

Many different species of bacteria called *Legionella* are commonly found in the environment and some of these are known to cause illness in people. Infection by *Legionella* causes a disease known as legionellosis.

Infection with *Legionella pneumophila* is called Legionnaires' disease. *Legionella* generally infects the lung causing pneumonia, which is often very severe.

Symptoms include:



- fever
- chest pain
- diarrhoea.
- cough
- breathlessness

Diagnosis is usually made by a series of blood tests. Occasionally the organism can be grown from a sample of sputum or lung fluid. Some infections may be identified rapidly by testing a sample of urine.

Legionella pneumophila are widespread in natural water sources and often colonise man-made water systems. The bacteria must be inhaled to cause disease. Legionnaires' disease occurs most commonly in the warmer months. Risk of infection is increased by:

- being of male sex (possibly related to smoking)
- smoking
- chronic heart or lung disease
- diabetes
- kidney failure
- some forms of cancer
- age over 50.

Incubation period

(time between becoming infected and developing symptoms)

2 – 10 days, though may be longer.

Infectious period

(time during which an infected person can infect others)

Person-to-person spread does not occur.

Treatment

Antibiotic treatment is required. Severe cases may need to be treated in hospital and may require intensive care.

Control of spread

- *Legionella* have been isolated from many sources including ice machines, hot water systems, air-conditioning cooling towers, hot and cold water taps, showers, nebulisers, spa baths, hydrotherapy pools and ornamental fountains. Inhalation of aerosols generated by these systems can serve as a route of infection. These systems must be maintained according to national guidelines which reduce the risk of them growing *Legionella* and releasing them into the surrounding environment.

! ***Legionella pneumophila* infection is a notifiable disease.**

Useful website

- > Guidance for the control of *Legionella*
<http://www.dh.sa.gov.au/pehs/publications/monograph-legionella.pdf>