



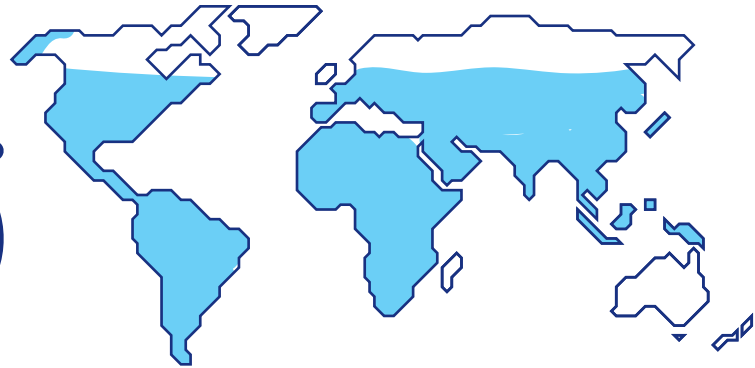
Who

The incidence of leptospirosis in the tropics is approximately 10 times higher than in temperate regions. In the tropics, it is mainly a disease of poverty (including low education, poor housing, and absence of sanitation). There, it is acquired through occupational exposure and living in rodent-infested, flood-prone urban slums.



What

Leptospirosis is caused by bacteria belonging to the *Leptospira* genus. The disease normally exists in animals but human beings can be infected (zoonosis). Rodents are the most important reservoirs for maintaining transmission and may shed the bacteria in their urine, resulting in contamination of the environment, particularly water.



Where and when

Human infection usually results from exposure to environmental sources, such as animal urine, contaminated water or soil, or infected animal tissue. Risk factors for infection include occupational exposure, recreational activities like freshwater swimming or kayaking, and household exposure. Many synonyms for the disease are available, including Weil's disease, swamp fever, or mud fever.

Prevention

The most important ways to prevent leptospirosis include avoiding potential sources of infection such as stagnant water and animal farm water runoff, rodent control, and protection of food from animal contamination. Vaccination of domestic and farm animals may be applied but protection is moderate. Convincingly effective human vaccines do not exist.



Treatment

Many patients recover spontaneously and do not need any therapy. If the illness is severe enough to come to clinical attention, antibiotic therapy should be administered to shorten the duration of illness. The preferred agent depends on the clinical presentation.

Symptoms

The clinical course of leptospirosis is variable. Most cases are mild and self-limited, while some are severe and potentially fatal. After an incubation period of 2-26 days, the illness generally presents with the abrupt onset of fever, muscle strain, and headache in 75-100% of patients. Conjunctival redness, nonproductive cough, and aseptic meningitis may also occur.



In case of infection

Leptospirosis may be complicated by jaundice and renal failure, pulmonary hemorrhage, inflammation of the heart and muscle breakdown. Multiorgan failure and even death may occur, so for severe cases, making a correct diagnosis is important to enable timely administration of antibiotic therapy.