

Commercial Legionella Risk Assessment

conducted for

David Watt

Document No.

DW001

Audit Title

Commercial Legionella Risk Assessment

Property address

Belmont Drive
East Kilbride
G75 8HD

Responsible person (Can be same as dutyholder)

David Watt

Name of assessor

Kirk McInally

Conducted on

31 Jul 2020 10:00 AM

Completed on

19 Aug 2020 11:41 AM

Score

10/12.0 - 83.33%

Introduction

Question	Response	Details
Legionnaires' disease		
Legionellosis is a collective term for diseases caused by legionella bacteria including the most serious legionnaires' disease, as well as the similar but less serious conditions of Pontiac fever and Lochgoilhead fever. Legionnaires' disease is a potentially fatal form of pneumonia and everyone is susceptible to infection. The risk increases with age, but some people are at higher risk, eg people over 45, smokers and heavy drinkers, people suffering from chronic respiratory or kidney disease, diabetes, lung and heart disease or anyone with an impaired immune system. The bacterium <i>Legionella pneumophila</i> and related bacteria are common in natural water sources such as rivers, lakes and reservoirs, but usually in low numbers. They may also be found in purpose-built water systems, such as cooling towers, evaporative condensers, hot and cold water systems and spa pools. If conditions are favourable, the bacteria may multiply, increasing the risks of legionnaires' disease, and it is therefore important to control the risks by introducing appropriate measures. <i>Legionella</i> bacteria are widespread in natural water systems, eg rivers and ponds. However, the conditions are rarely conducive for people to catch the disease from these sources. Outbreaks of the illness occur from exposure to legionella growing in purpose-built systems where water is maintained at a temperature high enough to encourage growth, eg cooling towers, evaporative condensers, hot and cold water systems and spa pools used in all sorts of premises (work and domestic).		
Legionnaires' disease is normally contracted by inhaling small droplets of water (aerosols), suspended in the air, containing the bacteria. Certain conditions increase the risk from legionella if: (a) the water temperature in all or some parts of the system may be between 20–45 °C, which is suitable for growth; (b) it is possible for water droplets to be produced and if so, they can be dispersed; (c) water is stored and/or re-circulated; (d) there are deposits that can support bacterial growth, such as rust, sludge, scale, organic matter and biofilms. It is important to control the risks by introducing measures which do not allow proliferation of the organisms in the water systems and reduce, so far as is reasonably practicable, exposure to water droplets and aerosol. This will reduce the possibility of creating conditions in which the risk from exposure to legionella bacteria is increased.		

Question	Response	Details
Health and Safety Law		
Duties under the HSW Act apply to the risks from exposure to legionella bacteria that may arise from work activities. The Management Regulations provide a broad framework for controlling health and safety at work. As well as requiring risk assessments, they also require employers to have access to competent help in applying the provisions of health and safety law; to establish procedures for workers if there are situations presenting serious, imminent danger; and for co-operation and co-ordination where two or more employers or self-employed people share a workplace. More specifically, COSHH provides a framework of actions designed to control the risk from a range of hazardous substances, including biological agents. Only the courts can give an authoritative interpretation of law on the application of these Regulations and guidance to people working under another's direction. If people working under the control and direction of others are treated as self-employed for tax and national insurance purposes, they may nevertheless be treated as employees for health and safety purposes. So, it may be necessary to take appropriate action to protect them. If there is any doubt about who is responsible for the health and safety of a worker, clarify this and include it in the terms of a contract. However, a legal duty under section 3 of the HSW Act cannot be passed on by means of a contract. You will still have duties towards others under section 3 of the HSW Act. If you employ workers on the understanding that they are responsible for their own health and safety, seek legal advice before doing so. For section 3 to apply:		
(a) there must be a dutyholder – either an employer or a self-employed person; and (b) there must be a risk to the health or safety of a person who is not an employee of the dutyholder or the self-employed dutyholder themselves; and (c) that risk must arise from the conduct of the dutyholder's undertaking. 'Undertaking' means 'enterprise' or 'business'. Section 3 does not apply to: (a) welfare issues (such as the provision of toilets or washing facilities); (b) nuisance or amenity issues that have no health or safety implications (such as unpleasant smells arising from work activities); (c) poor workmanship, where trading standards or contractual remedies may exist, unless they have demonstrably compromised health and safety. COSHH provides a framework of actions designed to control the risk from a range of hazardous substances, including biological agents. The essential elements of COSHH are: (a) risk assessment; (b) where reasonably practicable, prevention of exposure or substitution with a less hazardous substance, or substitution of a process or method with a less hazardous one; (c) control of exposure, where prevention or substitution is not reasonably practicable; (d) maintenance, examination and testing of control measures; (e) provision of information, instruction and training for employees; (f) health surveillance of employees (where appropriate, and if there are valid techniques for detecting indications of disease) where exposure may result in an identifiable disease or adverse health effect.		

Question	Response	Details
		The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) require employers and others, eg someone who has control of work premises, to report to HSE, accidents and some diseases that arise out of or in connection with work. Cases of legionellosis are reportable under RIDDOR if: (a) a doctor notifies the employer; and (b) the employee's current job involves work on or near cooling systems which are located in the workplace and use water; or work on water service systems located in the workplace which are likely to be a source of contamination. For more guidance on RIDDOR, see www.hse.gov.uk/riddor/index.htm. The Safety Representatives and Safety Committees Regulations 1977 and the Health and Safety (Consultation with Employees) Regulations 1996 require employers to consult trade union safety representatives, other employee representatives, or employees where there are no representatives, about health and safety matters. This includes changes to work that may affect their health and safety at work, arrangements for getting competent help, information on the risks and controls, and planning of health and safety training. You can find more information in the HSE leaflet Legionnaires' disease: A brief guide for dutyholders and at www.hse.gov.uk/legionnaires/index.htm.
		The risk being assessed
		This assessment is to assess the risk of exposure to Legionella Bacteria from work activities related to water systems on these premises.
		The hazard
		The hazard is the inhalation of water droplets containing Legionella bacteria.
		The people at risk
		The following people have been identified as being at risk: •occupiers •visitors •staff •contractors Of particular risk are: •people with a long term illness •smokers •heavy drinkers •the elderly.

Audit - 10/12 83.33%

Question	Response	Details
Schematics (optional - might be useful for complex system)		
Diagram		
Water Supply		
How is water fed to the dwelling?	Mains	
Water heating and storage		
Add any boilers heating the hot water (including if heats a cylinder)		
boiler		
boiler 1		
Where is the boiler located?	Other (please describe)	
Other description	Boiler 1 plant room	
Record the temperature of the hot water setting (If temp. not shown, enter dial setting e.g. Max)	At maximum	
Is the temperature between 55 and 60 degrees celsius?	N/A	
 Appendix 1  Appendix 2		
boiler 2		
Where is the boiler located?	Other (please describe)	
Other description	Boiler 2 plant room	
Record the temperature of the hot water setting (If temp. not shown, enter dial setting e.g. Max)	At maximum	

Question	Response	Details
Is the temperature between 55 and 60 degrees celsius?	N/A	
  Appendix 3 Appendix 4		
Add any hot water cylinders here (whether heated by a boiler or electric)		
Hot water cylinder		
Are there any cold water tanks supplying a hot water cylinder?		
Cold water storage tank		
Record of temperatures		
List of outlets and temperatures. If there are thermostatic mixer valves, the temperatures recorded are the temperatures of the pipes as close to the TMV as possible.		
Hot / Cold Outlet		
Hot / Cold Outlet 1		
Outlet name / location	Other (describe)	
Other description	Office toilet sink	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.1 Degrees C	
Cold water temperature	18.4 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 2		
Outlet name / location	Other (describe)	
Other description	Cleaning cupboard Sink	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.2 Degrees C	

Question	Response	Details
Cold water temperature	17.9 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 3		
Outlet name / location	Other (describe)	
Other description	Male toilet sink - left hand	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.2 Degrees C	
Cold water temperature	17.5 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 4		
Outlet name / location	Other (describe)	
Other description	Male toilet sink - middle	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.2 Degrees C	
Cold water temperature	17.5 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 5		
Outlet name / location	Other (describe)	
Other description	Male toilet sink - right hand	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.1 Degrees C	
Cold water temperature	17.5 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 6		

Question	Response	Details
Outlet name / location	Other (describe)	
Other description	Disabled toilet sink	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.3 Degrees C	
Cold water temperature	17.2 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 7		
Outlet name / location	Other (describe)	
Other description	Ladies toilet sink - right hand	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.3 Degrees C	
Cold water temperature	17.2 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 8		
Outlet name / location	Other (describe)	
Other description	Ladies toilet sink - middle	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.2 Degrees C	
Cold water temperature	17.2 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Hot / Cold Outlet 9		
Outlet name / location	Other (describe)	
Other description	Ladies toilet sink - left hand	
Is the outlet fed via a TMV?	No	
Hot water temperature	50.3 Degrees C	

Question	Response	Details
Cold water temperature	17.2 Degrees C	
Is the cold below 20 and hot 50 or greater?	Safe	
Showers		
Add any showers		
Shower		
Spa pools		
Add any whirlpool baths, spa baths, hot tubs, jacuzzis		
Spa		
Deadlegs		
Add any deadlegs		
Deadleg		
Are occupiers given information about the control of legionella?	N/A	
Void periods		
Is there adequate procedures in place when the premises are shut?	No	Flushing regime to be implemented and recorded if required.
Recommended action for void periods is that taps should be opened during viewings with prospective tenants at least weekly. If the property is unoccupied for longer than 6 weeks, the hot cylinder (if one) should be heated to at least 60 degrees for one hour and run through for 5 minutes. Where there is no cylinder, the temperature should be set to 60 degrees and run through for 5 minutes. For longer periods, consideration should be given to professional cleaning. Where a new tenant is to take occupation, temperatures on boilers and cylinders should be checked to ensure they are set at between 55 and 60 degrees.		
Any other risks identified		
Details of risk identified		
other risk		
other risk 1		
Detail of risk identified	Random temperature readings should be taken monthly and recorded.	

Question	Response	Details
	At Risk	

Banding, review and signature

Question	Response	Details
Risk banding		
The risk score is defined as follows: 0% to 40% - High risk - there is a high risk to the identified people and prompt action is needed 41% - 74% - Medium risk - there is a medium risk to the people identified and the recommended action is required within one month 75% - 100% - Low risk - there is a low risk to the people identified. Recommendations to be completed as soon as possible		
Review		
A review of this risk assessment should be carried out regularly (at least every two years) and whenever there is reason to suspect that it is no longer valid for example if there is: • a change to the water system or its use; • a change to the use of the building where the system is installed; • new information available 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		
Signed		
	Kirk McInally	
Company name and address of assessor	Legionella UK First Floor, 75 Kilbowie Road Clydebank G81 1BL Tel: 0330 350 1325	

Media



Appendix 1



Appendix 2



Appendix 3



Appendix 4