

Preparing for Norovirus Season in Schools

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Norovirus Overview

Norovirus Background

Causes acute, self-limited diarrhea along with

Vomiting

Fatigue

- Nausea
- Headache
- Stomach cramps
- Fever

Body aches

Incubation usually 12-48 hours

Duration typically 2-3 days

Can affect everyone, but may be more severe in vulnerable populations

No long-term immunity to the virus





How You Get Norovirus From People or Surfaces



Norovirus



Figure: **Burden of Norovirus in the United States**. Estimates of the annual number of illnesses and associated outcomes for norovirus disease in the U.S., across all age groups. Lifetime risks of disease are based on a life expectancy of 79 years of age.



Seasonality

Number of Norovirus** Outbreaks Reported by Quarter 2015-2024



*2024 data is preliminary ** Contains confirmed and suspected outbreaks





Norovirus** Outbreaks in TN by Setting



*2024 data is preliminary ** Contains confirmed and suspected outbreaks



Great, but what do we <u>do</u> about it?

Before An Outbreak



Communicate and educate



Clean with appropriate tools

Establish and maintain an outbreak plan

- Report a higher than normal number of staff and/or students with V/D
 - Chain of communication
 - Teachers, school nurses, administrative staff, local health department





Communicate and educate

- Educate all staff about norovirus and outbreaks
 - During new employee training and/or annually
 - Local or state health department can assist
- Cross training to support coverage of ill employees
- Communication
 - Send-home letters to parents/guardians
 - Signage addressing hand hygiene

ATTENTION!

BE SURE TO WASH YOUR HANDS TO PREVENT THE SPREAD OF ILLNESS



Cleaning and Disinfecting for Norovirus

- Know how to clean certain surfaces and what chemicals to use
- Concentration will affect bleach mixture
- Verify if wipes, other tools are appropriate for norovirus
- Prepped kits or carts equipped for norovirus disinfection
- Advise food workers of proper hand washing, cleaning and sanitation of contaminated surfaces



Norovirus Guidelines

- Guidelines for Schools
 - Outbreak prevention, detection, and control
 - Cleaning protocols
 - Staff and student exclusion criteria
 - Documentation of cases



TN

During An Outbreak



Outbreak identification and reporting

- All outbreaks are reportable to public health by TN law
 - Report a higher than normal number of staff and/or students with V/D
 - Do NOT wait for laboratory test confirmation
 - Maintaining a line list of cases can help recognize an outbreak

Contact public health officials

- Testing kits available through TDH Laboratory Services
 - Stool samples from ~3 5 ill persons within 48-72 hours after the onset of symptoms (up to 2 weeks)
 - Takes 2 positives to confirm outbreak



Who you gonna call?

- Foodborne outbreak (entericoutbreak.health@tn.gov)
- Local or regional health department

Local and Regional Health Departments



Ill staff and students

- Maintain a log of ill staff and students
- Staff
 - Should be symptom-free for 48 hours before returning to school.
- Students
 - Ill students should be picked up immediately.
 - Exclude from activities where they could infect others, pause communal activities
 - Should be symptom-free for 48 hours before returning to school.



Appendix 6: Suggested Case Log (Line List)

N=Nausea, V=Vomiting, D=Diarrhea, AC=Abdominal Cramps, Fe=Fever, Ch=Chills, Hosp=Hospitalization

No.	Name	Staff/Resident	Age	Sex	Unit	Room No.	Onset Date	Recovery Date	Ν	V	D	Ac	Fe	Ch	Hosp.	Lab Results
1	Dr. Suzie	Staff	45	F			11/28/2021	11/30/2021	. Y	Υ	Υ	Ν	Ν	Ν	Ν	Positive
2	Patrick	Resident	78	Μ	В	302	11/28/2021	12/5/2021	. Y	Υ	Υ	Y	Y	Ν	Ν	Pending
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Enhanced cleaning and disinfection

- Disinfection
 - Wipe up vomit or diarrhea using appropriate method
 - Wear protective clothing, such as disposable gloves, apron and/or mask while sanitizing
 - Immediately sanitize with a disinfectant for norovirus
 - Focus on frequently touched surfaces
 - Dispose of paper towel/waste in a plastic bag or biohazard bag
 - Wash soiled linens with detergent and HOT water for the maximum available time setting
 - $_{\odot}$ Do not shake any soiled linens or vacuum soiled carpets



Enhanced cleaning and disinfection

- Food Handling and Dining
 - Require food service staff to wear PPE
 - Ensure soap, clean water, and paper towels are available in dining areas
 - Throw away all potentially contaminated food
 - Continue for at least 96 hours after last case's symptoms resolve







Resolution of outbreak

- After 2+ incubation periods with no new cases
 - For norovirus, this is **around 4 days**
- Provide a final number or line list of cases to public health
- Outbreaks can and SHOULD be used as a learning opportunity
 - Hot wash with public health and school staff available





Communicable and Environmental Diseases and Emergency Preparedness

Recommendations for the Prevention and Control of Viral Gastroenteritis Outbreaks in Schools and Childcare Settings



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