

LEPTOSPIROSIS

What is leptospirosis?

Leptospirosis is a serious bacterial disease that can be life threatening and is transmissible to humans. There are over 250 strains of the disease, many of which affect dogs. Currently we can vaccinate against *four* of these strains. The disease has become much more prevalent in the past 10 years and is on the rise.

How do dogs acquire the infection?

Common carriers of this disease include rats, skunks, possums, raccoons and small rodents. The organism is shed in their urine and can be picked up by dogs through sniffing of infected urine (soil), ingestion, bite wounds and contact with urine-contaminated water. Infected dogs can also act as a source of infection to other dogs and even people.

What are the signs of leptospirosis?

Leptospirosis most commonly affects the liver and/or kidneys. Clinical signs may include fever, vomiting, lethargy, not eating, weight loss, excessive drinking and urinating, abdominal pain, back pain, diarrhea, jaundice, clotting dysfunction and joint pain.

What is the treatment?

Antibiotics are reasonably effective if they are begun promptly. However these dogs are generally so sick that hospitalization and intensive nursing care, including intravenous fluids, are required. The disease can be fatal (in 11-27% of cases), or cause permanent organ damage.

HOW CAN LEPTOSPIROSIS BE PREVENTED? VACCINATION

The parvo/distemper combination vaccination for dogs is now available with four strains of Leptospirosis protection. We have had vaccines against the serovars *Icterohaemorrhagiae* and *Canicola* since the 1960's. But more commonly in our area disease is due to serovars *Pomona* and *Grippityphosa*, which are included in this newer vaccine. More strains of protection are due on the market in the future.

Boostering the Vaccine:

If this is the first time your dog is receiving this additional Leptospirosis coverage then your dog will need to return in about 3 weeks for a booster vaccination. Because this vaccine is new to the dog's immune system it is given as a series of two injections to stimulate adequate protection. A technician will give this booster vaccine and you pay only the cost of the booster. Annual vaccinations are then needed to maintain proper immunity.

Can the vaccine cause reactions?

Of all the components of a dog's annual vaccinations, the Leptospirosis portion is considered most likely to cause a reaction. However the company manufacturing the four Leptospirosis strain combination vaccine uses special technology to reduce the potential for adverse reactions. 1% of dogs in the FDA safety studies exhibited signs of reaction. These included lethargy, injection site pain, injection site swelling and itching at the injection site. More serious reactions can occur (from facial swelling to anaphylactic shock), but are even less common.

Miniature and Toy Breeds:

Miniature and toy breeds such as the Chihuahua, Miniature Dachshund, Fox Terrier and Maltese had a three times greater incidence of reaction than larger breed dogs, especially as puppies. Even so, reactions were infrequent. We take all this into account when assessing risk versus benefit for vaccination.

How common is leptospirosis?

Unfortunately, leptospirosis is prevalent in our region. We recommend vaccination for dogs that are "at risk". This is why we discuss the disease with every owner to determine your pet's environment and lifestyle and potential for contracting the disease. Though we strive to educate and inform, ultimately the vaccine decision is yours. You can elect to have your pet vaccinated against the common canine viruses without any Leptospirosis protection. We feel that for most patients the benefits of protection outweigh the risk of vaccination.