

Legionella pneumophila infection



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 with *Legionella pneumophila* is called Legionnaires' disease.



***Legionella pneumophila* infection is a notifiable condition¹**

How *Legionella pneumophila* is spread

Legionella pneumophila are widespread in natural water sources and often colonise (become established) in manufactured water systems. The bacteria must be inhaled to cause disease.

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 and spa pools
- > hydrotherapy pools
- > ornamental fountains
- > home birthing pools.

See Legionnaires' disease, reducing the risks in the home for tips on ways to reduce the risks.

Signs and symptoms

Legionnaires' disease occurs most commonly in the warmer months. *Legionella* generally infects the lung, causing pneumonia, which is often very severe.

Symptoms may include:

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

People of any age may be infected, but the disease is more common in middle aged and older people and people whose immune system is weak. Men are affected more frequently than women.

Risk of infection is increased by:

- > smoking
- > chronic heart or lung disease
- > diabetes
- > kidney failure
- > some forms of cancer
- > immunosuppression, especially if on steroid medication
- > being 50 years or older.

Diagnosis

Diagnosis is usually made by a series of blood tests. The bacteria may sometimes be grown from a sample of sputum (phlegm) or lung fluid. Some infections may be identified rapidly by testing a sample of urine.

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Incubation period

(time between becoming infected and developing symptoms)

2 to 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. People with severe Legionnaires' disease may need to be treated in hospital and may require intensive care.

Prevention

Exclusion from childcare, preschool, school or work is not necessary.

Maintenance of water systems. Water systems which can serve as a route of infection include:

- > ice machines
- > hot water systems
- > air-conditioning cooling towers
- > hot and cold water taps
- > showers
- > nebulisers
- > spa baths and spa pools
- > hydrotherapy pools
- > ornamental fountains.

Ongoing maintenance of these systems significantly reduces the risk of *Legionella* growing and being released into the surrounding environment. These systems must be maintained according to the manufacturer's instructions and any relevant legislation. If used, heated home birthing pools should be filled at the onset of labour.

Useful links

Legionella regulations and guidelines

www.sahealth.sa.gov.au/legionella

SA Health website www.sahealth.sa.gov.au

- > Legionnaires' disease, reducing the risks in the home
- > When you have a notifiable condition

¹ In South Australia the law requires doctors and laboratories to report some infections or diseases to SA Health. These infections or diseases are commonly referred to as 'notifiable conditions'.

You've Got What? 5th Edition

Communicable Disease Control Branch

Telephone: 1300 232 272 Email: HealthCommunicableDiseases@sa.gov.au

The SA Health Disclaimer for this resource is located at www.sahealth.sa.gov.au/youvegotwhat



This document has been reviewed and endorsed by SQCAG* for consumers and the community FEBRUARY 2016.

Public-I3-A1

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Interpreter



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