Campylobacteriosis

What is campylobacteriosis?

Campylobacteriosis is an infectious disease caused by bacteria of the genus *Campylobacter*. Most people who become ill with campylobacteriosis get diarrhea, cramping, abdominal pain, and fever within two to five days after exposure to the organism. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts one week. Some infected persons do not have any symptoms. In persons with compromised immune systems, *Campylobacter* occasionally spreads to the bloodstream and causes a serious life-threatening infection.

What sort of germ is *Campylobacter*?

*Campylobacter* organisms are spiral-shaped bacteria that can cause disease in humans and animals. Most human illness is caused by one species, called *Campylobacter jejuni*, but human illness can also be caused by other species. *Campylobacter jejuni* grows best at the body temperature of a bird, and seems to be well adapted to birds, who carry it without becoming ill. These bacteria are fragile. They cannot tolerate drying and can be killed by oxygen. They grow only in places with less oxygen than the amount in the atmosphere. Freezing reduces the number of *Campylobacter* bacteria on raw meat.

Almost all persons infected with *Campylobacter* recover without any specific treatment. Patients should drink extra fluids as long as the diarrhea lasts. In more severe cases, antibiotics such as azithromycin or erythromycin can shorten the duration of symptoms if given early in the illness. Your doctor will decide whether antibiotics are necessary.
How common is *Campylobacter*?

*Campylobacter* is one of the most common causes of diarrheal illness in the United States. The vast majority of cases occur as isolated, sporadic events, not as part of recognized outbreaks. Active surveillance through FoodNet indicates that about 13 cases are diagnosed each year for each 100,000 persons in the population. Many more cases go undiagnosed or unreported, and campylobacteriosis is estimated to affect over 2.4 million persons every year, or 0.8% of the population. Campylobacteriosis occurs much more frequently in the summer months than in the winter. The organism is isolated from infants and young adults more frequently than from persons in other age groups and from males more frequently than females. Although *Campylobacter* does not commonly cause death, it has been estimated that approximately 124 persons with *Campylobacter* infections die each year.

How do people get infected with this germ?

Campylobacteriosis usually occurs in single, sporadic cases, but it can also occur in outbreaks, when a number of people become ill at one time. Most cases of campylobacteriosis are associated with eating raw or undercooked poultry meat or from cross-contamination of other foods by these items. Infants may get the infection by contact with poultry packages in shopping carts. Outbreaks of Campylobacter are usually associated with unpasteurized milk or contaminated water. Animals can also be infected, and some people have acquired their infection from contact with the stool of an ill dog or cat. The organism is not usually spread from one person to another, but this can happen if the infected person is producing a large volume of diarrhea.

A very small number of Campylobacter organisms (fewer than 500) can cause illness in humans. Even one drop of juice from raw chicken meat can infect a person. One way to become infected is to cut poultry meat on a cutting board, and then use the unwashed cutting board or utensil to prepare vegetables or other raw or lightly cooked foods. The Campylobacter organisms from the raw meat can thus spread to the other foods.
What can be done to prevent Campylobacter infection?

Some simple food handling practices can help prevent Campylobacter infections.

- Cook all poultry products thoroughly. Make sure that the meat is cooked throughout (no longer pink) and any juices run clear. All poultry should be cooked to reach a minimum internal temperature of 165 °F.
- If you are served undercooked poultry in a restaurant, send it back for further cooking.
- **Wash hands** with soap before preparing food
- **Wash hands** with soap after handling raw foods of animal origin and before touching anything else.
- Prevent cross-contamination in the kitchen by using separate cutting boards for foods of animal origin and other foods and by carefully cleaning all cutting boards, countertops, and utensils with soap and hot water after preparing raw food of animal origin.
- Avoid consuming unpasteurized milk and untreated surface water.
- Make sure that persons with diarrhea **wash their hands** carefully and frequently with soap to reduce the risk of spreading the infection.
- **Wash hands** with soap after contact with pet feces.

Physicians who diagnose campylobacteriosis and clinical laboratories that identify this organism should report their findings to the local health department. If many cases occur at the same time, it may mean that many people were exposed to a common contaminated food item or water source which might still be available to infect more people. When outbreaks occur, community education efforts can be directed toward proper food handling techniques, and toward avoiding consumption of raw (not pasteurized) milk.

For more information on Campylobacteriosis please visit:
http://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylobacter/