Legionnaires' disease

Legionnaires' disease (also known as legionellosis) is a severe form of pneumonia. It is caused by *Legionella* bacteria which are found in damp or wet environments, ranging from damp soils to spa baths.

In Western Australia, there are around 12 diagnosed cases of infection by *Legionella pneumophila* each year, and around 60 diagnosed cases of infection by *Legionella longbeachae*.

Almost all patients diagnosed with a legionella infection will need to be admitted to hospital for treatment.

Legionnaires' disease can result in death if not treated in time.

**How do you get Legionnaires’ disease?**

You can catch Legionnaires’ disease by breathing in water droplets or air-borne liquid droplets that are contaminated by the bacteria.

Legionnaires' disease cannot be caught from other people or from animal contact.

The most common bacteria species associated with causing human disease in Australia are *Legionella pneumophila* and *Legionella longbeachae*.

*Legionella pneumophila* is found in warm water environments such as:
- air conditioning cooling towers in large buildings
- evaporative air conditioners
- showers and hot water systems
- spa pools
- misting or droplet sprays
- water fountains.

*Legionella longbeachae* is the most common strain in Western Australia and is associated with
- potting mixes
- gardening soils
- mulches
- composts
- soil conditioners.

Tests show that your body is able to develop immunity against a second Legionella infection but how long immunity lasts is not known. It is therefore important to take care at all times.
Who are the people with an increased risk of Legionnaires’ disease?

Some people are more likely to contract Legionnaires’ disease, including:

- people over 50 years of age
- smokers
- people with chronic health conditions such as lung disease, diabetes, kidney disease
- people with weakened immune systems.

Men are also more commonly affected than women.

What are the signs and symptoms?

It usually takes 2 to 10 days after exposure for Legionnaires’ disease to develop. In most cases symptoms appear after 5 to 6 days.

The early symptoms of Legionnaires’ disease are typically similar to severe ‘flu-like’ illness, and may include:

- fever
- chills
- muscle soreness
- headaches
- tiredness
- reduced appetite
- dry cough and shortness of breath.

Sometimes other parts of the body are affected, which can lead to:

- diarrhoea
- vomiting
- mental confusion
- kidney failure.

How do I know I have Legionnaires’ disease?

Medical tests are required to diagnose Legionnaires’ disease. These may include blood, urine or spit tests.

The tests are repeated after 7 days to confirm diagnosis.
How is Legionnaires’ disease treated?

Most people who are diagnosed with Legionnaires' disease will need to be treated with antibiotics such as erythromycin and ciprofloxacin.

Most patients who receive early antibiotic treatment begin to improve within 3 to 5 days but usually require treatment for 10 to 14 days.

How can Legionnaires’ disease be prevented?

There is no vaccine currently available for the prevention of Legionnaires' disease.

Owners of commercial premises that have water-based cooling towers, spa pools, or hot water systems are required by law to conduct regular cleaning and maintenance of this equipment to reduce the risk of *Legionella* contamination.

Suppliers of gardening soils, both bagged and bulk forms, are required to ensure their customers are aware of the safe handling of potting mixes and gardening soils prior to use. Warnings should be displayed on bags and where bulk products are sold, advising you to:

- always wear gloves
- keep the product damp while in use
- avoid inhaling the mix
- wash your hands after use.

Minimise the risk at home

Minimise the risk of a *Legionella* infection at home by:

- correctly maintaining water based air conditioners, hot water systems and spas
- following safety precautions when using potting mixes and gardening soils.

Where to get help

- See your doctor
- Visit a [GP after hours](#)
- Visit [healthdirect](https://healthdirect.gov.au) or call 1800 022 222

Remember

- Legionnaires' disease is a severe form of pneumonia caused by bacteria found in damp or wet environments.
- The early symptoms are similar to the flu.
- Legionnaires' disease can be fatal if not treated in time.