

## April is Heartworm Awareness Month

### **Our Recommendation:**

If your dog has never been tested or it's been 2 or more years since testing, he/she will need to be tested this year before going on the preventative. We recommend giving the heartworm preventative May-October, so testing in April will ensure the best protection. **A 6 month supply of heartworm preventative will cost about \$29.50 to \$51, depending on a dog's weight.**

If you only need a heartworm test, the **cost is \$19 for the heartworm test (no exam fee)**. We still recommend calling or emailing to set up a time to come in so your wait time is limited.

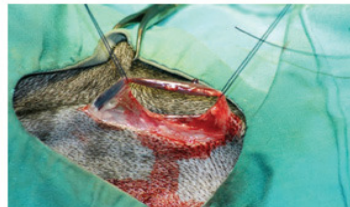
There is a heartworm preventative also available for cats. Testing prior to going on the preventative is not necessary. If you are interested in the preventative for cats, give us call or email and let us know.

### **Interesting Facts About Heartworms**

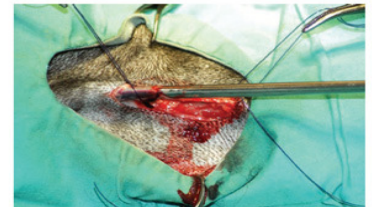
- \* The average lifespan of heartworms in untreated pets is 5-7 years in dogs
- \* The normal habitat of the adult heartworm is the right ventricle and adjacent blood supply of the dog.
- \* Old female heartworms can measure up to 12" in length.
- \* The mosquito is the only known transmitter of heartworm.
- \* Heartworms have also been found in the liver, trachea, esophagus, stomach, feces, eye, brain, spinal cord, and vomit in dogs.

### **What are heartworms and why should I care?**

Heartworms are the most life-threatening of the common canine parasites. They live in a dog's heart and surrounding blood vessels, and can cause heart disease and organ failure, which can lead to death. Heartworms are spread by mosquitoes, so any dog is at risk. Since there are often no early signs of heartworm disease, it is very important to have your family veterinarian examine and test your dog; a procedure that is both quick and easy. Dogs must be tested for heartworm prior to using heartworm preventatives.



Right external jugular with 1 cm incision, hemorrhage controlled by lifting vein with two loops of #1 nylon suture.



Insertion of 30 cm rigid alligator forcep.



Retrieval of heartworms with multiple passes.



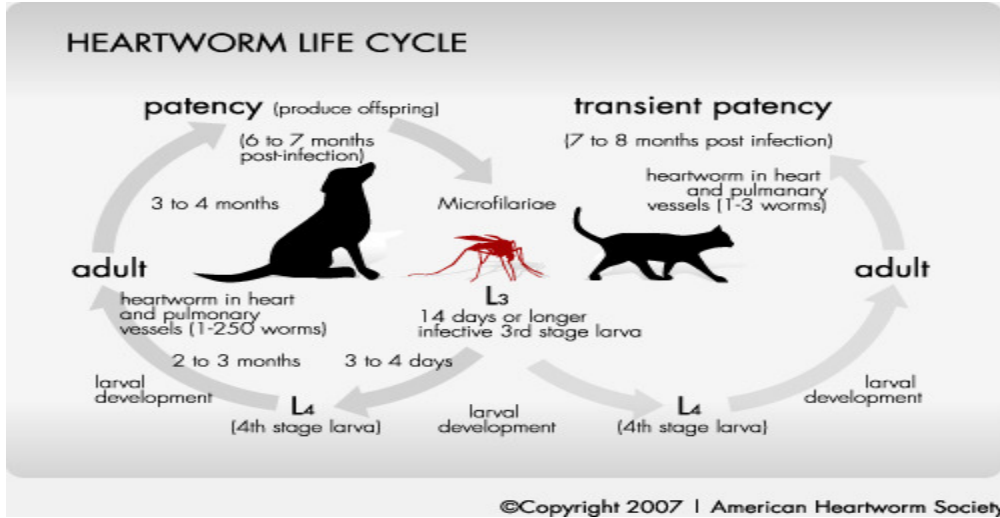
Twenty-four heartworms retrieved from 10 kg JRT.

Photos courtesy of Tom Nelson, DVM

Cats are resistant hosts of heartworms, and the presence of heartworm offspring in the blood of the host animal (microfilaremia) is uncommon (usually less than 20% of cases). When present, microfilaremia is inconsistent and short-lived. Some cats appear to be able to rid themselves of the infection spontaneously. It is assumed that such cats may have developed a strong immune response to the heartworms, which causes the death of the parasites. These heartworms may die as a result of an inability to thrive within a given cat's body.

**The following link provides information on transmission, treatment, and prevention:**  
<http://www.heartwormsociety.org>

## How Heartworm Happens: The Life Cycle



First, adult female heartworms release their young, called microfilariae, into an animal's bloodstream. Then, mosquitoes become infected with microfilariae while taking blood meal from the infected animal. During the next 10 to 14 days, the microfilariae mature to the infective larval stage within the mosquito. After that, the mosquito bites another dog, cat or other susceptible animal, and the infective larvae enter through the bite wound. It then takes a

little over 6 months for the infective larvae to mature into adult worms. In dogs, the worms may live for up to 7 years. Microfilariae cannot mature into adult heartworms without first passing through a mosquito.

## Prevention

Because heartworm disease is preventable, the American Heartworm Society recommends that pet owners take steps now to talk to their veterinarian about how to best protect their pets from this dangerous disease. Heartworm prevention is safe, easy and inexpensive. While treatment for heartworm disease in dogs is possible, it is a complicated and expensive process, treatment of taking weeks for infected animals to recover. By giving a monthly chewable, and when administered properly on a timely schedule, heartworm infection can be completely prevented. These medications interrupt heartworm development before adult worms reach the lungs and cause disease.

## Treatment

Usually, all but the most advanced cases of heartworm disease can be successfully treated in dogs. Heartworm prevention is safe, easy and inexpensive. Currently there are no products in the United States approved for the treatment of heartworm infection in cats. Cats have proven to be more resistant hosts to heartworm than dogs, and often appear to be able to rid themselves of infection spontaneously; however it is always best to prevent the disease.

## Common Q & A

### **Q: How do dogs get heartworms?**

A: Only by the bite of an infected mosquito. There's no other way dogs get heartworms. And there's no way to tell if a mosquito is infected. That's why prevention is so important. Heartworm disease has been reported in all 50 states. And the bite of just one mosquito infected with the heartworm larvae will give your dog heartworm disease. Heartworm disease has not only spread throughout the United States, but it's also now found in areas where veterinarians used to say "Oh, we don't have heartworm disease." Areas like Oregon, California, Arizona, and desert areas -- where irrigation and building are allowing mosquitoes to survive. And if you have mosquitoes and you have animals, you're going to have heartworms. It's just that simple. It takes about seven months, once a dog is bitten by an infected mosquito, for the larvae to mature into adult heartworms. They then lodge in the heart, lungs, and surrounding blood vessels and begin reproducing. Adult worms can grow up to 12 inches in length, can live 5-7 years, and a dog can have as many as 250 worms in its system.

### **Q: If my dog gets heartworms, and is treated for them, can he get them again?**

A: Yes, he can get them again. That's why prevention is so important.