



Leptospirosis

Last update: 2025-03-18

Key facts

- Leptospirosis is a zoonotic disease with the potential to become a major epidemic, especially after a rainfall. It can cause disease in both humans and animals
- Virtually all mammalian species such as cattle, buffaloes, horses, sheep, goat, pigs, dogs and rodents are can harbour leptospirosis and act as source of infection to human beings and other animals.
- However, rodents are considered the primary source of infection to human beings.
- Epidemics may be associated with changes in human behaviour, animal or sewage contamination of water, increase in animals with leptospirosis or incidence of natural disasters such as cyclones and floods.

Transmission: Animal-borne, direct or indirect contact (primary reservoir is rats, but other animals can also be reservoirs, including domestic pets)

- Consuming food or water contaminated with the urine from infected animals
- Water or dirt contaminated with the urine from infected animals getting into the body:
 - Through cuts or sores
 - Absorbed through the eyes, nose or mouth

Most vulnerable to contracting the disease

- People living in areas of flooding
 - Especially in areas with poor rubbish disposal and waste management
- People working or living closely with animals (for example, farmers, veterinarians, river fishermen)

Symptoms

The symptoms of leptospirosis may mimic many diseases, such as influenza, dengue and other viral haemorrhagic diseases; making the correct diagnosis important to prevent severe cases and save lives, especially during outbreaks.

- Fever and chills (sometimes, may be mild)
- Headache (sometimes, may be mild)
- Nausea with or without vomiting (sometimes, may be mild)
- Diarrhoea (sometimes, may be mild)
- Muscle pain (sometimes, may be mild)
- Skin rash (sometimes, may be mild)
- Eye infection (sometimes, may be mild)

Symptoms of severe leptospirosis (Weil's disease):

- Any of the general symptoms, usually worsening
- Jaundice (yellowing of the skin and eyes)
- Chest pain
- Bleeding

What can you do to prevent and control an epidemic?

Monitoring the community and identifying sick people

- Identify people in the community with suspected leptospirosis according to the community case definition

Treatment and management

- Refer suspected cases to health facilities
- Provide psychosocial support to the sick person and their family members

Personal protection and hygiene

- Promote handwashing with soap
 - BEFORE: preparing food; eating; feeding a child; treating wounds; or caring for sick people
 - AFTER: using the toilet or cleaning a baby; touching garbage or waste (especially when dealing with rodent waste); touching or feeding animals; blowing nose, coughing or sneezing; treating wounds; or caring for sick people
- Encourage people to avoid contact with contaminated water

- Avoid swimming or fishing in contaminated water
- When it is not possible to avoid contact with contaminated water, encourage people to protect themselves
 - Wear protective clothing/footwear or equipment when in contact with animals or animal waste
- Shower or bath with uncontaminated water after taking part in water activities like swimming or river fishing

Water hygiene and safety

- Encourage treatment of drinking water sources that might be contaminated, especially during and after floods
- Promote the use of safe, well-maintained sources of drinking water (especially those which cannot be contaminated during a flood)
- Encourage household water treatment for safe drinking water when necessary
 - Store water in clean, covered water container
- Promote thorough cleaning, cooking and storage of food
 - Cover and store food safely (protected from insect/animal contamination)
 - Use clean utensils and storage containers

Social mobilization and health promotion

- Find out the specific advice being given by health and other relevant authorities
- Model following this advice and inform community members of current health practice advice
- Offer support and encouragement to follow the advice
 - Try to gain understanding about if and why health practice advice is not being followed
 - With the guidance of your supervisor and health authorities, work with communities to overcome barriers to following health advice and recommended practices

Mapping and community assessment

- Make a map of the community.
- Mark the following information on the map:
 - How many people have fallen sick with leptospirosis? Where?
 - How many people have died? Where? When?
 - Where are the local health facilities and services? (include traditional healers)
 - Where do people obtain their drinking water?
- Record the following information on the back of the map:
 - When did people start to fall sick with leptospirosis?

- How many people live in the affected community?
 - How many are children under five years?
- Is the community (or are some parts of it) flooded?
- Are water sources (such as lakes, ponds, canals) contaminated?
 - Is there the chance they can become contaminated?
- Are there rats observed in the community households? How common is this?
- Do community members keep livestock animals? Have animals been falling sick lately?
- What are the community's habits, practices and beliefs about caring for sick people? Consider any differences in roles and responsibilities between women and men.
- Is a social mobilization or health promotion programme in place?
- Which sources do people use/trust the most for information?
 - Are there rumours or misinformation about leptospirosis? What are the rumours?
- What are the roles, responsibilities, specific needs and priorities of women and girls, men and boys, and people with disabilities in handling, storing and treating water? Make sure you think about cultural and social traditions and perceptions, household decision-making, livelihoods such as agriculture and livestock raising etc.
- What are the barriers people face in accessing water points and sanitation and hygiene facilities, of all gender identities, ages, disabilities and backgrounds?

Other resources

WHO – World Health Organisation Regional Office for South-east Asia; [Leptospirosis Fact Sheet](#)

WHO PAHO – World Health Organization Pan American Health Organization; [Leptospirosis; 2024](#)