

Feline Roundworm Infection

**What are roundworms?**

Roundworms are one of the most common intestinal parasites found in cats. They are also an important cause of illness and death in kittens. As the name implies, these are worms that have round bodies. On average, they are about three to five inches long. They live in the cat's intestines and consume partially digested food. Unlike hookworms, they do not attach to the intestinal wall; rather, they literally swim in their food.

The scientific name for the feline roundworm is Toxocara cati. Another less common roundworm, Toxascaris leonina, can infect both dogs and cats. Roundworms are sometimes called ascarids and the disease they produce is called ascariasis.

**Which cats are likely to get roundworms?**

Risk factors for roundworm infection include mother cats with a pre-existing infection, heavily contaminated environments and the presence of intermediate hosts, such as roaches, earthworms and birds.

**What are the clinical signs?**

Roundworms are not particularly pathogenic (harmful) to mature cats, but large numbers may cause life-threatening problems in kittens and debilitated adult cats. In kittens, common signs include a pot-bellied appearance, abdominal discomfort, depressed appetite, vomiting, diarrhea or poor growth. In both kittens and adult cats with small numbers of worms, no signs may be apparent.

**How are roundworms acquired?**

Mother cats that have had roundworms at any time in the past can transmit them to their kittens before birth. This is true even if the mother tests negative for roundworms because roundworm larvae (immature worms) encyst in the mother's muscle tissue and are not detected by our tests for adult worms. Another major source of roundworm infection for kittens is the mother's milk. Roundworm larvae may be present in the mother's mammary glands and milk throughout the nursing period.

Both kittens and adult cats may become infected by swallowing roundworm eggs which contain infective larvae. The larvae hatch out in the cat's stomach and small intestine and migrate through the muscle, liver and lungs. After several weeks, the larvae make their way back to the intestine to mature. When these worms begin to reproduce, new eggs will pass in the cat's stool and the life cycle of the parasite is completed.

Obviously, roundworm eggs passed in one cat's stool may be infectious to other cats. Interestingly, a large number of other animal species have been found to harbor roundworms and represent potential sources of infection for cats as well. These include cockroaches, earthworms, birds and rodents.

**How are roundworms diagnosed?**

To diagnose roundworm infection, a small amount of the cat’s stool is mixed into a special solution that causes the eggs to float to the top. The distinctive eggs are easily recognized under a microscope. Roundworm eggs are usually plentiful, but in some cases it may take more than one fecal examination to find them. Occasionally, intact adult roundworms can be found in the cat's stool or vomit.

**What is the treatment?**

Fortunately, treatment for roundworm infection is safe, simple and relatively inexpensive. After administration of a deworming medication (anthelmintic), the worms will pass into the stool. Because of their large size, they are easily identified. At least two or three treatments are needed; they are typically performed at two- to three-week intervals. Ideally, kittens are dewormed again with each visit for kitten vaccinations. None of these treatments will kill the immature forms of the worm or the migrating larvae.

**Will my cat recover?**

The prognosis of a roundworm infection is good if appropriate medication is given promptly. However, in some cases, extremely debilitated kittens may die.

**Is prevention possible?**

Prevention of roundworm infection should include the following measures:

* Breeding queens should be dewormed prior to pregnancy and again in late pregnancy. This will reduce environmental contamination for new kittens.
* New kittens should be appropriately dewormed as recommended by your veterinarian. The first deworming should be given at two to three weeks of age, before the kitten is seen for his/her first vaccines.
* Prompt deworming should be given when any parasites are detected. Periodic deworming may also be appropriate for cats at high risk for reinfection. Adult cats remain susceptible to reinfection with roundworms throughout their lives.
* Cats with predatory habits should have a fecal examination several times a year. Rodent control is desirable since rodents may serve as a source of roundworm infection for cats.
* Stool should be removed from litter boxes daily, if possible. Litter boxes and other contaminated surfaces can be cleaned with a bleach solution (one cup of chlorine bleach per gallon of water) to facilitate removal of eggs. Rinse the litter box thoroughly to remove all toxic bleach. This solution makes the eggs easier to rinse away but does not kill the eggs. Always wash your hands after handling litter box material.
* Appropriate disposal of cat feces, especially from yards and playgrounds, is important. Once an environment is contaminated with roundworm eggs, they may remain viable for long periods unless they are exposed to direct sunlight or very dry conditions.
* Strict hygiene is especially important for children. Do not allow children to play in potentially contaminated environments. Be mindful of the risk that public parks and sandboxes pose. Even though stool may not be visible, roundworm eggs may be present. Sandboxes with fitted covers are recommended to prevent roundworm infection in children.
* Contact your animal control officials when homeless animals are found.

**Are roundworms a danger to me or my family?**

The roundworms of both dogs and cats pose a health risk for humans. As many as 10,000 cases of roundworm infection in humans have been reported in a single year. Children, in particular, are at risk for health problems should they become infected.

A variety of organs may be affected as the larvae migrate through the body. In suitable environments, the eggs may remain infective to humans and cats for years.