

Vancouver Coastal Health – Public Health, Gastroenteritis Outbreak Control Policy

<p>Purpose</p>	<p>Early detection and implementation of control measures are essential for the control of outbreaks of infectious gastroenteritis in health care facilities.</p> <p>Under the Public Health Act, the Medical Health Officer has the authority and responsibility to direct the management of outbreaks in the community and in health care facilities. The purpose of this document is to summarize the recommendations of the Medical Health Officer primarily for the prevention and control of viral gastroenteritis outbreaks e.g. Norovirus in acute and long term care facilities in Vancouver Coastal Health. Should another enteric pathogen be identified, the MHO or designate may change the recommended measures.</p> <p>The recommendations in this document should be incorporated in to existing gastrointestinal illness infection control guidelines in acute and long-term care facilities including contracted services such as food, housekeeping and laundry.</p>
<p>Prevention and Early Detection</p>	<p>The Public Health Surveillance unit monitors a range of indicators of gastrointestinal illness in the community. When the seasonal trend in gastrointestinal illness activity in the community increases, suggesting a high risk of outbreaks in health care facilities, facilities should implement disinfection of surfaces in emergency departments with 1:50 (1000PPM) dilution of bleach, in addition to routine cleaning. This measure is intended to reduce the risk of introduction of gastrointestinal pathogens, most likely Norovirus, from the community.</p> <ul style="list-style-type: none"> - When suspected cases of gastroenteritis occur, it is recommended that the facility : <ul style="list-style-type: none"> o Segregate the ill patients/residents and use contact precautions (see below). o Implement enhanced cleaning & disinfection practices (see below). o Begin a line list for patients/residents and staff (see below). - In the event of a suspected outbreak of gastroenteritis, immediately report and discuss the suspected outbreak with a Medical Health Officer (MHO) or designate [e.g. Environmental Health Officer (EHO), Adult Care Licensing Officer (ALO)] at Vancouver Coastal Health.
<p>Case Definitions:</p>	<ul style="list-style-type: none"> • Case of Gastroenteritis - Two or more liquid or watery stools above what is normal for the person within a 24-hour period; OR - Two or more episodes of vomiting within a 24-hour period; OR - One episode each of vomiting and diarrhea in a 24 hour period OR - One episode of bloody diarrhea OR - Lab confirmation of a known enteric pathogen with at least one symptom compatible with a GI infection (i.e., nausea, vomiting, diarrhea, abdominal pain, bloody stools or tenderness) <p>Note: Care must be taken to rule out non infectious causes of these symptoms. For example, new medications, laxatives, other illnesses, causing vomiting or diarrhea.</p>

	<ul style="list-style-type: none"> • Suspected Outbreak of Gastroenteritis (in the absence of an identified pathogen) <ul style="list-style-type: none"> - <u>Three or more cases with gastroenteritis symptoms are noted within the same setting (i.e. floor, unit, ward) in a four-day period.</u> • Confirmed Outbreak of Gastroenteritis <ul style="list-style-type: none"> - <u>Evidence of transmission of a pathogen causing gastroenteritis.</u> <p><u>Note: An outbreak is confirmed by a review of cases by the facility director or infection control doctor in consultation with the Medical Health Officer.</u></p>
<p>Outbreak Detection and Confirmation</p>	<ul style="list-style-type: none"> • In the event of a suspected outbreak of gastroenteritis, immediately report and discuss the suspected outbreak with a Medical Health Officer (MHO) or designate [e.g. Environmental Health Officer (EHO), Adult Care Licensing Officer (ALO)] at Vancouver Coastal Health. The MHO or designate will assess the case histories with the reporting facility and if indicated will declare an outbreak. - The MHO or designate will post the outbreak details on the <u>VCH Hospital & Long-term Facility Outbreak Bulletin</u> <p>The local MHO or designate can be reached at the following numbers: Coastal Garibaldi (604) 892-2793 Richmond (604) 233-3147 North Shore (604) 983-6700 Vancouver (604) 675-3900</p> <p><i><u>On Call MHO – after office hours/weekends: 604 527 -4893</u></i></p>
<p>Outbreak Management</p>	<ul style="list-style-type: none"> • Designate an outbreak leader (e.g., Infection Control Professional (ICP), Director of Care, etc.). For large outbreaks an outbreak team should consist of an outbreak leader and representatives from infection control, nursing, medical, housekeeping, food services, laundry services, occupational health and public health. Additional team members may be invited to meet specific needs. • Maintain an Outbreak Line List of cases including staff (nursing, food handlers, housekeeping). Record the details as required on the attached VCH Gastroenteritis Outbreak Line List for Facilities (see page 6 & 7 for an example template). Forward the line list as and when requested to the MHO or designate. • Facility <ul style="list-style-type: none"> - Close the affected floor/unit/ward or facility to new admissions, readmissions or transfers unless medically necessary. If an admission or transfer is deemed medically necessary call a MHO or designate to review and discuss. - Post outbreak notification sign(s) at facility entrance and/or floor/unit/ward advising visitors about the outbreak (see page 8 for an example template) - Notify housekeeping, food services and laundry that the facility has an outbreak of gastroenteritis so that department-specific outbreak management protocols are initiated. • Patients/Residents <ul style="list-style-type: none"> - Restrict as much as possible, ill patients/residents to their rooms for 48 hours after cessation of symptoms. - As much as possible, serve meals to ill patients/residents within their rooms or floor/unit/ward.

	<ul style="list-style-type: none"> - Remind patients/residents to wash hands thoroughly and report incidents of diarrhea/vomitus. - Do not transfer well patients/residents into rooms with ill people. - Minimize contact between patients/residents on affected floors/units/wards with unaffected areas. - Provide all patients/residents with information on the illness and personal protective measures. - Well patients/residents may attend their required health care appointments. Advise the receiving facility about the presence of the outbreak. - In consultation with the MHO or designate decrease or discontinue group activities or outings. Well patients/residents should not be discouraged from outings with family members. <ul style="list-style-type: none"> • Staff - <u>Exclude ill staff until they are symptom free for 48 hours; ill food handlers until they are symptom free for 72 hours, or as directed by the MHO (or designate).</u> - Remind excluded staff that they may not work at other facilities during this period. - Staff with no symptoms may continue to work in health care facilities. - Staff should self-monitor for GI symptoms and report illness as per the employers protocol. Staff ill while at the facility must report the incident immediately to their supervisor. Ensure the area where the GI episode occurred is cordoned off until thoroughly cleaned and disinfected. - Review hand washing protocol with staff. - Staff should not share washrooms with residents; food handlers should have designated washrooms. - As much as possible, cohort staff to care for the ill patients/residents and/or to the same floor/unit/ward.
<p>Infection Control & Cleaning and Disinfection Procedures</p>	<ul style="list-style-type: none"> • Hand Washing - Hand washing with liquid soap & warm water should be practiced by all staff at all times. - Alcohol (70% ethanol/ethyl alcohol or 1-propanol) based hand sanitizer may be as an alternative to liquid soap & water when a sink is not readily available and provided that hands are not visibly soiled. <p>Note: Isopropyl alcohol hand sanitizers are not considered to be effective against non-enveloped viruses such as norovirus.</p> <ul style="list-style-type: none"> • Contact Precautions In addition to routine precautions use contact precautions when providing direct care or within 2 meters of ill patients/residents. - Use gloves when providing direct care. After removal of gloves, wash hands with liquid soap or use alcohol based hand sanitizer between patients/residents. - Use gowns and change when contamination of the health care providers clothing is possible. <ul style="list-style-type: none"> • Droplet Precautions In addition to routine and contact precautions staff and visitors are to use droplet precautions when patients/residents are actively vomiting or experiencing explosive diarrhea. - Use surgical masks and eye protection within 2 meters of patients/residents who

are actively vomiting or experiencing explosive diarrhea or when cleaning up areas grossly contaminated by feces and/or vomitus.

- **Visitors and volunteers**

- Limit as much as possible non-essential staff/visitors from the affected area.
- Advise essential visitors/family caregivers about relevant personal precautions including hand hygiene.
- If possible, provide for visitors a designated washroom or hand sink.

- **Laundry**

- Transport laundry from outbreak affected floor/unit/ward in tagged and closed leak-resistant bags.
- Use gloves, water-resistant gowns or plastic aprons, and surgical masks to handle contaminated laundry.
- Handle soiled laundry with minimum agitation.
- Wash with detergent in hot water in a commercial laundry machine and then machine (hot-air) dry.

- **Food and dietary services**

- **Exclude ill food handlers until they are symptom free for 72 hours or longer, as directed by the MHO or designate.** Careful attention to hand hygiene is important upon returning to work.
- Discard exposed food (handled by an ill food handler).
- Consult with your EHO if food is the suspected source of infection/outbreak.
- Ensure that dietary services has a gastroenteritis outbreak control plan/protocol that includes meal service delivery to affected floors/units/wards
- Implement enhanced cleaning and disinfection procedures of the kitchen and the patients/residents, staff or visitor eating areas.
- If possible food handlers should use a separate washroom from the patients/residents, visitors and other staff.

- **Enhanced Cleaning & Disinfection**

- Increase the frequency of routine floor/unit/ward, washroom and toilet cleaning.
- Implement a program of increased cleaning and disinfection of common touch surfaces such as door handles, handrails, sink/toilet handles, ice machines, light switches and water fountains/dispensers.
- Disinfect environmental surfaces using 1:50 (1000 parts per million) bleach solution. The surface must stay wet for at least one minute and then let air dry. Prepare fresh bleach solution daily using 4 teaspoons (20mL) of domestic 5.25% bleach to 1 liter of water to produce a concentration of about 1000 PPM.

- **Cleaning up vomit or feces on hard surfaces**

- Use contact precautions (disposable gloves, water-resistant gowns, surgical masks, eye protection).
- Use paper towels to soak up excess liquid; dispose in a plastic garbage bag.
- Clean the area with detergent and water using a single-use cloth.

- Disinfect the contaminated area with 1:10 (5000PPM) bleach solution. The surface must stay wet for at least one minute and then air dry. Prepare fresh bleach solution daily using 1 cup (250 mL) of domestic 5.25% bleach to 2.5 liters of water to produce a concentration of about 5000 PPM.
- Put disposable gloves, gowns/aprons, and masks in garbage or reusable aprons/gowns in laundry bag.
- Wash hands thoroughly using liquid soap and water for at least 30 seconds.

	<ul style="list-style-type: none"> • Cleaning other contaminated materials - Wash all dishes, utensils and trays in a commercial dishwasher with hot water or a chemical sanitizer rinse. Do not cross contaminate dirty and clean dishes. - Clean vinyl covered furniture or mattresses with detergent and hot water, then disinfect with bleach solution. - Clean soft furnishings with detergent and hot water or steam clean. - Contaminated carpets should not be vacuumed but can be cleaned with detergent and hot water or steam cleaned. - Wash non-disposable mop heads with detergent in hot water using a commercial laundry machine and then machine (hot-air) dried. - Clean & disinfect common use medical equipment between clients, such as wheelchairs, BP cuff's, lifting belts, slings, and stethoscopes etc. as per manufacturer's instructions.
Specimen Collection	<ul style="list-style-type: none"> - A VCH EHO or ICP will complete and forward to the BCCDC the Public Health Microbiology & Reference Laboratory Notification Form (http://www.phsa.ca/NR/rdonlyres/EBF16FF8-DE39-4512-AD37-2396AFF200E3/0/GIOutbreakFAXForm.pdf) and will include the outbreak identification code/number. - Use GI disease specimen outbreak kits provided by a VCH EHO or by your ICP. - In consultation with a VCH EHO or ICP use the BCCDC Public Health & Microbiology Reference Laboratory GI Disease Outbreak Requisition form (http://www.phsa.ca/NR/rdonlyres/A2DC18D3-EB20-45A8-BF11-920608707F2B/0/GIOutbreakReq.pdf). Ensure that all required fields have been completed. - Specimens should be couriered or dropped by facility staff to the BCCDC. An EHO/ALO can assist you in clarifying the transportation details.
Outbreak - Termination	<ul style="list-style-type: none"> - The VCH MHO or designate in consultation with the facility will declare the outbreak over. - An outbreak is normally declared over by the MHO when two incubation periods have passed since the resolution of symptoms in the last case (i.e., 96 hours for norovirus) An outbreak summary must be sent to the MHO or designate (see page 9 - VCH Enteric Outbreak Summary Form – Health Care Facility) within two weeks of the restrictions being lifted.

References:

1. **Gastrointestinal infection Outbreak Guideline Working Group - Provincial Infection Control Network of British Columbia. Gastrointestinal Infection Outbreak Guidelines for Healthcare Facilities – June 2010.**
2. **A. Faremo CPHI (C)., - VCH Facility Outbreak Response Guideline – Gastrointestinal Illness – Jan. 2008**
3. **Gehrke C., Steinmann J., Goroncy-Bermes P., Mikrolab GmbH, Norderoog 2, D-28259 Bremen, Germany. Inactivation of feline calicivirus, a surrogate of norovirus (formerly Norwalk-like viruses, by different types of alcohol in vitro and in vivo. J. Hosp. Infection. 2004 Jan: 56(1) 49-55**
4. **Park GW, Barclay, Macinga D, Charbonneau D, Pettigre CA, Vinje J. Dision of Viral Disease, Centers for Disease Control and Prevention, Atlanta, Georgia, USA. Comparative efficacy of seven hand sanitizers against murine norovirus, feline calicivirus, and GI.4 norovirus. J Food Protection 2010 Dec: 73 (12): 2232-8**

Gastroenteritis Outbreak Line List for Facilities

The attached form is to be used by facilities suspecting or experiencing a gastroenteritis outbreak to track their cases.

- Please maintain an outbreak line list of cases including staff (nursing, food handlers, housekeeping) and forward the line list as and when requested to the MHO or designate.

Case definitions

- **Case of Gastroenteritis**
 - Two or more liquid or watery stools above what is normal for the person within a 24-hour period; **OR**
 - Two or more episodes of vomiting within a 24-hour period; **OR**
 - One episode each of vomiting and diarrhea in a 24 hour period **OR**
 - One episode of bloody diarrhea **OR**
 - Lab confirmation of a known enteric pathogen with at least one symptom compatible with a GI infection (i.e., nausea, vomiting, diarrhea, abdominal pain, bloody stools or tenderness)

Note: Care must be taken to rule out non infectious causes of these symptoms. For example, new medications, laxatives, other illnesses can cause vomiting or diarrhea.

Suspected Outbreak of Gastroenteritis

Three or more cases of gastroenteritis infection are noted within the same setting (i.e. floor, unit, ward) in a four-day period.

Confirmed Outbreak of Gastroenteritis

Evidence of transmission of a pathogen causing gastroenteritis.

Note: An outbreak is confirmed by a review of cases by the facility director or infection control doctor in consultation with the Medical Health Officer.

If you have any questions, please contact your local Environmental Health Officer, Adult Care Licensing Officer or Infection Control Professional.

Gastroenteritis Outbreak Line List for Facilities (Adult)

FACILITY:				CONTACT PERSON:			TELEPHONE:		
TODAY'S DATE:				Coast Garibaldi Health Protection: Phone: (604) 892-2793 North Shore Health Protection: Phone: (604) 983-6700 Richmond Health Protection: Phone: (604) 233-3147 Vancouver CDC: Phone: (604) 675-3900			Fax: (604) 892-2327 Fax: (604) 983-6702 Fax: (604) 233-3175 Fax: (604) 731-2756		
OUTBREAK DEFINITION: Three (3) or more cases of gastroenteritis in the same setting, within a four (4) day period.									
NOTE: a case of gastroenteritis is a person (including staff) experiencing 2 or more liquid or watery stools above what is normal for the person in a 24 hour period, OR an episode of unexplained vomiting, OR one episode each of vomiting and diarrhea in a 24 hour period, OR one episode of bloody diarrhea, OR a lab confirmation of a known enteric pathogen and at least one GI symptom i.e. nausea, vomiting, diarrhea, abdominal pain etc., care must be taken to rule out non-infections cause e.g. medication or other illnesses that can cause vomiting or diarrhea.									
INSTRUCTIONS: <ol style="list-style-type: none"> 1. Record all cases of gastroenteritis using the table below. 2. Use a new form to daily update any new cases. 3. When requested; fax or email this form to the Health Protection office in your area. 									
Demographics				Symptoms			Specimen		
Name or Initials	Staff (Y/N)	Room or Unit/Ward	Room type	Date of First Vomit or Diarrhea	Specify Symptoms and # of Episodes	Date of Last Vomit or Diarrhea	Specimen Collection Date	Specimen Result	Comments / Outcome

ROOM TYPE: M = multi-bed P = private S = shared
SYMPTOMS: A = abdominal pain B = bloody diarrhea F = fever H = headache M = myalgia N = nausea



Attention

We presently have a number of patients/residents currently experiencing vomiting or diarrhea. You may wish to reconsider visiting at this time.

Please let the staff know who you are visiting and they will give you the necessary instructions.

Please wash your hands and/or apply alcohol hand sanitizer before visiting and when leaving.

Thank-You

VCH Enteric Outbreak Summary Form – Health Care Facility

Complete and fax this form to your local Health Protection or CCFL Office as soon as possible AFTER the outbreak is declared over by the Medical Health Officer or designate.

Coast Garibaldi Health Protection
North Shore Health Protection
Richmond Health Protection
Vancouver CDC

Phone: (604) 892-2793
Phone: (604) 983-6700
Phone: (604) 233-3147
Phone: (604) 675-3900

Fax: (604) 892-2327
Fax: (604) 983-6702
Fax: (604) 233-3175
Fax: (604) 731-2756

Facility Name: _____

Facility Address: _____

HSDA: Coast Garibaldi North Shore Richmond Vancouver

Reported by: _____ **Telephone:** (____) _____ - _____

Date of onset in first case: _____ (DD/MM/YY) Date of onset in last case: _____ (DD/MM/YY)

Date outbreak declared: _____ (DD/MM/YY) Date outbreak declared over: _____ (DD/MM/YY)

Lab information:

Were specimens sent for testing? Yes, Lab: _____, Results: _____ No Unknown

Predominant symptoms:

- Nausea Diarrhea Bloody diarrhea Fever Vomiting Headache Abdominal Pain/cramps
- Other (specify) _____ Other (specify) _____

Summary of enteric cases:

# Cases in patients/residents.. <input style="width: 50px;" type="text"/>	# Cases in staff..... <input style="width: 50px;" type="text"/>	# Clinical cases..... <input style="width: 50px;" type="text"/>
Total # of patients/residents ... <input style="width: 50px;" type="text"/>	Total # of staff..... <input style="width: 50px;" type="text"/>	# Laboratory confirmed cases <input style="width: 50px;" type="text"/>
Outcomes: # of long-term residential cases hospitalized..... <input style="width: 50px;" type="text"/>	# of cases who died..... <input style="width: 50px;" type="text"/>	

Actions taken: (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Restricted admission and transfers | <input type="checkbox"/> Limitation of group activities |
| <input type="checkbox"/> Visitor notification | <input type="checkbox"/> Cohorting of staff |
| <input type="checkbox"/> Exclusion of ill staff | <input type="checkbox"/> Cohorting of cases |
| <input type="checkbox"/> Outbreak protocol disinfection | |
| <input type="checkbox"/> Other actions: (describe): _____ | |

Comments:

Wash Your Hands

손을 씻으세요 ਆਪਣੇ ਹੱਥ ਧੋਵੋ

洗手 دست هایتان را بشوئید

Lávese las manos Hãỵ rửa tay



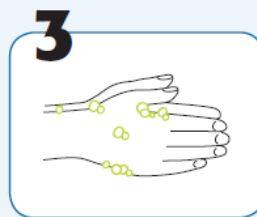
HOW TO HANDWASH



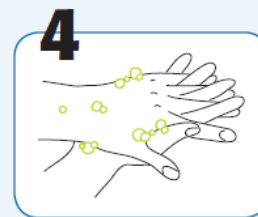
1
Wet hands with warm water.



2
Apply soap.



3
Lather soap and rub hands palm to palm.



4
Rub in between and around fingers.

Lather hands for a total of 30 seconds



5
Rub back of each hand with palm of other hand.



6
Rub fingertips of each hand in opposite palm.



7
Rub each thumb clasped in opposite hand.



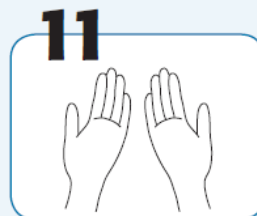
8
Rinse thoroughly under running water.



9
Pat hands dry with paper towel.



10
Turn off water using paper towel.



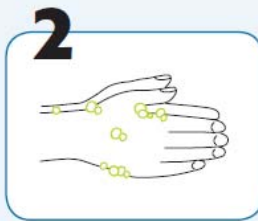
11
Your hands are now safe.



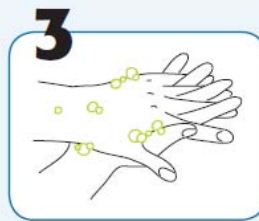
HOW TO HANDRUB



Apply 1 to 2 pumps of product to palms of dry hands.



Rub hands together, palm to palm.



Rub in between and around fingers.



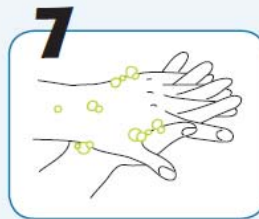
Rub back of each hand with palm of other hand.



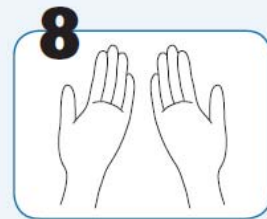
Rub fingertips of each hand in opposite palm.



Rub each thumb clasped in opposite hand.



Rub hands until product is dry. Do not use paper towels.



Once dry, your hands are safe.

