

Norovirus: Facts for Food Handlers

Norovirus is a highly contagious virus. It can make you very sick with diarrhea, throwing up, and stomach pain. Anyone who works with food should know about this virus.



Foods contaminated with norovirus can make people sick

Norovirus is a leading cause of illness from contaminated food in the United States. The virus can easily contaminate food because it is very tiny and infective. It only takes a very small amount of virus particles (fewer than 100) to make someone sick.

Food can get contaminated with norovirus when—

- infected people who have stool or vomit on their hands touch the food,
- it is placed on counters or surfaces that have infectious stool or vomit on them, or
- tiny drops of vomit from an infected person spray through the air and land on the food.

Foods can also be contaminated at their source. For example:

- oysters that are harvested from contaminated water, or
- fruit and vegetables that are contaminated in the field.



Food handlers with norovirus illness can spread the virus to others

People who have norovirus illness can shed billions of norovirus particles.

You are most contagious—

- when you are sick with norovirus illness, and
- during the first 3 days after you recover.

If you work with food when you have norovirus illness, you can spread the virus to others. You can easily contaminate food and drinks that you touch.

People who consume the food or drinks can get norovirus and become sick. This can cause an outbreak.

Outbreaks of norovirus illness occur in nursing homes, hospitals, restaurants, cruise ships, schools, banquet halls, summer camps, and even at family dinners. These are all places where people often eat food handled or prepared by others.

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Foods commonly involved in outbreaks—

- leafy greens (such as lettuce)
- fresh fruits
- shellfish (such as oysters)

Any food served raw or handled after being cooked can get contaminated.



5 Tips to Prevent Norovirus From Spreading

1. Practice proper hand hygiene

Always wash your hands carefully with soap and water—

- after using the toilet and changing diapers, and
- before eating, preparing, or handling food.

Alcohol-based hand sanitizers can be used in addition to hand washing. However, they should not be used as a substitute for washing with soap and water.

See the FDA Employee Health and Personal Hygiene Handbook (<http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/IndustryandRegulatoryAssistanceandTrainingResources/ucm113827.htm>)

2. Wash fruits and vegetables and cook seafood thoroughly

Carefully wash fruits and vegetables before preparing and eating them. Cook oysters and other shellfish thoroughly before eating them.

Be aware that noroviruses are relatively resistant. They can survive temperatures as high as 140°F and quick steaming processes that are often used for cooking shellfish.

Food that might be contaminated with norovirus should be thrown out.

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

You should not prepare food for others while you are sick and for at least 2 to 3 days after you recover. This also applies to sick workers in schools, daycares, healthcare facilities, and other places where they may expose people to norovirus.

Many local and state health departments require that food handlers and preparers with norovirus illness not work until at least 2 to 3 days after they recover. Tell your manager if you have symptoms of norovirus illness or if you were recently sick. Keep sick infants and children out of areas where food is being handled and prepared.

See the FDA Food Code (www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/default.htm)

4. Clean and disinfect contaminated surfaces

After throwing up or having diarrhea, immediately clean and disinfect contaminated surfaces. Use a 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).

See EPA's Registered Antimicrobial Products Effective Against Norovirus (Norwalk-like virus) (www.epa.gov/oppad001/list_g_norovirus.pdf)

5. Wash laundry thoroughly

Immediately remove and wash clothes or linens that may be contaminated with vomit or stool (feces).

You should—

- handle soiled items carefully without agitating them,
- wear rubber or disposable gloves while handling soiled items and wash your hands after, and
- wash the items with detergent at the maximum available cycle length then machine dry them.

What is the Right Way to Wash Your Hands?

1. Wet your hands with clean, running water (warm or cold) and apply soap.
2. Rub your hands together to make a lather and scrub them well; be sure to scrub the backs of your hands, between your fingers, and under your nails.
3. Continue rubbing your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
4. Rinse your hands well under running water.
5. Dry your hands using a clean towel or air dry them.

See Handwashing: Clean Hands Saves Lives (www.cdc.gov/handwashing/)



Visit CDC's Norovirus Web site at www.cdc.gov/norovirus for more information.