Campylobacter Infection

What is Campylobacter?

*Campylobacter* is a bacteria that infects the intestinal tract, and very rarely can also infect the bloodstream. When a person gets sick from this infection it is called campylobacteriosis.

*Campylobacter* is a common cause of diarrhea worldwide and is the most commonly reported 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; and
- vomiting.

Symptoms start an average of 2 to 5 days (range 1 to 10 days) after exposure to the bacteria and usually last for less than 1 week.

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

How can I become infected with Campylobacter?

*Campylobacter* is 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, and animals including pets and farm animals.

During food preparation, bacteria can be transmitted from contaminated foods to other foods or surfaces in the kitchen. This is called cross-contamination. 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. When cross-contaminated, uncooked foods such as fresh fruit and vegetables, and ready-to-eat foods such as sandwich meats carry a greater risk of illness.

Drinking water can be contaminated if human feces or animal waste contaminates water sources such as: streams, rivers, lakes or shallow wells, and if this water is not treated properly.

How can I prevent Campylobacter infection?

It is important to 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 they are contaminated. Make sure to practice good hand hygiene, including regular hand washing which can protect you from many infections including *Campylobacter*. If you have diarrhea or other symptoms of *Campylobacter*, you should not handle or prepare food for others.

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.
- 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 temperatures:
• The minimum internal temperature for poultry is 74º C (165º F).
• The minimum internal temperature for other meats is 71º C (160º F).

- Avoid direct contact between raw meats and other uncooked foods.
- When cooking or barbequing, 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. Follow these steps:
  1. Wash items with warm, soapy water.
  2. Rinse items with warm, plain water.
  3. Sanitize with a mild bleach solution – 5ml (1 teaspoon) of bleach in 1 litre (4 ¼ cups) of water. Immerse items in the solution or spray solution onto surfaces and soak for at least 2 minutes to kill any bacteria.

Additional ways to reduce the risk of infection:
• Wash your hands with soap and warm running water at a sink and dry hands with disposable single-use towels. Always wash your hands:
  o before eating;
  o before handling food;
  o right after handling raw poultry or meat, and before touching anything else;
  o after using the toilet or changing diapers; and
  o after touching pets or farm animals. If the 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 a Boil Water Advisory has been issued for your community water system, 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, see HealthLinkBC File #49b Disinfecting 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 health care provider for testing, advice and treatment.

Campylobacter is passed through human feces or animal waste. 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 daycare, 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 at least 48 hours (or as instructed by your local Health Authority) 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 daycare 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 daycare 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 health care provider will decide if treatment is necessary. People with Campylobacter are advised to drink fluids to prevent dehydration from diarrhea.