Noroviruses

The Issue
Outbreaks of norovirus illness in hospitals, aboard cruise ships, in nursing homes, and in other institutions have raised concerns among Canadians as to the causes and health effects of this virus.

The Health Effects of Norovirus
The main symptoms of norovirus illness are:
- diarrhea
- nausea
- vomiting
- stomach cramps

Other symptoms may include:
- low-grade fever
- headache
- chills
- muscle aches
- fatigue (a general sense of tiredness)

The illness often begins suddenly, and the infected person may feel very sick with frequent vomiting and/or diarrhea. Most people feel better within one or two days, with symptoms resolving on their own and no long-term health effects occurring after illness. In general, children experience more vomiting than adults.

However, for the very young, the elderly, and those with suppressed immune systems, such as those with HIV or AIDS, the disease may be more serious, especially if these people do not drink enough liquids to replace those they lost because of vomiting and diarrhea. They may become dehydrated and need special medical attention to replace the liquids lost from their bodies. This may include hospitalization.
Minimizing Your Risk

Anyone can be infected with a norovirus. You can minimize your risk by taking these steps:

- Wash your hands thoroughly and often, especially after using the bathroom, changing diapers, and before eating or preparing food.
- Do not eat raw or undercooked oysters or other shellfish.
- Thoroughly clean contaminated surfaces, and disinfect using chlorine bleach, especially after an episode of illness.
- After an episode of illness, immediately remove and wash clothing or linens that may be contaminated with the virus (use hot water and soap).
- If you do become infected, avoid contact with others until you are well again, and avoid preparing food while you have symptoms and for the first three days after you recover.
- If you become infected, drink plenty of liquids.

Background

Noroviruses are actually a group of viruses that cause gastroenteritis—an illness that usually includes diarrhea and/or vomiting—in those affected. People of all ages can be affected by gastroenteritis—often called stomach flu. It is not related to the flu (or influenza), which is a respiratory illness caused by the influenza virus.

About 300 to 400 outbreaks of norovirus are reported to the Public Health Agency of Canada every year. Outbreaks occur more frequently during the fall and winter months. Many outbreaks in the community go unreported. Only the common cold occurs more often.

Noroviruses are easily spread in environments where people are in close contact. Outbreaks often occur in group settings such as schools, hospitals, childcare facilities, nursing homes, cruise ships, and passenger trains.

Norovirus was first identified as a virus in 1972, after an outbreak in Norwalk, Ohio. There is no vaccine or medicine that will prevent a norovirus infection, and norovirus illness can recur throughout a person’s lifetime.

Sources of Norovirus

Noroviruses are found in the stool or vomit of infected people. The viruses are very contagious and can spread easily from person to person. People exposed to the virus usually develop symptoms of gastroenteritis within 24 to 48 hours, but symptoms can occur as early as 12 hours after exposure. People infected with norovirus can be contagious, from the moment they start feeling ill, to at least three days after they have recovered. Some people may be contagious for as long as two weeks after recovery.

People can become infected with the virus in several ways, including through direct contact with another infected person (for example, caring for or diapering an ill child, sharing food or utensils with an ill person); touching surfaces or objects contaminated with norovirus; or eating food or drinking water that has been contaminated.

Most food-borne outbreaks of norovirus illness likely occur when food is contaminated by food handlers who have the virus, especially if they do not wash their hands properly after using the bathroom. Some foods can be contaminated at their source; for example, shellfish such as oysters may be contaminated by sewage in water, before they are harvested. Water-borne outbreaks are often caused by sewage contamination of drinking water (for example, from wells) or recreational water.

Government of Canada’s Role

The Public Health Agency of Canada and Health Canada collaborate with their provincial and territorial partners on activities for the prevention and control of norovirus outbreaks. As part of this work, the Public Health Agency of Canada and its partners conduct surveillance to assess norovirus activity and its spread across Canada.
Need More Info?

For more information, contact your local public health department or your healthcare provider.

Or, visit the following websites:

- The Public Health Agency of Canada’s fact sheet on norovirus at: www.phac-aspc.gc.ca/id-mi/norovirus-eng.php#3
- Centres for Disease Control and Prevention, norovirus section at: www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus.htm
- Community and Hospital Infection Control Association Canada (CHICA-Canada), Information about Hand Hygiene at: www.chica.org/links_handhygiene.html
- For additional articles on health and safety issues go to the It’s Your Health web section at: www.healthcanada.gc.ca/iyh

You can also call toll free at 1-866-225-0709
or TTY at 1-800-267-1245*