

# Weil's Disease



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Watersports enthusiasts should be aware of the risks of Weil's disease. This is the relevant NHS information:

[www.nhs.uk/conditions/leptospirosis/](http://www.nhs.uk/conditions/leptospirosis/)

BWSW has also sourced this third party profile of the disease, which aims to clarify its nature, frequency and to suggest ways of preventing infection.

## History

- Weil's Disease occurs World Wide, but may have spread from S.E Asia centuries ago.
- First recognised in 1888 by Professor Adolph Weil of Heidelberg.
- Cause only discovered 20 years later.
- Used to be associated with canal workers in rice fields, sugar cane cutters, fish cleaners, fleshers and curers, fish porters and fishmongers, tripe scrapers, piggery workers, stablemen and rat catchers.
- Troops in the trenches suffered from it during the First World War.
- Then in recent years, associated with sewer workers, abattoir workers, miners and agricultural and fish farm workers.
- Today with 10 million people in Britain participating in water sports annually, the risk of exposure has spread into undefined groups of the population.

## What is it?

A bacterial (spirochete) infection carried in the kidneys of rodents, commonly rats (rodent itself has no symptoms). Their urine then contaminates water and wet riverbanks. In favourable conditions the organism may remain infectious for several weeks.

Infection is most likely to occur:

- At the waters edge near rat's homes
- After floods which may wash out rat's homes
- In the warmer temperatures of summer and autumn
- In stagnant or slow moving water

Humans have to be quite heavily exposed before they become infected. The bacteria cannot breed in salt water. The disease is also known as Canicola fever, Haemorrhagic jaundice, Mud fever and Swineherd's disease.

## Symptoms

Often Flu-like to begin with. All or some of the following may be present, most people only have a mild form of the disease.

### Stage 1

- Temperature / fever
- Muscular Pain (particularly calf, abdomen and neck)
- Loss of appetite
- Vomiting
- Abdominal pain
- Exhaustion

- Nose Bleeds
- Cold Sores
- Bloodshot eyes / conjunctivitis
- Rash (may go on to produce bruising or bleeding)
- Urine colour change from light (lager) to dark (bitter)
- Severe headaches (unremitting and hard to relieve)
- Delirium

### **Stage 2 (Jaundice)**

- Skin discoloration
- Severe prostration
- Swollen Liver
- Meningitis
- Jaundice
- Kidney damage

Only five to ten percent will have the more severe form of the disease.

### **Routes of Infection**

- Cuts
- Mucous membranes of eyes, nose and mouth
- Swallowing (less likely as stomach acids will kill most organisms)

Person to person transmission is very rare.

### **Diagnosis**

- Blood Test
- Spinal Fluid sample

### **Treatment**

- Antibiotics (within 24 to 48 hours if possible)
- No Vaccine, because there are so many types of this bacteria, the effects wear off very quickly and the side effects of the vaccine are serious

### **Incubation**

- 3 - 19 days

### **Those at risk**

- Farm workers (more than 50 percent of all victims)
- Water sports participants
- Those in contact with dogs
- Sewage workers

### **Prevention**

- Control of vermin (keep clear of litter)
- Do not provide holes where rats could breed
- Chemical checks on water
- Sewers & drains should be well maintained (including covers)
- Awareness
- First aid facilities available where possible
- Training
- Wash or shower after skiing
- Cover abrasions, open cuts etc with waterproof plasters
- Use footwear to avoid cutting feet
- If experiencing flu-like symptoms after skiing consult doctor and describe contact with water
- Eye protection not necessary if you have healthy eyes