

NOROVIRUS

What you need to know

► What is norovirus?

Norovirus is a virus that causes vomiting and diarrhea in people. It is sometimes called the “stomach flu,” but it has nothing to do with the flu (influenza) virus.

► What are the symptoms of this illness?

Norovirus illness usually begins 24 to 48 hours after exposure, but can appear as early as 10 hours after exposure. Exposure means when the norovirus enters your body.

Symptoms usually include nausea, vomiting, diarrhea and stomach cramping. Sometimes people have a low-grade fever, chills, headache, muscle aches and a general sense of tiredness. The illness is usually brief, with symptoms lasting only one or two days.

► How serious is norovirus?

Norovirus disease is usually not serious, but people may feel very sick. Most people get better within one or two days and have no long-term health effects from the illness.

Losing too much fluid through vomiting and diarrhea can be serious. Sometimes people are unable to drink enough liquids to replace what they lose from vomiting and diarrhea, and they can become dehydrated. These people need to get medical care. This problem usually occurs only among the very young, the elderly and persons with weakened immune systems. The main cause of death after norovirus infection is due to dehydration.

► How is norovirus spread?

Norovirus is **very contagious** and spread easily from person to person. The virus is found in the stool and vomit of infected people. People can become infected in several ways:

- Touching surfaces or objects contaminated with norovirus and then touching their mouth before handwashing,
- Having direct contact with another person who is infected and then touching their mouth before handwashing.

- Eating food or drinking liquids that are contaminated by infected food handlers.
- Outbreaks also have occurred from eating undercooked oysters harvested from contaminated waters — cooking kills the virus. Drinking water contaminated by sewage can also be a source of these viruses.
- Persons working in daycare centers or nursing homes should pay special attention to children or residents who have norovirus illness. This virus can spread quickly in these places.

► How long are people contagious?

People infected with norovirus are contagious from the moment they begin feeling ill to at least three days after recovery. Some people may be contagious for as long as two to three weeks after recovery.

Therefore, **good handwashing** is important. Persons infected with norovirus should not prepare food while they have symptoms and for three days after they recover. Infected people do not become long-term carriers of norovirus.

► Who gets norovirus infection?

Anyone can become infected with these viruses. Because there are many different strains of norovirus, norovirus infection and illness can re-occur throughout a person’s lifetime.

► What treatment is available for norovirus?

Currently, there is no specific medication or vaccine for norovirus. Norovirus infection cannot be treated with antibiotics.

Drinking fluids, such as juice or water, can reduce a person’s chance of becoming dehydrated. Sports drinks do not replace the nutrients and minerals lost during this illness. **Dehydration can lead to serious problems.** Severe dehydration may require hospitalization for treatment with fluids given through your vein (intravenous or IV fluids).

Continued on back

NOROVIRUS: *What you need to know*

Watch for signs of dehydration in children who have norovirus illness. Children who are dehydrated may cry with few or no tears and be unusually sleepy or fussy.

► Do infected people need to be excluded from school, work or daycare?

Since the virus is passed in vomit and stool, children should not go to daycare or school while they have diarrhea or vomiting. Once illness ends, children can return to daycare, but handwashing must be strictly monitored.

Persons who work in nursing homes, take care of patients or handle food should stay out of work until at least three days after symptoms end.

► How about food handlers?

Food contamination by infectious food handlers is a common cause of norovirus gastroenteritis outbreaks. Ready-to-eat foods that require handling but no subsequent cooking (e.g., salads and deli sandwiches) pose greater risk.

- For three days after resolution of illness, ill food handlers should be excluded from work or work in areas where they are not in contact with food,
- For three weeks after resolution of illness, food handlers should wash their hands and wear gloves whenever they handle food ready to be served.

► Why is norovirus so easily transmitted?

It is very persistent in the environment. The bug can survive on hard surfaces for up to 12 hours and on soft ones for up to 12 days. It can live for months, possibly years, in contaminated still water.

Stools from a sick person are loaded with viruses: between 100,000 to 10 million viruses per gram of stool.

It takes very few viruses to infect someone, only about 10. With 1 gram of stool, one could infect more than a million people.

► How can norovirus infections be prevented?

Practice proper hand hygiene. Wash your hands:

- After using the toilet or changing diapers,
- Always before eating, preparing or handling food,
- Before giving yourself or someone else medicine, and
- Use alcohol-based hand sanitizers in addition to handwashing, but you should not use hand sanitizer as a substitute for washing your hands with soap and water.

Handle and prepare food safely.

- Carefully wash fruits and vegetables before preparing and eating them.
- Cook oysters and other shellfish thoroughly before eating.
- Noroviruses are relatively resistant to heat. They can survive temperatures as high as 145 degrees Fahrenheit and quick steaming processes that are often used for cooking shellfish.
- Food that might be contaminated with norovirus should be thrown out.
- Keep sick infants and children out of areas where food is being handled and prepared.



When you are sick, do not prepare food or care for others.

- Do not prepare food for others or provide healthcare while you are sick and for at least three days after symptoms stop.
- This applies to sick workers in restaurants, schools, daycares, long-term care facilities and other places where you may expose people to norovirus.

Clean and disinfect surfaces.

- After someone vomits or has diarrhea, always thoroughly clean and disinfect the entire area immediately.
- Put on rubber or disposable gloves, and wipe the entire area with paper towels, then disinfect the area using a bleach-based household cleaner as directed on the product label.
- Leave the bleach disinfectant on the affected area for at least 5 minutes, then clean the entire area again with soap and hot water.
- Finish by cleaning soiled laundry, taking out the trash and washing your hands.
- To help make sure that food is safe from norovirus, routinely clean and sanitize kitchen utensils, counters and surfaces before preparing food.
- 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).

Wash laundry thoroughly.

- Immediately remove and wash clothes or linens that may be contaminated with vomit or poop.
- Handle soiled items carefully without agitating them.
- Wear rubber or disposable gloves while handling soiled items and wash your hands after.
- Wash the items with detergent and hot water at the maximum available cycle length, then machine dry them at the highest heat setting.