

Legionnaires' disease

What is Legionnaires' disease?

Legionnaires' disease is caused by a bacterium called *Legionella pneumophila*. The disease and the bacterium were discovered after 182 delegates became ill, and 28 died, at an American Legion convention in Philadelphia in 1976.

However, Legionnaires' disease was not new. Earlier outbreaks, at the time unexplained, were later shown to have been due to the same infection.

The commonest illness caused by *Legionella* is pneumonia. Pneumonia is an inflammation of your lung tissue which may reduce the amount of oxygen entering your bloodstream.

Legionella organisms may give rise to a mild, flu-like illness, called Pontiac Fever - but this is rare.

Where does Legionnaires' disease come from?

Legionella bacteria are widespread. You can find them almost anywhere where there is water. The infection is caught by inhaling tiny droplets of water containing the bacteria. You cannot catch Legionnaires' disease from someone else.

Anything which leads to the formation of tiny droplets of contaminated water can lead to the disease. You can find these conditions in air conditioning systems, showers and jacuzzis. There have been a number of outbreaks related to each of these appliances, but three quarters of all cases of Legionnaires' disease appear to be isolated, with no known source of infection.

How common is Legionnaires' disease?

It is uncommon. There are between 120 and 200 cases each year in the UK - only one to two per cent of all recorded cases of pneumonia. Nearly 50 per cent of cases are related to recent foreign travel and this may explain why most cases seem to happen in the late summer and early autumn.

Who gets Legionnaires' disease?

Anyone can catch it, but it is rare in children and most commonly occurs in middle age. Men are affected more than twice as often as women.

What are the symptoms of Legionnaires' disease?

Symptoms are similar to those found in other forms of pneumonia. It is common to get fever, coughing, breathlessness, pain and headaches. You can also get diarrhoea and feel confused. If you get Legionnaires' disease, you will most probably need admission to hospital.

How is Legionnaires' diseases diagnosed?

To diagnose Legionnaires' disease, doctors use a rapid urine test which can identify up to 85 per cent of cases. Blood tests are also used, but they can take several weeks to confirm diagnosis.

If you have a severe pneumonia, your doctor may also use urine tests to help prescribe the correct antibiotic.

How is Legionnaires' disease treated?

Antibiotics are used to treat Legionnaires' disease. You will probably need oxygen and additional fluids given by drip.

What happens to people with Legionnaires' disease?

Most people (nine out of ten) make a complete recovery - even in severe cases - but recovery is often slow. A stay in hospital of about 10-14 days is usual, but it will be another four to six weeks before you feel back to normal. The most persistent symptom during your recovery will be tiredness. The elderly and those with other medical problems are most at risk.

Can Legionnaires' disease be prevented?

Because the source of Legionnaires' disease is often unknown, prevention can be impossible. However, if mechanical apparatus, such as air conditioning systems are the source of the infection, we can learn lessons in design and maintenance to prevent future problems.

Research into Legionnaires' disease

Research work on Legionnaires' disease is mainly directed at making rapid diagnosis of the condition, so that treatment with the right antibiotic can be started as early as possible. Other areas of research include the testing of new antibiotics, and attempts to discover the source of some cases.

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