LYME DISEASE

Lyme disease is caused by a bacterium called Borrelia burgdorferi. Symptoms of the disease in people begin with fatigue, headache, and often a characteristic rash. If not treated in humans Lyme can progress to include cardiac, neurologic and arthritic signs. Infected animals will often only show arthritic signs, which may occur with fatigue and poor appetite.

Borrelia burgdorferi has been found in many wild animals. Horses, cows, and cats can harbor the bacteria but the infection is most common in the dog. Lyme disease seems to have a worldwide distribution. In the United States the areas with the highest activity are the northeastern seaboard, Wisconsin, Minnesota and Northern California. In the valley spring and fall are the worst times of the year for ticks and preventative measures are recommended.

Lyme disease is transmitted through tick bites. Some biting insects have been found to carry Borrelia burgdorferi but they are not considered to be major transmitters of the disease. Usually the tick needs to be attached for 24-48 hours to transmit the bacteria. The natural incubation period for onset of the disease is unknown, but it usually takes about three to six weeks for production of antibodies to begin because the bacteria can "hide" in cells that line the blood vessels and lie dormant in connective tissue. This allows the bacteria to evade the dog's immune response, which is how we test for the disease. Laboratory and clinical signs can occur anywhere from two to five months after exposure. Clinical signs can include sudden onset of joint swelling, lameness, fever and lethargy. Lyme can affect the heart, kidneys and nervous system of infected dogs but symptoms mimicking arthritis are most common.

A vaccine for Lyme disease is available for dogs to help strengthen their immune response to the bacteria. The vaccine doesn't prevent Lyme disease, it only provides increased protection. At WHVC we vaccinate dogs at risk for contact with ticks, administering a booster vaccine a few weeks later then repeating it annually.

A positive antibody test for Lyme disease only means that your pet has been exposed to the bacteria at some point in time. This test does not indicate infection by itself. This test is frequently performed at yearly physical exams or when a dog is showing clinical signs of Lyme disease. If the test for exposure is positive, another test called a quantitative C6 can be performed to measure the amount of antibodies produced specifically for Borrelia Burgdorferi. Keep in mind that it can take three to six weeks for production of these antibodies to begin after becoming infected. If the C6 number is high and the dog exhibits symptoms treatment is recommended. The decision to treat the infection is made by the dog's owner and veterinarian on an individual basis, taking into consideration the physical examination and laboratory results.

Vaccinated dogs will test positive for exposure to Lyme but the C6 measures antibodies made in response to infection, not vaccination.