

# **Gastrointestinal Outbreak Toolkit**

**General toolkit for daycares and childcare facilities**

# About Gastrointestinal (GI) Illness

- GI illness can be caused by many different viral, bacterial, or parasitic bugs.
- Nebraska law requires healthcare providers & laboratories to report infectious diseases to public health.

## WHAT IS INFECTIOUS GI ILLNESS?



- More commonly, **viruses such as norovirus & rotavirus**, spread quickly in close spaces such as childcare facilities.
- **Parasites such as *Cryptosporidium***
- **Bacteria such as *E. coli*, *Shigella*, or *Salmonella***

## TYPES OF GI ILLNESS



- Diarrhea (sometimes bloody), vomiting, nausea, and stomachache are the most common symptoms.
- Fever (usually low-grade), headache, and body aches are also reported.

## SYMPTOMS



- Most viral GI illness begins 12-48 hours after exposure and last 24-72 hours.
- Some GI illness, such as parasites or bacteria, can last for several days or weeks.

## TIMELINE OF ILLNESS



- In childcare facilities, norovirus is the most common GI illness spreading person to person.
- GI illness can also spread by food, water, animal, and the environment.

## SPREAD



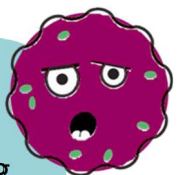
- If there are multiple individuals with GI symptoms, it must be reported.
- **Contact your local health department as soon as possible for next steps.**

## REPORT



## There's no such thing as "Stomach Flu"

Hear the "stomach flu", "tummy bug", "24-hour flu", or "gastroenteritis" is going around? It's likely Norovirus! Norovirus is caused by germs that make people throw up or have diarrhea. These germs spread when tiny particles from someone's poop or vomit get into people's mouths, sometimes by accident. If a lot of kids or staff are getting sick with these symptoms, it could be serious and should be reported to your local health department.



# Gastrointestinal Toolkit Information

## PUBLIC HEALTH'S ROLE

The Nebraska Department of Health and Human Services (NDHHS), the Nebraska Public Health Lab (NPHL), and local health departments (LHDs) investigate, test, and report disease outbreaks to the [National Outbreak Reporting System](#). They use the data to link outbreaks to common sources, track existing illness strains, and find new ones. LHDs roles are to investigate, track, and control outbreaks of GI illness in the community. In childcare centers, norovirus is the main cause of sudden GI illness outbreaks, though other germs like *Cryptosporidium*, *Salmonella*, and Rotavirus can also cause them.

## INTENT OF TOOLKIT

This packet is intended for use during a suspected outbreak of GI illness at your childcare facility to:

- 1) Give advice on how to stop the outbreak and figure out what caused it.
- 2) Assist with coordination of stool samples for testing if needed.
- 3) Collect data on to help prevent future outbreaks and understand how common the disease is.

## WHEN TO REPORT A SUSPECTED OUTBREAK

By Nebraska state regulation, [Title 173 Communicable Disease](#), Reporting and Control of Communicable Diseases, outbreaks shall be reported to your LHD. This includes suspected outbreaks, increases in GI illness, or unusual disease activity at your facility. Here are some examples of when to report:

- 1) Illnesses are higher than normal. Find out what the usual number of GI illness is in your facility by looking at daily absence records. If the number of people out sick with vomiting or diarrhea goes above this usual number (like if it doubles), report it to your LHD.
- 2) Multiple cases of GI illness in one classroom or group (e.g., preschool room, toddler room, etc.)
- 3) More staff calling in sick with GI illness than usual.

## DEFINITION OF CHILDCARE ATTENDEE AND WORKER

Student/Attendee: Any child who attends a childcare or preschool and has not started kindergarten. Exclusion is not recommended for kindergarteners (or above) who attend afterschool programs held at childcare facilities.

Childcare Worker: Provides childcare in any type of childcare setting (including in-home providers & childcare centers) for less than 24-hour periods without transfer of custody.

## HOW TO REPORT

Please call or email your [local health department](#) to report any outbreak or suspect outbreak.

## Your Health Department Contact Information

**Local Health Department:**

**Name:**

**Phone Number:**

**Email address:**

**Fax Number:**

# Checklist

Use this checklist for outbreak response.

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## REPORT

- Daycare and childcare staff know their children and facility best. If there's an increase in GI illness beyond normal, report the possible outbreak to your [local health department](#) for further guidance on reducing spread in your facility.
- Gather information when you report to your LHD, specifically:
  - What day was the first illness?
  - How many attendees in the facility? How many have been ill?
  - How many staff in the facility? How many have been ill? Any kitchen staff?
  - What GI symptoms are being reported? Length of illness?
  - Have ill individuals been in one classroom (infant, toddler, preschool) or spread across the facility?
  - Have any attendees or staff tested positive for GI illness, such as norovirus?
  - Any recent vomiting incidents or diarrheal accidents in the facility?
  - Any recent activities, events, or field trips, held during the week prior to the first illness date?

## DATA COLLECTION

Note: Generally, the GI illness line list report is sufficient. If warranted, another method of data collection may be used such as an electronic survey.

- Use the [GI ILLNESS LINE LIST REPORT](#) (download the form) to track illnesses among staff and children.
  - Contact teachers of each classroom, kitchen staff to gather illness information.
- You may send an updated daily line list to your LHD contact so they are updated each day for monitoring.
- When the outbreak is deemed over, send the final GI illness line list report (required) and the checklist (optional) to your LHD contact.
  - Your LHD will inform you when the outbreak is deemed over.

## STUDENTS/ATTENDEES

- Conduct daily health screenings by asking parents about their child's overall health and any new symptoms.
- Track students/attendees' illness in the same GI illness line list report. Use "ST" for student.
- Norovirus**, exclude ill students/attendees from childcare for **48 hours** after vomiting/diarrhea has ended.
- Salmonella, Cryptosporidium, Rotavirus**, exclude ill students/attendees from childcare for **24 hours** after diarrhea has ended.
- E. coli, Shigella, or Salmonella Typhi or Paratyphi**, exclude ill students/attendees from childcare until negative stools are completed. See [Enteric Exclusion Recommendations for Disease Control](#)
  - Work with your LHD on exclusion disease control and negative stool testing.

## STAFF

- Conduct daily health screenings by asking staff about their overall health and any new symptoms.
- Track staff illness in the same GI illness line list report. Use "SF" for staff.
- Norovirus**, exclude ill staff from work for **48 hours** after vomiting/diarrhea has ended.
- Salmonella, Cryptosporidium, Rotavirus**, exclude ill staff from work for 24 hours after diarrhea has ended.
- E. coli, Shigella, or Salmonella Typhi or Paratyphi**, exclude ill staff from work until negative stools are completed. See [Enteric Exclusion Recommendations for Disease Control](#)
  - Work with your LHD contact on exclusion disease control and negative stool testing.

## OUTBREAK COMMUNICATION

- Notify staff, parents, or legal guardians of the outbreak and provide prevention measures (including handwashing, keeping children and staff home while ill, and proper cleaning).
  - You can find an example of a norovirus notification letter at the bottom of this toolkit.
  - If the cause of the outbreak is a germ other than norovirus, your LHD can assist with crafting a letter for the appropriate germ.



# Checklist (continued)

Use this checklist for outbreak response

## STOOL TESTING

- If stools from children or staff were ordered through their healthcare provider, notify your LHD of those results.
- If stool testing has not been done, DHHS/LHDs may be able to assist with cost of testing.
  - You will coordinate with your LHD. LHDs may have kits on hand to provide to your facility.
- Collect a stool sample from three (3) infants, children and/or staff (if possible).

**LHDs - DHHS approval is needed before ordering stool testing. Please contact DHHS.**

	Option 1	Option 2
<b>Test</b>	Norovirus Only (NVOBD)	Gastrointestinal Pathogen Panel (GIP)
<b>Collection Device</b>	Urine container or similar 	Cary-Blair/Enteric Plus container (with liquid) 
<b>Volume</b>	Minimum 1 mL raw stool	Fill stool to the fill line, 10mL
<b>Storage/Transport</b>	Refrigerated up to 3 days	Room temperature or refrigerated up to 4 days
<b>Availability/Turnaround Time</b>	Performed Mon-Fri only at NPHL, results in 24-48 hours	Performed daily in UNMC micro lab, results in 24 hours

- Label container with patient's name, date of birth, and collection date.
- Complete a pre-approved "NPHL Test Req Form" for each stool sample (pre-approved form is provided to the LHD from NDHHS upon notification of outbreak)
  - Patient name, address, date of birth, gender, and collection date must be completed.
  - Ensure information on the form matches the specimen container.
  - **If information does not match or is missing, specimens will be rejected.**

## TRANSPORTATION OF STOOL SPECIMENS

- Coordinate with your LHD on transportation of stool specimens. Your LHD will work with you to coordinate collection kits.
- LHD staff please call NPHL Client Services **402-559-2440** to arrange a courier.
  - Please discuss with client services and they will check their available routes.
  - Client services will not pick up from a personal residence.

## HAND WASHING

- Make hand washing fun! Have children scrub with soap for as long as it takes to sing the ABCs! Use good friction to get between your fingers and under your nails to wash away all the germs. Handwashing should happen:
  - As soon as children arrive at the childcare setting.
  - After using the toilet or after having their diapers changed.
  - Before eating snacks or meals.
- Put up fun handwashing signs near the sinks for kids! Use bright colors and silly characters to remind them to wash their hands and make it a game.
- Ensure staff are washing hands with soap and water for 20 seconds too! Handwashing should happen:
  - After using the toilet
  - After helping a child use the toilet or changing a child's diaper
  - Before handling or eating food.

## FOOD SERVICE

Kitchen staff/food handlers can be a source for ongoing spread of illness from contaminated food.

- Contact all food staff to determine if kitchen staff are ill. Add them to the GI illness linelist report and document they are a food handler.
- Notify your LHD if kitchen staff are ill so that a sanitarian can implement other prevention measures.
- Continue to monitor for kitchen staff illnesses during the outbreak.
- Norovirus**, exclude ill kitchen staff from work for **48 hours** after diarrhea/vomiting have ended.
- According to [The Nebraska Food Code](#), food handlers who are diagnosed or suspected with any of the following infectious diseases are required to report to their manager and shall be excluded from work:
  - *Salmonella*\*
  - Shiga toxin-producing *E.coli* (STEC)\*
  - Norovirus
  - *Shigella*\*
  - *Salmonella* Typhoid or Paratyphoid Fever\*
  - Hepatitis A

\*Some diseases require may proof of negative stool cultures before returning to food handling duties.

- Clean and sanitize all kitchen and dining area surfaces with an approved product.
- Food handlers should wash their hands before preparing food and avoid bare hand contact with ready-to-eat items by using gloves or utensils.
- Encourage food handlers to become certified in the [ServSafe Food Safety Program](#).

## CLEANING, SANITIZING OR DISINFECTING

For viral outbreaks such as **NOROVIRUS**.

- Before you begin cleaning, protect yourself by wearing personal protective equipment (PPE) such as gloves, mask, or face shield.
- Clean up vomiting or diarrheal incidents immediately.
  - Ensure everyone leaves the area until the air is clear of any particles from the incident and cleanup.
  - Consider having a staff member who has been ill and recovered during the outbreak do the cleaning.
  - Never use a vacuum to clean up vomit as norovirus particles can aerosol.
- Immediately clean and disinfect the facility.
  - Cleaning is the first step of any disinfection process to remove organic matter or soils. Disinfecting kills viruses and bacteria on surfaces using chemicals.
- Clean surfaces with warm, soapy water. Use paper towels, or if using kitchen towels, wash often on hot.
- Focus on frequently touched surfaces and objects (e.g., bathrooms, door handles, counters, tables, water foundations, diaper changing areas, toys in younger classrooms).
- Use either of these two options:
  - Disinfectant with a norovirus claim ([EPA](#)). Check that the label on your disinfectant specifically says that it is effective against norovirus. Use as directed.
  - Use a 5%-8% bleach solution of 5 to 25 tablespoons of household bleach per gallon of water (1,000 to 5,000 ppm). Try using a [bleach dilution calculator](#).
    - Wear PPE (gloves, face shield) and use ventilation when applying this solution.
    - Bleach has a 10-minute contact time.
    - Visit [CDC's Cleaning and Disinfecting with Bleach](#) for more information.
- Wash cloth toys in the washing machine, then dry on high heat for 30 minutes.
- Continue to clean and disinfect daily until the outbreak is deemed over by your LHD.

# Checklist (continued)

Use this checklist for outbreak response

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For bacterial outbreaks such as **SALMONELLA, SHIGELLA, OR E. COLI.**

- Before you begin cleaning, protect yourself by wearing personal protective equipment (PPE) such as gloves, mask, or face shield.
- Clean up vomiting or diarrheal incidents immediately.
  - Consider having a staff member who has been ill and recovered during the outbreak do the cleaning.
  - Never use a vacuum to clean up vomit.
- Immediately clean and disinfect the facility.
  - Cleaning is the first step of any disinfection process to remove organic matter or soils but does not kill bacteria. Sanitizing kills bacteria on surfaces using chemicals.
- Clean surfaces with warm, soapy water. Use paper towels, or if using kitchen towels, wash often on hot.
- Use either of these two options:
  - Approved disinfectant product. Check that the label on your disinfectant specifically says that it is effective against *Salmonella*, *Shigella* or *E. coli*. Use as directed.
  - Use a 5%-8% bleach solution of 5 to 25 tablespoons of household bleach per gallon of water (1,000 to 5,000 ppm). Try using a [bleach dilution calculator](#).
    - Wear PPE (gloves, face shield) and use ventilation when applying this solution.
    - Bleach has a 10-minute contact time.
    - Visit [CDC's Cleaning and Disinfecting with Bleach](#) for more information.
- Wash dishwasher-safe toys in a commercial dishwasher that has a dry cycle or a final rinse that exceeds 113°F for 20 minutes or 122°F for 5 minutes or 162°F for 1 minute.
- Wash cloth toys in the washing machine, then dry on high heat for 30 minutes.
- Continue to clean and disinfect daily until the outbreak is deemed over by your LHD.

For parasitic outbreaks such as **CRYPTOSPORIDIUM.**

- Before you begin cleaning, protect yourself by wearing personal protective equipment (PPE) such as gloves, mask, or face shield.
- Clean up vomiting or diarrheal incidents immediately.
  - Consider having a staff member who has been ill and recovered during the outbreak do the cleaning.
  - Never use a vacuum to clean up vomit.
- Immediately clean and disinfect surfaces and objects.
  - Cleaning is the first step of any disinfection process to remove organic matter or soils. Disinfecting kills parasites on surfaces using chemicals.
- Clean surfaces with warm, soapy water. Use paper towels, or if you use kitchen towels, wash them often on hot.
- Disinfect objects and surfaces with **3% hydrogen peroxide**, soaking for 20 minutes and rinsing well. Hydrogen peroxide works better than bleach, but never mix the two.
- Items that should be **disinfected at least twice a day**: toys, tabletops, and highchairs.
- Areas that should be **disinfected daily**: bathroom surfaces, diaper-changing areas, and food preparation surfaces.
- Wash dishwasher-safe toys in a commercial dishwasher that has a dry cycle or a final rinse that exceeds 113°F for 20 minutes or 122°F for 5 minutes or 162°F for 1 minute.
- Wash cloth toys in the washing machine, then dry on high heat for 30 minutes.
- Continue to clean and disinfect daily until the outbreak is deemed over by your LHD.

# Checklist (continued)

Use this checklist for outbreak response.

## ANIMAL ACTIVITIES

Animals can be entertaining and educational, but can carry germs, even if they look healthy. Be aware of the risks and how to prevent illness. Before bringing animals or pets:

- Review [Title 391 Children's Services Licensing – Chapter 3 Childcare Centers](#). Section 3-006.32C Animals/Pets
- Create specific areas for interaction with animals. Do not allow animals to roam freely around the facility, especially in areas where food or drink is prepared, served, or eaten.
- Children should wash their hands with water and soap right after handling animals, their food, or their habitats (for example, cages, terrariums, aquariums, water bowls, and toys).
- Clean and disinfect all areas where animals have been.

## WATER ACTIVITIES

- Postpone/cancel water-related activities such as water tables, splash pads/fountains, kiddie pools and slides until the outbreak is deemed over by your LHD.
- Individuals with diarrhea in the past two (2) weeks should not swim or play in water.

## GROUP ACTIVITIES/SPORTS

- Consider postponing or canceling group meals, field trips, sports, and social activities until the outbreak is over. This helps reduce contact and the risk of spreading illness.

## FACILITY CLOSURE

Facilities usually don't need to close during a GI outbreak, but it's important to check with your LHD. In some cases, closure might be considered if there are many illnesses, if control measures aren't working, and if closing is needed for proper cleaning.

## INFECTION CONTROL CONSULTATION

- [Nebraska Infection Control Assessment and Prevention Program \(ICAP\)](#) is available for general questions regarding infection control in your facility. **402-552-2881**

## DHHS CHILDCARE LICENSING

- Visit [Nebraska Department of Health and Human Services Childcare Licensure](#) for contact information, questions, or information regarding licensure.



## [SAMPLE NOTIFICATION LETTER: NOROVIRUS]

Dear Parent or Guardian,

Some students or staff at <name of childcare facility> are sick with vomiting and diarrhea. During this time of year, many illnesses are going around and one of the most common causes of sickness is norovirus. Fortunately, people with norovirus usually recover quickly with rest and hydration. There are actions you can take to help limit the spread of the illness, even if your child is not experiencing symptoms.

### The two most important things you can do:

- **Make sure your child washes their hands properly.**
- **Keep your child at home if they are sick.**

### What is norovirus?

Norovirus is a virus that spreads quickly from person-to-person in closed environments and group settings. It's sometimes called the "stomach flu" but it's not related to influenza (flu). Most people with norovirus get better within 1-3 days. There is no specific medicine to treat norovirus but it's important to drink plenty of liquids to prevent dehydration.

### Symptoms include:

- abrupt onset of diarrhea
- vomiting
- nausea
- stomach cramping, and
- sometimes fever

### How does norovirus spread?

- Direct contact with someone who is sick, for example, sharing food.
- Touching a contaminated surface (like faucets, toys, or doorknobs) and then touching your mouth.
- Eating food or drinking food and liquids contaminated with the virus.

### How can parents and guardians help prevent norovirus from spreading?

- **Keep your child home for at least 48 hours AFTER symptoms have ended.**
- Ensure that your child stays hydrated by sipping fluids. Talk to your health care provider about the best types of fluids.
- Ensure that all members of your household wash their hands often, especially after using the bathroom, cleaning, changing diapers, or before preparing or eating food. Cover all parts of hands with soap, rub lathered hands together vigorously for at least 20 seconds, and thoroughly rinse the hands with water.
- Avoid sharing household items with your child, and if possible, have your child use only one bathroom (and increase cleaning of used bathroom).
- Disinfect household surfaces with a solution of 3/4 cup of concentrated bleach (or one cup of regular strength bleach) in one gallon of water.
- Work with your school or local health department to coordinate laboratory testing.
- Contact a health care provider if your child is dehydrated, or if you have any concerns.

For more resources, please visit [CDC's Norovirus](#) website.