What is leptospirosis?

Leptospirosis is an infection caused by several strains of a bacterium called *Leptospira*.

What are the symptoms of leptospirosis?

The symptoms can be fever, headache, and severe muscle pain, fatigue, chills, jaundice, and anemia, sometimes rash and gastrointestinal upset. Less frequently, it can result in meningitis (swelling of the covering of the brain), liver and kidney dysfunction, and eye inflammation. Severe cases are more common in older individuals and can result in death.

How soon do symptoms appear?

The symptoms usually start 5-14 days after exposure, with a range of 2-30 days.

How is leptospirosis spread?

Many species of wild and domestic animals (including dogs, cattle, horses, swine, rodents, and deer) are susceptible to leptospirosis and can excrete the bacteria in their urine. The urine can then contaminate water, moist soil, or vegetation with the *Leptospira* bacterium. Humans can acquire the infection if this contaminated material contacts broken skin, mucous membranes, or is swallowed. Because infected humans can also pass the bacteria in their urine, person-to-person transmission is possible but rarely occurs.

Who gets leptospirosis infection?

Although all persons are susceptible, this uncommon infection occurs mainly in persons whose occupation brings them into contact with animals or with material contaminated with animal urine. Farmers, veterinarians, slaughterhouse workers, sewer workers, and miners are at greater risk of exposure. Although very rare, exposures can also occur during recreational activities such as camping or swimming, when there may be contact with or ingestion of contaminated water. Leptospirosis occurs most often in the summer and in warm climates.

How long is a person infectious?

Direct transmission from human to human is rare, but the bacteria can be found in urine as long as 11 months after illness.

How is leptospirosis diagnosed?

The diagnosis can be made by growing the *Leptospira* bacterium from body fluids, or by finding elevated levels of antibodies to the bacterium in a person's blood.

Can a person get leptospirosis more than once?

There are several strains of the organism. Infection with one usually provides immunity to that organism but not to other strains; therefore a person could get leptospirosis from a different strain of *Leptospira*.

What is the treatment for this illness?

The antibiotics of choice are penicillin or doxycycline. Kidney dialysis may be necessary.

Do infected people need to be excluded from school, work, or child care? No.

What can be done to help prevent the spread of this disease?

For persons in high-risk occupations, the use of protective clothing, boots, and gloves will minimize exposure. Recognizing and avoiding potentially contaminated water and soil during recreational activities, and rodent control in areas where human and domestic animals live can also reduce the risk of exposure.