

Leptospirosis

- Leptospirosis is a serious and potentially fatal bacterial disease that can be transmitted to humans.
- The disease typically attacks the kidneys and liver of infected dogs.
- It is transmitted to dogs through contact with contaminated water, soil, or surfaces. Localized outbreaks may occur in areas that have recently experienced flooding.
- Infected dogs require treatment with antibiotics and fluid therapy.
- The risk of infection can be reduced by attempting to avoid high-risk environments; vaccination of individual dogs may be recommended.

What Is Leptospirosis?

Leptospirosis is a potentially serious disease caused by the bacterium *Leptospira interrogans*. It affects dogs but can also infect a wide variety of domestic and wild animals and humans. The bacteria can survive for long periods of time in water and are frequently found in swamps, streams, lakes, and standing water. The bacteria also survive well in mud and moist soil, and localized outbreaks can occur after flooding. Infected animals can continue to shed the bacteria in their urine for months or even years after recovery. Carriers of the bacteria include raccoons, opossums, rodents, skunks, and dogs. The disease is transmitted to dogs when they have contact with urine or contaminated water or soil.

Signs of Leptospirosis

Clinical signs typically develop 2 to 12 days after exposure to the bacterium. In many dogs, infection may remain subclinical (without clinical signs) or chronic. In acute, or more serious cases, dogs may experience potentially fatal kidney or liver disease.

Signs include:

- Weight loss
- Fever
- Inappetence (appetite loss)
- Vomiting
- Lethargy
- Muscle and/or joint pain
- Diarrhea
- Bloody urine
- Excessive thirst
- Jaundice
- Excessive bleeding

Diagnosis and Treatment

Leptospirosis can be diagnosed through blood tests; however, tests may need to be performed multiple times to confirm a diagnosis.

Treatment typically consists of a regimen of antibiotics. Complications such as liver or kidney damage or spontaneous bleeding are treated with fluid therapy and other treatments that are appropriate for the individual patient. Hospitalization is required in many cases.

It is transmitted to dogs through contact with contaminated water, soil, or surfaces. Localized outbreaks may occur in areas that have recently experienced flooding.

Prevention

Exposure to leptospirosis can be reduced by preventing your dog from drinking from puddles of standing water or from swimming in lakes, streams, or other bodies of water that may be contaminated. Unfortunately, for dogs that are accustomed to an active outdoor lifestyle that includes swimming, these precautions may not be practical.

Prevention of leptospirosis is complicated by the fact that there are more than 200 different serovars (subtypes) of the *Leptospira interrogans* bacterium that can cause illness in animals and people. The available

Common Conditions

vaccines only protect against a handful of the most common subtypes that infect dogs, which can limit the protective value of the vaccines. Nevertheless, the available vaccines are effective and safe when used as directed, and many veterinarians recommend the vaccination for dogs at risk for exposure. Annual revaccination is required.

The leptospirosis vaccine is not required for all dogs. Your veterinarian may recommend this vaccine based on your dog's lifestyle and exposure risk.

Vaccination, no matter how routine, is a medical procedure. Always monitor your pet for signs of a vaccine reaction and follow your veterinarian's instructions on what to do if one occurs.

Humans can also become infected with leptospirosis, so handle dogs suspected of having the disease with care. Adhere to good hygiene techniques, such as frequent handwashing and avoiding contact with potentially contaminated urine.