

Cryptosporidium (*C. parvum*)

DISEASE IN ANIMALS

C. parvum is an obligate, intracellular coccidia. Though it can infect any mammal species, it is more common in primates, calves, and other young ruminants.

Reporting: Animal cases of cryptosporidiosis are not required to be reported to the Ohio Department of Agriculture (ODA) or USDA APHIS Veterinary Services. Cases that may be associated with human illness or that occur in public settings, such as petting zoos, are encouraged to be reported to the [local health department](#) (LHD).

Transmission: Transmission typically occurs directly or indirectly through the fecal-oral route, but can also occur by aerosolization. Infected animals shed large numbers of oocysts in their feces. The oocysts are immediately infectious and can survive for up to six months in a moist environment. They are highly resistant to disinfectants, such as chlorine.

Clinical signs: Most cases occur in young or naive animals; neonates and those that are immunocompromised are most susceptible to severe disease. Clinical signs typically range from asymptomatic to anorexia, diarrhea, and weight loss.

Diagnostics: (oocysts are not shed continuously so repeated testing may be required):

- Fecal flotation: sucrose or zinc sulfate
- Cytology: stained biopsy/necropsy specimens or intestinal scraping
- Immunofluorescence: fresh fecal sample
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Case classification:

- Suspected: a clinical case with signs consistent with cryptosporidium.
- 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: A gastrointestinal illness characterized by diarrhea, abdominal cramping, fever, nausea, vomiting and/or anorexia. In immunocompromised persons, infection can persist for extended periods, and the parasites may invade the respiratory track. The infectious dose is low; as few as 10 oocysts can result in infection. Many cases are asymptomatic or mild.

Personal protection: In humans, cryptosporidiosis is primarily a water-borne disease, though direct transmission from animals is also known to occur. Avoid possibly contaminated water when drinking or hand washing. Wear gloves when handling diarrheic animals and when handling neonatal calves. After contact with animals and animal feces, wash your hands thoroughly.

FOR MORE INFORMATION

Disease in Animals

[Iowa State University Center for Food Security and Public Health Animal Disease Factsheets](#)
[Ohio Department of Agriculture, Animal Disease Diagnostic Laboratory](#)

Disease in Humans

[ODH Infectious Disease Control Manual](#)
[CDC--Cryptosporidiosis](#)