

What Is Leptospirosis?

Leptospirosis is a disease caused by infection with one of the more than 250 types of bacteria called *Leptospira*. These bacteria can infect any mammal, including humans. *Leptospira* live in warm, wet environments like damp grass, standing water, mud, and lakes. Under ideal conditions, the bacteria can survive more than three months outside the body.

How Is Leptospirosis Transmitted?

Leptospirosis is most often transmitted to dogs through mucous-membrane (mouth, nose or eye) contact with the urine of infected animals and/or contaminated food, bedding, soil, or water. Dogs may also be infected through the bite of, or by eating, an infected animal. Raccoons, skunks, opossums, rats, cows, and pigs are all known carriers of the infection. Dogs can also become infected from close contact with another infected dog.

Because of the broad range of carrier species, any dog—even one briefly outdoors in an urban backyard—is vulnerable to the disease.

How Can Leptospirosis Affect My Dog?

Leptospirosis can cause a broad range of clinical signs in any combination. The most common early indicators of *Leptospira* infection are: loss of appetite, increase or decrease in urine production, uncharacteristic inactivity, vomiting, and diarrhea. Even with prompt, exhaustive medical care, 10 to 15 percent of infected dogs may die. Left untreated, many infected dogs die of kidney or liver failure.

How Do I Prevent Leptospirosis?

Vaccination is the best way to prevent leptospirosis. For most dogs, limiting exposure to the outdoors is neither practical nor desirable. The vaccine used today is a four-way, second-generation vaccine which protects against four types of leptospirosis and is associated with fewer reactions in vaccinated dogs than previous versions.

There are a number of vaccine options and vaccination schedules. Discuss what type of leptospirosis vaccination is appropriate for your dog with your veterinary medical provider. Canine leptospirosis became a rare event once because of wide-spread vaccination. Pet owners and veterinarians can help reduce incidents of the disease by working together to increase the number of vaccinated dogs.

What Do I Do If I Suspect Leptospirosis?

If you suspect your dog may have leptospirosis, **CONTACT YOUR VETERINARY MEDICAL PROVIDER**. Your veterinarian can assess your dog's condition and order any necessary diagnostic tests. Early diagnosis, treatment, and supportive care are essential to giving your dog the best chance for survival.

Humans are also vulnerable to leptospirosis. If your dog is diagnosed with leptospirosis, consider medical assessment for anyone in close contact with the animal.

This fact sheet is provided by the Diagnostic Center for Population and Animal Health at the Michigan State University College of Veterinary Medicine as a public service. It is not intended to diagnose any disease. Please contact your veterinary medical service provider if you have questions regarding this or any other veterinary medical issue.

DIAGNOSTIC CENTER FOR POPULATION AND ANIMAL HEALTH

4125 Beaumont Road, Lansing, MI 48910 | 517.353.1683 animalhealth.msu.edu

