

GIARDIA IN DOGS

What are Giardia?

Giardia are sometimes confused with worms because they invade the gastrointestinal tract and can cause diarrhea. They are not worms; instead, they are one-celled parasites classified as protozoa.

Most dogs that are infected with *Giardia* do not have diarrhea or any other signs of illness. When the eggs (cysts) are found in the stool of a dog without diarrhea, they are generally considered a transient, insignificant finding. However, in some dogs, they may cause diarrhea that in young puppies or debilitated dogs may be fatal.

How did my dog get Giardia?

A dog becomes infected with *Giardia* when it swallows the cyst stage of the parasite. Once inside the dog's intestine, the cyst goes through several stages of maturation. Eventually, the dog is able to pass infective cysts in the stool. These cysts lie in the environment and can infect other dogs. Because the cysts must stay moist in order to be infective, contaminated water from lakes, streams or even puddles is the most common source of infection.

How is giardiasis diagnosed?

Giardiasis may be diagnosed with two different methods. *Giardia* can be diagnosed by performing a microscopic examination of a stool sample. The cysts, however are quite small and usually require a special floatation medium for detection, so they are not normally found on routine fecal examinations. Occasionally, the parasites may be seen on a direct smear of the feces.

An ELISA (Enzyme-linked immunosorbent assay) test kit is now available to diagnose *Giardia* from a stool sample. Previously this type of test required a blood sample, and several days for a positive result. These kits resemble a home pregnancy test, and are used to detect proteins produced only by the organism. This test takes approximately 10 minutes, allowing a quick diagnosis. Unfortunately these proteins may remain in the body for several weeks to months following treatment, so this test is not useful for determining if an infection has been cleared.

How is giardiasis treated?

The most common drugs used to kill *Giardia* are metronidazole, an antibiotic and fenbendazole (Panacur) which is typically used for de-worming.

Can humans become infected with Giardia?

Giardia can also cause diarrhea in humans. Therefore, environmental disinfection is important. The use of chlorine bleach, one cup in a gallon (500 ml in 4 liters) of water, is effective if the surfaces and premises can be safely treated with it.