



Navarro Small Animal Clinic

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Heartworm Disease

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Heartworm disease is a preventable, but potentially fatal parasitic disease that primarily affects dogs and occasionally cats. The heart and lungs are the major organs affected by heartworms in dogs. Adult heartworms can be 6 to 14 inches long and live in the right side of the heart and the pulmonary arteries, which connect the heart to the lungs. Blockage and damage caused by heartworms may lead to congestive heart failure. Cats are much more resistant to heartworms than dogs and many rid themselves of infection spontaneously. Even though cats do not become infected as easily as dogs, the disease can be much more severe with signs ranging from chronic cough and vomiting to sudden death.

Heartworms are transmitted by the bite of an infection carrying mosquito. Mosquitos are the only agent of transmission for heartworms and since we live in South Texas, this is extremely important.

Adult heartworms living in the heart of an infected animal release their offspring, called microfilaria, into the bloodstream of the infected animal. When a mosquito bites this infected animal, it takes in blood containing these immature microfilaria. The microfilaria incubate in the mosquito for several days to become the mature infective stage microfilaria. When the mosquito bites another susceptible animal, it injects the microfilaria into the pet. The infective microfilaria migrate through body tissues for 2 to 3 months until they enter the heart and pulmonary vessels where they grow to adult size over the next 3 months. The adult heartworms will start to reproduce once they reach adulthood, letting immature microfilaria circulate into the bloodstream where they can be picked up by another mosquito, starting the lifecycle again.

Pets newly infected with heartworms or with light infections may show no signs of disease. In later stages of infection or heavily infected pets, dogs may have a cough and difficulty breathing, become lethargic, lose their appetite and lose weight. They may tire quickly after any exercise. Advanced heartworm infections may cause accumulation of fluid in the abdomen causing the dog to look bloated.

Your veterinarian can test for heartworm infection by doing a quick easy blood test to check for heartworm antigen (protein produced by adult heartworms) and can look for microfilaria in the bloodstream. If a test is positive, the severity of the infection can be assessed by clinical signs, exam, lab tests and urinalysis, and x-rays.

Heartworm disease is virtually 100% preventable with the proper use of heartworm preventives that can be dosed orally, topically, or by injection. We strongly recommend the regular use of heartworm prevention for all dogs in our area. Heartworms occur in all breeds of dogs and both inside-dogs and outside-dogs. Cats are not at the extreme risk dogs are but owners with outside cats should strongly

consider treating these cats as well. Prior to starting heartworm prevention, the veterinarian will do a test to insure the pet is not already infected and then discuss appropriate administration of the medication to the pet. No preventive is 100% successful all of the time, so for pets that are on heartworm prevention, we still recommend annual blood checks for heartworm infection. Owners should be vigilant about giving the heartworm medication exactly as directed because one of the biggest reasons for heartworm infection is missed doses!! Giving the medication regularly ensures that immature heartworms (microfilaria) are destroyed soon after they infect a pet.