

## GIARDIA

*Giardia* is an intestinal parasite that can be passed to people and *giardiasis* (GEE-are-DYE-uh-sis) is a diarrheal illness caused by this microscopic parasite. Once an animal or person has been infected, the parasite lives in the intestine and is passed in the stool, where it can survive outside the body for a long time. The organisms come from the environment and live in moist or wet areas. *Giardia* is one of the most common causes of waterborne disease (from drinking water and recreational water) in humans in the United States, where it occurs in every region.

### Who is at Risk?

Young puppies or kittens, immune-compromised human patients and dogs who already have multiple parasite infections are more likely to have clinical signs associated with giardia. Some animals develop disease while others in the same environment do not, so the cause may be an animal's individual immune response to the parasite. Some dogs and cats get this condition several times in their lifetime.

### Can people get giardia from their pets?

There is controversy over whether or not giardiasis is a zoonotic disease (one that can be passed from pets to humans). It isn't known whether there is one species of this parasite or several different ones that can affect animals, including people. The dog and human strains of giardia have different characteristics while the cat and human strains are more similar. However, until there is definite proof one way or the other it is safe to assume that contact with fecal material from infected dogs or cats can potentially infect people. Good sanitary practices, like washing your hands after handling an infected

puppy, are very important. If a family member develops similar clinical signs, go to your doctor.

### How do You Know if a Dog or Cat Has *Giardiasis*?

*Giardia* can be very hard to find through fecal examinations because even if animals infected with the organism it may not be present in their stool. Therefore repeated fecal exams are often necessary to identify this parasite, also because all animals infected with *giardia* do not have clinical signs of diarrhea or poor weight gain. Clinical signs of *giardia* include weight loss or inability to gain weight if a young growing animal, diarrhea, vomiting, lack of appetite and greasy appearing stools. Estimates of how many pets are infected with this parasite range all the way up to 70%. The infection rate varies widely by region - *Giardiasis* occurs almost everywhere there is water (the most common way for it to be transmitted, resulting in the variations in reported infection rates), but direct contact can also pass the disease. In any case, since the organism can be found in a lot of dogs without any visible symptoms, it is safe to assume that most dogs with *giardia* will not have signs of it.

### Preventing *Giardiasis*

Water-borne protozoans and contaminated water sources are probably the most likely source of infection for both pets and people, so don't let your animals drink from puddles or containers that sit outside. Good sanitation, such as hand washing after playing with cats and dogs and avoiding contact with the dog's feces is the best defense against this condition. Keeping the dog's environment dry helps a lot, too.

There is a vaccine that helps to prevent the symptoms from occurring in dogs that are very susceptible and in puppies that are likely to be exposed, however it is one of the vaccines that AVMA recommends *against*.

Treatment: The most commonly used medication for giardia infection is metronidazole (Flagyl).