ILLINOIS DEPARTMENT OF PUBLIC HEALTH



# **NOROVIRUS**

#### What are noroviruses?

Noroviruses are a group of related viruses that affect the intestinal tract causing gastroenteritis illness. This group of viruses has been also referred to as caliciviruses and Norwalk-like viruses. These viruses are an important cause of gastrointestinal illness throughout the United States, including Illinois.

## What are the symptoms of noroviruses?

Many of the noroviruses cause similar symptoms that usually occur between 24 hours and 48 hours after exposure. They include nausea, vomiting, diarrhea, abdominal pain, body aches, headache, tiredness and low-grade fever. Symptoms typically last 24 hours to 60 hours and subside on their own. There are no known long-term effects after recovery from this infection.

#### How common is norovirus infection?

The U.S. Centers for Disease Control and Prevention estimates that at least half of all foodborne outbreaks of gastroenteritis can be attributed to noroviruses. Some studies indicate that more than 60 percent of the U.S. population is exposed to one or more of these viruses by the age of 50. Noroviruses are highly contagious and can spread easily from person to person.

### How do people come in contact with these viruses?

Humans are the only source for these viruses. These viruses do not multiply outside the human body. The viruses are present in the feces of infected persons and can be transmitted to others when hands are not thoroughly washed after having a bowel movement. When an infected person who did not wash hands after toileting handles food that is not later cooked, others who eat the food can become infected. Heating foods to cooking temperatures kills these viruses. People also can be infected by drinking water contaminated by sewage containing one of these viruses or by consuming ice made from contaminated water. Unless thoroughly cooked, shellfish (such as oysters) harvested from waters containing sewage can transmit the viruses. These viruses also are transmitted readily from person to person when hands are not washed after toileting. There is some evidence that the viruses can be transmitted by aerosolized vomitus or contact with objects contaminated with fecal material.

## How are these infections diagnosed?

Standard hospital laboratories and commercial laboratories usually are not equipped to detect noroviruses. The specialized laboratories that can detect these viruses perform

tests on stool specimens from an infected person to detect the virus. In Illinois, only the Illinois Department of Public Health's laboratories have the capability to confirm a diagnosis of one of these viruses. This laboratory service is reserved for testing a small number of people associated with recognized outbreaks and is not available for testing individual cases of gastrointestinal illness.

## If I have had a norovirus infection in the past, can I get it again?

Yes. It appears that immunity following norovirus infection varies from person to person. It is possible some persons achieve immunity but more studies are needed to better understand susceptibility to reinfection.

## How can these infections be prevented?

Food handlers should practice careful handwashing after toileting and before food preparation. Food handlers should not have bare hand contact with ice. Persons involved in food preparation who have symptoms of gastroenteritis should be restricted from work until they no longer have diarrhea. Water supplies should be protected from the risk of contamination by sewage. Plumbing in dwellings and business establishments should be constructed with no cross-connections to prevent sewage from entering the drinking water supply.

All persons can decrease their chance of coming in contact with noroviruses by following these preventive steps:

- Frequently wash your hands, especially after toileting or changing diapers and before eating or preparing food.
- Carefully wash fruits and vegetables, and steam oysters before eating them.
- Thoroughly clean and disinfect contaminated surfaces immediately after an
  episode of diarrhea or vomiting by using a bleach-based household cleaner. If
  using liquid household bleach prepared daily, one part bleach to nine parts water
  (1:10 dilution) is recommended.
- Immediately remove and wash clothing or linens that may be contaminated with feces or vomitus (use hot water and soap).
- Flush or discard any vomitus and/or stool in the toilet and make sure that the surrounding area is kept clean.
- Persons who are infected with norovirus should refrain from food preparation while they have symptoms and for three days after they recover from their illness.

Outbreaks of norovirus in long-term care facilities are not uncommon and are frequently transmitted from person to person (including residents, staff, visitors and volunteers). Strict compliance with good hygiene practices is important to prevent the spread of norovirus in this population.



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