

Campylobacter Infection

What is *Campylobacter*?

Campylobacter are bacteria that infect the intestinal tract and sometimes the blood. When a person gets sick from this infection it is called campylobacteriosis.

Campylobacter is a common cause of diarrhea in B.C. and the world. Between 1995 and 2004 an average of 2300 infections per year were reported to the B.C. Centre for Disease Control. The number of infections has steadily declined since 1994.

What are the symptoms of a *Campylobacter* infection?

Campylobacter may cause mild to severe diarrhea, bloody diarrhea, nausea, stomach pain, fever and at times vomiting. Symptoms start an average of two to five days (range one to 10 days) after exposure to the bacteria and usually last for less than one week.

Sometimes a person can be infected and have no symptoms. In some cases symptoms may continue for more than 10 days, and sometimes symptoms can return after you have started to get better. Rarely, arthritis and Guillain-Barré Syndrome (a neurological condition) can occur after campylobacteriosis.

How is *Campylobacter* spread?

Campylobacter is spread by the fecal-oral route. Fecal material from infected humans or animals can get into mouths by:

- eating or drinking contaminated food or drink;
- not washing your hands properly after contact with the feces of infected humans;
- not washing your hands properly after contact with the feces of domestic or wild animals, including pets and farm animals. Pets may also have fecal matter on their hair or fur that can get on your hands when you touch them.

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 consume.

Common sources of infection are undercooked poultry and meats, unpasteurized milk, and other food and water contaminated with fecal material. During food

preparation, bacteria can be transmitted from contaminated foods to other foods or surfaces in the kitchen. This is called cross-contamination. There is a greater risk of contamination or illness if foods that are meant to be consumed uncooked, such as fresh fruits or vegetables, are cross contaminated. An example of this would be cutting raw meat on a cutting board and then cutting vegetables on the same board without washing and then sanitizing the board in between.

Drinking water can be contaminated if humans or animals leave their droppings in or near surface water sources, such as streams, rivers, lakes or shallow wells, and if this water is not treated properly.

How can *Campylobacter* infections be prevented?

Be aware of the risks with the food products you buy and know how to prepare your food safely. Handle and prepare all raw poultry and meat as if it is contaminated.

To handle and prepare food safely:

- Refrigerate foods right away. Keep raw meat well wrapped and on lower refrigerator shelves so blood does not drip onto other foods.
- Thaw poultry and meat in the refrigerator, microwave, or under cold running water, and **not** at room temperature.
- Do not eat raw or undercooked poultry or meats.
- To make sure poultry and meats are well-cooked use a meat thermometer and measure the **internal** temperature of the meat by putting the thermometer into the thickest part of the meat. You must achieve the following temperatures:
 - The **minimum** internal temperature for poultry is 74° C (165° F).
 - The **minimum** internal temperature for other meats is 71° C (160° F).
- 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 a separate cutting board is not available, cut all other ingredients first before cutting raw meats.

- **Wash and sanitize** items that do not go in the dishwasher such as cutting boards, utensils, counters, kitchen sinks and tap handles:
 1. Wash with warm, soapy water.
 2. Rinse with warm, plain water.
 3. Sanitize with a mild bleach solution – one teaspoon of bleach per litre of water. Immerse items in the solution or spray solution onto surfaces and soak for at least two minutes to kill any bacteria.

Other ways to reduce the risk of infection:

- **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; and
 - After touching animals.
- Do not eat raw unpasteurized eggs or uncooked foods made with raw unpasteurized eggs.
- Do not drink unpasteurized milk or juices.
- If your local Medical Health Officer has issued a boil water notice or advisory follow the instructions.
- Do not drink untreated surface water from a spring, stream, river, lake, pond or shallow well. Assume it is contaminated with animal feces. Boil or disinfect water from these sources that is used for drinking, making ice cubes, washing uncooked fruits and vegetables, making baby formula, brushing teeth, and washing dentures or contact lenses.
 - Boil water for at least 1 minute at a rolling boil. At elevations above 2000 m (6562 ft), boil for at least 2 minutes.
 - Disinfect using 1 drop of bleach per litre of water. Shake and allow to stand for 30 minutes before drinking. Disinfection using bleach works best with warm water.

For more information on disinfecting water, see BC HealthFile [#49b How To Disinfect Drinking Water](#).
- Make sure children, especially those who handle pets, wash their hands carefully before eating and on a regular basis if they suck their thumbs or put their hands in their mouths.

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

If you think you have a *Campylobacter* infection, see your doctor for testing, advice and treatment.

Campylobacter is passed in the feces; people with diarrhea who cannot control their bowel movements should not go to work or school.

If you are a food handler, health care worker or work in or attend a day care, it is possible for you to transmit *Campylobacter* to others in these settings.

Do not work while you have diarrhea or vomiting and do not return to work or day care until 48 hours after your last loose stool or episode of vomiting. This time period will ensure you have a chance to recover and lessen the possibility of transmitting the infection to others.

Children in day care who have diarrhea or vomiting can be cared for temporarily in an area separate from other children until picked up by their parents. To ensure proper hand washing, children in a day care should be supervised by an adult when washing their hands.

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 doctor will decide if treatment is necessary in your case. People with *Campylobacter* are advised to drink fluids to prevent dehydration from diarrhea.



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