

Provincial Population & Public Health
Infection Prevention & Control
Workplace Health & Safety

Guide for Outbreak Prevention & Control in Acute Care Sites

Includes Respiratory & Gastrointestinal Illness



If you have feedback about this guide please email:

CDCResourceFeedback@albertahealthservices.ca

If you have questions about a specific outbreak, or facility-specific processes, always direct your questions to your designated facility lead or the AHS Public Health Outbreak Team.

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Land acknowledgement

Our work takes place on historical and contemporary Indigenous lands, including the territories of Treaty 6, Treaty 7 & Treaty 8 and the homeland of the Métis Nation within Alberta and 8 Metis Settlements. We also acknowledge the many Indigenous communities that have been forged in urban centres across Alberta.

Introduction

This guide provides current best practice and evidence-based guidance for preparation, assessment, determination and confirmation (of outbreak type) for COVID-19, respiratory illness (RI) including confirmed influenza, and gastrointestinal illness (GI) outbreaks and related management in acute care settings¹.

The following individuals are accountable for the development, ongoing review and implementation of this manual:

- AHS MOH Lead for Communicable Diseases Control
- AHS MOH Lead for Safe Healthy Environments
- AHS IPC Senior Medical Director / Designate.

Background

Infectious disease outbreaks occur year-round and in different settings, including acute care facilities. Early recognition of unusual clusters of illness and swift responses are critical to protect high-risk and vulnerable patients who are in close contact with each other in acute care facilities.

Effective outbreak management requires a multidisciplinary approach to facilitate a prompt response to help minimize the impact of the outbreak. This document discusses the roles of Public Health, including MOHs; IPC; Acute Care Operational Leads; Workplace Health and Safety (WHS) / Occupational Health and Safety (OHS); and on-site HCWs.

¹ Note

- Direction about best practices for outbreak management of possible or confirmed outbreaks due to an unusual, infrequent, or emerging/novel infectious disease will be provided by the Medical Officer of Health (MOH) and is beyond the scope of this document.
- It is beyond the scope of this document to include *Clostridioides difficile*, multi-drug resistant organisms (e.g., methicillin-resistant *Staphylococcus aureus* [MRSA], carbapenem-resistant organisms [CPO]) and rash-causing organisms due to their unique epidemiological properties.
- This is not a comprehensive Infection Prevention and Control (IPC) document. It outlines minimum outbreak management strategies and may be enhanced or modified depending on identification of the causative agent. It is important to consider the potential impact of outbreak management measures on the well-being of patients and health care workers (HCWs; includes contractors). Consult IPC and/or Public Health for more detailed information.
- For sites that are combined acute care and congregate settings, application of acute care outbreak measures to non-acute care areas in the same facility will be determined on a case-by-case basis by Outbreak Management Team (OMT). Considerations include (but are not limited to) physical layout, staffing, and shared spaces and/or activities between patients and residents.

Public Health, IPC and WHS/OHS in acute care work collaboratively with operational leads and HCWs to facilitate a prompt response to help minimize the impact of the outbreak.

Note

For the purposes of this document, “WHS” is used throughout and includes both WHS and OHS.

The notification of outbreaks and other infectious disease threats in Alberta is mandated under Section 26 of the provincial [Public Health Act](#), and MOH is accountable for outbreak investigation and management (Section 29).

1. Preparing for potential outbreaks

It is the responsibility of acute care facilities to always be prepared for the possibility of a COVID-19, RI (including influenza) or GI outbreak. Each site should:

- Ensure HCWs have access to and are familiar with current AHS outbreak management protocols.
- Review and update internal protocols and procedures for outbreak management as necessary, including, but not limited to:
 - Symptoms which require investigation
 - Reporting to IPC, WHS and/or Public Health [Table 2A](#)
 - Case and outbreak definitions for:
 - COVID-19 [Table 3A](#)
 - Respiratory illness (RI) [Table 3B](#)
 - Influenza [Table 3C](#)
 - Mixed Pathogen (Respiratory) [Table 3D](#)
 - Gastrointestinal illness (GI) [Table 3E](#)
 - Mixed Pathogen (GI) [Table 3F](#).
- Work with key site personnel to ensure adequate availability of supplies for outbreak management including on-site patient specimen collection kits for respiratory and stool specimen collection.
- Review routine IPC practices and additional outbreak-related measures with HCWs and physicians.

1.1 Roles and responsibilities for outbreak prevention and control

The RACI matrix outlines the specific responsibilities of the key stakeholder roles by function and task for the major actions associated with outbreak preparation and management. See [Table 1A RACI Outbreak Matrix](#).

RACI

- | | |
|----------|------------------------------------|
| R | → Responsible: Does the work. |
| A | → Accountable: Delegates the work. |
| C | → Consulted: Provides input. |
| I | → Informed: Needs to be told. |

Table 1A: RACI outbreak matrix

Functions	Context	Stakeholders						
		OMT Lead ² and/or MOH	IPC	WHS	Public Health (CDC ³ or SHE/EPH ⁴)	Site or Unit Manager	Site Leadership	ProvLab
Surveillance/ Case Finding (Investigate)	HCW (acquired at work)	A	C	R/A	C/I	C	I	
	HCW (acquired in community)	A		R/A	C/I			
	HCW (at work while communicable)	A	C	R/A	C/I	C	I	
	Patient (inpatient unit)	A	R/A	C	C/I	C	I	
	Patient (outpatient unit)	A	R/A	C	C/I	C	I	
	Visitor to unit	A	C	C	C/I	C	I	
Outbreak declaration		A	C	C	R/A	C	I	I
Notify AH		A			R/A			
Notify AHS (Zone Leads)		A	R				R	
Communicate with affected units	Patients	A	A	C	C/I	R	I	
	HCW	A	C	A	C/I	R	I	
	Visitors	A	C	C	C/I	R	I	
Implementation of IPC measures		A	C	C	C	R		
Testing strategy - HCWs		A	C	R/A	R/A	R	I	C
Testing strategy - patients		A	R/A	I	R/A		I	C
Monitoring outbreak control strategies		A	R	R	C	R		
Reporting outbreak status (tracking and communication)		A	R	R	R/A	R	I	R
Declaring outbreak over		A	C	C	R/A	C	I	I

² The Outbreak Management Team (OMT) Lead:

- Should be an expert in outbreak management such as a MOH or IPC physician.
- Alternatively, a co-lead model could be used in which an IPC physician/MOH and site operations/medical lead are partnered.
- OMT Lead is an independent role (i.e., separate from usual functions and responsibilities).

³ CDC = Communicable Disease Control

⁴ SHE = Safe Healthy Environments; EPH = Environmental Public Health

2. Assessing a potential outbreak

2.1 Surveillance and threshold for investigation

All acute care sites are responsible for conducting ongoing monitoring for unusual clusters of illness in patients and HCWs. This occurs prior to, during and after outbreaks.

- If patients show signs or symptoms of illness, notify IPC.
- If HCWs show signs or symptoms of illness, notify WHS.
- IPC and/or WHS will investigate further as needed.
- IPC and WHS will report to Public Health when indicated.

Table 2A: Symptoms which require investigation and reporting to IPC or WHS/OHS to initiate an outbreak investigation.

Patients	Health care workers (HCWs)
<p>Any new/worsening/unexplained respiratory or core symptoms:</p> <ul style="list-style-type: none"> • Cough • Shortness of breath/difficulty breathing/dyspnea • Decreased oxygen saturation or increased oxygen requirement • Sore throat/painful swallowing/hoarse voice • Runny nose/nasal congestion/sneezing • Fever/chills/rigors <ul style="list-style-type: none"> - Adults: greater than 37.8°C - Paediatrics: greater than or equal to 38.0°C • Loss of/change in sense of smell or taste. <p>New or unusual symptoms including but not limited to:</p> <ul style="list-style-type: none"> • Headache • Conjunctivitis/red eye/chemosis • Vomiting/diarrhea • Nausea/unexplained loss of appetite • Myalgia (muscle aches) or arthralgia (joint aches) • Fatigue/severe exhaustion • Any additional symptoms at clinician’s discretion (e.g., skin manifestations such as “COVID toes,” altered/change in mental status, etc.). 	<p>Any symptoms that are new or worsening (if associated with allergies, chronic or pre-existing conditions):</p> <ul style="list-style-type: none"> • Cough • Shortness of breath/difficulty breathing • Runny or stuffy nose • Sore throat • Fever/chills • Nausea/Diarrhea • Loss of sense of smell or taste.

Note

Symptoms not listed in [Table 2A](#) may still be indications of illness and should be managed at the discretion of the care team for the individual experiencing the symptoms. However, symptoms not listed in Table 2A do not need to be reported to Public Health and/or IPC and/or WHS.

Section 3: Outbreak definitions and determining outbreak type

Both symptoms and laboratory results play a role in determining the type of outbreak. Based on patient and/or HCW symptoms AND available laboratory results, a decision can be made about:

- Whether the unit/site meets an outbreak definition, and
- The type of outbreak occurring.

3.1 Case confirmation

Case confirmation should be done prior to calling Public Health to open the outbreak.

Public Health may also be consulted in the initial investigation to determine acquisition (i.e., hospital or occupational) and/or any epidemiological links.

Patient case(s)

IPC will determine and document:

- If case is hospital-acquired and/or epidemiologically linked
- Whether patient was in the outbreak area during the communicable period
- Patient movement during the communicable period.

There may be instances when two (2) or more patients present with respiratory symptoms that are not case-defining but are the same as each other and within a 14-day period.

When this occurs, the unit/site should contact IPC to determine next steps (e.g., continued monitoring, specific interventions, etc.).

HCW case(s)

WHS will determine:

- If case is workplace-acquired and/or epidemiologically linked
- If HCW was in the outbreak area during their communicable period
- HCW vaccination status (if applicable) at time of exposure.

3.2 Declaring an outbreak

The steps in declaring an outbreak are as follows:

Step 1

The accountable individual that identifies symptomatic patients or HCWs or at least two (2) confirmed cases notifies the designated Outbreak Management Team (OMT) Lead/designate by the Fastest Means Possible (FMP) (direct voice communication and email).

Step 2

The OMT Lead/designate confirms that cases meet definition, consults with Public Health to declare an outbreak and identifies subsequent management/control strategies.

Step 3

The OMT Lead/designate determines whether there is a need to convene an OMT meeting based on the type and magnitude of outbreak. If a meeting is required, the OMT Lead/designate convenes a conference call as soon as possible after the initial notification. Regardless of whether a formal meeting is convened, communication of direction must be provided via email to all key stakeholders.

OMT membership

OMT membership is site-specific but **must** include the following participants:

- IPC
- WHS
- Public Health
- Unit Manager and/or Patient Care Manager
- Site Manager / Site Operations
- Environmental Services
- Bed Management / Transition Services
- Allied Health

Optional members of the OMT may include:

- Pharmacy
- Laboratory Services
- Nutrition & Food Services
- Physician Lead or Program Site Chief for the outbreak unit
- Program Executive Director
- Facility Medical Director
- Communications representative

Note

For sites that are combined acute care and congregate settings, OMT must include representation from both.

See agenda template in [Appendix 5](#).

3.3 Case definitions and outbreak criteria

Table 3A: COVID-19 illness

(See [Table 2A](#) for COVID-19 symptoms.)

COVID-19 illness case definition ⁵	COVID-19 illness outbreak definition
<p>A person with confirmation of infection with the virus (SARS-CoV-2) that causes COVID-19 by:</p> <ul style="list-style-type: none"> • A positive result on a molecular test⁶ regardless of whether symptoms are present <p>OR</p> <ul style="list-style-type: none"> • One (1) positive result on a Health Canada approved rapid/point-of-care (POC) antigen test in a person with COVID-19 symptoms <p>OR</p> <ul style="list-style-type: none"> • Two (2) positive results on a Health Canada approved rapid/POC antigen 	<p>Two (2) or more confirmed hospital-acquired⁷ COVID-19 patient case(s) within a 10-day period⁸</p> <p>OR</p> <p>Two (2) or more confirmed⁸ COVID-19 cases in HCWs assigned/linked to a unit⁹ within a 10-day time period AND where at least one of the HCWs was in the work place during the communicable</p>

⁵ Refer to [Alberta Health Public Health Disease Management Guidelines: Coronavirus, COVID-19](#) for more details. Please note that the Acute Care symptom list includes additional symptoms (see [Table 2A](#)).

⁶ A molecular test is a nucleic acid amplification test [NAAT] such as polymerase chain reaction [PCR], loop-mediated isothermal amplification [LAMP] or rapid molecular test that is Health Canada approved or approved by the lab accreditation body of the jurisdiction in which the test was performed. Positive results by the Abbott ID NOW™ COVID-19, Simplexa®, GeneXpert®, Aptima, Cobas SARS-CoV-2 and Allplex 2019nCoV assays are deemed acceptable to provide a final result (i.e., does not require confirmatory testing).

⁷ Laboratory-confirmed COVID-19 infection in a patient admitted to hospital at least four (4) calendar days before symptom onset; OR who had a swab test positive when collected least four (4) calendar days after admission; OR a patient admitted to hospital for less than four (4) calendar days who is deemed to have a confirmed hospital-acquired COVID-19 infection for any reason.

⁸ If one (1) hospital-acquired patient case or one (1) HCW case occurs: patient and HCW contact tracing will occur, and it will be used as an opportunity for heightened surveillance and reinforcement of routine measures and processes. Recommendations or measures specific to a particular exposure event will be made, as appropriate (e.g., patient and/or HCW prevalence testing). Any key learnings and/or actions for quality improvement that may stem from the exposure event will be reviewed and communicated.

⁹ “Unit” may refer to a single acute care unit or area, but some units/areas may be viewed as contiguous and should be viewed as though they are one unit for the purposes of this definition due to the flow of HCWs (e.g., Obstetrical Assessment, labour and delivery, and post-partum care). In some settings, a “unit” may refer to those HCWs who during the 10 days preceding the infections were sharing breakrooms or meeting spaces or work spaces.

test completed at least 24 hours apart in an asymptomatic person

phase of illness¹⁰ AND/OR it is suspected there has been work site transmission as cause for one or more of the infections. The transmission could have been:

- Patient to HCW transmission; or
- HCW to HCW transmission; or
- Visitor to HCW transmission; or
- If after detailed review it is clear there was no community risk for infection acquisition for either HCW then even if the transmission link remains thus far unknown, outbreak criteria may be met.

Note: If variant testing results are available and results are discordant, then re-assess outbreak status.

- Refer to [Section 4](#) if the COVID-19 illness outbreak definition is met.

COVID-19 Site on Watch

To be defined as a “Site on Watch,” an acute care site must meet **both** one (1) and two (2) below:

1. COVID-19 outbreaks affecting more than 30% of patient care units at a single acute care site AND significant impact on capacity for key services (including but not limited to Medicine, Family Medicine, Critical Care, Surgery).

OR

COVID-19 outbreaks called in two (2) or more support services groups who are itinerant across an acute care site (e.g., Protective Services, Environmental Services, Lab Collections, etc.).

AND

2. As determined by the Site Outbreak Management Team.

¹⁰ The communicable phase of illness includes the pre-symptomatic phase (48 hours before first symptom onset) and the 10 days after symptom onset or until symptoms have improved AND afebrile for 24 hours without the use of antipyretic medication, whichever is longer. There are situations where the communicable phase of illness is longer (e.g. immune compromised individuals). Consult with IPC and/or WHS as appropriate.

Table 3B: Respiratory illness (RI)

Patient RI case definition ¹¹		RI outbreak definition
New/acute onset of respiratory illness with TWO (2) or more symptoms below, at least ONE (1) of which MUST be respiratory:		Two (2) or more hospital-acquired patient RI cases within a 10-day period with a common epidemiological link ¹²
Respiratory	Other	OR
<ul style="list-style-type: none"> • Cough • Shortness of breath/difficulty breathing/dyspnea • Decreased O₂ saturation or increased O₂ requirement • Sore throat/painful swallowing/hoarse voice • Runny nose/nasal congestion/sneezing • Loss of/change to sense of taste or smell. 	<ul style="list-style-type: none"> • Fever <ul style="list-style-type: none"> - Adults greater than 37.8 °C - Pediatrics greater than or equal to 38 °C • Headache • Myalgia (muscle ache) or arthralgia (joint pain) • Fatigue (significant and unusual) • Nausea/vomiting/diarrhea 	Two (2) or more HCW RI cases ¹³ within a 10-day period with a common epidemiological link ¹²
		Note: <ul style="list-style-type: none"> • RI case or outbreak includes any non-influenza, non-COVID pathogen. • Where laboratory confirmation is available, a RI outbreak would be called if at least two RI cases are due to the same confirmed pathogen. • Patient cases must be hospital-acquired¹⁴. • HCW cases must have a common occupational link.

- Refer to [Section 5](#) if the RI outbreak definition is met.

¹¹ It is recognized that the definitions for respiratory illness (RI) may differ slightly between this document and the Connect Care Communicable Disease Screen for patients with suspected RI or COVID-19. These definitions serve different purposes. This definition is for population surveillance whereas the screening tool is a means for HCWs to assess the infectious risk of patients to themselves and others and implement appropriate preventive measures.

¹² Epidemiological link means the cases were acquired in the same location or from the same person in the workplace setting/facility (i.e., during their incubation period or period of communicability), and there is evidence of healthcare-associated transmission within the facility.

¹³ Use symptom list in [Table 2A](#).

¹⁴ Symptom onset in a patient admitted to hospital at least 48 hours (48h) OR symptom onset in a patient who has been admitted to hospital for less than 48h who was discharged from an acute care facility within the previous 48h prior to symptom onset OR a patient who is re-admitted with symptoms which started less than 48 hours after discharge. Use [COVID-19 definitions](#) if patient tests positive for COVID-19.

Table 3C: Influenza illness

Influenza illness case definition	Influenza illness outbreak definition
<p>Clinical illness (as defined by RI above) with laboratory confirmation of infection by:</p> <ul style="list-style-type: none"> • Detection of influenza RNA <p>OR</p> <ul style="list-style-type: none"> • Demonstration of influenza virus antigen in an appropriate clinical specimen <p>OR</p> <ul style="list-style-type: none"> • Isolation of influenza virus from an appropriate clinical specimen <p>OR</p> <ul style="list-style-type: none"> • Significant rise (e.g., fourfold or greater) in influenza IgG titre between acute and convalescent sera. 	<p>Two (2) or more confirmed hospital-acquired¹⁴¹⁵ patient influenza cases within a 7-day period with a common epidemiological link¹²</p> <p>OR</p> <p>Two (2) or more confirmed HCW influenza cases within a 7-day period with a common epidemiological link¹².</p>

- Refer to [Section 5](#) if the Influenza illness outbreak definition is met.

Table 3D: Mixed pathogen outbreak (respiratory)

Mixed pathogen outbreak (respiratory) definition
<p>A mixed pathogen outbreak (respiratory) could result when a combination of infections with different respiratory pathogens/viruses are identified on a unit or in a facility. This could result in a combination of:</p> <ul style="list-style-type: none"> • Influenza and COVID-19 cases • Influenza and Respiratory Illness cases • COVID-19 and Respiratory Illness cases • Respiratory Illness outbreak with two different RI organisms or pathogens <p>Virus-specific outbreak definition must be met for each of the pathogens in the mixed pathogen outbreak (respiratory). Where a pathogen is not identified, the criteria for a RI outbreak definition must be met.</p> <p>Note</p> <ul style="list-style-type: none"> • The IPC and/or WHS teams, in discussion with Public Health, will advise which recommendations are applied where there is a discrepancy due to a mixed pathogen outbreak (respiratory). The general principle of applying the more conservative recommendation will be followed. • If there are concurrent respiratory and GI (see Table 3E) outbreaks: The Public Health team will provide guidance on a situation-specific basis, and provide support along with IPC and/or WHS.

Table 3E: Gastrointestinal illness

Gastrointestinal (GI) illness case definition	GI illness outbreak definition
<p>At least ONE (1) of the following criteria must be met and not be attributed to another cause (e.g., Clostridioides difficile diarrhea, medication, laxatives, diet or prior medical condition etc.):</p> <ul style="list-style-type: none"> Two (2) or more episodes of diarrhea (i.e., loose or watery stools) in a 24-hour period, above what is normally expected for that individual <p>OR</p> <ul style="list-style-type: none"> Two (2) or more episodes of vomiting in a 24-hour period <p>OR</p> <ul style="list-style-type: none"> One (1) or more episodes of vomiting AND diarrhea in a 24-hour period <p>OR</p> <ul style="list-style-type: none"> One (1) episode of bloody diarrhea <p>OR</p> <ul style="list-style-type: none"> Laboratory confirmation of a known enteric pathogen AND at least one symptom compatible with a GI infection (e.g., nausea, vomiting, diarrhea, abdominal pain or tenderness). 	<p>Two (2) or more hospital-acquired¹⁴ patient GI cases with initial symptom onset within a 48-hour period with a common epidemiological link¹²</p> <p>OR</p> <p>Two (2) or more HCW GI cases with initial symptom onset within a 48-hour period with a common epidemiological link¹²</p> <p>Note: Where laboratory confirmation is available, GI outbreak would be called if at least two GI cases due to the same confirmed pathogen. Discuss with MOH/designate. Consider organism, incubation period, etc.</p>

- Refer to [Section 6](#) if the GI illness outbreak definition is met.

Table 3F: Mixed pathogen outbreak (gastrointestinal [GI])

Mixed pathogen outbreak (GI) definition
<p>A mixed pathogen outbreak (GI) could result when a combination of infections with different GI pathogens are identified on a unit or in a facility.</p> <p>Pathogen-specific outbreak definition must be met for each of the pathogens in the mixed pathogen outbreak (GI). Where a pathogen is not identified, the criteria for a GI outbreak definition must be met.</p> <p>Note</p> <ul style="list-style-type: none"> The IPC and/or WHS teams, in discussion with Public Health, will advise which recommendations are applied where there is a discrepancy due to a mixed pathogen outbreak (GI). The general principle of applying the more conservative recommendation will be followed. If there are concurrent respiratory (see Tables 3A, 3B and 3C) and GI outbreaks: The Public Health team will provide guidance on a situation-specific basis, and provide support along with IPC and/or WHS

Section 4: Confirmed COVID-19 outbreak

The following are baseline/minimum recommendations and considerations for a confirmed COVID-19 outbreak in an acute care setting. Additional or more restrictive recommendations may be put in place at the discretion of IPC, WHS/OHS, Public Health and/or the OMT.

For sites that are combined acute care and congregate settings, application of acute care outbreak measures to non-acute care areas in the same facility will be determined on a case-by-case basis. Considerations include (but are not limited to) physical layout, staffing, and shared spaces and/or activities between patients and residents.

4.1 Acute care COVID-19 outbreak definition

Refer to COVID-19 Illness - [Table 3A](#).

Refer to [Appendix 6](#) for Outbreak Checklist template.

4.2 Case confirmation

Refer to [Section 3.1: Case Confirmation](#).

In addition, IPC and/or MOH and/or CDC must confirm that patients testing positive for COVID-19 are acute cases.

4.3 Duration of outbreak

- 10 days (i.e., one [1] complete incubation period for the Omicron sub-variant of SARS-CoV-2) from last day of possible exposure provided that serial asymptomatic patient testing is performed. This means that outbreak can be closed on day 11.
- Otherwise use 20 days (i.e., two [2] incubation periods for SARS-CoV-2 Omicron subvariant) and close outbreak on day 21.
- Duration may change at the discretion of IPC Medical Lead and/or Medical Officer of Health if new COVID-19 variant strains are circulating.
- See [Section 7: Closing an Outbreak](#).

4.4 Outbreak communication

4.4.1 Initial communication

- IPC or WHS to request an epidemiological investigation number (EI#) from Public Health as per zone process. Include the following information as part of EI# request:
 - Number of COVID-positive patients
 - Number of COVID-positive HCWs
 - Symptom onset date of cases
 - Number of patient close contacts
 - Number of HCW close contacts
 - Number of at-risk patients
 - Number of at-risk HCWs
 - Name and contact information for unit/area manager.
 - Designated IPC contact person.
- IPC to notify (by phone call or email as per site process):
 - Environmental Services
 - Bed Management / equivalent
 - Workplace Health & Safety
 - Unit/Program/Site Leadership.
- IPC/Site Leadership/Communications to distribute on-site outbreak memo/email notification.
- IPC to enter initial outbreak information into provincial IPC outbreak tracking tool.
- Unit to notify patients and DFSPs.
 - “Unit” can be charge nurse, assistant head nurse, unit manager, patient care manager, or any other individual who has been delegated this responsibility.
- Unit to arrange shift huddles: consider initial and ongoing (as needed).
- Operational/Site Leadership or IPC to send communication to zone leadership using usual zone/site process.
 - If Incident Command Structure (ICS) is in place, Site Command Post (SCP) to notify Zone Emergency Operations Centre (ZEOC)

4.4.2 Ongoing communication

- Unit to notify IPC of new symptomatic or COVID-19 positive patients.
- Unit to notify WHS of new symptomatic or COVID-19 positive HCWs per zone process.
- Communicable Disease Outbreak Daily Report (i.e., REDCap entry) completed and submitted to CDC as per site/zone process.
- IPC to update provincial IPC outbreak tracking tool as needed.
- Outbreak Management Team (OMT) meetings – frequency to be determined by OMT.
- Communication to Zone leadership (i.e., daily check-in).
 - Use usual site/zone communication processes.
 - SCP to notify ZEOC if ICS in place.

4.5 Patient movements (admissions/discharges/transfers)

4.5.1 Admissions and incoming transfers

- OMT will determine if:
 - Unit will close to admissions and incoming transfers, or
 - Remain open with any restrictions/specific criteria including closure of surge and/or over-capacity spaces.

4.5.2 Outgoing patient movements

- Minimize patient transfers off unit – should be medically necessary or repatriation to home zone (i.e., no transfers of convenience).
- Notify IPC of all transfers or discharges for patients from outbreak unit and any identified close contacts on other units.
- See [Table 4A](#).

Table 4A: Outgoing patient movement decisions from a COVID-19 outbreak unit

Scenario	Action by unit and/or bed coordinator / transition team
Intra-facility or inter-facility transfer (i.e., within acute care and acute tertiary rehabilitation)	<ul style="list-style-type: none"> • Ensure receiving unit/site is made aware of outbreak and additional precautions as necessary. • Outbreak unit and receiving unit to notify respective site IPC teams¹⁵
Transfers/discharges to continuing care homes or other congregate settings	<ul style="list-style-type: none"> • Refer to Risk Assessment Matrix to determine if Risk Assessment Worksheet (RAW) and MOH approval is required. • Ensure receiving unit/site is made aware of outbreak and any additional precautions plus any pertinent direction based on risk assessment. • Outbreak unit and receiving unit to notify site IPC¹⁵.
Discharges home	<ul style="list-style-type: none"> • Consider providing the completed COVID-19 Patient Discharge Instructions¹⁶ Letter (Appendix 4) to the patient. • Outbreak unit and receiving unit to notify site IPC¹⁵.

¹⁵ IPC at the sending site may also directly notify receiving site’s IPC team/designate as per site/zone processes.

¹⁶ Please note that most patients being discharged from outbreak unit are considered to have a COVID-19 exposure and this should be checked off in the letter. Possible exception is a recently COVID-recovered patient (<90days) – consult IPC.

4.6 Patient considerations

4.6.1 Patient symptom monitoring

- Increase patient symptom monitoring for all patients on outbreak unit to every 8 hours (i.e., minimum of three (3) times daily).
 - Document symptoms in Connect Care (i.e. Acute Care COVID-19 Symptom Identification & Monitoring).
 - Seniors / altered cognition:
<https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-recognizing-early-symptoms-in-seniors.pdf>.
- If patient develops new, changed or worsening symptoms, place patient on Contact and Droplet precautions in a private room (when available). and test for viral respiratory pathogens (i.e. COVID-19 plus respiratory pathogen panel). Notify IPC.

4.6.2 PPE requirements and additional precautions

- Asymptomatic patients:
 - HCWs to use Routine Practices – during respiratory virus outbreaks this includes continuous masking and eye protection for **any** interaction with patients not on Contact and Droplet precautions.
- Symptomatic patients:
 - HCWs to use Contact and Droplet precautions.
 - Place patient in private accommodation, when available. If private space is not available, then maintain at least two (2) metres of physical separation between bed/stretchers spaces or ensure that there is a barrier between patients (e.g., curtain or screen).
- Contact and Droplet precautions for all patients on the outbreak unit are not recommended.
- For more information, refer to the [AHS COVID-19 Personal Protective Equipment website](#).

4.6.3 COVID-19 testing

- Add EI# to any swabs for COVID-19 testing.
- Symptomatic patient testing may be directed by the most responsible healthcare provider (MRHP) or IPC.
 - Patients with recent COVID-19 infection (i.e., within last 90 days) should be retested for COVID-19 if new, changed or worsening symptoms develop.
- Asymptomatic patient testing (close contacts and unit-wide) is directed by IPC or Public Health. Specific direction will be provided for patients with recent COVID-19 infection.

4.6.4 Discontinuation of additional precautions

- See [Discontinuation of Additional Precautions for Suspected or Confirmed Respiratory Virus Infection](#).
- Consult/notify IPC as per agreed upon site process when discontinuing additional precautions for patients on the outbreak unit.

4.6.5 Patient cohorting considerations

- Cohorting recommendations will depend on outbreak-specific factors. Discuss at OMT.

4.6.6 Patient and unit contact tracing and management

- IPC is responsible for patient contact tracing.
 - This includes inpatients, patients transferred to another acute care facility or continuing care home/other congregate setting, and discharged patients.
 - Exposure period for COVID-19 on the outbreak unit starts 48 hours prior to symptom onset of first chronological case.
 - Follow-up period is for ten (10) days since last possible exposure OR duration of outbreak, whichever is shorter.
- Inpatients:
 - IPC to follow up with unit(s)
 - If transferred to another inpatient unit:
 - Provide direction about any additional precautions and/or asymptomatic COVID-19 testing as needed.
 - Check any pending COVID-19 results in Netcare or Connect Care.
 - Check if re-admitted for potential COVID-related illness.
- Patients from outbreak unit discharged to other levels of care or continuing care homes/congregate settings:
 - IPC to notify appropriate IPC team or CDC to notify facility as per site/zone process.
 - Symptom monitoring by facility.
 - Any additional direction to be provided by IPC/PH.
- Patients from outbreak unit discharged home prior to outbreak:
 - No notification unless otherwise directed by OMT.
- Patients discharged home during outbreak:
 - No notification unless otherwise directed by OMT.
- Close contacts from outbreak unit have additional considerations:
 - If admitted in any acute care facility (including on outbreak unit):
 - Implement additional precautions and/or asymptomatic COVID-19 testing as needed. Direction will be provided by IPC/PH.
 - Consult IPC prior to any cohorting of patients on additional precautions.
 - If transferred to continuing care home/other congregate setting:
 - Symptom monitoring by facility

- Any additional direction to be provided by IPC/PH.
- DFSP/Visitors: See [Section 4.7.6](#).

4.6.7 Early antiviral treatment for symptomatic patients (i.e., before causative pathogen identified)

- Treatment decisions are the responsibility of the MRHP.
- [COVID-related therapy](#) is usually considered after laboratory confirmation in conjunction with clinical presentation and immunization status (i.e., is not early antiviral treatment based on symptoms only).
- There is currently no chemoprophylaxis for COVID-19.

Note

Hospitalized patients with respiratory symptoms should be empirically treated with oseltamivir for suspected influenza.

- Start influenza related antivirals within 48 hours of onset of symptoms to be effective in reducing the duration and severity of illness and decreasing the rate of complications.
- Re-assess once laboratory results are available.

Current recommendations will be discussed at the time of the outbreak.

4.7 Unit outbreak control measures

4.7.1 Cleaning and disinfection

- Enhanced/outbreak cleaning by Environmental Services.
- Frequent cleaning of high touch surfaces (e.g. doorknobs, light switches, handrails, workstations, etc.) by unit staff.
 - Discuss at OMT.
 - See [Key Points for Ready-to-Use \(RTU\) Pre-moistened Disinfectant Wipes](#).
- Only AHS-approved products are to be used.

4.7.2 Unit/area entrances

- Signage at entry points: See [Appendix 7: Outbreak Spotlight Sign](#).
- Access to alcohol-based hand rub (ABHR) and PPE as applicable at entrance.
- Ensure clear signage that anyone entering unit must check-in at main desk.
 - Consider screening HCWs at area/unit entrance to cue hand hygiene, masking and eye protection for anyone entering the unit.
- Minimize unnecessary traffic onto unit.

4.7.3 Personal protective equipment (PPE)

- Continuous masking and continuous eye protection for all HCWs when on the affected

unit. See [Section 4.6.2](#) for patient-specific direction.

- Review existing complement of PPE coaches/equivalent. Consider “just in time” training if no unit-based PPE coaches available. See [Provincial PPE Safety Coach Program](#).
- Keep record of noted breaches/errors/gaps and report to unit manager / Clinical Nurse Educator and OMT.

4.7.4 Supplies

- Ensure adequate supplies for:
 - PPE
 - Specimen collection
 - Cleaning and disinfection

4.7.5 Additional measures

- Any patient leaving their bedspace should be masked.
 - Discuss exceptions and/or site-specific processes at OMT.
 - Exceptions may be made for discharge planning/assessment; consult IPC.
- For wandering patients or patients with behavioural concerns: [Management Strategies for the Wandering Patient in Acute Care](#).
- Appointments: Patients from outbreak unit may attend appointments if medically necessary.
 - Patient should be wearing clean clothes, clean mask and performing hand hygiene.
 - Ensure receiving unit/site is notified of any additional precautions required.
- Other reasons for leaving unit: Discuss measures with IPC.
- Rehabilitation restrictions:
 - Patients on Contact and Droplet precautions: complete rehabilitation in patient’s room.
 - All other patients:
 - Complete rehabilitation on unit.
- Group activities/therapy: cancel for duration of the outbreak.
 - Outbreak unit patients should not leave the unit for group therapy.
 - If on-unit group therapy is deemed necessary and is considered safe to proceed by OMT, then only asymptomatic patients from outbreak unit may attend. Discuss any necessary additional measures (e.g. patient masking during group therapy, physical distancing, etc.).
- Communal dining: restrict if applicable.
- Nutrition centre should be accessed by staff only.
 - Closed to patients and DFSPs/Visitors.
 - Ensure signage posted to cue hand hygiene.
- No shared products (e.g., hand lotions, communal food or candy bowls, etc.).

4.7.6 Designated family / support persons (DFSPs) / visitors

- Follow guidance on AHS website: [Family/Visitors of Patients & Residents](#).
 - Any DFSP/visitor access restrictions must be discussed by OMT.
 - If visitation restrictions are being considered, exceptions can be made for end-of-life or other extenuating circumstances.
 - Ensure site and zone notification process as follows:
 - [Policy - Family Presence: Designated Family/Support Person and Visitor Access](#)
 - [Procedure – Managing Limits to Designated Family Support Person and Visitor Access](#)
- DFSPs/visitors should be advised of the potential risk of acquiring illness if they choose to enter the outbreak unit.
- DFSPs/visitors should be advised to not visit when symptomatic or feeling unwell.
- DFSPs/visitors who choose to visit during an outbreak:
 - Follow additional precautions when required; unit staff or PPE coaches should assist with proper donning and doffing.
 - Practice good hand hygiene.
 - Wear a mask continuously while in outbreak-affected unit/area.
 - Use of eye protection is at discretion of OMT.
 - Limit visit to one (1) patient only.
 - Exit the facility immediately after the visit.
- If any DFSP/visitor close contacts identified: IPC and unit will advise about symptom monitoring.

4.8 WHS actions and HCW outbreak control measures

(Including volunteers, students, resident physicians, midwives, physicians)

4.8.1 General measures

- Unit/area and any staff group entering affected unit/area to review:
 - Hand hygiene (HH)
 - Continuous masking and eye protection
 - Self-monitor for symptoms
 - HCWs are not to work if symptomatic or feeling unwell
 - Distancing during breaks
 - No shared foods/drinks (including no potlucks or parties)
- Applies to any HCW based on affected unit or entering affected unit for any reason.
- Send related sick calls to WHS for follow up.

4.8.2 HCW personal protective equipment (PPE)

- Continuous masking and continuous eye protection for all HCWs when on the affected

unit.

- Asymptomatic patients: Use Routine Practices including continuous masking and eye protection.
- Symptomatic patients: Use Contact and Droplet precautions (including a fit tested N95 respirator when involved in an [AGMP](#)).
- For more information, refer to the [AHS COVID-19 Personal Protective Equipment](#).
- Manager to ensure that PPE support is in place. Consider use of PPE coach/equivalent (see [Section 4.7.3](#)).
- Unit/IPC to report back to OMT about issues identified with PPE/HH/IPC practices, etc.
- PPE recommendations apply to all HCWs regardless of COVID-19 immunization status.

4.8.3 HCW cohorting and non-essential personnel (volunteers, students)

- Consider cohorting of unit-based staff on the outbreak unit/affected area for a single shift.
 - HCWs may continue to work on other units at the same site or different sites.
 - It is assumed that any HCW at work is asymptomatic.
 - OMT to re-assess staff cohorting as needed.
- Limit non-essential personnel in the outbreak unit/area; OMT should discuss and re-assess regularly.
- Non-essential personnel who continue to assist during an outbreak must follow the same measures as HCWs.
- Advise non-essential personnel of the potential risk of acquiring illness during outbreaks.

4.8.4 Break areas / gatherings

- Break areas:
 - Reinforce safe IPC practices in break areas.
 - Encourage outdoor breaks when warm enough.
- Other off-unit events/gatherings such as Connect Care training and BLS training.
 - Review recently occurred events – consider for contact tracing purposes and to assess potential linkages in the transmission chain.
 - Upcoming events – no restrictions; re-assess as needed. Provide reminders that symptomatic individuals should not attend.

4.8.5 Symptomatic HCW and testing recommendations

- Continue to self-monitor for any COVID-19 symptoms regardless of immunization status while at and away from work.
- **Emphasize messaging for HCWs to not work while symptomatic.**
- All symptomatic HCWs are encouraged to test for COVID-19 when tests kits are available.
- WHS will provide direction about return-to-work guidance for symptomatic and/or

COVID-positive HCWs.

- Units/WHS report any new symptomatic HCWs and their test results as applicable (i.e., pending, negative, positive).

4.8.6 Work restrictions

- Follow WHS guidelines for work restrictions as applicable.
 - Directive: AHS Attendance at Work and Respiratory Virus Symptoms Directive.
- Work restriction may be extended at the discretion of the MOH/WHS Medical Consultant.
- Immunocompromised HCW cases should consult their physician/specialist regarding the duration of their work restriction period and if any additional testing is recommended. WHS Medical Consultant may also be consulted.

4.8.7 HCW tracing and exposure assessment

- WHS will provide direction about work restrictions and return to work.

Section 5: Confirmed respiratory illness (RI) outbreak including confirmed influenza

(Excludes COVID-19: see [Section 4.](#))

The following are baseline/minimum recommendations and considerations for a Respiratory Illness (RI) outbreak in an acute care setting. Additional or more restrictive recommendations may be put in place at the discretion of IPC, WHS, Public Health and/or the OMT.

For sites that are combined acute care and congregate settings, application of acute care outbreak measures to non-acute care areas in the same facility will be determined on a case-by-case basis. Considerations include (but are not limited to) physical layout, staffing, and shared spaces and/or activities between patients and residents.

5.1 Acute care outbreak definition – respiratory illness, influenza, mixed pathogen (respiratory)

Refer to:

- Respiratory Illness (RI) - [Table 3B](#)
- Influenza - [Table 3C](#)
- Mixed Pathogen (Respiratory) - [Table 3D.](#)

Refer to [Appendix 6](#) for Outbreak Checklist template.

5.2 Case confirmation

Refer to [Section 3.1: Case Confirmation.](#)

5.3 Duration of outbreak

5.3.1 RI outbreak

- If a non-influenza, non-COVID-19 respiratory pathogen is identified, the outbreak will remain open for two incubation periods for that pathogen.
 - See [Table 5A](#) for incubation periods for common viral respiratory pathogens. e.g., the incubation period for human metapneumovirus (hMPV) infection is

three (3) to five (5) days, so a hMPV outbreak would remain open until the 11th day following symptom onset of the last patient case.

- If no pathogen is identified, an RI outbreak would remain open for seven (7) days i.e., would close on the eighth (8th) day following symptom onset of the last case.

5.3.2 Influenza outbreak

- The outbreak is closed on the eighth (8th) day following symptom onset of the last patient case.

5.3.3 Mixed pathogen (respiratory) outbreak

- Outbreak remains open for two incubation periods based on the pathogen with the longest incubation period.
- If COVID-19 is one of the pathogens, then follow COVID-19 outbreak duration. See [Section 4: Confirmed COVID-19 Outbreak](#).

5.3.4 Closing an outbreak

- See [Section 7: Closing an Outbreak](#).

Table 5A: Organisms commonly associated with RI

(Reference: [IPC Diseases and Conditions Table for Management of Patients in Acute Care](#))

Organism	Adenovirus
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Sore throat, runny nose, coughing, ↑O₂ requirement, ↓O₂ saturation, sneezing
Infectious substance / How it is transmitted	Respiratory secretions are transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	2-14 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours • For immuno-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding

¹⁷ AGMP: [aerosol-generating medical procedure](#).

Outbreak restrictions / Recommendations for Acute Care¹⁸	Refer to Section 5 .
Organism	COVID-19
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • See Table 2A • All symptoms listed are possible COVID-19 symptoms (core and expanded)
Infectious substance / How it is transmitted	Respiratory secretions transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	1 to 14 days Note: The incubation period for SARS-CoV-2 ranges from 2 to 14 days; however, the incubation period may vary for different variants. The typical incubation period for the Omicron family of sub-variants ranges from 1 to 10 days in hospitalized patients.
Period of communicability	<ul style="list-style-type: none"> • Begins up to 48 hours prior to symptom onset. • Continues until patient is considered to be recovered. • In acute care: Depending on the patient’s clinical presentation and medical history/co-morbidities, this can be up to 21 days (or more if severely immunocompromised) from symptom onset (or from the initial COVID-positive test if symptom onset unknown) and symptoms have improved /stabilized for at least 48 hours, whichever is longer. • See Discontinuation of additional precautions for Suspected or Confirmed Respiratory Virus Infection for more specific information.
Outbreak restrictions / Recommendations for Acute care¹⁸	Refer to Section 4
Organism	Enterovirus/rhinovirus
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Sore throat, runny nose, coughing, ↑O₂ requirement, ↓O₂ saturation, sneezing

¹⁸ First day is designated as Day 0; after the first 24 hours is Day 1. If IPC / Public Health / WHS declares the outbreak to be over 7 days after onset of symptoms in the last case, then outbreak closes on the morning of Day 8.

Infectious substance / How it is transmitted	Respiratory secretions are transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	Usually 2-3 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours • For immuno-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸	Refer to Section 5 .
Organism	Human metapneumovirus (hMPV)
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Cough, ↑O₂ requirement, ↓O₂ saturation, fever, muscle or joint aches, fatigue, sore throat, nasal congestion, shortness of breath
Infectious substance / How it is transmitted	Respiratory secretions transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	3 to 5 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours. • For immune-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸¹⁸	Refer to Section 5 .
Organism	Influenza A / influenza B
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Sudden onset of cough, ↑O₂ requirement, ↓O₂ saturation, fever, muscle or joint aches, fatigue, sore throat • In children under age 5, GI symptoms may also be present. • In patients <5 or ≥65, fever may not be prominent.

Infectious substance / How it is transmitted	Respiratory secretions transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	1 to 4 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms Maintain precautions until symptom resolution/ improvement/ stabilization for at least 48 hours • For immunocompromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸¹⁸	Refer to Section 5 .
Organism	Non-COVID-19 coronaviruses
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Sore throat, runny nose, coughing, ↑O₂ requirement, ↓O₂ saturation, sneezing
Infectious substance / How it is transmitted	Respiratory secretions are transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	Usually 2-4 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours • For immuno-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸¹⁸	Refer to Section 5
Organism	Parainfluenza type 1, 2, 3, 4
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Cough, ↑O₂ requirement, ↓O₂ saturation, fever, muscle or joint aches, fatigue, sore throat, runny nose, sneezing, wheezing, croup, bronchitis
Infectious substance /	Respiratory secretions transmitted person-to-person by:

How it is transmitted	<ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP¹⁷) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	2 to 6 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms; however, cough may persist for 1 to 3 weeks post-acute infection. • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours. • For immuno-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸	Refer to Section 5 .
Organism	Respiratory syncytial virus (RSV)
Common symptoms / Clinical presentation	<ul style="list-style-type: none"> • Cough, ↑O₂ requirement, ↓O₂ saturation, fever, muscle or joint aches, fatigue, sore throat, runny nose, sneezing, wheezing
Infectious substance / How it is transmitted	Respiratory secretions transmitted person-to-person by: <ul style="list-style-type: none"> • Large respiratory droplets • Aerosols (e.g. AGMP^{17/17}) • Direct/indirect contact with surfaces, equipment, or body parts recently contaminated with respiratory secretions.
Incubation period	2 to 8 days
Period of communicability	<ul style="list-style-type: none"> • Communicable for duration of symptoms • Maintain precautions until symptom resolution/improvement/stabilization for at least 48 hours. • For immuno-compromised patients: consult with IPC on a case-by-case basis due to prolonged viral shedding
Outbreak restrictions / Recommendations for Acute care¹⁸	Refer to Section 5 .

5.4 Outbreak communication

5.4.1 Initial communication

- IPC or WHS to request EI# from Public Health as per zone process. Include the following information as part of EI# request:
 - Number of symptomatic/positive patients
 - Number of symptomatic/positive HCWs
 - Symptom onset date of cases
 - Number of patient close contacts
 - Number of HCW close contacts
 - Number of at-risk patients
 - Number of at-risk HCWs
 - Name and contact information for unit/area manager
 - Designated IPC contact person.
- IPC to notify (by phone call or email as per site process):
 - Environmental Services
 - Bed Management/equivalent
 - Workplace Health & Safety
 - Unit/Program/Site Leadership
 - Pharmacy (to assist with coordinating antiviral prophylaxis if influenza; see [Appendix 2](#)).
- IPC/Site Leadership/Communications to distribute on-site outbreak memo/email notification.
- IPC to enter initial outbreak information into provincial IPC outbreak tracking tool.
- Unit to notify patients and DFSPs.
 - “Unit” can be charge nurse, assistant head nurse, unit manager, patient care manager, or any other individual who has been delegated this responsibility.
- Unit to arrange shift huddles: consider initial and ongoing (as needed).
- Operational/Site Leadership or IPC to send communication to zone leadership using usual zone/site process.
 - If Incident Command Structure (ICS) is in place, Site Command Post (SCP) to notify Zone Emergency Operations Centre (ZEOC)

5.4.2 Ongoing communication

- Unit to notify IPC of new symptomatic or positive patients as per site/zone process.
- Unit to notify WHS if new symptomatic or positive HCWs as per zone process.
- Communicable Disease Outbreak Daily Report (i.e., REDCap entry) completed and submitted to CDC as per site/zone process.
- IPC to update provincial IPC outbreak tracking tool as needed.
- Outbreak Management Team (OMT) meetings – frequency to be determined by OMT.
- Communication to Zone leadership (i.e., daily check-in).

- Use usual site/zone communication processes.
- SCP to notify ZEOC if ICS in place.

5.5 Patient movements (admissions/discharges/transfers)

5.5.1 Admissions and incoming transfers

- OMT will determine if:
 - Unit will close to admissions and incoming transfers, or
 - Remain open with any restrictions/specific criteria including closure of surge and/or over-capacity spaces.

Influenza



If the outbreak pathogen is influenza.

- For confirmed influenza outbreaks, **any admission restrictions/criteria that are implemented will remain in place for seven (7) days minimum following the onset of symptoms in the last case**, based on recommendations from the Association of Medical Microbiology and Infectious Disease (AMMI) Canada, and as directed by Public Health.
- This means that any restrictions/criteria in place can be lifted on day eight (8). Any exceptions must be discussed by the OMT.

5.5.2 Outgoing patient movements

- Minimize patient transfers off unit – should be medically necessary or repatriation to home zone (i.e., no transfers of convenience).
- Notify IPC of all transfers or discharges for patients from outbreak unit and any identified close contacts on other units.
- See Tables [5B](#), [5C](#) and [5D](#).

Table 5B: Outgoing patient movement decisions from a RI or influenza outbreak unit

Scenario	Action by unit and/or bed coordinator / transition team
Intra-facility or inter-facility transfer (i.e., within acute care and acute tertiary rehabilitation)	<ul style="list-style-type: none"> Ensure receiving unit/site is made aware of outbreak and additional precautions as necessary. See Table 5E. Outbreak unit and receiving unit to notify respective site IPC teams¹⁹.
Transfers/discharges to continuing care homes or other congregate settings	<ul style="list-style-type: none"> Refer to Risk Assessment Matrix to determine if Risk Assessment Worksheet (RAW) and MOH approval is required. Ensure receiving unit/site is made aware of outbreak and any additional precautions plus any pertinent direction based on risk assessment. Outbreak unit to notify site IPC¹⁹.
Discharges home	<ul style="list-style-type: none"> No further direction.

Table 5C: IPC management for outgoing transfers from a non-influenza RI outbreak unit

(For influenza A/B outbreak see [Table 5D](#)).

Patient	Current site	Receiving site	
		Transfers to another acute care unit/facility (i.e. medically necessary)	Transfers to continuing care homes or other congregate settings
Symptomatic patient	Maintain Contact and Droplet precautions until asymptomatic x 48h.	Place patient in private room. Continue to symptom monitor. Maintain Contact and Droplet precautions until asymptomatic x 48h.	Refer to setting-specific Guide for Outbreak Prevention and Control for management recommendations.
Asymptomatic patient	Continue to symptom monitor.	No isolation necessary but private room preferred x 48h. Continue to symptom monitor.	

¹⁹ IPC at the sending site may also directly notify receiving site's IPC team/designate as per site/zone processes.

Table 5D: IPC management for outgoing transfers from an influenza A/B outbreak unit

Patient	Current site	Receiving site	
		Transfers to another acute care unit/facility (i.e. medically necessary)	Transfers to continuing care homes or other congregate settings
Symptomatic patient	Continue to symptom monitor.	Place patient in private room. Continue to symptom monitor.	Refer to setting-specific Guide for Outbreak Prevention and Control for management recommendations
Osetamivir (treatment = 5-day course)	Maintain Contact and Droplet precautions until asymptomatic x 48h.	Maintain Contact and Droplet precautions until asymptomatic x 48h.	
No osetamivir	Re-assess osetamivir as needed (based on duration, lab test results or worsening symptoms).	Re-assess osetamivir as needed (based on duration, lab test results or worsening symptoms).	
Asymptomatic patient	Continue to symptom monitor.	Private room preferred x 48h.	
Osetamivir (prophylaxis)	IPC to determine need for additional precautions for roommate/close contacts.	Continue to symptom monitor.	
No osetamivir	Re-assess osetamivir as needed.	Maintain any measures in place. Continue osetamivir prophylaxis x 72h. Re-assess measures as needed.	

5.6 Patient considerations

5.6.1 Patient symptom monitoring

- Increase patient symptom monitoring for all patients on outbreak unit to every 8 hours. (i.e., minimum of three [3] times daily)
 - Document symptoms in Connect Care [i.e. Acute Care COVID-19 Symptom Identification & Monitoring].

- Seniors/altered cognition: [COVID-19 Recognizing Early Symptoms in Seniors](#)
- If patient develops new, changed or worsening symptoms, place patient on Contact and Droplet precautions in a private room (when available) and test for viral respiratory pathogens (i.e. COVID-19 plus respiratory pathogen panel). Notify IPC.

Note

These documents were developed for COVID-19 but are relevant to all types of outbreaks.

5.6.2 PPE requirements and additional precautions

- Asymptomatic patients:
 - HCWs to use Routine Practices – during respiratory virus outbreaks this includes continuous masking and eye protection for **any** interaction with patients not on Contact and Droplet precautions.
- Symptomatic patients:
 - HCWs to use Contact and Droplet precautions.
 - Place patient in private accommodation, when available. If private space is not available, then maintain at least two (2) metres of physical separation between bed/stretchers spaces or ensure that there is a barrier between patients (e.g., curtain or screen).
- Contact and Droplet precautions for all patients on the outbreak unit are not recommended.
- For more information, refer to [AHS Personal Protective Equipment](#).

5.6.3 RI testing

- Symptomatic patient testing will be directed by MRHP or IPC.
 - Request Respiratory Pathogen Panel (RPP) and COVID-19 testing.
 - Check off “outbreak investigation” on Microbiology requisition.
 - Add EI# to any nasopharyngeal (NP) swab.
 - Patients with recent COVID-19 infection (i.e., within last 90 days) should be retested for COVID-19 if new, changed or worsening symptoms develop.
- **There is no asymptomatic testing for RI/influenza outbreaks.**

5.6.4 Discontinuation of additional precautions

- See [Discontinuation of Additional Precautions for Suspected or Confirmed Respiratory Virus Infection](#).
- Consult/notify IPC as per agreed upon site process when discontinuing additional precautions for patients on the outbreak unit.

5.6.5 Patient cohorting considerations

- Cohorting recommendations will depend on outbreak-specific factors. Discuss at OMT.

5.6.6 Patient contact tracing

- IPC is responsible for patient contact tracing and will determine if there are any patient close contacts who require follow-up (i.e., additional precautions +/- prophylaxis).

5.6.7 Early antiviral treatment for symptomatic patients (i.e., before causative pathogen identified)

- Treatment decisions are the responsibility of the MRHP.
 - Hospitalized patients with respiratory symptoms should be empirically treated with oseltamivir for potential influenza.
 - This can be re-assessed based on laboratory results.
- Start antivirals within 48 hours of onset of symptoms to be effective in reducing the duration and severity of illness and decreasing the rate of complications. Current recommendations will be discussed at the time of the outbreak.

Influenza



If the outbreak pathogen is influenza.

Post-exposure antiviral chemoprophylaxis (see [Appendix 2](#))

The recommendation to implement antiviral chemoprophylaxis for outbreak management is made by the IPC physician / MOH.

- Antiviral prophylaxis is used for asymptomatic at-risk patients. Symptomatic individuals require treatment doses (i.e., not prophylaxis).
- Pharmacy should be included in the OMT for suspect and confirmed influenza outbreaks to help co-ordinate post-exposure chemoprophylaxis for patients.

5.7 Unit outbreak control measures

5.7.1 Cleaning and disinfection

- Enhanced/outbreak cleaning by Environmental Services.
- Frequent cleaning of high touch surfaces (e.g. doorknobs, light switches, handrails, workstations, etc.) by unit staff.
 - Discuss at OMT.
 - See [Key Points for Ready-to-Use \(RTU\) Pre-moistened Disinfectant Wipes](#).
- Only AHS-approved products are to be used.

5.7.2 Unit/area entrances

- Signage at entry points: see [Appendix 7: Outbreak Spotlight Sign](#).
- Access to alcohol-based hand rub and PPE as applicable at entrance.
- Ensure clear signage that anyone entering unit must check-in at main desk.
 - Consider screening HCWs at area/unit entrance to cue hand hygiene, masking, and eye protection for anyone entering the affected unit.
- Minimize unnecessary traffic onto unit.

5.7.3 Personal protective equipment (PPE)

- Continuous masking and continuous eye protection for all HCWs when on the affected unit [see Section 5.6.2 for patient-specific direction].
- Review existing complement of PPE coaches/equivalent. Consider “just in time” training if no unit-based PPE coaches available. See [Provincial PPE Safety Coach Program](#).
- Keep record of noted breaches/errors/gaps and report to unit manager / Clinical Nurse Educator and OMT.

5.7.4 Supplies

- Ensure adequate supplies for:
 - PPE
 - Specimen collection
 - Cleaning and disinfection.

5.7.5 Additional measures

- Until COVID-19 is ruled out: Any patient leaving their bedspace should be masked.
 - Discuss exceptions and/or site-specific processes at OMT.
 - Exceptions may be made for discharge planning/assessment; consult IPC.
- For wandering patients or patients with behavioural concerns: [Management Strategies for the Wandering Patient in Acute Care](#).
 - This document was developed for COVID-19 but is relevant to all types of outbreaks.
- Appointments: Patients from outbreak unit may attend appointments if medically necessary.
 - Patient should be wearing clean clothes and performing hand hygiene.
 - Patient to also wear clean mask if on Contact and Droplet precautions.
 - Ensure receiving unit/site is notified of any additional precautions required.
- Other reasons for leaving unit: Discuss measures with IPC.
- Rehabilitation restrictions:
 - Patients on Contact and Droplet precautions: complete rehabilitation in patient’s room.
 - All other patients:
 - Complete rehabilitation on unit.
- Group activities/therapy: cancel for duration of the outbreak.
 - Outbreak unit patients should not leave the unit for group therapy.
 - If on-unit group therapy is deemed necessary and is considered safe to proceed by OMT, then only asymptomatic patients from outbreak unit may attend.
 - Until COVID-19 is ruled out: Patients must be masked or at least 2m physical distance from one another must be maintained.
- Communal dining: restrict if applicable.

- Nutrition centre should be accessed by staff only.
 - Closed to patients and DFSPs/Visitors.
 - Ensure signage posted to cue hand hygiene.
- No shared products (e.g., hand lotions, communal food or candy bowls, etc.).

5.7.6 Designated family / support persons (DFSPs) / visitors

- Follow guidance on AHS website: [Family/Visitors of Patients & Residents](#).
 - Any DFSP/visitor access restrictions must be discussed by OMT.
 - If visitation restrictions are being considered, exceptions can be made for end-of-life or other extenuating circumstances.
 - Ensure site and zone notification process as follows:
 - [Policy - Family Presence: Designated Family/Support Person and Visitor Access](#)
 - [Procedure – Managing Limits to Designated Family Support Person and Visitor Access](#)
- DFSPs/visitors should be advised of the potential risk of acquiring illness if they choose to enter the outbreak unit.
- DFSPs/visitors should be advised to not visit when symptomatic or feeling unwell.
- DFSPs/visitors who choose to visit during an outbreak:
 - Follow additional precautions when required; unit staff or PPE coaches should assist with proper donning and doffing.
 - Practice good hand hygiene.
 - Wear a mask continuously while in outbreak-affected unit/area.
 - Use of eye protection is at discretion of OMT.
 - Limit visit to one (1) patient only.
 - Exit the facility immediately after the visit.
- IPC and unit to advise significant DFSPs/visitor close contacts to symptom monitor as applicable.

5.8 WHS/OHS actions and HCW outbreak control measures

(Including volunteers, students, resident physicians, midwives, physicians)

5.8.1 General measures

- Unit/area and any staff group entering affected unit/area to review:
 - Hand hygiene
 - Continuous masking and eye protection
 - Self-monitor for symptoms
 - HCWs are not to work if symptomatic
 - Distancing during breaks
 - No shared foods/drinks (including no potlucks or parties)

- Applies to any HCW based on affected unit or entering affected unit for any reason.

5.8.2 HCW personal protective equipment (PPE)

- Continuous masking and continuous eye protection for all HCWs when on the affected unit.
- Asymptomatic patients: Use Routine Practices including continuous masking and eye protection.
- Symptomatic patients: Use Contact and Droplet precautions.
- For more information refer to [AHS COVID-19 Personal Protective Equipment](#).
- Manager to ensure that PPE support is in place. Consider use of PPE coach/equivalent (see [Section 5.7.3](#) above).
- Unit/IPC to report back to OMT about issues identified with PPE/HH/IPC practices, etc.
- PPE recommendations apply to all HCWs regardless of COVID-19 and influenza immunization status.

5.8.3 HCW cohorting and non-essential personnel (volunteers, students)

- Consider cohorting of unit-based staff on the outbreak unit/affected area for a single shift.
 - HCWs may continue to work on other units at the same site or different sites.
 - It is assumed that any HCW at work is asymptomatic.
 - OMT to re-assess staff cohorting as needed.

Influenza



If the outbreak pathogen is influenza.

- HCWs working at more than one facility/unit must inform the alternate facility/unit that an influenza outbreak is in progress in the index facility to determine whether or not they are permitted to work at the alternate facility/unit.

- Limit non-essential personnel in the outbreak unit/area. OMT should discuss and re-assess regularly.
- Non-essential personnel who continue to assist during an outbreak must follow the same measures as HCWs.

Influenza



If the outbreak pathogen is influenza.

- See [Appendix 3: HCW-related outbreak control measures for influenza outbreaks](#).

- Advise non-essential personnel of the potential risk of acquiring illness during outbreaks.

5.8.4 Break areas / gatherings

- Break areas:
 - Reinforce safe IPC practices in break areas.
 - Encourage outdoor breaks when warm enough.
- Other off-unit events/gatherings such as Connect Care training and BLS training.
 - Review recently occurred events – consider for contact tracing purposes and to assess potential linkages in the transmission chain.
 - Upcoming events – no restrictions; re-assess as needed. Provide reminders that symptomatic individuals should not attend.

5.8.5 Symptomatic HCW and testing recommendations

- Continue to self-monitor for symptoms of respiratory illness while at and away from work.
- **Emphasize messaging for HCWs to not work while symptomatic.**
- Respiratory virus testing:
 - All symptomatic HCWs are encouraged to test for COVID-19 when tests kits are available.
 - Testing for other respiratory viruses (including influenza) is for individual clinical management only and is at the discretion of the HCW's health care provider in the community.
 - During an outbreak, WHS may provide further direction.
- Units/WHS are to report any new symptomatic HCWs and their test results as applicable (i.e., pending, negative, positive).
- No asymptomatic testing for RI and influenza outbreaks.

5.8.6 Work restrictions

- Follow WHS guidelines for work restrictions as applicable.
 - For RI outbreak (non-COVID, non-influenza):
 - Directive: AHS Attendance at Work and Respiratory Virus Symptoms Directive.
 - For influenza outbreak:
 - See [Appendix 3: HCW-related outbreak control measures for influenza outbreaks](#) and [WHS Influenza Outbreak Management guideline](#).
- Work restriction may be extended at the discretion of the MOH/WHS Medical Consultant.
- Immunocompromised HCW cases should consult their physician/specialist regarding the duration of their work restriction period and if any additional testing is recommended. WHS Medical Consultant may also be consulted.

Influenza



If the outbreak pathogen is influenza.

- Sites must comply with HCW influenza immunization policy. There are additional work restrictions based on influenza immunization status regardless of symptoms.
- See [Appendix 3: HCW-related outbreak control measures for influenza outbreaks](#) and [WHS Influenza Outbreak Management guideline](#).

Section 6: Confirmed gastrointestinal illness outbreak

The following are baseline/minimum recommendations and considerations for a Gastrointestinal Illness (GI) outbreak in an acute care setting. Additional or more restrictive recommendations may be put in place at the discretion of IPC, WHS, Public Health and/or the Outbreak Management Team (OMT).

For sites that are combined acute care and congregate settings, application of acute care outbreak measures to non-acute care areas in the same facility will be determined on a case-by-case basis. Considerations include (but are not limited to) physical layout, staffing, and shared spaces and/or activities between patients and residents.

6.1 Acute care outbreak definition - gastrointestinal illness

Refer to:

- Gastrointestinal Illness (GI) – [Table 3E](#)
- Mixed Pathogen (GI) – [Table 3F](#).

Refer to [Appendix 6](#) for Outbreak Checklist template.

6.2 Case confirmation

Refer to [Section 3.1: Case Confirmation](#).

6.3 Duration of outbreak

- 48 hours from symptom resolution in the last case OR 96 hours from onset of symptoms in the last case, **whichever occurs first**.
- See [Section 7: Closing an Outbreak](#).

6.4 Outbreak communication

6.4.1 Initial communication

- IPC or WHS or MOH/Public Health to request EI# from Safe Healthy Environments (SHE) team (previously Environmental Public Health [EPH]) as per zone process. Include the following information as part of EI# request:

- Number of symptomatic/positive patients
- Number of symptomatic/positive HCWs
- Symptom onset date of cases
- Number of patient close contacts
- Number of HCW close contacts
- Number of at-risk patients
- Number of at-risk HCWs
- Name and contact information for unit/area manager
- Designated IPC contact person.
- IPC to notify (by phone call or email as per site process):
 - Environmental Services
 - Bed Management/equivalent
 - Workplace Health & Safety
 - Unit / Program / Site Leadership.
- IPC/Site Leadership/Communications to distribute on-site outbreak memo/email notification.
- IPC to enter initial outbreak information into provincial IPC outbreak tracking tool.
- Unit to notify patients and DFSPs.
 - “Unit” can be charge nurse, assistant head nurse, unit manager, patient care manager, or any other individual who has been delegated this responsibility.
- Unit to arrange shift huddles: consider initial and ongoing (as needed)
- Operational/Site Leadership or IPC to send communication to zone leadership using usual zone/site process.
 - If Incident Command Structure (ICS) is in place, Site Command Post (SCP) to notify Zone Emergency Operations Centre (ZEOC)

6.4.2 Ongoing communication

- Unit to notify IPC of new symptomatic or positive patients as per site/zone process.
- Unit to notify WHS if new symptomatic or positive HCWs as per zone process.
- Daily line list/tracking sheet completed and submitted to SHE per site/zone process.
- IPC to update provincial IPC outbreak tracking tool as needed.
- Outbreak Management Team meetings (OMT) – frequency to be determined by OMT.
- Communication to Zone leadership (i.e., daily check-in).
 - Use usual site/zone communication processes.
 - SCP to notify ZEOC if ICS in place.

6.5 Patient movements (admissions/discharges/transfers)

6.5.1 Admissions and incoming transfers

- OMT will determine if:
 - Unit will close to admissions and incoming transfers, or

- Remain open with any restrictions/specific criteria including closure of surge and/or over-capacity spaces.

6.5.2 Outgoing patient movements

- Minimize patient transfers off unit – should be medically necessary or repatriation to home zone (i.e., no transfers of convenience).
- Notify IPC of all transfers or discharges for patients from outbreak unit and any identified close contacts on other units. See Tables [6A](#) and [6B](#) for more information.

Table 6A: Outgoing patient movement decisions from a GI outbreak unit

Scenario	Action by unit and/or bed coordinator / transition team
Intra-facility or Inter-facility transfer (i.e., within acute care and acute tertiary rehabilitation)	<ul style="list-style-type: none"> • Ensure receiving unit/site is made aware of outbreak and additional precautions as necessary. See Table 6C. • Outbreak unit and receiving unit to notify respective site IPC teams.²⁰
Transfers/Discharges to continuing care homes or other congregate settings	<ul style="list-style-type: none"> • Discuss with OMT as needed to assist with zone-specific processes. • Ensure receiving unit/site is made aware of outbreak and any additional precautions plus any pertinent direction based on risk assessment. See Table 6C. • Outbreak unit to notify site IPC.²⁰²⁰
Discharges home	<ul style="list-style-type: none"> • No further direction.

²⁰ IPC at the sending site may also directly notify receiving site’s IPC team/designate as per site/zone processes.

Table 6B: IPC management for outgoing transfers from a GI outbreak unit

Patient	Current site	Receiving site	
		Transfers to another acute care unit/facility (i.e., medically necessary)	Transfers to continuing care homes or other congregate settings
Symptomatic patient	Maintain additional precautions ²¹ until asymptomatic or back to baseline for 48h.	Place patient in private room. Continue to symptom monitor. Maintain additional precautions until asymptomatic or back to baseline for 48h.	Refer to setting-specific Guide for Outbreak Prevention and Control for management recommendations.
Asymptomatic patient	Continue to symptom monitor.	Ensure receiving site IPC is aware. Continue to symptom monitor.	

6.6 Patient considerations

6.6.1 Patient symptom monitoring

- Increase patient symptom monitoring for all patients on outbreak unit to every 8 hours. (i.e., minimum of three [3] times daily)
 - Document symptoms in Connect Care (i.e. Acute Care COVID-19 Symptom Identification & Monitoring).
 - Seniors/altered cognition: [COVID-19 Recognizing Early Symptoms in Seniors](#).

Note
These documents were developed for COVID-19 but are relevant to all types of outbreaks.

- If any patient develops new, changed or worsening symptoms:
 - See [Table 6C](#) below for recommended additional precautions
 - Private accommodation recommended
 - Notify IPC.

²¹ Use Contact precautions if diarrhea only. Use Contact and Droplet precautions if emesis/vomiting present.

6.6.2 PPE requirements and additional precautions

- Asymptomatic patients:
 - Use Routine Practices.
- Symptomatic patients:
 - See [Table 6C](#).
 - Place patient in private accommodation with dedicated bathroom, when available.
 - If private space is not available
 - Maintain at least two (2) metres of physical separation between bed/stretcher spaces or ensure that there is a barrier between patients (e.g., curtain or screen).
 - Patients do not share bathroom.
 - One patient in room is assigned the bathroom and each of the other patients has a dedicated commode.
- Additional precautions for all patients on the outbreak unit are not recommended.
- For more information, refer to [Personal Protective Equipment](#).

Table 6C: Additional precautions for GI symptoms

GI Symptoms	Prior to pathogen being identified	Pathogen identified as		
		SARS-CoV-2	<i>C. difficile</i> [see note below]	Other enteric
Vomiting/ Emesis	Contact + Droplet	Contact + Droplet	n/a	Contact + Droplet
Diarrhea only	Contact + Droplet PLUS Contact Sporicidal	Contact + Droplet	Contact Sporicidal	Contact
Vomiting PLUS diarrhea	Contact + Droplet PLUS Contact Sporicidal	Contact + Droplet	Contact + Droplet PLUS Contact Sporicidal	Contact + Droplet

6.6.3 GI testing

- Symptomatic patient testing will be directed by MRHP or IPC.
 - Request:
 - Stool culture (bacterial enteric screen/panel)
 - Gastrointestinal Viral Panel (viruses)
 - *C. difficile* toxin
 - COVID-19 testing (NP swab).

- Consider:
 - Stool for ova and parasites.
- There is no asymptomatic testing for GI outbreaks.
- Add EI# to any specimens collected.

Note

C. difficile outbreaks are outside the scope of this document. For further direction about C. difficile outbreak management, discuss with site-based IPC team.

6.6.4 Discontinuation of additional precautions

- Consult/notify IPC as per agreed upon site process when discontinuing additional precautions for patients on the outbreak unit.

6.6.5 Patient cohorting considerations

- Cohorting recommendations will depend on outbreak-specific factors. Discuss at OMT.

6.6.6 Management of “relapse” cases

- GI cases frequently “relapse” (i.e., experience onset of vomiting or diarrhea after being asymptomatic for 24 to 48 hours).
- The relapse is likely due to malabsorption during an existing norovirus or other enteric infection rather than being a new infection.
- Maintain additional precautions/isolation for “relapse” GI cases until they are free of vomiting and diarrhea for 48 hours, as they may still be communicable.
- These should NOT be counted as new outbreak cases and should therefore NOT be included on daily case listings.
 - A patient should only be counted as a new case once on a daily case listing.
 - Relapse case(s) alone would not result in the extension of the outbreak and any related restrictions.

Note

If a previously identified GI case has onset of GI symptoms after being symptom-free for **at least seven (7) days**, the patient is considered to be a new case.

6.7 Unit outbreak control measures

6.7.1 Cleaning and disinfection

- Enhanced/outbreak Cleaning by Environmental Services.
- Frequent cleaning of high touch surfaces (e.g. doorknobs, light switches, handrails, workstations, etc.) by unit staff.
 - Discuss at OMT.

- See [Key Points for Ready-to-Use \(RTU\) Pre-moistened Disinfectant Wipes](#).
- Only AHS-approved products are to be used.

6.7.2 Unit/area entrances

- Signage at entry points: see [Appendix 7: Outbreak Spotlight Sign](#).
- Access to alcohol-based hand rub and PPE as applicable at entrance.
- Ensure clear signage that anyone entering unit must check-in at main desk.
 - Consider screening staff at area/unit entrance to cue hand hygiene for anyone entering the unit.
- Minimize unnecessary traffic onto unit.

6.7.3 Personal protective equipment (PPE)

- Review existing complement of PPE coaches/equivalent. Consider “just in time” training if no unit-based PPE coaches available. See [Provincial PPE Safety Coach Program](#).
- Keep record of noted breaches/errors/gaps and report to unit manager / Clinical Nurse Educator and OMT.

6.7.4 Supplies

- Ensure adequate supplies for:
 - PPE
 - Specimen collection
 - Cleaning and disinfection.

6.7.5 Additional measures

- For wandering patients or patients with behavioural concerns: [Management Strategies for the Wandering Patient in Acute Care](#).
 - This document was developed for COVID-19 but is relevant to all types of outbreaks.
- Appointments: Patients from outbreak unit may attend appointments if medically necessary.
 - Patient should be wearing clean clothes and performing hand hygiene.
 - Ensure receiving unit/site is notified of any additional precautions required.
- Other reasons for leaving unit: Discuss measures with IPC.
- Rehabilitation restrictions:
 - Patients on any type of additional precautions for GI symptoms: complete rehabilitation in patient’s room.
 - All other patients: complete rehabilitation on unit.
- Group activities/therapy: cancel for the duration of the outbreak.
 - Outbreak unit patients should not leave the unit for group therapy.
 - If on-unit group therapy is deemed necessary and is considered safe to proceed

- by OMT, then only asymptomatic patients from outbreak unit may attend.
- Communal dining: restrict if applicable.
- Nutrition centre should be accessed by staff only.
 - Closed to patients and DFSPs/visitors.
 - Ensure signage posted to cue hand hygiene.
- No shared products (e.g., hand lotions, communal food or candy bowls, etc.).

6.7.6 Designated family / support persons (DFSPs) / visitors

- Follow guidance on AHS website: [Family/Visitors of Patients & Residents](#).
 - Any DFSP/visitor access restrictions must be discussed by OMT.
 - If visitation restrictions are being considered, exceptions can be made for end-of-life or other extenuating circumstances.
 - Ensure site and zone notification process as follows:
 - [Policy - Family Presence: Designated Family/Support Person and Visitor Access](#)
 - [Procedure – Managing Limits to Designated Family Support Person and Visitor Access](#)
- DFSPs/visitors should be advised of the potential risk of acquiring illness if they choose to enter the outbreak unit.
- DFSPs/visitors should be advised to not visit when symptomatic or feeling unwell.
- DFSPs/visitors who choose to visit during an outbreak:
 - Follow additional precautions when required; unit staff or PPE coaches should assist with proper donning and doffing.
 - Practice good hand hygiene.
 - Limit visit to one (1) patient only.
 - Exit the facility immediately after the visit.
- IPC and unit to advise significant DFSPs/visitor close contacts to symptom monitor as applicable.

6.8 WHS/OHS actions and HCW outbreak control measures

(Including volunteers, students, resident physicians, midwives, physicians)

6.8.1 General measures

- Unit/area and any staff group entering affected unit/area to review:
 - hand hygiene
 - self-monitor for symptoms
 - HCWs are not to work if symptomatic
 - no shared foods/drinks (including no potlucks or parties)

- Applies to any HCW based on affected unit or entering affected unit for any reason.

Note: Handwashing with soap and water is preferred during GI outbreaks. However, if a hand hygiene sink is not available, then use ABHR (minimum 60-90% alcohol) when leaving the room prior to accessing a sink within or outside of patient room.

6.8.2 HCW personal protective equipment (PPE)

- Asymptomatic patients: Use Routine Practices.
- Symptomatic patients: See [Table 6C](#).
- For more information, refer to the [AHS Personal Protective Equipment](#).
- Manager to ensure that PPE support is in place. Consider use of PPE coach/equivalent (see [Section 6.7.3](#)).
- Unit/IPC to report back to OMT about issues identified with PPE/HH/IPC practices, etc.

6.8.3 HCW cohorting and non-essential personnel (volunteers, students)

- Consider cohorting of unit-based staff on the outbreak unit/affected area for a single shift.
 - HCWs may continue to work on other units at the same site or different sites.
 - It is assumed that any HCW at work is asymptomatic.
 - OMT to re-assess staff cohorting as needed.
- Limit non-essential personnel in the outbreak unit/area; OMT should discuss and re-assess regularly.
- Non-essential personnel who continue to assist during an outbreak must follow the same measures as HCWs.
- Advise non-essential personnel of the potential risk of acquiring illness during outbreaks.

6.8.4 Break areas/gatherings

- Break areas:
 - Reinforce safe IPC practices in break areas.
 - Encourage outdoor breaks when warm enough.
- Other off-unit events/gatherings such as Connect Care training and BLS training.
 - Review recently occurred events – consider for contact tracing purposes and to assess potential linkages in the transmission chain.
 - Upcoming events – no restrictions; re-assess as needed. Provide reminders that symptomatic individuals should not attend.

6.8.5 Symptomatic HCW and testing recommendations

- Continue to self-monitor for symptoms while at and away from work.
- **Emphasize messaging for HCWs to not work while symptomatic.**

- Symptomatic HCWs are encouraged to test for COVID-19 when tests kits are available.
- WHS will provide direction about return-to-work guidance for symptomatic HCWs and/or those with a laboratory-confirmed infection.
- Units/WHS report any new symptomatic HCWs and their test results as applicable (i.e., pending, negative, positive).
- No asymptomatic testing for GI outbreaks.

6.8.6 Work restrictions

- Any HCW that fits the case definition for GI illness should be excluded from work at all care facilities until 48 hours following the last episode of vomiting and/or diarrhea.
 - Work restriction may be extended at the discretion of the MOH/WHS Medical Consultant.
- Immunocompromised HCW cases should consult their physician/specialist regarding the duration of their work restriction period and if any additional testing is recommended. WHS Medical Consultant may also be consulted.

Section 7: Closing an outbreak (COVID-19, RI including influenza, or GI)

An outbreak may be closed when:

- Duration criteria are met, including no new patients or HCWs under investigation.
- There are no outstanding issues or concerns from:
 - IPC
 - WHS
 - Public Health (i.e., CDC/SHE/MOH)
 - Outbreak unit/site.

IPC will consult with WHS and Public Health prior to closing any patient-related outbreaks (i.e. either patients only or mixed patient/HCW). If an outbreak affects HCWs only, then Public Health will take the lead.

Ensure that enhanced unit-wide cleaning is done the day that the outbreak is closed prior to officially lifting outbreak-related restrictions.

Following an outbreak:

- Key program leads need to review and evaluate their role in management of the outbreak and revise internal protocols (where necessary) for improvement.
- A debrief may be called by any OMT member to address any aspect of outbreak management.
- Depending on type and scale of the outbreak, a summary report including background, details of the investigation, results and recommendations may be written by a member of the OMT and shared with internal/external partners.

If additional patients or HCWs develop symptoms within 7 days of the outbreak being closed, the unit/site should follow the steps for assessing a potential outbreak in [Section 2: Assessing a Potential Outbreak](#).

Appendix 1: Definition of terms and glossary

Acute care: includes all urban and rural hospitals, psychiatric facilities and urgent care facilities where inpatient care is provided.

Admission and transfer status: determined in consultation with the Outbreak Management Team (OMT) and categorized as follows:

- **“Open”:** The facility/unit remains open to all patient admissions, transfers and discharges.
- **“Restricted”:** Depending upon the circumstances and the infectious agent involved, admission and transfer status may range from NO admission to selected patient admissions, transfers and discharges as permitted under the direction of the zone Medical Officer of Health and in consultation with the OMT. This approach is intended to be flexible allowing for individual assessments to be made based on established criteria without undue risk to patients, programs, or the system in general.

AHS: Alberta Health Services

Cluster: aggregation of similar, relatively uncommon events or diseases in space and/or time in amounts that are believed or perceived to be greater than could be expected by chance.

Cohorting: controlling the movement of HCWs and patients for the purpose of limiting an outbreak to a specific unit/floor/area within a larger facility. To meet the criteria for cohorting, HCW and patient activities are confined to the outbreak area for the full duration of the outbreak. The facility must (i) assign dedicated HCWs as required (e.g., night nurses, housekeeping, therapists) that work only in the outbreak area, and (ii) manage all patient activities (e.g., dining, bathing) within the outbreak area, except for specific services that are medically required.

Close contact: any person suspected to have been exposed to an infected person or a contaminated environment to a sufficient degree to have had the opportunity to become infected or colonized with an organism.

Contact and Droplet precautions: see [sign](#) and [information sheet](#) for details.

Congregate setting: locations where individuals live, work or are cared for within close quarters in a communal environment.

Continuing care home: Continuing care home means a facility or part of a facility where facility-based care is provided to residents, some of whom must be eligible residents. Continuing care homes are publicly funded facility-based accommodations that provide care (health and support services) appropriate to meet the resident's assessed needs.

Exclusion: a measure that prevents symptomatic/infected/susceptible HCW from working, until such time that the risk for patients or HCW is low or minimal, as recommended by Public Health, or Workplace Health and Safety or designate.

Exposure investigation number (EI#): a number assigned by the Alberta Precision Laboratory for Public Health for the purpose of tracking laboratory specimens associated to a specific event (e.g., a potential outbreak) at a specific location and time.

Gastrointestinal (GI) illness: for GI illness case and outbreak definitions refer to [Table 3E](#)

Health care workers (HCW): as defined by Alberta Health (AH) includes all individuals at increased risk for exposure to, and/or transmission of, a communicable disease because they work, study, or volunteer in one or more of the following healthcare environments: hospital, nursing home (facility living), supportive living accommodations, or home care setting, mental health facility, community setting, office or clinic of a health practitioner, clinical laboratory.

Infection Control Professional (ICP): is a health professional with specialized knowledge responsible for infection prevention and control within the facility or area of practice. ICPs come from several disciplines, including nursing, medicine, microbiology, medical technology and/or epidemiology and may be certified or working toward certification in infection control (CIC®).

IPC: Infection Prevention and Control

Medical Officer of Health (MOH): Physician appointed as Executive Officer under the Public Health Act with focus on the health of the population, reports the health status of the population, controls and manages infectious and communicable diseases, gives direction to Public Health (including Communicable Disease Control and Safe Healthy Environment) service programs, and to chronic disease and injury prevention

Medical Officer of Health (MOH) Designate: Public Health staff designated by the Zone Medical Officer of Health to assist with decision making regarding outbreak management in the Zone.

Outbreak: “The occurrence of cases of disease in excess of what would normally be expected in a defined community, geographical area or season” (World Health Organization, 2018). A common source of infection or the identification of transmission between cases are not required. The epidemiologic features of an outbreak and subsequent public health actions are assessed through the outbreak investigation process.

Outbreak Management Team (OMT): a group of key individuals, including but not limited to, representatives from Public Health, Infection Prevention and Control (IPC/ICD), Occupational Health/ Workplace Health Safety (WHS), Facility Administration/Facility Management or their Designate who work cooperatively to ensure a timely and coordinated response to a suspect or confirmed outbreak. Composition of the OMT will depend on disease and facility type.

PPE: Personal Protective Equipment

ProvLab: Alberta Precision Laboratory for Public Health

Public Health: for the purpose of this document, Public Health staff refers to Zone Medical Officer of Health / designates within Alberta Health Services. This includes, but is not limited to, Communicable Disease Control (CDC) Nurses and Public Health Inspectors/Safe Healthy Environments (SHE).

Workplace/Occupational Health and Safety (WHS/OHS): designated personnel responsible for staff health and safety in facilities. In some facilities, Employee Health or the Site Management or the Site Medical Leader may fill this role. For the purposes of this document, “WHS” is used throughout and includes both WHS and OHS.

Appendix 2: Antiviral chemoprophylaxis for influenza outbreaks

Alberta Health Services (AHS) supports the National Advisory Committee on Immunization (NACI) recommendations for influenza control published annually in the Canada Communicable Disease Report.

Influenza immunization is the primary strategy for prevention of influenza infection and illness. **Antiviral prophylaxis should not replace annual influenza immunization;** instead, it should be used as an adjunct to immunization during influenza outbreaks. When antiviral prophylaxis is administered simultaneously to all eligible patients and HCW as soon as an outbreak is confirmed, the number of new cases usually decreases quickly.

Both oseltamivir and zanamivir can be used for the prevention of influenza A and B. The mechanism of action of these neuraminidase inhibitors is to prevent release of influenza virus from infected cells. Because of high levels of amantadine resistance in recent years amantadine is not recommended for prophylaxis against influenza; in addition to increasing resistance of influenza A, influenza B is inherently resistant to it. Neither oseltamivir nor zanamivir are effective for prophylaxis in preventing respiratory infections other than influenza (e.g., RSV, Parainfluenza).

The recommendation to implement antiviral prophylaxis for outbreak management is made by IPC, WHS and/or Public Health.

Patients

- During an influenza outbreak, [antiviral prophylaxis](#) is recommended for all at-risk asymptomatic patients **regardless of their influenza immunization status.**
- Each unit/site should develop a process for how antiviral prophylaxis will be ordered for patients.

Health care workers (HCW)

- Antiviral prophylaxis is also recommended for unimmunized HCWs unless a contraindication is present.
- During outbreaks caused by influenza strains that are not well matched by the vaccine, prophylaxis should also be considered for exposed, asymptomatic HCW regardless of their immunization status.
- HCW who require antiviral prophylaxis should consult with their WHS or Designate, or

their own family physician/prescribing pharmacist for prescriptions and monitoring.

Duration of antiviral prophylaxis:

- The recommended duration of antiviral prophylaxis is 10 days.
- If the outbreak continues past 10 days, antiviral prophylaxis should be extended until the outbreak is declared over.
- If the outbreak duration is less than 10 days, antiviral prophylaxis may be discontinued – consult with IPC.
- If cases continue beyond the first 72 hours after initiating prophylaxis, this should be discussed by the OMT (including IPC/WHS/Public Health) promptly for further direction.

Symptomatic individuals do not require antiviral prophylaxis.

- **Use early treatment** with antiviral medication for any patients or HCWs who have had symptoms for less than 48 hours.
- Each attending physician is responsible for prescribing antiviral medication for treatment of individual patients.

Reference:

- Aoki FY *et al.* 2021–2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada. JAMMI 2022 March;7(1):1-7. doi:[10.3138/jammi-2022-01-31](https://doi.org/10.3138/jammi-2022-01-31).

Appendix 3: HCW-related outbreak control measures for influenza outbreaks

(Including volunteers, students, physicians, resident physicians)

Public Health will provide recommendations for immunization, antiviral prophylaxis and/or work restrictions during influenza outbreaks. Oseltamivir (Tamiflu®) antiviral prophylaxis is recommended according to the Alberta Health Influenza Antiviral Drug Policy. Facilities are to identify HCWs/staff who are recommended to take antiviral prophylaxis and advise them how to access it.

- It is recommended that HCWs who continue to work on an influenza outbreak unit/area should have received the current season's influenza vaccine more than 14 days ago or are receiving oseltamivir prophylaxis.
 - Consult with OMT (including Zone MOH) if worker restrictions create extreme staffing challenges that affect service delivery.
- The affected unit/area should escalate any critical staffing shortage concerns to their Program/Site/Zone leadership.

Note

These measures are to be considered within the broader picture of staffing availability, and decisions regarding work requirements during staffing shortages will be made and/or escalated to program/site/zone leadership by the OMT Lead.

For HCWs/staff with symptoms, manage as per [Section 4.8 WHS Actions and HCW Outbreak Control Measures](#).

Assessment to determine if asymptomatic HCWs/staff may work on the outbreak unit

A HCW/staff is considered to be **adequately protected** against influenza if:

- they have had the annual influenza vaccine **AND**
- It has been at least 14 days since influenza immunization.

Asymptomatic HCW/staff who were immunized at least 14 days prior

- HCW/staff immunized 14 days prior are considered to have adequate protection against influenza.
- There is no work restriction. HCWs/staff may continue to work on the outbreak

unit/facility.

- Antiviral prophylaxis is not recommended.

Asymptomatic HCW/staff without adequate protection against influenza

Refer to the table below for work restriction and antiviral prophylaxis recommendations for HCWs/staff who are:

- Immunized with annual influenza vaccine less than 14 days ago **OR**
- Not immunized with annual influenza vaccine
 - Offer influenza vaccine immediately to unimmunized HCWs/staff.

Antiviral prophylaxis and work restrictions

Asymptomatic HCWs/staff	Accepts antiviral prophylaxis	Does not accept antiviral prophylaxis
Immunized with annual influenza vaccine less than 14 days ago	<ul style="list-style-type: none"> • May continue to work on the outbreak unit/facility AND • Take antiviral prophylaxis until at least 14 days since immunization or until the outbreak is over (whichever is shorter). • There is no waiting period between starting antiviral prophylaxis and working. 	First 3 days (72 hours) <ul style="list-style-type: none"> • Restricted from working at any facility and will monitor for symptoms for 3 days (72 hours) from last day worked on outbreak unit/facility.
		Day 4 to end of outbreak if remains asymptomatic <ul style="list-style-type: none"> • May be reassigned to a non-outbreak unit/facility for at least 14 days since immunization or until the outbreak is over (whichever is shorter). <ul style="list-style-type: none"> ○ May then return to home unit/facility. • If reassignment is not possible restrict from work for at least 14 days since immunization or until outbreak is over (whichever is shorter). <ul style="list-style-type: none"> ○ May then return to work.
Not immunized with annual influenza vaccine	<ul style="list-style-type: none"> • May continue to work on the outbreak unit/facility if they take antiviral prophylaxis until the outbreak is over. • There is no waiting period between starting antiviral prophylaxis and working. 	First 3 days (72 hours) <ul style="list-style-type: none"> • Restricted from working at any facility and will monitor for symptoms for 3 days (72 hours) from last day worked on outbreak unit/facility.
		Day 4 to end of outbreak if remains asymptomatic <ul style="list-style-type: none"> • May be reassigned to a non-outbreak unit/facility for the duration of the outbreak. <ul style="list-style-type: none"> ○ May then return to home unit/facility. • If reassignment is not possible restrict from work until outbreak is over. <ul style="list-style-type: none"> ○ May then return to work.

Management of symptomatic HCW

- If HCW on antiviral prophylaxis develop symptoms, they should stay home and contact WHS or designate for instructions about next steps. (This may ultimately be a referral to their family physician).
 - In addition to WHS, HCW must also contact their manager or supervisor to let them know that they are off work.
- The length of time for which a symptomatic HCW should stay off work will be recommended by WHS / Public Health at the time of the outbreak.

Appendix 4: COVID-19 patient discharge instructions



Do NOT PRINT
 This is a template only.
 Request latest version from IPC.

Patient Discharge Instructions for COVID-19

Site Name: _____

Discharged from Unit: _____

Date of Discharge: _____

This discharge sheet is for you to understand the actions you need to take when you go home. These instructions are to help protect you and others when going home from your hospital stay.

	Immunization status	Directions
<input type="checkbox"/>	Any immunization status AND No COVID-19 exposure	Consider on-site vaccination prior to discharge as needed and if available. (Primary series or additional doses) Continue to monitor yourself for any new or changed symptoms.
<input type="checkbox"/>	Any immunization status AND COVID-19 exposure	Monitor for new or changed symptoms until: DATE DD/MMM/YYYY _____ (enter date provided by IPC) See below and page 2.

What do you have to do?

Monitor for signs and symptoms of COVID-19:

1. fever and/or chills
2. new cough or worsening chronic cough
3. new or worse shortness of breath or difficulty breathing
4. sore throat or pain when swallowing or hoarse voice

5. runny nose or stuffy nose or sneezing
6. nausea, vomiting, diarrhea or unexplained loss of appetite
7. loss or change of smell or taste

If symptoms develop:

- You are recommended to isolate.
- Do a rapid antigen test at home if available.
- See [COVID-19 Info for Albertans – Prevent the Spread](#) for isolation recommendations.

Additional instructions for patients who had a COVID-19 exposure while in hospital:

- If you develop new symptoms before the date above (with or without an EI #) then please also call:

UNIT: _____ Phone Number: _____

- If you need urgent medical attention, call **911** or go to the Emergency Department immediately. Inform them of these instructions and show them this letter.
- COVID-19 Testing for Symptomatic Individuals
 - See: [COVID-19 Info for Albertans – Symptoms and testing](#).
 - Perform a home rapid antigen test if available.
 - **If you test positive for COVID-19:** Call the unit at the number above.
 - Follow the recommended isolation guidance for symptomatic individuals at [COVID-19 Info for Albertans – Prevent the Spread](#).
- If you have an essential healthcare appointment scheduled before the date indicated on page 1 or while you are self-isolating, please contact that office and inform them of the instructions on this letter. Bring this letter with you to the visit.
- If you had a COVID-19 exposure AND are re-admitted to any health care facility before the date below, please alert the hospital staff by showing them this letter.

DATE DD/MMM/YYYY _____
 (this should be the same as the date in the box on Page 1)

- If you require additional support, please contact Health Link at 811.

Appendix 5: Outbreak management team meeting agenda

Outbreak Management Team Meeting

TYPE

UNIT

DATE

TIME

MS Teams

AGENDA

- | | |
|---|-----------|
| 1. Welcome and Introductions | Chair |
| 2. Approval of Agenda | All |
| 3. Review Previous Meeting Notes/Actions | All |
| 4. Updates | |
| 4.1. IPC | |
| 4.2. Unit Manager / Charge Nurse | |
| 4.3. WHS/OHS | |
| 4.4. Bed Management | |
| 4.5. Public Health (MOH / Communicable Disease Control / Safe Healthy Environments) | |
| 5. Patient Movement | Presenter |
| 6. Round Table | Presenter |
| 7. (1 st meeting only) Meeting Chair | All |
| 8. Next Steps (Review of “To Dos”) | Chair |
| 9. Date of Next Meeting | Chair |
| 10. Adjournment | Chair |

Attendees: Site Administration, Facility Medical Director, Program Chief, Program Executive Director, Patient Care Manager, Unit Manager, Bed Management / Transition Services, Environmental Services, Allied Health, Infection Prevention and Control (IPC), IPC Site Medical Director, Workplace Health & Safety (WHS) / Occupational Health Safety (OHS), Public Health, others as applicable

Note: For sites that are combined acute care and congregate settings, OMT must include representation from both.

Appendix 6: Outbreak checklist for discussion at OMT meeting

Acute Care Outbreak Initial Considerations Checklist

For sites that are combined acute care and congregate settings, application of acute care outbreak measures to non-acute care areas in the same facility will be determined by the OMT on a case-by-case basis. Considerations include (but are not limited to) physical layout, staffing, and shared spaces and/or activities between patients and residents.

Patient Movements (Admissions/Discharges/Transfers):

- Admissions and incoming transfers
 - Open/Closed/Specific criteria
- Outgoing transfers within facility or to another acute care site:
 - Any isolation and testing requirements
 - Minimize intra-facility patient transfers off unit – should be medically necessary (i.e., no transfers of convenience)
- Discharges home:
 - Any specific instructions
- Transfers to continuing care homes/congregate settings:
 - Refer to [Risk Assessment Matrix](#) to determine if [Risk Assessment Worksheet \(RAW\)](#) and MOH approval is required.
 - Any isolation and testing requirements
- Notify IPC of all transfers or discharges for patients on outbreak unit and any identified close contacts on other units

Patient Considerations:

- Increase patient symptom monitoring to q8h. (i.e., minimum of 3 times daily)
 - Document symptoms in Connect Care (i.e. Acute Care COVID-19 Symptom Identification & Monitoring)
 - [COVID-19 Recognizing Early Symptoms in Seniors](#)
- Wandering patients: see [Management Strategies for the Wandering COVID-19 Patient in Acute Care](#)
- Additional precautions/PPE Requirements:
 - Asymptomatic patients: Use Routine Practices

- For COVID-19 or RI/influenza outbreak: this includes continuous masking and eye protection for any patient interaction.
 - Symptomatic patients: Use Contact and Droplet precautions. Private room preferred.
- Testing:
 - Symptomatic patient testing may be directed by most responsible healthcare provider (MRHP) or IPC.
 - If applicable: asymptomatic patient testing (close contacts and unit-wide) is directed by IPC or Public Health.
 - Add Exposure Identification (EI) number to any swabs.
- Discontinuation of additional precautions
 - IPC should be consulted or notified as per agreed upon site process when discontinuing additional precautions for patients on the outbreak unit.
 - For any patient on Contact and Droplet precautions, complete [Discontinuation of Additional Precautions for Suspected or Confirmed Respiratory Virus Infection](#)
- Anti-viral recommendations: Considerations for respiratory illnesses (suspect or confirmed influenza)
 - Suspect/unconfirmed respiratory illness (i.e., before causative organism identified):
 - Hospitalized patients with respiratory symptoms should be empirically treated with oseltamivir for suspected influenza (i.e., treatment dose).
 - Re-assess once laboratory results are available.
 - Confirmed influenza A/B outbreak unit:
 - Prophylaxis for asymptomatic patients
 - Treatment for symptomatic (i.e., empiric) and/or confirmed influenza patients.

Note: [COVID-related therapy](#) is usually considered after laboratory confirmation in conjunction with clinical presentation and immunization status (i.e., this is not early antiviral treatment).
- Contact tracing (if applicable)
 - IPC is responsible for patient contact tracing.
 - Determine exposure period.
 - Determine if any exposed patients who have been discharged or transferred out require follow-up.
 - IPC and unit to determine if any potential DFSP/visitor close contacts (if applicable).
- Patient cohorting
 - Yes/No/Any other considerations

Unit Outbreak Control Measures:

(“Unit” can be charge nurse, assistant head nurse, unit manager, patient care manager, or any other individual who has been delegated this responsibility)

- Cleaning and Disinfection:
 - Connect with Environmental Services for enhanced/outbreak cleaning
 - Frequent cleaning of high touch surfaces (e.g. doorknobs, light switches, handrails, workstations, etc.) by unit staff - see [Key Points for Ready-to-Use \(RTU\) Pre-moistened Disinfectant Wipes](#).
 - Use only AHS-approved cleaning products.
- Unit/Area Entrances
 - Signage at all entry points
 - Access to ABHR and PPE as applicable at entrance
 - Minimize unnecessary traffic onto unit/into area
- PPE and Supplies:
 - PPE coaches/equivalent (See [Provincial PPE Safety Coach Program](#).)
 - Adequate PPE supplies
 - Adequate supplies for specimen collection
 - Adequate supplies for cleaning and disinfection
- Additional Measures:
 - Leaving the unit
 - Medical appointments
 - Other reasons
 - Communal dining considerations
 - Group activities/therapy considerations
 - Rehabilitation: on unit, in room
 - Nutrition centre: staff access only, cue hand hygiene prior to accessing
 - No shared products
- DFSPs/Visitors:
 - Follow guidance on AHS website: [Family/Visitors of Patients & Residents](#).
 - Discuss any needed restrictions
 - Communication
 - Preventive measures
 - Self-symptom monitoring
 - Hand hygiene/masking/eye protection

WHS Actions and HCW Outbreak Control Measures:

- Unit/area and any staff group entering affected unit/area to review general measures:
 - Hand hygiene
 - Continuous masking and continuous eye protection (for COVID-19, influenza)

- and RI outbreaks)
- Self-monitor for symptoms and stay home if symptoms or unwell
- Distancing during breaks
- No shared foods/drinks (including no potluck or parties)
- HCW PPE:
 - Review PPE requirements (as above)
- Minimize HCW movement
 - Consider cohorting of staff as needed – i.e., single unit or single site requirements.
 - Are there any access restrictions for clinical or support staff during outbreak?
 - Review non-essential staff (volunteers, students etc.) – current placement on unit, alternatives, etc.
 - **For influenza:** Staff working at more than one facility/unit must inform the alternate facility/unit that an influenza outbreak is in progress in the index facility to determine whether or not they are permitted to work at the alternate facility/unit.
- Breaks/break room considerations
 - Safe IPC practices
 - Outdoor breaks when warm enough
- Off unit events/gatherings of people (e.g., Connect Care training, BLS training etc.)
 - Review recently occurred events for contact tracing purposes and to assess potential linkages in the transmission chain.
 - Upcoming events – no restrictions; re-assess as needed. Symptomatic individuals should not attend.
- WHS' guidelines for work restrictions as applicable depending on type of outbreak.
 - For influenza A/B outbreaks: immunization and oseltamivir consideration
- HCWs to self-monitor for symptoms while at and away from work.
 - Emphasize messaging for HCWs to not work while symptomatic.
- Consider need for HCW testing (symptomatic +/- asymptomatic)
 - Ongoing: HCWs to inform unit manager and/or WHS about any new symptoms and test results (as applicable – i.e. pending, negative or positive)

Communication:

- IPC/WHS to request EI# from Public Health as per zone process.
- IPC to notify (if not already done)
 - Environmental Services
 - Bed Management/equivalent
 - Workplace Health & Safety
 - Unit/Program/Site Leadership

- Pharmacy (for influenza outbreaks)
- Establish Outbreak Management Team (OMT).
 - Schedule meetings.
- IPC/Site Leadership/Communications to distribute on-site outbreak memo/email notification.
- Unit communication:
 - Notify patients and DFSPs.
 - Arrange shift huddles: consider initial and ongoing (as needed).
 - Notify WHS if new symptomatic or positive HCWs.
 - Notify IPC of new symptomatic or positive patients.
- IPC to enter initial outbreak information into provincial IPC outbreak tracking tool and update as needed.
- Communicable Disease Outbreak Daily Report (i.e., REDCap entry or daily line list) to be completed and submitted as per site/zone process.
- Operational/Site Leadership or IPC to send communication to zone leadership using usual zone/site process.
 - If Incident Command Structure (ICS) is in place, Site Command Post (SCP) to notify Zone Emergency Operations Centre (ZEOC)

Appendix 7: Outbreak spotlight sign

<https://www.albertahealthservices.ca/assets/healthinfo/ipc/if-hp-ipc-facility-outbreak-stoplight-poster-colour.pdf>

