

## Feline Heartworm Disease

Cats are very different from dogs when it comes to heartworm disease. Not only do they differ in their susceptibility to the disease, but also in how the disease affects them and how the disease is diagnosed.

There are significant differences between feline heartworm disease and canine heartworm disease. Cats are more resistant to the disease, and typically when they do become infected have a smaller burden of worms in their bodies. But due to their smaller size, even a few worms can be considered a heavy infection for a cat. Even one worm can cause illness or death in a cat.

Heartworms are caused by a parasite called *Dirofilaria immitis*. Cats and dogs become infected with this parasite through mosquitoes that can carry this parasite. When a mosquito bites the cat, the parasite enters the bloodstream and grows into an adult worm several centimeters long. These worms tend to accumulate around the vessels of the heart and lungs and cause inflammation of these vessels. In severe cases they can cause a thromboembolism which results in an acute death.

Since heartworm disease in cats happens less often than in dogs, cats with heartworm disease are often misdiagnosed. Cats with heartworms are often wrongly diagnosed as having asthma or allergic bronchitis. Also, many cats can have heartworms and not appear ill.

The true percentage of heartworm positive cats is hard to determine due to diagnostic limitations. In dogs an antigen test is the "gold standard" in diagnosing heartworm disease and it is a very accurate test. Unfortunately in cats these tests are not as accurate. In cats several tests must be used together to arrive at an accurate diagnosis. These tests can include serology, x-rays, and echocardiographs.

Cats that are positive for heartworm disease have many treatment options, but they all have risk associated with them. In mild cases an anti-inflammatory like prednisone may be used. This drug helps support cats by reducing the inflammation of affected vessels. For cats showing severe clinical signs, more extensive treatment and hospitalization are needed. Surgery is also an option to physically remove any worms.

There are many medications on the market to help prevent your cat from getting heartworm disease. Monthly preventatives are an option for cats living in areas where heartworm disease is endemic. Even indoor cats may be at risk if windows are left open. Year-round preventative is increasingly being recommended by more veterinarians. Kittens as young as eight weeks can be started on preventatives.

The most common products used for cats include Interceptor, Heartgard, and Revolution. Interceptor and Heartgard are given orally as chewable medication. Revolution is a topical medication that is applied to the hair over the shoulders. At a minimum the medication should be started within 30 days of heartworm transmission season, and continued until at least 30 days after it ends. In most places this means starting the medication in spring and continuing through the fall.

If you live in an endemic area of heartworm disease, be sure to keep your cat on preventative. Talking to your veterinarian is the best source of advice about the prevalence of heartworm in your area.