreak Response Lead, who will consult with the MHO as needed, or on Weekends and holidays call the MHO on call.

- See the LTC Transfer Algorithm and Transfer Risk Assessment Form for Outbreaks
- For admissions from other locations (eg. community or other LTC) the Outbreak Management Team Lead will provide details to Outbreak Response Lead.

Restriction of Group Activities

- For Scenario A:
  - Group activities and non-critical volunteer services for residents should be suspended within the affected area.
  - Restriction of residents' movements within the facility will be implemented (to wing or floor, depending on layout of the facility).
  - The OMT will make decisions regarding group rehabilitation program modification requirements with review by the IP/CD Unit, who will consult with MHO as needed.

- For Scenario B:
  - Review group activities and non-critical volunteer services and consider cancelling or modifying to prevent spread. (i.e., cohorting ill-residents with ill-residents, and well-residents with well-residents.)
  - Weigh the importance of group activities for resident well-being against the needed infection control measures.

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Visitor Restrictions

In general, a complete closure of the facility to all visitors/volunteers is **not** recommended and should only be done in consultation with the MHO and with careful consideration of the risks/benefits to all residents.

Ensure:

- Family members of ill residents are notified.
- Advise visitors of the potential risk of acquiring infections within the facility and of re-introducing infections into the facility.
- Advise visitors to reschedule visits if they themselves are sick with respiratory symptoms.
- Visitors, including family members, should be counselled about their ability to spread the virus.
- Visitors are encouraged to wear a mask in any common areas
- All visitors are required to perform hand hygiene on arrival and immediately prior to leaving the resident's room, perform respiratory hygiene, and are not to visit other residents in the facility.

Enhanced Cleaning and Disinfection

- Frequent disinfection of commonly high touched surfaces or items such as handrails, elevator buttons and door handles. Use a healthcare approved product with a DIN.
- Provide sufficient receptacles for safe disposal of contaminated items such as tissues.

Education

- Reassess practices of staff on identifying early signs of illness, prevention, donning and doffing PPE, educating residents and visitors, and provide educational updates to all staff.

Outbreak Signage

- Use signage to alert visitors and staff of the outbreak and required precautions. See "Signs" under Links and Tools.

Return to Top: Measures for Managing Outbreaks

Tool N: Specimen Collection and Transport

**Testing of clinical specimens *is completed at IH labs.* Please drop off all specimens for the outbreak at the local Interior Health lab as soon as possible after collection.

1. **Nasopharyngeal Swab Collection Kits**

   Respiratory outbreak kits from BCCDC may be ordered from Public Health Laboratory using the Sample Container Order Form. Fax to the BC Public Health Laboratory at 604-707-2606 or **email** to kitorders@hssbc.ca.

   - Ensure that a supply of specimen containers is kept on hand as delivery of kits takes approximately two weeks.

2. **Nasopharyngeal Swab Specimen Collection**

   NOTE: For personal protection it is recommended that gloves, gown, mask, and eye protection be worn when collecting specimens.

   NOTE: Collect the specimens within 48-72 hours of symptom onset.

   Label the container with the **resident's full name** and **date of birth** and **Personal Health Number (PHN)**.

   Supporting Resources:

   IH staff must use:
   - Clinical Skills: Specimen Collection: Nose and Throat Specimens for Culture, Elsevier Performance Manager

   Contracted Partner and Private sites:
   - How To Guide: Nasopharyngeal Flocked Swabs and UTM

3. **Complete the Accompanying Documentation**

   - Send one PHSA Laboratories Virology Requisition for each nasal swab taken.
     - Ensure the resident's **full name**, **date of birth**, and **PHN** match the labelled container.
     - Under Section 2 – Test(s) Requested – Respiratory Pathogens**,** select **Influenza A Influenza B RSV**, and **COVID-19,** and **Other** and specify *"Magpix".*
     - Under Section 2 – Outbreak Location/Information, enter "**LTCF Outbreak**" and the name of the facility.
     - Under '**Ordering Practitioner'** and **'Additional Copies',** enter the full name and billing number of facility and physician to whom the final report will be sent.
     - Under '**Additional Copies'**, ensure IH CD Unit is entered.
     - See "Respiratory Viral Testing Long Term Care" for references on completing requisitions.

4. **Transportation of Nasal/Nasopharyngeal Swabs**

   - Specimens are to be shipped directly to the local IH lab for analysis.
     - Make sure specimen containers are closed tightly and properly labeled with name, PHN and date of birth.

  - Ensure a requisition has been filled out for each specimen, and matches the specimen container.
  - **Place each individual specimen in its *own* biohazard bag and seal the bag**.
- Keep specimens at refrigerator temperature (2°C to 8°C). Do not freeze specimens. Specimens optimally can be held at this temperature for 24 hours until they can be delivered to lab. If the sample does not make it to the lab within 72 hours, held at refrigerator temperature, the sample will be rejected.
- Assemble the swabs and ship them together in a cooler which meets Transport of Dangerous Goods requirements, with an ice pack. Ship to a local IH Lab as soon as possible.

Return to Top: Specimen Collection and Transport

Tool O: When to declare an outbreak over:

Outbreak Type	Criteria (Consult with facility Infection Control to determine if criteria has been met)
Scenario A **More Severe RI known or suspected to be due to Influenza**	The MHO will declare the outbreak over the morning after the 8th day after the onset of illness in the most recent case and 4 days after the last symptomatic staff member worked in the facility.
Scenario B **More severe RI known or suspected to be due to a non-influenza or bacterial cause (commonly human metapneumovirus)**	The MHO will declare the outbreak over when two incubation periods have passed since the onset of illness in the last case (anywhere from 4-14 days since the last case, based on the pattern of illness and the known or suspect causative organisms). The MHO will determine this length of time. The outbreak can be declared over on the morning after the last day.

The CD Unit will confirm with the MHO when an outbreak can be declared over.

- IH facilities are to report to the IH IP first, who will review and notify the CD Unit.
- Contracted Partner and Private sites will connect with the CD unit.

The CD Unit will consult with IH Infection Control and the Medical Health Officer (MHO); the outbreak will be declared over by the MHO.

Note: If the possibility exists that an outbreak might be able to be declared over during a weekend/holiday, then consultation with the CD Unit prior to the weekend/holiday is needed to confirm actions with the MHO. These actions could include contacting the MHO on the weekend or to self-declare the outbreak over on the weekend/ holiday, should no new cases arise, at MHO discretion.

Tool P: Outbreak Debrief

It is important to learn from each outbreak. Completing a timely debrief process after an outbreak has ended will help facilities evaluate how the outbreak management process occurred. This includes determining what actitivies worked well and finding opportunities for improvement.

It is the responsibility of the Outbreak Management Team Lead to facilitate the Outbreak Debrief.

All Outbreaks	**Timeline**
Outbreak Management Team Lead organizes a site debrief with frontline staff and leadership	Within 7 days of outbreak over
The OMT Lead share the outbreak debrief documentation with frontline staff and leadership and organizational IPAC	Within 14 days of outbreak over

Where Outbreaks that:

- Lasted 15 days or more OR
- Had high attack rates that occurred beyond an incubation period from initiating outbreak precautions OR
- At the request of CD Unit, IH IPAC, MHO, due to an identified issue that would benefit from a debrief.
- The OMT Lead must include any partners that may be appropriate in the debrief (including the MHO. CD Unit, or Director of Clinical Operations).

Outbreaks of Concern	**Timeline**
Outbreak Management Team Lead organizes a site debrief with frontline staff and leadership	Within 7 days of outbreak over
Outbreak Management Team Lead organizes a debrief call with MHO, CD Unit, Director of Clinical Operations	Within 14 days of outbreak over
The OMT Lead share the outbreak debrief documentation with all partners that participated in the debrief process, including frontline staff and organizational IPAC.	Within 21 days of outbreak over

A Table is provided to use as a template which can be modified as needed.

Outbreak Summary and Debrief			
Facility Name:		Units Affected:	
Type of Outbreak (eg. RI Scenario A or B)		Organism Identified:	
Date of First Resident Case Onset		Date of Last Resident Case Onset	
Date Outbreak Declared		Date Outbreak Declared over	
Total Number of Residents in Outbreak Area		Total Number of Staff working in Outbreak Area	
Total Resident Case Numbers:		Total Staff Case Numbers	
Number of Hospitalizations		Number of Deaths	
	Things that Went Well	**Areas of Opportunity**	**Recommendations for Improvement**
Communication within Outbreak Management Team			
Timeliness in recognizing and reporting outbreak			
Timeliness in implementing control measures			

Effectiveness of control measures in limiting the outbreak.			
Other			

References

PICNet (Provincial Infection Control Network of British Columbia). 2018. *Respiratory Infection Outbreak Guidelines for Healthcare Facilities*. Retrieved from: https://www.picnet.ca/wp-content/uploads/Respiratory-Infection-Outbreak-Guidelines-for-Healthcare-Facilities_November-2018.pdf

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VERSION HISTORY

DMS ID	Key changes	Revised by:	Effective Date:
-	*Note: adapted Respiratory Infection (RI) Outbreak Guidelines for Health Care Facilities September 2018 document to develop June 2022 version for LTC facilities only*	IH Communicable Disease Unit	2008, 2009, 2013, 2014, 2015, 2016, 2017, 2018, 2022, 2023
-	Slight language revision: page 24 item 16 – Declaring the Outbreak Over.	Michele Andrews, Communicable Disease Specialist.	October 19, 2017
CD722SP (rev 1750)	☑ Major Revision Tool L – Enhanced Measures and Outbreak Debrief Tool P are NEW	Jennifer Jeyes, Communicable Disease Lead	Oct 2023