



## LEPTOSPIROSIS / WEIL'S DISEASE

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The national rat population is increasing and between 50 and 60 percent of rats carry and excrete the bacterium *Leptospira ictero-haemorrhagiae* in their urine. Infection with the bacterium causes an illness which has been known to result in death of 10 percent of cases.

In England and Wales an average of 40 cases of leptospirosis are reported each year however very few of these are fatal. Since 1996, there have only been three deaths from leptospirosis.

The nature of leisure water activity means that the average age of this at-risk group is fairly young with most cases occurring in the 13-42 age group.

### ABOUT THE ILLNESS

The bacterium enters the human body through breaks in the skin such as cuts, blisters and abrasions or via the lining of the nose, throat or alimentary tract if water is swallowed.

The incubation period is 7 – 13 days and the disease starts with a fever, muscular aches and pains, loss of appetite and vomiting with prostration.

It is vital that the doctor be told of any water borne activity as the symptoms are easily confused with those of flu and if the patient has a clean occupation the possibility of Weil's Disease may be overlooked in the early stages.

Subsequent bruising of the skin, sore eyes, nose bleeds and jaundice may occur. The fever lasts about five days and may be followed by significant deterioration.

Laboratory testing of blood will confirm the diagnosis but this may take undue time in an ordinary hospital lab. Send the samples direct to:

Leptospira Reference Unit  
Department of Microbiology and Immunology  
County Hospital  
Hereford  
HR1 2ERT                      Tel: 01432 277707  
[leptospira.lru@hhtr.nhs.uk](mailto:leptospira.lru@hhtr.nhs.uk)

with a request form (Annex 1) where they will be tested within 24 hours. Treatment is usually by penicillin antibiotic (alternatives are available for those with a penicillin allergy).

## **RATS AND THE ILLNESS**

The rat is a creature of the waters edge. The leptospira bacterium is passed in urine and, while it does not live long in dry conditions, can survive for some time in water. Salt water soon kills off the organism but there is a significant risk in tidal waters such as lower parts of the Thames and other rivers. The risk increases upstream and is greatest in canals, ponds or areas of slowly draining water. There is a significant to users of river banks or reservoir edges.

## **WATER USERS**

Sailors, Boardsailors, canoeists, oarsmen, swimmers and fishermen are at risk in any area with a population of rats. Any skin wound or blister, old or new, may be infected if immersed in water polluted with the bacterium.

## **PREVENTION**

Every sailing club should have available to members **at all times a supply of clean fresh water to wash wounds and a shower for those who may have fallen into suspect water.** During Winter Frostbite series it is important that such washing water is still available from a stand pipe if the club's water has been turned off to reduce the risk of frost damage.

Waterproof surgical plasters of an adequate size must be readily available for the use of those injured whilst sailing. Old skin wounds should be covered **before** going afloat or to the dinghy park. Such protection will also apply to club working weekends when members may be clearing old structures or other hazards.

## **FOOD RESIDUES**

Every effort must be made to see that food residues are removed from the club house, boat and trailer parks or picnic areas. A happy well-nourished rat will produce more rats.

If a rat population is suspected the Local Environmental Health Officer should be informed and requested to take action. If poison is laid, members should be warned so that pets and children come to no harm.

## **GENERAL CARE**

Handrails, steps and walkways should be checked for gaps, nails or rough edges that may cause minor wounds.

If rats have been noted in a particular area, steps should be taken to inform members and a warning notice displayed.

Children's play areas and refuse areas should be monitored with particular care. Refuse should be disposed of regularly either by burning or some other means.

Wear shoes to protect the feet from cuts.

Do not allow water to collect inside your dinghy as it may be wet but it may not be water!

**Cruiser owners:** Do not think it is solely a dinghy sailor's problem. If you have ever had to come ashore clutching at a jetty from your tender – you too are at risk.

