

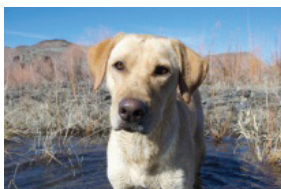
# Spotlight on Leptospirosis

By Dr. Krista Hight



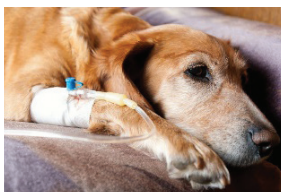
## Is Leptospirosis really a concern?

We recently had two 11 week old puppies come to us for vomiting and diarrhea of several days duration. They both had extremely yellow eyes, gums, and skin, as well as abdominal pain, lethargy, and unresolving bloody vomit and diarrhea. Labwork revealed sky-high liver and kidney values which made sense with the jaundiced skin. History revealed that the dogs play and drink from puddles in the yard and the owners have seen rodents in their yard as well. We immediately isolated the pups and started treatment for Leptospirosis, being careful to use gloves and gowns when dealing with the pups.



## What is Leptospirosis?

I find that many people don't even know what leptospirosis is, which means many dogs go unvaccinated. Leptospirosis is a deadly disease that affects both animals and humans. It is a bacteria that is carried in wildlife urine and tends to pool in fresh or standing water. The bacteria enters the body through the skin (especially if there are any cuts or abrasions) or mucous membranes, or by drinking and swimming in contaminated water. Leptospirosis is a spirochete bacteria that travels through the kidneys and the liver causing severe damage in both organs.



Raccoons, skunks, squirrels, rodents, and deer are among the wildlife that can carry Leptospirosis. Clinical signs include fever, vomiting, diarrhea, abdominal pain, anorexia, severe lethargy, and yellow gums and skin. It is treated with rigorous intravenous fluid therapy, antibiotics, and supportive care. Prognosis is generally good with mild infections and very poor with severe infections.



## How do I prevent infection?

The good news is that Leptospirosis can be prevented through vaccination. The vaccine is initially given twice two to three weeks apart then yearly after that. It is a very safe vaccination and should be considered in any dog that may have exposure to wildlife or water sources. Also, pest control is important as rodents are an important carrier of the disease. Currently, it is thought that cats have an inherent immunity to developing Leptospirosis following exposure, so there is not a recommended vaccine for cats.



## Transmission to Humans

Leptospirosis is a zoonotic disease, meaning humans are at risk. Just like dogs, humans can catch Lepto from contaminated water sources and from an infected animal's bodily fluids (especially urine). The disease progresses the same way in humans eventually leading to kidney and liver failure.