

Orchard Park Veterinary Medical Center Heartworm Standard of Care

Heartworm disease is a serious parasitic infection of dogs. As the name implies, the parasite (*Dirofilaria immitis*) lives in the heart and large blood vessels of the lung. Heartworm infection can lead to heart failure, lung damage, and death.

Is there treatment for heartworm disease?

Treatment is available, and dogs can survive heartworm disease. However, it is far easier, safer, and less expensive to prevent the disease than to treat it.

How is heartworm disease transmitted?

Heartworm disease is transmitted by mosquitoes. Dogs with active heartworm infections harbor large quantities of immature heartworms (larva) in their bloodstream. When a mosquito bites an infected dog, it draws some of these heartworm larvae with the blood meal. The heartworm larvae mature within the mosquito and become infective. If the mosquito bites another dog, infective larvae are injected into the new host where they develop into adult worms in the heart.

Heartworms require mosquitoes for part of their life cycle. Therefore, other blood-sucking insects such as fleas and flies cannot transmit the disease. Similarly, injecting larva from an infected dog directly into a non-infected dog cannot transmit heartworm---the larva must mature in a mosquito first.

Can my dog become infected any time I see mosquitoes?

Actually, climate plays a key role in the transmission of heartworm disease. The larvae require an average daily temperature of at least 57 degrees Fahrenheit to mature within the mosquito. In addition, the length of time it takes for the larva to mature depends on the average daily temperature. Maturation can take as few as eight days at 86 degrees Fahrenheit or as many as twenty-nine days at 65 degrees Fahrenheit.

This means is the occasional mosquito seen during a February thaw is not going to transmit heartworm disease. In fact, heartworm season in most areas of the United States generally lasts six months or less (except for the Southeastern and Gulf States). In the Buffalo area, transmission generally occurs from June to October.

How can I prevent my dog from getting heartworm disease?

A number of very safe and effective preventative medications are available, in pill form or as a liquid that is applied to the skin. These medications are given monthly during heartworm season. Several heartworm preventatives will also prevent other parasitic infections including intestinal worms and fleas.

When should preventative medication be given?

For dogs living in the Buffalo area, preventative medication given from June to November will provide sufficient protection against heartworm disease.

Wouldn't it be better to give the preventative medication year-round?

This is an option and represents the most stringent level of protection. In addition, some clients find it easier to remember to give their dog medication when it's given every month. Preventative medication from June to November is the minimum recommended level of protection. If a dog is likely to travel to an area of the country with a longer heartworm season than Buffalo (e.g., Florida), additional preventative medication will be needed. Your veterinarian can help you tailor an appropriate schedule.

Is there a test for heartworm disease?

There are several blood tests used to detect heartworm infections. The most widely used detects the presence of adult worms in the heart by detecting minute particles (antigens), which the worms shed into the blood stream. It is important to note that once injected by the mosquito, it takes seven months for a heartworm larva to develop into an adult. Therefore, if the dog has been infected for less than seven months, the test will not detect the infection.

When should a dog be tested for heartworm disease?

The best time to test for heartworm disease in the Buffalo area is between March and June. Dogs receiving appropriate preventative medication should be tested at least every two years; yearly testing is ideal.

Any dog that did *not* receive preventative medication during the previous year's heartworm season is at risk for infection, and should be tested no earlier than seven months after potential exposure. Puppies less than seven months of age are not tested; even if they were infected, the test would not detect it (it takes seven months for the heartworm to mature and the test to turn positive). Puppies are generally on preventative medication if they are less than seven months old at the start of heartworm season.

What are the current recommendations of the Orchard Park Veterinary Medical Center regarding heartworm prevention?

1. All dogs in Western New York should receive heartworm preventative medication at least from June through November.
2. Dogs that routinely receive appropriate preventative medication are tested for heartworm disease at least every two years, ideally in the spring.
3. All dogs over the age of seven months should be tested for heartworm disease in the Spring if they did not receive continuous heartworm preventative during the previous heartworm season.
4. Dogs that travel to regions of the country with different heartworm seasons (e.g., the South) should receive year-round preventative medication or have their preventative schedule tailored by their veterinarian.

Can cats get heartworm disease?

While cats can become infected with heartworm in the same manner as dogs, they are much more resistant to infection. At the present time, the risk to Buffalo cats of heartworm infection is very low. Though it is available, we do not currently recommend routine preventative medication for cats.