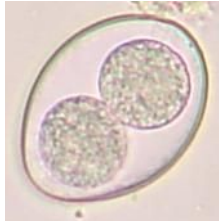


Parasites In Dogs

COCCIDIA



What is it? Coccidia are tiny single-celled parasites that live in the wall of your dog's intestine. They are found more often in puppies, but they can also infect older dogs and cats. Dogs become infected by swallowing soil that contains coccidia or other substances in the environment that may contain dog feces.

How does it affect my dog? Coccidiosis, the disease caused by coccidia, may not cause any signs in dogs but is usually more serious in puppies. The most common sign of coccidiosis is diarrhea. More severe infections can cause bloody diarrhea. Severe infections, especially in

puppies, can kill them.

Prevention Coccidial infections can be prevented by removing your dog's feces regularly from your yard or other areas where the dog goes to the bathroom. Because coccidia are found most often in puppies, it is important to have puppies examined for the parasite as soon as possible. Your veterinarian can perform a fecal test to diagnose coccidiosis. If your dog is infected with coccidia, your veterinarian is able to give it effective medications.

EAR MITES



What is it? Ear mites are tiny mites, barely visible to the human eye, that live on the surface of ear canal skin in dogs (and cats). They are barely visible to the human eye. An infestation produces brownish ear wax, similar in appearance to coffee grounds. Ear mites are contagious and can travel from the ears of an infected dog to any other dogs in close contact.

How does it affect my dog? Dogs who are infected with ear mites typically have very itchy and irritated ears and frequently scratch at their ears or shake their heads. The ears can become red and inflamed, and rashes or other skin disorders can occur on the skin

around the ears.

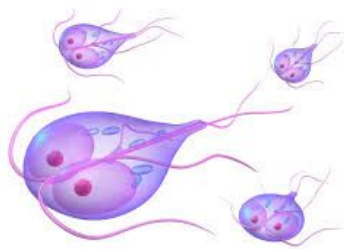
Prevention: Ear mites are a very common problem in dogs, particularly in puppies. If your dog's ears appear red, inflamed or irritated, or you see waxy debris inside their ears, consult with your veterinarian for a definitive diagnosis and treatment options.

Ear mites are transmitted through social interaction with other infected dogs, which can include sleeping or playing together. All dogs should be checked regularly for any sign of ear mites.

Ear mites can be successfully treated with a number of medications. Because ear mites are contagious, all pets in the household (both dogs and cats) should be treated for ear mites. Your veterinarian can provide assistance in choosing the most effective treatment for your cats and other pets.

GIARDIA

What is it? Giardia is a single-celled parasite that lives in your dog's intestine. It infects older dogs but more frequently infects puppies. Dogs become infected when they swallow Giardia that may be present in water or other substances that have been soiled with feces.



How does it affect my dog? Many dogs infected with Giardia do not get any disease. Giardiasis, the disease caused by Giardia infection, usually results in diarrhea. Having giardiasis for a long time can cause weight loss; poor condition; and even death.

Prevention: The best way to prevent Giardia infection is to make sure that your dog has safe, clean drinking water. It is important not to allow dogs to drink water from areas where other animals have left their feces.

Your veterinarian can perform a test on your dog's feces to see if it has giardiasis. If your dog is infected with Giardia, your veterinarian can prescribe safe, effective treatment for control of the disease. To prevent spreading Giardia (and other parasites), pick up the feces left by your dog immediately and place it in the trash. Be sure to avoid contact with the feces by using gloves, a bag over your hand, or a scooping device.

HEARTWORMS



What is it? Heartworms are common in dogs throughout the United States (*cats can have them, too*). They are among the most damaging parasites in dogs but they are almost 100 percent preventable. Heartworms are transmitted by mosquitoes and, once mature, they live in the heart and large blood vessels of the lungs. Adult heartworms can measure over one foot in length.

How does it affect my dog? The heartworm larvae deposited by the feeding mosquito eventually migrate to the chambers of the heart or into the vessels of the lungs. Once in the heart, the worms can affect blood flow throughout the body. Heartworm infection can affect many different organs of the dog—heart, lungs, kidneys, and liver, for example—so symptoms may be varied. Most commonly though, signs of heart or lung

disease are present. A veterinarian may suspect that a dog has been infected if an active animal tires easily or shows shortness of breath or coughing. Early in the disease, dogs are often asymptomatic. Signs are often progressive over weeks to months and untreated, heartworm infection can be fatal. Blood tests are most commonly used to diagnose heartworm infection in dogs. An in-house screening test run by your veterinarian may be followed by a confirmatory blood test sent to an outside lab. Other tests frequently employed in determining the extent and severity of heartworm infection in a dog include blood tests of kidney and liver function, x-rays of the chest and an ultrasound (sonogram) of the heart. Once infection is confirmed, your veterinarian will discuss the most appropriate treatment for your pet.

Prevention: Heartworms have been found in dogs in all 50 states so all dogs are at risk, even those animals that primarily live indoors. Fortunately, with medication, heartworm infection is almost always preventable.

Ask your veterinarian about heartworm prevention. Preventive treatment should begin at 6 or 8 weeks of age in puppies and after tests have been conducted in older dogs to determine if your dog has already been infected. An annual blood test should be run to confirm the dog continues to be negative for heartworms. If your dog does have heartworms, your veterinarian can advise you about treatment options.

HOOKWORMS



What is it? Similar to tapeworms and roundworms, hookworms are intestinal parasites that live in the digestive system of your dog (or cat). The hookworm attaches to the lining of the intestinal wall and feeds on your dog's blood. Its eggs are ejected into the digestive tract and pass into the environment through your dog's feces.

Larvae (young hookworms) that hatch from hookworm eggs live in the soil. These larvae can infect your dog simply through contact and penetration of the skin and

through the dog eating the larvae when they ingest dirt or during their routine licking (cleaning).

How does it affect my dog? Hookworms suck blood and therefore cause internal blood loss. They are a serious threat to dogs, especially young puppies that may not survive the blood loss without transfusions. In older animals the blood loss may be more chronic, and the pet may have diarrhea and show weight loss.

If you think your dog is infected with hookworms, call your veterinarian to schedule an appointment for evaluation, diagnosis, and safe, effective treatment.

Prevention: Similar to steps for prevention of other intestinal parasites, it is essential to keep your dog's surroundings clean and prevent the dog from being in contaminated areas.

Puppies should be treated for hookworms at 2, 4, 6, and 8 weeks of age with a deworming medication you can get from your veterinarian. This frequent treatment schedule is recommended due to the very high rate of hookworm infection in newborn puppies. Most monthly heartworm preventatives include a drug to prevent to treat and prevent infections so additional deworming medications are usually not required if the dog is reliably treated with a heartworm preventive. Fecal examinations should be conducted 2 to 4 times during the first year of life and 1 to 2 times per year in adults. Nursing mothers should be treated along with their puppies.

Consult your veterinarian for safe and effective prevention and treatment options.



MANGE **What is it?** Demodex is a parasitic mite that causes a skin disease often referred to as mange or canine demodicosis. The microscopic Demodex mites live in the hair follicles and oil glands of your dog's ([or cat's](#)) skin or at the skin surface.

Many animals have natural mite populations; however, most healthy animals are able to suppress the populations from becoming problematic. Usually, animals that are going to be affected by Demodex show signs of mange early in life. Occasionally, an

animal will develop demodectic mange as an adult; however, this usually means that the animal has another medical condition that is compromising the immune system.

How Does it affect my dog? Demodex mites create patches of hair loss as a result of mild irritation and itching, usually starting on the muzzle and head and progressing toward the rear. The disease can be limited to a small area of infestation (localized), which most often occurs in young dogs, or more widespread (generalized) infestations. Diagnosis of Demodex mites is made through skin scrapings of the affected areas. Localized infestations can easily be treated, and most are resolved with no treatment. Generalized infestations of Demodex can be more challenging to treat.

Prevention: First and foremost, maintaining your dog's overall health is critical to creating immunity to mite infestations. A good diet and clean environment can greatly reduce the opportunity for your dog to develop a mite infestation. Consult your veterinarian for additional prevention strategies and treatment options.

ROUNDWORMS



What is it? Roundworms are the most common of the parasitic worms found inside a dog. Almost all dogs become infected with them at some time in their lives, usually as puppies. Roundworms may be contracted in different ways, making them easy to spread and hard to control.

Your dog may be infected with roundworms from the time it is born because often the mother passes the worms to the puppy while it is still in her body. Roundworms can also develop in a puppy after it is born when the puppy eats larvated eggs from the environment or drinks worm larvae (young worms) in the mother's milk. Another way roundworms are passed is when roundworm larvae are present in the tissues of a mouse

or another small mammal and the puppy eats the animal.

How Does it affect my dog? Adult roundworms live in the affected dog's intestines. Many dogs do not have signs of infection; however, dogs with major roundworm infections, especially puppies, show diarrhea, vomiting, weight loss, dull hair, and a pot bellied appearance. The dog may cough if the roundworms move into the lungs. You may notice the adult roundworms in your dog's feces or vomit. They will appear white or light brown in color and may be several inches long.

Prevention: Because roundworms can enter your dog's body in many different ways, it is essential to keep your dog's living area clean, remove feces regularly, and, if possible, prevent your dog from eating wild animals that may carry roundworms.

To get rid of roundworms that are passed from the mother dog, puppies should be treated at 2, 4, 6, and 8 weeks of age and then receive a preventive treatment monthly. Fecal (stool) examinations should be conducted 2 to 4 times during the first year of life and 1 or 2 times each year in adults. Nursing mothers should be kept on monthly preventive and treated along with their puppies to decrease the risk of transmission.

Many heartworm preventatives also control roundworms. Ask your veterinarian about prevention and treatment choices that are appropriate for your dog.

TAPEWORMS



What is it? Tapeworms are long, flat worms that attach themselves to your dog's (or cat's) intestines. A tapeworm body consists of multiple parts, or segments, each with its own reproductive organs. Tapeworm infections are usually diagnosed by finding segments—which appear as small white worms that may look like grains of rice or seeds—on the rear end of your dog, in your dog's feces, or where your dog lives and sleeps. There are several different kinds, or species, of tapeworms that can infect your dog, each with stage(s) in a different intermediate (in-between) host, which the dog eats to become

infected. *Dipylidium caninum* is a tapeworm that uses fleas as its intermediate host, whereas *Taenia* and *Echinococcus* species use small rodents (mice, rats, squirrels), rabbits, or large animals (such as deer or sheep) as their intermediate hosts.

How does it affect my dog? Dogs with tapeworm infections usually are not sick and do not lose weight from the worms. Contrary to popular belief, dogs that “scoot” on their rear ends are generally doing it for reasons other than having tapeworms, such as blocked or irritated anal sacs (pouches located in your dog's rear end) or other skin inflammation of the rear.

Prevention: Try to keep your dog from coming in contact with intermediate hosts that contain tapeworm larvae. Because fleas are an intermediate host for the most common kind of tapeworm, consistent, safe, and effective flea control is an essential prevention measure.

If you think your dog is infected with tapeworms, call your veterinarian for an appointment to get an accurate diagnosis and safe, effective treatment options.

