

Heartworm in Cats

Heartworms are traditionally considered a parasite of dogs; however, they have been found in cats for MANY years. Because of this we recommend heartworm prevention in ALL cats as insurance that they do not get heartworms.

How do cats get heartworms?

Mosquitoes are carriers of the larval (baby) stage of heartworms. When they take a blood meal they inject the heartworm larvae into the cat. Dogs are the main source of larvae that the mosquitoes ingest and inject into cats. Cats living in a home with a heartworm positive dog are 80% more likely to get heartworms!

When mosquitoes bite cats, they inject the larvae into the cat. These larvae quickly mature and migrate to major blood vessels near the heart. They are present 3-4 months after the mosquito bite as they mature into adult heartworms. The adults are >6 inches in length, living primarily in the pulmonary arteries that carry blood from the heart to the lungs. The worms cause a lot of inflammation to these arteries and lung tissue. If there are a lot of worms they “spill” into the right side of the heart where they can sometimes be seen on ultrasound.

How do you diagnose heartworms in a cat?

1. There are two types of **blood tests**: antibody and antigen. Both are included in diagnosing heartworms because they have limitations.

Antibodies are made by the cat in response to heartworm larvae or adults. If this test is positive there are juvenile heartworms in your cat. There is a short window of opportunity to get a positive test result though and this test can come back as negative and your cat may have heartworms.

An **Antigen** test detects a protein produced by the adult heartworm, but only the female heartworm produces this protein. A positive test means your cat has one or more adult female worms. But a negative test can result if there are only larvae or the adult heartworms are male.

2. **Radiographs (x-rays)** are an important part of heartworm testing. There can be changes in the major blood vessels that are typical of heartworm disease. However, many of the important findings are in the lungs.
3. **Ultrasound** of the heart can be helpful if there are adult heartworms in the heart. But it can be very difficult to find them if there aren't many there.

Treatment

There are no drugs to kill adult heartworms in cats. The drugs we use for dogs are not safe for use in the cat. Therefore, “treatment” is based on your cat's immune system's ability to kill the larvae and the adults. This is a typically slow process, which is actually an advantage to the cat. It can take anywhere from 2-4 years.

The second part of the “treatment” is to relieve the inflammation caused by the worms with steroids. They may be given orally and continuously at a low dose. We may also use an anti-histamine called Singulair to help with the inflammation caused by the immune system.

The third step in “treatment” is to prevent further infections by using one of our heartworm prevention products. At Southport Animal Hospital, we recommend ALL cats be on heartworm prevention. Our preference is **Revolution Plus**. This is a liquid put on the back of a cat's head once monthly that could save your cat's life!

