

Heartworm Disease: Signs, Treatment, Prevention

Many new pet owners and some long-time owners of pets may not know the reason their pet needs a heartworm preventive. This article explains everything an owner needs to know about this devastating disease including how it is transmitted, signs of the disease, how veterinarians diagnose and treat the disease, and most importantly, how it is easily prevented.

Heartworm Disease, caused by the parasite *Dirofilaria immitis*, was once considered a disease of the southern United States. But it is now found in every state in the continental United States. A heartworm infection can affect both dogs and cats, but the infection occurs a bit differently in each species.

In dogs, the immature larval stage of the worms are deposited into the dog's body by a mosquito. In 2-3 months they migrate through the bloodstream to the right side of the heart. There they grow into adult worms. As they grow, the heartworms can lodge in the heart and the large blood vessels going from the heart to the lungs. If untreated, dogs usually die of heart failure.

Cats' bodies react to heartworm infestation a bit differently. It takes about one month longer for the larvae to develop into adults in the heart. Additionally, the larvae may migrate to other tissues of the cat's body, such as the brain or the eye.

Signs

The first outward signs of heartworm disease may not be apparent until a year after infection and may begin simply as a soft cough. As the disease progresses in dogs, the infected pet will find it more difficult to breathe. He will be reluctant to exercise, and he may have a decreased appetite and weight loss. His quality of life can severely diminish, and as heart failure occurs, the dog can die. Severity of disease depends on the number of heartworms present.

Infected cats have signs that mimic many other diseases. These include vomiting, difficult or rapid breathing, fainting, seizures, blindness, coughing, loss of appetite and weight loss.

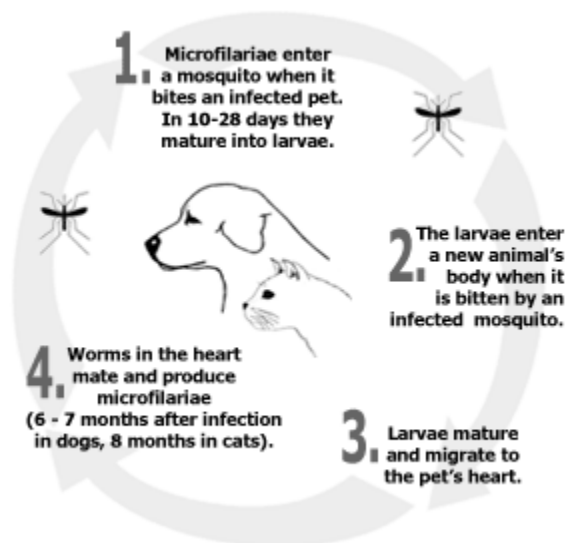
Diagnosis

If the pet has adult heartworm disease, an immature stage of the worms, called "microfilariae," will be present in 99% of individuals. The most common blood test detects certain proteins on the adult female worm. Another blood test detects antibodies the pet's body has made in an attempt to kill the heartworms. This test is most commonly used in cats. If a test is positive, other confirmatory tests including x-rays, ultrasound, and additional laboratory tests are performed.

Treatment

In dogs, heartworm disease can be treated, but treatment can result in fatal complications. The adult worms are killed by injections of arsenic-containing compounds. The treatment must be done carefully to avoid drug toxicity or complications resulting from the dead or dying worms.

These complications can occur when the dead or dying worms obstruct blood vessels to the lungs. Dogs must be hospitalized during treatments and must be kept quiet (cage rest) for at least four weeks after treatment. The treatment will kill the adult worms, but damage already done to the heart and lungs will remain. In severe cases, the worms may need to be surgically removed from the heart.



Prevention

The good news is that there is no need for your pet to have to endure the treatment for heartworm disease, because it is so easy to prevent. A heartworm prevention program is effective and simple, and consists of three parts:

- **Regular Blood Testing** - This ensures your pet is free from heartworms before he begins or continues on his preventive medication. Your veterinarian will advise you as to the frequency of regular blood tests.
- **Preventive medication** - This means administering a heartworm preventive to your pet for at least six months to a full year depending on the mosquito season. Prevention for dogs includes monthly oral preparations like [Tri-Heart Plus](#), [Heartgard](#) products, [Revolution](#), [Interceptor](#), [Advantage Multi](#), or [Sentinel](#) (which includes flea prevention). [Heartgard](#), [Revolution](#), [Advantage Multi](#), and [Interceptor](#) also offers a monthly feline heartworm preventive.
- **Reducing your pet's exposure to mosquitoes** - This means making your pet's environment less hospitable to mosquitoes. This decreases the risk of your pet being infected with heartworm in the first place.



Heartworm prevention is safe, easy and inexpensive compared to treating a dog or cat after worms have matured into adults. While treatment for heartworm disease is possible, it is a complicated and expensive process, taking weeks for infected animals to recover and there is usually permanent damage to the heart. By investing in a preventive medication, you will spare your pet from this deadly disease and its complicated treatment. Talk to your veterinarian today to start a prevention program for your pets.