

**What is *Campylobacter* infection?**

*Campylobacter* infection, or campylobacteriosis, is an infectious disease caused by *Campylobacter* bacteria. It is one of the most common causes of diarrheal illness in the United States. The [Foodborne Diseases Active Surveillance Network \(FoodNet\)](#) indicates that about 14 cases are diagnosed each year for every 100,000 people. Many more cases go undiagnosed or unreported. CDC estimates *Campylobacter* infection affects more than 1.3 million people every year. Most cases are not part of recognized outbreaks, and more cases occur in summer than in winter. In Ohio, between 2014 and 2018, a median of 1,962 cases were reported (range 923-2,190).

**What are the symptoms of *Campylobacter* infection?**

People with *Campylobacter* infection usually have diarrhea (often bloody), fever, and abdominal cramps. The diarrhea may be accompanied by nausea and vomiting. These symptoms usually start within two to five days after exposure and last about a week. Some infected people do not have any symptoms. In people with weakened immune systems, such as people with the blood disorders thalassemia and hypogammaglobulinemia, AIDS, or people receiving some kinds of chemotherapy, *Campylobacter* occasionally spreads to the bloodstream and causes a life-threatening infection.

**What kind of germ is *Campylobacter*?**

*Campylobacter* are bacteria that can make people and animals sick. Most human illness is caused by one species, called *Campylobacter jejuni*, but other species also can cause human illness.

**How does food and water get contaminated with *Campylobacter*?**

Many chickens, cows, and other birds and animals that show no signs of illness carry *Campylobacter*. *Campylobacter* can be carried in the intestines, liver, and giblets of animals and can be transferred to other edible parts of an animal when it is slaughtered. In 2014, [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) testing found *Campylobacter* on 33% of raw chicken bought from retailers.

Milk can become contaminated when a cow has a *Campylobacter* infection in her udder or when milk is contaminated with manure. Other foods, such as fruits and vegetables, can become contaminated through contact with soil containing feces from cows, birds, or other animals. Animal feces can also contaminate lakes and streams. Pasteurization of milk, washing or scrubbing of fruits and vegetables, and disinfection of drinking water helps prevent illness.

**How do people get infected with *Campylobacter* bacteria?**

It takes very few *Campylobacter* germs (fewer than 500) to make someone sick. That means a single drop of juice from raw chicken can have enough *Campylobacter* in it to infect someone.

Most *Campylobacter* infections are associated with eating raw or undercooked poultry or from contamination of other foods by these items. People can get infected when a cutting board that has been used to cut and prepare raw chicken isn't washed before it is used to prepare foods that are served raw or lightly cooked, such as salad or fruit. People also can get infected through contact with the feces of a dog or cat. *Campylobacter* does not usually spread from one person to another.

Outbreaks of *Campylobacter* infections have been associated most often with poultry, raw (unpasteurized) dairy products, untreated water, and produce. *Campylobacter* infection is common in the developing world, and people who travel abroad have a greater chance of becoming infected. About 1 in 5 *Campylobacter* infections reported to the FoodNet are associated with international travel.

Even more rarely, people may become infected through contaminated blood during a transfusion.

### **How is *Campylobacter* infection diagnosed and treated?**

*Campylobacter* infection is diagnosed when a laboratory test detects *Campylobacter* bacteria in 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.

Most people with *Campylobacter* infection recover without specific treatment. Patients should drink extra fluids as long as the diarrhea lasts. Antibiotics are needed only for patients who are very ill or at high risk for severe disease, such as people with severely weakened immune systems, for example people with the blood disorders thalassemia and hypogammaglobulinemia, AIDS, or people receiving chemotherapy.

### **Is *Campylobacter* infection serious?**

Most people with a *Campylobacter* infection recover completely within a week, although they may shed (get rid of) *Campylobacter* bacteria in their stool for several weeks after recovery, which might result in person-to-person transmission. *Campylobacter* infection rarely results in long-term consequences. Some studies have estimated that 5–20% of people with *Campylobacter* infection develop irritable bowel syndrome for a limited time and 1–5% develop arthritis.

About 1 in every 1,000 reported *Campylobacter* illnesses leads to [Guillain-Barré syndrome \(GBS\)](#). GBS happens when a person's immune system is triggered by an earlier infection, such as *Campylobacter* infection. GBS can lead to muscle weakness and sometimes paralysis that can last for a few weeks to several years, and often requires intensive medical care. Most people recover fully, but some have permanent nerve damage, and some have died of GBS. As many as 40% of GBS cases in the United States may be triggered by *Campylobacter* infection.

### **What can be done to prevent the infection?**

#### Wash Your Hands

Illness-causing bacteria can survive on your hands. Wash your hands thoroughly with soap and water during these times:

- Before, during, and after preparing food.
- Before eating food.
- After using the toilet.
- After changing diapers or cleaning up a child who has used the toilet.
- Before and after caring for someone who is sick.
- Before and after treating a cut or wound.
- After touching pets and other animals or their food or poop.
- After touching garbage.

#### Keep Certain Foods Separated

Keep raw poultry away from other foods. Use separate cutting boards and clean them properly.

- Use one cutting board for raw meat (including poultry, seafood, and beef).

- Use another cutting board for fresh fruits and vegetables, and other foods.
- Clean all cutting boards, countertops, and utensils with soap and hot water after preparing any type of raw meat.

#### Cook Food to the Right Temperature

Be extra careful with poultry, one of the top causes of *Campylobacter* illnesses in the United States. Poultry includes chicken, turkey, duck, goose, and other farmed birds.

- All poultry and foods containing poultry, such as sausages and casseroles, should be cooked to reach a minimum internal temperature of 165°F.
- If you are served poultry that appears to be undercooked in a restaurant, send it back for further cooking.

#### Drink Pasteurized Milk

Raw milk can carry *Campylobacter* and other harmful germs that can make you very sick. The risk of getting sick from drinking raw milk is greater for:

- Infants and young children.
- Adults aged 65 and older.
- Pregnant women.
- People with weakened immune systems, such as people with the blood disorders thalassemia and hypogammaglobulinemia, AIDS, or people receiving chemotherapy.

#### Do Not Drink Untreated Water

It is important to know where drinking water comes from, if it's been treated to remove harmful germs, and if it's safe to drink.

- Do not drink untreated water from a stream, river, pond, or lake.
- Be sure that wells are located a safe distance from possible sources of contamination, such as septic tanks, livestock, and manure.
- If you have a septic tank or well, have it inspected regularly to ensure that it is functioning properly.

#### **For more information, please visit these websites:**

- CDC's Campylobacteriosis: [www.cdc.gov/campylobacter](http://www.cdc.gov/campylobacter)
- FDA's Bad Bug Book: <https://www.fda.gov/downloads/food/foodborneillnesscontaminants/ucm297627.pdf>