

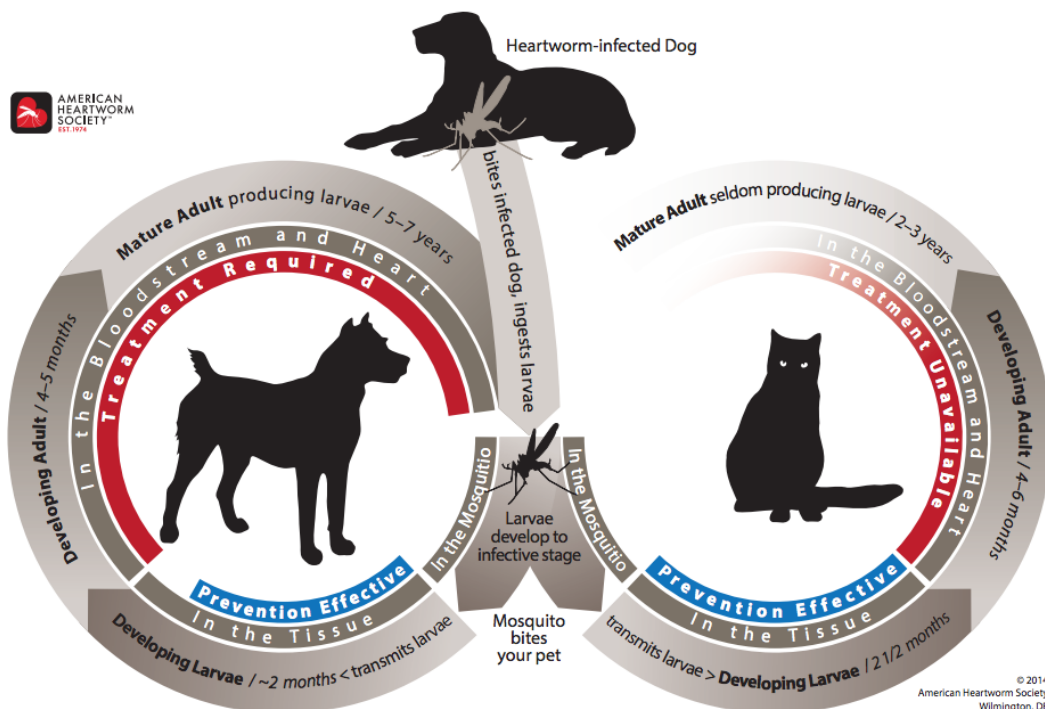
HEARTWORM DISEASE

Internal Parasite

While heartworm disease is diagnosed throughout the United States, it is most commonly reported in the southeastern region due to the damp, warm climate. Since 2013, the average number of reported cases per year has increased by over 21% with trends continuing to inch upward. Reducing the incidence of heartworm disease, and its associated health problems, can be easily achieved with routine year around administration of monthly prevention in our household pets.

What is heartworm disease?

Heartworm disease develops when a dog or cat is bitten by a mosquito carrying the microscopic larvae of a parasite called *Dirofilaria immitis*. When an infected mosquito bites, it transmits the larvae to your pet. Over the next 6-7 months, the larvae will travel to the bloodstream eventually making its way to the lungs and heart where it will then grow into an adult worm. These mature adult worms will then start producing microfilariae, or offspring, which are abundant in the infected pet's blood. That pet will then become a reservoir for the heartworms and will inevitably lead to infection of other mosquitoes and secondarily other pets. Because heartworms can live for several years, each mosquito season can lead to increasing numbers of worms in an unprotected pet. Overtime, the presence of adult worms can lead to lung disease and heart failure.



How are Heartworms Detected? Who Should be Tested?

While there are many tests available for detecting heartworm disease, test results do not always produce clear answers, especially for cats. No diagnostic test can accurately detect all heartworm infections. A blood antigen test is most commonly used yearly to look for infections in dogs. However, some infections may not be picked up by this routine test and can require more extensive testing like x-rays or ultrasounds. In cats, a combination of blood antigen and antibody testing is performed to diagnose heartworm disease. Just as in dogs, cats may also need multiple blood tests as well as advanced imaging to diagnose the disease.

All dogs 7-months of age or older should be tested before beginning a monthly preventative. Annual heartworm testing is recommended, and often times required, for all dogs to ensure heartworm prevention is achieved and maintained. At a minimum, retesting is recommended 6 months after initially starting a dog on preventative medication or if a monthly dose is missed. Because heartworm disease can be so difficult to diagnose in cats, testing usually isn't performed unless the patient develops clinical signs of heartworm disease (HARD).

Treatment and Prevention

In cats, there is unfortunately no medications that exist that are safe for the treatment of heartworm disease. In some cases, surgical removal of the heartworms has been successful; however, this procedure is difficult and risky. The best option for cats is the routine use of heartworm preventatives to inhibit development of the infection.

While treatment of heartworm disease is possible in dogs, it can lead to serious health concerns. Treatment of infected dogs is always recommended unless medical reasons identify a dog as a poor candidate. A thorough physical exam and a variety of diagnostic tests may be needed prior to commencing treatment. A series of three melarsomine injections are administered into the infected dogs back over the course of 2 months. The injections themselves are painful for the patient and the dying parasites can cause further injury to the patient's lungs and pulmonary arteries. Additionally, some dogs will not be completely cleared with a single course of injections and they may require additional treatment.

Heartworm preventive medications are very effective when given properly on the prescribed schedule. All approved preventatives are safe, easy to use, and relatively inexpensive. **Prevention of heartworm disease is always safer and more affordable than treating adult infections.** The best way to reduce the risk of heartworm infection is to give preventative medication year around. Discuss the different options available for your pet with the veterinarian at PAWS Atlanta Veterinary Clinic.

Facts About Heartworms

- Adult female heartworms are larger than male heartworms and can grow 10-12 inches in length.
- Unprotected dogs, cats, foxes, coyotes, and wolves act as reservoirs for the spread of this disease.
- Pets can be infected for several years before symptoms of the disease develop.
- Feline HARD = Heartworm-Associated Respiratory Disease. HARD can mimic many common diseases. Signs can include loss of appetite, sluggishness, intermittent vomiting (not related to eating), coughing, wheezing, and respiratory distress.