



## Intestinal Parasites

Almost all puppies and kittens have intestinal parasites. They are infected through the placenta, through their mother's milk or through normal grooming and nursing behavior. As animals age, the environment plays a larger role in infection. Parasites can also be spread through fleas and through the ingestion of captured prey.

Intestinal parasites include both worms (roundworms, hookworms, whipworms and tapeworms) and protozoans (bacteria-like organisms: giardia and coccidia). Some animals with parasites may be without symptoms for a while, but eventually develop anemia, diarrhea or constipation, vomiting, coughing, poor coat and body condition, appetite and weight loss.

Environmental contamination with roundworm eggs can pose a serious health hazard to humans. Roundworms do not complete their life cycle within a human but rather become arrested in the migratory larval stage causing vague, difficult to diagnose flu-like symptoms. Rarely, these larvae can cause a severe local response in the retina that mimics a tumor and can lead to blindness. Children are the most at risk for migrant roundworm larval infection caused by ingesting contaminated soil.

**1. Microscopic Fecal Examination:** Though the adult stage of intestinal worms may be visible with the naked eye, they in general remain lodged within the intestinal tract and so may be present in large numbers without our awareness. A variable numbers of eggs are intermittently shed into the feces and can be detected only with a microscope. All life stages of protozoans are microscopic so they too require special techniques for detection. We recommend a fecal exam at 8 weeks of age, 6 months of age and annually thereafter.

A positive result for parasites gives us very valuable information. All worming medications do not treat all parasites, and therefore, when a specific parasite is detected, the most effective medication may be chosen.

A negative fecal examination must be interpreted with care. False negatives are common with fecal examinations for a number of reasons. The infection may not be old enough to be producing eggs, or they may be in a non-shedding phase. Sometimes the egg count is too low to detect, and sometimes the quality or quantity of the stool does not lend itself to reliable evaluation. Tapeworms do not pass eggs and therefore are diagnosed by finding small rice-like segments in the stool or around the anal area.

**2. Routine deworming:** Puppies and kittens should be dewormed monthly for roundworms **despite** the result of their fecal exam. This will not only keep young animals parasite free during crucial growing months, but also will reduce environmental contamination in the interest of protecting them from reinfection and protecting humans from a preventable risk. Puppies taking monthly Heartgard Plus will not need an additional dewormer as Heartgard Plus already contains an effective roundworm medication.

**3. Environmental Care:** Stool should be promptly removed from the yard and litterbox. Fleas should be controlled as should contact with wild animals, birds, other dogs, other cats and all droppings.



A sound plan for the control of intestinal parasites includes regular microscopic fecal exams, routine deworming and environmental care. Keeping your pet free from intestinal parasites will ensure better health and a safer environment for all.