

WEIL'S DISEASE



What is Weil's disease, leptospirosis in humans?

Weil's disease (Leptospirosis) is a term applied to diseases caused by microorganisms of the genus *Leptospira*. The *Leptospira* arise in the urine of rats and farm animals and are quite frequently found in the cave environment in water and mud. The *Leptospira* organisms can easily enter the body and can lead to flu like illness, which may well be fatal. Treatment for leptospirosis in humans is possible at the early stage of the infection but the average GP will neither be aware of the illness nor be able to differentiate the symptoms from those of many flu bugs. Treatment for leptospirosis in humans starts with a blood sample and the laboratory must be instructed to look for traces of leptospirosis or *Leptospira* (ELISA test).

What is Leptospirosis?

Leptospirosis is a term applied to diseases caused by micro-organisms of the genus *Leptospira*. Leptospirosis may range from being a mild flu-like illness to full-blown Weil's disease, which is a very serious and often fatal condition.

Infection and symptoms of Leptospirosis?

The incubation time and full notice of the symptoms of Leptospirosis (*Leptospira*) varies between extremes of 7 - 26 days but is usually 7 to 13 days, the average being 10 days. In some cases, the *Leptospira* infection with the organism does not produce any symptoms at all and they may be totally unaware that they have been infected. The *Leptospira* illness in its mildest form is very like influenza. The onset is usually very sudden and often the patient is able to give the exact time that they started to feel unwell. They may have a headache, feel chilled, shiver have vague muscular pains and a sore throat and temperature. They may feel nauseous and not want to eat. After a few days to a week the *Leptospira* symptoms disappear and the patient fully recovers believing they had a touch of the flu.

They may have respiratory difficulty because of a headache and neck stiffness and a mild rash. Vomiting is common and tends to get worse as the disease progresses, constipation is usual (although diarrhoea may occur) and abdominal pain is present in most cases in the first few days.

This is the first phase of the disease and usually lasts about a week after which the symptoms abate and the patient feels better. Slow recovery may take place at this stage but usually after 2 - 3 days relief the second stage begins. The symptoms are varied but often similar to the first phase accompanied with fever and symptoms of meningitis. After this there is a slow recovery usually between the second and fourth week during which fever and aching may recur or the disease may progress to full-blown Weil's disease.

Sources of Infection?

The usual source of *Leptospira* infection is wet clay, mud or water, which has been contaminated with the urine of an infected rat. Other animals such as dogs and farm animals, especially cattle, may also be a source of *Leptospira* infection and in some instances may constitute the major source. The route by which the *Leptospira* infection enters the body is through cuts and abrasions, through the membranes of the mouth, nose and eyes

Weil's disease/ Weil's disease in humans

This is probably best thought of as being a very severe type of Leptospirosis. The mortality rate is about 5 - 10%. The symptoms at onset are as before or considerably worse. The headache may be so bad as to require morphine and muscular pain is also severe. The eyes become bloodshot and may ooze. In already severe patients the disease may progress to a second stage of liver and kidney failure. The skin begins to turn yellow and the bloodshot eyes acquire an orange colour. The condition worsens rapidly and as the jaundice deepens the skin becomes intensely yellow. There is anorexia and continuous vomiting. Bleeding may occur internally into the gut, brain and lung cavity and externally from the nose and other orifices. Heart and brain may also be affected. As the kidneys begin to fail the patient may cease to pass urine; the

amount of urine may greatly reduce or cease altogether. If the condition does not improve the urine flow increases by the second week they slip into a coma and die. If the illness begins to lessen, the patient begins the slow road to recovery though even in this phase symptoms may recur and there may be a temporary impairment of vision.

Prevention against Leptospirosis in humans

Wear suitable PPE. Wash, clean and sanitize hands and effective areas plus any cuts and grazes immediately.

Summary of Anti-Wails Products/Packaging

Quatrodent: which is applied PRIOR to commencing work may be applied to hands directly or the area where possible contamination may occur or may also be sprayed. Quatrodent comes in 500ML bottles

QuattroGel Hand Wash: is used by workers to remove visible dirt but also to decontaminate the hands so offering additional protection against Weil's disease and broad spectrum protection against other bacteria (MRSA, E.coli, Listeria etc). The product is applied to the hands and washed off with water. QuattroGel comes in: 250ml, 1000ml and 5 litre bottles

QuattroGel: (waterless, alcohol based) which is an alcohol based hand cleanser that does not need to be rinsed off in environments where access to water is not feasible. QuattroGel comes in 50ml, 200ml, 500ml, 1000ml and 5 litre bottles

Quattro Wipes: Pleasant smelling anti-Weil's and anti-Leptospira wipes which will remove even the toughest of dirt (Grease, oil, inks, paint etc) and contain moisturizers to ensure the skin does not dry or crack. Comes in a plastic dispenser (80).

Dispenser for QuattroGel (both products one which needs water and one which does not need water) which is easily affixed to a wall or van and holds the QuattroGel liquid for ease of use.

For further information please email sales@safequip.co.uk