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Consultation	H&S Panel	Reviewed By	Assets & Building Safety Manager
EIA	N/A	Responsible Officer	Head of Assets and Investment Manager
DPIA	N/A	Approval By	Executive Team

## Legionella Policy

### Purpose

In the UK the main legionella regulations are underpinned by primary health and safety laws that include: The Health and Safety at Work Act 1974 Management of Health and Safety at Work Regulations 1999 Control of Substances Hazardous to Health Regulations 2002 (COSHH). BCHG shall comply with Approved Code of Practice L8 – The Control of Legionella Bacteria in Water Systems using guidance contained within the HSE publication HSG274.

This Policy is for the management of the hot and cold water systems within Black Country Housing Group's Stock, with particular emphasis on the prevention of infection by Legionella. The Policy:

- Aims to ensure that sources of risk are identified and assessed
- Refers to a control scheme used to prevent, reduce, control or remove risks.
- Provides for a system of management, monitoring and reporting.

It sets out who the Dutyholder and the Responsible Persons are, who is responsible for what, and whether responsibility is sole or shared.

This Policy is to ensure that the management of hot and cold water systems is carried out actively, continuously and effectively in line with ACOP L8 and HSG274 Part 2.

### Review

This Policy will be formally reviewed every 3 years or where there are changes to legislation, guidance or any other factors that indicate the need for interim review or amendment.

### Scope

The Policy is written primarily to ensure compliance with the three pieces of guidance set out below.

1. HSE Publication ACOP L8 'Legionnaires' disease: The control of legionella bacteria in water systems - Approved Code of Practice - November 2013.
2. HSE Publication - HSG 274 Part 2 technical guidance is now separate from the above and is entitled The Control of Legionella bacteria in hot and cold water systems' - April 2014
3. HSE Publication - <https://www.hse.gov.uk/pubns/priced/hsg274part3.pdf> 2013

ACOPs (Approved Codes of Practice) describe preferred or recommended methods that can be used (or standards which must be met) in order to comply. Compliance aims to protect BCHG employees, contractors, tenants, visitors and members of the public.

This Policy also acknowledges the requirements of the following:

- Health & Safety at Work Act 1974 (HASAWA)
- Managing Health and Safety at Work Regulations 1999
- British Standard BS8580 - 1:2019 Water quality - risk assessments for Legionella, or latest version thereof.
- British Standard BS7592 Sampling for Legionella bacteria in water systems, or latest version thereof.
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- Health Protection (Notification) Regulations 2010.

#### **Related BCHG Policies and other**

- Health & Safety Policy
- Equality & Diversity Policy
- Gas Safety and Servicing Policy
- Tenancy/lease Agreements
- Care and support policy and procedures

#### **What is Legionnaires' disease?**

Legionnaires' disease is a severe pneumonia caused by the Legionella bacterium. People become infected when they inhale aerosols from a contaminated source. Early symptoms include muscle aches, tiredness, headaches, dry cough and fever. Sometimes diarrhoea occurs and confusion may develop. Legionnaires' disease can cause long term health problems. It is not contagious infection is caused by breathing in small droplets of water containing the bacteria. Complications such as respiratory failure, acute kidney damage or severe sepsis can arise and it can be fatal. Anyone can contract Legionella however it is the number of bacteria encountered and the level of resistance within the individual which influences the severity of the infection. There is a 10% mortality rate where contracted and 33% where contracted by someone who is susceptible.

#### **Where are Legionella bacteria found?**

Legionella bacteria can grow in both hot and cold water both in water systems within buildings or in natural water courses and can enter via mains water. They can grow where temperatures are between 20°C and 45°C. Where temperatures are outside this range Legionella cannot survive or multiply. The ability of Legionella to grow can further be supported by the presence of a nutrient supply e.g. rust, sludge, limescale or algae, by the presence of other bacteria, or where water is stagnant allowing bacteria to multiply.

Legionella grows the best in water between 20°C and 45°C which has been stagnant for a period of time. This explains why the two main (core) control measures are to maintain correct water temperatures and the prevention of stagnant water.

### **What else can affect hot and cold water safety?**

There are also various organisms, contaminants and water conditions which can harm people:

**Faecal bacteria e.g. E.coli, Salmonella and others** – normally resides in the gut of humans, animals, wildlife. If they get into food or water (by release of faecal matter into water or by not washing after going to the toilet) they can cause illness which, in susceptible groups, can be severe or fatal.

**Contaminants such as rust, sludge, lime scale, algae, bacteria** – the presence of these can provide a nutrient source enabling bacterial growth. Where limescale exists it presents an infection control risk as many bacteria can colonise the lime scale deposit, including those which cause diarrhoea and vomiting, since routine cleaning cannot remove them. Limescale can only be effectively removed using chemical descaling.

**Water temperature** – requiring hot water to be kept hot in order to prevent Legionella growth can present risk to vulnerable users such as the elderly due to the risk of scalding. In such cases it may be necessary to use thermostatic mixer valves (TMVs) at appropriate points in the water system to blend hot and cold water to a safe and constant temperature. If TMV's are fitted these should be fitted as close as possible (within 0.5m) of outlet and flexible connectors should not be used post TMV as these have been shown to promote biofilm growth.

Requiring cold water to be kept cold may not be reasonably practicable in very hot weather where incoming mains water will be warmer. Where this occurs it should be recorded.

**Other water systems** – The asset management team is responsible for fire equipment servicing including sprinkler systems where they are provided. Servicing is carried out by competent fire engineers with risk assessments and method statements provided. Should there be an activation of a sprinkler head through fire or failure this will be logged as an incident or near miss. Those potentially affected will be advised to contact their GP that they may have been exposed to legionella bacteria. By way of BCHG's training matrix, legionella awareness and responsible person training will enable colleagues to identify any systems that may fall under HSG274 part 3 either at design stage or retrospectively.

### Abbreviations/terms used

- HSE Health & Safety Executive
- HPA Health Protection Agency\*
- PHE Public Health England
- BS British Standard
- ACOP L8 HSE Approved Code of Practice Legionnaires Disease
- NOID Notification of Infectious Diseases
- TMV Thermostatic Mixer Valve.
- TVC Bacterial water test to detect contaminants such as E.coli
- Vulnerable groups The elderly, those with underlying health conditions (especially heart disease, smoking, immunosuppression and diabetes)

\* = The Health Protection Agency became part of PHE 1 April 2013

### Duty holder, Competent Persons and Responsible Persons

Role	Type of responsibility	Name
Statutory Dutyholder	The Duty holder has the overall corporate responsibility for compliance with legionella legislation. In the event of an investigation by the HSE the Duty holder is considered responsible and can face prosecution including prison. The Dutyholder must ensure that all employees involved in controlling legionella risks are given suitable and sufficient information, instruction and training.	Board of Management
	The Duty Holder is responsible for appointing the responsible persons and their deputies for properties or groups of properties.	
Competent Person	The Competent Person is responsible for ensuring the contractor employed and staff are competent to carry out their tasks, recording and bringing to attention of the responsible persons any non-conformities, rectifying those where possible and where not, bringing them to the attention of the health and safety panel. This person is responsible for re-evaluating the need to review legionella risk assessments. The competent person is responsible for ensuring the Duty holder is provided with appropriate, robust and frequent assurance about legionella compliance. This person should be appropriately trained to a sufficient level of competency.	Compliance Manager  Assets & Building Safety Manager – Deputy to the Competent Person

Responsible Person	The responsible person(s) should be managers or directors and are nominated for specific properties, working in conjunction with the competent person, having day-to-day responsibility for ensuring the delivery of safe hot and cold water systems. The responsible person(s) are required to provide the Competent Person and Duty holder with appropriate, robust and frequent assurance about legionella compliance. They should accept this responsibility in writing. This person should be appropriately trained to a sufficient level of competency.	Further detailed below.
Deputy to the responsible person	The Deputy is the person who takes over from the responsible person if the responsible person is not available. For the avoidance of doubt the manager of the responsible person is their deputy in this scenario.	Further detailed below.

### Responsible Persons

Who has responsibility for ensuring checks completed in accordance with Water Hygiene (Legionella Written Scheme of Control) for buildings with complex water systems? (Refer to Appendix1)

Requirement	Frequency	Offices, Retirement Living & Supported	Responsible person
Initial Risk Assessment / Renewal of Risk Assessment	Initial or reassessment following validation.	<input type="checkbox"/>	Contractor
Validity assessment	Two yearly (or when there's reason to suspect that current RA is no longer fit for purpose)	<input type="checkbox"/>	Contractor/ Compliance Manager
Checking flow temperatures of calorifiers and setting of calorifier temperatures	Monthly	<input type="checkbox"/>	Scheme staff / Homeforce
Checking of temperatures at cold and hot water sentinel outlets in communal areas (nearest and furthest to the water source)	Monthly	<input type="checkbox"/>	Scheme staff / Homeforce

Checking of temperatures at all non-sentinel hot & cold outlets at the scheme on a rotational basis ensuring 100% outlets are checked over a 12- month period and temperatures recorded in a logbook		<input type="checkbox"/>	Contractor / Homeforce
Water booster sets	Annually	<input type="checkbox"/>	Contractor
Legionella water samples taken at the scheme where determined by Risk Assessment.	Ad-hoc	<input type="checkbox"/>	Contractor
Flushing infrequently used outlets	Weekly	<input type="checkbox"/>	Scheme staff
Flushing outlets in void properties (Long Term/Short Term/Disposals/Drained Down in winter period)	Weekly	<input type="checkbox"/>	Scheme staff

### New Regimes

Replacement of showerheads and temperature checks on communal showers	Quarterly- shower head replacement continues as current practice	<input type="checkbox"/>	Homeforce
Servicing and Failsafe Testing of TMVs	Annual	<input type="checkbox"/>	Homeforce
Inspection of water storage tanks to Commercial / Sprinkler Systems – Review industry practices for adoption by BCHG – by Risk Assessment	Annual	<input type="checkbox"/>	Contractor
Internal inspection of the hot water calorifiers to Commercial Systems via access hatch – Review industry practices for adoption by BCHG - by risk assessment	Annually	<input type="checkbox"/>	Contractor

### **Risk assessment / Re-evaluation and Re-assessment.**

The Duty holder is responsible for ensuring that an initial risk assessment is carried out. ACOP L8 requires that a 'suitable and sufficient' assessment be carried out which identifies and assesses potential sources of legionella exposure.

### **Re-evaluation and re-assessment**

The competent person is responsible for evaluating the validity of the existing risk assessments to ensure continues to be valid. This process will be managed through the asset management system using a standard set of questions to determine validity or otherwise of the existing risk assessment. If a risk assessment is deemed invalid then a reassessment of risk is required, this is the responsibility of the competent person to arrange and record.

### **Risk assessment in individual houses and flats**

The Control of Legionella bacteria in hot and cold water systems' ('HSG274 Part 2) April 2014 clarifies the responsibility landlords have for residential units within their property portfolios, risk assessment for all dwellings to be carried out during 2020/21.

### **Risk assessment of complex water systems**

Larger buildings with more complex water systems account for the most cases of Legionnaires' disease. Aside from controlling water temperatures and preventing stagnation one or more additional control measures are usually required for these more complex properties as per HSG274 Part 2, included in Appendix 1

### **Appendices:**

1. Example - Water Hygiene (Legionella Written Scheme of Control) for buildings with complex water systems.
2. Advice sheet for tenants – this example will be subject to updates

## Appendix 1

### Example - Water Hygiene (Legionella Written Scheme of Control) for buildings with complex water systems.

**Premises name:** \_\_\_\_\_

This should be read in conjunction with the legionella risk assessment

Duty Holder: Board  
 Competent Person: Compliance Manager  
 Responsible Persons and Deputies: Set out below

#### Written Scheme:

Task	Primary (who does it)	Deputy (in absence of primary)	Frequency
Arrange legionella risk assessment when required. Centrally track remedial actions from legionella risk assessment. Arranging servicing/inspection.	Compliance Manager	Assets and Building Safety Manager	As required
Risk assessment validation (and subsequently arranging risk reassessments where necessary)	Compliance Manager	Assets and Building Safety Manager	Every 2 years or as required
Review/complete risk assessments. Complete and review Schematics	Contractor	Contractor	As required
Problem/ hazard spotting as part of role profile and health and safety checks	Scheme Manager, Contractor, Asset management		Ongoing
Respond to temperatures outside of conformity – diagnose and remedy	Commercial gas contractor	Commercial gas contractor	As required
Monthly water temperature testing	Contractor	Contractor	Monthly
Receive monthly water temperature tests workflow actions arising	Compliance Officer	Compliance Manager	Monthly
Communal cleaning regime including keeping all outlets free of limescale	Scheme Manager	Independent Living Manager	Weekly



Flushing communal infrequently used outlets and recording.	Scheme Manager	Independent Living Manager	Weekly
Shower heads and hoses Cleaning / replacement	Contractor	Contractor	Quarterly
Cleaning Individual outlets within tenanted flats only	Occupant	Occupant	Weekly
Flushing infrequently used outlets within tenanted flats only	Occupant	Occupant	Weekly
Cleaning and descaling showerheads in individual flats	Occupant	Occupant	Quarterly
Cleaning and descaling aerators in individual flats , or Remove for standard taps (Homeforce) to eliminate regular clean/descale operation	Scheme Manager		Quarterly
Communicating tenancy obligations	Scheme Manager	Scheme Manager	As required
Arrange Cyclical maintenance of TMV's	Compliance Manager	Compliance Officer	Annually
Training to ensure all colleagues are competent for the task at hand	HR	Line Managers	As required
Ensuring all piping used is WRAS approved, flexible hoses are not permitted unless supplied with a monoblock tap or there is movement required.	Head of Assets and Investments	Assets and Building Safety Manager	As required
Responding to incident; suspected or reported case of legionella.	Compliance Manager	Assets and Building Safety Manager	As required
Correctly carrying out work	All staff	All staff	As required
Arranging water tank and cylinder inspections	Compliance Manager	Assets and Building Safety Manager	Annually – refer to policy
Arranging tank and cylinder cleaning	Compliance Manager	Assets and Building Safety Manager	As necessary - refer to policy
Inspection of Pressure Vessels (Commercial Boiler Systems)	Contractor	Contractor	Six monthly

**Site overview:**

Checklist	Y/N	
Up to date schematic plan:	Y	See risk assessment document for the schematic which are held centrally and on site. Schematic plans can be amended periodically for minor changes.
Are control measures detailed	Y	Monthly water temperature testing, weekly flushing regimes and quarterly shower heads/hoses.
Do I know what to do if written scheme is found not to be effective?	Y	Log as near miss/incident on cascade, report to responsible person and phone compliance manager.
Are there tanks or cylinders to inspect?	Y/N	See schematic
Operating cycles for water heater achieving 60 degrees		Note whether 60 degrees is constant or is achieved or outline if there is a cycle in place for 1 hour in 24 hour period
Escalation procedure / emergency procedure		Report concerns to compliance manager and call out Halesowen Gas. Raise as risk event, ensure Statutory Duty Holder is aware Enact business continuity protocols for the site as appropriate.
Cleaning and disinfection procedures:		Communal outlets – BCHG cleaning, flushing, descaling arranged and documented by <b>Scheme Manager</b> . Within dwelling flats customers are required to clean, flush and descale as part of tenancy obligation – <b>Occupant</b> included within tenancy agreement and other communications.
Commissioning and recommissioning procedures:	Y	Commercial Gas contractor to get up to temperature and monitor appropriately in addition to normal monthly temperature testing.

## Appendix 2

### Advice sheet for tenants

#### What is legionella?

Legionella bacteria occur naturally in locations such as rivers, lakes and reservoirs. It may also be found in:

- Domestic water systems in people's homes
- Places where water droplets may be formed such as showers and taps.
- Hose pipes

The most likely way to be infected by legionella is by inhaling the bacteria when it is carried by water droplets.

Legionella bacteria thrive in any suitable water system, the temperature at which the bacteria will grow is within the temperature range of 200°C and 46°C. All hot water storage cylinders in our properties include a thermostat which makes sure that the hot water is stored at 60°C

The risk of infection from exposure in domestic properties is very low but as part of the health and safety regulations we have A DUTY OF CARE to our residents to inform you of the risk and practical steps you can take to reduce the risk of being affected by legionella bacteria in water droplets.

#### Your responsibilities and how to reduce the risk of legionella

- If you feel that your hot water system is not working as it should please contact our repairs team 0300 555 0302. Hot water temperature at your taps should reach 50°C within 1 minute of turning the tap on.
- Disinfect and descale your shower head every 3 months in addition to normal cleaning process (using a recognised shower head descaling product to remove lime scale build up) If you are unable to do this and you live in you must inform us.
- If you have a shower or water outlet you do not use regularly, you should flush the system at least once a week by running water through it for several minutes. If you don't use your shower head for a two-week period, we advise you that you should remove the shower head and allow the shower to run for a minimum of 2 minutes as hot as possible. You should then disinfect the shower head before re-fitting.
- You should flush garden hoses for several minutes without creating sprays each time they are used. You should flush through external hose pipes every week and if they are not used for two weeks or more you should remove the nozzle or adjust it so it will not produce a spray, you should let the hose run for 2 minutes. You should disinfect the nozzle before re-fitting.
- If you have been away from home for more than a week you should run every water tap and outlet for several minutes on returning to the property.

If you would like further information in reference to Legionella and Legionnaire's Disease, information can be found on the Health and Safety Executive [website www.hse.gov.uk](http://www.hse.gov.uk) or you can contact [compliance@bchg.co.uk](mailto:compliance@bchg.co.uk)