

Legionnaires Disease risk assessment & guidelines

Who can carry out an assessment?

Landlords and letting agents 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 landlords 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 you should familiarise yourself 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 - <https://www.hse.gov.uk/pubns/priced/hsg274part2.pdf>

If you do not consider that you are competent then 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 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 tenants, residents, visitors etc 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

The assessment of risk is an ongoing process and not merely a paper exercise. The risk assessment should be regularly reviewed at intervals of no more than two years and specifically when there is reason to suspect it is no longer valid. If a review of the risk assessment indicates that there has been a change to the risk factors then a new risk assessment should be carried out.

Educating tenants

Landlords should inform tenants of the potential risk of exposure to Legionnaire's disease within domestic properties and its consequences. They should advise on any actions arising from the findings of the risk assessment, where appropriate.

Tenants should be advised in particular that they should:

- inform the landlord/letting agent if they believe the hot water temperature is below 50°C or the hot water tank/boiler is defective in any way
- not adjust the temperature of the hot water
- advise landlord/letting agent if they believe the cold-water temperature is above 20°C
- flush through little used outlets for 2 minutes at least once a week
- clean, disinfect and descale shower heads at least once every 6 months
- notify the landlord/letting agent if they notice any debris or discolouration in the hot or cold water

Legionnaires Disease Risk Assessment

Property address	
Date of assessment	
Assessment carried out by	

Describe property type	
Is there any tenant, resident or regular visitor 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: Landlord/tenant/other	

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: Landlord/tenant/other	

3. Hot water

Is the temperature setting on the boiler and/or hot water tank such that the hot water is heated to and stored at a temperature of 60°C?	Yes/No	
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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: Landlord/tenant/other	

4. Little used outlets

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

5. 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: Landlord/tenant/other	

6. 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: Landlord/tenant/other	

7. Unoccupied properties

Is the property left unoccupied for periods of time, e.g. in the case of student lettings over the summer holiday or at Christmas/New Year?	Yes/No	
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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: Landlord/tenant/other	

8. Advice to tenants

Has advice been given to the tenants as to the risks of Legionnaires Disease in a domestic setting and their responsibilities to minimise risk?	Yes/No	
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This can be done by giving the tenant/s the tenant advice sheet.

The assessment is complete and should be reviewed regularly (at least once a year) 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		

Legionnaire's Disease Risk Assessment Review

To be completed at intervals of no more than two years.

Property address	
Date of assessment	
Assessment carried out by	

If any of the following are true, please tick the box on the right.

Since the original risk assessment 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 available about risks or control measures?

When testing the temperature of the water in the system, does hot water flow from any outlets at a temperature of below 50C?

When testing the temperature of water in the system, does cold water flow from any outlets at a temperature of above 20C?

Are the current tenants and their visitors more susceptible due to their age, health or lifestyle?

Has there been a case of Legionnaires 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		