

Campylobacter infection

What is *Campylobacter* infection?

Campylobacter is a bacteria that infect the intestinal tract. Very rarely, the bacteria can also infect the blood stream. When a person gets sick from this infection it is called campylobacteriosis.

Campylobacter are a common cause of diarrhea worldwide. *Campylobacter* infection is the most commonly reported bacterial enteric (intestinal) disease in B.C.

What are the symptoms of a *Campylobacter* infection?

Campylobacter infection is usually self-limited, which means it usually ends without treatment. Symptoms may include:

- Mild to severe diarrhea
- Bloody diarrhea
- Nausea
- Stomach pain
- Fever
- Vomiting

Symptoms start an average of 2 to 5 days (range one to 10 days) after exposure to the bacteria. Symptoms usually last for less than one week.

You can be infected and have no symptoms. In some cases, symptoms may continue for more than 10 days. Occasionally, symptoms can return after you have started to get better. Rarely, arthritis and Guillain-Barré Syndrome (a neurological condition that can cause weakness and paralysis of the body's muscles) can occur after campylobacteriosis.

How can I become infected with *Campylobacter*?

Campylobacter are spread by the fecal-oral route, which is when contaminated feces are ingested.

Campylobacter live in the intestines of many animals including chickens, cows, pigs, sheep, dogs, cats and humans. When animals are slaughtered for food,

bacteria from an animal's intestines may contaminate the meat that we eat.

Common sources of infection include:

- Undercooked poultry and meats
- Unpasteurized milk
- Food and water contaminated with fecal material
- Animals including pets and farm animals

During food preparation, contaminated foods can transmit bacteria to other foods or surfaces in the kitchen. This is called cross-contamination. An example is cutting raw meat on a cutting board and then cutting vegetables on the same board without washing and then sanitizing the board in between.

If water sources such as streams, rivers, lakes or shallow wells are not treated properly, drinking the water may be unsafe. This drinking water can be contaminated with human feces or animal waste.

How can I prevent *Campylobacter* infection?

Handle and prepare food safely:

- Refrigerate foods right away. Keep raw meat well-wrapped and on lower refrigerator shelves so liquid does not drip onto other foods
- Thaw poultry and meat in the refrigerator, microwave or under cold running water. Do not thaw at room temperature
- Do not eat raw or undercooked poultry or meats
- Make sure poultry and meats are well-cooked by using a meat thermometer. Measure the internal temperature of the meat by putting the thermometer into the thickest part of the meat. You must achieve the following internal temperatures:
 - At least 74° C (165° F) for poultry
 - At least 71° C (160° F) for other meats
- Avoid direct contact between raw meats and other uncooked foods
- When cooking or barbecuing, use separate plates and utensils for raw and cooked poultry and meat

- Use a separate cutting board for raw meats. If you do not have a separate cutting board, cut all other ingredients first before cutting raw meats
- Wash and sanitize surfaces and items that do not go in the dishwasher such as cutting boards, utensils, counters, kitchen sinks and tap handles. Follow these steps:
 1. Wash with warm, soapy water
 2. Rinse with warm, plain water
 3. Sanitize with a mild bleach solution – 5 mL (one teaspoon) of bleach in one litre (4 ¼ cups) of water. Immerse items in the solution or spray solution onto surfaces. There should be at least 2 minutes of contact time with the solution to kill any bacteria

More ways to reduce the risk of infection:

- Wash your hands regularly with soap and warm running water at a sink and dry hands with disposable single-use towels. For more information on hand washing, refer to [HealthLinkBC File #85 Hand washing: Help stop the spread of germs](#). Always wash your hands:
 - Before eating
 - Before handling food
 - Right after handling raw poultry or meat, and before touching anything else
 - After using the toilet or changing diapers
 - After touching pets or farm animals. If an animal is sick with diarrhea, bring it to a veterinarian for treatment
- Do not eat raw unpasteurized eggs or uncooked foods made with raw unpasteurized eggs
- Do not drink unpasteurized milk or juices
- If your community water system issues a Boil Water Advisory, follow the instructions provided in the advisory
- Do not drink untreated surface water from a spring, stream, river, lake, pond or shallow well. Assume it is contaminated with animal waste. If you do use this type of water, boil or disinfect it for

drinking, making ice cubes, washing uncooked fruits and vegetables, making baby formula, brushing teeth and washing dentures or contact lenses. For more information on disinfecting water, visit [HealthLinkBC File #49b Disinfecting drinking water](#)

- Make sure children wash their hands carefully before eating and on a regular basis if they suck their thumbs or put their hands in their mouths. This is especially important if they handle pets

What should I do if I become infected with *Campylobacter*?

If you think you have a *Campylobacter* infection, visit your health care provider for testing, advice and treatment.

Do not handle or prepare food for others. If you have diarrhea and cannot control your bowel movements, you should not go to work or school.

If you are a food handler, health care worker, or work in or attend a daycare, it is possible for you to transmit *Campylobacter* to others in these settings. Do not go to work or day care until 48 hours after your last loose stool or episode of vomiting (or as instructed by your local health authority). This will allow you to recover and lessen the chance of spreading the infection to others.

Children in daycare who have diarrhea or vomiting can be cared for in an area separate from other children until their parents pick them up. Adults should supervise children in a daycare to ensure children follow proper hand washing.

How is a *Campylobacter* infection diagnosed and treated?

Campylobacter infection is diagnosed by testing a stool (bowel movement) sample.

Antibiotics are sometimes used to treat a *Campylobacter* infection. Your health care provider will decide if treatment is necessary. People with *Campylobacter* are advised to drink fluids to prevent dehydration from diarrhea



BC Centre for Disease Control
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