**Legionella Risk Management Policy**

# Purpose

The purpose of this policy is to ensure that as far as possible all users of [nursing home] are protected from the incidence of Legionnaire’s disease.

# Policy detail

The Administration has agreed to adopt the Legionella Risk Management program. All relevant details regarding roles and responsibilities and testing regimes are contained within this procedure.

The engineer’s role will be to ensure that the relevant testing is completed and that an up to date risk assessment is carried out by a professional company.

# Reporting

The Facility Director will report on an annual basis to the Safety committee and confirm that all testing has been carried out and report any results that may be of concern.

# Review and evaluation

On receipt of the risk assessment the Administrator will review the necessary actions and ensure that these are carried out in a timely manner.

**Approved by:\_\_\_\_\_** **Date for Review: \_\_\_\_\_**

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**Appendix**

Logbook and checklists

## 1. Purpose

1.1. It is the policy of THE FACILITY to ensure that appropriate precautions for the control of Legionella bacteria are identified through a ‘Legionella’ risk assessment process, and appropriate control measures implemented to ensure, so far as is reasonably practicable, the health, safety and welfare of residents and others. The minimum standards to be met include;

* Carrying out Suitable and Sufficient Legionella Risk Assessments;

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* Preparation of an Action Plan or written scheme for preventing or controlling the risk, *where appropriate*;

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* Implementation, management, monitoring and recording of precautions to include regular inspection, microbiological monitoring, temperature checks and flushing, *where appropriate*;

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* Seeking suitable advice and assistance from competent persons, Corporate

Health and Safety Team, or Specialist Consultant;

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* Appointment of a person or persons to be managerially responsible for water system at each premise, i.e. the Responsible Person & Competent Person;



* To otherwise meet the requirements of the HSE Approved Code of Practice;

 ‘Legionnaire’s disease: The Control of Legionella bacteria in water systems.

1.2 The Health and Safety Executive promotes sensible risk management, and states that this is not about: creating a totally risk free society;

## 2. Scope and Application

2.1. This policy applies to all THE FACILITY buildings with water systems including: hot and cold water supply systems, cooling towers, spa baths, pools and showers where THE FACILITY is either the ‘employer’ or is in control of the premises.

2.2. In accordance with THE FACILITY ‘Statement of Policy on Health, Safety and Welfare’, Directors are responsible for applying the Residents Health, Safety and Welfare Policy within their respective Service Areas.

2.3. This policy does not apply to Foundation or Voluntary Aided Buildings although they may wish to adopt this as a ready-made means of securing compliance.

## 3. Background

3.1. Legionella bacteria are naturally present in the environment and if water conditions are favorable to the bacteria i.e. warm, nutritious and stagnant, they will proliferate.

Disturbance of this ‘contaminated’ water can cause tiny droplets to become airborne which, if inhaled, can cause a potentially fatal type of pneumonia called legionnaires disease. Those people especially at risk are the old or those who are ill as their immune system is less able to fight the disease.

3.2. Making sure adequate & appropriate management arrangements exist for controlling Legionella is a requirement defined within the Legionella Toolkit, CMS guidance, and NYSDOH requirements. These are both relevant to legionella issues.

3.3. The Approved Code of Practice has been produced to focus attention on those water systems where it is reasonably foreseeable for persons to be exposed to legionella bacteria, where no controls are in place, such as cooling towers, evaporative AC condensers, plant where stored water temperature exceeds 95F and which releases a aerosol.

3.4. This Procedure defines the system by which THE FACILITY manages the risk from Legionella and is focused upon preventing water conditions ‘favorable’ to the bacteria existing in any of the facility managed water systems including hot and cold water services, spa baths, pools and showers.

## 4. Definition of Terms

Legionella A potentially dangerous type of bacteria when inhaled with water vapor.

Bacterium grows best in warm, nutrient rich water

Legionella Risk A specific risk assessment carried out to determine the risk level of Legionella

Assessment proliferation, and exposure from a specific water system.

Responsible The RP is defined in the Regulatory Reform (Fire Safety) order 2005, and other Person (RP) legislation, and this person has ‘control’ of the building and its facilities. The RP

 may appoint a Competent Person for the building, who is given the day to day responsibility for in-house checks.

Log Book A record book provided to record all local checks and tests carried out, as specified by legionella risk assessment, e.g. sentinel taps hot water temperature checks. Maintenance Cleaning, repair, tests etc required to minimize bacterial growth. Split between the Property Services maintenance contractor and the Local appointed person;

**Sentinel Taps** These are the taps at the start and end of a re-circulating hot or cold water distribution system, which will be nearest and furthest from the storage tank.

## 5. Roles and Responsibilities

5.1. **Corporate Directors**: To provide suitable and sufficient resources for Heads ofService and management for them to carry out their duties and responsibilities in accordance with this Procedure. Monitor the application of this procedure.

5.2. **Heads of Service**: Ensure that managers and staff assist the RP and CP for legionella issues.

5.3. **Responsible Person**: Ensure the Legionella risk assessment addresses all watersystems in the premises. For low risk and simple water systems the risk assessment may only need to be reviewed by the RP or CP on a yearly basis. Where the premises have a complicated hot and cold water distribution system, and/ or complex equipment, e.g. evaporative condenser, and there is not expertise on site, then specialist legionella services should be bought in. Property Services provide a specialist legionella surveying and risk assessment service, and a corporate maintenance contract. The RP should ensure an equal standard is met where the Property Services contractor is not used.

5.3.1. Where necessary, as specified by the risk assessment, the RP needs to identify, appoint, instruct and train a member of staff to carry out regular visual inspections and temperature checks in accordance with the log book, where appropriate. An appropriate thermometer should also be provided and maintained for this purpose e.g. digital probe thermometer.

5.3.2. Notify relevant persons in THE FACILITY of any alterations to the water systems e.g. use premises alteration form, and ensure legionella risk assessment is reviewed.

5.3.3. Monitor the controls to ensure they remain effective, e.g. inspect log book to ensure maintenance and inspections are done and recorded. Keep records to provide evidence you are complying with the above standards where needed (as identified by risk assessment).

5.3.4. Notify the Head of Property Services and the Corporate Health and Safety Team of any planned or unplanned visits by any enforcement authority. Also, to notify any problems with the water system / Legionella precautions immediately to Engineering Services and Health and Safety Team if appropriate. In partnership with Engineering Services monitor the works of any contractors carrying out work on any water systems in the premises for which you are responsible.

5.4. Nominate a Competent Person(s) to complete the log book where necessary (see appendix) ensuring instructions are followed. Contact Property Services for any additional advice and support on maintenance issues.

5.5. **Engineering services:** Supply a service to appoint and monitor compliance with anappropriate and competent ‘Legionella’ maintenance contract covering V buildings. Arrange a specialist contractor to carry out Legionella risk assessments for building water system facilities if requested, *where this service is needed*.

5.5.1. Arrange a specialist contractor to carry out remedial works/recommendations arising from risk assessments where requested by service users. Monitor compliance with

the requirements of this Procedure and provide timely reports to the Head of Property Services.

5.5.2. Ensure the risk of Legionella is considered at the design stage of any building/ structural alteration project.

5.6. **Corporate Health and Safety Team:** Provide Training for managers responsible forpremises (e.g. part of the’ safety course). Provision of advice and assistance in support of this procedure, and the HSE ACOP. Monitor and periodically audit building arrangements, to ensure appropriate Legionella controls are in place.

## 6. Overview of Legionella Risk Management

6.1.1 The following figure provides an overview of Legionella management precautions in THE FACILITY.

## 7. Risk Assessment

7.1 Each premise must undertake a legionella risk assessment (LRA). Most premises will have had an DOH 5223 completed, which will give details of the buildings water system. These documents should enable the LRA to be reviewed by either the RP, CP or Risk Assessor on yearly basis. Those premises which have a low risk water system, where the risk assessment has identified as insignificant risk, Shall conduct yearly test

7.2 THE FACILITY properties can be split into two risk groups, those (A) *high risk* premises, which include occupants that are susceptible, i.e. healthcare premises, residential homes, and (B) *low risk* premises, as detailed in the table below.

##  Premise Risk Type

 (A) High Risk premises (B) Low Risk Premise



 Sheltered Housing Offices

 Buildings with Cooling Towers or

 Evaporative Condensers

 Properties with Gravity Fed Water and

 Systems with Recirculation

The local Legionella Risk Assessment will determine the risk. This table should only be used as a guide.

7.3 If in producing the legionella risk assessment it is identified that the water system does

 not store water between the temperatures of 95 and 120, then only monitoring will be needed to ensure that this control continues to be in place.

7.4 Record Keeping: If the risk assessment identifies the need for ongoing monitoring, all or part of the log book in the appendix will need to be completed.

### 8. Training

8.1. A training needs analysis should first be undertaken, those premises where the risk assessment has shown there to be an insignificant legionella risk, then no specific training is likely to be needed, other than that provided for the FLASH form system. Where significant risk has been identified, and control measures need to be in place, the RP and CP for the premise may seek training to support them with their responsibilities for premises, or others, e.g. caretaker. Contact Engineering Services or the Corporate Health and Safety Team for information on legionella training.

8.2. Managers responsible for premises must ensure the Competent Person nominated to manage/perform temperature checks, etc, fully understands the instructions provided.

If required, further support, advice and training is available from Engineering Services and the Corporate Health and Safety Team.

8.3. Managers must ensure records of all training and instruction (where appropriate) are

held.

### 9. Advice and further information

9.1. Further advice, information and guidance to support this procedure can be obtained from the resources below.
https://www.cdc.gov/legionella/index.html

 <https://www.cdc.gov/infectioncontrol/pdf/guidelines/environmental-guidelines.pdf>

9.2. **Suspected Outbreak**: If it is suspected that the properties water system is implicatedin a legionella disease case the Corporate Health and Safety Team must be notified immediately to organize the THE FACILITY response to the situation.

9.3. Other contact details for information sources including;

* Engineering Services Manager:

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* Property Helpdesk

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* The Corporate Health & Safety Team:

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**Guidance Documents/ Leaflets:**

## Appendix 1. Log book

## Completion Instructions

### Introduction

This log book has been prepared to comply with the Approved Code of Practice ‘The Control of

Legionella bacteria in water systems. The required actions to control the risk from Legionella are split between the management on each site (RP or CP) and the appointed maintenance contractor (conducting more technical aspects). These can be carried out by a Competent Person /caretaker to help reduce costs. The LRA and water services you have within your premises will determine the frequency of visits and tasks required to be carried out under these regulations (if any), and adaptations may need to be made to the log book tables.

### Thermometers

In order to check water temperatures, you are required to purchase and maintain a basic thermometer suitable for checking water temperatures range 0°C - 100°C e.g. digital probe thermometer. These are widely available and are not expensive. To ensure the thermometer remains accurate you should calibrate this monthly. The simplest way to do this is to use boiling water and crushed ice water to check 100°C and 0°C respectively. Adjust accordingly and keep records. If more than 1°C out then please purchase a new thermometer.

### Completing and recording water temperatures

Water temperature record sheets need to be filled in and kept within the logbook. It is usual to spread this over the 12 months, i.e. if you have 24 taps you need to sample 2 per month. Outlets failing to meet the required temperature should be reported for suitable action and retested in subsequent months until satisfactory. Hot Water should be at least 110F after 1 minute and cold water below 65FC after 2 minutes flow.

### Flushing infrequently used taps and showers

Hot or warm water left in pipes for long periods can allow Legionella bacteria to multiply presenting a risk when finally discharged e.g. school showers after summer holidays. Identify infrequently used taps and showers on the ‘Weekly flushing record sheet’ and record when flushing takes place. Flush each tap/ shower for several minutes to ensure stagnant water is fully discharged. Flush all sentinel taps monthly.

### Hot and Cold Water Temperature Monitoring

A schedule for precautionary checks on hot, cold water taps and showers (where there is water storage), the responsible person should organize checks to be carried out at the frequencies indicated below. Where the temperatures fall outside the standards actions should be taken to resolve the problem.

### Weekly Checks

**Showers**: that are not in uses for over a one-week period must be flush from 2 minutes atboth maximum and minimum temperature. A plastic bag should be secured over shower head with corner cut off to allow water to escape.

### Monthly Checks

**Taps:** Temperature of cold water sentinel taps (nearest and furthest to the storage tank), tocheck that water is below 65f.

Run cold tap for 2 minutes then measure temperature by inserting calibrated digital thermometer in the water flow and record reading.

Temperature of hot water sentinel taps (nearest and furthest to the calorifier/ water heater), to check that water is above 110°F.

Run hot tap for 1 minute then measure temperature by inserting calibrated digital thermometer in hot water flow and record reading.

### Actions in the event of negative temperature monitoring checks

In the event of a negative temperature test result being noted, (i.e. either Hot water below 110c or cold above 65c) by the RP or CP the following actions should be carried out.

If hot water:

* then the boiler settings need to be reviewed to ensure that the temperature can be raised.
* Further additional temperature checks should be made after 48 hours to ensure that the

 problem does not persist.

* If the temperature cannot be raised to the required level then further action needs to be taken to ensure the boiler is serviced / checked.

If cold water

* then the situation should be monitored more closely for a period.
* In the event that the temperature remains above the required 20c then further advice needs to be sought from Property Services.

In either case if monitoring indicates an ongoing issue then the water supply must be examined/ tested by a suitably qualified contractor to ensure that the Legionella risk is managed. In the event that a test of the water supply indicates that Legionella is present in high concentrations then the following actions need to be carried out:

* Inform the Corporate H&S Team and Property Services, who will take relevant steps to ensure that the issue can be monitored.



* To shut down any processes which are capable of generating and disseminating airborne water droplets and keep them shut down until remedial cleaning or other work has been done.

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* To immediately arrange emergency disinfection to be undertaken if required.

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* Depending on the client group or staff group that may have been exposed – monitor client

/ staff health to discern whether there are any undiagnosed cases of illness.

**Health and Safety:** Completion of the above checks presents little risk to the health and safety ofstaff.

#### Further Information

 HOT AND COLD WATER SYSTEMS CHECKLIST

Use the checklists to keep up to date with water systems maintenance requirements for your site.

Please be aware that not all tables may be relevant to your site, i.e. you may not have showers. Fill in dates of when work is carried out and initial/ signature in the signed columns.

### MONTHLY HOT AND COLD WATER TEMPERATURE RECORD SHEET

#### HOT WATER TAP OUTLET RECORD SHEET – Hot Water to be at least 110oC after 1 minute

|  |  |  |  |
| --- | --- | --- | --- |
| **Date**   | **Location**   | **o****Temp ( C)**   | **Signed**   |
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#### COLD WATER RECORD SHEET – Cold water to be below 65 after 2 minutes

|  |  |  |  |
| --- | --- | --- | --- |
| **Date**   | **Location**   | **o****Temp (F**   | **Signed**   |
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If temperatures are not achieved, contact Property Services Helpdesk/ Property Services Manager.

 WEEKLY FLUSHING RECORD SHEET for infrequently used taps and showers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date**  | **Location**  | **OK (Yes/**  | **Fault Notified**  | **Person/ Signature**  |
|    |    | **No)**   | **(if applicable)**   |    |
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Flush shower/ tap for several minutes taking care not to generate aerosols / droplets.

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| --- | --- | --- | --- |
| **Date**  | **Sampling Company**  | **Sample Location**  | **Pass/ Fail**  |
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Bacteria sampling only usually carried out routinely for Cooling Towers/ High Risk Systems.

### QUARTERLY CLEANING/ DISINFECTION RECORD SHEET for infrequently used taps and showers

|  |  |  |  |
| --- | --- | --- | --- |
| **Date**     | **Location**     | **Action undertaken,** e.g. shower dismantled, cleaned, de-scaled & disinfected.   | **Person/ Signature**     |
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