

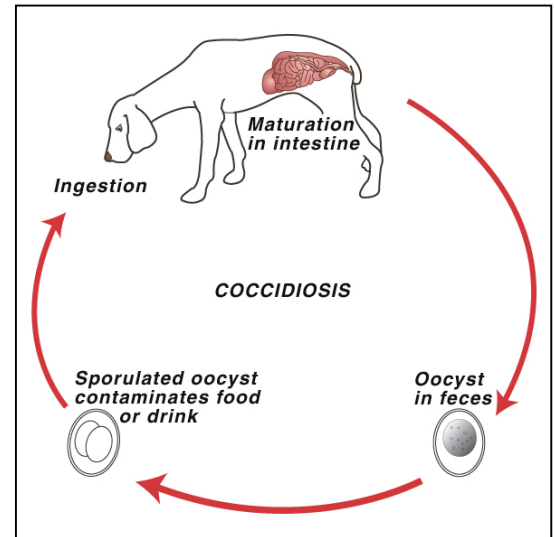
## COCCIDIOSIS

### ***What is coccidiosis?***

Coccidiosis is an intestinal tract infection caused by a one-celled organism (protozoa) called coccidia. Coccidia are sub-classified into a number of genera, and each genus has a number of species. Some six different genera of coccidia can infect dogs and cats. They are microscopic parasites that spend part of their life cycle in the lining cells of the intestine. Most infections are not associated with any detectable clinical signs (they are sub-clinical). Most clinical infections in dogs are caused by the species *Isospora canis*, and in cats *Isospora felis*. *Cryptosporidium parvum* is another coccidian parasite that may cause diarrhea in some puppies and kittens.

### ***How did my pet become infected with coccidia?***

Oocysts (immature coccidia) are passed in the stool of an infected dog or cat. They are very resistant to environmental conditions and can survive for some time on the ground. Under the right conditions of temperature and humidity these oocysts “sporulate”. These oocysts can become air borne in dusty litterboxes. If the sporulated oocysts are ingested by a susceptible host they will release “sporozoites” that invade the intestinal lining cells and set up cycles of infection in neighboring cells. Dogs and cats may also be indirectly infected by eating a mouse that is infected with coccidia.



### ***What kinds of problems are caused by coccidiosis?***

Infection in puppies, kittens and debilitated adults, may cause severe, watery diarrhea, dehydration, abdominal distress, and vomiting. In severe cases, death may occur.

### ***How is coccidiosis diagnosed?***

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

### ***How is the coccidian 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, other treatments are available. Re-infection of dogs is common so environmental disinfection is important. The use of diluted chlorine bleach [1 cup (250 ml) of bleach mixed in 1 gallon (3.8 L) of water] is effective if the surfaces and premises can be safely treated with it.

### ***Are the coccidian parasites of my dog infectious to humans?***

The most common coccidia found in dogs and cats 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 cats or dogs and may be transmitted to people. This parasite has also been found in public water supplies in some major cities. It poses a health risk for immuno-suppressed humans such as AIDS patients, those taking immune suppressing drugs, cancer patients, or the elderly. *Toxoplasma*, another coccidian organism that only infects cats, is of particular concerns to pregnant women because of the potential to cause birth defects in newborns. Proper disposal of feces is important in minimizing risk of transmission of all parasites to humans, or to other animals.