

Document Title	Legionella Procedure
Responsible Postholder	Property Services Manager
Date of Issue	December 2020
Next Review Due	December 2025

1. Introduction

- 1.1. Legionella are bacteria that are common and can be found in environmental water sources such as lochs, rivers and reservoirs as well as in artificial cold and hot water systems (e.g. storage tanks, taps, showers, pipe works etc.), although legionella presence is usually associated with large water systems used in hospitals, schools etc., it can also be found in smaller water supply systems used in homes and office accommodation.

Legionnaire’s Disease is a potentially fatal pneumonia caused by legionella bacteria. It is normally contracted by inhaling viable legionella bacteria in a sufficient quantity, either in tiny droplets of water (aerosols) or in droplet nuclei (the particles left after the water has evaporated) from water contaminated with legionella, deep into the lungs. Legionella bacteria can also cause less serious illnesses which are not fatal or permanently debilitating. The collective term used to cover the group of diseases caused by legionella bacteria is legionellosis.

2. Purpose

- 2.1. The purpose of this procedure is to provide a comprehensive set of instructions to employees regarding the management and control of legionella in all Waverley Housing properties, buildings and offices.

It applies to all hot and cold water supplies and distribution systems (both direct mains and tank fed), and any other system (such as air conditioning systems) with the potential to provide an environment for the growth of legionella, that have outlets located within communal areas of premises owned or managed by Waverley.

3. Related Documents

- The Prevention or Control of Legionella (including Legionnaires’ Disease) Approved Code of Practice (ACOP)
- HSE Guidance for the Control of Legionella Bacteria in Water Systems (L8)
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- www.hse.gov.uk
- Legionella Risk Assessments

4. Responsibilities

- 4.1. As an employer and a landlord, responsible for the control of premises, the company has a legal duty to:
- Appoint a person to be managerially responsible.
 - Identify and assess sources of risk.
 - Prepare a process for preventing or controlling the risk.
 - Implement, manage and monitor precautions.
 - Keep records and check the effectiveness of past actions completed.

The Property Services Manager will take managerial responsibility for this procedure and will act as our competent person and is responsible for ensuring:

- Legionella risk assessments are conducted by a competent person.
- Any actions/recommendations from such risk assessments are carried out.
- Scheduling suitable contractors to carry out legionella risk assessments if required.
- Ensuring legionella records are completed and maintained correctly.
- Monitoring the effectiveness of legionella controls.

5. Management Reporting/Monitoring

- 5.1. Risk Assessments completed on all relevant properties bi-annually with any actions identified or changes to this procedure reported to the Management Team.

6. Procedure

6.1. Identification and assessment of risk

The Company has used an initial desk top exercise and knowledge of the water systems in our housing stock to determine the level of risk of legionella occurring in these systems. Our stock does not contain premises with larger scale water systems such as sheltered housing and our self- contained general needs properties typically have a high turnover of water usage which acts as a deterrent against the growth of legionella.

Our assessment of the possible presence of legionella and potential for exposure of our tenants, staff and visitors to our housing stock and office to legionella is that this is a low risk.

6.2. Risk assessment

The Approved Code of Practice clearly states the requirement for employers and others to undertake risk assessments to establish the risk of legionella. This should include identifying potential sources of transmission and preventing conditions that may allow the proliferation of the legionella bacteria such as:

- The presence of the bacteria;
- Condition of the water and the existence of suitable conditions for the organism to grow and multiply in the storage and distribution systems (e.g. legionella will multiply at water temperatures between 20°C and 45°C);
- The presence of people;

- d) Means of creating an aerosol or small breathable droplet such as the ones from a shower, fire-sprinkling system, hosepipes, spray taps in sinks and wash-hand basins etc.

All risk assessments should be carried out by a suitably competent and qualified person, and following the initial assessment, a review of the risk assessment should be carried out whenever there is a reason to believe that the original assessment may no longer be valid due to:

- a) Changes to the plant and water systems in use;
- b) Changes to the use of the building;
- c) When monitoring indicates the level of risk has changed;
- d) When the system has been involved in an outbreak;
- e) Following availability of new information about risks or control measures;
- f) Or at least every 2 years.

Risk assessments will be carried out in those buildings where there is a potential for exposure to legionella as follows:

- a) Cold water tanks in blocks of flats.
- b) Void properties.
- c) The office at 51 North Bridge Street Hawick.

6.3. Preventing or Controlling the Risk

The company will design, maintain and operate water services under conditions which prevents or controls the growth and multiplication of legionella bacteria and will:

- a) Avoid water temperature and conditions that help legionella growth (recommended temperature for hot water is 60°C (thermostats need to be set above 50°C and maintained at an appropriate level and adequate insulation installed), or below 20°C for distribution (water can be stored with adequate insulation);
- b) Ensure that water cannot stagnate anywhere in the system by keeping pipe lengths as short as possible or removing them where applicable (known as dead-legs, which occur when water services leading from the main circulation water system to taps or appliances, are only used intermittently);
- c) Avoid usage of certain materials that are prone to legionella growth (use of materials that may provide nutrients for microbial growth should be avoided);
- d) System maintenance – keep water systems clean and treat water systems by disinfecting them before taking into service and after shut-downs of over 5 days or longer.

It should be noted that hot water coming out of taps above 43°C poses the risk of scalding. Hot water pipes and radiators carrying water above 43°C could pose a hazard where vulnerable people may lean against them. Ideally, water should be circulated at 50°C, with scalding hazards controlled by fitting thermostatic control valves (TCV) to radiators and to the water supply for baths, showers and hand-basins.

If a risk of legionella is identified, actions should be taken to remove the risk if reasonably practicable to do so. If the risk cannot be removed, a programme of control measures must be put in place that is proportionate to the level of risk. This will include a systematic

approach to flushing systems, checking water temperatures and sampling water supplies where appropriate.

The necessary control measures should be identified as part of the risk assessment process and the Property Services Manager (or other designated person responsible) should ensure that the control measures are put in place.

In relation to the risk assessments to be carried out by the Company the following control measures will apply:

Void properties which remain empty for more than 8 weeks will have their water systems drained down. Before a decision is taken to drain down a system the Property Services Manager will liaise with the Housing Services Manager to establish whether the void property is likely to be relet in the near future.

For all void properties following termination of tenancy our voids team will ensure that all toilets will be flushed, shower heads and flexible hoses will be removed and replaced with new heads and hoses. All cold and hot water taps will be run for 5 minutes with care being taken to check the drainage capacity of the property. If the void is not relet within one week of the voids team finishing with the property a member of staff will ensure all toilets are flushed and cold and hot water taps are run for 5 minutes. These actions will be carried out at the same time as the tenancy sign up is undertaken and details of the time and date they were undertaken and the member of staff undertaking these actions will be recorded as part of the tenancy sign up paperwork.

The office at 51 North Bridge Street, Hawick has been assessed as low risk. The toilets and hot and cold water taps are used regularly whilst the shower head is cleaned and run for 5 minutes each week by the cleaner. A record of these actions will be kept. The shower head is dismantled, cleaned and descaled on a three monthly basis and record of this is kept by the cleaner.

6.4. Managing the risk

WH Property Services Manager is our 'responsible person' for all our operational areas.

WH Property Services Manager will ensure that works affecting the water supply to Waverley buildings is carried out to a required standard, where work is carried out by a contractor or other third party.

Where works are carried out to Waverley properties which significantly affect the provision of water services then suitable drawings should be provided to the Company clearly illustrating the new and/or modified water services pipework, valves, tanks etc.

Actions identified to control the risk should be monitored at suitable intervals to ensure effectiveness. They must be reviewed at least every two years, or more frequently if changes to the system are made or the risks change. A detailed list of considerations is contained in Part 1 of the Approved Code of Practice (ACOP).

Appropriate PPE such as masks will be made available to staff undertaking inspections, flushing or running of taps in properties.

6.5. Action levels following legionella sampling

Any amendment required to the action levels listed below should be updated in this procedure.

Legionella bacteria (cfu/litre)	Action required
More than 100 but less than 1000	Either (a) If only one or two samples are positive, system should be resampled. If a similar count is found again, a review of the control measures and risk assessment should be carried out to identify any remedial actions (b) If the majority of samples are positive, the system may be colonized, albeit at a low level, with legionella. Disinfection of the system should be considered but an immediate review of control measures and risk assessment should be carried out to identify any other remedial action required.
More than 1000	The system should be resampled and an immediate review of the control measures and risk assessment carried out to identify any remedial actions, including disinfection of the system.
Less than 100	No further action required.

6.6. Record Keeping

Legionella records relating to the office at 51 North Bridge Street, Hawick, cold water tanks in blocks of flats and void properties will be maintained for a minimum of five years.

In order to provide an audit trail and compliance with the law, the records should include where appropriate:

- a) Details of risk assessments carried out.
- b) The written scheme or course of action.
- c) The names and responsibilities of the responsible person(s) under the scheme.
- d) Details of any new or modified water services installation.
- e) Details of precautionary measures which have been carried out (e.g. records of flushing regime; temperatures taken; test results from samples taken; details of any cleaning and disinfection carried out in response to a potential outbreak).
- f) Monitoring details (e.g. reports).
- g) The signature of the person(s) carrying out various tasks or other forms of authentication.

6.7. Response to an Outbreak

In the event of an outbreak of legionellosis, the 'Responsible Person' will follow their emergency and/or contingency plan that should include:

- a) Identification of people who have been or might have been exposed.
- b) Water samples taken from the relevant premises by a suitably qualified contractor
- c) Notifying the Health and Safety Executive and Scottish Borders Council.
- d) Notifying members of the Executive Team.

6.8. Staff whose duties require them to have a knowledge of the control of legionella will receive legionella awareness training.

**WAVERLEY HOUSING SAFETY MANAGEMENT SYSTEM
RISK ASSESSMENT**

TITLE:	LEGIONELLA
DATE:	DECEMBER 2020
REVIEW DATE:	DECEMBER 2021
Overview/Scope	TO DETAIL THE MEASURES TO REDUCE THE GROWTH OF LEGIONELLA BACTERIA AND POSSIBLE RISK FROM EXPOSURE TO SUCH BACTERIA

No	Nature of Hazard Present and Description	Who Might be Harmed	Rating	Controls Measures
1	Growth of legionella bacteria in cold water tanks	Contractors working on such tanks and residents receiving water from such tanks.	8	Waverley has relatively few cold water tanks
				All cold water tanks will be checked bi-annually and an individual report will be held on each
2	Growth of legionella bacteria in void properties.	Contractors working in void properties and residents moving into void properties.	8	Properties which are void for more than 8 weeks will have their water system drained down and the job line instructing this work will be recorded against the property.
				All void properties will have new showerheads and flexible hoses fitted as these are potential risk areas for the growth of legionella bacteria. This work will be recorded on the job lines for repairs to the void property.
				The voids team will flush toilets and run all cold and hot water taps in the void property for 5 minutes. Their actions in this connection will be recorded in the voids spreadsheet.
				If the void property is not relet within one week of the voids team finishing with the property the member of staff signing up the new tenant in the property will flush the toilet and run the hot and cold water taps for 5 minutes. Their actions in this connection will be recorded in the sign up of Tenancy Paperwork.

SCORE TABLE

RISK RATING EQUALS = Consequence X Likelihood

Consequence						
Catastrophic	5	Adequate	Tolerable	Tolerable	Unacceptable	Unacceptable
Major	4	Acceptable	Adequate	Tolerable	Tolerable	Unacceptable
Moderate	3	Acceptable	Adequate	Adequate	Tolerable	Tolerable
Minor	2	Acceptable	Acceptable	Adequate	Adequate	Tolerable
Insignificant	1	Acceptable	Acceptable	Acceptable	Acceptable	Adequate
		1	2	3	4	5
	Likelihood	Very Unlikely	Unlikely	Fairly Likely	Likely	Very Likely
Unacceptable	Stop activity and make immediate improvements					17-25
Tolerable	Look to improve with specified timescale					10-16
Adequate	Look to improve at next review					5-9
Acceptable	No further action but ensure controls are maintained					1-4

**WAVERLEY HOUSING SAFETY MANAGEMENT SYSTEM
RISK ASSESSMENT**

TITLE:	LEGIONELLA
DATE:	DECEMBER 2020
REVIEW DATE:	DECEMBER 2021
Overview/Scope	TO DETAIL ARRANGEMENTS TO MANAGE THE POTENTIAL RISK OF LEGIONELLA BACTERIA IN THE OFFICE AT 51 NORTH BRIDGE STREET, HAWICK

No	Nature of Hazard Present and Description	Who Might be Harmed	Rating	Controls Measures
1	The hot and cold water systems in the office can provide an environment where legionella bacteria can grow and if conditions are favourable the bacteria can multiply and increase the risk of exposure.	Staff and visitors to the office.	8	The hot and cold water systems are of modern design and there is no redundant pipework.
				Cold water temperature at the taps is below 20 degrees and hot water at the taps is above 50 degrees. These temperatures assist in reducing the likelihood of legionella bacteria developing.
				All of the toilets and hot and cold water taps are used regularly and again this assists in preventing the growth of legionella bacteria.
				The shower is used irregularly and the cleaner on a weekly basis records that the shower has been run for 5 minutes and the showerhead cleaned. A record of this cleaning regime is kept.
				It is unlikely that anyone particularly frail or vulnerable who may be susceptible to contracting legionella will use the shower, toilets or hot and cold water taps in our office.

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Moderate	3	Acceptable	Adequate	Adequate	Tolerable	Tolerable
Minor	2	Acceptable	Acceptable	Adequate	Adequate	Tolerable
Insignificant	1	Acceptable	Acceptable	Acceptable	Acceptable	Adequate
		1	2	3	4	5
	Likelihood	Very Unlikely	Unlikely	Fairly Likely	Likely	Very Likely
Unacceptable	Stop activity and make immediate improvements					17-25
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