

SYMPTOMS

Leptospirosis, also known as Weil's disease, is a bacterial infection typically found in tropical and subtropical regions, being responsible for sickness within both humans and animals ^[1]. The bacteria are rather resistant, surviving in bodies of water, soil or urine for months, contaminating whatever comes into contact with them. Infection involves the following symptoms, ranging from mild to severe, typically developing within 1-2 weeks post-infection ^[2].

- High fever
- Headaches and nausea
- Muscle and joint aches
- Vomiting and diarrhea
- Loss of appetite
- Reddening of eyes

In extreme circumstances, the infection may result in meningitis, failure of the liver and/or kidneys, and potentially death ^[2].



TRANSMISSION

Distribution and Spread

Leptospirosis is mostly spread through direct contact with infected animals or their urine, commonly cattle, rodents and pigs; and any polluted water or soil thereof ^[2]. Transmission may also occur with direct contact of infected tissues or blood. Risk of infection is higher for those employed in mining, agriculture, and wastewater treatment. The pathogens can enter the body through tears in the skin or mucous membranes, including the nose, mouth, or eyes. Note that leptospirosis hardly ever spreads from person to person, or from animal bites ^[1].

RECOMMENDATION

Treatment

Antibiotics like penicillin or doxycycline are frequently used to treat leptospirosis; with the chosen antibiotic being based on the infection's severity and the patient's age and history. Treatment can be given intravenously or orally, typically needed for 5-7 days, with most making a full recovery within days or weeks ^[1]. For supportive treatment, hospitalization may be necessary in extreme situations ^[3].

Prevention

Prevention methods include the following ^[3]:

- Frequent hand washing, using soap and hot water, especially after handling animal products
- Avoiding exposure to contaminated water and soil
- Avoiding contact with infected animals and their urine
- Wearing protective clothing, including gloves and boots, when working around animals
- Covering any skin cuts with waterproof plasters
- Vaccinating animals at risk of infection, including dogs
- Rodent control through proper waste disposal

1. Leptospirosis (Weil's disease) [Internet]. NHS Choices. 2019. Available from: <https://www.nhs.uk/conditions/Leptospirosis/> (accessed April 16, 2023).
2. Leptospirosis [Internet]. CDC. 2019. Available from: <https://www.cdc.gov/leptospirosis/index.html> (accessed April 16, 2023).
3. Factsheet about leptospirosis [Internet]. ECDC. Available from: <https://www.ecdc.europa.eu/en/leptospirosis/factsheet> (accessed April 16, 2023).