

What is leptospirosis?

Leptospirosis is a bacterial disease that affects humans and animals. It is caused by bacteria of the genus *Leptospira*. In humans it causes a wide range of symptoms, and some infected persons have no symptoms at all. Symptoms of leptospirosis include high fever, severe headache, chills, muscle aches, and vomiting, and can include jaundice (yellow skin and eyes), red eyes, abdominal pain, diarrhea, or a rash. If the disease is not treated, the patient could develop kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, and respiratory distress. In rare cases, death occurs. Many of these symptoms can be mistaken for other diseases. Leptospirosis is confirmed by laboratory testing of a blood or urine sample.

How do people get leptospirosis?

Outbreaks of leptospirosis are usually caused by exposure to water contaminated with the urine of infected animals. Many different kinds of animals carry the bacterium; they can become sick but sometimes have no symptoms. *Leptospira* have been found in cattle, pigs, horses, dogs, rodents, and wild animals. Humans become infected through contact with water, food, or soil containing urine from these infected animals. This can happen by swallowing contaminated food or water; through contact with mucosal surfaces, such as the eyes or nose; or through broken skin. The disease is not known to be spread from person to person.

How long is the time between exposure and when people become sick?

The time between a person's exposure to a contaminated source and becoming sick is 2 days to 4 weeks. Illness usually begins abruptly with fever and other symptoms. Leptospirosis can occur in two phases; after the first phase, with fever, chills, headache, muscle aches, vomiting, or diarrhea, the patient might recover for a time but become ill again. If a second phase occurs, it is more severe; the person might have kidney or liver failure or meningitis. This phase is also called Weil's disease. The illness lasts from a few days to 3 weeks or longer. Without treatment, recovery might take several months.

Where is leptospirosis found?

Leptospirosis occurs worldwide but is most common in temperate or tropical climates. It is an occupational hazard for many people who work outdoors or with animals, such as farmers, sewer workers, veterinarians, fish workers, dairy farmers, or military personnel. It is a recreational hazard for campers or people who participate in outdoor sports in contaminated areas, and it has been associated with swimming, wading, and whitewater rafting in contaminated lakes and rivers. The incidence is also increasing among urban children.

How is leptospirosis treated?

Leptospirosis is treated with antibiotics, such as doxycycline or penicillin, which should be given early in the course of the disease. Intravenous antibiotics might be required for persons with more severe symptoms. Persons with symptoms suggestive of leptospirosis should contact a health care provider.

Can leptospirosis be prevented?

The risk of acquiring leptospirosis can be greatly reduced by avoiding swimming or wading in water that might be contaminated with animal urine. Protective clothing or footwear should be worn by those exposed to contaminated water or soil because of their job or recreational activities.

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http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g.