

## 1. OBJECTIVE

Provide guidance on Legionella identification and prevention

## 2. PROCEDURE

### 2.1. What is Legionnaire's 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 cause human disease are Legionella pneumophila and Legionella longbeachae.

### 2.2. Symptoms of Legionnaire's Disease

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.

### 2.3. How do you get Legionnaire's Disease

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.

Man-made water systems sometimes provide environments that let Legionella bacteria increase to large numbers. These man-made 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 have not been known to cause Legionnaires' disease. You cannot catch Legionnaires' disease from another person, or from drinking water contaminated by Legionella bacteria.

### 2.4. Individuals 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.

### 2.5. Prevention

#### 2.5.1. Smokers

Smokers are more likely to get Legionnaires' disease and can reduce their risk by quitting.

#### 2.5.2. Gardeners

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 while opening the bag.

- Moisten the contents of potting mix bags to avoid creating dust.
- Always wash hands after handling potting mix.

### *2.5.3. Air Handling and Water Systems*

RMIT's cooling towers, pools, or warm water systems are required by law to be regularly maintained and tested to reduce the risk of Legionella contamination and spread. See the following section for more detail on RMIT's

In accordance with RMIT Health, Safety and Wellbeing Policy, the air handling and water systems of all RMIT Buildings will be designed, installed, commissioned, operated and maintained to a standard that minimises the risk of spread of Legionnaires' disease, as well as other conditions such as Pontiac fever, Humidifier fever and hypersensitivity pneumonitis.

RMIT adopts AS 3666 - "Air-handling and water systems of buildings- microbial control" as a minimum standard for all new, existing or proposed building air handling and water systems.

It is the responsibility of Property Services to implement and monitor the requirements of this section.

It is the responsibility of the relevant Operational Leader or her or his delegate to report any suspected problems relating to the air handling and water systems servicing their area, to Property Services.