

Leptospirosis (Weil's disease)

Background

This disease, caused by an organism called *Leptospira*, is found almost worldwide, but especially in the tropics. It is important for international travellers because it can be picked up through contact with water, soil and mud contaminated by the urine of rodents, especially rats. Other animals can also spread the germ including dogs, goats and cattle.

Recent flooding increases the risk, but any ponds, ditches, canals, lakes, damp soil or mud may harbour the organism. The incubation period is normally between 5 and 14 days.

The disease enters the body through mucous membranes, eyes and skin, especially if there are any breaks in the skin or abrasions. It can also be caught from ingesting infected water or occasionally from eating food contaminated by rat urine.

Two groups of traveller are at special risk. The first are those involved in aid and relief work following floods or heavy rainfall, with water and sanitation workers being at particular risk. The second are adventure travellers involved in aquatic sports such as kayaking in unclean fresh water or after recent heavy rains, and environmentalists working in fresh water or marshy habitats.

What are the symptoms?

These are varied but usually there is a sudden onset of fever, headache, muscle ache, chills, inflamed eyes, nausea and rash. These symptoms can mimic other illnesses, such as malaria, typhus and dengue which is one reason why it is important to get good medical advice as soon as possible. Most cases are mild but about 10% go on to more serious infection often after a few days of apparent recovery. This more severe form, sometimes referred to as Weil's Disease, causes jaundice.

Symptoms affecting the heart, lungs and kidney can also develop which need urgent treatment.

How do you prevent it?

This is through avoiding contaminated water, being particularly careful if you have any skin cuts or abrasions. Avoid any contact with rodents, especially rats. If exposure to contaminated non-salt water is essential, wear a protective suit and start prophylactic antibiotics. The current first-choice is doxycycline 200 mg once per week, starting one or two days before exposure, and continuing during the period of risk. Anyone also needing antimalarials (usually the case) would sensibly choose doxycycline 100 mg daily, which would protect against both diseases.

What is the treatment?

This must be done by a specialist and started as soon as possible. Penicillin by injection is usually used in severe cases. Otherwise, amoxycillin and tetracyclines by mouth are the most effective antibiotics.

What basic health rules should be followed?

- Be alert to local guidance - do not travel around unnecessarily.
- Know the route you intend to take; do not take risks and carry a first aid kit and torch with you.
- Any cuts and abrasions need to be covered with waterproof dressings when walking through flood waters. Keep wounds clean and dry and check regularly for any signs of inflammation.
- Always carry safe water to drink in a suitable sealed container.
- On return to accommodation after walking through flood waters always strip wash/shower, change clothes and keep warm.
- Be alert to potential dangers associated with electrical equipment which may have been made dangerous by contact with water.
- Be cautious when walking through flood waters and be aware of potential dangers as murky waters will prevent you from spotting dangers underfoot.
- Do not go out in the dark.
- Be careful with fresh foods which have been contaminated by flood water. All foods should be carefully washed in treated water.
- Watch out for snakes and other reptiles which can be washed into areas where they are not normally found.

Further Information

More information can be found in: 'The Traveller's Good Health Guide', by Ted Lankester.

InterHealth's Travel Health Advice Centre (THAC) is available to travelwellplan subscribers. Please visit:

<http://www.interhealth.org.uk/our-services-travelwell-plan-travel-health-advice-centre.html>