



An Adopter's Guide to Canine Heartworm Disease

Adopter's "To Do" List for Adopting a Heartworm Positive Dog that has not been treated with Immiticide®

Before adopting your dog:

- Read over *Adopter's Guide for Canine Heartworm Disease*. A veterinarian or veterinary technician can help answer your questions. It is very important that this step is completed.
- NHS recommends that you call your veterinarian to discuss if a heartworm positive dog is right for your home and your budget.

Once you have adopted your dog:

- Restrict exercise— no running, walks for exercise or rough-housing. Generally speaking, it's ok to walk your dog outside to use the restroom or to sit outside to enjoy the weather, but no walks (short or long) for exercise. Your veterinarian may have alternative recommendations.
 - Please contact your veterinarian immediately if you see the following signs: coughing, difficulty breathing, lethargy or depression with or without the desire to eat or drink. **This is an emergency situation.** Treatment is the responsibility of the adopter.
- Schedule an appointment with your veterinarian. Prepare a list of questions for your veterinarian. Be prepared to purchase medications and diagnostic tests that are recommended by your veterinarian.
- Visit <http://www.heartwormsociety.org/> for more information about heartworm disease.
- Enjoy your new family pet!



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Why should I adopt a heartworm positive dog?

Dogs with heartworm disease can live happy, high quality lives as long as they are given appropriate care. Heartworm disease is relatively common in the United States, so we are in need of caring adopters like you that are willing to open their home to a dog with heartworm disease. We think that our heartworm dogs have just as much to offer their new adopters as any other dog and they deserve a chance at life. You are truly saving a life by adopting a heartworm positive dog!

What is Heartworm Disease?

This dog has been diagnosed with heartworm disease. Dogs acquire heartworm infections when they are bit by a mosquito that was infected with heartworm larvae (immature worms) from other animals. The larvae mature over a period of approximately six months into adult heartworms. The adult heartworms are large parasites that live in the pulmonary arteries and heart of an infected dog. Heartworms cause life-threatening damage to the lungs, heart, liver and kidneys. If left untreated, the lifespan of an adult heartworm is about 5-7 years in.

Making the Heartworm Diagnosis

Your dog's heartworm infection was diagnosed with a test that looked for the presence of adult female heartworms. If the test is positive, we confirm the diagnosis by looking for microfilaria. Microfilaria are the offspring of adult heartworms that circulate throughout an infected dog's bloodstream. Many dogs diagnosed at our shelter are asymptomatic, which means they are not displaying any obvious outward signs of heartworm disease. Other dogs that are placed for adoption may have mild signs.

What are the signs of heartworm disease?

In dogs, signs of heartworm disease may include a mild persistent cough, reluctance to exercise, fatigue after moderate activity, decreased appetite and weight loss. If heartworm disease progresses, dogs may develop heart failure recognized by fluid in the abdomen giving the pet the appearance of a "swollen belly." Dogs infected with large numbers of heartworms can develop a sudden blockage of blood flow within the heart leading to a life threatening form of the disease called caval syndrome. Signs of caval syndrome include a sudden onset of labored breathing, pale gums and dark bloody or "coffee-colored" urine. Please see your veterinarian if any of these signs are seen.

Is there a treatment for heartworm disease?

Immiticide®, the only drug used to kill adult heartworms is currently unavailable for an undetermined length of time. **This means your dog has not been treated for the adult heartworm infection.** Because there are no other approved products available for killing adult heartworms, the Nebraska Humane Society is following guidelines set forth by the American Heartworm Society to manage (not cure) heartworm positive dogs. We feel that heartworm positive dogs can still have a high quality of life as long as they are properly cared for by an adopter that is willing to go the extra mile to save a life.



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A separate treatment is used to kill heartworm microfilaria. A heartworm preventative has been given to your dog to kill the microfilaria. Your dog will need to stay on a monthly heartworm preventative as recommended by your veterinarian to continue to kill new microfilaria, prevent your dog from acquiring more heartworm infections and prevent your dog from spreading heartworm disease. Please see your veterinarian for further details.

Antibiotics and anti-inflammatory medications are also used to help treat heartworm disease. Your dog has been started on an antibiotic called doxycycline that helps reduce the damage heartworms cause to the body. The antibiotic is given in pulses so when you adopt your dog, (s)he may or may not currently be on the antibiotic. Your veterinarian may recommend continuing this treatment. See your veterinarian for more details.

All medical expenses are the responsibility of the adopter.

Does my dog require any special care?

Your dog must be kept as quiet as possible. This means no running, walks or rough-housing. Walking outside to use the restroom or to sit outside with you to enjoy the weather is ok, but no walks (short or long) for exercise. Be advised that the severity of heartworm disease is directly related to the activity level of the dog. As physical activity increases, the damage the adult heartworms can do to the body increases. Pulmonary thromboemboli (obstruction of blood vessels in the lungs) can cause shock and potentially death if not treated. Exercise restriction is critical to reduce the risk of possible complications secondary to heartworms.

It is important that your new dog is taken to your veterinarian for a complete examination. Your veterinarian may have alternative treatment and exercise restriction recommendations, so it is imperative that you talk with them as soon as possible. ***See your veterinarian for their recommendations and be committed to following the recommendations!***

Please contact your veterinarian immediately if you see the following signs: excessive coughing, difficulty breathing, lethargy or depression with or without the desire to eat or drink. This is an emergency situation.

Will my dog ever be able to exercise regularly like a normal dog?

A variety of factors play into when/if your dog will be able to exercise like a normal dog. Ideally, Immiticide will become available again for treatment of the adult heartworms. After treatment, a dog with mild to moderate heartworm disease is generally kept on at least 4-8 weeks of exercise restriction, but then can gradually return to normal activity as recommended by your veterinarian. Sometimes the damage the heartworms cause to the dog's lungs and heart can be significant enough that your dog may always be on exercise restriction, regardless of treatment. This is a question that is best answered as time passes and your dog is re-examined by your veterinarian.



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What if my dog develops a complication from heartworm disease?

An adopter of a dog with heartworm disease must be willing and able to care for the dog's special needs including medical expenses. NHS is not able to reimburse adopters for medical expenses. Because of the nature of heartworm disease, it is possible for an asymptomatic dog (a dog with no obvious outward signs) to become symptomatic (sick). Strict exercise restriction is one of the most important ways to reduce the risk of a major complication. Some other serious complications include damage to the kidneys, heart failure and increased pressure in the lungs (pulmonary hypertension). See your veterinarian for a more detailed discussion.

Can I return to NHS for heartworm treatment if Immiticide® becomes available again?

Unfortunately you will not be able to return to the Nebraska Humane Society (NHS) for any heartworm treatment or heartworm preventative. Your veterinarian is your pet's healthcare expert and will devise a treatment plan for your dog if Immiticide® becomes available again. Your veterinarian may recommend performing additional tests to re-confirm the heartworm infection. Your veterinarian may also recommend performing blood tests and radiographs ("x-rays") to evaluate your dog's health. These tests are also the responsibility of the adopter.

What is the goal of managing heartworm disease in my dog while Immiticide is not available?

As previously stated, NHS is following the American Heartworm Society's guideline for managing heartworm positive dogs while Immiticide® is unavailable. There are three goals of managing heartworm positive dogs: reduce the damage heartworm infection causes to the body; maintain the health of the dog until it can be appropriately treated and to prevent additional heartworm infections.

The goals listed above are best achieved by limiting the activity level of the dog, place the dog on heartworm preventative and administer an antibiotic called doxycycline to reduce damage and infective potential of heartworms.

From the bottom of our hearts, thank you for saving a life!