

<b>Disease Name:</b>	<b>Giardiasis</b>			
<b>Agent:</b>	<i>Giardia duodenalis</i> (syn. <i>G. intestinalis</i> , <i>G. lamblia</i> )			
<b>Infective forms:</b>	Exists as intestinal trophozoite form and as an infective cyst			
<b>Susceptible domestic species:</b>	Cats, dogs, and most domestic species			
<b>Zoonotic?:</b>	Humans are much more likely to be infected with Giardia from a contaminated water source than from an infected pet (a.k.a. Beaver fever). However, it is known that the same species of Giardia can infect domestic animals and humans, so precautions should be taken when handling infected animals.			
<b>Clinical Signs &amp; Symptoms</b>	<p><b>Animals</b> - Diarrhea, chronic weight loss, and pale, malodorous feces. Even animals with no obvious symptoms can carry Giardia.</p> <p><b>Human</b> - Some people experience no symptoms, typical symptoms include mild or severe diarrhea, abdominal pain and occasional weight loss. Fever is rarely present.</p>			
<b>Diagnostic tests:</b>	<b>Direct smear</b>	<b>Zinc flotation with centrifugation</b>	<b>Flotation without centrifugation</b>	<b>Idexx ELISA SNAP test</b>
<b>Test sensitivity</b>	~ 50% on diarrheic feces	~75% on 3 samples over 5 days	Poor (probably <10%)	85-90%
<b>Test specificity</b>	Must distinguish from <i>T. foetus</i> in cats	Good, if able to distinguish from coccidia, yeast, etc.		95-99%
<b>Test comments:</b>	Must be fresh sample	Cyst shedding is intermittent – must sample repeatedly	Test is essentially not recommended for giardia	Can test + for up to 2 weeks following + treatment
<b>Other tests:</b>	There are several other tests available from laboratories. The ProspectT microplate ELISA and FA tests are good; please call your lab for details on the tests and on their specificities/sensitivities. (The ProspectT RAPID assay is less sensitive.)			

**ONTARIO SPCA**  
AND HUMANE SOCIETY

<b>Prevalence in shelters:</b>	Cats: 10-30% (up to 100% in some catteries) Dogs: 20-40% (up to 100% in some kennels)
<b>Vaccine available?</b>	Yes, however it is not recommended as it has not been proven to be effective.
<b>Excreted in:</b>	Feces
<b>Mode of transmission:</b>	Fecal-oral either directly or indirectly, e.g. fecal contaminated water or food.
<b>Disinfection:</b>	Cysts can exist for months in a moist/cool environment. Drying of kennels also helps in between disinfection. Does not survive freezing. Mechanical removal through routine cleaning and disinfection is most effective.
<b>Incubation:</b>	Average prepatent period is 8 days in dogs, 10 days in cats. Onset of disease (if it occurs) may precede cyst shedding by 1-2 days.
<b>Post-recovery shedding:</b>	Shedding may still occur even after disease is treated. It is advisable to retest animal at the end of treatment and then again several weeks later.
<b>Carrier state?:</b>	YES. Most infections in otherwise healthy adult animals are asymptomatic. Self cure is possible as is chronic shedding.
<b>Treatment &amp; prevention of outbreaks:</b>	Fenbendazole (panacur); Febental/pyrantel/praziquantel (Drontal Plus); Metronidazole (less effective and resistance is possible). Reinfection is common so decontamination of the environment in shelters is paramount.
<b>PPE Required</b>	Gloves, gown, impermeable shoe covers
<b>Control</b>	Bathing can also help decrease cyst load found on fur.