Campylobacter

Disease in Animals

C. jejuni and *C. coli* infect ruminants, poultry, pigs, as well as dogs, cats, mink, ferrets and primates. *C. fetus ssp fetus* and *C. fetus ssp venerealis* are found in ruminants.

Reporting: Campylobacter infection in animals is not routinely reportable to ODA, although voluntary reporting to the local health department (LHD) is encouraged when there is a risk of transmission to humans.

Transmission: The organism is present in feces, vaginal discharges and abortion products. Fecal-oral transmission can occur by direct contact or on fomites including food and water. Arthropods such as flies may act as mechanical vectors. Fecal shedding occurs in apparently healthy animals.

Clinical signs: Enteritis is more common in young animals and is usually characterized by a mucoid watery diarrhea, which may or may not contain blood. *C. fetus* infections in ruminants cause infertility, early embryonic death and sometimes abortion in sheep and cattle. Asymptomatic carriage is common, especially in poultry.

Diagnostics:

- Culture: of fresh feces, or semen; special growth media and conditions required
- Cytology: gram stain or darkfield microscopy
- Antigen testing: PCR-based or IFA antigen assay

Case classification:

- Suspected: a clinical case with signs consistent with campylobacter
- Probable: a clinically suspect case with laboratory evidence from a screening or unvalidated test
- Confirmed: a case that meets confirmatory testing criteria determined by a state or federal diagnostic laboratory

Disease in Humans

Reporting: Report by the end of the business week any suspected human illness or positive laboratory result to the LHD where the patient resides. If unknown, report to the LHD of the health provider or laboratory.

Human illness: Symptoms can be mild to severe. Fever, headache, myalgia and malaise can occur 12 to 24 hours before onset of intestinal symptoms, which include diarrhea (stool might contain blood or mucus), abdominal pain, vomiting and nausea. Symptoms last from one day to one week or longer.

Transmission: *Only a few organisms are needed to cause infection.* Although primarily a pathogen associated with foods of animal origin (especially poultry), direct transmission from animals (especially poultry, pets and livestock) or their feces to humans can occur through the fecal-oral route. Direct person-to-person transmission may occur but is uncommon.

Personal protection: Avoid eating and drinking when working around animals or animal manure. Hand washing after contact with animals can also help prevent campylobacteriosis. All meat and poultry dishes should be thoroughly cooked. Avoid cross-contamination of food (especially raw fruits and vegetables) with raw meat and poultry.

For More Information

Disease in Animals

Ohio Animal Disease Diagnostic Laboratory
Iowa State University Center for Food Security and Public Health Animal Disease Factsheets
AVMA Zoonosis Updates- Campylobacter

Disease in Humans

Home | CDC Campylobacter
ODH Infectious Disease Control Manual