

## Heartworm Disease

Heartworm disease, present in all 50 states, is a serious and potentially fatal disease primarily affecting dogs, cats, and ferrets. Adult heartworms live in the heart and pulmonary (lung) arteries and can cause heart failure and severe lung disease.

Transmission: Heartworm is transmitted when an infected mosquito bites an animal. It cannot be transmitted from animal to animal. When a mosquito bites an infected animal, it receives young heartworms (microfilariae) with the blood meal. After a short incubation period in the mosquito (10-14 days), heartworms can be passed onto the next animal the mosquito bites. Larvae then migrate through the tissues and enter the blood stream to the heart and lung vessels where they develop into adults over several months. Heartworms can grow up to 12 inches and produce new microfilariae, beginning the cycle again.

Signs: In later stages, as the heartworms develop, a dog may cough, become lethargic, have difficulty breathing, and lose stamina. Cats may develop coughing and breathing difficulties, resembling signs of feline asthma.

Treatment: If detected early, heartworm disease in dogs can be treated. The treatment process is prolonged, can be expensive, and has risk of serious side effects. There is no treatment for cats. Prevention is always the best option for your pet.

Diagnosis: Heartworm disease is diagnosed by a simple blood test for dogs. We recommend this blood test annually even if your dog is on year-round prevention. Diagnosis in cats is more complex and cats are typically tested when there is a strong suspicion for heartworm disease based on clinical signs.

Prevention: Many safe and relatively inexpensive preventives are available by prescription and we will work with you to find the best option for you and your pet. With their proper and timely use, heartworm disease is extremely preventable. Most preventives are given once monthly to stop the cycle of development from microfilariae to adult heartworms inside the animal. Year round treatment is recommended, even for pets that spend most of their time indoors because mosquitoes often find their way inside. In the case of heartworm disease, an ounce of prevention really is worth a pound of cure!