



Legionnaires Disease Fact Sheet

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Legionnaires' disease is an infection of the lungs (pneumonia) caused by Legionella bacteria. To prevent it, building operators must ensure that cooling towers are well maintained. Quit smoking. When gardening, avoid breathing in dust from soils and potting mix, and wash your hands afterwards.

What is Legionnaires' disease?

- Legionnaires' disease (Legionellosis) is a serious and sometimes fatal form of pneumonia caused by the bacteria Legionella. Although not all cases of Legionnaires' disease are severe, up to ten per cent of cases can be fatal.
- There are over forty strains of Legionella bacteria but only a few cause disease in humans. The strains that are most commonly associated with human disease are L. pneumophila and L. longbeachae.

What are the symptoms?

- Symptoms are usually similar to a severe 'flu' infection and include: fever; headache (often severe); shortness of breath; muscle aches and pains and sometimes a dry cough.
- From the time of infection with Legionella bacteria, it takes between two and 10 days for symptoms to appear. In most cases, symptoms begin after five or six days.

How is it spread?

- Legionella bacteria are found naturally in the environment and thrive in warm water and warm damp places. They are commonly found in bodies of water, soil and potting mix.
- People usually get Legionnaires' disease by breathing in Legionella bacteria in very fine droplets of water called aerosols.
- Built water systems sometimes provide environments that let Legionella bacteria increase to large numbers. These manmade systems include showers, spa pools, fountains, and also cooling towers associated with air conditioning and industrial cooling processes.



- The evaporative units sometimes used in home air conditioning units have not been known to cause Legionnaires' disease. You cannot catch Legionnaires' disease from another person, or from drinking water contaminated by Legionella bacteria.

Who is at risk?

- Most people exposed to Legionella bacteria do not become infected. The risk of disease increases with age, especially amongst smokers. People with long term medical conditions that weaken the body's immune system (such as cancer, lung disease, diabetes, and transplant recipients) may be at increased risk of Legionnaires' disease.
- Young people, especially children, rarely get Legionnaires' disease.

How is it prevented?

- There is no vaccine currently available for the prevention of Legionnaires' disease; however, there are measures that will reduce the risk of transmission. Owners of premises that have cooling towers, public spa pools, or warm water systems (for example in hospitals) are required by law to conduct regular maintenance of this equipment to reduce the risk of Legionella contamination and spread.
- Smokers are more likely to get Legionnaires' disease and can reduce their risk by quitting smoking.
- Because Legionella bacteria are commonly found in soils and potting mix, gardeners should:
 - Always wear a face mask and gloves when using compost and potting mix, including opening the bag.
 - Moisten the contents of potting mix bags to avoid creating dust.
 - Always wash hands after handling potting mix.

How is it diagnosed?

- For people who already have symptoms of the infection, there are three main tests for diagnosing Legionnaires' disease.
- These are: sputum tests; blood tests (this takes 2 tests more than 4 weeks apart); and a urine test.
- There is no value in being tested unless you are ill.



How is it treated?

- Most people with Legionnaires' disease need to be treated in hospital and for some, this will be in an intensive care unit.
- Legionnaires' disease is treated with antibiotics and the earlier that treatment is begun, the better the outcome.

What is the Public Health response?

- Laboratories and hospitals are required to confidentially notify cases of Legionnaires' disease to Public Health Units. Public health unit staff interview patients or their carers about their illness and possible exposures. Where two cases are linked, then possible sources of infection (such as cooling towers) are assessed and if necessary cleaned.