



Heartworm Disease in Dogs

Dirofilaria immitis, the heartworm, is common in many parts of the United States. It is spread by mosquitoes and actually has a part of its development take place in the mosquito. The adult worms mainly live in the right side of the heart, but can be present in other locations as well. In the heart, they block normal blood flow, causing secondary heart failure. The female worms produce microscopic offspring called microfilaria which circulate in the blood. When a mosquito bites an infected dog, the microfilarias are ingested. They develop for 2-3 weeks in the mosquito, and the larvae are injected into the next dog that the mosquito feeds on. The larvae migrate through tissue over a 3-5 month period and end up in the dog's heart to begin the life cycle again.

Symptoms of heartworm disease in dogs include: weight loss, cough, and the inability to exercise normally. Liver and kidney disease develop secondary to the parasites. Untreated heartworm disease is almost always fatal. It can also cause a sudden death syndrome. Cats, ferrets, seals and wild canids such as wolves and coyotes are also host for the disease. They are a natural reservoir of heartworms, which continues the spread of the disease in the wild.

The number of cases of heartworm disease diagnosed is increasing year by year. With an influx of rescue animals from the south already carrying heartworms, the percentage of positive cases is on the rise. Diagnosis is made by means of a SNAP test which requires a few drops of blood. The SNAP test takes 10 minutes and is performed in the veterinary office. Three of the tick-borne diseases (Lyme, Ehrlichia and Anaplasma) are also tested at the same time. Treatment of heartworm disease is complex and expensive. Many dogs that are symptomatic will already have had damage done to their heart, lungs, kidney and liver. To keep your dog healthy, have a test done annually, and use the monthly preventative year round, not just during mosquito season.

The larval forms of heartworms are susceptible to preventative medications so they are killed before ever reaching the heart. It is therefore essential in preventing this disease to give a preventative every month, in the correct dose for your pet's weight, and to be sure the medication is swallowed and retained. If given properly, heartworm preventatives are almost 100% effective in killing the larvae before any irreversible damage occurs. For the cost of a medium pizza, you can protect your pet against this fatal disease. Sadly, a recent North Carolina university study showed that only 59% of dogs take the monthly preventative.