

Dog Tips

Cat Tips

Can Your Pet's Environment Make Them Sick?

Insights into how environmental factors like contaminated soil and water contribute to Giardia infections in pets.

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STORY AT-A-GLANCE

- Giardia duodenalis (Giardia) is a microscopic parasite that affects people and pets; once infected, Giardia lives in the intestines and is passed in poop
- The most common way dogs are infected is via feces-contaminated water, such as drinking from a creek or pond
- If your dog is infected, there's a good chance you won't know it, as most giardia infections are asymptomatic
- If symptoms do occur, diarrhea, gas, abdominal pain, nausea and vomiting are possible, with sudden, chronic or intermittent diarrhea being most common
- Longer term infection interferes with your pet's ability to digest and absorb nutrients from their food and may also damage the lining of the intestines
- A twice-yearly fecal test will also help to catch any parasitic infections early on, before they have a chance to do a lot of GI damage

Giardia duodenalis (Giardia) is a microscopic parasite that affects people and pets. Once infected, Giardia lives in the intestines and is passed in poop. Your pet can become infected if he ingests contaminated feces. An infected animal that licks his backside and then licks another animal or human can also transmit Giardia.

This parasite can also be picked up if your dog rolls in contaminated soil, which is one reason why it's often recommended that people wear gloves when gardening — you can pick up Giardia from soil, too. Dogs are sometimes infected if their body comes in contact with contaminated feces from a dog crate or litter box, and they then lick the area.¹

Puppy mills are common breeding grounds of Giardia for this reason, among others. However, the most common route of transmission is through feces-contaminated water, such as drinking from a creek or pond.

What Happens if Your Dog Has Giardiasis?

Giardia can survive for long periods of time in the environment — and is even somewhat resistant to chlorine disinfection² — because it's protected by an outer shell, or cyst. If your pet swallows Giardia cysts, they pass through to the small intestine, where they release two trophozoites, the active form of the parasite, which feed off the animal they've infected.

The trophozoites then multiply, eventually moving to the colon and transforming back into cysts via a process known as encystation.³ They're then passed from the body in feces, which easily contaminates water sources, grass, soil and other surfaces. Giardia thrive in cool, moist environments.

If your dog is infected, there's a good chance you won't know it, as most giardia infections are asymptomatic. If symptoms do occur, diarrhea, gas, abdominal pain, nausea and vomiting are possible, with sudden, chronic or intermittent diarrhea being most common. Your pet's stool may seem mushy for a few days, then improve on its own. After a week or two of normal poop, soft stools may start again.

While it may not seem initially to be a serious infection, after longer term infection, pets may experience debilitating bloody diarrhea that's dehydrating. This can cause weight loss, even if your pet is still eating normally.

Further, since this is a parasitic infection, it interferes with your pet's ability to digest and absorb nutrients from their food, and may also damage the lining of the intestines. I believe many cases of **inflammatory bowel disease (IBD)** or leaky gut syndrome (dysbiosis) could be caused by an undiagnosed giardia infection. Many of these patients have a history of being giardia positive as puppies or kittens, and they go on to develop IBD as adults.

I also see a number of pets with chronic diarrhea, malabsorption and other digestive issues who end up being giardia positive. It's something many primary care veterinarians don't routinely check for.

Testing for Giardia Infection

If you think your pet may have giardia, I recommend you ask your veterinarian to send a stool sample to a commercial laboratory for analysis. Don't settle for testing in-house at your veterinarian's office, as up to 30% of such tests may result in a false negative. If your pet has a history of gastrointestinal (GI) issues, I also recommend an ELISA or PCR test for giardia.

This checks for the presence of giardia antigens, not just giardia cysts, which may not be present in the stool when it's tested. Labs also offer a diarrhea panel that checks for other common causes of diarrhea, and it's a good diagnostic choice for any dog or cat with intermittent GI issues.

How Is Giardia Treated?

If your pet tests positive for giardia, antiprotozoal drugs will be prescribed to eliminate the parasite. However, giardia is becoming increasingly resistant to drug treatments, so it's possible that this may not eliminate the infection.

I've tried many natural protocols to eliminate giardia without the use of drugs, and I've had some success using combinations of antiparasitic herbs such as berberine (Oregon grape root), ginger, cinnamon, black walnut, olive leaf, cat's claw and Pau d'arco. However, while these herbs are useful for reducing the parasitic load in dogs and cats, they don't always resolve the infection.

Immediately following treatment for giardia, I recommend veterinarians run a fecal float test once a month for 3 to 4 months to ensure it is negative, followed by an antigen test to ensure the infection has been fully resolved. It will take a while for your pet to clear the antigens from his system, so it's not unusual to have a positive antigen test up to six months after treatment.

It's important to conduct multiple fecal float tests to ensure you catch any giardia cysts left behind. You may get one or two fecal samples that are negative, but if your pet is persistently infected or if the treatment didn't work, he could still be positive. Extending follow-up testing ensures your pet is truly free of the parasite.

If you choose to treat your pet all naturally, I recommend that you extend your intermittent stool checks to 9 months because I most commonly see a recurrence of cysts between the 6 and 9-month mark after an all-natural giardia treatment protocol. Once your pet is in the clear, work with a functional medicine veterinarian to create an intestinal recuperation plan. This will help your pet avoid long-term consequences from the infection.

Top Tips for Prevention

The best way to prevent giardia infection is to avoid letting your pet drinking water from ponds, streams and other outdoor sources. You should also pick up any dog poop in your yard, avoid walking your dog in areas where other dogs poop — like dog parks — and don't crate your pet with animals that could be infected.

A twice-yearly fecal test will also help to catch any parasitic infections early on, before they have a chance to do a lot of GI damage. Do not give your pet unnecessary medications or routine deworming "just in case" — this will typically cause more harm than good. Instead, have your dog or cat's feces regularly tested and take action then only if parasites are discovered.

Sources and References

1,4 U.S. CDC, Giardia and Pets (Archived)

^{2,3} <u>U.S. CDC, Pathogen and Environment (Archived)</u>