

## Heartworm Disease In Ferrets

**Heartworm disease is a secret killer, and ferrets are just as at risk for this disease as dogs or cats.**

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Even if a ferret lives its life indoors, it's still at risk for heartworm if an infected mosquito gets into the house.

For decades, heartworm disease has been thought of as a dog disease. It is common practice to test dogs regularly for heartworm and give them preventives against the disease. With increasing regularity, other species — most notably, cats and ferrets — are being diagnosed with this problem as well. Fortunately, this disease is completely preventable in all of our companion species. Don't let your pets become infected and possibly die from this parasite.

### What Is Heartworm Infection, & How Are My Ferrets Exposed?

Heartworms (*Dirofilaria immitis*) are mosquito-borne parasites that are transferred from an infected animal to a healthy one via the bite of a mosquito. After a host is infected with the tiny parasite, the developing and maturing worm (called larvae at this point) moves freely through the system and into the connective tissue of the victim. Here, nestled amongst the tissues, the larvae feeds and grows over several months, finally molting and proceeding through the veins as an immature adult into the heart of the host. At the center of the body, the heartworm matures into an adult and finally begins to produce young, called microfilaria. These microfilaria are released into the bloodstream, where a biting mosquito can pick them up and perpetuate the cycle as it transfers the microfilaria to another host.

Any animal bitten by a mosquito can be at risk for heartworm disease. The risk is especially obvious for animals spending any time outdoors, but a significant proportion of indoor pets have been diagnosed with heartworm. Leaky screens on windows and opening doors to the home allow mosquitoes to sneak in unnoticed where they can feed on our unsuspecting pets. Even humans can be infected with heartworm, although the infection generally does not progress to a mature state.

Heartworms have been diagnosed in animals in every state of the nation, but are most commonly seen within 150 miles of the Atlantic and Gulf coasts, from the Gulf of Mexico to New Jersey and along the Mississippi River and its major tributaries, according to the American Heartworm Society. Make no mistake, however, that heartworms are found everywhere in the United States. Wildlife populations, environmental factors, and the migration of dogs (such as after Hurricane Katrina) make this disease a concern for all pet owners.

### What Do Heartworms Do To My Ferret?

Initially, most patients show no ill effects as the heartworms develop into their adult stage. Once the worms mature, they lodge themselves in the heart and the major blood vessels surrounding the heart. At this stage, they somewhat resemble strands of cooked spaghetti and wrap themselves in and around the functional parts of the blood system. This forces the heart to work harder as it attempts to continue to pump blood through the obstructions and to the organs of the body, eventually leading to pressure build up in the lungs (known as pulmonary hypertension) and, ultimately, to heart failure. Additionally, the presence of the heartworms irritates the body and the lungs, causing inflammation and damage to the tissues. Even a single heartworm can be enough to kill a ferret.

Signs that a ferret may be suffering from a heartworm infection can be very vague or very dramatic. Some ferrets simply do not feel well — they are weak (especially in the hindquarters), they may not eat normally, they may be sluggish and uninterested in playing, some will cough or have difficulty breathing, others will develop fluid accumulation in their abdomen, and some are simply found dead. A large number of other diseases that afflict ferrets cause exactly the same signs, so it is always necessary for a veterinarian to run additional testing to be able to diagnose a ferret with heartworm disease.

### Getting A Diagnosis

Diagnosing heartworm disease in ferrets isn't a simple task. [Click Here>>](#)

### My Ferret Has Been Diagnosed With Heartworm. Now What Do I Do?

As we have previously mentioned, ferrets with heartworm disease are very delicate patients. Treatment can be difficult and, in some cases, may be impossible. First any signs of disease must be controlled. This may mean removing fluid from the body cavities, treating heart failure, and general good supportive care and nursing care.

Medications are available that can kill the heartworms quickly, but in some patients that are already fragile, the dying heartworms can land in the lungs and other organs of the body (called an embolus), resulting in the death of the patient. Other animals are treated with medications that kill the heartworms more slowly with less likelihood of the embolus happening, however, the heartworms continue to do damage as long as they are present.

Some very brave surgeons have attempted to remove heartworms from the heart through a special scope and basket. This is certainly much easier to do – and more successful – on patients significantly larger than a ferret. Once again, the small size of our ferrets really works against them. Lastly, some patients are only treated with supportive measures until the heartworms die off on their own.

Any way you look at it, a ferret diagnosed with heartworm disease is in a bad spot with a reasonably high likelihood of dying from the infection. Prevention is worth a bucketload of cure.

#### How Do I Prevent Heartworm Disease In My Ferret?

Heartworm prevention is simple, inexpensive, and extremely effective when given properly. The decision to treat your ferret with heartworm preventives is one that should be made after consultation with your veterinarian. Several different commercial products are available and, when given monthly, are essentially 100 percent protective. These medications come in chewable forms, pill forms, as well as a topical spot-on product. Most of them have effectiveness against more than just heartworms, controlling several other internal parasites.

Knowing which medication is the best one for your ferret is something that can only be decided after a thorough physical examination done by a ferret-knowledgeable veterinarian. Many factors affect the choice of preventive, including what health condition(s) does your ferret have, what other pets do you have in the household, how many ferrets will you be treating, does your ferret go outside, and how easy is your pet to medicate. There isn't a "best" preventive, but there are preventives that best suit the needs of your ferrets. Talk with your ferret-knowledgeable veterinarian before starting any medication for your ferret.

Virtually all veterinary offices carry one or more forms of heartworm preventive safe and effective for ferrets. Many others may be available with a prescription from your veterinarian. The important thing to realize is that heartworm is one of the rare serious ferret diseases that we have complete control over – and very few ferrets are not going to benefit from a monthly preventive.

Dr. Mitchell owns Animal Medical Associates in Saco, Maine. She shares her home with 14 ferrets, 11 cats, two birds, a dog and a good-natured husband.