

	POLICIES & PROCEDURES Number: 55-40 Title: Gastrointestinal (GI) Illness Outbreak Acute Care urban & Rural
Authorization: <input checked="" type="checkbox"/> SHR Infection Prevention & Control Committee <input type="checkbox"/> Facility Board of Directors	Source: Infection Prevention & Control Date Initiated: June 5, 2007 Date Reaffirmed: Date Revised: October 2012 Scope: SHR & Affiliates

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Introduction

Gastrointestinal (GI) illness is characterized as:

- Two or more loose, watery stools, above what is normal for the person, within a 24 hour period, **or**
- Two episodes of vomiting in a 24 hour period, **or**
- One episode of vomiting and loose stool in a 24 hour period, **or**
- Two people (patient, resident or staff) showing blood in stool.

GI illness outbreak definition: three or more people (any combination of patients/residents/staff) in the same unit/department/facility exhibiting symptoms of GI illness in a 24 hour period.

Policy

1. GI illness meeting the outbreak definition shall be reported immediately to the site Infection Prevention & Control Professional (ICP).
2. The Infection Control Officer/Medical Health Officer or his/her designate shall direct the investigation and management of a GI illness outbreak.

Purpose

1. To control and prevent further spread of GI illness.
2. To provide guidelines for the investigation and management of a GI outbreak.

Procedure

1. Validation (see algorithm – Appendix A):

Infection Prevention & Control (IPC) or Public Health Services (PHS) validates the outbreak. Active case finding for patient cases is conducted by the unit staff and ICP. Active case finding and investigation for staff cases are overseen by Occupational Health & Safety to investigate staff illness.

For outbreaks in long term care facilities, refer to the SHR Long Term Care Outbreak Manual.

Unit staff initiate Patient/Resident and Staff line listing forms (Appendix B and C as attached) and continue to update the original form as new information is available. This may include date recovered, new symptoms, etc. Continue to add new cases to the original list as they are identified.

2. Laboratory Samples/Diagnosis:

The Infection Control Officer determines if there is a need for and/or the type of laboratory testing to be performed. ICP will call the lab supervisor and give them a "heads up" so they can check that they have enough stock for potential extra testing. When IPC gets an outbreak number the lab supervisor will be notified immediately of the number and a list of samples that have already been tested that need to have the outbreak number assigned to them will be formulated and forwarded.

In order to ensure timely testing of specimens, contact IPC or PHS for an outbreak number. Record the outbreak number on the lab requisition.

If specimens must be sent prior to obtaining an outbreak number, write "query outbreak" on the lab requisition.

Stool specimens are to be collected within 48 hours (preferably within 24 hours) of onset of symptoms.

Initially collect stool specimens from at least six symptomatic people. Testing would typically include the following from each case:

- One sample for viral studies (Norovirus and Rotavirus) placed in a sterile specimen container with no transport media or preservative,
- One sample for *Clostridium difficile* placed in a sterile specimen container with no media or preservative, and
- One sample for C&S, placed in enteric pathogen transport media (Carey-Blair™)

Label all specimens as per SHR laboratory protocol and record on the viral studies requisition "Suspect Outbreak - ? Norovirus". Transport specimens to the lab immediately. For best results, specimens should be processed in the lab within 24 hours of collection. Transport specimens collected as per your regular laboratory protocol.

In some cases rural hospitals send samples to SDCL (Saskatchewan Disease Control Laboratory) they shall notify the lab by email at sdcl.outbreak@health.gov.sk.ca that they are sending the samples.

3. Outbreak Control Team:

See [Outbreak Management Policy](#) regarding membership and purpose of the team.

The Infection Control Professional /Infection Control liaison arranges a planning meeting in conjunction with the Unit/Department Manager/ Director of Care and the Infection Control Officer and/or Medical Health Officer.

In consultation with the Manager on call, for weekend and after hours coverage, contact the Medical Health Officer on call at 655-4620.

The overall functioning of the unit/facility is assessed in relation to the phase of the outbreak as determined by the Outbreak Control team. Examples of restrictions include but are not limited to:

- Unit may be closed to admissions, transfers, and may be restricted for visitors (see IPC Policy [55-70 Visitor Restrictions During Outbreaks](#)).
- Cohort ill patients to one area of the unit.
- Notify teaching facilities of the outbreak so that faculty can decide, in consultation with IP&C or PHS, what student restrictions are to be put in place. Ensure students receive training in infection control procedures before beginning work on an outbreak unit.
- Notify volunteers and apply restrictions for students (see # 4 – staff restrictions), if they choose to continue to attend.
- Cancel group activities/meetings/gatherings scheduled on the outbreak unit.
- Evaluate if outside contractors can continue to perform work on the outbreak unit. Cancel/reschedule outside contractors unless the job is urgent or related to resolving the outbreak (i.e., plumbing).

The Outbreak Control Team may recommend opening the Site Incident Command Center or a Health Emergency Operation Centre based on the extent of the outbreak and anticipated support requirements, (security, public affairs, purchasing, etc.).

4. Control Measures:

Note: For *Clostridium difficile* refer to [IPC Policy 40-30](#) for additional measures.

- a) Isolate symptomatic patients/residents and place on Contact/Droplet Precautions when symptoms are present. Place patients/residents on Contact Precautions for 48 hours after their last symptoms.
- b) Upon validation of an outbreak:
 - Patients/residents are to be advised of the outbreak situation, and the need to report symptoms.
 - Restrict visitors to unit/department/facility.
 - Post STOP sign and GI Illness information at entrances.
 - Retain line listing forms on the unit for ICP/ IC liaison to review daily or fax to a central location as instructed (see Appendix B and C).

Hand Hygiene:

- Locate alcohol-based hand rub (ABHR) at each unit/department/facility entrance for all to use.
- Place hand sanitizer in patient/staff/visitor lounge areas for use before and after eating, if hand washing with soap and water is not available.

Cleaning:

- Enhance environmental cleaning in patient rooms and common areas of frequently touched surfaces must be done at least 2 times per day (see Appendix D).

- Perform routine cleaning and disinfection of frequently touched environmental surfaces and equipment in isolation and cohorted areas, as well as high-traffic clinical areas.
- Switch to accelerated hydrogen peroxide solution (i.e., PerCept). Note there must be a 5 minute wet-contact time.
- Continue enhanced cleaning for one week after the end of the outbreak. If the outbreak lasts greater than 25 days then enhanced cleaning for two week after the end of the outbreak.
- Place heavily soiled laundry in a leak-proof bag. Wear gown and gloves to handle soiled laundry. Send soiled laundry directly to laundry services. Do not place soiled bags on the floor.
- Garbage is handled in the routine manner.
- Upon terminal cleaning, ensure all supplies are disposed of/cleaned appropriately.

Communal Food:

- Remove all communal food from nursing station and staff lounge areas.
- Assist patients to perform hand hygiene prior to a meal or snack if they require assistance.
- Close unit kitchen/nourishment center to all patients and visitors.
- Empty, shut off, and sanitize the bulk ice machine and the scoop. Leave it shut off until the outbreak is declared over.
- Automatic ice dispensing machines require cleaning of high contact areas twice per day.
- Staff restrictions:
 - As much as possible cohort staff to **either** affected or unaffected patients within the unit.
 - Staff to notify other facilities/hospitals at which they work that they have worked in an outbreak situation. HCW's who work on an outbreak unit should not work elsewhere until at least 48 hours have elapsed since the end of the last shift on the outbreak unit and they are asymptomatic.
 - All staff that are ill with GI symptoms shall remain off work for 48 hours after symptoms subside; exception Food Services staff who prepare and/or serve food, shall be off for 72 hours after symptoms subside.
 - Staff may leave the outbreak unit for breaks as usual after removing all protective equipment and performing hand hygiene.
- Additional restrictions:
 - Any further control measures required will be determined by the Outbreak Team.

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References:

Centers for Disease Control and Prevention. (2011). Updated norovirus outbreak management and disease prevention guidelines. MMWR 60(3). Retrieved May 1, 2011 from http://www.cdc.gov/hicpac/pdf/norovirus/HICPAC_Norovirus_FR_Ver_05_20_10_clean.pdf

CDC/NHSN (2008). Surveillance definition of healthcare associated infection and criteria for specific types of infections in the acute care setting. Am J Infection Control, 36, p. 309-322.

Saskatoon Health Region (2012). Gastrointestinal Outbreak guidelines for SHR Long Term Care Facilities
http://www.saskatoonhealthregion.ca/your_health/ps_public_health_profinfo.htm

APPENDIX A

Is this a G.I. Outbreak?

Isolate symptomatic patients in a single room to reduce the risk of cross contamination

An outbreak can only be declared by Infection Prevention and Control in collaboration with Public Health

A patient develops diarrhea and/or vomiting.
Is an infectious agent possible ?
(e.g. have not had laxatives or enema within 48 hours)

Yes

Start Droplet/Contact Precautions on patient who has diarrhea and/or vomiting

Does anyone else have diarrhea or vomiting?
(patient or staff)

Yes

No

Not an Outbreak (yet)

- Continue to observe patients or staff for development of symptoms

**Do three or more people have GI symptoms?
(patients or staff)**

- Vomiting (2 episodes within 24 hours) **or**
- Diarrhea (2 episodes within 24 hours) **or**
- Vomiting and diarrhea (1 episode of each within 24 hours)
- **OR** Do 2 people have blood in their stools?

CALL Infection Prevention & Control

No

Yes

Likely to be a G.I. outbreak

- Droplet/Contact precautions for all symptomatic pts
- Send symptomatic staff home
- Send stool samples and begin control measures with help of IP&C
- Start G.I Patient and Staff Line Listing for all symptomatic cases (Appendix B&C)

Less likely to be GI Outbreak

Consider other causes of diarrhea — antibiotics, laxatives, constipation, food related (e.g. sensitivities)

Isolate patients
Use contact precautions
Still send stool samples

Call your IPC if you are concerned or if the situation changes.

Appendix B – GI Patient Line Listing

Date: _____ **Unit/Facility** _____

Definition:Gastrointestinal (GI) illness is characterized as:

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If no patient sticker, please include: Full Name HSN DOB Sex Physician Room # Bed #	<i>Patient Sticker</i>	<i>Patient Sticker</i>	<i>Patient Sticker</i>	<i>Patient Sticker</i>	<i>Patient Sticker</i>
Symptom onset date					
time					
Date isolated/precautions					
Date off isolation/precautions date					
time					
Expired					
SYMPTOMS					
1. Nausea					
2. Abdominal Cramps					
3. Diarrhea					
4. Bloody stool					
5. Fever					
6. Vomiting					
7. Fatigue/Malaise					
8. Antibiotics					
9. Laxatives/Enemas/stool softeners					
10. Known Cause					
SPECIMENS					
Date Collected					
Results					
Lab Confirmed case					
Suspected case					

yes = Y no = X : criteria met OR not met

Fax to Infection Prevention & Control daily @ 0600 hours (RUH 0609, SPH 6142, SCH 7554)

Appendix C – GI Staff Line Listing

Date: _____ **Unit/Facility** _____

Definition:Gastrointestinal (GI) illness is characterized as:

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Full Name					
HSN					
DOB					
Sex					
Physician					
SYMPTOMS					
Symptom onset	date				
	time				
Date isolated/precautions					
Date off isolation/precautions	date				
	time				
Expired					
SYMPTOMS					
1. Nausea					
2. Abdominal Cramps					
3. Diarrhea					
4. Bloody stool					
5. Fever					
6. Vomiting					
7. Fatigue/Malaise					
8. Antibiotics					
9. Laxatives/Enemas					
10. Stool Softeners					
11. Known Cause					
SPECIMENS					
Date Collected					
Results					
Lab Confirmed case					
Suspected case					

yes = Y no = X : criteria met OR not met

Fax to Infection Prevention & Control daily @ 0800 hours

Appendix D – Enhanced Cleaning for Facilities and Engineering (FES) and Unit Staff

Patient’s rooms – areas cleaned by FES staff two to three times per day:

- door surfaces where people push to open the door
- bed side table, bed railings, TV remote, telephone and any shared items
- bathrooms (toilets, toilet handles, sinks and taps)

Common areas cleaned by FES staff two to three times per day:

- frequently touched surfaces including but not limited to hallway handrails, telephones, nursing stations/conference rooms, TV remote controls, door pushes/pulls, fridge handles, elevator buttons (inside and outside), ledges around nurses desks, garbage can lids, washroom stall doors and handles, staff washrooms, and other conference rooms where Physician/Nurses from that unit consistently work in are cleaned two to three times a day
- Common areas used by identified patients such as lounge areas, hallways, quiet rooms will be ‘A’ cleaned once per day during the outbreak. (For more information on please contact FES)

****You may copy this chart to use as a checklist.**

Checklist for Enhanced Cleaning by unit staff

Mark times cleaned for each	time cleaned	time cleaned
Clean 2-3 times per day, paying particular attention to likely areas of greatest environmental contamination		
Commodes		
Bed pans - cover and clean in soiled rooms. Use bed pan washer if available		
Boosters		
Patient’s lifts		
Patient’s wheel chairs		
Walkers		
Telephone and desk at nursing station		
Charts		
Computers and equipment (e.g. keyboards and printers)		
Thermometers		
IV poles/pumps		
Automatic ice dispensing machines		
Medication carts – top and drawer handles		
Employee items in staff rooms (e.g. microwaves, fridges, counters and cupboard handles)		
Portable fans		
Linen Cart		
Nursing carts		
SPD cart drawer handles		