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## DEPARTMENT OF ENVIRONMENTAL HEALTH County of Riverside

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INFORMATIONAL BULLETIN NO. 77-12-DES

DISTRICT ENVIRONMENTAL SERVICES

# NOROVIRUS FACTS FOR FOOD HANDLERS IN FOOD FACILITIES OR AT HOME

## Norovirus – the “Stomach Bug”

Noroviruses are a group of viruses that cause gastroenteritis in people. The most common symptoms of norovirus are diarrhea, vomiting, nausea, and stomach cramping. The illness often begins suddenly, anywhere from 12 to 48 hours after exposure, with symptoms lasting 1 to 2 days. People can be contagious from the moment they begin feeling ill to at least 3 days after recovery. Most people get better after 1 to 2 days and have no long-term health effects related to their illness. However, sometimes people are not able to drink enough liquids to replace the liquids they lost because of vomiting and diarrhea. These people can become dehydrated and may need special medical attention.

## Norovirus Spreads Quickly and Easily

Noroviruses are found in the vomit and stool of infected people; infection with the virus can occur in several ways:

- Eating food or drinking liquids that are contaminated with norovirus.
- Touching surfaces or objects contaminated with norovirus, and then placing their hand in their mouth.
- Having direct contact with another person who is infected and showing symptoms. Some examples of this are, when caring for someone with illness, sharing foods or utensils with someone who is ill.
- The virus is small and it takes as few as 10 norovirus particles to make a person sick.

## Food Handlers Can Spread Norovirus to Others

Whether handling food in a restaurant setting or at home, people working with food who are sick with norovirus are a particular risk to others because they handle the food and drink others will consume. The virus is very small and shed (discharged from the body through vomit or stool) in great numbers. People eating contaminated food may become ill and an outbreak may result. Norovirus can also be spread from person to person as a result of exposure to tiny droplets that may spray through the air during vomiting, coughing or sneezing. These droplets may land on objects that others may touch, like door handles or utensils.

Outbreaks of norovirus have taken place in nursing homes, hospitals, restaurants, sporting events, cruise ships, schools, summer camps, and family dinners – in other words, places where people consume food and drinks prepared and handled by others.

It is estimated by the Centers for Disease Control (CDC), that more than half of all food related outbreaks are caused by norovirus.

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**OFFICES IN: RIVERSIDE, BLYTHE, CORONA, HEMET, INDIO, MURRIETA AND PALM SPRINGS**

**For more information call (888) 722-4234**

**Department Web Site – [www.rivcoeh.org](http://www.rivcoeh.org)**

Foods can be contaminated by:

- Direct contact with contaminated hands.
- Direct contact with work surfaces that are contaminated with infectious stool or vomit.
- Tiny droplets of vomitus that spray through the air when an infected person vomits.

### Preventing the Spread of Norovirus

It is important to follow good hygienic practices to help prevent the spread of norovirus both at work and at home.

**Wash your hands properly and frequently.** Vigorously scrub hands under warm water using soap for at least 15 seconds. Be sure to wash between all fingers and under finger nails. Rinse off the soap with warm water and dry hands with a paper towel or hot air blower.

**Do not prepare foods while ill.** Food handlers may not prepare foods while they have symptoms such as vomiting or diarrhea, and for at least 3 days after they recover from their illness. Food handlers who were recently ill may be given other duties such as working a cash register or hosting, where they do not come into contact with any food or food surfaces.

**Clean and disinfect contaminated surfaces.** Immediately after an episode of illness, clean and disinfect all surrounding surfaces. Use a chlorine bleach solution with minimum concentration of 1000 ppm and up to 5000 ppm, as these levels are recommended to be effective against noroviruses. See the table following for instructions on making bleach solutions. People who are responsible for cleaning up should wear disposable gloves and wash their hands often, including before and after glove use.

**Take care in the kitchen.** Any foods that may have been contaminated by an ill person should be disposed of properly. Ensure all counters, utensils or any potentially contaminated surface is immediately washed and sanitized. Additionally, to guard against any food contamination that may have occurred before being delivered to the food facility, wash all fruits and vegetables, and cook oysters and other shellfish thoroughly before eating. Oysters should be obtained only from approved sources and appropriate documentation must be kept in case trace back is needed. At home be sure to exclude sick children and infants in diapers from the kitchen and any food preparation areas.

**Practice proper hygienic practices.** Flush any vomit and/or stool in the toilet, with the lid down, and make sure that the surrounding area is kept clean and disinfected. Immediately launder any linens or clothing that is soiled. Do not agitate the items prior to laundering them to avoid spreading the virus. Use hot water and soap at the maximum available cycle length and then machine dry.

**How To Make Bleach Solutions For Disinfection\***  
**Use Standard Household Bleach (5.25%-6.15%) and Cool Water**  
**(Do Not Use Ultra or Scented Bleach Products)**

Approximate Chlorine Concentration (ppm)	Use This Amount Of Bleach In 1 Gallon Of Water	Approximate Dilution	Application
50-60	1 teaspoon	1 : 1000	Use for home food contact surfaces
100	1/2 tablespoon (- 1 capful)	1 : 500	Use in food facilities routinely (not during norovirus outbreak)
200	1 tablespoon	1 : 250	Use for food/mouth contact items during norovirus outbreaks
500-600	1/4 cup	1 : 100	Use for routine home disinfection of surfaces
1000	1/3 cup	1 : 50	Use for norovirus outbreaks; use in patient care facilities
5000-6000	1 1/2 cups to 1 2/3 cups	1 : 10	Use for norovirus or <i>Clostridium difficile</i> outbreaks; patient care facilities; body fluid or blood spills

\*When working with bleach, all recommended safety precautions listed on the manufacturer's label should be followed. Diluted bleach solutions are best when made fresh daily; if not made daily, they can be stored in an opaque container for up to 30 days, but the chlorine concentration will decrease by half in 30 days. All containers should be clearly labeled and dated.

\*Document available in alternate format upon request.