



Campylobacteriosis

1.0 Introduction

Campylobacteriosis is caused by *Campylobacter* bacteria which commonly causes gastroenteritis, an inflammation of the lining of the intestines. Campylobacteriosis is the most common bacterial cause of diarrheal illness in the United States. The CDC indicates about 20 cases are diagnosed each year for every 100,000 people. Many more go undiagnosed or unreported. The CDC estimates *Campylobacter* infection affects 1.5 million U.S. residents each year. More cases occur in the summer than in winter. campylobacteriosis is primarily transmitted via consumption of contaminated food and water, it can also be acquired through contact with live animals or animal products.

2.0 People at Risk

Humans usually become infected with *Campylobacter* after eating poorly prepared meat, especially undercooked chicken. Campylobacteriosis can be contracted by animal workers via contact with animal feces and when a infected bird or other animals are slaughtered, it can be transmitted from contaminated intestines.

3.0 Transmission

Campylobacter bacteria is generally spread by eating or drinking contaminated food or water, unpasteurized milk, and by direct or indirect contact with fecal material from an infected person, animal or pet (especially puppies and kittens). Many animals including pigs, cattle, dogs and birds (particularly poultry) carry the bacteria in their intestines. These sources in turn may contaminate meat products, particularly poultry, water supplies, milk and other items in the food chain. Generally after being infected people will continue to pass the bacteria in their feces for a few days up to a week or more. Certain antibiotics may shorten the carrier phase. Most people may return to work or school when their stools become formed provided that they carefully wash their hands after toilet visits.

In lab animal facilities *Campylobacter* is contracted by individuals coming in contact with the fecal material of the animals in that facility

4.0 Symptoms

Campylobacteriosis may cause mild or severe infection. Most people who become ill with campylobacteriosis get diarrhea, cramping, abdominal pain, and fever within 2-5 days after exposure to the organism. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts 1-week. Some individuals who are infected with *Campylobacter* don't have any symptoms at all. In people with compromised immune systems, *Campylobacter* occasionally spreads to the bloodstream and causes a life-threatening infection.

5.0 Prevention, Diagnosis, and Treatment

Prevention

1. Wear gloves while working with animals and thoroughly wash hands after animal contact
2. Do not store or consume food in the lab animal facility
3. Do not use tobacco products, take or apply medicine, handle contact lenses, or apply cosmetics in animal facilities
4. Wear appropriate protective clothing while working with animals, such as lab coats, coveralls specified by each facility.
5. Do not wear soiled protective clothing outside the animal facility. Remove gloves prior to exiting the animal facility
6. Clean and disinfect your work area and equipment regularly with facility approved cleaners

7. Recognize, control and prevent *Campylobacter* infection in domestic animals and pets
8. Always wash hands with soap after toilet visits
9. Always treat raw poultry, beef, or port as if it is contaminated, handling accordingly:
 - Promptly refrigerate foods at <40 degrees Fahrenheit, minimize holding time at room temperature
 - Cutting boards and counters used for food preparation should be washed and disinfected immediately after use to prevent cross contamination with other foods.
 - Avoid eating raw or undercooked meats.
 - Ensure that correct internal cooking temperature is reached, particularly when using a microwave.
 - Avoid eating raw eggs or undercooking foods containing raw eggs.
 - Avoid consuming raw milk (unpasteurized).
 - Carefully wash hands with soap before and after food preparation.

Diagnosis

Diagnosis of *Campylobacter* infectiuon is confirmed by a laboratory test of the stool, body tissue, or fluids. The test could be a culture that isolates the bacteria, or a rapid diagnostic test that detects genetic material of the bacteria.

Treatment

Most people infected with *Campylobacter* will recover without treatment. Infected persons should drink plenty of fluids as long as the diarrhea lasts to prevent dehydration. Antibiotics are occasionally used to treat severe cases or to shorten the carrier phase, which may be important for food workers, children in day care and health care workers. Since relapses occasionally occur, some physicians might treat mild cases with antibiotics to prevent a recurrence of symptoms.

Potential Longer Lasting Effects

Most people who get campylobacteriosis recover completely in 2 to 5 days, although some may last as long as 10 days. Rarely, some long-term complications can result from a *Campylobacter* infection. Some people may have arthritis following campylobacteriosis, others may develop a rare disease known as Guillain-Barré syndrome that affects the nerves of the body and lead to paralysis. This paralysis usually lasts several weeks and requires intensive care. It is estimated that 1 of every 1000 cases of campylobacteriosis results in Guillain-Barré syndrome and that as many as 40% of GuillainBarré syndrome cases may be triggered by campylobacteriosis.

7.0 Resources

[CDC Campylobacteriosis link:](#)

For further information related to possible zoonotic disease exposure, or further related resources, please contact UT Occupational Health Nurse Bryan Cranmore RN, COHN at bcranmore@utk.edu, or for urgent response the OHP nurse can be reached at 865-755-8924

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Bryan Cranmore RN, COHN
Occupational Health Nurse

