Legionnaires Disease risk assessment & guidelines

Who can carry out an assessment?

Hosts and Operators of Short-term Let properties can carry out a Legionnaire's risk assessment themselves if the property is a single dwelling or a flat with its own water supply (hot and cold) and they are competent to do so. In particular hosts/operators should:

- understand different types of water systems
- understand Legionella bacteria and the factors which increase the risk of an outbreak in a domestic setting
- understand the control measures which if present will reduce the risk of an outbreak within a domestic setting

Before considering carrying out a risk assessment hosts/operators should familiarise themselves in particular with the following HSE publications: -

Legionnaire's disease: A brief guide for duty holders - http://www.hse.gov.uk/pubns/indg458.pdf

Legionnaire's disease Part 2: The control the relevant part of Legionella in hot and cold water systems

- http://www.hse.gov.uk/pubns/indg458.pdf

If they do not consider that they are competent then they should give the task to someone who is.

The risk assessment process

The practical risk assessment should include a site survey of the water system. A template is attached (Appendix 1) which is suitable for a basic system and can be adapted as required. The assessor should complete all the sections coloured blue.

The assessor should understand the water systems and any associated equipment in the property, in order to conclude whether the system is likely to create a risk from exposure to Legionella.

It is important to identify whether:

- water is stored or re-circulated as part of the system (areas of risk include water tanks, dead legs, shower heads and/or long runs of pipe work containing warm water)
- the water temperature in some or all parts of the system is between 20 45°C (hot water should be stored in any tanks at 60°C)

- there are sources of nutrients such as rust, sludge, scale and organic matters
- conditions are present to encourage bacteria to multiply
- it is possible for water droplets to be produced and, if so, whether they could be dispersed, e.g. showers
- there are parts of the system that are used infrequently e.g. guest bathrooms
- it is likely that any of the guests are more susceptible to infection due to age, health or lifestyle and whether they could be exposed to any contaminated water droplets

Reviewing the risk assessment

If the risk assessment concludes there is no reasonably foreseeable risk or the risks are insignificant and are managed properly to comply with the law, the assessment is complete. Although no further action may be required at this stage, existing controls must be maintained. The assessment of risk is an ongoing process and not merely a paper exercise. The assessment should be reviewed regularly and specifically when there is reason to suspect it is no longer valid.

Legionnaires Disease Risk Assessment

Property address	
Date of assessment	
Date of assessment	
Assessment carried out by	

Describe property type	
Is there any guest particularly susceptible to Legionella due to age, health or lifestyle?	
Describe type of cold-water system e.g. mains feed or from storage tank	
Describe type of hot water system e.g. mains feed via combi boiler or from storage tank.	

Risk categories

1. Water outlet temperature

Is cold water temperature at outlets below 20°C?	Yes/No	
Is the hot water temperature above 50°C at outlets?	Yes/No	

Cold water must flow from outlets at below 20°C and hot water above 50°C to minimise risk. If temperatures are too low/high then adjustments need to be made to the system such as lagging of pipework or adjustment of temperature settings for hot water.

Identify any defect/risks and related recommendations associated with water outlet temperature. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	

2. Cold water storage tanks

Is there one present?	Yes/No	
Location		
Does it have a tight fitting lid?	Yes/No	
Is the water in the tank clean and free from rust, debris, scale and organic matter?	Yes/No	
Is the temperature of the water in the tank below 20°C?	Yes/No	
Is the tank insulated?		

If any debris etc. is present in the system it should be drained and thoroughly cleaned. If debris is from corrosion on the tank itself then the tank may need to be replaced. All cold water tanks should have tight fitting lids to prevent debris entering the system. The water in the tank should be below 20°C and the tank should be insulated to prevent the temperature rising above this level.

Identify any defect/risk and related recommendations associated with cold water storage. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	

1. Hot water

Is the temperature setting on the boiler and/or hot water tank such that	Vec/Ne	
the hot water is heated to and stored at a temperature of 60°C?	165/100	

NB: If the temperature is set at above 60°C this can cause scalding to users.

The temperature setting on the boiler and/or hot water tank should be set and maintained at 60°C.

Identify any defect/risk and related recommendations associated with hot water. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	
Host/operator/guest/other	

2. Little used outlets

Are there any water outlets that are used	Yes/No? If yes, identify outlet & location
less than once per week e.g. in guest	
bathrooms?	

Any little used outlets should be flushed through weekly by running water through the outlet for at least 2 minutes. Aerosol production should be minimised during this process.

Identify any risks and related recommendations associated with little used outlets. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	
Host/operator/guest/other	

3. Shower heads

Are there any showers in the property?	Yes/No?	If yes, identify location

All shower heads should be cleaned, disinfected and descaled at least once every 6 months. Aerosol production should be minimised during this process.

Identify any risks and related recommendations associated with shower heads. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	
Host/operator/guest/other	

4. Dead legs and redundant pipework

Sections of pipework which are redundant or owing to the system design and have little/no through flow of water (known as "dead legs") can allow water to stagnate in the system. Are there any dead legs known in the system? If so, please describe.

Are there any dead legs in the property?	Yes/No?	If yes, identify location:

Any dead legs in pipework should be removed or the system altered so that water flows through all pipework on a regular basis.

Identify any risks and related recommendations associated with dead legs. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	
Host/operator/guest/other	

5. Unoccupied properties

Is the property left unoccupied for periods of time	Yes/No	

During periods of inoccupancy all outlets on hot and cold water systems should be flushed through at least once a week for at least 2 minutes. For long periods consider draining the system. Make sure that the system is flushed through when it is re-occupied by running all outlets for at least 2 minutes. Aerosol production should be minimised during this process.

Identify any risks and related recommendations associated with inoccupancy. If any action is required identify responsible person: -

Defect/Risk	
Recommendation	
Responsible person:	
Host/operator/guest/other	

6. Advice to Guests

Has advice been given to the guests as to the risks of Legionnaires		
Disease in a domestic setting and their responsibilities to minimise risk?	Yes/No	

This can be done by making a legionnaires information sheet available to guests residing in the accommodation (Appendix 2).

The assessment is complete and should be reviewed regularly (at least once a year) (Appendix 3) and specifically when there is reason to suspect it is no longer valid. You should ensure that the recommendations above are implemented and any existing controls maintained.

Signed	Date:	
Print name		

Information for Guests

What is Legionnaires Disease?

Legionnaire's disease is a lung infection caused by the inhalation of water droplets containing a bacterium called legionella. Legionnaires disease is a form of pneumonia and whilst everyone is susceptible to infection, the risks increase for those in the following higher risk categories; -

- people over 45 years of age
- smokers and heavy drinkers
- people suffering from chronic respiratory or kidney disease
- diabetes, lung and heart disease
- anyone with an impaired immune system

Legionella occurs naturally in water sources such as rivers and ponds, but usually in low numbers and are unlikely to cause disease. The risk of exposure to legionella bacteria from purpose-built water systems, is dependent on a number of environmental factors, such as, the presence of legionella bacteria, the holding temperature of water in the system, material or debris introduced or accumulating within the water system and a means of creating aerosol droplets.

The responsibility to control the risk of legionella within a property is with the duty holder/day-to-day manager. A legionella risk assessment completed by a competent person will identify any areas which are likely to pose a risk of exposure to legionella. Where risks are identified, suitable control measures are put in place, to reduce the hazards.

All hot and cold water systems must be adequately maintained and control measures be put in place as per those identified the Legionella Risk Assessment.

Should you have any concerns about the water system in this property, or the following matters come to your attention during your stay, please contact the relevant duty-holder or day-to-day manager

- You believe the hot water temperature is below 50°C or the hot water tank/boiler is defective in any way
- You believe the cold-water temperature is above 20°C
- You notice any debris or discolouration in the hot or cold water

Please <u>Do Not</u> adjust the temperature of the hot water or interfere with the water thermostat.

Name of Duty-holder/Day-to-day Manager: _____

Contact email address: _____

Contact number: _____

Legionnaire's Disease Risk Assessment review

To be completed at least once per year.

Property address		
Date of assessment		
Assessment carried out by		
If any of the following are tru	e, please tick the box on the right.	
Since the original risk asses	sment was carried out: -	
Has there been a change to	the water system or the way it is used by occupants?	
Has there been a change to	the use of the building where the system is installed?	
Is there new information ava	ilable about risks or control measures?	
When testing the temperature any outlets at a temperature	re of the water in the system, does hot water flow from of below 50C?	
When testing the temperature of a	re of water in the system, does cold water flow from any bove 20C?	
Are the current guests more	susceptible due to their age, health or lifestyle?	
Has there been a case of Le	gionnaires Disease associated with the system?	

If you have ticked in response to any of the questions above, a new risk assessment should be carried out by a competent person.

Signed	Date	
Print name		