

WEIL'S DISEASE

The national rat population is increasing and between 50% and 60% of rats carry and excrete the organism *Leptospira ictero-haemorrhagiae* in their urine. Infection of humans with this organism causes an illness (commonly called Weil's disease) which has been known to result in death in 10% of cases. The majority of deaths are now related to water activities. Weil's disease remains, however, extremely rare in the UK.

ABOUT THE ILLNESS

The organism enters the body through breaks in the skin such as cuts, blisters and abrasions, or via the lining of the nose, throat or alimentary tract. The incubation period is 2-26 days and the disease starts with a fever, severe headache, muscular aches and pains, loss of appetite and vomiting. 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.

It is vital that the doctor be told that the patient may have been in contact with a source of infection. The symptoms can easily be mistaken for those of flu and, if the patient has a clean occupation, the possibility of Weil's disease may be overlooked in the early stages.

Laboratory testing of blood will confirm the diagnosis. Treatment is usually with the antibiotic penicillin.

RATS AND THE ILLNESS

Rats commonly live near water and in areas where there are sources of food such as farms, stables, high density animal husbandry units and along river and canal banks.

The leptospira organism is passed in the rats' urine and, while it does not live long in dry conditions, can survive some time in water.

Salt water soon kills off the organism but there is a significant risk in tidal waters such as river estuaries. **The risk increases upstream and is greatest in canals, ponds or areas of slowly draining water.**

PREVENTION

Any skin wound or blister, old or new, may be infected if immersed in water polluted by the organism. Gloves should be worn and wounds covered by a waterproof plaster.

BE AWARE

The disease is curable if recognised in time, but many doctors in urban areas will never have encountered it. If you have any reason to suspect that you may have been infected, you may need to draw your doctor's attention to the possibility that the symptoms could be Weil's Disease.

THE SYMPTOMS

The incubation period is 2-26 days, average 10 days.

Early Symptoms are:

Fever with severe headache
Muscular aches and pains
Loss of appetite
Vomiting

Later symptoms may include:

Bruising of the skin
Sore eyes
Nose bleeds
Jaundice

The fever lasts for about five days, and may be followed by significant deterioration.