

Public Health Notice: Outbreak of *Cyclospora* infections linked to salad products and fresh herbs

November 4, 2020 - Final Update

This notice has been updated to reflect that the outbreak appears to be over and the investigation is winding down.

Why you should take note

The Public Health Agency of Canada (PHAC) collaborated with provincial public health partners, the Canadian Food Inspection Agency (CFIA) and Health Canada to investigate an outbreak of *Cyclospora* infections that occurred in six provinces and territories. The outbreak appears to be over and the investigation is winding down.

Exposure to certain Fresh Express brand salad products were identified as a likely source for some of the illnesses reported in the outbreak. The CFIA issued a [food recall warning](#) for certain Fresh Express brand salad products containing iceberg lettuce, carrots and red cabbage that were distributed nationally in Canada. Contaminated Fresh Express brand salad products that made people sick in this outbreak are past their shelf-life and are no longer available.

Exposure to fresh herbs, including imported fresh cilantro and fresh parsley, were also identified as a likely source for some of the illnesses reported in the outbreak. At the time this information became available, investigators were not able to identify any contaminated products available in the Canadian marketplace.

For the remainder of *Cyclospora* infections reported in the outbreak, the source of illnesses was not identified.

Investigation summary

As of November 4, 2020, 370 confirmed cases of *Cyclospora* illness were reported in the following provinces and territories: British Columbia (1), Ontario (255), Quebec (105), New Brunswick (1), Newfoundland and Labrador (6), and Nunavut (2). Individuals became sick between mid-May and late August 2020. Ten individuals were hospitalized. No deaths were reported. Individuals who became ill were between 0 and 83 years of age. The illnesses are distributed equally among men (50%) and women (50%).

The [U.S. Centers for Disease Control and Prevention](#) and the U.S. Food and Drug Administration also investigated a multi-state outbreak of *Cyclospora* infections that was linked to bagged salad mixes containing iceberg lettuce, carrots, and red cabbage produced by Fresh Express.

In general, *Cyclospora* infections occur each summer in Canada. Previous outbreaks have been linked to various types of imported fresh produce, including pre-packaged salad mix, basil, cilantro, berries, mesclun lettuce and snow peas. As part of the Government of Canada's commitment to keeping Canadians safe from infectious diseases, PHAC and its food safety partners continue our work to identify possible ways *Cyclospora* infections are occurring in Canada each year.

What you should do to protect your health

It is important to properly wash and sanitize any containers and refrigerator drawers or shelves that were used to store [recalled products](#) before using them again.

It can be difficult to prevent a *Cyclospora* infection. This is because washing produce does not always get rid of the parasite that causes the illness. Although you can't fully eliminate the risk of illness associated with fresh produce, following [safe food handling practices](#) on a daily basis is the best way to avoid getting sick.

Who is most at risk

Cyclospora is a microscopic single-celled parasite that is passed in peoples' feces. If it comes in contact with food or water, it can contaminate food and cause infection in the people who consume it. This causes an intestinal illness called cyclosporiasis. It is unlikely for *Cyclospora* to be passed from one person to another.

You are at higher risk for a longer or more severe illness if you:

- are a young child
- are an older adult
- have a weakened immune system (cannot fight disease easily)

Symptoms

Most people develop the following symptoms within one week after being infected with *Cyclospora*:

- watery diarrhea
- abdominal bloating and gas
- fatigue (tiredness)
- stomach cramps
- loss of appetite
- weight loss
- mild fever
- nausea

When you eat or drink contaminated food or water, it may take 7 to 14 days for symptoms to appear. If left untreated, you may have the symptoms for a few days to a few months. Most people have symptoms for 6 to 7 weeks without treatment.

Symptoms may go away and then return.

If you become ill, drink plenty of water or fluids to prevent dehydration from diarrhea. If you have signs of illness and have reason to believe you have cyclosporiasis, contact your health care provider who may request a laboratory test to confirm the illness.

Antibiotics may be given to treat the illness.

What the Government of Canada is doing

The Government of Canada is committed to food safety. The Public Health Agency of Canada leads the human health investigation into an outbreak, and is in regular contact with its federal, provincial and territorial partners to monitor the situation and to collaborate on steps to address an outbreak.

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 conducts food safety investigations into the possible food source of an outbreak.

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

Epidemiological information

Figure 1 below is an epidemiological curve for this outbreak. Outbreak investigators use this information to show when illnesses begin, when they peak, and when they trail off. It can take several weeks from the time a person becomes ill to when the illness is reported and testing confirms a link to the outbreak. Data are available for 370 cases.

Figure 1: Number of people infected with *Cyclospora*

