



What is Heartworm?

Heartworm is a parasite transmitted by mosquitos. Animals can only be infected with heartworm from a mosquito bite. Dogs are considered the species primarily affected by heartworm disease. Cats, ferrets, foxes, wolves and horses are other species that heartworm disease can cause considerable harm. Preventatives are available to protect your pet from heartworm disease.

Transmission to your pet

1. A mosquito will ingest microfilaria (larva or immature stage of heartworm) when it bites an infected animal.
2. Once ingested by the mosquito, the microfilaria takes 2 to 3 weeks to develop into the infective stage larva. The infective stage larva will not develop further unless they are transmitted into a new host such as a dog or cat.
3. The infective stage larva penetrates the skin of the new host by passing through the bite wound created by the mosquito. The larva migrates through the layers of tissue and muscle into the abdominal and chest cavity of the host where they develop into the final larva stage. This process takes up to 60 days.
4. From the final larva stage, the larva penetrates the veins of their host where the infestation reaches the bloodstream and the heart after 70 to 90 days.
5. The larva grows and matures in the heart where the males and females mate to produce motile microfilaria. The microfilaria cannot be detected in the blood for approximately 6 months for dogs and 8 months for cats after a host was infected by the mosquito.

Heartworm Prevention

Preventing heartworm is as simple as giving your pet a treat. A once-a-month preventative can be given to dogs and cats as directed by your veterinarian. The preventative kills the infective stage larva before they can mature into adulthood and damage the heart and lungs. Preventatives are available for feline and canine pets.

Heartworm Testing

Testing for adult heartworms is available for dogs and cats. A small sample of blood is needed from your pet to perform the test. The test can be performed in the clinic with results available in less than 10 minutes. Pets must be tested prior to beginning a heartworm preventative to ensure adult worms are not currently present. Giving preventative to an infected patient may cause significant harm. Testing is then performed on a regular basis to ensure heartworm infection has not occurred while on preventatives.

Positive test results require additional diagnostics to evaluate the severity of the heartworm disease. Diagnostics may include additional blood work, X-rays, cardiac ultrasound, ECG, and hospitalization.

Heartworm Treatment

Preventatives will not kill the adult worms of an infected patient. If an animal is infected, treatment to eliminate the adult worms is necessary prior to beginning heartworm preventative medications. Treatment is available for canine patients. The treatment available for heartworm disease in dogs can be a considerable risk for the patient. Life threatening complications may occur as a result of treatment. Patients must be hospitalized for a period of time during treatments and placed on strict reduced activity for approximately two months after treatment is administered.

An effective treatment is not available for infected cats.

Symptoms of Heartworm Disease

Symptoms of heartworm disease are not usually noticeable until the later stages of the disease when damage to the heart and lungs has occurred. Symptoms include lethargy, coughing, or difficulty breathing and possibly sudden collapse. These symptoms coinciding after light to moderate exercise are of considerable concern and can be a result of heartworm disease.