

# Legionella Risk Assessment



## 1. Introduction

### 1.1 Managing legionella in hot and cold water systems

What is legionella?

Legionella bacteria is commonly found in water. The bacteria multiply where temperatures are between 20-45°C and nutrients are available. The bacteria are dormant below 20°C and do not survive above 60°C.

Legionnaires' disease is a potentially fatal type of pneumonia, contracted by inhaling airborne water droplets containing viable Legionella bacteria. Such droplets can be created, for example, by:

- hot and cold water outlets;
- atomisers;
- wet air conditioning plant; and
- whirlpool or hydrotherapy baths.

Anyone can develop Legionnaires' disease, but the elderly, smokers, alcoholics and those with cancer, diabetes or chronic respiratory or kidney disease are at more risk.

1.2 The Approved Code of Practice (ACOP) L8 2013 applies in any undertaking involving a work activity and to premises controlled in connection with a trade, business or other undertaking where water is used or stored, and where there is a means of creating and transmitting water droplets which may be inhaled, thereby creating a reasonably foreseeable risk of legionellosis.

1.3 Responsibility for complying with L8 rests with the 'responsible person'. In a workplace, this is the employer and any other person who may have control of any part of the premises, e.g. the occupier or owner. In all other premises the person or people in control of the premises will be responsible.

1.4 To comply with their legal duties, they should:

- identify and assess sources of risk;
- prepare a scheme for preventing or controlling the risk;
- implement, manage and monitor precautions;
- keep records of the precautions; and

- appoint a person to be managerially responsible.

1.5 An assessment should be carried out on behalf of:

- the employer, where the risk from their undertaking is to their employees or to others;
- a self-employed person, where there is a risk from their undertaking is to their employees or to others;
- the person who is in control of premises or systems in connection with work.

## 2. Quantum Compliance's Approach

2.1 The water risk assessment would apply to premises controlled in connection with a trade, business or other undertaking where water is used or stored, and where there is a means of creating and transmitting water droplets which may be inhaled, thereby creating a reasonably foreseeable risk of legionellosis, and applies to the following items of equipment:

- cooling tower systems;
- evaporative condensers;
- hot and cold water systems;
- spray humidifiers and air washers;
- spa baths and pools; and
- fire fighting systems.

While this is not an exhaustive list, it does identify those systems which are most likely to cause infection.

2.2 In order to identify and assess such risk, the employer or person in control of the premises is required to carry out, or have carried out on his behalf, a full and sufficient assessment that should identify any risk, and necessary precautionary measures.

2.3 A written management scheme should be prepared detailing checks and actions necessary to remove or minimise, so far as is reasonably practicable, any risk identified as a result of the assessment.

2.4 The assessment should be reviewed at least every two years or whenever there is cause to believe that the original assessment may no longer be valid, for example, this may be because of:

- changes to the system or its use;
- changes to the use of the building;
- new information on risk or control measures; and
- results show that control measures are no longer effective.

## 3. Report Format

3.1 The report would be produced to comply with the Health & Safety Executive's approved code of practice (ACOP) "Legionnaires' disease. The control of legionella bacteria in water systems " L8 2013, the guidance contained in the HSE publication "Legionnaires' disease – technical guidance " HSG274 Part 1 2014 and Part 3 2013 and the British Standard BS 8580:2010 "Water Quality – Risk Assessments for Legionella control – Code of Practice ".

3.2 The report would cover the water systems contained within the areas falling under the responsibility of

the client and would comprise:

**Section 1 Executive Summary**

- Site Details
- Actions Requiring Immediate Attention

**Section 2 Introduction and Methodology**

- Objective and Scope

**Section 3 Description of Premises**

**Section 4 Action Plan**

**Section 5 Risk Assessment**

- Mains Water
- Domestic Cold Water
- Domestic Hot Water
- Other Systems
- Documentation and Records

**Section 6 Scheme for controlling the risk**

- Responsibility organogram for Legionella control
- Frequency of Tasks and Action Guidance

**Section 7 Photographs**

**Section 8 Schematics of Water Distribution System**

**Section 9 Domestic Water Temperatures Delivery Temperatures**



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