

# TO YOUR *Pet's* Health

## THE MENACING *Mosquito*



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Spring is just around the corner. The robins are starting to appear, and the daffodils are peeking out of the ground. Unfortunately, with warmer weather comes the bugs including that bothersome pest, the mosquito. I don't know about you, but I often question exactly what the purpose of the mosquito is. Other than being extremely annoying on an otherwise enjoyable spring or summer evening, buzzing and biting whenever possible, and in my case causing big itchy welts, they also can spread disease to us and our pets.

The primary disease that mosquitoes can spread to our dogs and on occasion cats, is Heartworm disease. This occurs when a mosquito bites a dog that has heartworms, ingests the heartworm larvae and then after a period of incubation where the larvae matures, bites another dog and transmits the larvae to that dog. The mosquito is known as the intermediate host, meaning that heartworms cannot be directly transmitted from one dog to another. They must mature in a mosquito before they can infect another dog.

The heartworm is a parasite that lives in the pulmonary arteries of the lungs. Although the name is a little misleading, as heartworms grow and mature, they move into the main pulmonary artery, and can eventually move into the right ventricle of the heart through the pulmonic valve. The female heartworm can grow up to 10 to 12 inches in length!

As you can imagine, a worm potentially 10 to 12 inches long that

is camping out in the heart and lungs, can cause a lot of damage. At first, your pet may not show any symptoms, but as the worms mature and take up space in the vessels of the lungs, they are causing the heart to work harder to move blood through the lungs. The worms are also causing inflammation in the heart and lungs. Both of which can cause serious issues and eventually death if left untreated.

What can be done to prevent heartworm disease in your pet? The easiest and most effective preventions are oral, topical or injectable preventatives. These preventatives, if given on the regular recommended basis, which is generally monthly or every 30 days, are very effective. These medications work by killing off any 3rd and 4th stage larvae, before they can mature into juvenile or adult heartworms. It takes a little over 30 days for these larvae to mature once the dog has been bitten. This is the reason the preventative needs to be given monthly, so that it can treat any new larvae that have been introduced from a mosquito bite. These drugs do not stay in the animal's system, but instead kill the larvae present on the day they are given.

With the weather warming up, and the unquestionable appearance of mosquitoes, it is time to get your dog started on a Heartworm preventative. As always, your vet is the best source of information on the types of preventatives available, and what needs to be done to get your pet started on one of them.



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