Gastrointestinal Infection Outbreak Toolkit: Long-term Care Facilities

October 2023

Supersedes October 2022

Outbreaks of gastrointestinal illness (GI) in long-term care (LTC) facilities can occur at any time during the year and can be caused by a number of viruses, bacteria, and occasionally from toxins created by bacteria. LTC facilities will be more commonly affected episodically by viral GI infection outbreaks that are also affecting the greater local community. This toolkit outlines steps to take and identifies resources to prepare, identify, and manage outbreaks in LTC facilities.

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

Before there is an outbreak

these are the things you want to ensure are in place (TOOL G) (e.g. Sept/Oct or sooner):

- Follow Outbreak Prevention Principles (TOOL A) year round.
- Designate an Outbreak Management Team (OMT) (TOOL E)
  - Review Roles and responsibilities (TOOL B), control measures (TOOL J) and cleaning and disinfection practices (TOOL K) that would be implemented for an outbreak with all staff (care staff, housekeeping, dietary, etc.).
  - Prepare a binder/folder (keep records, procedures, contact lists (TOOL F), supply lists (TOOL C) etc.) or set up bookmarks for online access, review with all staff.
- Provide ongoing gastrointestinal infection outbreak education and training for staff, volunteers and residents/patients (case/reporting threshold definitions, identifying/reporting a threshold, Hand hygiene, routine practices and additional precautions, cleaning and disinfection, donning/doffing PPE, facility policies, etc.) (TOOL G)
- Ensure there are adequate levels of supplies (TOOL C), re-order as necessary
- Consider staff levels needed to work in an outbreak
- Maintain surveillance line lists (TOOL D) in order to identify when a reporting threshold has been met. See Case and Reporting Threshold (TOOL H) definitions, and undertake supplementary activities if Reporting Threshold is not met to help reduce transmission. (TOOL G)
- Anyone with symptoms should be placed on Droplet and Contact precautions (807904) .

How to Identify an Outbreak:

- Use surveillance line list tools (TOOL D) to determine when a reporting threshold is met
  - See Case and Reporting Threshold Definitions (TOOL H)
- Contact the CD Unit or ICP (TOOL I)
- The MHO declares the outbreak.
- Report (TOOL I) the reporting threshold and required detail as soon as possible.

Once an Outbreak has been declared:

- Bring together the OMT (TOOL E) to discuss the state of the outbreak
  - This occurs 5 days a week (Mon-Fri). This is an ongoing process: review ongoing surveillance cases, assess precautions, status of the outbreak. Meeting template
  - Submit daily reports (823076) to the CD Unit, and if an IH facility, your ICP.
  - Notify partners (TOOL F) that an outbreak has been declared
- Implement control measures (TOOL J) including enhanced cleaning and disinfection (TOOL K);
- Collect Samples (TOOL L)
- Admissions/Re-admission/Repatriations (TOOL J) require consultation with the MHO by the Most Responsible Person of the LTC facility.

To declare the outbreak over:

- Consult Outbreak over definitions (TOOL M)
- Contact the CD Unit or ICP (TOOL I)
- Once over, organize site Outbreak Debrief (TOOL O)

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

Toolkit Table of Contents

Links and Tools....3
Introduction and Application....5
Tool A: Outbreak Prevention Principles....6
Tool B: Roles and Responsibilities....9
Tool C: Supply Checklist Template....15
Tool D: Surveillance in LTC Facilities....16
Tool E: Outbreak Management Team....17
Tool F: Notification of Partners....20
Tool G: Outbreak Preparedness Considerations....21
Tool H: Case and Reporting Threshold Definitions....23
Tool I: Contact Information for Reporting Thresholds....24
Tool J: Measures for Managing an Outbreak:....26
Tool K: Cleaning Vomit and Feces and Recommended Disinfectants....30
Tool L: Specimen Collection and Transport....33
Tool M: When to declare an outbreak over:....35
Tool O: Outbreak Debrief....36

Links and Tools

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

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

Surveillance Forms

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

Lab Forms and Tools

- Public Health Laboratory Sample Container Order Form
- Public Health Lab Gastrointestinal Outbreak Notification Form
- Public Health Lab Gastrointestinal Disease Outbreak Requisition

OMT

- OMT Agenda and Notes Template

Signs

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

Transfers to LTC

- LTC Transfer Algorithm for Outbreaks
- LTC Transfer Risk Assessment Form for Outbreaks

Education – Staff

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

Education – Family Resources

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

Infection Prevention and Control

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

- IH Infection Prevention and Control IPC Manual

Other Policies and Programs

- Licensing: Community Care Reportable Incident Form
- IH Communicable Disease Unit – Reportable communicable disease surveillance and management
- Environmental Health Officer – find locations
- IH Occupational Health

BC Laws

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

Introduction and Application

Gastrointestinal (GI) infection is generally caused by viruses and bacteria, and occasionally from the toxins created by bacteria. GI infection can cause a variety of symptoms from diarrhea, nausea, and vomiting to abdominal cramps, fever, headaches, and rashes; and is spread from person to person through direct or indirect contact via the fecal/oral route.

Common sources of infection in healthcare environments are contaminated hands that are not cleaned between residents, contaminated equipment that is not cleaned between resident use, and/or contact with environmental surfaces that have been contaminated with vomit or feces. Less common sources include consumption of contaminated food or beverages.

It is expected that LTC facilities will more commonly be affected episodically by viral GI infection outbreaks that are also affecting the greater local community. Other possible pathogen causes should be considered if the clinical presentation and onset/incubation appears different than a routine viral GI infection outbreak.

These guidelines provide direction for LTC facilities in the event multiple cases of GI infection are identified.

While it is recognized that *Clostridioides difficile* can be responsible for clusters or outbreaks in healthcare facilities and that some of the measures outlined in this protocol may be applicable in preventing or controlling this organism, it is beyond the scope of this document to provide direction in managing outbreaks caused by this organism due to its unique epidemiological properties.

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

Tool A: Outbreak Prevention Principles

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

Mode of Transmission for GI

The mode of transmission of GI illness is via the fecal-oral route. This can be from person to person, and primarily through direct or indirect contact.

- Direct contact can be from direct physical contact between an infected individual and body surface to body surface without barrier.
- Indirect contact can occur via an intermediate object, e.g. contaminated hands that are not cleaned between residents or contaminated care equipment.

It can also include contact with suspended droplets when a person is actively vomiting or when there is gross contamination of the environment with vomitus or feces.

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

Infection Prevention and Control Principles

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

Environmental Best Practices

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

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

Routine Practices

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

Equipment (PPE), the area in which care is being provided, and potential for contamination of equipment or environment.

- Routine Practices Information Sheet.

Additional Precautions

- Additional Precautions are used when Routine Practices are not enough.
- Residents and their visitors should be educated on additional precautions being used.
- Healthcare workers should have quick and easy access to PPE and cleaning and disinfecting products required when providing care, including supporting items, such as hands free linen hampers and waste cans.

Personal Protective Equipment

See Links and Tools for signs and posters.

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

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

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

Resident Illness

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

Staff illness

- Any staff who develop symptoms of GI illness (i.e. vomiting, diarrhea, other GI symptoms) while at work need to report to their supervisor to arrange being able to leave work.

- Any staff with symptoms that suggest GI infection should be excluded from work while ill and for 48 hours after the last symptom, or 48 hours diarrhea free if anti-diarrheal medications were taken. If a known agent is found to be circulating among residents before an outbreak is declared, or the staff person is diagnosed with a specific agent, a timeframe specific to that organism should be used for exclusion. Staff should be vigilant in self-assessment of symptoms, particularly those working in multiple sites.
- Staff should not be coming to work while ill.

Return to Top: Outbreak Prevention Principles

Tool B: Roles and Responsibilities

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

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

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

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

Medical Health Officer

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

Communicable Disease Unit

Roles	**Responsibilities**
Outbreak Assessment	• For all facilities, compiles an initial assessment of the facility that has met the Reporting Threshold to review with the MHO. • For IH facilities, includes as part of the initial assessment to the MHO the assessment from IP regarding facility IPAC measures and compliance. • For all facilities, consults with MHO regarding outbreak declaration and outbreak over declaration.
Outbreak Response Lead/Facilitation	For contracted partner or private LTC sites:

	• Provides outbreak precaution direction and implementation recommendations to the site Outbreak Management Team lead (Most Responsible Person). • Reviews the outbreak situation and facilitates the first OMT, provides documentation of action items and MHO direction. • Consults with the MHO to obtain direction when deviations to control measures outlined in guidelines as needed, including getting approval from MHO on admissions, transfers, and repatriations.

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

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

Infection Preventionist (IP)

Roles	**Responsibilities**
Outbreak Assessment	• Provides initial assessment of situation and IPAC measures and compliance to the CD Unit for IH sites when reporting thresholds are met.
Outbreak Response Lead/Facilitation	For IH LTC Facilities: • Provides outbreak precaution direction and implementation recommendations to the site Outbreak Management Team Lead (Most Responsible Person). • Reviews the outbreak situation and facilitates the first OMT, provides documentation of action items and MHO direction. • Consults with MHO regarding deviations to control measures from the outbreak guidelines including getting approval from MHO on admissions, transfers, and repatriations.

	• Completes IPAC Outbreak Summary Report and sends to facility Manager/Director of Care and IPAC Directors, Managers and Epidemiologist.
Education	• In collaboration with CD Unit, provide pre-season preparedness training to all LTC facilities. • Provide outbreak education prior to outbreak season for IH owned and operated facilities • For contracted partner and private sites, provides Infection Prevention and Control (IPAC) support for private facilities when requested by the MHO/CD Unit as resources permit. • Provides ongoing outbreak support and education to facility staff.

Site Nursing Staff

Roles	**Responsibilities**
Outbreak Identification	• Works collaboratively with all staff interacting with residents to ensure early recognition of GI illness and implement appropriate additional precautions. • Works with site Outbreak Management Team (OMT) Lead (manager/most responsible person) and facility ICP (IH sites) or the CDU (contracted partner or private facilities) to ensure early recognition of GI illness in residents and possible outbreaks occurring. • Collects specimens and completes specimen requisitions. • Assess and identifies potential GI cases and reports to leadership (site OMT Lead).
Outbreak Management	• Ensures timely implementation of control measures and adherence to control measures. • Collects necessary specimens and sends them to the local IH lab with completed requisition forms as well as faxes the PHSA Laboratory Gastrointestinal Disease Outbreak Notification form to the PHSA lab. • Works collaboratively with any staff working with residents to ensure early recognition of GI illness and possible outbreaks. • Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, additional precautions, waste management and environmental controls.
Communication	• Communicates new cases and challenges to leadership/OMT Lead (e.g. lack of supplies).

Data Collection	• Provides details of resident GI cases on the GI Line List Worksheet and reviews with the site OMT Lead (Most Responsible Person) and OMT for inclusion into the Master GI Surveillance Line List Tool.

All Staff Departments (Managers and Staff) that interact with Residents (i.e. nursing, care aides, recreation, volunteers, and allied health personnel, etc.)

Roles	**Responsibilities**
Identification	• Works collaboratively with all staff interacting with residents to ensure early recognition of GI illness. • Communicates with nursing staff to ensure awareness of early recognition of GI illness and implementation of precautions. • Ensure timely implementation of Droplet and Contact precautions.
Outbreak Management	• Ensures timely implementation of control measures and precautions. • Working as a team (department managers and staff) with all staff to ensure additional resources including staff, supplies and enhanced cleaning are available and implemented during the outbreak. • Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, Additional Precautions, waste management and environmental controls.
Communication	• Report GI illness to their supervisor and do not work for the duration of their illness and for at least 48 hours after the resolution of symptoms. • For IH Staff, report GI illness to the Provincial Workplace Health Contact Centre for an assessment of exposure and reporting of the incident 1-866-922-9464. • Report any breaches in PPE when working with an infectious resident or when they were potentially infectious prior to illness to the manager.
Data Collection	• Provides details of resident GI cases on the GI Line List Worksheet and reviews with the site OMT Lead (Most Responsible Person) and OMT for inclusion into the Master GI Surveillance Line List Tool.

Support Services Managers and Staff (i.e. Housekeeping, laundry, dietary, and maintenance personnel)

Roles	**Responsibilities**
Outbreak Management	• Ensures additional resources including staff, supplies and enhanced cleaning and disinfecting supplies are available and implemented during the outbreak.

	• Adhere to best practices in relation to PPE use, hand hygiene, cleaning & disinfection, Additional Precautions, waste management and environmental controls.

Access and Flow

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

Environmental Health

Roles	Responsibilities
Outbreak Management	• Involved in the investigation if there are reasons to believe the GI outbreak is related to food or caused by something other than a common viral GI illness. • MHO may request support to assess entire facility infection control measures and provide recommendations.

Communication Representative

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

Licensing

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

Return to top: Roles and Responsibilities

Tool C: Supply Checklist Template

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

Specimen Collection containers - Not expired		
	Order from Public Health Laboratory or IH labs minimum of 6 GI Outbreak kits on all units by **Sept 15 annually** and maintain at all times.	
	Public Health Lab Gastrointestinal Illness requisitions	
	Public Health Lab Gastrointestinal Illness Outbreak Notification Form	
Cleaning Supplies - easily accessible, adequate supply		
	Cleaner and Disinfectant (See Tool K for details)	
	Hand soap and paper towels	
	Alcohol-based hand rub	
Outbreak Signage		
	"STOP – We are Experiencing an Outbreak" (form 807909 printed on red)	
	Droplet and Contact Precautions (form 807904)	
	Any other signage needed.	
Outbreak Documents - bookmarked on computer or printed in a binder/folder easily accessible		
	IH GI Outbreak Guideline Toolkit	
	Quick Reference Guide (first page/landing page of Toolkit)	
	Master Gastrointestinal Illness Surveillance Line List Tool	
	Gastrointestinal Illness Line List Worksheet	
	RI and GI Outbreak Report Form (823076)	
Personal Protective Equipment (PPE) - Easily accessible, Adequate supply – sufficient is sizes and volume		
	PPE carts or holders	
	Impervious disposable gowns	
	Masks	
	Eye Shields	
	Gloves • Small • Medium • Large • XLarge	
Outbreak Supplies		
	Linen	
	Linen Cart	
	Laundry Hampers	
	Garbage cans- hands free	
Other		

Tool D: Surveillance in LTC Facilities

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

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

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

Master Gastrointestinal Illness (GI) Surveillance Line List Tool Template

Gastrointestinal Illness (GI) Line List Worksheet

Tool E: Outbreak Management Team

All facilities are to have a designated **Outbreak Management Team** (OMT) responsible for ensuring measures are in place for preventing outbreaks and overseeing and directing outbreak control measures during an outbreak.

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

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

Before any outbreak occurs:

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

Education for the facility staff includes:

- Case and reporting threshold definitions
- The process of identifying and reporting a threshold
- Hand hygiene
- Routine Practices and Additional Precautions, and reporting of breaches in PPE
- Practicing donning and doffing PPE
- Enhanced cleaning and disinfection procedures
- Facility Policies

During any outbreak:

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

OMT Meeting Topics:

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

- New and Total Cases are reviewed in residents and staff:
  - Completion of the daily RI and GI Outbreak Report form (823076).
- Review precautions and if they are implemented appropriately
  - Any changes or additional precautions needed?
  - Any equipment needs? (sample containers, PPE, garbage cans, etc.)
- Sample collection and testing
- Program reports
  - Any issues that need to be addressed?
  - Staffing issues
- Communications
  - Initial outbreak notification to partners (Tool F)
  - Other ongoing communications
- If control measures appear to be failing (e.g. after a few days of control measures, new cases should reduce but don't seem to be) the OMT should review possible reasons for ongoing cases.
- If an MHO is attending an OMT, ensure the OMT is prepared with questions that require MHO input or direction.

Membership to the OMT:

Mandatory:

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

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

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

Staffing Services	Stores/Logistic
Transition Liaison Representative	Workplace Health and Safety
Other stakeholders as required by outbreak circumstance	

Return to top Outbreak Management Team

Tool F: Notification of Partners

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

This notification includes, but is not limited to:

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

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

Department	**Contact Information**
Director, Clinical Operations on Call (IH) or private/contracted facility Equivalent	
Communicable Disease Unit	CDOutbreak@interiorhealth.ca or 1-866-778-7736
Infection Control Practitioner (IH/contracted partner) or private facility equivalent	IPAC@interiorhealth.ca (IH Facilities) Or site IPAC (contracted partner/private)
Patient Transport Office	
Oxygen Services	
Lab Services	
BCEHS	
Hemodialysis	
Public Health Laboratory	Complete the BC PH Lab Gastrointestinal Disease Outbreak Notification Form and fax
Medical Director	
Licensing Officer	LicensingDirect@interiorhealth.ca or 1-877-980-5118
HandyDART	
Medical gas/oxygen provider	
Hairdresser	
Physiotherapist	
Admin Respite Support	

Tool G: Outbreak Preparedness Considerations

Outbreak Preparedness

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

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

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

Reduce transmission with supplementary activities

There will be times in which cases of gastrointestinal illness do occur in the facility, but an outbreak has not been declared by the MHO. Should cases occur, but the reporting threshold has not been met (either the initial reporting threshold, or an updated threshold provided by the MHO), taking some steps can help reduce further transmission.

1. Investigate and identify the source of illness so that it can be stopped/reduced if possible.
2. If more control measures are felt to be useful to implement, only use the least restrictive control measures for residents. Discuss with ICP (IH facilities) or CD Unit (contracted and private sites) what could be implemented. These include:
   - Enhanced cleaning and disinfection/housekeeping
   - Increase symptom monitoring frequency
   - Avoid transferring well residents into multi-bed rooms with ill residents
   - Consider removing common touch items in shared areas (salt and pepper shakers, sugar bowls, table cloths)
   - Ensure there are no food items open in/near common and resident areas (e.g. also including nursing stations).
   - Ensure that staff who reported ill do not work for the appropriate timeframe for the organism that has been identified.
   - Ensure those staff moving between sites (e.g. physio, lab, etc.) have increased vigilance in proper PPE and hand hygiene.
   - Cohort staff if not already occurring.
   - For residents on precautions that require necessary or urgent visits to other health care sites, ensure the requirements for precautions have been communicated to the receiving site so they can be taken there.

Any more restrictive measures ***must have MHO approval to implement.*** These more restrictive measures can include closing dining rooms, limiting visitors, stopping group activities, restricting transfers and admissions, cohorting ill residents from multi-bed rooms, isolating well residents (even contacts), etc.

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

For IH facilities, consult with IPAC. If more restrictive measures are thought to be needed by IPAC, they will consult with the CD Unit/ MHO.

For contracted partner and private sites who feel they would like to implement restrictive measures, contact the CD Unit for consultation.

Return to the top: Outbreak Preparedness Considerations

Tool H: Case and Reporting Threshold Definitions

Case Definition

Gastrointestinal Infection (GI) Case: (Implement Droplet & Contact Precautions (807904) when providing direct care to symptomatic residents)	***One*** of the following conditions ***that cannot be attributed to another cause:*** (e.g. laxative use, medication side effect, diet, prior medical condition) • Two or more episodes of diarrhea in a 24 hour period (above what is considered normal for that individual) OR • Two or more episodes of emesis in a 24 hour period OR • One episode each of emesis and diarrhea in a 24 hour period OR • Positive culture for a known enteric pathogen with a symptom of GI infection (e.g. emesis, abdominal pain, diarrhea) OR • One episode of bloody diarrhea

Reporting Thresholds

Threshold not met - No reporting to CD Unit Needed The purpose of taking action at this time is to prevent an outbreak from occurring.	When one or two cases of GI illness occur within a 4-day period and no outbreak declared: • Isolate cases of GI on precautions • Be on the alert for more cases with increased monitoring and recording • Be ready to possibly implement full unit-wide control measures if more cases are detected and an outbreak is declared by the MHO • Consult facility infection prevention and control • See Tool G: Outbreak Preparedness Considerations for supplementary activities.
Reporting to CD Unit	Three or more cases of GI illness occurring within the same area (e.g. unit, ward, wing, facility) in a four-day period.

Outbreak Definition

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

Tool I: Contact Information for Reporting Thresholds

1) Contact Information:

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

2) Reporting Thresholds:

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

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

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

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

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

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

3) Daily Outbreak Case Reporting:

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

	On the day of Outbreak Declaration	**Ongoing Daily Reporting**

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

Return to Top: Contact Information

Tool J: Measures for Managing an Outbreak:

Outbreak Precaution Details

Continue Routine Infection Prevention and Control Practices

- Point of Care Risk Assessment
  - Must be done for any interaction with the resident: assess resident's symptoms and cognitive ability, type of interaction that will occur, necessary Personal Protective Equipment (PPE) and potential for contamination of equipment or environment.
  - Includes:
    - Potential exposure to body fluids (i.e. Active vomiting, explosive diarrhea)
    - Exposure to large deposits of body fluids (vomitus/feces) on environmental surfaces;
    - Residents continence level and ability to comply with instructions.
- Hand Hygiene
  - Practice 4 moments of hand hygiene
    - Use soap and warm water. Alcohol based hand rub (ABHR) can be used if hands are not visibly soiled.
  - Assist residents with hand hygiene, particularly after toileting, before meals, and before handling food.
  - Provide hand sanitizer at all entrances and exits with signage on how to use.
  - Practice hand hygiene before and after contact with each resident and resident environment.
- Routine Practices and Additional Precautions
  - Use Routine Practices for interaction with all residents.
  - PPE and cleaning supplies should always be readily accessible for use.
  - Droplet and Contact Precautions (807904) for interactions with residents showing symptoms of GI.
  - Ensure personal care supplies are patient specific.
  - Ensure no shared food or drink (i.e. Nursing station, lounges)
  - Ill residents should not access the patient kitchen or public lounge.
  - Wear a surgical mask and eye protection when cleaning areas grossly contaminated by feces or vomitus.
  - Clean and disinfect all equipment between uses for different residents. This is a shared responsibility between all staff.
- Monitoring
  - Monitor residents for symptoms daily during the outbreak. Collect samples until an agent for the outbreak is identified.
  - Maintain Master Gastrointestinal Illness Surveillance Line List Tool and the Gastrointestinal Illness Line List Worksheet.

Ill Residents

- Isolate Ill residents in their rooms as much as possible until 48 hours after symptoms end.
  - Confinement of residents can have adverse effects on their well-being. It is important to *keep the period of confinement to a minimum.*
- Provide meal tray service in room.
- Ensure staff and visitors use appropriate Routine Practices and Additional Precautions

  - Use Droplet/Contact Precautions (807904). Use precautions for entire isolation period.
- If residents require hospitalization, notify the receiving facility and transportation services that an outbreak is in progress.
- Keep well residents away from affected floors/wings/areas where the outbreak is occurring.
- Residents who are not ill may attend other facilities for medically necessary appointments. Notify the receiving facility and transportation services that an outbreak is in progress.

Cohort Residents

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

Cohort Staff

- Staff cohorting to specific units should be used where practical.
- Staff members should be cohorted to work with either ill residents or well residents. If this is not possible, staff should work with asymptomatic residents first and then with symptomatic residents.
- Since some individuals acquire short-term immunity following illness, staff who return to work after becoming ill with GI symptoms should also be assigned to care for ill residents whenever possible.
- Healthcare providers entering the facility/area during an outbreak (e.g. laboratory staff or physicians) will be expected to provide care or services in the non-affected areas of the facility or with well residents first.
- Staff handling, providing, and or delivering food should not enter rooms of residents on droplet and contact precautions or outbreak units.

Common Areas

- Discontinue or modify group activities, consult with MHO if needed. Limiting activities to restrict movement of residents between units and floors may be an option.
- All shared items should be removed from the shared areas (e.g. salt and pepper shakers, sugar bowls, table cloths). Remove and discard food in refrigerators found in common areas or nourishment areas and disinfect these appliances.
  - Open or shared food items (candy, cookings, fruit, etc) should not be kept in shared resident areas, staff lounges, or staff workspaces (eg. nursing station). Staff should avoid sharing food. Food should be contained to staff room only.
- Ill residents should not access the patient kitchen or public lounge.

Return to Top: Measures for Managing Outbreaks

Restrict Admissions and Transfers

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

Considerations/Requirements:

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

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

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

Visitors and Volunteers

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

Ensure:

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

Animals and Pets

- It may be reasonable to restrict visiting pets and/or temporarily remove resident pets during a GI outbreak.
- Recommendations for restricting or excluding pets do not apply to certified guide or service dogs. The Guide Dog and Service Dog Act (the Act) ensures public access rights for guide dogs and service dogs.

Return to Top: Measures for Managing Outbreaks

Enhanced Cleaning and Disinfection

Note: If outbreak is related to a ***bacterial*** GI illness these recommendations may change. Please refer to your facility's disinfectant policy.

- Change the general disinfectant used in the facility to a solution that is effective against norovirus. See Tool K for recommended disinfectants during an outbreak.
  - Examples of products such as a 0.5% Accelerated Hydrogen Peroxide product ***or*** a 1000 ppm bleach solution could be used. See Tool K for solution preparation.
  - For further information on disinfectants, see PICNET GI Outbreak Guidelines for Healthcare Facilities - Appendix 7.
- Areas contaminated with vomitus or feces must be cleaned and then disinfected immediately to minimize the risk of infection.
- Increase cleaning and disinfection frequency of high touch areas including but not limited to bed rails, call bell cords, phones, bathroom surfaces (taps, toilet handle), door knobs, light switches, hand rails, elevator buttons, tables, counter tops, nourishment areas (fridges, ice machines, cupboard handles), and nurse's station.
- For specific directions for cleaning vomit and feces, see Tool K: Cleaning Vomit and Feces

Food Services

- Wash all dishes, utensils and trays in a commercial dishwater with hot water (82C at manifold or 71C at plate level) or use a chemical sanitizer rinse at appropriate concentration after washing. Food contact surfaces may require a potable water rinse depending on the concentration used.
- Be careful not to cross-contaminate dirty and clean dishes.
- Increase cleaning and disinfection, hand hygiene in any food services areas.
- Review site Sanitation Plan, and consult with your local Environmental Health Officer for questions.
- See Tool K: Cleaning Vomit and Feces for recommendations on cleaning up vomitus and fecal matters in food preparation areas and dining rooms.

Laundry Services

- Ensure good separation of soiled and clean laundry during collection, transport, and storage.
- Transport laundry from outbreak affected floor/unit in tagged and closed leak-resistant bags.
- Use PPE when handling contaminated laundry.
- Wash with detergent in hot water and hot air dry.
- Ensure routine cleaning and disinfection of laundry bins, loading areas, washing machines, etc.

Education

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

Outbreak Signage

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

Return to top: Measures for Managing an Outbreak

Tool K: Cleaning Vomit and Feces and Recommended Disinfectants

Directions/Precautions for cleaning vomit and feces apply at all times, regardless if an outbreak is ongoing.

Cleaning Vomitus and Feces

Note: Ensure the area is very well ventilated.

1. **Areas should be isolated** to prevent other residents from unintentional exposure and place wet floor signs to prevent slipping. *The area should be cleaned immediately*.
2. **Wear appropriate personal protective equipment** including
    a. disposable nitrile gloves,
    b. a surgical mask and eye protection and
    c. a plastic disposable apron or fluid-resistant gown.
3. **Use paper towels or equivalent to soak up excess liquid**. Transfer these and any solid matter directly into a plastic garbage bag.
4. **Clean the soiled area with detergent and water**, using a "single-use" cloth. *Do not dip cleaning cloth into cleaning solution more than once.*
5. **Prepare the disinfectant solution**. See below for recommended disinfectants. Follow the manufacturer's instructions regarding preparation, dilution and contact time required to be effective.
6. **Disinfect** the area to a radius of 2 metres using contact time as recommended by disinfectant.
7. **Remove PPE.** Deposit used disposable gloves, masks and aprons into a garbage bag and re-usable aprons/gowns into laundry bag after cleaning the area of the vomit and/or fecal incident.

Wash hands thoroughly using soap and warm running water for at least 30 seconds

Cleaning up vomit in food preparation areas and dining rooms

- Follow process above for cleaning vomit and feces. Disinfect the area to a radius of 2 metres using contact time as recommended by disinfectant.
- Dispose of any food that has been handled by the ill person since symptom onset, or been present within 2 meters of a vomiting incident.
- Wash all dishes, utensils and trays in a commercial dishwasher – with hot water rinse of at least 82°C or a chemical sanitizer rinse at appropriate concentration. Food contact surfaces may require a potable water rinse after sanitizer.
- Be careful not to cross-contaminate dirty and clean dishes.

Treatment of Specific Materials

Items must be **cleaned** and then **disinfected.**

- Soft furnishings or cloth-covered mattresses should be thoroughly cleaned with detergent and hot water.

For disinfection: articles can be placed outdoors in the sun for several hours or they can be steam cleaned at a minimum temperature of 60 °C (which is strongly recommended) or they can be disinfected with 1:50 bleach (if bleach-resistant) or 0.5% accelerated hydrogen peroxide (in accordance with product information). Contaminated carpets should be cleaned with detergent and hot water and then disinfected with bleach (if bleach-resistant), or 0.5% accelerated hydrogen peroxide (in accordance with product information), or steam cleaned using water at a minimum of 60°C.

For further information on cleaning, see PICNET GI Outbreak Guidelines for Healthcare Facilities - Appendix 8.

Recommended Disinfectants

Hypochlorite (Bleach) Solution

1000 ppm bleach solution is made by adding:

- 1 part of household bleach (5.25% hypochlorite) to 50 parts water
  [i.e., 4 tsp (20 ml) household (5.25%) bleach to 4 cups (1000 ml) water]

Ensure you have a method of confirming the concentration of the bleach solution (e.g. test strips).

Allow surface to air dry naturally. Food contact surfaces will require a potable water rinse when the above bleach solution is used.

> ***Note:*** *Hypochlorite at higher concentrations is corrosive and may bleach fabrics. This concentration of bleach is the minimum recommended level known to be effective against viral gastrointestinal illness agents.*

0.5% Accelerated Hydrogen Peroxide Solution

A 0.5% accelerated hydrogen peroxide solution is effective against the feline calicivirus. This virus is used as a surrogate for Norovirus as these viruses cannot currently be cultured in the laboratory.

The 0.5% accelerated hydrogen peroxide solution should be used as recommended in the product use and safety information. When cleaning up vomit or feces ensure a 5 minute contact time.

Note: Considerations for selecting a disinfectant/sanitizer during an outbreak:

- The disinfectant is effective against norovirus, unless it has been determined another pathogen is the cause, such as a bacterial cause.
  - Sanitizers typically used in food premises (eg. 100 ppm bleach or 200ppm quaternary ammonia) may not be effective against Norovirus.

- A disinfectant with a Drug Identification number (DIN) issued by Health Canada with a specific label claim against norovirus, feline calicivirus or murine norovirus is recommended. The above disinfectants of bleach at 1000 ppm or 0.5% Accelerated Hydrogen peroxide solution are examples.
- Some disinfectants may damage certain materials (corrode metals, discolour carpets, etc). They should be compatible with the material or equipment that it will be used on.

For further information on disinfectants, see PICNET GI Outbreak Guidelines for Healthcare Facilities - Appendix 7.

Return to top: Cleaning Vomit and Feces and Recommended Disinfectants

Tool L: Specimen Collection and Transport

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

1. **Gastrointestinal Disease Outbreak Kits**

   Specimen vials may be ordered from Public Health Laboratory using the Sample Container Order Form. Fax to Public Health Laboratory at (604) 707-2606 or email to Public Health Laboratory at kitorders@hssbc.ca.

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

2. **Gastrointestinal Disease Specimen Collection:**

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

   NOTE: It is more likely that a viral organism will be identified if the sample is taken early in symptom onset and it is delivered to lab the same day as collection (or next morning if collected late in the day). IH Labs should receive the sample within 3 days of collection.

   Instructions for specimen collection are located on the bottom of the BCCDC Gastrointestinal Disease Outbreak Requisition.

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

3. **Complete the Accompanying Documentation.**

   - Complete the BCCDC Gastrointestinal Disease Outbreak Notification Form. Follow the instructions on this to create an outbreak identification number for your facility.
     - Fax this to BCCDC Environmental Microbiology at 604-707-2607.
     - Include a copy of this form with the samples.
   - Send one *completed* BCCDC Gastrointestinal Disease Outbreak Requisition for each sample collected and placed in the outside pocket of the plastic bag.
     - Ensure the name, date of birth and PHN match the labelled container.
     - Under Test Requested, select "**Viral/Bacterial Outbreak Test**"
     - Under '**Ordering Practitioner'** and **'Additional Copies',** enter the full name and billing number of facility and physician to whom the final report will be sent.
     - Under '**Additional Copies'** enter IH CD Unit.

4. **Transport of Specimens:**

   - Specimens for a GI Outbreak are to be shipped directly to IH labs for analysis.
     - Make sure specimen containers are closed tightly and properly labeled with name, PHN and date of birth.
     - Ensure a requisition has been filled out for each specimen, and matches the specimen container.
     - **Place each individual specimen in its own biohazard bag and seal the bag.**

- Keep specimens at refrigerator temperature (2°C to 8°C). Do not freeze specimens. Specimens optimally can be held at this temperature for 24 hours until they can be delivered to lab. If the sample does not make it to the lab within 72 hours, held at refrigerator temperature, the sample will be rejected.
- Assemble the swabs and ship them together in a cooler, which meets Transport of Dangerous Goods requirements, with an ice pack. Ship to a local IH Lab as soon as possible.
- Include a copy of the completed BCCDC Gastrointestinal Outbreak Notification Form with the samples.

Return to top: Specimen Collection and Transport

Tool M: When to declare an outbreak over:

When the outbreak is known to be caused by Norovirus, or the agent is unknown but a viral cause is suspected, the outbreak can be declared over after 96 hours since the most recent case onset.

For outbreaks where other viral agents are identified, the outbreak can be declared over when two incubation periods (based on the known agent or suspect non-viral agent) have passed since the last case onset. The CD Unit will consult with the MHO to determine this timeframe.

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

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

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

See the BC PICNet Gastrointestinal Infection Outbreak Guidelines for Health Care Facilities for Appendix 3 - Agents that are Common in Gastrointestinal Infection Outbreaks.

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

Tool O: Outbreak Debrief

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

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

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

Where Outbreaks that:

- Lasted an extended period of time (eg. 15 days or more) OR
- Had high attack rates that occurred beyond an incubation period from initiating outbreak precautions OR
- At the request of CD Unit, IH IPAC, MHO, due to an identified issue that would benefit from a debrief.

the OMT Lead must include consulting with the MHO, CD Unit, Director of Clinical Operations, and any other partner that may be appropriate in the debrief.

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

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

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

Effectiveness of control measures in limiting the outbreak.			
Other			

References

PICNet (Provincial Infection Control Network of British Columbia). 2016. *Gastrointestinal Infection Outbreak Guidelines for Healthcare Facilities.* Retrieved from: https://www.picnet.ca/wp-content/uploads/PICNet-GI-Outbreak-Guidelines_Revised-June-2016.pdf

Developed by:

Judy Ekkert, B.Sc., CPHI (C), CD Specialist, Interior Health [2008]

Reviewed by:

Interior Health Medical Health Officers [2014, 2015, 2018, 2022, 2023]

Infection Prevention and Control - Outbreak Working Group [2018]

Nicki Gill, RN BSN CIC, Infection Prevention and Control Educator [2014, 2015]

Andrea Neil, RN, Infection and Control Practitioner [2015]

Interior Health Communicable Disease Unit [2014, 2015]

Dr. Bing Wang, Infection Prevention and Control Medical Director [2017, 2018]

Valerie Wood, Infection Prevention and Control Director [2017]

Dr. Silvina Mema, MHO, CD Unit Medical Director [2017, 2018]

Shannon Campbell, Interior Health Workplace Health and Safety [2018]

Tiffany Holdstock, Interior Health Workplace Health and Safety [2018]

Joanna Harrison, Director, Access and Flow, Hospitals and Communities Integrated Services [2018]

Maureen McLean-Young, Infection Control Practitioner [2019]

Lisa Schwartz – Infection Prevention and Control [2022]

Joanne Standish – IH Workplace Health & Safety [2022, 2023]

Nicole Byrne – Manager, IH Community Care Facility Licensing [2022, 2023]

Elaine Steinsland, Infection Prevention and Control Manager [2019, 2022]

Dr. Amanda Wilmer, Medical Microbiologist [2019, 2022, 2023]

Evelyn Nicol, Infection Prevention and Control Manager [2022]

Karen Stoopnikoff, Infection Control Practitioner [2022]

Bonnie Lantz, Direction Infection Prevention and Control Manager [2022]

Kristen Hanson, Communicable Disease Unit Manager [2022, 2023]

Dr. Jonathan Malo, Medical Health Officer, [2022, 2023]

Katrina Wong, Specialist Environmental Health Officer [2023]

Jeevan Jaswal, Infection Preventionist [2023]

Janie Nicols, Manager, Infection Prevention and Control [2023]

Endorsed by:

Dr Andrew Larder, FRCPC, Interior Health Senior Medical Health Officer [2013]

Heather Cooke, Chief Nursing Officer and Professional Practice Lead [2013]

Dr. Sue Pollock, Interior Health Medical Health Officer [October 2014]

Glenn McRae, Chief Nursing Officer/Professional Practice Lead [October 2014]

Donna Mendel, Regional Practice Leader, on behalf of Glenn McRae, Chief Nursing Officer and Professional Practice Lead [September 2015]

Dr. Trevor Corneil, Chief Medical Health Officer [August 2015, 2017]

Dr. Jonathan Malo, Medical Health Officer, Communicable Disease MHO [2022, 2023]

Paula Araujo, Regional Practice Leader – Clinical Process on behalf of Glenn McRae, Chief Nursing Officer and Professional Practice Lead [September 2017]

Kathy Williams, Director, Professional Practice on behalf of Glenn McRae, Chief Nursing Officer and Professional Practice Lead [September 2018]

Kathy Williams, Director, Professional Practice on behalf of Cheryl Whittleton, Chief Nursing and Allied Health Officer and Professional Practice Lead, Professional Practice Office [January 2020, November 2022, October 2023]

VERSION HISTORY

DMS ID	Key changes	Revised by:	Effective Date:
-		Lori Hiscoe, RN, BScN, CD Specialist	2013
-		Meg Rao, RN, BScN, CD Specialist	2014, 2015
-		Michele Andrews, RN, BScN, CD Specialist	2017
-	Adapted Gastrointestinal (GI) Infection Outbreak Guidelines for Health Care Facilities September 2018 document to develop October 2022 version for LTC facilities only	Jennifer Jeyes, B.Sc., B.Tech, CPHI(C), CD Specialist	2018, 2022
CD721 (rev 1751)	☑ Major Revision	Jennifer Jeyes, Communicable Disease Lead	Oct 2023