



Gastroenteritis Outbreak Toolkit

Guidance for Acute Gastroenteritis and Norovirus
Outbreak Management in Long-Term Care Facilities

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Gastroenteritis Outbreak Response Checklist

When a gastrointestinal outbreak is identified, use this checklist as a guide to prevent further disease transmission.

NOTIFY

- ☐ Notify Washington County Public Health of a suspect or confirmed outbreak immediately at 503-846-3594 and provide information about ill residents and staff.

IMPLEMENT CONTROL MEASURES

- ☐ Enforce strict handwashing with soap and water (no hand sanitizer!)
- ☐ Clean and sanitize/disinfect your facility
 - Have staff use PPE
 - Use EPA-Approved sanitizer or bleach solution
 - Increase surface wipe down using EPA approved sanitizer to 4 times in 24 hour period
- ☐ Isolate ill residents
- ☐ Exclude ill staff
- ☐ Exclude ill visitors
- ☐ Cohort staff assignments and equipment
- ☐ Cancel group activities (including communal eating)
- ☐ Discontinue admissions and transfers
- ☐ Notify and Limit Visitors (use signage)

TEST

- ☐ Coordinate with Washington County Public Health to have 3-5 stool or vomit specimens tested.

INSTITUTE SURVEILLANCE (Track new cases)

- ☐ Implement or continue active surveillance by documenting the symptoms and personal information of at least 10 ill residents and/or staff in the **Gastroenteritis Case Log**. After reporting the first 10 cases, report a daily count of new illnesses and hospitalizations.

CLOSING THE OUTBREAK

- ☐ Maintain contact with Washington County Public Health for the duration of illness in your facility plus two incubation periods (generally 4 days for noro-like illness). After confirmation from Washington County Public Health, declare the outbreak over.

When to Call Washington County Public Health

Long-term care facilities are required to report all acute gastroenteritis outbreaks to Washington County Public Health under Oregon Administrative Rule 333-018-000.

Triggers to call Washington County Public Health:

- **Two or more residents and/or facility staff with acute gastroenteritis** (i.e., nausea, vomiting and/or diarrhea) within 3 days of each other.
- **One or more residents and/or facility staff with bloody stool** with or without a high fever.
- **Unusually high absenteeism by staff/volunteers** complaining of gastrointestinal symptoms.

Washington County Public Health Disease Control and Prevention should be immediately notified of every suspected or confirmed acute gastroenteritis outbreak in a long-term care facility. Oregon law requires long-term care facilities to report communicable disease outbreaks to local public health authorities as soon as possible (OAR-333-018-000). Washington County Public Health will notify the Oregon Health Authority of suspected or confirmed outbreaks.

What to Report

When you call Washington County Public Health, you will be asked to provide the following information:

- Facility name, address and contact information
- Total number of residents, staff and food handlers in your facility
- Total number of *ill* residents, staff and food handlers
- Symptoms and first onset date
- Number of hospitalizations and deaths
- Total number of floors, units, dining rooms, kitchens, wings and/or buildings
- Total number of *affected* floors, units, wings and/or buildings
- Number of staff who float between floors or units
- Positive lab results from any resident and processing facility

What to Return

1. **Gastroenteritis Case Log**
2. **Oregon Health Authority's Gastroenteritis Control Measures Report**

Washington County Public Health Disease Control and Prevention: **503-846-3594**
This number is monitored 24 hours a day, 7 days a week.

Tri-County LTCF Gastroenteritis Outbreak Surveillance Data

Norovirus season lasts from August of one year to July of the next. In the past 5 norovirus seasons, August 2013 to July 2018, there were 129 gastrointestinal outbreaks reported in long-term care facilities (LTCFs) in the Greater Portland Area, an area that includes Clackamas, Multnomah and Washington Counties.

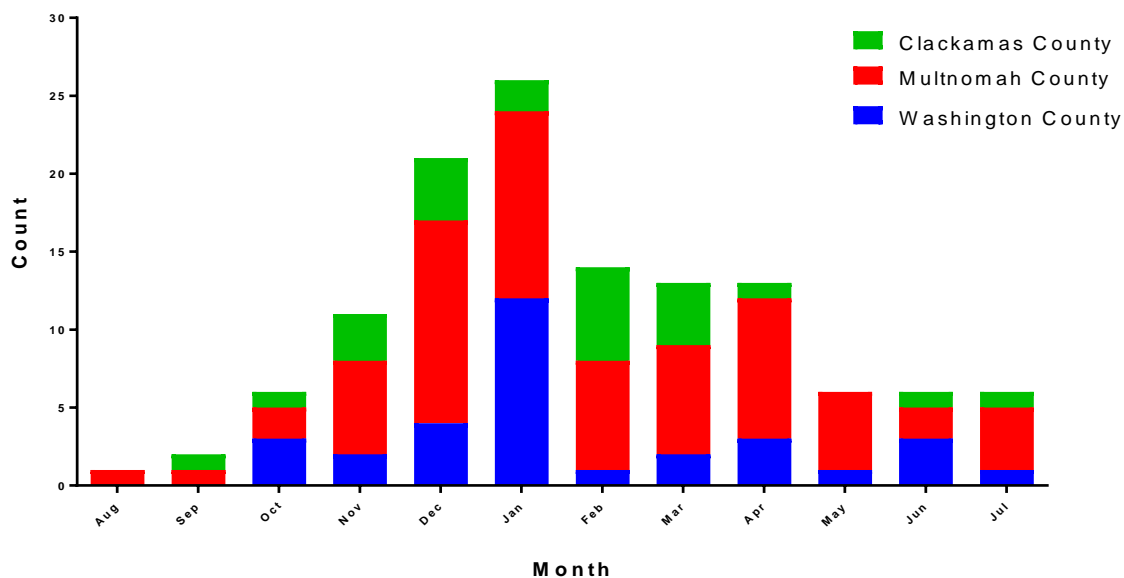
Table 1. Acute Gastroenteritis Outbreaks in Long-Term Care Facilities in the Greater Portland Area, August 2013– July 2018 (n = 129)

Season	Total No. of Outbreaks	% of Outbreaks Caused by Norovirus [‡]	Case Count
2013-2014	33	100%	998
2014-2015	13	92%	375
2015-2016	32	94%	774
2016-2017	29	97%	690
2017-2018	22	100%	560
	129		3,397

[‡] Other pathogens that caused acute gastroenteritis outbreaks included: sapovirus (2), rotavirus (1) and *Campylobacter* (1).

In the past 5 seasons, 97% of all reported Tri-County LTCF gastrointestinal outbreaks were caused by norovirus, with an average of 25 norovirus outbreaks a year resulting in the illness of over 3,300 facility residents, staff and volunteers. While norovirus outbreaks are reported throughout the season, we typically see the majority of outbreaks reported from November to April, with a peak in January.

Figure 1. Lab-Confirmed Norovirus and Noro-Like Outbreaks* in Long-Term Care Facilities in the Greater Portland Area, August 2013 – July 2018 (n = 125)



*An outbreak is defined as 2 or more residents and/or facility staff with lab-confirmed norovirus or vomiting and/diarrhea within 4 days of one another.

Outbreak Prevention and Detection

The majority of acute gastroenteritis outbreaks are caused by norovirus. If you covered a pinhead with norovirus, there would be enough viral particles to infect a 1,000 people. Due to the highly infectious nature of norovirus, it is essential to have an established outbreak response plan to combat a prolonged outbreak among facility residents and staff.

1. **Know your baseline to detect an outbreak early.**

Keep accurate, daily health records of each ill resident to be able to identify early symptoms of norovirus or other gastrointestinal illnesses. Alert Washington County Public Health when two or more facility residents and/or staff with similar acute gastroenteritis symptoms are identified within 3 days of one another.

Your facility should encourage staff members to report any acute gastroenteritis illnesses among residents immediately to your infection prevention team. For any questions about illnesses, contact Washington County Public Health.

2. **Enforce facility staff sick policy.**

Norovirus is primarily transmitted person-to-person. Ask ill staff members to stay home from work for 48 hours after gastroenteritis symptoms (i.e., vomiting and/or diarrhea) have resolved.

Outbreak Response and Reporting

We think we have an outbreak. Now what?

1. **Notify** Washington County Public Health immediately about suspected gastroenteritis outbreaks at **503-846-3594** (24/7).

2. **Implement control measures.**

Once an outbreak is identified, control measures should be implemented to prevent further spread. When thinking about appropriate control measures, remember to consider all individuals who enter your facility, including: residents, staff, visitors and volunteers.

The control measures listed here focus on norovirus outbreaks but similar measures are helpful in controlling other acute gastroenteritis outbreaks. We encourage your facility to implement as many of the control measures listed as possible.

- a) **Personal hygiene.**

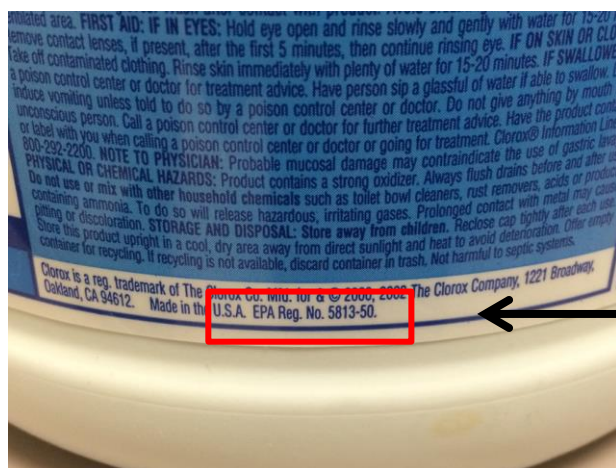
- Enforce frequent handwashing with soap and water among facility residents, staff and food handlers. Discourage the use of alcohol-based hand sanitizers.

- Encourage the use of proper Personal Protective Equipment (PPE), such as gloves, masks and gowns, for all staff members working directly with ill residents and/or cleaning bodily fluids (i.e. vomit or diarrheal accidents around the facility) until ill residents are symptom-free for 48 hours. This includes staff members who are handling linens and other laundry. Remove protective equipment before leaving the rooms of ill residents and wash hands with soap and water immediately.
- Ensure that food handlers are using gloves when serving ready to eat foods.

b) Clean and sanitize/disinfect the facility.

Your facility will first need to be cleaned and then disinfected, as outlined below.

- Clean up diarrhea and vomiting accidents promptly and appropriately. Remember to clean both the affected and surrounding area.
 - Anything soaked with vomit or diarrhea should be handled using appropriate PPE (gloves, masks, gowns).
- Use a chlorine bleach solution with a concentration of 1000-5000 ppm (5-25 tablespoons of household bleach [5.25%] per gallon of water) or other disinfectant registered as effective against norovirus by the Environmental Protection Agency (EPA). Bleach solutions must be made within 24 hours of use and mop heads need to be changed between batches of bleach.
- To verify if your disinfectant is registered as effective against norovirus, send a picture of the front of the cleaner with the product name clearly visible or a close up of the EPA Reg. No., often located at the bottom of the label on the back of the bottle after the company address and copyright year, to Washington County Environmental Health.



EPA Reg. No.

- You can also verify whether the product is registered by visiting EPA's Pesticide Product and Label System website: <https://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>

- Leave the surface wet for at least 2 minutes or follow the directions on the commercial cleaner to allow sufficient time for the bleach to kill the entire virus.
- Deep clean all equipment after use with ill residents, particularly if the equipment will be used with well residents.
- Disinfect frequently touched surfaces every few hours, to include: chair handles and backs (including shower chairs), door handles, counters, hand railings, bed linens, lifts and remote controls. Consider making water fountains and ice machines less accessible.

Sanitizing/Disinfecting Specific Items and Locations	
Bed linens, curtains, pillows with waterproof covers, and non-disposable mop heads	<ol style="list-style-type: none"> 1. Place contaminated objects into washing machines without mixing with other objects and launder with temperatures at 140-160°F 2. Decontaminate pillows with waterproof covers using an EPA approved sanitizer
Carpets, upholstery (i.e. couches) and other pillows	<ol style="list-style-type: none"> 1. Use an absorbent material for spills 2. Sweep up materials covered with vomit or diarrhea 3. Use an approved sanitizer for the appropriate contact time 4. Steam cleaners may be used at 158°F for five minutes or 212°F for one minute 5. Do not use a vacuum cleaner!
Furniture, floors and other hard non-porous surfaces	<ol style="list-style-type: none"> 1. Remove vomit and diarrhea with an absorbent material 2. Clean the contaminated furniture or other hard surfaces with detergent and hot water 3. Decontaminate with an approved sanitizer
Fixtures and fittings in toilet areas	<ol style="list-style-type: none"> 1. Remove vomit and diarrhea with an absorbent material 2. Clean with detergent and hot water 3. Decontaminate with a bleach solution
Food contact area in the kitchen	<ol style="list-style-type: none"> 1. Remove vomit and diarrhea with an absorbent material 2. Decontaminate the area surrounding the vomit or diarrhea accident with an approved sanitizer 3. Rinse the surface with water until no obvious debris or vomit is present 4. Wipe down the area with a 200 ppm sanitizing bleach solution or food-safe sanitizer 5. Throw out any exposed food

The Oregon Patient Safety Commission and the Oregon Healthcare Associated Infections Program at the Oregon Health Authority created training videos about appropriate infection prevention and cleaning for norovirus outbreaks. Videos are available in English and Spanish:

English Infection Prevention Videos: www.bitly.com/IPTrainingVideos

Spanish Infection Prevention Videos: www.bitly.com/IPTrainingVideosEspanol

Washington County Environmental Health is available for all questions related to cleaning your facility. Please reach them at: **503-846-8722**.

c) Isolate ill residents.

Place all sick residents into the same room or wing. Isolate ill residents until asymptomatic for 48 hours.

d) Exclude ill staff.

Sick staff members, including kitchen staff, with acute gastroenteritis symptoms should not be allowed to work until asymptomatic for 48 hours. Send sick staff home.

e) Exclude ill visitors.

Ask sick visitors to stay home until symptom-free for 48 hours.

f) Cohort staff assignments and equipment.

Assign some nursing staff to work with ill residents only. Do not allow staff working with ill residents to work with well residents. Exclude non-essential and floating staff from working with ill residents. Restrict food services personnel to the kitchen. If food handlers are delivering meals to residents, reassign this role to the CNAs for the duration of the outbreak. Assign patient-care equipment to ill residents only; do not use with well residents. If you are unable to cohort equipment make sure to properly clean and disinfect it (see above) after use with sick residents.

g) Cancel group activities.

Stop group activities until the outbreak is declared over. Stop all dining room services (including communal meals) and social/recreational events to prevent further spread.

h) Discontinue admissions and transfers.

Stop all admissions to and transfers from areas of your facility with ill residents until the outbreak is declared over by Washington County Public Health. This includes the transferring of residents without symptoms. The outbreak will be declared over when the last resident or staff member with vomiting or diarrhea has been symptom-free for 48

hours. If you must transfer an ill resident, notify the receiving facility about the illness prior to transfer.

i) Notify visitors.

Post notices on entrance doors to warn visitors of the outbreak (please ask us if you need a notice to use). Ask visitors to wash their hands with soap and water before entering and exiting your facility. Do not permit children or elderly visitors in the facility, particularly the rooms or wings with ill residents, until the outbreak is over.

Use the **Gastroenteritis Control Measures Report** to track all the control measures implemented by your facility during the outbreak.

3. Test.

Testing should occur when:

- An outbreak is declared by Washington County Public Health.

Oregon State Public Health Laboratory (OSPHL) testing:

- Once an outbreak is declared, the OSPHL can test up to six specimens from acute gastroenteritis outbreaks and subtype positive specimens.
- Washington County Public Health can send facilities stool collection kits upon request. Coordinate with Washington County Public Health to have at least 3 stool specimens sent to the OSPHL for testing. If stool is unavailable, the OSPHL is also able to test vomitus.
- Specimens should be collected as soon as possible after illness onset and no later than 5 days after illness has resolved. This is important because positive results confirm the cause of an outbreak and inform Washington County Public Health and the CDC which pathogens and norovirus strains are circulating in the state of Oregon. For more information about testing at the OSPHL visit:

<https://public.health.oregon.gov/LaboratoryServices/Pages/test.aspx?TestID=346>

4. Institute surveillance.

Fill out the **Gastroenteritis Case Log** to track symptoms and disease onset dates for ill residents and staff. The line list will help you know when an outbreak is ending as well as when to relax restrictions for activities and visitors. You are only required to fill out demographic information for the first 10 ill cases at your facility. After that, we will need a daily count of the number of new cases that fit the case definition provided by Washington County Public Health.

Maintain contact with Washington County Public Health for the duration of illness in your facility plus two incubation periods (generally 4 days for noro-like illness). After confirmation from Washington County Public Health, declare the outbreak over.



Facility: _____
Outbreak #: _____

List all residents, staff or volunteers with any gastrointestinal illness



GASTROENTERITIS CONTROL MEASURES REPORT

OUTBREAK # _____ FACILITY NAME _____

CORPORATION NAME _____

Completed by: _____ Date: ____/____/____ County: _____

FACILITY POPULATION QUESTIONS

- _____ Total number of residents in the facility during the outbreak.
_____ Total number of employees (not including staff from "temp" agencies) during the outbreak.
_____ Total number of temporary staff hired during this outbreak (enter 0 if temporary staff were not used).
_____ Total number of patient care staff during the outbreak.

FACILITY QUESTIONS *(please include dates)*

Y ? N NA

- A ☐ ☐ ☐ ☐ Is the facility Medicare certified?
B ☐ ☐ ☐ ☐ Is the facility Medicaid certified?
C ☐ ☐ ☐ ☐ Is the facility owned by a corporation?
D ☐ ☐ ☐ ☐ Does the facility have written procedures for contact isolation of patients?
E _____ When were facility control measures first implemented? ____/____/____
F _____ When were control measures lifted and typical procedures resumed? ____/____/____
G _____ What type of facility is it? *(check all that apply)*
☐ Skilled nursing ☐ Residential Care ☐ Assisted Living ☐ Adult Foster Care ☐ Memory Care

CONTROL MEASURES FOR RESIDENTS & PATIENTS *(please include Start and End dates)*

Y ? N NA

- H ☐ ☐ ☐ ☐ Were admission discontinued until the outbreak was over? *If yes*, what date were the admissions discontinued? ____/____/____ and resumed? ____/____/____
I ☐ ☐ ☐ ☐ Were sick patients confined to their rooms until they were symptom free for 48 hours or more? *If yes*, when were patients confined? ____/____/____ through ____/____/____
J ☐ ☐ ☐ ☐ Were group activities discontinued until the outbreak was over? ____/____/____ through ____/____/____
K ☐ ☐ ☐ ☐ Were ward transfers discontinued during the outbreak? ____/____/____ through ____/____/____
L ☐ ☐ ☐ ☐ Were visitors restricted during the outbreak? ____/____/____ through ____/____/____
M ☐ ☐ ☐ ☐ Was patient care equipment dedicated to a single sick patient, or shared among similarly sick patients?
N ☐ ☐ ☐ ☐ Were patients with vomiting or diarrhea put on contact precautions? ____/____/____ through ____/____/____
O ☐ ☐ ☐ ☐ Were patients with vomiting or diarrhea moved to private rooms or to rooms with other patients with vomiting or diarrhea (cohorting)? ____/____/____ through ____/____/____

CONTROL MEASURES FOR STAFF *(please include Start and End dates)*

Y ? N NA

- P ☐ ☐ ☐ ☐ Are sinks, soap and paper towels within or just outside each residents room?
Q ☐ ☐ ☐ ☐ Were the same staff-to-resident assignments maintained throughout the outbreak (cohort nursing)?
R ☐ ☐ ☐ ☐ Do employees have paid sick leave? *If yes, (check only one box)* ☐ all permanent staff or ☐ some permanent staff
S ☐ ☐ ☐ ☐ Were there any employees with vomiting or diarrhea restricted from work until symptom-free for 48 hours?
Number of restricted employees: _____
T _____ What did patient caregivers use while caring for a patient with vomiting or diarrhea *(choose one)*?
☐ gloves only ☐ gloves & gown both ☐ gloves, gown & mask ☐ no equipment
U _____ What preparation(s) were used to clean up fecal and vomit accidents *(choose all that apply)*?
☐ Bleach & water ☐ Other: _____
V ☐ ☐ ☐ ☐ Were non-essential staff excluded from outbreak units? ____/____/____ through ____/____/____
W ☐ ☐ ☐ ☐ Was staff education on the cause of the outbreak and control measures? When? ____/____/____