

Feline Hookworm Infection

**What are hookworms?**

Hookworms are parasites named for the hook-like mouth parts they use to attach to the intestinal wall. They are only about 1/8-inch long and so small in diameter that they are almost invisible to the naked eye. The scientific names for the most common feline hookworms are Ancylostoma tubaeforme and Ancylostoma braziliense. Occasionally, cats will also become infected with canine heartworms, also known as Ancylostoma caninum. In general, cats tend to harbor relatively few hookworms compared to the large numbers found in dogs. Feline hookworms also tend to be less aggressive than canine hookworms.

**Which cats are most likely to get hookworms?**

Hookworms are more common in warm, moist environments. Overcrowding and poor sanitation can also contribute to infection.

**What are the clinical signs?**

Feline hookworms tend to “graze” along the lining of the small intestine and are considered “tissue feeders." When the parasites suck the cat's blood, an anti-coagulant substance is injected at the feeding site. This can cause the cat to suffer blood loss and intestinal distress, though anemia is a more significant problem in kittens than adult cats. Evidence of hookworm infection includes anemia due to blood loss, the presence of digested blood in the stool, a poor hair coat and weight loss.

**How do cats get hookworms?**

A cat may become infected when he/she swallows hookworm larvae, or immature worms. The larvae may also penetrate the skin and migrate to the intestine to mature and complete the life cycle.

In dogs, prenatal infection (infection prior to birth) may be a significant problem. Puppies may become infected by the placental blood flow and then later through the mother’s milk. Prenatal infection has not been demonstrated to occur in kittens, however.

**How is the diagnosis made?**

Hookworms are diagnosed with a microscopic examination of a small stool sample. The stool is is mixed into a special solution that causes the eggs to float to the top. The eggs are then examined under a microscope and identified. Since there are so many eggs produced on a daily basis, hookworm infection is usually fairly easy to diagnose.

One adult female hookworm is reported to produce as many as 20,000 eggs a day, but the number of eggs does not necessarily correlate with the number of worms present. In fact, the number of eggs passed can be greater with light infections.

**How are hookworms treated?**

Fortunately, treatment is safe, simple and relatively inexpensive. There are several effective drugs that will kill hookworms. These can be given by injection or orally and have few, if any, side effects. However, these drugs only kill the adult hookworms. Therefore, it is necessary to treat again in about two to four weeks to kill any newly-formed adult worms that were larvae at the time of the first treatment. Ideally, cats are treated for worms during their kitten vaccination series. In rare cases, a blood transfusion may be necessary for cats that experience severe anemia.

**Will my cat recover?**

With appropriate diagnosis and treatment, the prognosis is good for full recovery from hookworm infection.

**Can hookworms be prevented?**

Hookworm prevention should include the following measures:

* All new kittens should be treated by two to three weeks of age. To effectively break the life cycle of the most common intestinal parasites, kittens should be dewormed on the schedule recommended by your veterinarian. Prompt treatment should be given when any parasites are detected; periodic deworming may be appropriate for cats at high risk for reinfection.
* Appropriate disposal of cat and dog feces, especially from yards and playgrounds, is important.
* Strict hygiene is especially important for children. Do not allow children to play in potentially contaminated environments. Be mindful of the risk posed by public parks and uncovered sandboxes. Sandboxes with fitted covers are recommended to prevent intestinal parasites in children.
* Rodent control is also important since these animals may play a role in the transmission of hookworms to cats.
* Stool should be removed from litter boxes daily, if possible. Always wash hands after handling litter box material.

**Can hookworms be transmitted to humans?**

Feline hookworms do not infect humans internally. However, the larvae can burrow into human skin, causing a disease called cutaneous larval migrans. Also known as “ground itch," this skin infection does not lead to maturation of the larvae. Because contact of human skin with moist, larvae-infected soil is required, infection rarely occurs when proper hygiene is practiced.