

NOROVIRUS FACT SHEET

Norovirus, also known as viral gastroenteritis, causes inflammation of the stomach and intestines. It is often incorrectly called the “stomach flu”, although the influenza virus does not cause it. Illness can be serious, especially for young children and older adults.

CAUSE	Norovirus (previously known as calicivirus, Norwalk virus, or Norwalk-like virus).
SYMPTOMS	Watery diarrhea and/or vomiting. Low-grade fever, headache, muscle aches, fatigue, and stomach cramps can also occur. The illness is mild to moderately severe. Symptoms usually last 1 to 3 days.
SPREAD	Norovirus leaves the body through the stool or vomit of an infected person and enters another person when hands, food, or objects (such as toys) contaminated with the virus are placed in the mouth. Norovirus particles are extremely small and billions of them are in the stool and vomit of infected people. Spread can occur when people do not wash their hands after using the toilet. People can also get sick by eating food items contaminated during preparation or serving.
INCUBATION	Typically, it takes 12 to 48 hours, from the time of person is exposed until symptoms develop.
CONTAGIOUS PERIOD	People are most contagious while symptoms are present and up to 72 hours after vomiting and /or diarrhea have stopped.
EXCLUSION	Exclude children and youth from childcare and school while ill and until 48 hours after diarrhea and/or vomiting have stopped. Staff must avoid food preparation while diarrhea and/or vomiting are present and for at least 72 hours after diarrhea and/or vomiting have stopped.
DIAGNOSIS/ TREATMENT	Questions related to symptoms, diagnosis and treatment should be directed to individuals’ primary care provider or clinic. There is no specific treatment for Norovirus.

PREVENTION/CONTROL

- Promote awareness and advise students, teachers, and school staff to stay home if they experience illness such as stomach pain, fever, nausea, vomiting, and/or diarrhea. Ill individuals should stay home for an additional 48 hours after symptoms are gone.
- Encourage everyone to wash their hands frequently throughout the day with soap and water. Ensure facilities have adequate warm running water and soap. Staff should closely monitor handwashing of all young children after they have used the bathroom.
- Ensure ill people do not prepare food and drink for others. Avoid serving food family style.
- Clean and disinfect contaminated surfaces regularly with appropriate disinfectant; bleach is recommended during outbreak situations. As noted in resources below, bleach is an allowable pesticide to apply at school.
 - Examples of items to clean and disinfect: doorknobs, faucets, sinks, toilets, counters, chairs (including backs), tables, hand rails, elevator buttons, toys, light switches, keyboards, phones.
 - Use a fresh chlorine bleach solution with a concentration of 1000-5000 ppm (5-25 tablespoons of household bleach [5.25%] per gallon of water) or other disinfectant registered as effective against norovirus by the Environmental Protection Agency (EPA). For more information see EPA Registered Hospital Disinfectants Effective Against Norovirus: https://www.epa.gov/sites/production/files/2016-06/documents/list_g_norovirus.pdf
 - Use appropriate personal protective equipment (PPE): when cleaning and disinfecting wear disposable gloves, masks, eye protection or face shields, and gown or protective clothing.

Disinfecting Procedures

- Pre-clean any visible/organic debris (vomit or stool) with absorbent material and place in a plastic bag to minimize exposure to aerosols.
- Liberally disinfect area and objects surrounding the contamination with an appropriate environmental disinfectant (multiple applications may be required).
- Ensure appropriate dilution and contact times for the appropriate environmental disinfectant, and ensure that you are wearing PPE

Hard Surfaces

- Disinfect surfaces by applying a chlorine bleach solution
- Leave surface wet for at least 5 minutes
- Rinse with water if food preparation area.

Carpet / Upholstered Furniture

- Visible debris should be cleaned with absorbent material such as: kitty litter, baking soda or other absorbent material on carpets and upholstery to absorb liquid
- Do not vacuum material (Aerosols created may pose a risk for transmission)
- Pick up using paper towels Dispose of paper towel/waste in a plastic trash bag or biohazard bag, and double bag to minimize exposure to aerosols.
- Steam clean (heat inactivation) 158°F for 5 minutes or 212°F for 1 minute.

Linens / Clothing / Textiles

- If soiled, vomit or stool should be carefully removed. Keep contaminated and uncontaminated clothes separated. Minimize disruption of soiled linens and laundry.
- Wash items in a pre-wash cycle, then use a regular wash cycle using detergent and dried separately from uncontaminated clothing at high temperature greater than 170°F.

Toys

- Toys should be cleaned and disinfected daily.
- Any toy that enter a child's mouth must be disinfected with 200ppm bleach, rinsed thoroughly and air dried or run through dishwasher with high temperature (170°F).
- Remove visible debris on softer toys that have been soiled by vomit – (see Disinfection section). Launder toy as directed or discard if necessary.

Diaper Changing Surfaces

- Surfaces should have a plastic covered pad without cracks.
- Use disposable material to cover the pad on changing tables such as shelf paper, wax paper, and scrap computer paper, cut up paper bags. Discard after each diaper change.
- Clean the surface after every diaper change by washing with detergent, water and friction, bleach dilution and rinsing with clean water.
- After changing a diaper, the diapered child's hands should be washed also.

Hand washing

- Wash hands with warm running water and soap, using friction for 20 seconds, paying special attention to under fingernails.
- Dry hands with a single-service paper towel or air dryer.
- Hands should be washed after using the restroom, sneezing, coughing, changing diapers, before any food preparation or service, after cleaning surfaces.

References

- <https://www.cdc.gov/norovirus/preventing-infection.html>
- <https://www.osha.gov/Publications/norovirus-factsheet.pdf>
- http://www.disinfect-for-health.org/wp-content/themes/disinfect/pdfs/NorovirusIncident_8.5x11_English_Color.pdf
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