

**Norovirus**

(Viral Gastroenteritis or Norwalk-like Virus)

What is norovirus?

Noroviruses cause diarrhea and vomiting in people worldwide. The disease occurs most common in outbreaks but also occurs sporadically, affecting all age groups.

Who is at risk for norovirus?

All people of all ages are at risk for norovirus.

What are the symptoms of norovirus?

The symptoms of norovirus illness usually include nausea, vomiting, diarrhea and some stomach cramping. Low-grade fever, chills, headache, muscle aches and a general sense of tiredness is also common. The illness often begins 24 to 48 hours after exposure to the virus. Symptoms usually last about one to two days. In general, children experience more vomiting than adults.

How soon do symptoms appear?

Symptoms of norovirus illness usually being about 24 to 48 hours after exposure to the virus, but may appear as early as 12 hours after exposure.

How is norovirus spread?

Noroviruses are very contagious and can spread easily from person to person, probably through fecally contaminated food, hands or surfaces touched by objects or hands put into the mouth (fecal-oral route). Both stool and vomit are infectious. People can become infected with the virus in several ways, including eating food or drinking liquids that are contaminated with norovirus, touching contaminated surfaces or objects and then placing their hands in their mouth, or having direct contact with another person infected with norovirus.

When and for how long is a person able to spread the disease?

People can spread the disease from the moment they begin feeling ill to at least 2 to 3 days after diarrhea stops. Some people can shed the virus in their stools and may be contagious for as long as two weeks after recovery.

How is a person diagnosed?

A laboratory can identify norovirus in stool specimens. Sometimes blood tests looking for antibodies against norovirus also are performed when stool tests are inconclusive or were not done.

What is the treatment?

Currently, there is no medication for norovirus and no vaccine to prevent infection.

Does past infection make a person immune?

No. Norovirus illness can recur throughout a person's lifetime.

Should children or others be excluded from day care, school, work or other activities if they have norovirus?

Yes, if the child has:

- Vomited two or more times within the previous 24 hours, unless the vomiting is determined to be caused by a noncommunicable condition and the child is not in danger of dehydration.
- A fever or is unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

Food workers should not prepare food until two or three days after they feel better. In addition, because the virus continues to be present in the stool for as long as two weeks after the person feels better, strict hand washing after using the bathroom and before handling food items is important in preventing the spread of norovirus.

What can be done to prevent the spread of norovirus?

- Frequently wash your hands, especially after toilet visits and 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 illness by using a household cleaner containing bleach.
- Immediately remove and wash clothing or linens that may be contaminated with virus after an episode of illness (use hot water and soap).
- Flush or discard any vomit and/or stool in the toilet and make sure that the surrounding area is kept clean.

Additional Information:

For additional information, call the North Dakota Department of Health at 800.472.2180.

Resources: American Academy of Pediatrics. [Norovirus]. In: Pickering LK, ed. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:[123-127, 226-227]. Control of Communicable Disease Manual, 18th Edition-2004, Heymann, David, MD ed.

