Legionnaires' disease

Summary

- Legionnaires' disease is a rare form of pneumonia.
- Not everyone who comes into contact with the bacteria is affected.
- If you have the symptoms, contact your doctor immediately.
- Early treatment can prevent the disease from becoming severe.
- Always take care when using potting mix.

Legionnaires' disease is caused by Legionella bacteria, which are widespread in our environment. They are 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.

A person may catch Legionnaires' disease by breathing in fine droplets of water that contain the bacteria. You cannot catch it from another person or by drinking contaminated water.

Risks of Legionella infection

Although this is a common kind of bacteria in the environment, only a few people who come in contact with the bacteria become infected. Some people are at greater risk, such as:

- people over 50 years of age
- smokers
- people with chronic illness
- people with medical conditions that impair their immune system.

Symptoms of Legionnaires' disease

The symptoms of Legionnaires' disease usually begin to appear within six days of being exposed to the bacteria. Early symptoms are like the flu and include:

- headache (often severe)
- fever
- chills
- muscle aches and pains
- a dry cough and shortness of breath.

Sometimes other systems in the body are affected. This can cause:

- diarrhoea
- mental confusion
- kidney failure.

If you have these symptoms, see your doctor.

Diagnosis and treatment for Legionnaires' disease

betterhealth.vic.gov.au
There are many other causes of Legionnaires’ symptoms and Legionella is not very common. Special tests are needed to diagnose the disease. A urine or sputum (mucus that is coughed up) test or blood samples taken three to six weeks apart will usually diagnose Legionnaires’ disease. The tests for Legionnaires’ disease are not screening tests – there is no value in being tested if you are not unwell.

The infection can be treated with appropriate antibiotics. There is no vaccine to prevent the disease.

**Prevention of Legionnaires’ disease**

The growth of the Legionella bacteria in spas and cooling towers can be controlled. You can also take care to avoid exposure to the bacteria from other sources, such as potting mix and water sources in the home.

**Maintenance and treatment of artificial systems**

A number of different regulations set out how to maintain and treat cooling towers, warm water systems and public spas to prevent the Legionella bacteria growing. For further information, visit the website [here](http://betterhealth.vic.gov.au).

**Hot water systems**

Hot water systems have the potential to harbour Legionella in places where there may be stagnant or warm water (25-50°C). Examples include shower nozzles, hot water taps, hot water storage vessels and hoses or filters attached to shower roses or tap outlets. Domestic plumbing systems must be installed and maintained correctly to ensure the risk of Legionella growth is minimised and to reduce the risk of scalding. Consult a plumber if you have any concerns.

**Spa pools**

Spa pools require careful maintenance, disinfection and frequent cleaning because they provide ideal conditions for the growth of Legionella, which can be carried into the lungs by aerosols created by the spa pool jets. The correct use of spa pool water chemicals, good management of the disinfection, filtration and recirculation systems and regular cleaning of spa pool surfaces can keep spa pool water in a clean, safe and healthy condition.

**Fountains**

Fountains can create aerosols by splashing water, and are a particular risk if the water is warm or heated intermittently by submerged lighting. Regular draining, cleaning and disinfection is recommended.

**Nebulisers and humidifiers**

Nebuliser bowls should be rinsed after each use, and the entire chamber and mask washed daily in warm water and dishwashing liquid. All components should be rinsed and allowed to air dry. Nebuliser pumps should be serviced and filters changed regularly, in accordance with the manufacturer’s instructions.

Humidifiers should be emptied, cleaned in warm water and dishwashing liquid and rinsed each day. All components should be allowed to air dry. Only distilled water or water that has been boiled and allowed to cool should be used in humidification devices.

**Spa baths**

Spa baths should be drained after each use, inspected frequently, and regularly cleaned and maintained to ensure hygienic operation. The entire system should be kept dry when not in use.

**Domestic evaporative air conditioners**

Although there have been no reported cases of Legionnaires’ disease connected with the use of domestic evaporative cooling systems, correct maintenance is essential to control the accumulation of sediment, bacteria, mould and algal growth inside the unit. Systems should be used and maintained in accordance with manufacturer’s guidelines.

**Portable evaporative cooling units**

Portable evaporative cooling units should be completely drained at least once a week during the summer season. When units are not being used for an extended period they should be completely drained, cleaned, and left to dry.

**Take care with potting mix**

In recent years, some cases of Legionnaires’ disease have been linked to the use of potting mix. When using potting mix:

- Always wear gloves to avoid transferring the potting mix from your hand to your mouth.
- Wear a face mask.
- Open the bag carefully to avoid breathing in the dust.
- Wet the contents of the bag to prevent dust.
- Wash your hands after using potting mix.

**Where to get help**

- Your doctor
- Local hospital
- Local council
- Nearest Department of Health office
- Department of Health, Communicable Disease Prevention and Control Unit, Tel. 1300 651 160

**Things to remember**

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- Always take care when using potting mix.