

North West London Health Protection Team

Factsheet: Legionnaires' disease

What is Legionnaires' disease?

Legionnaires' disease is a bacterial disease which may cause pneumonia. The majority of cases are reported as single (isolated) cases but outbreaks can occur. An outbreak of this disease in Philadelphia in 1976 among people attending a state convention of the American Legion led to naming the disease after this group. Subsequently, the bacterium causing the illness was identified and named *Legionella pneumophila*.

Is this a new disease?

No. While the bacterium was only recently identified, cases have been confirmed as far back as 1947 and some probably occurred before then.

How widespread is the disease?

Cases have been reported from all industrialised countries. Around 200 cases are reported each year in England.

Where are Legionella organisms found?

Legionellas are widely distributed in the environment. They have been found in ponds, hot and cold water systems, and water in air conditioning cooling systems.

How is Legionnaires' disease spread?

The disease is spread through the air from a water source. Person to person spread does not occur. Breathing in aerosols from a contaminated water system is the most likely route of transmission.

Who gets Legionnaires' disease?

All ages can be affected but it mainly affects people over 50 years of age, and generally men more than women.

What are the symptoms?

The early symptoms of Legionnaires' disease include a 'flu-like' illness with muscle aches, tiredness, headaches, dry cough and fever. Sometimes diarrhoea occurs and confusion may develop. These symptoms frequently lead on to pneumonia. Deaths occur in 10-15% of otherwise healthy individuals and may be higher in some groups of patients.

How soon do symptoms occur?

The incubation period ranges from 2 to 10 days but is usually 3 to 6 days. In rare cases some people may develop symptoms as late as three weeks after exposure.

What is the treatment?

Antibiotics against the infection are effective in treating the disease.

How is it diagnosed?

A rapid diagnosis can be made by testing a urine sample from the patient, once the relevant symptoms have occurred.

What should I do if I think I have Legionnaires' disease?

If you believe you have this infection, you should tell your doctor so that the appropriate investigations can be taken.

More information about Legionnaires' disease - NHS

https://www.nhs.uk/conditions/legionnaires-disease/