



Indiana
Department
of
Health

NOROVIRUS SEASON UPDATE

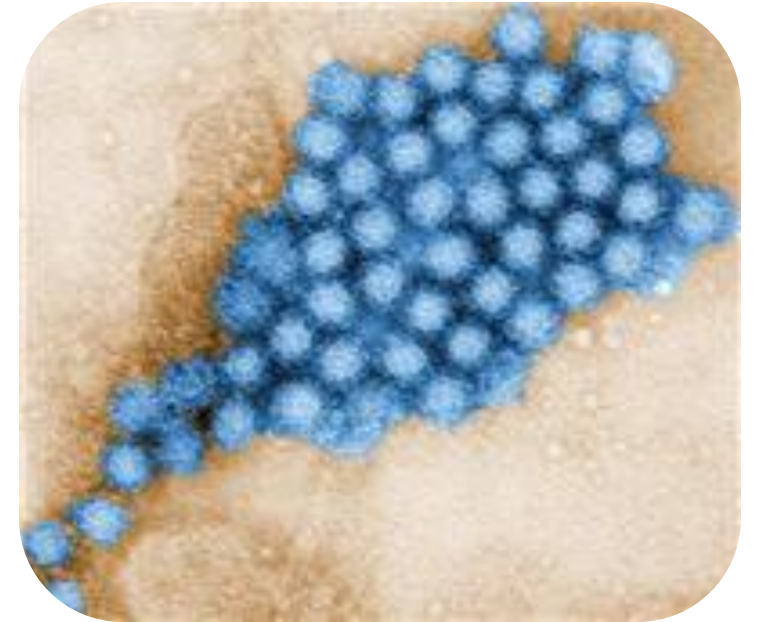
JENNA NICODEMUS, ENTERIC
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EPIDEMIOLOGIST

2/18/2025

What is Norovirus?

- Highly contagious virus
- Causes acute gastroenteritis (inflammation of the stomach or intestines)
- Also known as:
 - Viral gastroenteritis
 - Winter diarrhea
 - Food poisoning
 - Stomach flu



****norovirus is NOT related to influenza****

Norovirus vs COVID-19

- If diarrhea, nausea, or vomiting are present, consider testing for norovirus
- Studies show that approximately 33% of COVID-19 cases report gastrointestinal symptoms as part of their illness
 - It is rare for COVID-19 cases to report ONLY gastrointestinal symptoms (~15% of cases)

What is Norovirus?

Spread when someone ingests something contaminated with feces

- Usually person-to-person
- Infected individuals shed the virus in their stool and vomit, which can then contaminate food, surfaces, and objects

Incubation period:



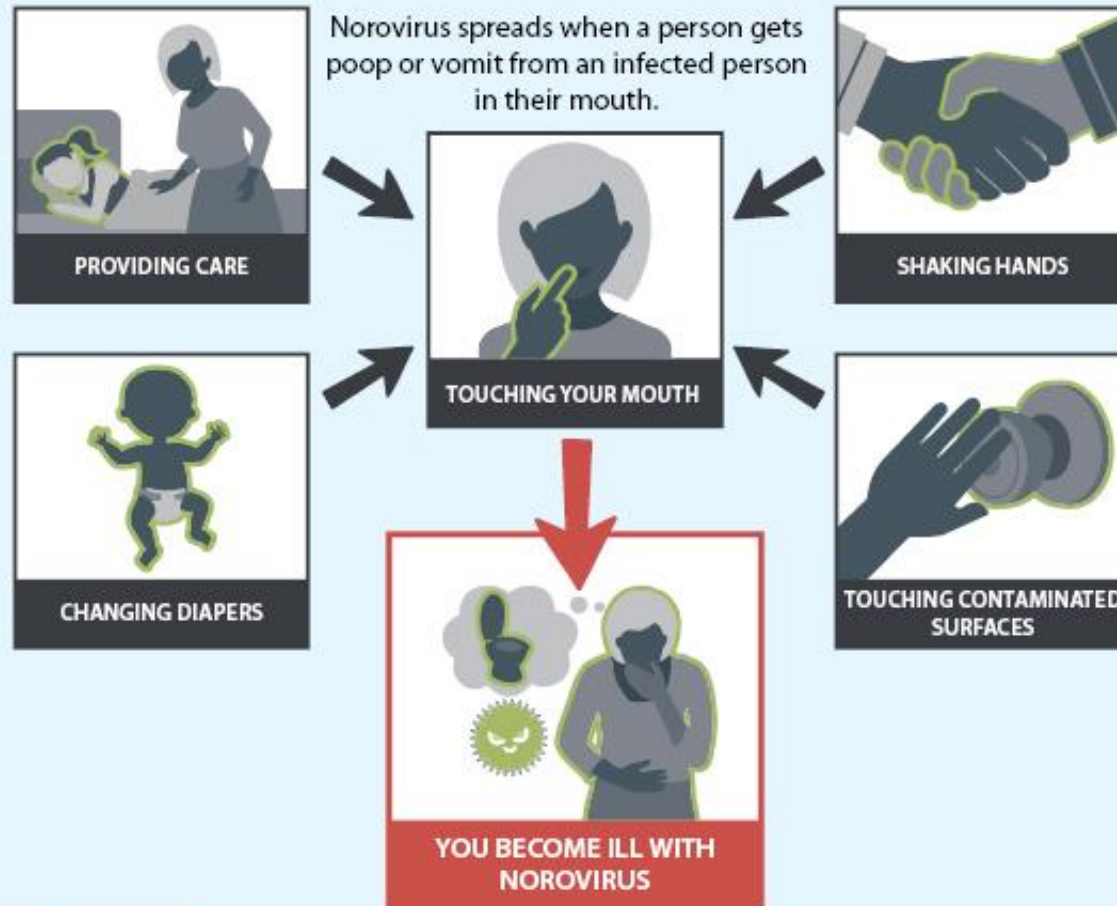
NOTE: Virus can be shed in the stool for several weeks after recovery

Signs & Symptoms

- **Vomiting**
- **Diarrhea**
- **Abdominal cramps**
- **Nausea**
- Low-grade fever
- Chills
- Headache
- Muscle aches



How You Get Norovirus From People or Surfaces



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

For more information, visit www.cdc.gov/norovirus

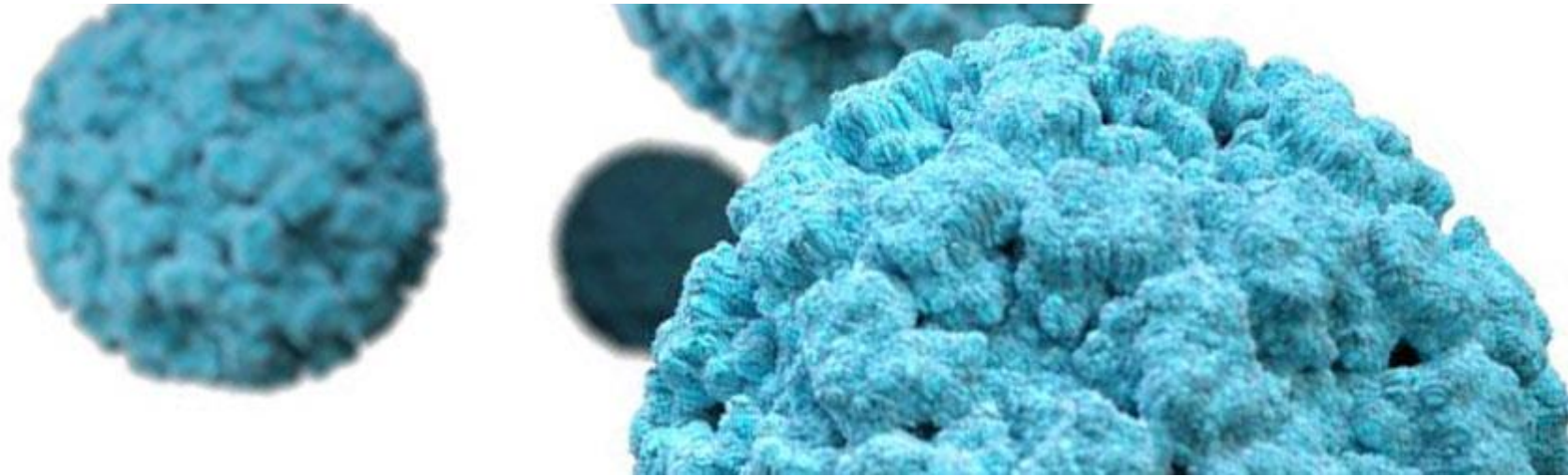
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How is One Exposed to Norovirus?

- A food handler serves food to others when they are sick
- Counters or other surfaces are not properly disinfected
- Food items that are grown or watered with contaminated water
- Recreational drinking water contamination
 - When water is not properly treated or when sewage water leaks
- Improper cleaning practices may spread the virus
- Common areas
 - If someone is sick with norovirus they may unintentionally contaminate surfaces
 - Household contacts or those using communal spaces may be exposed

Treatment and Prevention

- Hand sanitizer **does not work** against norovirus, wash your hands frequently with soap and water for 20 seconds
- Supportive treatment
 - Antibiotics not helpful or recommended!



Outbreak Investigation Criteria

Criteria to determine if the outbreak was likely caused by norovirus (without laboratory confirmation):

- A mean (or median) illness duration of 12 to 60 hours,
- A mean (or median) incubation period of 24 to 48 hours,
- More than 50% of people with vomiting, and
- No bacterial agent found

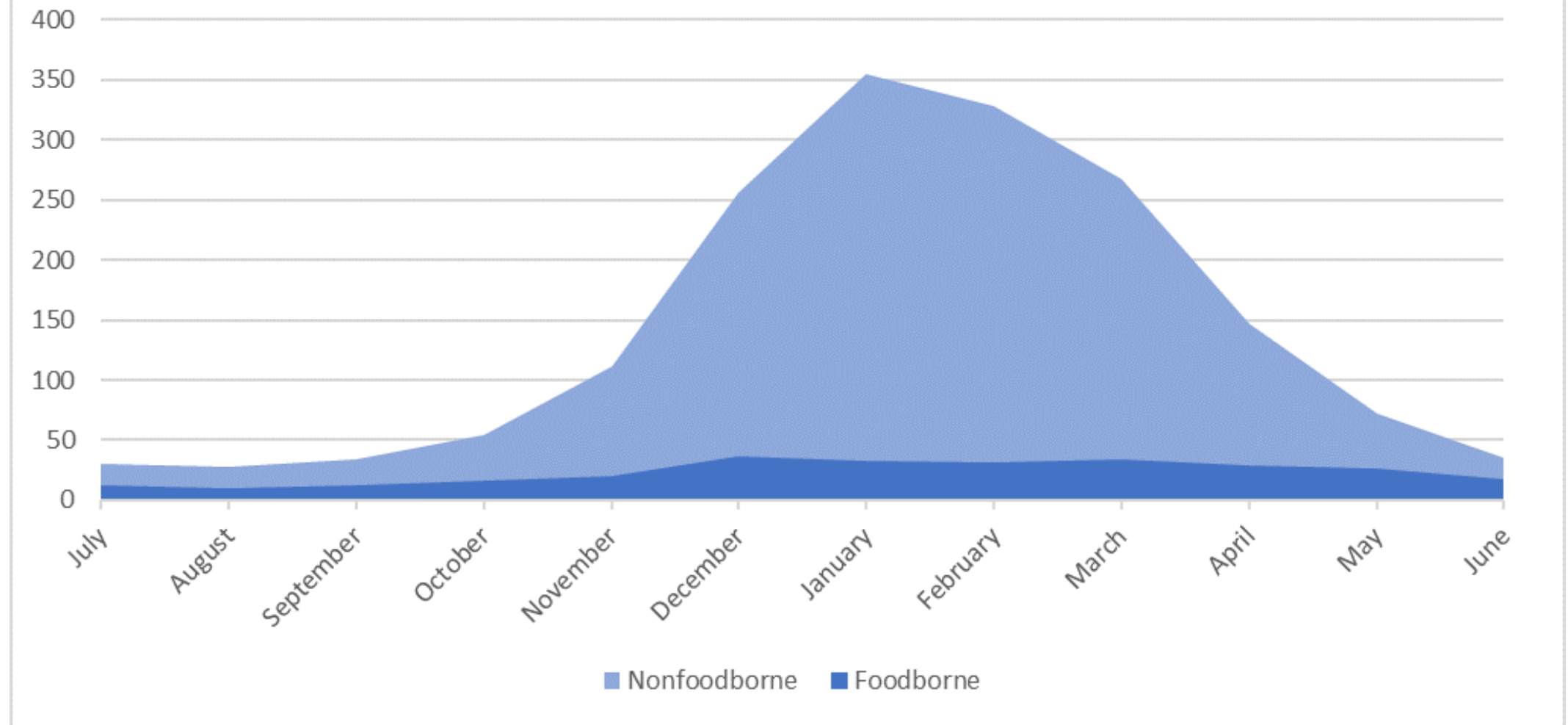
Alternate Criteria:

- A greater proportion of cases with vomiting than with fever,
- Bloody diarrhea in less than 10% of cases, and
- Vomiting in greater than 25% of cases.

National Outbreak Information

- Leading cause of acute gastroenteritis among U.S. children younger than 5 years of age who seek medical care
- 19-21 million cases in the United States, each year
- 2.27 million outpatient visits and 465,000 emergency department visits
 - Mostly in young children
- 109,000 hospitalizations and 900 deaths
 - Mostly among young children and elderly

Average Number of Reported Norovirus Outbreaks by Month 2009-2017



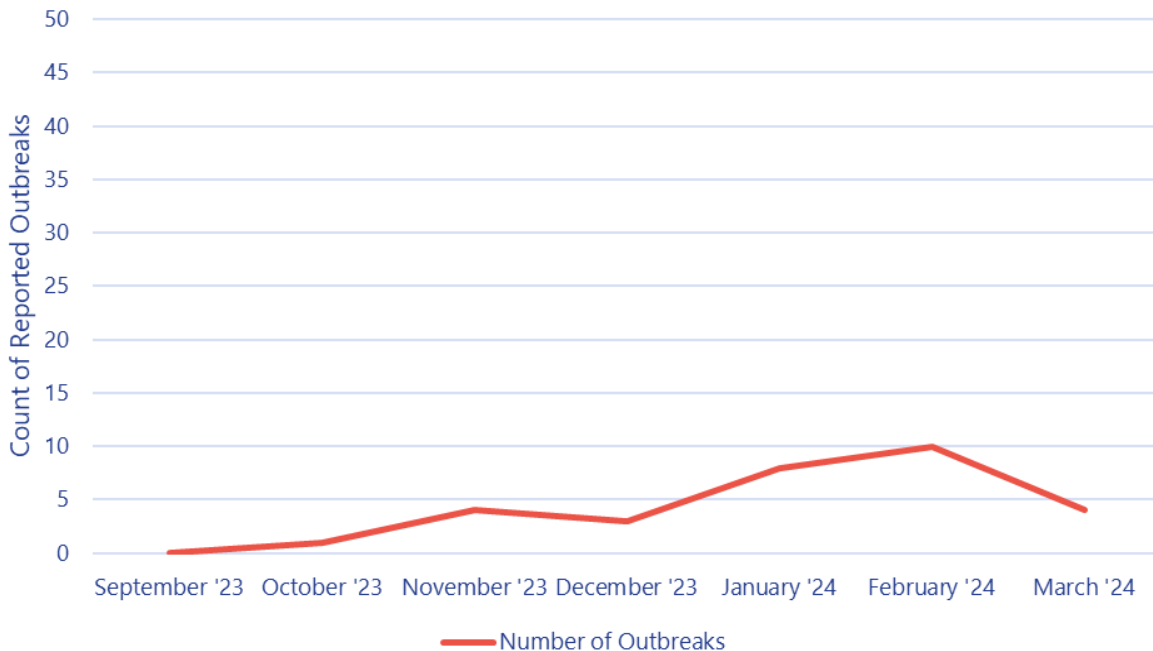
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<https://www.cdc.gov/norovirus/data-research/index.html> - Updated May 8, 2024

2024-25 Season Increase (Indiana)*

* As of 2/12/2025

Suspected Norovirus Outbreaks 2023 and 2024 Noro Season

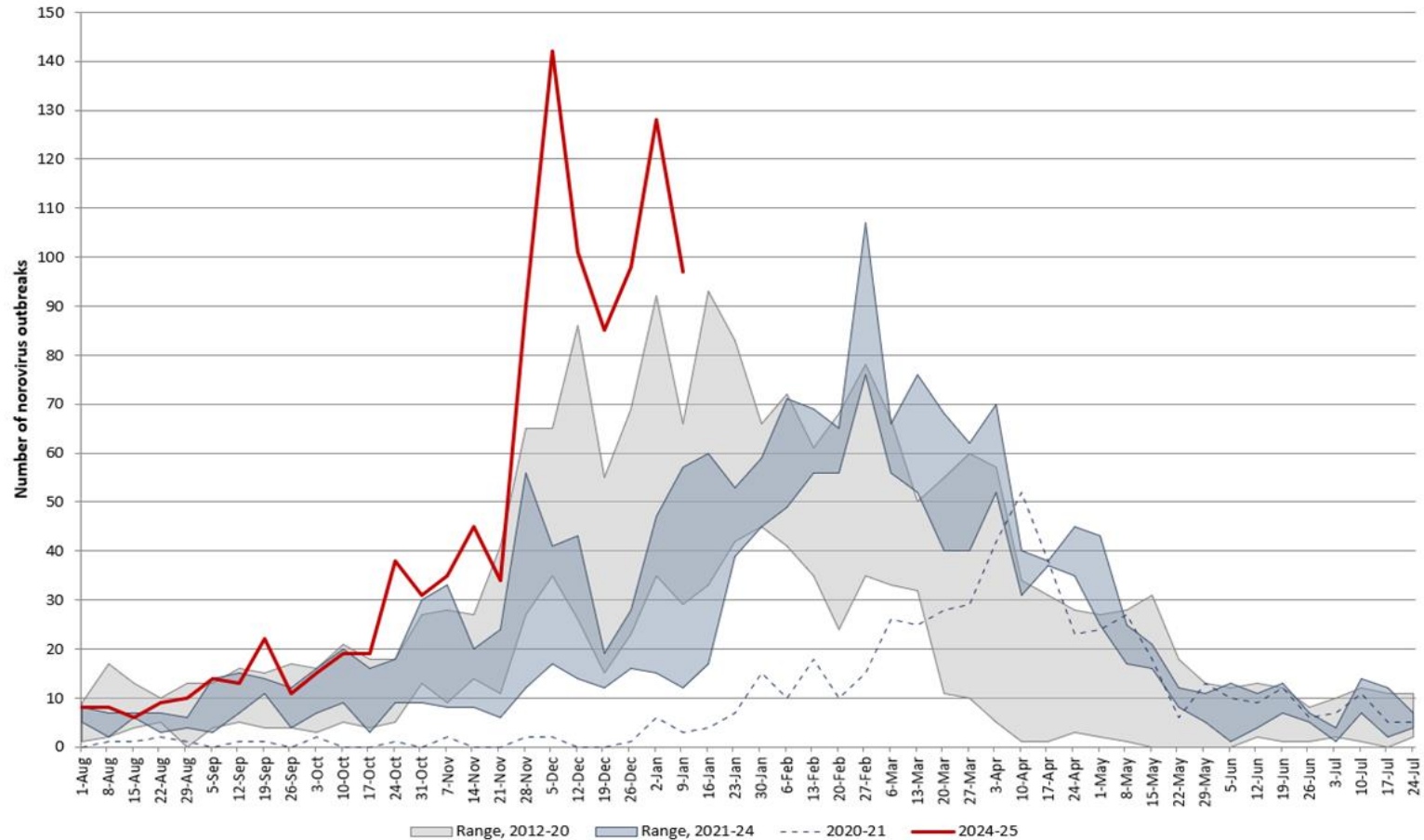


Suspected Norovirus Outbreaks 2024 and 2025 Noro Season



CDC: Season Increase

Of the 14 states that participate in NoroSTAT reporting, the CDC noticed a nearly two-fold increase in the August 2024-January 2025 time frame from the same time in the 2023-24 season



Number of Suspected or Confirmed Norovirus Outbreaks Reported by NoroSTAT-Participating States Per Week, 2012–2025

Norovirus Outbreak Settings

SETTING OF NOROVIRUS OUTBREAKS REPORTED THROUGH THE NATIONAL OUTBREAK REPORTING SYSTEM (NORS), 2009-2012

Exposure setting	Number of Outbreaks	Percentage of Outbreaks
Health care facility	2189	62.7%
Restaurant or banquet facility	771	22.1%
School or day-care facility	214	6.1%
Private residence	69	1.9%
Other/multiple settings	251	7.2%

Data on specific settings are restricted to outbreaks with a single exposure setting; for foodborne outbreaks, setting refers to the setting where implicated food was consumed.

Reporting Criteria

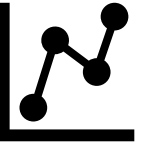
- Please report any suspected outbreaks based on the following criteria:
 - When you detect an increase in gastrointestinal illnesses above the expected baseline, or “normal” rate in the facility
 - When there are more suspected cases than usual in a particular wing or cluster
 - When there is a significant increase in staffing being out sick due to GI symptoms

How to Report an Outbreak



- If you suspect that an acute gastrointestinal illness outbreak is occurring:
 - **An occurrence of two or more similar illnesses resulting from a common exposure that is either suspected or laboratory-confirmed to be caused by norovirus**
- Submit an Incident Report Form through the Incident Reporting System facilitated through the IDOH Gateway with your Access Indiana account

Next Steps



- After submitting the report, an IDOH field team member will reach out to your facility for information on your outbreak, prevention materials, and next steps
- Information collected will include:
 - The total number of residents and staff at the facility
 - The total number of ill residents and staff FINAL numbers only (once the outbreak has been determined to be over, 2 incubation periods—4 days for norovirus)
 - If there are any ill food handlers. If yes, the date they became ill.
 - Also ensure they are no longer working until 24 hours after symptoms resolve.
 - Any additional details that people are experiencing, and if they are resolving after 24-72 hours

Next Steps



In addition to the requested information, your facility will be asked to **fill out a line list**.

- While this step is optional, the line list can provide a lot of specific and important information that improves the data that is eventually sent to CDC
- This **enhances surveillance and provides insights** that can help work toward prevention of outbreaks in the future
- If you do submit a line list, please ensure it is an enteric, encrypted Excel version

Line List

Indiana State Department of Health Enteric Disease Case Report Worksheet																						
<i>Note: Please notify your local health department or the Indiana State Department of Health (phone 317-233-7125, Enteric Epidemiologist) as soon as an outbreak is suspected.</i>																						
Reporting Facility					Contact Name					Est. # of exposed <u>patients</u> during outbreak												
Street Address					Phone Number					Est. # of exposed <u>staff</u> during outbreak												
Outbreak Number (ISDH Assigned)										Est. # of exposed <u>food handlers</u> during outbreak												
Patient/Staff Demographics					Case Location	Symptoms					Diagnostics					Outcome						
EX	Name (or initials, for noro only)	Patient (P) Staff (S) Food Handler (FH)	Age	Sex (M/F)	Unit and/or room number (admit date to onset date)	Symptom onset date (mm/dd/yy)	Vomiting (Y/N)	Nausea (Y/N)	Diarrhea (Y/N)	Bloody Stools (Y/N)	Fever (Y/N)	Abdominal Cramps (Y/N)	Specimen(s) collected for diagnostics (Y/N/UNK)	Date of specimen collection (mm/dd/yy)	Condition Tested For*	Lab Results (+/-)	Location of stool specimen testing (H=HCF lab, C=contracted lab, S=state lab, CD=CDC lab)	First symptom-free date (mm/dd/yy)	Hospitalized (Y/N/Unk)	Number of Days Hospitalized (if applicable)	Died (Y/N/Unk)	
	Johnny Smith	P	55	M	222	1/1/2014	Y	Y	Y	N	Y	N	Y	1/2/2014	Noro	+	S	1/5/2014	N	n/a	N	
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It is highly preferred to use the encrypted Excel version of the [enteric line list](#)



Next Steps – Stool Testing

Another important step is to confirm the etiology of the outbreak:

Stool

- **Whole stool or stool**
- **Cary Blair medium**
- **5 specimens recommended per outbreak**
 - Although, we will accept as few as two to confirm etiology
- **Collected within 48-72 hours after symptoms start.**
 - Can be detected in stool specimens that are collected after symptom resolution (up to 7 to 10 days after onset)

Next Steps – Stool Testing



- Importance of specimen collection
- Surveillance and the confirmation of norovirus etiology
- Private testing results > sent to IDOH when closing the outbreak
 - You can have the samples sent to IDOHL to be genotyped



Next Steps

- Your facility will also be provided with several resources to aid in cleaning and mitigation including:
 - **Stool specimen collection guide**
 - **Sanitizing solutions instructions**
 - **Control recommendations document**
 - **Outbreak Checklist**

Other resources:

<https://www.cdc.gov/norovirus/index.html>

<https://www.cdc.gov/norovirus/trends-outbreaks/index.html>

Cleaning

- A chlorine solution is best for cleaning and prevention, specifically on high touch surfaces and bathrooms.
- You should use a chlorine bleach solution with a concentration of 1,000 to 5,000 ppm (5 to 25 tablespoons of household bleach [5% to 8%] per gallon of water) or other disinfectant registered as effective against norovirus by the Environmental Protection Agency (EPA)
- [List G: Antimicrobial Products Registered with EPA for Claims Against Norovirus \(Feline calicivirus\) | US EPA](#)

Cleaning

- Clean up vomiting or diarrheal incidents immediately, using appropriate PPE. Do not use a vacuum.
- Always use best practices for cleaning/sanitizing, washing linens, etc.
- [Clean Up After Someone with Norovirus Vomits or has Diarrhea](#)

Prevent the Spread of Norovirus

- When possible, do not transfer patients into or out of the facility while they have vomiting or diarrhea
- Visitors with vomiting or diarrhea should not visit the facility while ill
- Staff and volunteers should stay home from work if ill with vomiting or diarrhea
- Clean/sanitize at least daily until the outbreak is over
 - 1 week after last illness onset. (Be sure to send the line list when the outbreak is over)
- Discontinue self-service food and drinks
- Restrict sharing of communal or homemade food items during outbreak
- [CDC Resource for Prevention and Control of Norovirus](#)

protect yourself from norovirus



▶ wash your hands often



▶ cook shellfish to 140°F or higher



▶ when you are sick, don't prepare food or care for others



▶ rinse fruits & vegetables thoroughly



▶ after vomiting or having diarrhea, immediately clean & disinfect surfaces & wash soiled laundry

Resources

- [Norovirus Fact Sheet for Food Workers](#)
- [CDC Norovirus in Healthcare Facilities Fact Sheet](#)
- We report de-identified outbreaks of norovirus to NORS through the CDC
 - [Learn more about Norovirus Reporting and Surveillance](#)
- [CDC Recommendations for Norovirus Specimen Collection](#)
 - IDOHL can test collected specimens
 - If a specimen is collected and tested from another laboratory, please provide the results to your IDOH field epidemiologist contact

Questions?

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