

Summary and Action Items

- Norovirus outbreaks can occur at any time, but they most commonly are reported between November and April.
- Healthcare providers should alert local health departments of people ill with gastrointestinal illness that are associated with groups or events with other people ill with similar symptoms.
- Healthcare providers and food handlers who have, or suspect they may have norovirus, should not return to work until vomiting and diarrhea has ceased for 48 hours.
- Persons suspected to have norovirus, should not return to school or daycare while acute symptoms are present.

Background

IDPH is seeing an increase in the number of norovirus outbreaks being reported in many settings. Anyone can get sick with norovirus which spreads quickly and very easily.

Symptoms

Signs and symptoms of norovirus often include vomiting, diarrhea, nausea, and abdominal cramping. Fever, headache, and body aches may also be reported. A person usually develops symptoms 12 to 48 hours after being exposed to norovirus. Most people with norovirus feel better within one to three days without treatment.

Transmission

Norovirus can be passed through the feces and vomitus of infected persons with humans being the only reservoir. People can become infected with norovirus by person-to-person contact, consuming contaminated food or water, by coming into contact with contaminated surfaces, or by tiny particles in vomit spread through the air that land on surfaces or enter a person's mouth. Norovirus outbreaks have been reported in many settings and are most commonly reported in long-term care facilities, restaurants and catered events, schools, and day care centers.

Diagnosis

Norovirus infection is diagnosed by detecting viral antigen or viral RNA in stool or vomitus. Diagnostic tests are available at many clinical laboratories.

Prevention

Proper hand hygiene practices are the best way to prevent the transmission of norovirus. Hands should be washed with warm water and soap. Hand sanitizer can be utilized in addition to handwashing, but hand sanitizer should not be a substitute for handwashing. People who have norovirus should not work in sensitive occupations,

work as food handlers, or prepare food for others until 48 hours after vomiting and diarrhea have resolved. Persons with vomiting or diarrhea believed to be infectious in nature, including norovirus, should not attend school or daycare while acute symptoms are present.

Promptly cleaning up vomit or diarrhea can assist with decreasing transmission. Affected areas should be cleaned with an Environmental Protection Agency-approved disinfectant or a freshly prepared sodium hypochlorite solution. Additional information on cleaning can be found in IDPH Guidance for Prevention of Acute Gastroenteritis (AGE) Outbreaks in Daycare Facilities and Schools (attached).

Healthcare Providers, IDPH, and LHD Response

Healthcare providers should notify local health departments of suspected or confirmed outbreaks of acute gastroenteritis as soon as possible. Providers should also remind staff that work in sensitive occupations to not return to work until vomiting and diarrhea have resolved for 48 hours.

Local health departments are asked to share this information with schools, daycare facilities, licensed food establishments, and other facilities that may be impacted in your jurisdiction. Local health departments should investigate and report outbreaks to IDPH by entering the outbreak into the IDPH Outbreak Reporting System (ORS).

Contact

For questions or additional information about this investigation, please contact the IDPH Communicable Disease Control Section at 217-782-2016. Clinicians should contact their [local health department](#) to identify prevention resources and to report cases.

Additional Resources

IDPH Guidance for Prevention of Acute Gastroenteritis (AGE) Outbreaks in Daycare Facilities and Schools - Attached

[CDC Norovirus Website](#)

[IDPH Norovirus Website](#)

[IDPH Control of Communicable Disease Code](#)

[Norovirus Transmission Infographic](#)

Target Audience

Local Health Departments, Infectious Disease Physicians, Family Practice and Internal Medicine Physicians, Pediatricians, Geriatric Physicians, Nurse Practitioners, Physician Assistants, Hospital Emergency Departments, Infection Control Preventionists, and Laboratories

Date Issued

March 18, 2022

Author

Communicable Disease Control Section

MEMORANDUM

TO: Illinois Daycare Facilities and Schools; Local Health Departments and Regional Offices of the Illinois Department of Public Health

FROM: Janette Candido, Epidemiologist
Communicable Disease Control Section

DATE: December 20, 2011

SUBJECT: Guidance for Prevention of Acute Gastroenteritis (AGE) Outbreaks in Daycare Facilities and Schools

Local health departments are asked to forward the following information to schools and daycare facilities in their jurisdiction.

This guidance supersedes the previously issued “*Guidance for Prevention of Norovirus Outbreaks in Daycare Facilities and Schools*,” posted on November 17, 2010 in the intranet Communicable Disease Updates page.

The Illinois Department of Public Health Communicable Disease Control Section (CDCS) defines an AGE outbreak in a school or day care setting as a cluster of four or more persons with acute-onset of vomiting and/or diarrhea in a classroom or in an otherwise defined group of students; or cases in more than 10% of the school's/daycare's census in a single day. This definition differs from that of most other outbreaks; including viral AGE outbreaks in long-term care facilities or other locations where people gather such as restaurants, banquet halls etc.

Norovirus, formerly called Norwalk-like virus, is part of the *Calicivirus* family which is the most common virus that causes AGE in humans. Aside from acute onset of vomiting or diarrhea, other symptoms include nausea, abdominal cramps, low-grade fever, and body aches. Norovirus is very contagious, and humans are the only known reservoir. The virus can be spread through food, water, or by person-to-person transmission. The virus has an incubation period of 12-48 hours and symptoms typically resolve in 1- 3 days even without treatment. Norovirus outbreaks are common in schools and daycare facilities particularly in fall or winter months.

The following recommendations are key steps in investigation and response to AGE outbreaks in daycare facilities and schools from the Centers for Disease Control and Prevention (CDC) 2011:

1. **Daycare facilities and schools are required to report all confirmed or suspected outbreaks of acute gastroenteritis to the local health department as soon as possible.**
2. Initiate investigation promptly to help identify predominant mode of transmission and possible source.
 - It is recommended that schools and daycares maintain a daily log of the number of students and teachers absent due to AGE illness. A line list is available to log reports of absenteeism due to AGE illness.
3. Promote hand hygiene: **Good hand hygiene is the best way to prevent transmission of AGE.**
 - Hands should be washed with warm water and soap for a minimum of 20 seconds.
 - Children should be taught good hand hygiene practices, and should wash their hands after using the bathroom and before eating.

- Staff, especially staff responsible for caring for diapered children, should wash their hands frequently and particularly prior to contact with any diapered child.
4. During outbreaks, washing hands with soap and warm water is preferable to using alcohol-based hand sanitizers. Alcohol-based hand sanitizers should only be used when washing with soap and warm water is not possible but not as a substitute to soap and warm water hand washing.
 5. Exclusion:
 - Children and staff who are experiencing symptoms of AG should stay home from school or daycare until **24 hours** after symptoms have stopped.
 - Staff involved in food preparation should be restricted from preparing food for **48 hours** after symptoms stop. The staff may perform other duties not associated with food preparation 24 hours after symptoms have stopped until the 48 hour restriction for food preparation activities has ended.
 6. Reinforce effective preventive controls and employee practices (e.g., elimination of bare-hand contact with ready-to-eat foods and proper cleaning and sanitizing of equipment and surfaces).
 7. If a vomit or fecal spillage occurs, the area should be sanitized with an Environmental Protection Agency-approved disinfectant or a freshly prepared sodium hypochlorite solution. The hypochlorite (bleach) solution should be a **1:50 dilution**; mix 1/3 cup bleach with 1 gallon water. For heavily soiled surfaces, use a dilution of 1:10, or 1 2/3 cup bleach to one gallon of water. **Allow the solution to be in contact with the surface for 10-20 minutes** or until it has air dried. Materials that may be put in children's mouths (e.g. toys) should be rinsed. For porous surfaces such as upholstered furniture, carpets or clothing, clean visible debris with an absorbent, double-layer material. Steam clean or wash the contaminated surface at 158° F for 5 minutes or 212° F for 1 minute. Custodial staff should wear masks and gloves when cleaning areas contaminated by feces or vomitus. Throw away all disposable materials in sealed bags.
 8. Bathrooms and other communal spaces should be cleaned more frequently during suspected Norovirus outbreaks. Frequently touched surfaces, such as door handles, classroom materials, and computer mice, should be disinfected with an approved product. For Day Care Centers, toys should be cleaned as often as possible. If a toy is not able to be cleaned by routine methods they should be put away during the course of the outbreak. Also toys which may fit in a child's mouth should be put away during the course of the outbreak.
 9. Facilities serving or sharing food should take these extra precautions:
 - Restrict sharing of foods brought from private homes.
 - Restrict students' sharing of any communal food items in classrooms. Instead, the teacher should hand out items to be shared after washing his/her hands.
 - Stop using self-service food bars. Do not let children serve themselves in any manner which might promote direct hand contact with shared foods.
 10. Assist the local health department in collecting whole stool specimens from at least two and no more than five persons during the acute phase of the illness (preferably <=72 hours from onset). The specimens can be submitted to a commercial laboratory for Norovirus testing or may be submitted to the IDPH lab assigned to test Norovirus in your area. Specimens should be collected in a clean container and shipped on cold packs. The specimen does not need to be frozen. Specimens should be kept cold and should not be sent to arrive on Fridays, weekends, or holidays.
 - The facilities should assist in the completion and submission of a final report form no more than 30 days after the last onset of illness.