COMMON INTESTINAL PARASITES

ROUNDWORMS (Ascariasis):
   **Clinical Signs:** Diarrhea or constipation; most common in young puppies or kittens that often have a pot-bellied appearance.
   **Transmission:** May be passed down from the mother (transplacental infection) or acquired from eggs ingested in the environment (fecal-oral)
   **Diagnosis:** Eggs visible on fecal floatation or adult worms (white, round long worms—up to 10 to 12 cm in length) in stool or vomit
   **Treatment:** Some options include fenbendazole, pyrantel pamoate and monthly heartworm prevention helps prophylactically.
   **Roundworms can cause visceral or ocular larva migrans in humans.**
   (Infection in humans occurs by accidental ingestion of the eggs or larvae.)

HOOKWORMS (Ancylostomiasis):
   **Clinical Signs:** Diarrhea, weight loss, pale gums (secondary to anemia).
   **Transmission:** Fecal-oral.
   **Diagnosis:** Eggs seen on fecal floatation (adult worms too small to see in stool).
   **Treatment:** Some options include fenbendazole and pyrantel pamoate.
   **Hookworms can cause cutaneous larva migrans in humans.**
   (Avoid walking barefoot in infected environments.)

TAPEWORMS (Cestodiasis):
   **Clinical Signs:** Worms visualized in the stool, pets sometimes seen scooting or licking anal area due to irritation.
   **Transmission:** Ingestion of adult fleas.
   **Diagnosis:** Can sometimes see eggs or egg packets in fecal floatation or direct exam. Most commonly, flat segmented worms are seen in stool broken into moving-rice like pieces.
   **Treatment:** Praziquantel can be used to treat tapeworms, plus flea control is essential to prevent recurrence. (Infection rarely occurs in humans in the United States, but is possible and can be caused by ingesting a flea that is carrying a tapeworm larva.)

WHIPWORMS (Trichuriasis):
   **Clinical Signs:** Bloody diarrhea, often with blood and/or mucus.
   **Transmission:** Fecal-oral. Eggs can persist in the environment for months to years.
   **Diagnosis:** Fecal floatation (often need repeated samples as sometimes, not many eggs are shed).
   **Treatment:** One option is Fenbendazole given in 3 doses on 3 consecutive days and repeated in 3 weeks and 3 months. Drontal Plus can be used as well. Milbymycin heartworm preventative (Interceptor) can help prevent recurrence.

   **Stool samples should be rechecked 3 weeks after treatment is completed**
COCCIDIA:

**WHAT IS IT?** Coccidia are single-celled organisms that reproduce within the cells that line the intestines. They are considered parasites although they are not the typical worms about which you may already know.

**WHAT SYMPTOMS WOULD MY DOG OR CAT HAVE?** Coccidia infections tend to cause watery diarrhea that sometimes contains blood or mucus. Many animals are asymptomatic and can clear the infection on their own, but coccidia can be quite debilitating in young or very small patients.

**HOW IS IT DIAGNOSED?** Coccidia can not be seen with the naked eye – a fecal flotation test is the best way to obtain a definitive diagnosis. Occasionally, it takes several tests to diagnose the problem, especially in a young pet with diarrhea that is not responding to conventional treatment.

**HOW DID MY PET GET COCCIDIA?** Animals are infected with coccidia through fecal-contaminated ground. They swallow the coccidia oocysts from grooming or licking dirt off their feet or body. It is possible they may get this from playing with another infected animal that is actively shedding the oocysts.

**ARE HUMANS SUSCEPTIBLE?** Although there are some special species of coccidia that can affect people, humans cannot become infected with *Isospora canis* or *Isospora felis* (the most common species of the parasite that affects dogs and cats.)

**HOW IS IT TREATED AND FOR HOW LONG?** There are no medications that will kill coccidia, but there are drugs that are “coccidiostatic” and can inhibit them from reproducing. This essentially gives the immune system time to recover and help clear out the parasites. Treatment generally lasts about a week but should be continued until there are no clinical signs (sometimes up to 2 to 3 weeks). An animal that is diagnosed should be treated – even if it doesn’t have clinical signs – in attempt to eliminate carriers. We most often use sulfa drugs such as Trimethoprim sulfa (TMZ) or sulfadimethoxine (Albon), although other anti-parasites are sometimes used. It is important to recheck a fecal sample 3 weeks after conclusion of the treatment.

GIARDIA:

**WHAT IS IT?** Giardia are microscopic protozoan (single celled) organisms that are found commonly in the intestines of many animals. The motile, tear-drop-shaped trophozoite stage of Giardia live and “feed” in the small intestines and then mature into non-motile oocysts that are shed in the feces.

**WHAT SYMPTOMS WOULD MY DOG OR CAT HAVE?** Clinical signs of Giardia range from asymptomatic to mild, moderate or severe diarrhea. The diarrhea is often bloody or mucousy and often has a rancid odor. Affected animals may also have increased amount of gas production. Young, small or debilitated animals will be the most severely affected. The cysts are too small for the naked eye to see.

**HOW IS IT DIAGNOSED?** Giardia cysts can be detected in fecal flotations (best with centrifugation or Zinc Sulfate technique) and occasionally one can detect the motile trophozoites in a direct fecal smear. Sometimes the cysts are shed only intermittently requiring multiple fecal samples to be evaluated before they are detected. Stool can also be sent to an outside lab for a slightly more sensitive (and more expensive) antigen test to determine the presence of Giardia.

**HOW DID MY PET GET GIARDIA?** Dogs or cats become infected by ingesting Giardia oocysts directly in feces or from an area contaminated by feces of an affected animal (such as standing water). Giardia cysts can live for months outside a host in the correct environmental conditions with adequate moisture.

**ARE HUMANS SUSCEPTIBLE?** Giardia has been reported in humans although it is uncertain if the species is the same that affects other animals. It is presumed that people become infected more from contaminated water sources and the significance companion animals play as a source of infection is still uncertain. Until this is better determined, if your pet is infected with Giardia, continue to maintain good hygiene practices regarding feces disposal and frequent hand washing, especially if there are small children in the household. Clinical signs would be similar to those described above in dogs and cats.

**HOW IS IT TREATED AND FOR HOW LONG?** There are multiple treatment options available including dewormers such as Fenbendazole (Panacur) and Albendazole or antibiotics like Metronidazole (Flagyl). Treatment should be carried out per instructions by your veterinarian for at least 5 days, and a fecal sample should be rechecked 2-3 weeks after completion of the prescribed medication.