

Legionella Risk Assessment

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 *Legionella pneumophila* 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.

Legionella 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).

Risk Factors

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.

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:

- Occupants
- Visitors

Of particular risk are:

- Those with a long-term illness
- Smokers
- Heavy drinkers
- The elderly.

Risk Assessment

Location

Residential property:

Flat 10, Amery House, Kinglake Street, London SE17 2QS

Date

30 July 2021

Scope

All fixtures identified as potential sources for legionella within the property.

Question	Response	Details
Water Supply		
How is water fed to the dwelling?	Mains	
Fixture Risk Assessment	Low Risk	
Kitchen: Sink		
Is the outlet fed by a TMV?	Yes	
Hot water temperature:	56	
Cold water temperature:	6	
Is the cold below 20 and hot 50 or greater?	Safe	
Do fixtures look clean?	Clean	Newly fitted.
Fixture Risk Assessment	Low Risk	
Bathroom: Sink		
Is the outlet fed by a TMV?	No	
Hot water temperature:	52	
Cold water temperature:	6	
Is the cold below 20 and hot 50 or greater?	Safe	
Do fixtures look clean?	Clean	
Fixture Risk Assessment	Low Risk	
Bathroom: Bath Taps		
Is the outlet fed by a TMV?	No	
Hot water temperature:	50	
Cold water temperature:	6	
Is the cold below 20 and hot 50 or greater?	Safe	
Do fixtures look clean?	Clean	
Fixture Risk Assessment	Low Risk	
Bathroom: Showerhead		
Is the outlet fed by a TMV?	Yes	
Hot water temperature:	As per bath taps	
Cold water temperature:	As per bath taps	
Is the cold below 20 and hot 50 or greater?	Safe	
Does the shower head look clean?	Clean	Has been disinfected on 29 October 2019 following void period in property.
Fixture Risk Assessment	Low Risk	

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;
- A case of legionnaires' disease / legionellosis associated with the system

Signed
