

Legionellosis

What is it?

Legionellosis or Legionnaire's disease is caused by common *Legionella* bacteria, which live in the environment, especially in soil, muds and water.

How common is legionellosis?

It is uncommon in New Zealand. People who become infected by *Legionella* bacteria are likely to be more susceptible to infection than the general community. The elderly, people who smoke or are ex-smokers, and people who have other serious illness or people with poor immune systems are more likely to get legionellosis than people who are healthy.

How do you know if you have it?

It usually takes 2 – 10 days but can be up to 14 days for symptoms to develop after you have been infected. Fever and chills, muscle aches and pains, headache, cough (often dry), abdominal pain, diarrhoea and severe exhaustion are common symptoms. Chest infection ultimately progresses to pneumonia, which may be very severe.

Laboratory tests on blood samples will confirm if a person has legionellosis. Two blood tests are taken approximately 3 – 6 weeks apart. Chest x-rays will indicate if pneumonia is present. For one type of Legionnaire's disease (usually acquired from contaminated water aerosols) – *Legionella pneumophila* serogroup 1 - there is a urine test.

A mild form called Pontiac fever may occur with the same initial symptoms but it does not cause pneumonia and patients recover in a few days without treatment.

How serious is it?

The disease can be very serious especially in people who already have poor immune systems. Often people with legionellosis are hospitalised for at least a short time. Most people recover fully but sometimes there are complications which affect the intestinal system, nervous system and kidneys.

How do you get legionellosis?

Susceptible people get the disease from breathing in soil dust or small water droplets (aerosols) that are contaminated with the bacteria.

Common sources of *Legionella* bacteria are:

- Contaminated water at home and work, especially in areas where small droplets can be inhaled, such as showers
- Air-conditioning units in large buildings and cooling towers on top of buildings
- Spray mists, for example; decorative fountains and vegetable misting systems in supermarkets
- Some hospital equipment such as respiratory therapy devices
- Potting mixes and compost
- Garden soil

Aspiration of contaminated water into lungs is also becoming recognised as a common source.

What about work?

You can return to work when you feel sufficiently recovered. There is no risk of infecting others.

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Is there any treatment?

Often people with legionellosis will be in hospital for an appropriate time. A course of antibiotics will be prescribed.

Can you get legionellosis more than once?

Yes, it's possible to get it more than once because there are many different strains of *Legionella* bacteria. People who are at risk – the elderly, smokers, people with low immunity and those with other illness – should be aware of the disease and of the precautions they should take to protect themselves.

How can you reduce your risk of getting legionellosis?

- Ensure that your hot water cylinder at home is set to at least 60°C (a tempering valve should be used to lower the water temperature at taps to reduce the risk of scalding)
- If you work in a building that has a water-cooled ventilation system it should be regularly maintained and tested according to industry standards
- When working in the garden minimise the amount of dust by wetting soil first
- Water the garden and indoor plants using a gentle spray
- Make sure when gardening that any inside areas such as glasshouses or potting sheds are well ventilated
- When using potting mix or compost always open the bag in a well-ventilated area and away from your face. Always dampen the potting mix or compost before using it
- Wash your hands thoroughly after working with soil, potting mix or compost.