



WHAT IS LEPTOSPIROSIS? BY: DR. KAREN KOHLER DVM

Many owners wonder what this disease is and why we recommend a yearly vaccine against it for every dog. So here is a brief explanation.

Leptospirosis is a disease caused by bacteria in the *Leptospira* genus. These bacteria, which are distributed worldwide, can infect any mammal, including humans. Infected animals spread the bacteria in their urine, which then contaminates standing water (like puddles and marshes) and soil. The bacteria survive longest in warm humid conditions.

If a dog walks through a contaminated area or drinks contaminated water, the organisms can penetrate through its skin, mucous membranes (like the mouth) or open skin wounds to start an infection. The bacteria then spread through the bloodstream, causing a fever and damaging red blood cells. They cause liver inflammation and jaundice. They settle in kidney tissue where they reproduce and are excreted in the newly infected dog's urine.



Signs of infection include fever, muscle soreness, lack of appetite, vomiting, diarrhea, dehydration, jaundice, increased drinking and urination leading to failure to produce urine and, ultimately, death... It is also possible for dogs to die of this disease without showing any specific signs.

The infection can be treated with antibiotics, but sick dogs may require intensive care and prolonged hospitalization, especially if the liver and kidneys have suffered severe damage.



Some animals, including rodents and other wildlife, can develop a chronic form of the infection and continuously shed bacteria in their urine. Soil and water in our area may be contaminated repeatedly. So our dogs are at risk.

We consider Leptospirosis endemic in our area; that is, we see causes year after year at a low level. We recommend that every dog be vaccinated to help protect against this disease. The vaccine produces immunity which lasts only 6 to 8 months, so we boost this vaccine every year.