## **Fecal Testing in Pets**

Fecal exams are used to identify and treat any intestinal parasitic infections that could be compromising your pet's overall health. Intestinal parasites live in your pet's gastrointestinal tract, hidden from view. Some parasites are worms, while others are microscopic protozoal organisms. Most intestinal worms remain within the body and are not shed in the stool. Instead, these worms lay microscopic eggs that are shed into the environment. Parasites not only make pets uncomfortable and irritable, they could lead to more serious conditions for your pet or even be transmitted to family members.

The effects of intestinal parasites can vary significantly, depending on the parasite and the overall health of the dog. Effects of common parasites include:

- **Roundworms**. Roundworm infections in adult dogs are often asymptomatic. In young dogs or severely infected adults, however, signs may include vomiting, diarrhea, weight loss, a dull coat, and a potbellied appearance. Roundworm larvae also migrate through the lungs as a part of their life cycle, so coughing may be observed.
- **Hookworms**. Hookworms embed in the wall of the intestine, sucking blood from their host. Therefore, the most significant effect of hookworms is anemia, resulting in lethargy, weakness, and pale gums. Weight loss and bloody diarrhea are also commonly observed.
- Whipworms. Whipworms often cause bloody diarrhea in dogs. Additionally, affected dogs may be weak and may become increasingly debilitated over time.
- Tapeworms. Tapeworms are segmented worms that a pet acquires from eating a flea or a rodent. These parasites shed the segments in the pet's stool and segments are commonly seen around the pet's anus, in the hair and on bedding. The segments can dry out and resemble a grain of rice. This parasite is often diagnosed by seeing these shed segments, as the eggs are actually contained inside the segments and not often detected on a routine microscopic screening. Tapeworms are not usually harmful to your pet. Weight loss may occur if your pet is heavily infected. Sometimes, an infected dog will "scoot" or drag its anus across the ground or carpet because the segments are irritating to the skin.
- **Giardia.** This protozoal parasite often causes severe watery diarrhea, which may or may not be accompanied by vomiting and weight loss.
- Coccidia. Although infection with this protozoal parasite is often asymptomatic in healthy adults, it may cause diarrhea and other signs of illness in puppies or debilitated adults.

There are different types of fecal parasite tests available. The most frequent test submitted for parasite detection is an Ova and Parasite Test. This test looks for intestinal parasites and their eggs by checking a sample of stool under a microscope. A more accurate and slightly more expensive test, the KeyScreen PCR, rapidly and accurately identifies the genetic material of a wide range of parasites from a small fecal sample, including parasites that otherwise might go undetected by other techniques. The only downside to this more accurate test is there is not a differentiation between if the parasite DNA comes from a living parasite or one that has already been killed from a deworming medication. For this reason it is not often used for follow up fecal testing after treatment.

Annual fecal exams are the quickest and most reliable way to test your pet for intestinal parasites. Simply collect a fresh stool sample and bring it to your vet's office that day. If the stool sample dries out or dehydrates, many of the potential parasites present may be killed which could mask their presence and make the test results unreliable. Our veterinarians recommend that all dogs and cats be tested for parasites at least once a year.

If your veterinarian finds evidence of intestinal parasites on routine fecal testing, they will recommend appropriate treatment to eliminate the parasites. Depending on the parasite, your pet's treatment may include as little as one to two doses of dewormer or a prolonged course of oral medication. Each intestinal parasite has its own unique treatment requirements.

While most monthly heartworm preventatives are very effective at preventing intestinal worms, breakthrough infections can occur. Additionally, not all heartworm preventives are designed to prevent all intestinal parasite infections. Therefore, even pets that are receiving consistent heartworm prevention may still develop intestinal parasites.

Your veterinarian may also recommend a change in your dog's heartworm preventive. If your pet is encountering a particular parasite in the environment that is not prevented by their current heartworm preventative, a change in prevention can prevent reinfection with the parasite.