

Outbreak Management

Gastroenteritis Outbreak Protocol

Infection Prevention and Control Guidelines for Acute and Residential Care

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GI INTRODUCTION & DEFINITIONS

GASTROENTERITIS: Defined as any one of the following gastrointestinal (GI) conditions that cannot be attributed to another cause such as new medications, laxative use, prior or current medical conditions causing diarrhea:

- Two or more liquid or watery stools ([Bristol Stool Chart Type 7](#)) above what is considered normal for the individual within a 24-hour period; or
- Two or more episodes of vomiting in a 24 hour period; or
- One episode each of vomiting and diarrhea in a 24 hour period; or
- Positive culture for a known enteric pathogen and symptoms of GI infection (vomiting, abdominal pain, diarrhea).

NOROVIRUS: A group of viruses that commonly cause gastroenteritis. A **confirmed case** requires laboratory confirmation. Prominent **symptoms** include frequent, liquid or watery stools and projectile vomiting. The **incubation period** is usually 24-48 hours. Transmission occurs by person-to-person via the fecal-oral route. Illness usually lasts 12 – 60 hours.

GASTROENTERITIS OUTBREAK: Suspected when **3 or more** residents/patients and/or staff meet the case definition of Gastroenteritis (see above), in the same geographic area within a **4 day period**.

GASTROENTERITIS OUTBREAK STAGES

1. **Suspected Outbreak:** A cluster of 3 residents/patients with sudden onset gastrointestinal infection (defined above), not attributed to another cause. This triggers: communication with IPAC, initiation of control measures, and collection of specimens.
2. **Declared Outbreak:** The causative organism is confirmed, and the VCH Infection Prevention and Control (IPAC) in conjunction with the Vancouver Coastal Health Medical Health Officer (MHO), declare the outbreak. The decision to close the unit or facility to admissions and transfers will be made by the IPAC Medical Microbiologist in collaboration with the Medical Health Officer upon confirmation of the outbreak.
3. **Concluded Outbreak:** 2 incubation periods (96 hours) with no new cases identified and the Vancouver MHO declares the outbreak over.

KAPLAN'S CRITERIA

In the absence of laboratory confirmation, an outbreak occurring in a long-term care facility of acute gastroenteritis due to norovirus infection may be assumed to be present if all of the following criteria are present ('Kaplan Criteria'):

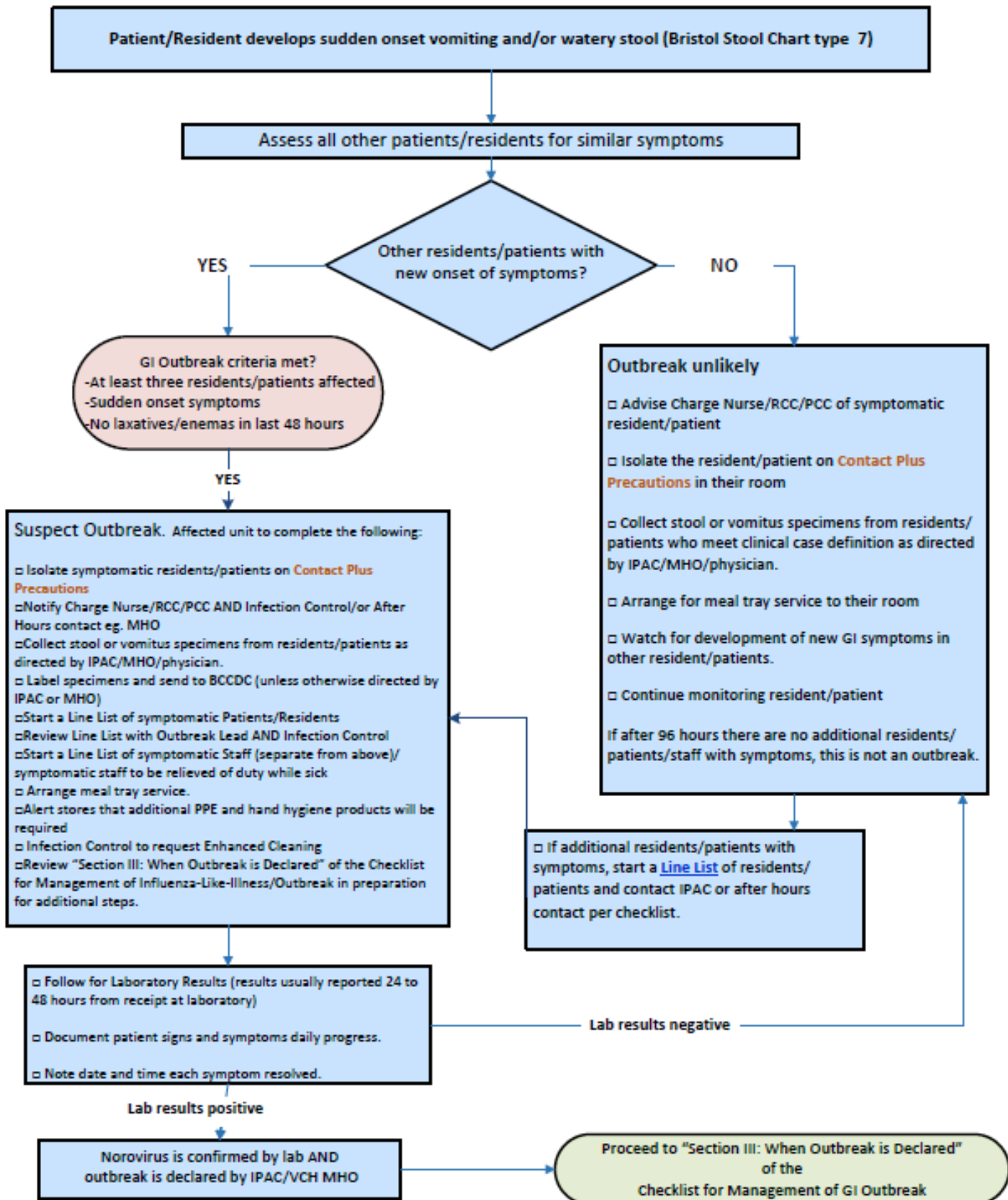
- a. Vomiting in more than half of affected persons;
- b. A mean (or median) incubation period of 24 to 48 hours;
- c. A mean (or median) duration of illness of 12 to 60 hours; and
- d. No bacterial pathogen identified in stool culture.

GASTROINTESTINAL OUTBREAK LEADER (Manager, PCC, RCC, EHO, MHO)

The GI Outbreak Leader is by default the Site Leader and may be delegated to another appropriate leader, such as the unit manager. The Outbreak Leader has the authority to institute outbreak control measures. Responsibilities include:

- Collaborating with IPAC and the unit care team to expedite control measures
- Establishing outbreak management team
- Scheduling and leading daily outbreak meetings (T-Con)
- Setting up an outbreak debrief meeting after the outbreak has concluded

SUSPECTED GI OUTBREAK ALGORITHM



CHECKLIST FOR THE MANAGEMENT OF GI OUTBREAK

I. Preseason Planning

Action	Done	Initial	Comments
1. Identify an outbreak lead i.e. PCC/RCC Name:			
2. Date Seasonal Planning Reviewed:			
3. Declutter unit(s)			
4. Review stock of supplies (e.g. VCH signage , culture containers, labels, requisitions, and order more as required)			
5. Review Gastroenteritis Outbreak Infection Prevention and Control procedures and policies with staff, and ensure information is current			
6. Place GI Outbreak materials in accessible location for staff to access when an outbreak is suspected. Refer staff to VCH IPAC website for resource materials.			

II. Suspected GI Outbreak

Consultation and Notification:	Done	Initial	Comments
<p>1. For VCH owned and operated facilities:</p> <ul style="list-style-type: none"> • Mon-Fri, during regular office hours, notify your area Infection Control Practitioner (ICP) • After regular office hours, or on weekends and statutory holidays, notify: <ul style="list-style-type: none"> ○ VA & Coastal Acute Sites : Medical Microbiologist on call 604-875-5000 ○ Richmond Acute: Pathologist on call 604-278- 9711 local 4143 ○ Long Term Care: Medical Health Officer on call 604-527-4893 			
Action (If outbreak is suspected by the designate above):	Done	Initial	Comments
<p>1. Immediately isolate all patients/residents on Contact Plus Precautions having:</p> <ul style="list-style-type: none"> • 2 or more episodes of diarrhea within a 24 hr period, OR • 2 or more episodes of vomiting within a 24 hr period, OR • 1 episode each of vomiting and diarrhea within a 24 hr period, OR • 1 episode of bloody diarrhea, OR • Positive stool culture of a known enteric pathogen AND gastroenteritis symptoms that cannot be attributed to another cause; add Facial Protection if vomiting/explosive diarrheal stools/flushing vomit or diarrhea. 			
2. Alert stores that additional hand hygiene products, gloves, gowns, mask with face shields will be required.			
3. Collect diarrhea stool specimen (preferred) in C & S container, or vomitus if patient does not have diarrhea. Label specimens with patient label; add "(Suspect) Outbreak Label"			
4. All facilities forward outbreak specimens to Laboratory for testing			
5. Discuss outbreak with ICP/Med Micro/MHO or designate and implement control measures as directed			
6. Begin a line list of patients/residents with symptoms and a separate line list of symptomatic staff			
<p>7. Implement strategies to prevent or manage dehydration (Vancouver Community Residential Care sites, Richmond and Coastal sites)</p> <ul style="list-style-type: none"> • Remind staff about risks of dehydration during outbreak episodes. • Identify at risk residents: inform dietitian, pharmacist and MRP. • Contact Central food Services (Sodexo) to supply extra water/juice jugs to residents on the unit • Consider reviewing diet order request: e.g. add extra fluids to meal trays or switch to full fluid diet as appropriate. • Follow Early Detection and Prevention of Dehydration in older adults guide 			

III. Declared GI Outbreak – Location: _____ Date of Closure: _____

Outbreak Control Measures: Facility	Done	Initial	Comments
1. Notify person in charge/Unit Outbreak Leader Name & Contact:			
2. Close indicated unit(s) to admissions and transfers (unless medically necessary or otherwise directed by IPAC/MHO). Notify receiving unit/facility on patient/resident transfer.			
3. Notify all department leads that they are to follow their outbreak guidelines for all areas			
4. Notify non-facility staff, professionals, and service providers of the outbreak Provide only essential therapeutic services			
• Notify housekeeping, food services and laundry so that department-specific outbreak management protocols are initiated			
• Notify other service providers of any outbreak control measures that may cancel or affect their provision of service (see list in # 6)			
• Notify any facility that admitted a resident from you within the past 24-48 hrs			
• Notify Priority Access			
• Notify family of resident of the outbreak and potential risk. Limit visitors.			
5. Schedule daily outbreak meeting/teleconference with key stakeholders			
6. Cancel group outings and large group gatherings in the facility (per MHO/designate)			
▪ Food related (cooking, potlucks, birthday parties, etc.)			
▪ Hand contact activities (dancing, cards, bingo, crafts, folding linen, etc.).			
▪ Hair salon			
▪ Occupational therapy/physiotherapy			
▪ Pet therapy			
▪ Foot care			
▪ Chapel			
▪ Day care (children)			
▪ Day program, visiting groups & outings			
▪ Outside meetings held in facility			
7. Arrange for <u>outbreak signage</u> on the doors and post on boards.			
8. Place approved hand sanitizer at all entrances for visitor use			

(IPAC) Infection Prevention and Control

Outbreak Control Measures: Patients/Residents	Done	Initial	Comments
1. Maintain line list for all symptomatic patients/residents			
2. Restrict movement of symptomatic patients/residents outside of their rooms as much as possible until 48 hours after symptom resolution. Do not move symptomatic patient/resident without IPAC direction. For cases in multibed room, cohort room on Contact Plus Precautions pending IPAC consult for placement.			
3. Place roomates of symptomatic patient/resident on Contact Plus Precautions for 48 hours post exposure to syptomatic index case.			
3. Provide tray service (meals to room). Close patient kitchen if present on unit (acute care). Discard any open food/beverages from patient kitchen.			
4. Post Contact Plus Precautions signage (add Droplet Precautions if vomiting)			
5. Dedicate patient care equipment to symptomatic patients/resident; thoroughly clean and disinfect any equipment used between residents and after use)			
6. Encourage diligent hand washing and use of alcohol hand sanitizer for all patients/residents			
7. Monitor patients/residents for new cases of gastroenteritis			
8. Implement strategies to prevent or manage dehydration (Vancouver Community Residential Care sites, Richmond and Coastal sites) <ul style="list-style-type: none"> • Remind staff about risks of dehydration during outbreak episodes. • Identify at risk residents: inform dietitian, pharmacist and MRP. • Contact Central food Services (Sodexo) to supply extra water/juice jugs to residents on the unit • Consider reviewing diet order request: e.g. add extra fluids to meal trays or switch to full fluid diet as appropriate. • Follow <u>Early Detection and Prevention of Dehydration in older adults guide</u> 			
9. Update line listings for ill patients/residents daily; record symptoms onset and resolution			
10. Fax updated line lists to the Infection Control department			

Outbreak Control Measures: Visitors	Done	Initial	Comments
1. Ask visitors to limit visits until outbreak has been declared over. Symptomatic visitors should not enter the facility unless for compassionate or exceptional circumstances			
2. Restrict visitation of multiple patients, residents/clients (i.e. do not visit room-to room)			
3. Encourage diligent hand hygiene on entering facility			

(IPAC) Infection Prevention and Control

4. Ask visitors to implement infection control practices for isolated patients/residents (e.g. Hand hygiene, mask with visor (as necessary), gown, visit only family member/friend)			
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Outbreak Control Measures: Staff	Done	Initial	Comments
1. Maintain line list for all symptomatic staff, contact the Provincial Workplace Health Call center for support in maintaining line list as needed			
2. Symptomatic staff must call the Absence Call line, the Provincial Workplace Health Call Center & their manager or designate and stay home until symptom free for 48 hours (72 hours for food handlers)			
3. Asymptomatic staff may continue to work in healthcare facilities, but self-monitor for symptoms and report illness/exclude from work as above if symptoms develop.			
4. Use gown, gloves (and mask/eye protection as necessary) when providing direct care to symptomatic patients/residents.			
5. Encourage diligent hand washing and use of alcohol hand sanitizer for all staff/patients/residents			
6. Dedicate staff to affected unit whenever possible , when not possible, start in non-outbreak area and finish work day in outbreak area. Avoid going back and forth between			
7. Cohort staff to have breaks separate from staff in unaffected areas (where possible)			
8. Clean out staff refrigerator to allow for proper cleaning and disinfection. Declutter staff lounge/break room. Discard any open/shared food items. Advise staff to use dishes/cutlery from home and avoid shared dishware for duration of outbreak.			
9. Staff to clean and disinfect common use items before re-use (i.e. stethoscopes). Ideally dedicate equipment for ill patients/residents			
10. Monitor staff for new cases of Gastroenteritis			
11. Update line listings for ill staff daily and fax to IPAC			
12. Volunteers/students should be excluded. Discuss with IPAC/MHO. If allowed to work, use appropriate PPE and follow outbreak measures. Instructor to monitor students compliance & competence.			
13. Schedule regular safety huddles to provide outbreak update and to reinforce key messages for staff: hand hygiene, PPE use, cleaning & disinfection, monitoring for new cases			
14. Post daily Outbreak Report sent by Infection Prevention and Control in area accessible to all unit staff			

IV. Outbreak Declared Over – Date: _____

****GI Outbreak declared over by MHO – two incubation periods (96 hours) after last symptom resolution**

Lifting of Restrictions	Done	Initial	Comments
1. Notify person in charge Name & contact:			
2. Notify all department leads that outbreak is now over and they may cease outbreak activities			
3. Arrange Isolation (i.e., terminal) cleaning for unit & patient/resident rooms as needed			
4. Arrange for the removal of outbreak signage			
5. Resume admissions and transfers			
6. Resume outings and large group meetings			
7. Resume dining room meal service			
8. Notify Priority Access that the outbreak is over			
9. Reorder replenishment supplies as needed			
10. Continue to monitor staff and residents/clients for signs and symptoms of gastroenteritis			
11. Conduct a post-outbreak debrief/review (Recommendations made for improved management of future outbreaks if necessary)			

PATIENT/RESIDENT LINE LIST

Complete and fax daily to [Infection Prevention and Control](#)

Facility Name: _____ Unit: _____ Telephone: _____
Contact Person: _____ Telephone: _____

DEMOGRAPHICS (one line per patient/resident)		Stool or Vomitus Spec	SIGNS & SYMPTOMS		ACUTE SUDDEN ONSET CLINICAL SYMPTOMS (✓tick all applicable & record # of episodes in a 24 hr period)					Acute Adm/ Tstr Date	Comments /Other	
NAME (LAST, First)	MRN & PHN	ROOM BED #	SENT DATE	Onset Date & Time	Resolved Date	ABD Pain	Nausea	Vomit #/24hr	Loose BM #/24hr	Bloody BM #/24hr		

STAFF LINE LIST

Complete and fax daily to [Infection Prevention and Control](#)

Facility Name: _____ Unit: _____ Telephone: _____
Contact Person: _____ Telephone: _____

DEMOGRAPHICS			SIGNS & SYMPTOMS		ACUTE SUDDEN ONSET CLINICAL SYMPTOMS (✓tick all applicable and record # episodes in 24 hr period when available)					Primary Assignment & Notes
INITIALS	POSITION (e.g., RN, RCA)	DATE OF LAST SHIFT	Onset Date	Date of last S&S	ABD Pain	Nausea	Vomit #/24hr	Loose BM #/24hr	Bloody BM #/24hr	

NOTE: Staff with gastroenteritis must remain off work until 48 hours symptom free (48 hours after last nausea/vomit/loose BM), 72 hours for food handlers.