

Leptospira spp.

Leptospira spp. is a risk group 2 bacterium. It is considered a **reproductive pathogen** as infection causes high rates of fetal adverse outcomes, including spontaneous abortion (particularly in the first trimester), stillbirth, and premature labor. Although rare, transplacental transmission can occur, leading to infected newborns. Detection and early antibiotic treatment are crucial for maternal and fetal survival.

How can I be exposed to *Leptospira spp.*?

- Exposure occurs most commonly by contact with or ingestion of water or soil containing urine or body fluids from infected animals, especially after hurricanes, flooding, or heavy rainfall.
- Laboratory workers may be exposed by direct and indirect skin or mucous membrane contact with fluids and tissues of infected animals during handling or necropsy, ingestion, parenteral inoculation, or inhalation of aerosols of contaminated fluids.

How can I protect myself from exposure?

- Avoid direct skin contact by wearing protective clothing and gloves.
- Avoid mucous membrane exposure by using eye/face protection for procedures that may produce splashes.
- Avoid respiratory exposure by using a biosafety cabinet or other primary containment device and wearing a respirator for procedures that may produce aerosols, particularly centrifugation, resuspension of pellets, and washing.
- The use of needles, syringes, and other sharp objects should be strictly limited, and additional precautions should be taken when working with animals.

What should I do if I think I've been exposed?

Wash the affected area immediately for 15 minutes with soap and water and seek medical attention.

How long does it take for symptoms to develop?

Symptoms develop between 2-30 days.

What symptoms should I look for after a potential exposure?

The first phase of disease symptoms include fever, chills, headache, muscle aches, vomiting, and diarrhea. Some people develop a more severe second phase with kidney or liver failure, or inflammation of the membranes around the brain and spinal cord.

Is there a treatment or vaccine?

Treatment includes a regimen of antibiotics. Vaccines are not available for use in humans.

Can I transmit it to other people?

Direct person-to-person transmission is rare as contact with human urine is required. The bacteria can be excreted in urine for 1-11 months.

Can I transmit it to my pets?

Humans can technically pass the bacteria to pets or livestock, but this is rare and would require contact with human urine.

Can it survive on surfaces?

Leptospira spp. can survive in contaminated water and soil for weeks to months.

See *Pathogen Safety Data Sheet* for *L. interrogans* for More Information

