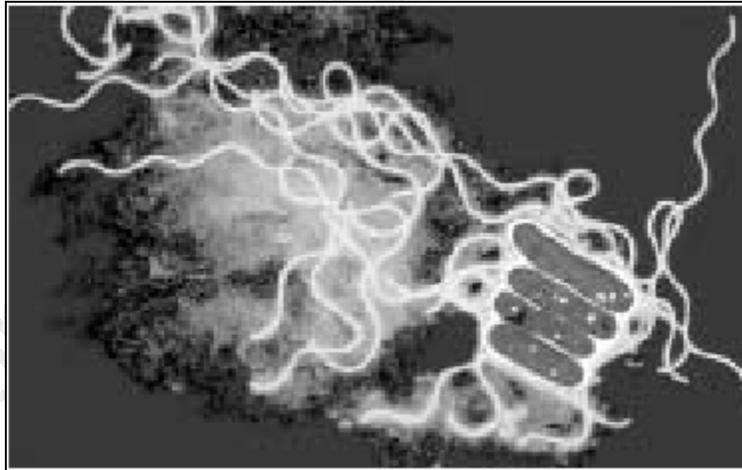


# Guide to Legionella Risk Assessments

by

Legionella Control International



## Guide to Legionella Risk Assessments

This guide has been prepared by Legionella Control International to help you understand more about Legionella risk assessments including whether you need one, and what is involved if you do. The guide covers the following:

- What is Legionnaires' disease?
- Where do Legionella bacteria come from?
- What is a Legionella risk assessment?
- Do I need a risk assessment?
- Why do I need a risk assessment?
- Who can carry out my risk assessment?
- Where are the greatest risks?
- Are there any areas that are exempt from the need for a risk assessment?
- Do I need to keep records?
- How often should I review my risk assessment?
- Do I have any other obligations?
- Where can I get further information?

### What is Legionnaires' disease?

Legionnaires' disease is a potentially fatal pneumonia caused by Legionella bacteria. Infection is caused by breathing in small droplets (an aerosol) of water contaminated by the bacteria.

Legionnaires' disease can potentially affect anyone, however some of us are more susceptible to infection than others including those over 45 years of age, smokers and heavy drinkers, those suffering from chronic respiratory or kidney disease; and people whose immune system is impaired.

### Where do Legionella bacteria come from?

Legionella bacteria are common in natural water courses such as rivers and ponds, and in the UK the bacteria are frequently found in the water supplied by utility companies. As a result Legionella bacteria may contaminate and grow in water systems such as cooling towers and hot and cold water services.

Under optimum conditions Legionella bacteria thrive at temperatures between 20°C and 45°C although they can survive, usually in a dormant state at lower temperatures. The bacteria are killed by high temperatures; however it is often not practical to operate

water systems at such elevated temperatures due to high energy costs and, in the case of hot water systems, the increased risk of scalding.

### **What is a Legionella risk assessment?**

A Legionella risk assessment is an assessment of the risks presented by Legionella bacteria. It should identify all aspects of a building or facilities water systems, including hot and cold water services, industrial and process systems such as pumps, heat exchangers, cutting machines, pressure washers, showers etc. that are likely to create a Legionella risk. The assessment should establish:

- If there are conditions present which will encourage the bacteria to multiply? For example, is the water temperature between 20°C and 45°C?
- If it is possible that water droplets, i.e. an aerosol, will be produced and, if so, could these droplets be dispersed over a wide area? Cooling towers have been shown to distribute Legionella infected aerosols over very large areas and so represent a higher risk.
- If it is likely that anyone considered to be more “at risk” will come into contact with contaminated water droplets? For example, the elderly and immuno-suppressed.

### **Do I need a Legionella risk assessment?**

If you are an employer, building owner or have responsibility for property and building facilities then you must formally consider the risks from Legionella that may affect your staff, other sub-contracted workers or members of the public.

A key process in meeting these obligations is the completion of a Legionella risk assessment.

### **Why do I need a risk assessment?**

Under general UK health and safety law, and more specifically the Control of Substances Hazardous to Health Regulations 2002 you must consider the risks from Legionella that may affect your staff, other sub-contracted workers or members of the public. You are required to take suitable precautions to ensure their health is not impaired in any way and you must:

- identify and assess all sources of risk;
- prepare a scheme or course of action for preventing or controlling the risks;

- implement and manage the scheme, appointing a person to be managerially responsible, this person is sometimes referred to as the “*responsible person*”;
- keep records and check that what has been done is effective; and,
- if appropriate, notify your Local Authority that you have cooling towers or evaporative condensers on site.

### **Who can carry out a Legionella Risk Assessment?**

You may be able to carry out a Legionella risk assessment yourself or perhaps with help from others within your organisation. However, often it will be necessary to seek expert assistance from independent Legionella specialists like Legionella Control International who can offer in-depth knowledge of water systems, best practice procedures and legislative compliance issues.

### **Where are the greatest risks?**

Cooling towers, evaporative condensers and hot and cold water systems have all been associated with outbreaks of Legionella. However, many other systems have also been found to present a potential risk of Legionella including spa baths, vehicle washes, humidifiers etc.

### **Are there any areas that are exempt from the need for a risk assessment?**

The answer to this question is no, although certain systems do present a reduced Legionella risk. Under such circumstances a Legionella risk assessment must still be completed.

### **Do I need to keep records?**

Good record keeping procedures are essential. If you employ five or more people you must record the significant findings of your Legionella risk assessment and details of any monitoring or checking that is carried out.

If you have fewer than five employees you do not need to write anything down, although it is useful to keep a written record of what you have done.

You also need to keep records of your written Legionella control scheme and identify who is responsible for managing that scheme. You should also keep the results of your routine monitoring. You need to keep these records for a minimum of five years.

### **How often should I review my risk assessment?**

A Legionella risk assessment must be reviewed after a maximum period of two years or sooner if substantial changes to the water systems have been carried out; or if the building has seen a change in use since the original assessment. If the system or building is the subject of an outbreak enquiry (Legionnaires' disease) then a re-assessment will most likely be required irrespective of the time since the last assessment.

A review is not necessarily a re-assessment, if no changes have been made to the facilities and the risk management programme is seen to be effective then a statement to this effect may be made by the "responsible person". However, if you are unsure we recommend you seek specialist advice.

### **Do I have any other obligations?**

If you have a cooling tower or evaporative condenser on your site you must, under the Notification of Cooling Towers and Evaporative Condensers Regulations, notify your Local Authority in writing with details of where it is located. If these systems are later removed your Local Authority must again be informed.

### **Where can I get further assistance?**

For more information concerning your legal duties or expert advice about Legionella risk assessments please contact us at:

Legionella Control International  
Statham House  
Talbot Road  
Manchester M32 0FP  
United Kingdom

Tel: +44 (0) 161 877 0586  
Fax: +44 (0) 870 421 5691  
E-mail: [info@legionellacontrol.com](mailto:info@legionellacontrol.com)