

## **Norovirus**

### **Q. What is Norwalk or Norovirus?**

**A.** It can be a cause of food borne illness in people. Noroviruses are members of a group of viruses also known previously as “Norwalk-like viruses.” Infection with norovirus affects the stomach and intestines, causing an illness called gastroenteritis, or “stomach flu.” This “stomach flu” is *not* related to the flu (or influenza), which is a respiratory illness caused by influenza virus. In addition, noroviruses are not related to bacteria and parasites that can cause gastrointestinal illnesses. It is estimated that nearly 65% of nonbacterial gastroenteritis in the US is attributable to Norwalk and Norwalk-like viruses. Approximately 181,000 cases occur annually, with no known associated deaths. Norovirus is not a “new” virus, but interest in it is growing as more is learned about how frequently noroviruses cause illness in people.

### **Q. What are the symptoms of infection with norovirus?**

**A.** Norovirus infection causes gastroenteritis, which is an inflammation of the stomach and the small and large intestines. The symptoms of gastroenteritis are nausea, vomiting, and/or diarrhea accompanied by abdominal cramps. Some people also complain of headache, fever/chills, and muscle aches. Symptoms are usually brief and last only 1 or 2 days. However, during that brief period, people can feel very ill and vomit, often violently and without warning, many times a day. Symptoms usually begin 12 to 48 hours after ingestion of the virus. Norovirus gastroenteritis is usually not a serious illness, and other than drinking liquids to prevent dehydration, there is no specific treatment. Most people recover completely within 1 to 2 days, with no long-term complications of norovirus illness.

### **Q. How is norovirus spread?**

**A.** Noroviruses are found in the stool or vomit of infected people. People can become infected with the virus in several ways, including:

- 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 (for example, when caring for someone with illness, or sharing foods or eating utensils with someone who is ill).

Food and drinks can very easily become contaminated with norovirus because the virus is so small and because it probably takes fewer than 100 norovirus particles to make a person sick. Food can be contaminated by direct contact with contaminated hands or work surfaces that are contaminated with stool or vomit. Although the virus cannot multiply outside of human bodies, once on food or in water, it can cause illness.

Some foods can be contaminated with norovirus *before* being delivered to a restaurant or store. Several outbreaks have been caused by the consumption of oysters harvested from contaminated waters. Other produce such as salads and frozen fruit may also be contaminated at source.

### **Q. Why is norovirus infection important for food handlers?**

**A.** People working with food who are sick with norovirus gastroenteritis are a particular risk to others, because they handle the food and drink many other people will consume. A sick food handler can easily – without meaning to – contaminate the food he or she is handling. Many of those eating the contaminated food may become ill, causing an outbreak.

Outbreaks of norovirus gastroenteritis have taken place in restaurants, cruise ships, nursing homes, hospitals, schools, banquet halls, summer camps, and family dinners – in other words, places where often people have consumed water and/or food prepared or handled by others. It is estimated that as many as half of all food-related outbreaks of illness may be caused by norovirus. *Information taken from ISU Food Safety website: [www.extension.iastate.edu/foodsafety](http://www.extension.iastate.edu/foodsafety).*