

Public Health Notice — Ongoing outbreak of norovirus and gastrointestinal illnesses linked to raw oysters

April 27, 2018 – Update

This notice has been updated to include additional cases of illness associated with this outbreak. In the last week, the Public Health Agency of Canada has seen a decrease in the number of cases being reported to the outbreak investigation team which indicates the outbreak may be slowing. The outbreak investigation remains active and findings to date have identified that most people who became sick were infected after consuming oysters that were harvested in the south and central parts of Baynes Sound, British Columbia. The investigation into a specific source of contamination impacting the shellfish farms in that area is ongoing.

Why should you take note?

The Public Health Agency of Canada is collaborating with federal and provincial public health partners to investigate norovirus and gastrointestinal illnesses in three provinces linked to raw oysters from British Columbia. The source of illness has been identified as raw oysters, and the cause of contamination is under investigation. Currently, oyster farms in British Columbia that have been associated with illnesses in this outbreak have been closed as a part of the investigation. These closures aim to prevent further illness. The outbreak investigation is ongoing and additional actions to protect public health will be taken as needed. This public health notice will be updated when new information is available.

The risk to Canadians is low. Oysters are a known risk for causing food-related illness if consumed as a raw product. Norovirus illnesses can be avoided if raw oysters are cooked to an internal temperature of 90° Celsius/194° Fahrenheit for a minimum of 90 seconds, and proper hand washing and food safety practices are followed.

What are Noroviruses?

Noroviruses are a group of viruses that can cause gastroenteritis in people, and usually include diarrhea and/or vomiting as main symptoms. Noroviruses are found in the stool

or vomit of infected people. They are very contagious and can spread easily from person to person. Some foods can be contaminated at their source. For example, shellfish like oysters may be contaminated by sewage in water before they are harvested.

Investigation Summary

Currently, a total of 172 cases of gastrointestinal illness linked to oyster consumption have been reported in three provinces: British Columbia (132), Alberta (15), and Ontario (25). No deaths have been reported. Individuals became sick between mid-March and mid-April 2018. In the last week, the Public Health Agency of Canada has seen a decrease in the number of cases being reported to the outbreak investigation team which indicates the outbreak may be slowing. Most individuals who became sick reported eating raw oysters from the south and central parts of Baynes Sound, British Columbia before the onset of their illness. Although not all cases of illness have been tested, testing of several cases has confirmed the presence of a norovirus infection. It is suspected that norovirus illness caused by the consumption of contaminated oysters is the cause of illness in the untested cases.

The food safety investigation into the cause of the contamination is ongoing. Under the Fisheries Act and the Management of Contaminated Fishery Regulations, implicated shellfish farms where oysters are harvested in British Columbia have been closed for harvest at this time. For more information on the status of shellfish harvesting sites in British Columbia visit the links at the end of this notice.

Who is most at risk?

Acute gastrointestinal illnesses such as norovirus illness are common in North America and are very contagious, affecting all age groups. However, pregnant women, people with compromised immune systems, young children and the elderly are at risk for developing more serious complications, like dehydration.

What should you do to protect your health?

The outbreak is ongoing, indicating that contaminated oysters may still be available in the marketplace (including seafood markets, restaurants, and grocery stores). Be aware of the risks associated with consuming raw or undercooked oysters. Food contaminated with noroviruses may look, smell and taste normal. The following safe food-handling practices will reduce your risk of getting sick:

- Ensure oysters are fully cooked before consuming them. Lightly cooking oysters does not kill norovirus. Oysters need to be cooked to an internal temperature of 90° Celsius (194° Fahrenheit) for a minimum of 90 seconds in order to kill norovirus.

- Discard any oysters that did not open while cooking.
- Eat oysters right away after cooking and refrigerate leftovers.
- Always keep raw and cooked oysters separate to avoid cross-contamination.
- Do not use the same plate or utensils for raw and cooked shellfish, and wash counters and utensils with soap and warm water after preparation.
- Wash your hands well with soap before and after handling any food. Be sure to clean and sanitize cutting boards, counters, knives and other utensils after preparing raw foods.

Noroviruses can be transmitted by ill individuals and are able to survive relatively high levels of chlorine and varying temperatures. Cleaning and disinfecting practices are the key to preventing further illnesses in your home.

- Thoroughly clean contaminated surfaces, and disinfect using chlorine bleach, especially after an episode of illness.
- After vomiting or diarrhea, immediately remove and wash clothing or linens that may be contaminated with the virus (use hot water and soap).
- If you have been diagnosed with norovirus illness or any other gastrointestinal illness, do not prepare food or pour drinks for other people while you have symptoms, and for the first 48 hours after you recover.

Symptoms

People with norovirus illness usually develop symptoms of gastroenteritis within 24 to 48 hours, but symptoms can start as early as 12 hours after exposure. The illness often begins suddenly. Even after having the illness, you can still become re-infected by norovirus.

The main symptoms of norovirus illness are:

- diarrhea
- vomiting (children usually experience more vomiting than adults)
- nausea
- stomach cramps

Other symptoms may include:

- low-grade fever
- headache
- chills
- muscle aches
- fatigue (a general sense of tiredness)

Most people feel better within one or two days, with symptoms resolving on their own, and experience no long-term health effects. As with any illness causing diarrhea or

vomiting, people who are ill should drink plenty of liquids to replace lost body fluids and prevent dehydration. In severe cases, patients may need to be hospitalized and given fluids intravenously. If you have severe symptoms of norovirus, consult your healthcare provider.

What is the Government of Canada doing?

The Government of Canada is committed to food safety. The Public Health Agency of Canada leads the human health investigation of an outbreak and is in regular contact with its federal and provincial partners to monitor and take collaborative steps to address outbreaks.

Health Canada provides food-related health risk assessments to determine whether the presence of a certain substance or microorganism poses a health risk to consumers.

The Canadian Food Inspection Agency (CFIA) conducts food safety investigations into the possible food source of an outbreak. CFIA also monitors for biotoxins in shellfish in harvesting areas and is responsible for registering and inspecting fish and shellfish processing plants. The CFIA may recommend affected sites or areas be opened or closed based on epidemiological information, sample testing results and/or relevant harvest area information.

Fisheries and Oceans Canada is responsible for opening and closing shellfish harvest areas, and enforcing closures under the authority of the Fisheries Act and the Management of Contaminated Fishery Regulations.

Under the Canadian Shellfish Sanitation Program (CSSP), Environment and Climate Change Canada monitors pollution sources and sanitary conditions in shellfish growing waters.

The Government of Canada will continue to update Canadians as new information related to this investigation becomes available.

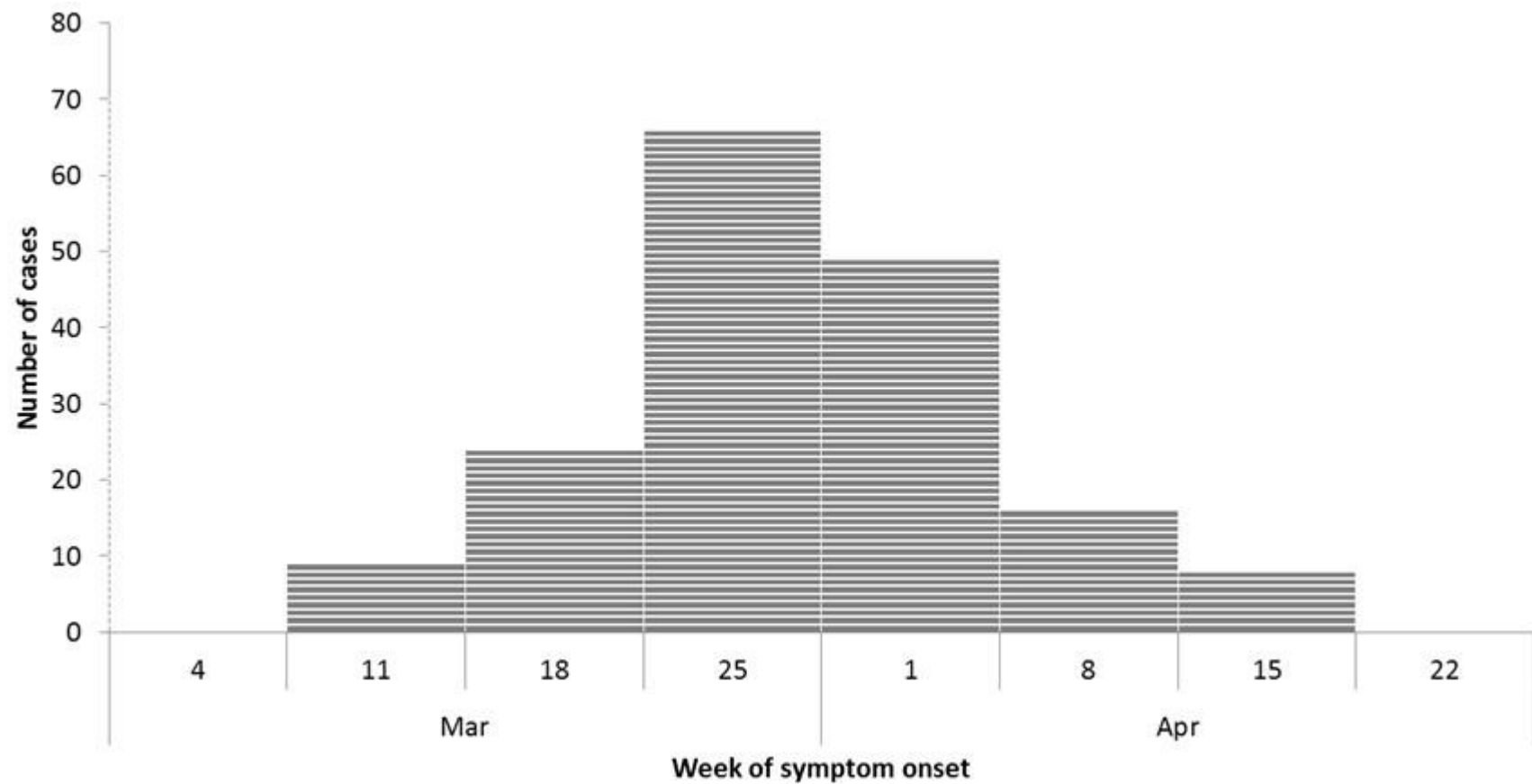


Figure 2: Reported number of cases of norovirus or acute gastrointestinal illness associated with consumption of oysters, by week

Table 2: Reported number of cases of norovirus or acute gastrointestinal illness associated with exposure to oysters, by week

Week of symptom onset	Number of cases
11-Mar-2018	9
18-Mar-2018	24
25-Mar-2018	66
1-Apr-2018	49
8-Apr-2018	16
15-Apr-2018	8

Table 3

Outbreak status	Ongoing
Case count	172
Provinces/Territories	3
Deaths	0
Recall	No