

The Heartworm 4 DX

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Our yearly heartworm test used the past, which was part of a canine annual physical examination, checked only for the presence of heartworm disease. A few years ago a new diagnostic test kit was made available which, in addition to testing for heartworm disease, also screened for three life-threatening tick borne diseases which are present in our geographic area, Lyme disease, ehrlichiosis and anaplasmosis. Through a simple blood test we are able to test for these four diseases and aid us in our goal of providing the best possible care for your pets. These diseases are present in Illinois and pose a danger to your pet. These diseases are often chronic or low grade and may not be obvious externally. Even a backyard dog is at risk. By performing this test annually we can be assured that we are providing the best in diagnostic testing for your pet and protecting them from serious disease. Prevention and early detection are essential. Sickness is costly, dollar-wise and emotionally.

We will discuss each disease briefly to give you an understanding of the condition and the risk to your pets.

Heartworm Disease

Heartworm disease is a parasitic infection that can be fatal if not treated. The parasite is a filarial worm named *Dirofilaria immitis*, and it makes its home in the dog's (or rarely cat's) bloodstream or heart, causing the animal to become very sick. The worm can grow to nearly six inches in length. Your dog can get heartworms if bitten by a mosquito carrying the disease from an infected dog.

If left untreated, heartworm disease can cause a number of serious symptoms, including difficulty breathing, lack of energy and heart damage. Over time there are changes to the heart muscle and valves will become permanent and irreversible. These symptoms may be hidden in the early stages of the disease, so it's very important to have your dog tested annually.

Heartworm has been detected in dogs throughout all areas of the country-even in dogs that have been taking heartworm preventatives.

Monthly heartworm preventatives can eliminate the larvae in a dog, but have no effect on adult worms. If no larvae are present, these infections can be missed by certain screening methods. The test we conduct does check for the presence of adult worms.

We recommend monthly heartworm preventatives, given year round to destroy the larvae before they migrate to the heart and produce heart damage and disease. If doses are missed there is a great risk if your dog is bitten by a heartworm carrying mosquito that the larvae can molt (change form) into the adult stage where the preventatives are no

longer effective. Heartworm disease can be treated but is very dangerous as it involves intramuscular injections of very toxic drugs (as you are “poisoning the worms”).

Since no preventative is 100% effective, we recommend testing your dog annually for heartworm disease. Our new test kit provides an effective means of checking for the disease.

Lyme Disease

The deer tick that carries Lyme disease can be found in woods, ponds, parks, playgrounds and in your own backyard. Your dog can get Lyme disease in almost any outdoor location where the deer tick can be found. The disease has been found in every U.S. state. Your dog can be infected with Lyme disease if bitten by a deer tick carrying the Lyme bacteria. Dogs are 50% more likely to get Lyme disease than humans. Make sure your dog is safe from the hidden threat.

If left untreated, Lyme disease can cause a number of symptoms that can become very serious, including lameness, fever, joint swelling, kidney failure and heart problems. These symptoms may be hidden in the early stages of the disease, so it's very important to have your dog tested during every annual visit or if you suspect your dog has been exposed to ticks.

Inspect your dog's coat daily for ticks. If you see or feel a tick or a hard bump, call us and either come in or get instructions on how to remove the tick properly and also to discuss whether or not testing is needed. Lyme disease cannot be transmitted directly from your pet to you or your family. However, if ticks are found in your area, your family is at risk. To reduce the risk, inspect your dog and every family member for ticks several times a day when enjoying outdoor activities.

Since no Lyme vaccine is 100% effective, you should test your dog for Lyme disease during every annual visit, even if your dog is vaccinated against Lyme disease. Lyme disease is always a concern for people and pets so with this new test kit we can be even more proactive checking for the presence of the disease.

Ehrlichiosis

Ehrlichiosis is the second most common infectious disease in the United States and one that most people have never even heard of. It is rapidly spreading in the US. Early detection is the key.

Ehrlichiosis is a potentially life-threatening disease your dog can get from several common dog ticks. When an infected tick bites your dog, the feeding site becomes contaminated, potentially infecting the dog with a parasite.

If left undetected and untreated, your dog can suffer symptoms (loss of appetite, runny nose or eyes, depression) which can be quite severe, depending upon the phase of infection and your dog's physical reaction to the parasite. Ehrlichiosis can result in permanent blindness, autoimmune diseases, bleeding complications and even death.

The proven, most effective prevention of infection is to control your dog's exposure to common dog ticks. We have topical tick prevention and control products for your dog. There is currently no vaccine available so that is why prevention and testing are so important.

Inspect your dog's coat daily for ticks. If you ever see or feel a tick or hard bump, call us and either come in or get instructions on how to remove the tick properly. The key to disease prevention is to avoid exposure to ticks.

Your dog can be tested for exposure to Ehrlichiosis during the annual visit, if you suspect any past or recent exposure to ticks, or if your dog is displaying unusual signs or symptoms.

There are no cases of direct transmission of the Ehrlichiosis parasite from dogs to people. The brown dog tick rarely bites people.

Ehrlichiosis is a disease that is under diagnosed because, although common, is not usually initially considered when a sick dog is presented to a veterinarian. It can be treated but specific types of drugs are used in the treatment so the typical broad spectrum antibiotics prescribed to treat sick dogs are usually ineffective. That is why it is ideal to screen dogs for the disease annually or have the capability to test a dog at the hospital if symptoms suspicious of Ehrlichiosis are displayed.

With the new test kit, which checks for Ehrlichiosis, we have enhanced our diagnostic capabilities, enabling us to provide better care for your pets.

Anaplasmosis

Anaplasmosis occurs nationwide and is transmitted by the bite of a tick. Common symptoms are like those seen with Lyme disease, and include high fever, depression, anorexia, lethargy, and inflammation of multiple joints. Neurologic signs including ataxic, seizures and neck pain may also be observed. The most consistent finding is the presence of an immune-mediated thrombocytopenia (lack of the cells involved in blood clotting), often in association with an immune-mediated hemolytic anemia (rupturing of red blood cells). The disease can be deadly.

Dogs can have low grade, sub-clinical infections with no obvious signs of disease. Chronically infected dogs typically appear clinically healthy. Treatment with doxycycline twice daily or tetracycline three times daily typically results in a favorable prognosis.

Dual infections with other tick born diseases are not uncommon. Quite often dogs with anaplasmosis are also infected with Lyme disease. Prevention is the key so be certain to use flea/tick preventatives during the seasons when ticks are present.

Our annual screening testing done with the 4 DX kit will also check for the presence of anaplasmosis. Early detection and treatment are important so that serious damage will not be caused by the disease organisms.