

Protecting your pet against heartworm disease



Facts to help you
understand the problem and
find the best answers

A Synbiotics Report

Facts

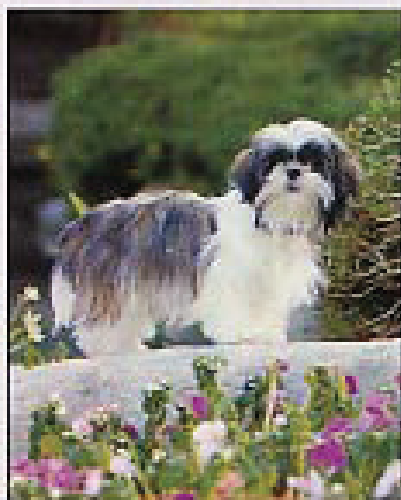
on Heartworm Disease

Hearthworm disease is a serious and potentially fatal disease of dogs which can be prevented. Infections have also been reported in cats, ferrets and other animals with varying degrees of incidence depending on their geographic location.

Adult worms may reach a length of 6-14 inches and are usually found in the pulmonary artery near the right side of the heart as well as in the lungs.

Infections of several hundred worms have been reported although the number is usually much less. Infected cats have fewer and smaller worms.

Even infections with relatively few worms can have serious consequences if left untreated.



Symptoms

*Diminished Appetite, Chronic Coughing,
Listlessness, Weight Loss*

If your pet has a diminished appetite, chronic coughing, tires easily, is listless and has experienced weight loss, contact your veterinarian; the diagnosis could be heartworm disease.

Because most pets do not have symptoms in the early stages of infection, annual testing is the best method of insuring early detection. Treatment in the early stages of infection can minimize the risk of side effects.

If not detected and controlled, a heartworm infection can lead to congestive heart failure and death.

The Life Cycle

A chain of events

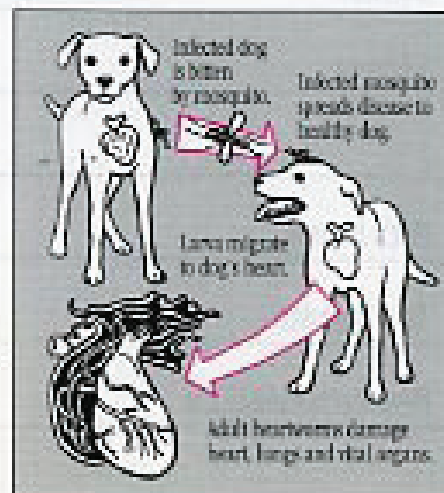
Hearthworm larvae are transmitted to an animal through the bite wound produced by a heartworm infected mosquito during a blood meal.

Larvae develop into immature adults and travel to the arteries surrounding the heart in 3-4 months.

Upon reaching maturity in about 6 months, proteins called antigens begin shedding from the worms into the animal's bloodstream.

Mature heartworms may reproduce and release offspring called microfilaria which, when picked up by another mosquito during a blood meal, develop into larvae within the insect. In this way the cycle of infection may be repeated again and again.

While outdoor pets are the most susceptible to heartworm, even pets kept indoors are seldom completely protected from mosquitoes.



Detection

of Infection

The most accurate method to detect heartworm infection is through an annual blood test for circulating heartworm antigens (commonly referred to as an antigen test).

A blood screening test for microfilariae may also be run on the same blood sample.

Your veterinarian may choose to use other blood tests and or x-rays to help confirm infections and determine if your pet is a suitable candidate for treatment.

Some dogs and most cats do not have circulating microfilariae but, fortunately many of these infections can be detected with an antigen test.

The cost of annual testing and preventives over the life of your pet is usually less than the cost of one treatment.

Treatment

of Heartworm Disease

Adult heartworms can be killed in the dog through a series of injections or in an emergency, removed through surgery.

In the cat, treatment to kill the heartworms is not generally recommended as it may be hazardous to your cat's health. Therapy may be prescribed to help infected cats.

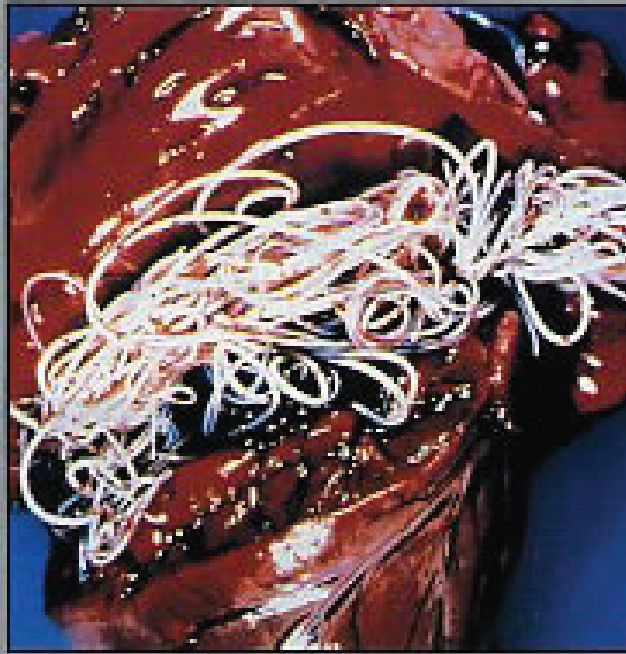


Prevention

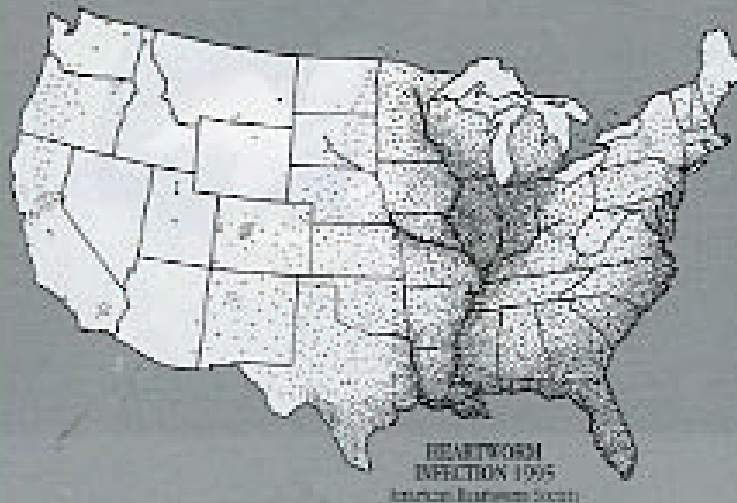
of Heartworm Disease

There is no vaccine available to prevent infections but there are methods of prevention that are nearly 100% effective.

Daily or monthly medication that destroys the early stages of the parasite soon after it enters your pet is the most common method. Since an animal's weight and geographic location must be taken into consideration, only your veterinarian can help you choose the right medication and prevention schedule for your pet.



Heart from a dog with fatal heartworm infection. Adult worms impede flow of blood to and from heart, reducing endurance and eventually resulting in congestive heart failure.



Heartworm infection has been found in dogs native to all 50 states, and is considered at least regionally endemic in each of the contiguous states and Hawaii. It also occurs across wide areas of Canada, Europe, Japan and Australia. This density map, produced by the American Heartworm Society, shows the problem in the United States. However, dogs or cats from low-incidence heartworm areas can easily pick up the infection while visiting a high-incidence area.

Date:
Owner:
Address:
Pet's Name:
Test Results:
Recommendations:



Heartworm disease in cats is a serious and growing problem...but new tests can easily detect heartworms or their larvae. Ask your veterinarian about testing, prevention and therapy for your cat.

This booklet produced and distributed by Symbiotics Corporation and your veterinarian in the interest of better health for your dog and cat.

SYNBIOTICS 
 CORPORATION
 11001 Via Frontera, San Diego, CA 92127
 800-228-4305
 www.symbiotics.com