

LEPTOSPIROSIS

There have been increasing numbers of outbreaks of Leptospirosis in dogs recently and we may be seeing more due to the wet weather and flooding in which the organism thrives. Leptospirosis is a bacterial infection of dogs and other mammals including humans (who can be infected by dogs with the disease). Once primarily a rural disease, it is being seen with more frequency in urban areas. It primarily affects the liver and kidneys. Leptospira bacteria are mainly carried by rats and other rodents, but infected or recovered "carrier" dogs may act as a source of infection. Ingestion of infected urine or rodent contaminated garbage is the most common form of transmission, but some forms of the bacteria can penetrate damaged or thin skin. For instance, when dogs swim in contaminated water, they may become infected through their skin. Dogs that hunt in water are at increased risk. The time from infection to clinical symptoms is usually four to twelve days.

There are three main forms of the disease:

1. Hemorrhagic which presents as high fever, listlessness, and loss of appetite. Bloody diarrhea and vomiting may occur and this form is often fatal
2. Liver which can show symptoms similar to the hemorrhagic form but also causes jaundice, a yellow color of the gums, whites of the eyes and skin due to liver damage.
3. Kidney failure presenting with blood in the urine, increased water intake and urination, loss of appetite, and vomiting. Dogs that survive the acute disease may be left with chronic kidney disease.

Because the symptoms are variable and easily confused with other diseases, diagnosis can be difficult and may involve a process of elimination based on symptoms and history of possible exposure. There is a blood test for antibodies to Leptospirosis and sometimes the organism can be seen in the urine.

The treatment is long term antibiotics, intravenous fluids, and may involve extended intensive care depending on the severity of the individual case.

There are vaccines available for the prevention of Leptospirosis. In recent years they have become more effective as the serovars (strains) of the organism in the vaccines are the ones being seen that cause the disease. The vaccines are also more refined and the side effects that frequently were associated with them in the past such as listlessness, loss of appetite, and anaphylaxis (severe allergic reaction) have been reduced or eliminated. The vaccination protocol consists of two vaccinations three weeks apart followed by yearly boosters. Check with your veterinarian to see if vaccination would be recommended for your dog.