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## What is Leptospirosis?

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Leptospirosis is a disease that can be passed from animals to humans. It is more common in tropical areas of the world but is also found in temperate areas such as Europe, including the United Kingdom (UK).

Traditionally leptospirosis was associated with miners, fish workers and sewerage workers, but as preventative measures were introduced into the working procedures, so the incidence in these groups declined. Only about one case per million of the UK population are diagnosed per year.

Leptospirosis is caused by a germ (bacteria) which infect a variety of wild and domestic animals (commonly rats, cattle and pigs). The animals can then spread it in their urine.

The germ can survive in moist conditions outside the host for many days or even weeks. However, they are readily killed by drying, exposure to detergents, disinfectants, heating to 50°C for five minutes and they only survive for a few hours in salt water.

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## How is Leptospirosis spread?

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Human infection occurs through exposure to water or an environment contaminated by infected animal urine, and has been associated with a variety of occupations such as farming which can involve direct or indirect contact with infected urine or recreational pursuits. In the UK, such activities include canoeing, windsurfing, swimming in lakes and rivers, pot holing, and fishing.

The germ enters the body through cut or damaged skin, but may also pass across damaged or intact mucous membranes, and the eyes. Person to person spread is very rare, if it occurs at all.

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## What are the symptoms?

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Human infection is more common in men than women. Typically, symptoms develop seven to 14 days after infection, though rarely the incubation period can be as short as two to three days or as long as 30 days.

Most cases present with flu-like illness and recover in two to three weeks. Common features are:

- ❖ sudden onset of fever
- ❖ intense headache
- ❖ severe pains in calf and back muscles
- ❖ red eyes

Some cases develop abdominal pains with diarrhoea and vomiting or meningitis. Only a few cases develop severe leptospirosis with jaundice and kidney failure, but of these 10-15% may die. Death is virtually unknown in patients who do not develop jaundice.

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## **How is Leptospirosis treated?**

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Leptospirosis is treated with antibiotics, which should be given early in the course of the disease. Intravenous antibiotics may be needed for people with more severe symptoms.

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## **How is it prevented?**

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There is no human vaccine available in the UK that is effective against leptospirosis.

General advice includes:

- ❖ reduce rodent populations, such as clearing rubbish and preventing rodent access into buildings
- ❖ not swimming or wading in water that might be contaminated with animal urine
- ❖ wearing protective clothing by those exposed to contaminated water or soil because of their job or recreational activities. The use of gloves or protective footwear in potentially contaminated environments is recommended
- ❖ Cuts or abrasions should be covered with waterproof dressings before possible exposure and cuts or abrasions received during activities should be thoroughly cleaned. Showering promptly after immersion in surface waters is recommended

### **Need further advice or information?**

- ❖ NHS Inform [www.nhsinform.co.uk](http://www.nhsinform.co.uk)
- ❖ NHS24 ☎ 111 [www.nhs24.co.uk](http://www.nhs24.co.uk)
- ❖ [www.nhsborders.scot.nhs.uk](http://www.nhsborders.scot.nhs.uk)
- ❖ Local health clinic or GP

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