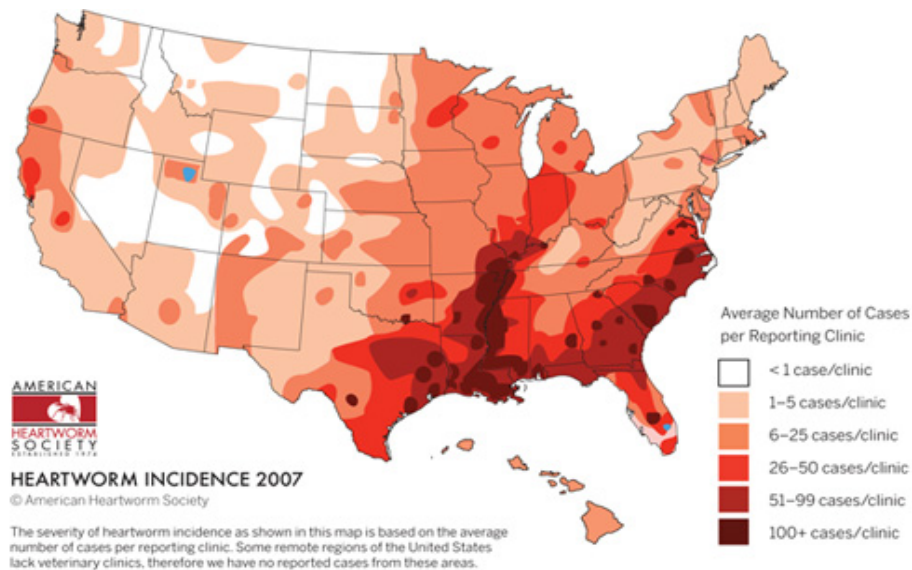
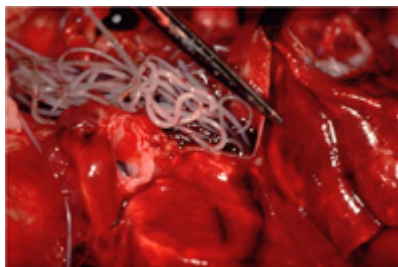


Heartworm in Colorado?

I do not need to test my dog for heartworm or have my dog on heartworm preventative because heartworm is not in Colorado. Unfortunately this is not true. The truth is heartworm exists in all 50 states including Colorado. This is a map illustrating the prevalence of dogs that tested positive for heartworm in the continental United States. Heartworm does exist in Colorado. Prevention is easy, however if a dog becomes infected, treatment is not.



What is heartworm? Heartworm is a worm that lives in the chambers of the heart and vessels in the lungs. Mosquitoes are vectors that carry heartworm microfilaria. Mosquitoes pick up microfilaria by biting an infected animal. Once inside a mosquito, the microfilaria mature into infective larvae. A dog becomes infected with heartworm when bitten by a mosquito carrying the infective larvae. When the dog is infected, the worm matures and lives in the chambers of the heart and vessels of the lungs. An adult female worm can measure up to 10 inches in length! These worms cause inflammation within the heart and lung tissue. They also plug up the vessels and make it difficult for the heart to do its job (pump blood through the body). A dog infected with heartworm will develop a cough, become tired after minimal exercise, have a decreased appetite, and may start to lose weight.



Picture of heartworms being removed from a dog's heart!

All dogs should be tested yearly for heartworm. Puppies should be tested after they are 5 months of age. This involves a trip to the veterinarian for a blood sample. If the dog is negative he should be placed on a monthly preventative. The preventative works by killing any young larvae that were injected into the skin up 35 days prior to giving the medication. Once the larvae reach a certain size the monthly preventative will no longer work. Many monthly preventatives have the added benefit of containing other medications that treat intestinal parasites such as hookworms and roundworms. I recommend giving a monthly preventative at May-November for dogs that live in our area of Colorado. Dogs that travel to warmer areas during the winter (Florida, Texas....) should remain on the preventative 12 months a year. Keeping your dog on year round preventative is also a good option as some people may forget when to start it and may miss one or two doses.

What happens if my dog tests positive? If a dog tests positive for heartworm I will perform a second test to confirm the diagnosis. If the second test is also positive further tests will be recommended to stage the severity of infection. Staging is important to help determine appropriate treatment for the dog. Blood work is performed to assess the dog's overall health and make sure the liver and kidneys can handle the treatment. X-rays of the chest are also taken to assess the size of the heart and presence of inflammation in the lungs. An ultrasound or echocardiogram of the heart may also be performed. These tests along with the dogs clinical signs (degree of exercise intolerance, presence of cough, harsh breathing or increased lung sounds) help the veterinarian determine the proper course of treatment.

The goal of treatment is to eliminate all stages of heartworm from the patient while minimizing post treatment complications. The more severe the heartworm infection, the more likely the chance for complications. Immiticide (melarsomine) is the only FDA approved drug for the treatment of heartworm. The drug is given as a series of injections in the back muscles of the patient. Once the injections are given the adult heartworms die and release from the heart and vessels. They travel further into the pulmonary vessels causing small clots within the lungs which are slowly absorbed by the body. After a dog is treated for heartworm it is very important to limit their activity level to minimize the severity of these clots. Most dogs with mild to moderate heartworm disease can be successfully treated and return to normal activity after 2 months of rest. Heartworm tests are performed 6 months after completion of the treatment to see if the infection has cleared.

The take-home message is that heartworm does exist in Colorado. It is easy to prevent a dog from becoming infected with yearly testing and once a month preventative. Heartworm infection can cause severe damage to the heart and lungs.

Call Elk Meadow Animal Hospital at 303-674-7400 to schedule an appointment.