

Legionnaires' disease

Answers to common questions

OFFICIAL

What is Legionnaires' disease?

Legionnaires' disease is a form of pneumonia (a lung infection) caused by the bacteria *Legionella*. *Legionella* is found in natural water bodies such as rivers, lakes, creeks and hot springs. The bacteria are also found in spas, potting mix, warm water systems and artificial systems that use water for cooling, heating or industrial processes, such as cooling towers.

Who is most at risk of developing Legionnaires' disease?

Although *Legionella* is common in the environment, not everyone who breathes in the bacteria will become unwell. People at greater risk of getting Legionnaires' disease include those who:

- are aged over 40 years
- are smokers
- have a chronic lung disease
- have a weakened immune system
- have other underlying medical conditions such as chronic heart, liver or kidney disease, and diabetes.

What are the symptoms of Legionnaires' disease?

The symptoms of Legionnaires' disease usually begin to appear within 2 to 10 days of breathing in the bacteria. Common symptoms include a cough, shortness of breath, fever, headache (often severe), chills, muscle aches and pains.

If you have symptoms consistent with these, it's important to seek urgent medical care. Early diagnosis and treatment with antibiotics is important.

How will my doctor test for Legionnaires' disease?

Pneumonia is usually diagnosed using a chest x-ray. Most people with pneumonia will have a cause other than *Legionella*, and special tests are needed to diagnose Legionnaires' disease. These may include:

- a urine test
- tests on sputum (mucus that is coughed up) or other samples from the lung
- blood tests taken during the illness and after recovery.

Most people with Legionnaires' disease will be admitted to hospital where the infection can be treated with appropriate antibiotics.

How can I protect myself from Legionnaires' disease?

There is no vaccine to prevent the disease. The best way to protect yourself or someone you know who is more at risk, is to visit your doctor when you first notice symptoms. Your doctor will be able to assess, test and recommend the best treatment for you.

Legionnaires' disease is not known to be transmitted between people. You won't catch it from someone who has it.

The symptoms are like those for other infectious diseases that can spread from person to person like COVID-19 the flu or RSV – so if you have symptoms, wear a mask until you have your test results so you can protect those around you from respiratory viruses.

What makes this an outbreak? Aren't there Legionnaires' disease diagnosis all the time?

We generally see a regular number of cases of Legionnaires' disease, usually between a few cases a week. However, we have seen a significant increase in those numbers in a short period of time. When this occurs, it triggers Local Public Health Units and the Department to investigate the cause of the increase and analyse the information to determine public health measures to reduce the case numbers and the risk to the public.

Is there a known source of infection for this outbreak?

We are currently investigating a range of probabilities. This includes assessing the information given to us by those who have contracted Legionnaires' disease during this outbreak, environmental conditions and knowledge of the conditions needed the *Legionella* bacteria to produce.

The most likely source is a cooling tower.

We are testing and disinfecting cooling towers in areas where we have evidence of activity from the cases and following the data to highlight other areas to further investigate.

How do cooling towers spread the *Legionella* bacteria?

Cooling towers are commonly used for cooling in industrial processes and as part of air conditioning systems. Cooling tower systems can provide an ideal environment for the growth of *Legionella*. During the normal operation of a cooling tower, aerosols are formed and then carried into the environment through the tower exhaust. If *Legionella* bacteria are present in the water of the cooling tower system, breathing these aerosols can result in infection.

Government regulations set out how to maintain and treat cooling towers to prevent the *Legionella* bacteria growing. There is more information available - [Legionella risk management page](#).

Is it safe to be in metropolitan Melbourne or use public transport?

Yes. Transmission of Legionnaires' disease is not transmitted between person to person.

The symptoms are like those for other infectious diseases that can spread from person to person like COVID-19 the flu or RSV – so if you have symptoms, wear a mask until you have your test results so you can protect those around you from respiratory viruses.

How do I stay up to date with information on the outbreak?

New and updated information will be updated on the Chief Health Officer alert on [health.vic.gov.au](https://www.health.vic.gov.au)
<https://www.health.vic.gov.au/health-alerts/outbreak-of-legionnaires-disease-in-metropolitan-melbourne>

To receive this document in another format, phone 1300 651 160, using the National Relay Service 13 36 77 if required, or [email the department](mailto:infectious.diseases@health.vic.gov.au) <infectious.diseases@health.vic.gov.au>.

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Available at [CHO alert – Outbreak of legionnaires' disease in metropolitan Melbourne](https://www.health.vic.gov.au/health-alerts/outbreak-of-legionnaires-disease-in-metropolitan-melbourne)
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