

COCCIDIOSIS

What is coccidiosis?

Coccidiosis is an infection with a one-celled organism; these organisms are classified as protozoa and are called coccidia. Coccidia are not worms; they are microscopic parasites which live within cells of the intestinal lining. Because they live in the intestinal tract and commonly cause diarrhea, they are often confused with worms.

How did my dog become infected with coccidia?

Oocysts (immature coccidia) are passed in the stool of the dog. They lie in the environment and eventually sporulate (mature) into a more developed oocyst which can infect the dog again. Other dogs, cats, or mice may also become infected. This process can occur in as little as 6 hours, but it usually takes 7-10 days. If the sporulated oocysts are swallowed, they mature in the dog's intestine to complete the life cycle. If the oocysts should be swallowed by a mouse, the dog may also become infected by eating the mouse.

What kinds of problems are caused by coccidial infection?

Most dogs that are infected with coccidia do not have diarrhea or any other clinical signs. When the eggs (oocysts) are found in the stool of a dog without diarrhea, they are generally considered a transient, insignificant finding. However, in puppies and debilitated adult dogs, they may cause severe, watery diarrhea, dehydration, abdominal distress, and vomiting. In severe cases, death may occur.

How is coccidial infection diagnosed?

Coccidiosis is diagnosed by performing a microscopic examination of a stool sample. Since the oocysts are much smaller than the eggs of the intestinal worms, a very careful study must be made. Infection with some of the less common coccidial parasites is diagnosed with a blood test.

How is the coccidial infection treated?

The most common drug used to eliminate coccidia is a sulfa-type antibiotic. It is given for 10-14 days. Other drugs are also used if diarrhea and dehydration occur. If the sulfa-type drug is not effective, others are available.

Reinfection of dogs is common so environmental disinfection is important. The use of chlorine bleach, one cup in a gallon of water (500 ml in 4 liters), is effective if the surfaces and premises can be safely treated with it.

Are the coccidial parasites of my dog infectious to humans?

The most common coccidia found in dogs do not have any affect on humans. However, less common types of coccidia are potentially infectious to humans. One parasite, called *Cryptosporidium*, may be carried by dogs or cats and may be transmitted to people. This parasite has also been found in public water supplies in some major cities.

Coccidial parasites pose a health risk for immunosuppressed humans (i.e., AIDS patients, those taking immune suppressing drugs, cancer patients, the elderly). Good hygiene and proper disposal of dog feces are important in minimizing risk of transmission of all canine parasites to humans. Although there is risk of the dog transmitting these two particular parasites to humans, it does not

warrant removing the dog from the household except in very rare instances.