

## Heartworm Disease

Mosquito season is around the corner and along with mosquitoes comes the increased risk of heartworm disease. Heartworm disease is primarily a parasite of dogs, which are the natural hosts. Heartworm disease is caused by a parasite that gets into a dog's tissue from a mosquito bite. The parasite larvae then migrate to the right side of the heart, where they stay & develop into adult heartworms. It takes 6-7 months for the heartworm larvae to migrate and develop into an adult heartworm within the heart. Adult heartworms are thread-like worms that can get up to 10-12 inches in length! They can interfere with blood flow through the heart and into the lungs. Adult heartworms bear live offspring, called microfilaria, which are very small and circulate in the bloodstream. These offspring are picked up by the next mosquito that bites the infected dog and then are spread to the next unsuspecting dog the mosquito bites. Although cats are more resistant to infection with heartworms, they are still susceptible & can have symptoms and problems from heartworm disease.

**Symptoms:** Dogs infected with heartworms may show no symptoms early on or if they have a low number of heartworms present in the heart. With larger worm burdens in the heart and progressive disease, symptoms will develop of heart & lung disease. These symptoms can become severe with the dog becoming very ill and even dying from heartworm disease. Signs include: chronic cough, exercise intolerance, weight loss, lethargy, labored breathing, and signs of heart failure.

**Testing:** There is a **blood test** that can be done to check for the presence of adult heartworms. Your veterinarian draws a blood sample and can either run the test in the clinic for immediate results or send it out for results usually within 24 hours. If a dog has symptoms, in addition to a physical exam, other diagnostic testing can be done to fully evaluate the dog's condition. These can include other blood tests, urinalysis, ECG, and chest radiographs (x-rays).

**Treatment:** If your pet tests positive for heartworm disease, treatment is done by a veterinarian in the clinic. A unique drug is administered that kills the adult heartworms very slowly so the dog's immune system can deal with the dying parasites. Strict rest and close monitoring after this treatment is very important. If the patient has symptoms of disease, prolonged hospitalization/other treatments may be necessary & complications can affect outcome. Your veterinarian would discuss the specific treatment, concerns, prognosis, and cost for your individual dog. Treatment of a dog with adult heartworms early in the disease and before symptoms has a high success rate with a low risk of complications. Treatment can be costly and heartworm disease can result in severe problems, even death, so prevention of heartworms is optimal.

**PREVENTION:** Fortunately, there are several preventative prescription medications available for dogs & cats. These are given once a month, preferably year-round, or only during the mosquito season. They kill the heartworm larvae before they get to the adult stage. The monthly preventative drugs will not kill the adult heartworms in the heart. It's very important to have a dog tested to make sure they do not already have adult heartworms before placing them on the preventative medication. The preventative also kills any offspring in the bloodstream, which in some cases can result in a severe, even fatal, allergic reaction. Annual re-testing for heartworms is recommended to monitor the effectiveness of the preventative and allow early detection (in case a pill was missed/vomited unknowingly). Most heartworm preventative medications are in the form of a flavored pill that is given orally, but some are applied topically between the shoulder blades. Heartworm preventatives also help control intestinal parasites and some products also control flea eggs, adult fleas, lice, mange, & ear mites. Consult with your veterinarian on which product is best to be prescribed for your pet. **Along with an annual check-up by your veterinarian, testing for heartworm disease & giving monthly preventative heartworm medication can help keep your pet healthy and prevent this potentially life-threatening disease.**

For more information on Heartworm Disease, also see the American Heartworm Society's web site:

[www.heartwormsociety.org](http://www.heartwormsociety.org)