



### What is Legionella?

Legionellosis is the collective term for diseases caused by legionella bacteria, which, when found in high numbers, can cause the most serious and potentially fatal Legionnaires Disease.

### Where is it found?

Legionella bacteria are commonly found widespread in natural water sources such as rivers, lakes and ponds, usually in low numbers. They can also be found in purpose built water systems such as:

- Hot and Cold Water Systems
- Spa Pools
- Showers
- Jacuzzi's
- Cooling Towers
- Evaporative Condensers

The conditions are rarely conducive for people to catch the disease from natural water sources. Outbreaks of the illness occur from exposure to legionella growing in purpose built water systems where conditions can be favourable encouraging growth/multiplication.

### How is it spread?

The most common way people get Legionnaires Disease is through inhaling very fine water droplets, also referred to as aerosol, from contaminated water systems. Legionella cannot be caught by drinking tap water.

### What are the symptoms of Legionnaires Disease?

The incubation period for Legionnaires Disease is between 2 and 10 days. Symptoms can present themselves similar to that of flu and pneumonia so early detection is essential. The most common symptoms include:

- High fever
- Chills
- Headache
- Muscles pains
- Dry cough
- Difficulty breathing.

### Who is most at risk?

Anyone who comes into contact with Legionella bacteria is at risk of contracting the disease; however there are groups who are classified as high risk groups:

- 45 years old +
- Smokers and heavy drinkers
- People suffering from chronic respiratory or kidney disease
- Those whose immune system is impaired



### What are my responsibilities?

Under health and safety law, you have to consider the risks from legionella that may affect your staff or member of the public and take suitable precautions. As an employer or a person in charge on the premises (e.g. A landlord), you must:

- Identify and assess the source of risk
- Prepare a course of action for preventing or controlling the risk
- Implement and manage the scheme – this includes appointing a person to be managerially responsible often referred to as the 'responsible person'. The responsible person must have sufficient knowledge and experience of your system to enable them to manage and control the scheme effectively.
- Keep records and check that what has been done is effective
- If appropriate, notify the local authority that you have a cooling tower(s) onsite.

### How can I assess the risk?

The risk assessment is your responsibility as the employer or person in charge of the premises however you can call upon the services of organisations such as Scottish Water Scientific to carry out a Legionella Risk Assessment for you and help you meet your legal requirements.

### What is a Legionella Risk Assessment?

When carrying out a Legionella Risk Assessment the assessor must determine:

- What equipment has the potential to carry a risk
- Are conditions present which will encourage the bacteria to multiply (e.g. is the water temperature between 20-45°C?)
- Is it possible that water droplets will be produced and, if so, could they be dispersed over a wide area? For example, showers and aerosols from cooling towers
- Is it likely that anyone particularly susceptible will come into contact with the potentially contaminated water droplets?

The responsible person or appointed contractor should produce a written scheme/report which should describe:

- An up to date plan or schematic diagram of your system
- Who is responsible for carrying out the assessment and managing its implementation
- The safe and correct operation of your system
- What control methods and other precautions you will be using
- The checks which are to be carried out on the control scheme and how often these checks will be carried out.

If you decide to appoint a company such as Scottish Water Scientific to carry out the Legionella Risk Assessment it is still the duty of the 'responsible person' to ensure that work is carried out to the required standards.



### How often should I be carrying out a Legionella Risk Assessment?

The record of the assessment is a living document that must be reviewed to ensure it remains up-to-date. Arrange to review the assessment regularly and specifically whenever there is reason to suspect it is no longer valid. An indication of when to review the assessment and what to consider should be recorded. This may result from, eg:

- changes to the water system or its use
- changes to the use of the building in which the water system is installed
- the availability of new information about risks or control measures
- the results of checks indicating that control measures are no longer effective
- changes to key personnel
- a case of legionnaires' disease/legionellosis associated with the system