

# Heartworm Disease

Heartworm disease is a serious, life-threatening disease that can affect both dogs and cats. It is caused by the adult stage of the parasite *Dirofilaria immitis*. The infection may cause inflammation and thickening of the pulmonary arteries, damage to the heart, liver and kidneys. If untreated, it can lead to heart disease and death.

Heartworm disease is present in Oregon, even in metropolitan areas. Camping and other outdoor activities increase your pet's risk of coming into contact with disease-carrying mosquitoes. Even if your pet resides primarily, or entirely, inside your home, it is at risk. No breed of dog or cat is immune, although cats are slightly less at risk than dogs in developing an infection upon exposure.

## Transmission:

Mosquitoes are the carriers of heartworm disease. The life cycle of a heartworm begins when a mosquito bites an infected animal carrying microfilaria in its blood. If the mosquito bites another cat or dog, it transmits the larvae to that animal. About 6 to 8 months after the initial mosquito bite, the larvae arrive in the heart.

## Diagnosis:

Your veterinarian may perform a blood test to determine whether your pet has the disease. A blood sample is tested for the Antigens (proteins) produced by adult heartworms. The sample may also be examined under a microscope for the presence of the heartworm larvae. More laboratory tests, including X-rays, may be required to make a diagnosis.

## Signs of infection in dogs may include:

- Chronic cough (which is the most common symptom and sign of advanced illness)
- Lack of energy or endurance
- Difficulty breathing
- Loss of appetite
- Weight loss

## Signs of infection in cats include:

- Cough
- Difficulty breathing
- Vomiting
- Sluggishness
- Weight loss

#### Treatment in Dogs:

If detected early enough, most dogs can be treated successfully. The goal of treatment is to kill both the adult heartworms and the larvae. The approved treatment is an arsenical compound administered through a series of injections. This treatment requires hospitalization and close supervision by a veterinarian. When treatment for the adult heartworms is complete, another drug is administered to kill the heartworm larvae remaining in the bloodstream. Only when tests show a dog is free from heartworms is a preventative medication prescribed.

#### Treatment for Cats:

Currently, there is no approved product for the treatment of heartworm in cats. However, a spontaneous cure is not uncommon, so treatment is aimed at helping cats tolerate the disease, rather than eliminating it. It is important to note that, in Oregon, heartworm disease is a far greater risk to dogs than to cats.

#### Prevention:

A yearly examination coupled with preventative treatment is recommended. Depending on your veterinarian's recommendation, preventative treatment may be administered year-round, or only during mosquito season. Several medicines are available to prevent heart-worm disease, including once-a-month pills, flavored treats, or a topical medication. Some of these preventatives can also protect your pet against fleas and other types of worms. There is no vaccine for heartworm disease. Talk with your veterinarian about how often your pet should be tested and the appropriate preventative treatment. Help keep your best friend safe from heartworm disease.