What is coccidiosis?

Coccidiosis is a parasitic disease of the intestinal tract that is caused by a microscopic protozoan (single-celled organisms) called coccidia. The diseases caused by these parasites is referred to as coccidiosis.

There are many species of coccidia, and each is infective in different animals. The species of coccidia that most frequently affect cats are Isospora rivolta and Isospora felis.

Most adults carry coccidia, but their immune system keeps it in check, some adults may, however, shed cysts in the feces. Symptoms are most commonly seen in kittens under 6 months of age. Stressed cats and those who have compromised immune systems are at greatest risk of developing symptoms.

The geographical distribution of coccidia is worldwide.

Life cycle of coccidia:

- Nonsporulated (non-infective) oocysts pass in the cat’s feces and into the environment.
- Once they are in the outside environment, the oocysts mature within 16-24 hours. The cat ingests oocysts.
- Once inside the cat, each oocyst contains 4 sporozoites in each of 2 sporocysts. The “zoites” invade the intestinal cells and develop to the schizont stage. The schizonts release more zoites which invade new cells and give rise to the next generation of schizonts. There are 3 generations of schizonts. Zoites released from the last generation of schizonts invade cells and form gametocytes. The male gametocyte releases gametes which fuse with the female gametocytes and form oocysts.

Transmission:

Infection occurs in one of several ways:

- Exposure to infective oocysts from the feces or environment.
- Hunting and consuming a rodent infected with coccidia.
- Mother cats pass on the infection to kittens via direct contact with contaminated feces in the nest.
It takes approximately two weeks from ingestion to symptoms of infection to occur.

**Symptoms:**

The primary symptom of coccidiosis is diarrhea, which may contain blood or mucus.

Other symptoms may include:

- Vomiting
- Weight loss
- Dehydration (due to loss of fluids)
- Loss of appetite (anorexia)
- Uveitis (inflammation of the uvea in the eye)
- Death, especially in young kittens or older cats with underlying medical conditions

**Diagnosis:**

Routine fecal examinations can detect the coccidiosis in cats. A negative result is not a definite indication that your cat doesn’t have the disease, and it may be necessary to repeat fecal examinations.

If an otherwise healthy cat presents with coccidia, it may also be worthwhile performing routine blood and urine tests to evaluate your cat’s overall health as well as FIV and FeLV tests to determine if he has an underlying condition which may have weakened his immune system and allowed the parasite to take hold.

**Treatment:**

It is not possible to kill the parasite, but medications can be given which inhibit coccidial reproduction.

The usual treatment is with a sulfa type antibiotic such as sulfadimethoxine or Trimethoprim-sulfa.

Supportive care such as intravenous fluids to treat dehydration and nutritional support.

**Can I become catch coccidiosis from my cat?**

* *I. felis* which is the most common form of coccidiosis in cats does not affect humans. However, it is possible to become infected with toxoplasmosis from cats which is of particular risk to pregnant women or people with...*
suppressed immune systems. It is also possible to catch cryptosporidium from an infected cat.

**Prevention:**

Most household disinfectants are unable to kill infective oocysts in the environment, however, precautions can still be taken to reduce exposure.

- Practice good hygiene. Ensure you scoop out your cat's litter tray at the very least once a day. It takes 24 hours for spores to become infective in the feces, so frequent removal of feces can help to decrease exposure to the parasite.
- Prevent your cat from hunting and killing rodents.
- Avoid stress in where possible, keep routines the same, avoid introducing other animals to the household.
- Daily washing of food and water bowls.
- Isolate cats who have coccidiosis from other household cats while they are being treated.
- If you have a pregnant cat, have her tested for coccidiosis before she gives birth. Treatment with the appropriate medication will be necessary if she tests positive. Never administer any medications to a pregnant cat without veterinary approval.
- Make sure your cat is up to date on his vaccinations which won’t prevent coccidia infection however it can help to protect him from other infectious diseases which can weaken his immune system.