

## April is Heartworm Awareness Month

Several months ago, I was shocked and horrified to find that one of my dearest friends who lives in Pennsylvania was not administering heartworm prevention to her dog. My friend is an avid animal lover and well-educated individual. When I asked her why she wasn't using heartworm prevention, her response was to cite the low incidence of heartworm positive dogs in her county. I pointed out the low numbers were due to successful education of pet owners and the administering of preventative medicine. I'm happy to report that although we talk frequently on the phone, I also place a special call each month on the 8<sup>th</sup> to remind her to administer heartworm prevention to her canine family member.

Heartworm is a serious and sometimes fatal disease of dogs, cats, and other species of mammals including foxes and coyotes. All dogs, regardless of age, sex, or living environment, are susceptible to heartworm infection. Indoor and outdoor cats are also at risk for the disease. Heartworm affects dogs, cats, and other species in all of the 50 United States as well as other countries.

Heartworms are transmitted from animal to animal by mosquitoes. When a mosquito bites an infected animal, young heartworms called microfilariae enter into that mosquito's system. Within two weeks, the microfilariae develop into infective larvae inside the mosquito. These infective larvae are transmitted to another animal when the mosquito takes its next blood meal. The larvae develop in the dog's tissue and migrate to the heart. The young worms develop to adult worms in the dog's heart. Adult female heartworms shed microfilariae into the bloodstream to continue the process. Adult heartworms also extend into the veins of the lungs and liver. Consequently, the worms can cause loss of lung function, liver failure, and cardiac failure. In dogs, heartworm disease is caused by the obstruction of blood flow due to the physical size of the worms.

The cat is not a natural "host" for the heartworm, which means the migrating larval heartworm is not likely to complete its life cycle. Most of the larvae that actually make it to the pulmonary artery die soon afterwards due to the massive immune attack from the feline body. Very few larval heartworms survive to adulthood in cats. Because the feline heart and blood vessels are so small, these few worms can cause severe injury. In a cat a single worm can lead to a lethal infection. Heartworm disease in cats is caused by the severe, and sometimes fatal, inflammatory reaction generated by the worm's presence.

The good news is it is easy to prevent this life-threatening disease. There are many products available that when used according to instructions prevent your family member from infection. Most products are dosed according to species and weight and are given once a month for life. You should contact your veterinarian for information on the best product for your pet. There are no over-the-counter or home remedies that protect against heartworm disease! Packaging usually comes with a sticker you can place on your calendar to help you remember to administer the medication. You can also ask a reliable friend to call you as a reminder!

For more information, go to [www.heartwormsociety.org](http://www.heartwormsociety.org)