

Norovirus Toolkit

Outbreak prevention and response information for shelters

About Norovirus

'Stomach flu'

"Stomach flu" is a common misnomer for norovirus or other enteric illnesses, which are not related to influenza.

Seasonality

Norovirus season in Minnesota typically starts in October and ends in April, but outbreaks can occur all year.

Symptoms

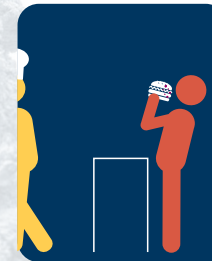
Diarrhea, vomiting, nausea, and stomach ache are the most common symptoms. Fever (usually low-grade), headache, and body aches are also reported. Symptoms typically last 1 to 3 days.

Disinfection

Norovirus is very resistant to cleaners. Use a product designated for norovirus on the label. Hand sanitizer does not work against norovirus! Wash hands for 20 seconds with soap and water.

Transmission

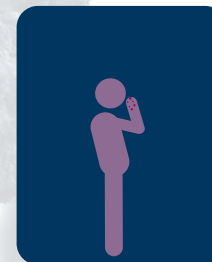
From your food



12-48 hours



From your friends and things you touch

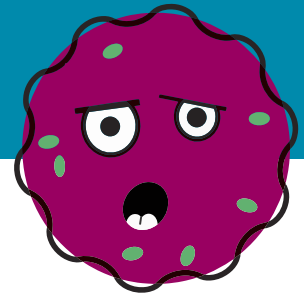


12-48 hours



Norovirus Toolkit

This letter explains how and when to use this toolkit



Greetings from the Minnesota Department of Health (MDH) Foodborne Diseases Unit!

WHO WE ARE & WHAT WE DO

At MDH, one of the things we are charged with is investigating, tracking, and controlling gastrointestinal (GI) illness outbreaks. One of the most common causes of acute GI illness outbreaks is norovirus (often referred to by the misnomer “stomach flu”), though these outbreaks can also be caused by a variety of other pathogens (e.g., sapovirus, *Salmonella*, *C. difficile*, and others).

We are here to help with an outbreak at your shelter, including answering questions and determining the best strategies for outbreak control. We will also document the outbreak to better understand disease burden and trends.

WHEN TO REPORT A SUSPECTED OUTBREAK

By Minnesota state law (Minn. Rules part 4605.7050), “any pattern of cases, suspected cases, or increased incidence of any illness beyond the expected number of cases in a given period” shall be reported immediately to MDH. This includes suspected outbreaks, increases in GI illnesses, or unusual disease activity at your facility. Here are some examples of when to report:

1. Illnesses above established baseline

Determine what the baseline incidence of GI illness in your shelter is. Report to MDH when the number or percent of illnesses rises above your baseline (e.g., track the number of guest illnesses to establish a baseline of diarrhea/vomiting in the facility).

2. Multiple cases in one unit or area of the facility

3. More staff or volunteers calling in sick with GI symptoms than usual

HOW TO REPORT

Call or email the MDH Foodborne Diseases Unit:

Phone: **651-201-5655** (Toll Free: **1-877-366-3455**)

Email: health.foodill@state.mn.us

We will notify your local public health department as needed. You can also contact your local public health department directly, and they will pass the information to MDH.

HOW TO USE THIS TOOLKIT

This packet is intended for use during a suspected outbreak of acute viral gastroenteritis at your shelter. The intent is to 1) provide guidance on implementing measures to stop the outbreak and determine its cause, and 2) collect data on the outbreak to prevent future outbreaks and inform disease burden estimates. Please do not hesitate to contact us with any questions or concerns regarding diarrheal/vomiting illnesses at your shelter.

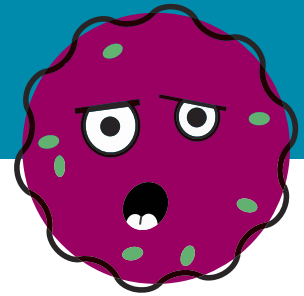
Sincerely,

Amy Saupe, MPH
Epidemiologist Senior
Foodborne Diseases Unit

Carly Baade
Health Program Representative
Foodborne Diseases Unit

Norovirus Toolkit • Prevention

Help prevent an outbreak at your shelter and be prepared to respond if one occurs



PREVENTION TOOLS

1. Hand hygiene

- Train staff and volunteers on proper hand hygiene.
- Make sure staff and guest handwashing facilities are stocked with soap and paper towels, and encourage good hand hygiene practices.
- Do not use hand sanitizer as an alternative to handwashing.

2. Clean/Sanitize

- Check the labels on your cleaning products to ensure they are effective against norovirus.
 - If not, obtain a sanitizer that is effective against norovirus to have on hand. Check with your chemical supplier, or look at [List G: EPA's Registered Antimicrobial Products Effective Against Norovirus](https://www.epa.gov/pesticide-registration/epas-registered-antimicrobial-products-effective-against-norovirus) (<https://www.epa.gov/pesticide-registration/epas-registered-antimicrobial-products-effective-against-norovirus>)
- Clean up vomiting or diarrheal incidents immediately, using appropriate personal protective equipment (PPE). Do not use a vacuum. See RESOURCES for best practices.
- Always use best practices for cleaning/sanitizing, washing linens, etc.

3. Person movement

- When possible, separate guests with vomiting or diarrhea from other guests who are not ill.
 - Designate bathroom(s) for guests with vomiting or diarrhea to use.
 - Cohort guests with vomiting or diarrhea in the same room(s) or sleeping areas.
- If the shelter requires guests to leave during the day or night (e.g., an overnight shelter), consider connecting ill guests to other shelters or spaces with available toilets and handwashing stations.
- Notify other nearby shelters if you detect an increase in gastrointestinal illnesses at your shelter.
 - Guests may move to different shelters while sick, and this helps other shelters prepare and implement measures to prevent illness from spreading to their facility.
- Staff and volunteers should stay home from work if ill with vomiting or diarrhea.

QUICKLY IDENTIFY AN OUTBREAK

- Keep track of guest illnesses and/or reports of illness. It may be helpful to maintain an illness log to record guest illnesses.
- Understand what your normal or baseline level of diarrhea and vomiting is in the shelter. Call MDH and initiate outbreak response measures when more guests are ill than expected, or there are multiple illnesses in one area or group.
- Keep track of staff and volunteer illnesses.

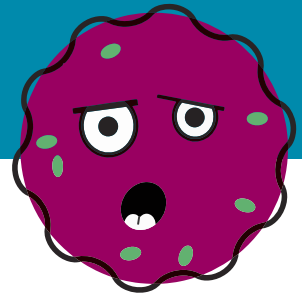
OTHER PATHOGENS

- [Prisons, Detention Centers, & Homeless Service Sites: Covid-19](http://www.health.state.mn.us/diseases/coronavirus/communities.html) (www.health.state.mn.us/diseases/coronavirus/communities.html)

Norovirus Toolkit • Checklist

Use this checklist for outbreak response

Page 1 of 3

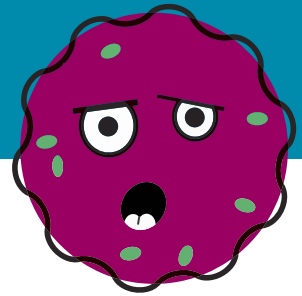


REPORT

- Report the possible outbreak when you detect an increase in gastrointestinal illnesses above the expected baseline, or “normal” rate (e.g., more illnesses than usual in the facility)
 - Call your local (i.e., city or county) health department, or notify the Minnesota Dept. of Health (MDH).
Phone: 651-201-5655 (Toll Free: 1-877-366-3455) Email: health.foodill@state.mn.us
- Information MDH will ask for:
 - What date did the earliest illness start? When did the other illnesses occur?
 - How many guests do you have in the facility? How many have been ill?
 - How many staff and volunteers do you have in the facility? How many have been ill?
 - What symptoms did ill individuals have? What is the approximate duration of illness?
 - Have the ill individuals been in one unit or wing, or spread across the shelter?
 - Have any kitchen or food staff been ill?

DOCUMENT

- Use intake records or other information to track **how many** guests and staff are sick, **what symptoms** they have, and **when** they got sick.
 - Consider assigning a staff member to aggregate illness reports from other staff, volunteers, and guests.
 - We encourage you to use the GUEST ILLNESS LOG and STAFF ILLNESS LOG to track illnesses.
 - Epidemiology staff use this information to assess A) which pathogen is causing the outbreaks, B) the likely route of transmission, and C) whether additional prevention measures are needed.
- Gather additional information
 - List activities, events, etc., held during the week prior to the first illness (especially if food was served).
 - Determine when and where there were any vomiting incidents or diarrheal accidents in the facility.
 - If requested by MDH, provide menus (breakfast, lunch, and dinner).
 - If requested by MDH, provide names and phone numbers for staff and/or guests (in rare cases, MDH may want to conduct interviews).
- Stool samples are important to confirm the outbreak cause, and determine strains that cause illness. Please distribute stool sample collection kits to 3 guests or staff (MDH will provide specimen collection kits; the testing is free of charge).
 - If stools from guests or staff were tested through a healthcare provider, notify MDH of any results.
- Report your final outbreak information (e.g., number sick, symptoms, dates) to MDH when requested.
 - This information is used to report to the [National Outbreak Reporting System \(NORS\)](http://www.cdc.gov/nors/) (www.cdc.gov/nors/) and helps us understand disease burden and trends. Your facility name is not reported.



IMPLEMENT OUTBREAK CONTROL MEASURES

GUESTS

- Monitor for guest illness. You may use the GUEST ILLNESS LOG if helpful. When possible, isolate guests while they are ill and for 72 hours after symptoms have stopped. Also if possible, consider grouping/cohorting guests based on illness status (e.g., assign guests with vomiting/diarrhea to the same sleeping area or room).
- Exclude actively ill guests from games/activities where touching common items occurs (e.g., checkers, cards).

STAFF

- Monitor for staff and volunteer illness. You may use the STAFF ILLNESS LOG if helpful.
- Restrict ill staff/volunteers from food handling duties and direct contact with guests until 72 hours after their vomiting/diarrhea has ended.
- Redouble efforts to promote glove use and hand hygiene.
 - Educate guests, staff, and volunteers on proper technique, especially those that handle, prepare, or serve food.
 - Traditional alcohol-based hand sanitizers are not effective against common gastrointestinal pathogens such as norovirus and *C. difficile*. Wash hands with soap and water to remove pathogens.

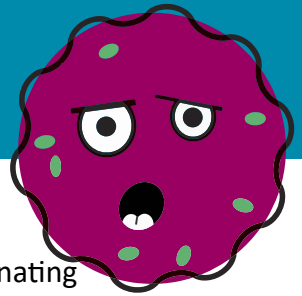
CLEAN

- Immediately clean and sanitize the facility. Focus on frequently touched surfaces and objects (e.g., bathrooms, door handles, counters, tables, water fountains, etc.).
 - Clean all surfaces with soap and water. Rinse.
 - Sanitize all surfaces with a disinfectant that is effective against norovirus. Norovirus is a hardy organism that is not killed by regular bleach solution, quaternary ammonia, or alcohol-based hand sanitizers. Use one of these products:
 1. Sanitizer with a norovirus claim (see FAQ). Check that the label on your sanitizer specifically says that it is effective against norovirus. Use as directed on the packaging (some sanitizers have a long contact time to kill norovirus).
 2. Strong (1000 ppm) bleach solution mixed fresh daily: 1 gallon water + 1/3 cup bleach.
 - For food contact surfaces, rinse with clean water after sanitizing solution has fully dried.
 - Wear personal protective equipment (PPE) and use ventilation when applying this solution.
- Clean/sanitize at least daily until the outbreak is over (1 week after last illness onset).
- Clean up vomiting or diarrheal incidents immediately.
 - Use appropriate procedures to prevent those doing the cleaning from getting sick (see RESOURCES).
 - Never use a vacuum to clean up vomit.
- Launder soiled bedding and other linens immediately, and use appropriate PPE.
 - Remove visible vomit and/or stool from linens before washing. Wash and dry linens using the hottest cycle setting.

Norovirus Toolkit • Checklist

Use this checklist for outbreak response

Page 3 of 3



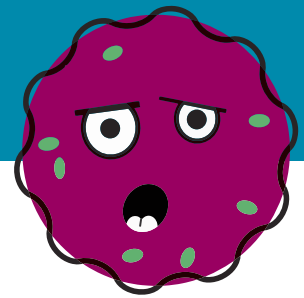
FOOD SERVICE

Kitchen staff and volunteers can be a source of ongoing transmission of illness by contaminating food that guests eat.

- Contact your kitchen department to determine if any kitchen staff or volunteers are ill (you may add them to the STAFF ILLNESS LOG if helpful). Notify MDH if kitchen staff are ill so that a sanitarian can work with the kitchen to implement additional prevention measures.
- Monitor for kitchen staff illnesses during the outbreak using the food service Employee Illness Screening Form.
- Exclude ill kitchen staff and volunteers from work for 72 hours after diarrhea/vomiting have stopped as required by the Minnesota Food Code.
- Clean and sanitize all kitchen and dining area surfaces with a product described above.
- Discontinue all self-service food/drinks including self-service foods using tongs or other serving utensils.
- Consider postponing or cancel common events such as birthdays, holidays, and special celebrations until the conclusion of the outbreak.
- Limit sharing of communal food/snack items between guests of different households.

Norovirus Toolkit • Resources

Try these sources for other materials to help your investigation



RESOURCES

A copy of this toolkit packet is also available online:

[Outbreaks at Facilities \(www.health.state.mn.us/diseases/foodborne/outbreak/facility\)](http://www.health.state.mn.us/diseases/foodborne/outbreak/facility)

FACT SHEETS

- [Norovirus Fact Sheet \(www.health.state.mn.us/diseases/norovirus/noro.html\)](http://www.health.state.mn.us/diseases/norovirus/noro.html)
- [Norovirus Facts for Food Workers \(www.cdc.gov/norovirus/media/pdfs/2024/04/Norovirus-Illness_Facts-for-Food-Handlers_3.20.24.pdf\)](http://www.cdc.gov/norovirus/media/pdfs/2024/04/Norovirus-Illness_Facts-for-Food-Handlers_3.20.24.pdf)

POSTERS

- (1) [Be A Germ-Buster...Wash Your Hands Poster \(www.health.state.mn.us/people/handhygiene/wash/fsgermbuster.html\)](http://www.health.state.mn.us/people/handhygiene/wash/fsgermbuster.html)
- (2) [There's No Such Thing as 'Stomach Flu' \(www.health.state.mn.us/diseases/norovirus/nostomachflu.pdf\)](http://www.health.state.mn.us/diseases/norovirus/nostomachflu.pdf)
- (3) [Clean Up & Disinfect for Norovirus. Vomit Poster \(https://www.health.state.mn.us/diseases/foodborne/vomitposter.pdf\)](https://www.health.state.mn.us/diseases/foodborne/vomitposter.pdf)

FURTHER READING

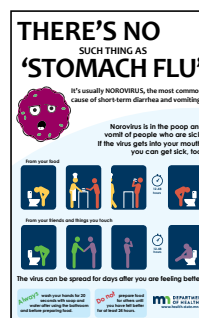
- [Sanitation & Hygiene Guide for Homeless Service Providers \(blog.homelessinfo.org/wp-content/uploads/Sanitation-Hygiene-Guide-final-edited.pdf\)](http://blog.homelessinfo.org/wp-content/uploads/Sanitation-Hygiene-Guide-final-edited.pdf)
- [MDH Hand Hygiene \(www.health.state.mn.us/people/handhygiene\)](http://www.health.state.mn.us/people/handhygiene)
- [Norovirus: step-by-step clean up of vomit and diarrhea \(extension.umn.edu/sanitation-and-preventing-illness/norovirus-step-step-clean-vomit-and-diarrhea#clothing-and-linens-3059212\)](http://extension.umn.edu/sanitation-and-preventing-illness/norovirus-step-step-clean-vomit-and-diarrhea#clothing-and-linens-3059212)

VIDEOS

- [Clean Up After Someone with Norovirus Vomits or has Diarrhea \(https://www.youtube.com/watch?v=TakH4jakLYA\)](https://www.youtube.com/watch?v=TakH4jakLYA)



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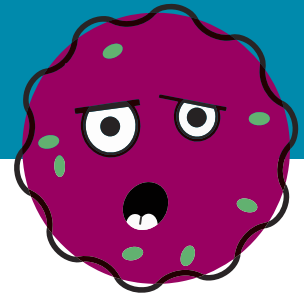
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3

Norovirus Toolkit • FAQ

Here are some frequently asked questions



FAQ

Q: What if this outbreak is not caused by norovirus?

A: The interventions in this toolkit are effective at controlling outbreaks of similar diarrheal pathogens. MDH can provide additional guidance as needed. It is important to collect stool specimens to confirm the outbreak etiology.

Q: Can we use our regular cleaner(s)?

A: Probably not. You must use a sanitizer/disinfectant that specifically says that it is effective against norovirus on the label.

Consider choosing a product that is also effective against *C. difficile*; use [List K: EPA's Registered Antimicrobial Products Effective against *Clostridium difficile* Spores \(www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium\)](http://www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium)

The bleach solution described in the CHECKLIST is effective against both norovirus and *C. difficile*.

Q: Are hand sanitizers effective?

A: Most are not effective against norovirus. Check with your chemical supplier, or read the label carefully to make sure it lists effectiveness against norovirus.

Q: Do we need to report this outbreak to anyone other than MDH?

A: No. MDH will notify your local health department as needed. You may want to give your kitchen licenser (i.e., the agency that inspects your kitchen) a heads up.

Q: Which staff are considered dietary or food workers?

A: Any staff member or volunteer who handles or prepares food, trays, utensils, etc., or who assists guests with eating.

Q: How do we report an outbreak of flu/influenza?

A: Another unit at MDH works with influenza – please see: [Information on influenza in long-term care \(www.health.state.mn.us/diseases/flu/ltc/\)](http://www.health.state.mn.us/diseases/flu/ltc/) or call 1-877-676-5414.

Q: Does MDH have any guidance or resources on how to respond to an outbreak of respiratory viruses in shelters?

A: Another unit at MDH works with COVID-19 – please see: [Prisons, Detention Centers, & Homeless Service Sites: COVID-19 \(https://www.health.state.mn.us/diseases/coronavirus/communities.html\)](https://www.health.state.mn.us/diseases/coronavirus/communities.html) or call 1-877-676-5414.