



# Legionellosis

## What is Legionellosis?

Legionellosis (also known as Legionnaires Disease or Pontiac Fever) is caused by bacteria that occur naturally in the environment. About 50 different strains of *Legionella* bacteria are known. One strain of bacteria called *Legionella pneumophilla* has been responsible for illnesses linked to some types of air conditioning systems in buildings. Another strain called *Legionella longbeachae* occurs in soils, composts and potting mixes, and is responsible for more than half of all New Zealand cases.

The disease is more common in middle-aged and older people, smokers, people with underlying lung disease and other long term conditions such as diabetes, and those with weaker immune systems. If you come into one of these categories you should be especially careful to take precautions.

## What are the symptoms?

Symptoms of legionellosis vary from a flu-like illness to severe pneumonia. Common early symptoms include loss of appetite, muscle pains, headache, abdominal pains and diarrhoea, with fever and a dry cough. The incubation period for the development of pneumonia is from two to ten days.

## How are people infected?

*Legionella* bacteria are usually found in either soil and similar products or water such as storage tanks or air conditioning systems. A person contracts the illness by breathing in dust or water vapour containing the bacteria. Dusts and vapours can be created by:

- water blasters
- handling soil/potting mix/compost
- showers
- Air conditioners that use a cooling tower

If you handle garden soil, compost or potting mixes, you need to be aware of the possible risk of contracting Legionellosis. Look for the warning label on the packaging of bagged garden products.

## How is Legionellosis treated?

Usually patients are put on a course of antibiotics. The illness responds readily to treatment. It is important for the illness to be diagnosed and treated promptly because of the possibility that complications may develop.

If you are exposed to *Legionella* bacteria your body builds up antibodies which give immunity to future infection caused by that strain only. You can still be infected by other strains at a later date.



### **How do I protect myself and others?**

The disease is more common in middle-aged and older people, smokers, people with underlying lung disease and other long term conditions such as diabetes, and those with weaker immune systems. If you come into one of these categories you should be especially careful to take precautions.

To reduce the risk of contracting Legionellosis take these precautions when handling soils, compost or potting mix:

- water gardens and composts gently, using a low-pressure hose.
- when opening bags of potting mix, do so slowly, making sure the opening is directed away from your face
- when potting plants, wet the soil first to reduce dust.
- avoid doing this work in unventilated places such as enclosed green houses or sheds
- wear a dust mask when working with potting mix, compost or soil

*Legionella* bacteria thrive in warm water. Make sure your hot water cylinder is set to a minimum of 55°C to prevent bacteria from growing in the cylinder. *Legionella* can be present in cold water too; water treated with chlorine is at lower risk of growing *Legionella*.

If you have a spa pool ensure it is cleaned regularly and maintained in accordance with the manufacturer's instructions. The pool water should be treated with chlorine or another suitable disinfectant. Chlorine breaks down in sunlight so outdoor spa pools will need additional treatment; speak to your pool supplies specialist about the right product. The disease is not spread from person to person.

### **Resources**

For more information about safer and healthier gardening, read the 'Safer and Healthier Gardening' pamphlet from the Ministry of Health.

For people handling soil, potting mix and compost in the workplace advice should be sought from Worksafe NZ, as this agency is responsible for health and safety in the workplace.

*Sourced in part from: Legionellosis pamphlet 1994, Occupational Safety and Health Service, Department of Labour (now Ministry of Business, Innovation & Employment).*

For further information to prevent or reduce the chance of infection please contact a Health Protection Officer at Toi Te Ora Public Health.