What Is Norovirus?

Learning how to control the spread of norovirus
IMPORTANT

Norovirus is a common cause of vomiting and diarrhea that can become life-threatening in certain situations. If you or someone in your family has been diagnosed with norovirus, there are steps you need to take now to avoid spreading it to your family and friends.

Follow the recommendations and practice good hygiene to take care of yourself. Norovirus causes physical discomfort and emotional stress. This booklet tells you how you can manage norovirus infection and keep from spreading it to others. For more information about norovirus infection, please contact your healthcare provider.
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What is norovirus and is it serious?

Norovirus are a group of viruses that are the most common cause of gastroenteritis (gas-troh-en-tuh-rah-y-tis) in the United States. Gastroenteritis means inflammation of the stomach and intestines. Incorrectly referred to as the ‘stomach flu’ (not related to the flu at all), typical symptoms include nausea, throwing up diarrhea and stomach cramps. Occasionally, people will also experience mild fever, chills, headache, body aches and feel very tired.

Anyone can get norovirus, a common form of viral gastroenteritis. The illness ranges from mild to severe, even life-threatening. Norovirus is very contagious and can be easily spread to other people through direct contact and contact with contaminated surfaces.

The illness begins suddenly with throwing up and/or diarrhea; children usually throw up more often than adults. The illness is unpleasant but doesn’t last long. For most people, symptoms last just 24 to 48 hours with no long term health effects due to the illness. The illness can be more severe among the very young, elderly and people with weakened immune systems. More severe forms of the illness are generally related to dehydration (not enough fluids in your body) and rarely deaths have occurred.

How can I get norovirus?

Norovirus is found in the stool and vomit of people who are infected (ill) with the virus. You can become infected with the virus in the following ways:

- Direct person-to-person contact such as caring for an ill person, sharing eating utensils or kissing a person who is ill.
- Touching surfaces or objects that have become contaminated with norovirus and introducing the virus to your mouth.
- Eating food or drinking liquids that have become contaminated with norovirus.
- You can get infected if you are near someone sick who is throwing up.
Will I always have norovirus?

No. Norovirus causes an acute illness that commonly lasts 1 to 2 days for most people, although some people may be ill or feel the effects for up to 6 days. After the period of illness your body gradually gets rid of the entire virus. Norovirus is not known to create a long term ‘carrier’ state in a person. However, people can become infected or ill from the virus more than once during their life. It does not appear that a person can become immune to norovirus.

How contagious am I?

Norovirus is very contagious. If you are ill with norovirus, you are contagious and can easily spread it to others. The virus is found in large quantities in the stool and vomit of an infected person. About 5 billion norovirus particles can be contained in 1 gram (about ¼ teaspoon) of stool and the number that can make a person sick is as low as 18.

People are most contagious from the beginning of the illness until a couple of days after they feel better. Some people can be contagious longer, perhaps weeks after they feel better. This is because your body is still getting rid of the virus even after you feel better.

If you don’t wash your hands properly, particularly after using the toilet, things that you use or touch with your hands can give the virus to other people.

Remember, if you have norovirus, it is possible to spread it to others even after you are feeling better. Washing your hands properly is the best way to avoid spreading it.

How do I know if I have norovirus?

If your doctor thinks you may have a norovirus infection, he or she may collect a stool sample from you for testing. If you are in a setting such as a long term care facility or assisted living where others have tested positive for norovirus, you may not need to be tested. If you have similar symptoms, your doctor may diagnose you based on what is going around in the facility.
How is norovirus treated?

Norovirus is a viral infection not a bacterial infection and therefore is not treated with antibiotics by your healthcare provider. Currently there is no antiviral medication effective against norovirus and there is no vaccine to prevent infection.

Norovirus causes vomiting and diarrhea, those ill with these symptoms should drink plenty of fluids. It is helpful to drink fluids that can replace electrolytes in the body which are lost quickly with vomiting and diarrhea. Electrolytes are an important part of our body’s make-up and help our muscles and nerves to work properly. There are many types and brands of electrolyte replacement drinks, from ‘sport’ type drinks to more complete ‘medical’ types, ask your pharmacist which electrolyte containing drink would be right for you.

Norovirus is usually a brief illness in healthy adults with symptoms lasting just a couple of days. However, among young children and the elderly, dehydration can be a common complication. Dehydration can become severe in these populations and may require hospitalization for treatment with fluids given through their veins (intravenous or IV fluids).

When should I seek medical care?

- If you notice blood in your stool
- If you are running a high fever
- If your symptoms last more than 3 days
- If you feel dizzy or faint more often than usual
- If you cannot keep any fluids down due to vomiting
- If you have muscle cramping in your legs/arms
What do patients and visitors need to do when they go to a healthcare facility that is having an outbreak of norovirus?

- If you think you have norovirus, tell staff or your healthcare provider.
- If you are unable to keep fluids down and feel thirsty, notify staff.
- Healthcare providers may use special precautions, such as wearing gowns and gloves when caring for you.
- Visitors should consider avoiding the facility while an outbreak of norovirus is occurring.
- Patients and visitors should wash their hands often with soap and water after using the bathroom and before eating.
- As recommended by the Centers for Disease Control and Prevention (CDC), patients with norovirus should stay in their rooms while they are ill, this is to prevent spreading the illness to others.
- Patients with norovirus should not go to “common” areas of the facility such as the cafeteria and gift shop.
- Visitors should stay at home if they are ill, if they have vomiting and/or diarrhea, they should wait until 2 days symptoms free before visiting.
- Visitors should check in with the nurse’s station prior to entering the patient’s room, follow the nurse’s instructions and always wash their hands before entering the room and before leaving the room.
- Let staff know if you have any linen or clothes that are soiled and need to be laundered.
- If you share your room, avoid close contact with your family member/roommate as much as possible to prevent them from getting ill, clean toilet areas with a 10% bleach solution and wash your hands frequently.
- Once you are feeling better again, and have not had any vomiting or diarrhea for 3 days, you can safely socialize with others. Be sure to shower and wear clean clothes, this will help to protect other patients/residents and visitors.
What is the proper way to clean surfaces?

- Cleaning with a diluted bleach solution is best for norovirus, follow the directions on the label- generally one part bleach and nine parts water (1:10 solution) made fresh daily. Never mix bleach with other cleaners.
- Wet the surface well and clean vigorously
- Allow the surface to air dry
- Pay special attention to toilet, sink and areas that are touched frequently such as toilet handles, door knobs and light switches.

<table>
<thead>
<tr>
<th>How often should I change clothes and bedding?</th>
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<tbody>
<tr>
<td>- Change your sheets and towels regularly</td>
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<tr>
<td>- Change clothes and linens right away if soiled with stool or vomit, follow instructions in the ‘proper way to clean section’</td>
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<tr>
<td>- Change your clothes daily</td>
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<tr>
<td>- Do not put dirty clothes or clothes you have just worn back in your closet or drawers until they have been washed.</td>
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How often should I clean?

Norovirus can live on surfaces for up to 4 weeks. It is important to clean regularly. For items or surfaces you touch frequently, clean them every day.

What is good hand hygiene?

Wash your hands for at least 20 seconds with soap and water:

- After using the toilet or helping someone use the toilet
- After touching dirty surfaces and handling soiled laundry
- After handling items soiled by body fluids
- Before and after preparing meals/snacks
- Before eating meals
- Before and after taking or giving medications
- After caring for a sick person
- After playing with pets
- After sneezing, coughing, blowing your nose
- Anytime hands are visibly dirty
How can I prevent spreading norovirus (and other germs) at home?

- Wash your hands often with soap and warm water, especially after using the bathroom, before preparing food and before eating (alcohol based hand sanitizers do NOT work against norovirus).
- Frequently wash towels used for drying your hands or use disposable towels.
- Wear disposable gloves if you expect to come into contact with stool or vomit. Wash your hands after removing gloves.
- Frequently clean areas of your home, such as your bathroom, that may become contaminated with norovirus.
- Clean and disinfect contaminated surfaces immediately after an episode of illness by using a dilute (1:10) bleach solution.
- Do not share eating utensils, cups, toothbrushes, towels, or other personal items especially while you are ill and for several days after you feel better.
- Change and wash linens on a regular basis, or any time they are soiled.
- Immediately remove and wash clothing and linens that may be contaminated with norovirus after throwing up or having diarrhea.
- Notify healthcare providers and facility staff if you are ill with vomiting and/or diarrhea.
- Wash fruits and vegetables and steam oysters and clams before eating them.
- Persons ill with norovirus symptoms should not prepare food while ill or for 3 days after feeling better.
How can I prevent the spread of norovirus to others?

If you have norovirus, you are contagious. Norovirus can be spread easily to others even for several days after you feel better. You should avoid social settings such as work, school, church and interacting with others while you are contagious. Washing your hands often and thoroughly helps to prevent spread to others.

If your child has norovirus symptoms, he/she should not attend childcare or school until no longer contagious.

Persons who work in nursing homes, take care of patients, or handle food should stay out of work until at least 48-72 hours after symptoms end.

What about Pets and norovirus?

No evidence currently exists that shows dogs and cats can spread norovirus to humans. It is always a good idea to wash your hands with soap and water after playing with pets and after picking up after them or cleaning the cat box.
**Things to remember about living with norovirus:**

1. Always wash your hands often, especially after using the bathroom and before preparing food.
2. Wear gloves if your hands may come in contact with stool or vomit.
3. Drink lots of fluids, ask your pharmacist to assist you in choosing a good one.
4. Don’t prepare food for others while you are ill and for 3 days after you are better.
5. Stay away from others while you are contagious.
6. Frequently clean touched areas of your home.
7. Inform your healthcare providers and facility staff if you are ill with vomiting, diarrhea so they may take the appropriate precautions when caring for you.
8. Talk to your healthcare provider if you have any questions about your illness.

**Other Resources**

**Shopping List**

These items can be found at most drug stores or grocery stores:

- Disposable gloves
- Alcohol-based hand sanitizer
- Disinfectant
- Plastic trash bags
- Tissues
- Soap
- Bleach
Web Sites

Centers for Disease Control and Prevention (CDC)
http://www.cdc.gov/norovirus/index.html
Your Local Health Department
http://www.azdhs.gov/diro/LHliaison/countymap.htm

Acknowledgements

Arizona Healthcare Associated Infections (HAI) Program
www.preventHAlaz.gov

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