

Community Viral Gastrointestinal (GI) Case and Outbreak Containment Toolkit

This toolkit provides guidance related to viral gastrointestinal illness (e.g. Norovirus, Rotavirus, and Adenovirus) only.

If gastrointestinal illness is caused by another enteric pathogen (e.g. Escherichia coli (E. coli), Salmonella etc.) consult with the MHO or designate as recommendations may be different.

For gastrointestinal infection caused by Clostridioides difficile (C. diff), please contact your ICP and follow established clinical pathways for treatment and management.

One to Two client(s) identified with new symptoms consistent with VGI	
GI Case definition <ul style="list-style-type: none"> ● 2 or more episodes of diarrhea (Bristol stool chart 6 or 7) within a 24 hr. period, above what is considered normal for that individual 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 ● lab confirmation of a known enteric pathogen with at least one symptom compatible with a GI infection (e.g. nausea, vomiting, diarrhea, abdominal pains, bloody stools or tenderness) 	
1. Notification and Line List	<ul style="list-style-type: none"> ● Frontline staff: initiate a paper line list to keep track of symptomatic clients. ● Site leadership: initiate an electronic line list to keep track of symptomatic clients. ● Follow the directions on the instructions tab of the electronic line list to password protect your file. ● Email the Ambulatory and Community team to notify that you have identified symptomatic client(s). The Ambulatory and Community team works Monday to Friday – they will respond by the following business day: <ul style="list-style-type: none"> ○ ICP-ambulatorycommunity@vch.ca ● Email questions to: ICP-ambulatorycommunity@vch.ca ● Site leadership to review the Community VGI Case Communication Algorithm. ● If you believe you have met outbreak definition, please follow the VGI Case Communication Algorithm to determine whom to contact and follow the directions on page 5 of this toolkit. ● Note: it is not necessary for facility staff to call the MHO on-call outside of business hours to simply report GI activity. Implement the containment measures outlined in this toolkit and connect with IPAC the following morning.
2. Additional Precautions	<ul style="list-style-type: none"> ● Place symptomatic clients that meet the case definition on Contact Plus Precautions (add Droplet Precautions when vomiting present).

	<ul style="list-style-type: none"> ● Maintain precautions until 48 hours after symptoms have resolved or until infectious cause is ruled out. ● Place Contact Plus (and Droplet when vomiting present) signage at entrance to client room. ● Place donning sign at entrance to client room in a visible location. ● Place doffing sign in the doffing zone inside the client room. ● Site leadership and ICP to review close contacts of symptomatic clients on a case-by-case basis (e.g. roommates or tablemates where a client may have had an episode of emesis or uncontained loose stool thus exposing other clients) to determine if additional precautions are required. ● Where possible dedicate toileting facilities and consider using a disposable containment system such as a commode/bedpan liner (see Appendix A for products). ● Use disposable equipment when possible (e.g., disposable blood pressure cuff). ● If disposable equipment is not available, dedicate equipment to symptomatic clients – clean and disinfect shared equipment using a 2-step process after every use. ● Refer to the IPAC Diseases and Conditions table for additional information regarding specific enteric pathogens.
<h3>3. Laboratory Specimens</h3>	<ul style="list-style-type: none"> ● Collect specimens only for symptomatic clients who meet case definition unless otherwise directed by the MHO, CD EHO, Medical Microbiologist, or delegate. ● Samples of stool or emesis may be collected and stored in a dedicated specimen fridge until picked up by courier service. Samples may be stored for ≤ 24 hours at 4°C. ● Send specimens to Vancouver General Hospital laboratory following the requirements listed below. <ul style="list-style-type: none"> ○ Required specimen labelling (must have at least 2 patient identifiers): <ul style="list-style-type: none"> ▪ Client’s first and last name, AND PHN or MRN or birthdate ▪ specimen type (i.e., feces; emesis) ▪ collection date and time ● Complete the VCH-Outpatient Requisition and labelling for each sample sent to VGH lab: <ul style="list-style-type: none"> ○ Required fields: <ul style="list-style-type: none"> ▪ Ordering Practitioner Name (MRP), Address, Phone, MSP Billing #, copy to Practitioner/Site Name ▪ Client: Name, PHN, Date of Birth. ▪ Site address where client is located. ▪ Date and Time of collection. ▪ Staff signature and date. ● In the “Other Tests” section: write “Infectious Diarrhea Panel NAT”, AND specimen type (i.e., feces; emesis). ● It is the responsibility of the site to send specimens to the Vancouver General Hospital Laboratory using your established courier service, taxi service or by dropping samples off. Samples should be couriered to: Vancouver General Hospital

	<p>Medical Microbiology Lab Receiving 855 West 12th Avenue Jim Pattison Pavilion Vancouver BC V5Z 1M9</p> <ul style="list-style-type: none"> • Samples are received Monday – Sunday (including Statutory Holidays) between 0700-2200. • Alert site leadership when specimens sent to the lab - method of delivery and the date and time the specimens were picked up should be noted in the line list in the comments section. • Once an organism is confirmed in 2 separate specimens, further testing is not required. Any additional testing must be approved/requested by the MHO, CD EHO, or Medical Microbiologist through the ICP. • Order sterile collection containers from VCH Supply Chain (ePro # 00008431).
<p>4. Hand Hygiene</p>	<ul style="list-style-type: none"> • Soap and water hand washing is the preferred practice. • If a hand hygiene sink is not available at point of care, staff to perform hand hygiene with ABHR and then immediately proceed to a hand hygiene sink to perform soap and water hand hygiene. • In situations when there is no access to a hand hygiene sink, consider making Sani-Wipes available to remove visible soil from staff hands.
<p>5. Symptom Screening</p>	<ul style="list-style-type: none"> • Increase symptom screening of all clients to twice daily in the affected areas until 4 days (96 hours) from last client symptom resolution. • Record client symptoms in the clinical record including date, time, number and type of episodes using the Bristol Stool Chart (e.g. Type 6 or 7).
<p>6. Cleaning & Disinfection</p>	<ul style="list-style-type: none"> • Consult with the Infection Prevention and Control Practitioner to determine if there is a need for enhanced cleaning.
<p>7. Group Activities</p>	<ul style="list-style-type: none"> • Clients on Contact Plus (and Droplet) precautions may not attend group activities. • Asymptomatic clients may participate in group activities.
<p>8. GI Monitoring - Staff</p>	<ul style="list-style-type: none"> • Encourage staff to self-monitor for symptoms and stay home when symptomatic. • Staff who develop symptoms at home to follow up with their own healthcare provider. • VCH staff to report work absence to the Provincial Workplace Health Call Centre (1-866-922-9464). • If staff experience nausea, vomiting or diarrhea at work they should: <ul style="list-style-type: none"> ➢ Notify their leader or charge nurse. ➢ Avoid further client contact. ➢ Transfer essential duties and go directly home. ➢ Close toileting facilities used by the symptomatic staff member until cleaned and disinfected.

	<ul style="list-style-type: none"> ● Symptomatic HCWs are excluded from work: <ul style="list-style-type: none"> ○ Exclude ill staff from working in any health care facility until they are symptom free for <u>48 hours</u>. ○ Exclude ill food-handler staff from work in any health care facility until they are symptom free for <u>72 hours</u>. ● Staff who are asymptomatic may work at other facilities and should inform alternate work sites re: status of the outbreak.
<p>9. Discontinuing Precautions</p>	<ul style="list-style-type: none"> ● When Contact Plus/Droplet precautions can be discontinued, coordinate “additional precautions clean” when the client is not occupying the room. ● Offer client a bath/shower and clean clothing when ready to discontinue additional precautions. ● Remove additional precaution signage after environmental cleaning is complete. ● Identify on the list when Contact Plus/Droplet precautions have been discontinued.

<p>Gastrointestinal Outbreak Definition: Three or more clients that meet the case definition for Viral GI cases on the same unit or ward within a <u>4-day period</u>.</p>	
<p>GI Case definition</p> <ul style="list-style-type: none"> • 2 or more episodes of diarrhea (Bristol stool chart 6 or 7) within a 24-hr. period, above what is considered normal for that individual 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 • lab confirmation of a known enteric pathogen with at least one symptom compatible with a GI infection (e.g., nausea, vomiting, diarrhea, abdominal pains, bloody stools, or tenderness) 	
<p>1. Notification and Line list</p>	<ul style="list-style-type: none"> • Frontline Staff: notify nurse in charge, manager or designate of symptomatic clients. • Frontline Staff: initiate or continue using a paper line list (updated daily) to keep track of symptomatic clients. • Site Leadership: to email the electronic line list of symptomatic clients daily until 4 days/96 hours (2 incubation periods) after resolution of symptoms in the last case or the outbreak declared over by the MHO: <p>Monday to Friday: CDEHO@vch.ca ICP-ambulatorycommunity@vch.ca VCHMedMicroIPAC@vch.ca</p> <p>Saturday, Sunday and STATs: CDEHO@vch.ca MHOandCDNurseOnCall@vch.ca ICP-ambulatorycommunity@vch.ca VCHMedMicroIPAC@vch.ca ICP-ChargeRN@vch.ca Call ICP In Charge RN: 604-220-5813</p>
<p>2. Outbreak Declaration</p>	<ul style="list-style-type: none"> • When outbreak definition is met, Infection Control Practitioner (ICP) will contact the MHO/Delegate to declare the outbreak: <u>Monday to Friday:</u> ICP will call (604-675-3900) or email CDEHO@vch.ca and vchmedmicroipac@vch.ca. <u>Saturday, Sunday and STATs:</u> ICP will email MHOandCDNurseOnCall@vch.ca or call MHO on call at 604-527-4893.




	<ul style="list-style-type: none"> ● ICP to detail the number of symptomatic residents and staff, facility layout, total number of beds and total number of staff in his/her communication to public health. ● Note: it is not necessary for facility staff to call the MHO on-call outside of business hours to simply report GI activity. Implement the containment measures outlined in this toolkit and connect with IPAC the following morning. ● Close the affected floor/unit/ward or facility to new admissions, re-admissions or transfers as per MHO/designate. ● For medically necessary admissions or transfers, site to call the MHO and/or designate to review and discuss. Mon-Fri 0800-1700: 604-675-3900 After Hours, Weekends and STAT Holidays: 604-527-4893 ● Site leadership to inform priority access and receiving facility and service providers (e.g., paramedics; contracted transfer services) of the client and outbreak status of the unit for transfers to acute care. ● Post Outbreak Notification signage at the facility entrance and/or floor/unit/ward advising visitors about the outbreak. ● Identify a site-based outbreak management leader.
3. Communication	<ul style="list-style-type: none"> ● EHO will coordinate outbreak meeting if requested by MHO, CD EHO, Medical Microbiologist, site leadership or ICP. ● Site based outbreak management leader to schedule internal meeting(s) with their staff. ● Outbreak management team lead to notify EVS and Food services manager, families, and site of outbreak status. ● Site to identify a means of communication with frontline staff (e.g., huddles, communication binders, communication boards, staff notices, emails, and key messages). ● Site to notify non-facility staff, professionals, and other service providers of the Public Health recommendations and to communicate any closures, cancelled services, and/or temporary restrictions (e.g., volunteers, clergy, Handy DART, oxygen service, BC Ambulance, paid companions, students, food service staff, and others). ● Develop an email distribution list for easy and timely notification.
4. Laboratory Specimens	<ul style="list-style-type: none"> ● Follow steps on page 2 for laboratory testing.
5. Cohorting Staff	<ul style="list-style-type: none"> ● Cohort staff to affected area where possible. ● When cohorting is not possible, staff to move from asymptomatic to symptomatic clients. ● Allied staff to provide support in unaffected units prior to working in affected areas of the facility.
6. Client Cases	<ul style="list-style-type: none"> ● Place symptomatic clients on Contact Plus precautions (add Droplet precautions when vomiting present). ● Maintain precautions until 48 hours after symptoms have resolved or until infectious cause is ruled out. ● Increase monitoring of all clients on the affected unit to twice-daily screening until 4 days (96 hours) from last client's symptom resolution. ● Assess clients daily in unaffected areas.



	<ul style="list-style-type: none"> ● Site leadership and ICP to review close contacts of symptomatic clients on a case-by-case basis, (roommates or tablemates where a client may have had an episode of emesis or uncontained loose stool thus exposing other clients) to determine if additional precautions are required. ● Restrict movement of symptomatic clients outside of their rooms as much as possible and create management plans for clients who cannot follow isolation orders. ● Do not move asymptomatic roommates. ● Do not admit or move asymptomatic clients into rooms on Contact Plus/Droplet precautions. ● Provide tray service (meals to room) for clients on precautions. ● Support clients to perform hand hygiene before and after meals, after toileting and after an episode of diarrhea and/or vomiting. ● Encourage staff to clean and disinfect bedrails and over bed tables when delivering meals and when providing care. ● Use disposable hygienic products for symptomatic clients (see appendix A).
7. Group Activities	<ul style="list-style-type: none"> ● Group activities are at the discretion of the MHO/Designate. ● Clients on Contact Plus and Droplet precautions may not attend group activities. ● No shared food.
8. Staff Cases	<ul style="list-style-type: none"> ● Encourage staff to self-monitor for symptoms and stay home when symptomatic. ● Staff who develop symptoms at home to follow up with their own healthcare provider. ● VCH staff to report work absence to the Provincial Workplace Health Call Centre (1-866-922-9464). ● If staff experience nausea, vomiting or diarrhea at work they should: <ul style="list-style-type: none"> ➢ Notify their leader or charge nurse. ➢ Avoid further client contact. ➢ Transfer essential duties and go directly home. ➢ Close toileting facilities used by the symptomatic staff member until cleaned and disinfected. ● Symptomatic HCWs are excluded from work: <ul style="list-style-type: none"> ○ Exclude ill staff from working in any health care facility until they are symptom free for 48 hours. ○ Exclude ill food-handler staff from work in any health care facility until they are symptom free for 72 hours. ● Staff who are asymptomatic may work at other facilities and should inform alternate work sites re: status of the outbreak.
9. Cleaning & Disinfection	<ul style="list-style-type: none"> ● Dedicate reusable equipment or use single use items where possible and clean and disinfect (2-step process) all shared items after every use. ● Initiate enhanced cleaning and disinfection on affected floors/units/wards. ● Clean dining room tables before mealtime.

	<ul style="list-style-type: none"> ● All refrigerators are emptied, food items are discarded, and the interior and exterior surfaces of the fridge are cleaned and disinfected. ● Access to fridges should be staff only for the duration of the outbreak. ● Sites to ensure a Health Canada approved product effective against non-enveloped viruses is used or use a cleaning product followed by bleach disinfectant (1000ppm) 1:50 ratio of bleach solution (4 teaspoons (20mL) of domestic 5.25% bleach to 1 liter of water). ● CD EHO or EHO will arrange with site leadership to assess the kitchen. Follow directives provided by the CD EHO or EHO for cleaning and disinfection the kitchen and food preparation areas.
10. Supplies	<ul style="list-style-type: none"> ● Identify a site supply lead. ● Ensure there are adequate amounts of sterile collection containers. ● Ensure there is an adequate supply of gowns, gloves, masks, eye protection, disinfectant wipes and ABHR. ● Develop a process for restocking supplies in the PPE cart as needed. Clean and disinfect the PPE cart(s) daily; identify a person responsible and assign this task daily. ● Ensure staff have access to supplies on the unit and know where and how to access them.
11. Visitors	<ul style="list-style-type: none"> ● Visitation is not restricted during GI outbreak. ● Inform non-essential staff/visitors of the presence of outbreak and associated risks. ● Provide education to visitors'/family caregivers about precautions, hand hygiene and PPE donning/doffing. ● Symptomatic visitors should not enter the facility unless for compassionate or exceptional circumstances.
12. Staff Break Rooms	<ul style="list-style-type: none"> ● Have disinfectant wipes and alcohol-based hand rub (ABHR) available to use. ● Remove common touch items from break spaces. ● DO NOT SHARE food items. ● Staff fridge should be emptied, cleaned, and disinfected. ● Recommend food handler staff have dedicated washroom facilities for duration of the GI outbreak.
13. Laundry	<ul style="list-style-type: none"> ● Follow established site-specific sanitation plan. ● Set up a process for in room laundry hampers for clients on precautions. ● Ensure hampers are impervious to prevent leakage of body fluids. ● Identify a process to clean and disinfect carts/bins used to transport laundry prior to exiting the site. ● Use Point of Care Risk Assessment (PCRA) when handling laundry and garbage. ● Handle soiled laundry with minimum agitation.
14. Meals	<ul style="list-style-type: none"> ● Group dining is at the discretion of the MHO/Designate. ● Tray service for all clients on Contact Plus/Droplet precautions. Disposables are not necessary unless operationally required. ● Encourage and support clients to perform hand hygiene prior to meals.

	<ul style="list-style-type: none"> ● Set up a process for meal delivery to units (facilities may need a meal wagon to deliver meals, consider using a closed wagon). ● Identify a process to clean and disinfect carts used to transport meals after each use. ● Cover meal and beverages carts during transport. ● Ensure there are overbed tables for clients to dine in their room. ● NO SHARED FOOD.
15. Discontinuing Precautions	<ul style="list-style-type: none"> ● When Contact Plus/Droplet precautions can be discontinued, coordinate “additional precautions clean” when the client is not occupying the room. ● Offer client a bath/shower and clean clothing when ready to discontinue additional precautions. ● Remove additional precaution signage after environmental cleaning is complete. ● Identify on the list when Contact Plus/Droplet precautions have been discontinued.
16. Calling an outbreak over	<ul style="list-style-type: none"> ● MHO or delegate will declare an outbreak over once 2 incubation periods (96 hours) have passed following resolution of symptoms in the last case. ● ICP to coordinate an outbreak debrief to review lessons learned and share with OMT. ● Site leader informs priority access the outbreak has ended. ● Site leader to complete the Outbreak Summary Report and fax or email to CD EHO team.
17. Resources	<p>Lab information</p> <ul style="list-style-type: none"> ● Follow the linked specimen guidance for collection (Page 3, Faeces, Infectious Diarrhea Panel NAT), specimen requirements/storage (Page 32, 10. Stool/Enteric) ● VCH laboratory outpatient requisition ● BC Chlorine Dilution Calculator ● Health Canada Drug Product Database Online Query

Appendix A

Product	Description	Photo	Brand	Supply Chain Ordering Information
Emesis Bag w/ Absorbent Powder	Portable emesis bag with absorbent inner lining to help solidify emesis and enable disposal in garbage.		Hygie Canada	PeopleSoft Item #: 00105357 20/Package
Vernagel Super Absorbent Powder	Polymer based powder that absorbs fluids (e.g. urine, blood, feces, vomit) into a semi-solid state enabling safer disposal.		Vernacare	PeopleSoft Item #: 00078234 100/Box
Commode Liner/Large Emesis Basin Disposable Pulp Fibre	Disposable bed pan/commode liner		Vernacare	PeopleSoft Item #: 00068954 100/Case

<p>Hygienic Bedpan/Commode Cover</p>	<p>Disposable cover for bedpan/commode for effective management/containment of body waste at point of care.</p>		<p>Hygie Canada</p>	<p>PeopleSoft Item #: 00095514 20/Box</p>
<p>Sterile Collection Container</p>	<p>Container Specimen Orange Top 90ml</p>		<p>Starplex Scientific Inc</p>	<p>PeopleSoft Item #: 00008431 1 each</p>