

Heartworm Disease in Dogs



- Heartworm is a small parasite that lives within the heart and blood vessels and is spread by mosquito bites.
- Heartworm disease attacks the lungs, heart, and related blood vessels. It is serious and potentially fatal.
- Dogs are highly susceptible to heartworm. Nearly all exposed dogs will become infected. Heartworm is endemic in all 50 states → Even Minnesota and North Dakota
- Illness is easily and effectively avoided by giving preventive medications
- Treatment can be costly and complicated.

What Is Heartworm Disease?

Heartworm disease is a serious and potentially fatal condition that affects both dogs and cats. It is caused by parasitic worms (heartworms) living in the major blood vessels of the lungs and, occasionally, in the heart. These worms are transmitted (as microscopic larvae) through the bite of an infected mosquito. The scientific name for the heartworm parasite is *Dirofilaria immitis*.

Heartworm disease can cause a variety of medical problems affecting the lungs, heart, liver, and/or kidneys. The main risk is from damage to the heart and heart valves leading to heart failure. Any of these problems, alone or in combination, can lead to death. Although a safe and effective treatment is available, it can be a costly and complicated process depending on how long the dog has been infected and how severe the infection is. Although we can clear the infection, we cannot reverse the damage to the heart and vessels.

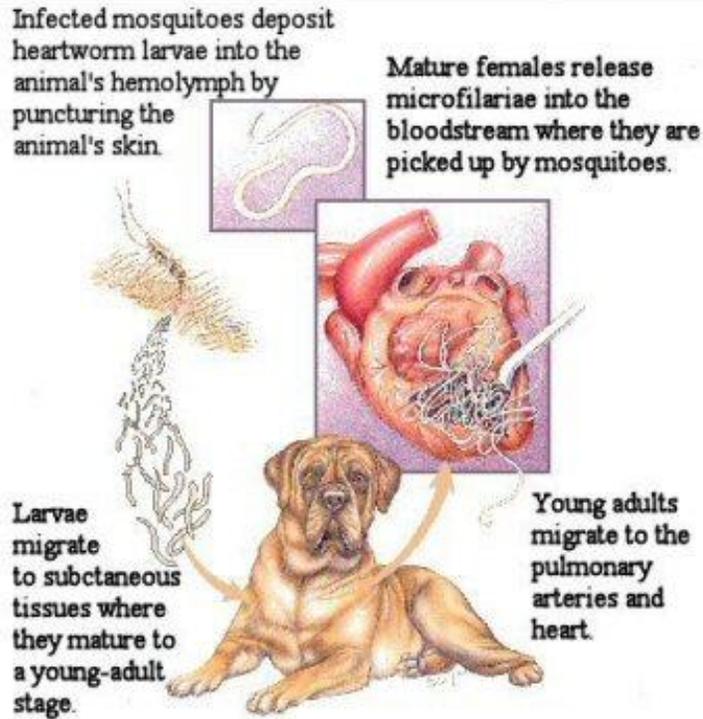
Despite the fact that heartworm disease is virtually 100% preventable, many dogs are diagnosed with it each year. The American Heartworm Society (AHS) estimates that one million dogs in the United States are infected with the disease today, and this number may be rising.

Signs of Heartworm Disease

Some dogs may show no signs of infection, as these signs only occur after heart failure from the worms has begun to take place. Once enough damage is done dogs may begin to show the following clinical signs:

- Persistent cough
- Lethargy (tiredness)
- Difficulty in exercising
- Loss of appetite and weight loss

Hill's Atlas of Veterinary Clinical Anatomy
Heartworms



Diagnosis and Treatment

Apart from clinical signs (heart failure), heartworm disease can be diagnosed using laboratory tests that check the dog's blood for evidence of infection. These tests are fairly cheap (\$25-35), take only 10 minutes and require only 3 drops of blood to run on.

Ultrasound images and radiographs ("x-rays") can also sometimes show evidence of heartworms in the heart or lungs, but only after damage has been done and the effects of heart failure are visible.

If infection is detected early enough, heartworm disease can be treated before permanent damage to the heart, lungs, and blood vessels occurs. However, if the infection has been present for a long time or consists of a large number of worms, the risk of complications increases. In these cases, treatment can be more expensive and complicated, and dogs may take many months to recover from the infection. Hospitalization may be required depending on severity of infection.

Untreated heartworm disease is ultimately fatal.

Prevention

It is **much** cheaper, easier and safer to prevent heartworm disease than to treat it. Safe, easy-to-give, effective medications are available to prevent heartworm disease. Some are given monthly and are either applied to the skin (topical or "spot on" medications) or given as a pill/treat. Ask us about which method and schedule of heartworm prevention are best for you and your pet.

Lee Veterinary Clinic 218-486-5660 Email: leevetclinic@yahoo.com