



# Campylobacteriosis



## Disease Vectors

Campylobacteriosis is a bacterial disease typically causing gastroenteritis in humans. Several species of *Campylobacter* may cause illness in livestock (calves, sheep, pigs) and companion animals (dogs, cats, ferrets, parrots). Among pets, dogs are more likely to be infected than cats; symptoms present primarily in animals less than 6 months old. Most cases of human campylobacteriosis result from exposure to contaminated food (particularly poultry), raw milk or water, but the bacteria may be transmitted via the feces of companion animals, typically puppies or kittens recently introduced to a household.

The principal infectious agent in human cases, *C. jejuni*, is common in commercially raised chickens and turkeys that seldom show signs of illness. Dogs and cats may be infected through undercooked meat in their diets or through exposure to feces in crowded conditions. *Campylobacter* prevalence is higher in shelters than in household pets. *Campylobacter* infection should be considered in recently acquired puppies with diarrhea.

## Symptoms , Diagnosis and Treatment

Symptoms of *Campylobacter* infection in humans typically occur 2-5 days after exposure and include diarrhea (sometimes bloody), cramping, abdominal pain, fever, nausea and vomiting. In the vast majority of cases, the illness resolves itself without treatment, generally within a week, and antibiotics are seldom recommended. Symptoms may be treated by increased fluid and electrolyte intake to counter the effects of diarrhea. In people with weakened immune systems, infection may spread throughout the body through the bloodstream, and medical treatment including hospitalization and antibiotic therapy may be necessary. Long term complications, though uncommon, may occur including a type of arthritis or Guillain-Barre syndrome, a rare autoimmune disease that can lead to paralysis.

Symptomatic dogs and cats have diarrhea that may be bloody with mucus and sometimes bile-stained, reduced appetite and vomiting. In dogs < 6 months old, diarrhea typically lasts 3-7 days, returning intermittently up to two weeks. Some apparently healthy dogs and cats are asymptomatic carriers of *Campylobacter*.

Diagnosis in humans and companion animals involves laboratory culture of fecal samples. DNA analysis is used to differentiate specific strains.

Antibiotic resistance has been documented among various *Campylobacter* species and subspecies. Therefore treatment should be under the direction of a veterinarian. Typically, antibiotic therapy is reserved for young animals or pets with severe symptoms, but treatment of symptomatic pets may be appropriate in households to reduce the risk of human infection. Along with treatment, the pet should be removed to a clean environment and tested to determine if the bacteria remain in feces.

## Prevention

- Wash your hands with soap and water immediately after handling pets.
- Symptomatic pets:
  - ◊ Disinfect enclosure, food and water bowls.
  - ◊ Immediately clean up feces; wear disposable, waterproof gloves during cleanup.
  - ◊ Regularly clean/disinfect bedding
- Don't feed raw meat diets or raw milk to pets.
- Keep pets out of kitchen and food preparation areas.
- Young children always should be supervised in hand washing after handling pets.

## References and Links

CDC (<https://www.cdc.gov/campylobacter/index.html>): Campylobacter

CDC: <https://www.cdc.gov/healthypets/>: Healthy Pets Healthy People

Medscape (<https://emedicine.medscape.com/article/213720-overview>): Campylobacter Infections

Medline Plus (<http://medlineplus.gov/ency/article/000224.htm>): Campylobacter infections

Overview of Enteric Campylobacteriosis, Merck Veterinary Manual, <http://www.merckvetmanual.com/digestive-system/enteric-campylobacteriosis/overview-of-enteric-campylobacteriosis>

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