

Internal Parasites in Cats

This handout is designed to give you an overview of some of the internal parasites that can infect your cat. For more detailed information, refer to the separate handouts "Roundworm Infection in Cats", "Hookworm Infection in Cats", "Tapeworm Infection in Cats", and "Heartworm Infection in Cats".



Are there different types of internal parasites or worms?

There are several types of internal parasites that cause problems in cats. These include roundworms, such as *Toxocara cati*, *Toxascaris leonina*; heartworm (*Dirofilaria immitis*); tapeworms, such as *Dipylidium caninum*, *Taenia* species, and *Echinococcus* species; and hookworms, such as *Ancylostoma* species.

Are these infections serious in the cat?

Intestinal worms can be a serious problem in young kittens. Hookworms can cause anemia and roundworms can lead to poor growth and development. Tapeworms can also accumulate in high numbers, leading to intestinal obstruction.

In adult cats, however, intestinal parasites are only occasionally life-threatening. Debilitated animals or those that have a weakened immune system are more likely to experience severe intestinal parasitism and show clinical signs due to their worms.

Heartworm disease is a major life-threatening problem in dogs, and is increasingly recognized as a threat to cats. Heartworm disease is transmitted by mosquitoes and can cause extensive damage within the heart and lungs.

What will happen if my cat gets worms?

Roundworms

If a growing kitten is infected with a large number of roundworms, the worms can stunt the kitten's growth, cause serious digestive upset, and result in excessive gas formation. These kittens often have a characteristic 'pot-bellied' appearance.

Roundworms are free-living in the intestines. Roundworms do not require an intermediate host to spread from cat to cat, but can be transmitted by ingesting the eggs that are passed in the feces of an infected cat.

Hookworms

Hookworms are one of the most significant intestinal parasites of the cat. The hookworm is approximately ½ to 1" (1–2 cm) long. It attaches to the lining of the small intestine, where it feeds on blood. As a result of blood-sucking, hookworms can cause severe anemia in infected cats. The infective larvae can enter the host either by mouth or through the skin, particularly the feet. Eczema and secondary bacterial infection can occur due to irritation as they burrow through the skin.

Tapeworms

Tapeworms require an intermediate host, such as a flea, a bird, or certain species of rodents, in order to complete their life cycle. In other words, your cat cannot get tapeworms directly from another cat or a dog. *Dipylidium caninum*, the most common tapeworm of the cat, causes few problems in the adult cat, but can cause digestive upsets and stunting of growth in kittens. The intermediate host of *Dipylidium* is the flea; cats get tapeworm by eating an infected flea.

Taenia species of tapeworms usually infect adult cats and cause few problems. The intermediate hosts for *Taenia* species are small mammals such as rodents, rabbits, and some species of birds. Therefore, this parasite is most common in outdoor cats who hunt. Kittens are occasionally infected (mostly when they eat raw prey) and, in heavy infections, large numbers of tapeworms can cause intestinal blockage.

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Echinococcus is important because it is zoonotic, meaning it can infect humans. The adult tapeworm is tiny, only about ¼" (5–6 mm) long. Sheep and sometimes humans can act as the intermediate hosts for *Echinococcus*, with the immature forms of *Echinococcus* developing inside various organs of these species. *Echinococcus* is a risk to cats that live in close proximity to sheep.

Heartworms

Heartworm disease is uncommon in cats but increasing in incidence, especially in certain areas of North America. Heartworms are spread by mosquitoes; a mosquito, when feeding on a cat, may inject heartworm larvae into the bloodstream. These larvae mature and ultimately travel to the heart, residing in the major vessels of the heart and lungs.

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In the cat, symptoms associated with heartworm infection are non-specific. Heartworm disease may lead to coughing, rapid breathing, weight loss, and vomiting. Occasionally a cat that is infected with heartworms will die suddenly, and the diagnosis will be made on a post-mortem examination. Heartworms are large worms, reaching 6–14 inches (15–36 cm) long. They are primarily located in the right ventricle of the heart and adjacent blood vessels.

How can I prevent or treat these parasites?

Speak to your veterinarian about the most appropriate parasite control program for your cat. Prompt treatment for worms should be given when any intestinal parasites are detected; periodic routine deworming may be appropriate for cats at risk for re-infection. Controlling fleas will prevent infection of certain types of tapeworm. There are excellent heartworm preventives now available for cats, making prevention of heartworm disease safe and easy.

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