

Water Safety Management Policy



Title:			
Water Safety Management Policy			
Date effective from:	June 2023	Review date:	June 2025
Approved by:	NHS Lothian Policy Approval Group		
Approval Date:	6 June 2023		
Author/s:	Head of Health and Safety NHS Lothian Water Safety Group		
Policy Owner:	Director of Estates and Facilities		
Executive Lead:	Deputy Chief Executive		
Target Audience:	All ward/departments/buildings where patients are cared for and any areas NHS Lothian staff work		
Supersedes:	Water Safety Management Policy v 3.0 (2021)		
Keywords (min. 5):	Water, safety, group, plan, <i>Legionella</i> , <i>Pseudomonas aeruginosa</i> , harmful pathogens		

Water Safety Management Policy



Version Control

Date	Author	Version/Page	Reason for change
Sept 2019	Head of Hard FM, Health and Safety Adviser/NHSL Water Safety Group	v1.1	National HTM change. Water Safety Management encompasses <i>Legionella</i> species, <i>Pseudomonas aeruginosa</i> and other pathogens
Dec 2019	Head of Hard FM, Health and Safety Adviser/NHSL Water Safety Group	v2.0	Approved by the Policy Approval Group
Aug 2021	Head of Hard FM, Health and Safety Adviser/NHSL Water Safety Group	v2.1	Under technical review
Dec 2021	Head of Hard FM, Health and Safety Adviser/NHSL Water Safety Group	v3.0	Approved by the Policy Approval Group
Nov – Dec 2022	Head of Health and Safety NHSL Water Safety Group	v3.1-3	Under review
June 2023	Head of Health and Safety NHSL Water Safety Group	v4.0	Approved by the Policy Approval Group

Executive Summary

Microorganisms such as *Legionella* species and *Pseudomonas aeruginosa* can grow in water distribution systems. Growth is promoted by conditions such as low flow, stagnant water, and warm water temperatures.

This document is concerned with the management of risks posed by water systems to ensure sources of risk are identified, and measures taken to prevent and control risk when water systems become contaminated with *Pseudomonas aeruginosa* from water outlets, or *Legionella* species, or other water associated micro-organisms; and where there is a means of creating and transmitting water droplets or aerosols that could be inhaled.

Contents

	Page number
1.0 Purpose	5
2.0 Policy statement	5
3.0 Scope	6
4.0 Definitions	6
5.0 Implementation roles and responsibilities	9
5.1 NHS Lothian Chief Executive (Duty Holder)	9
5.2 Designated Person (Water) - Director of Estates and Facilities	9
5.3 Responsible Person (Water) – Head of Hard FM Estates	10
5.4 Authorised Person (Water) – Sector Manager	12
5.5 Competent Persons	13
5.6 Associate Director and Head of Soft FM	13
5.7 Area Managers Soft FM	13
5.8 Site Service Managers and Assistant Managers	13
5.9 Domestic Supervisors Soft FM	14
5.10 Authorising Engineer	14
5.11 Capital Planning Director	14
5.12 Lead Assurance Manager	15
5.13 Employees	15
5.14 Consultant Microbiologist	16
5.15 Infection Control Doctor	16
5.16 Assistant Director for Infection Prevention and Control	16
5.17 Head of Health and Safety	16
5.18 Site Director	17

Water Safety Management Policy



5.19	Associate Nurse Director	17
5.20	Senior Charge Nurse (from relevant Augmented Care units)	17
5.21	Third Party Duty Holders	17
5.22	The Water Safety Group	18
5.23	Problem Assessment Group	19
5.24	Incident Management Team (IMT)	19
6.0	Associated materials	19
7.0	Evidence base	20
8.0	Stakeholder consultation	21
9.0	Monitoring and review	21

1.0 Purpose

This policy document defines the management structures and arrangements for effective control of risks posed by the bacterium *Pseudomonas aeruginosa* from water outlets, and *Legionella* from water distribution and supply systems, and associated equipment. Risks to human health from other waterborne pathogens is also included.

2.0 Policy statement

The provision of safe water systems is an explicit duty by virtue of statute. This policy outlines the structures in place that assist NHS Lothian to fulfil its legal duties.

The governance arrangements for the management of water safety to meet regulatory requirements are outlined in Figure 1.

Figure 1 Governance Arrangements for the Management of Water Safety

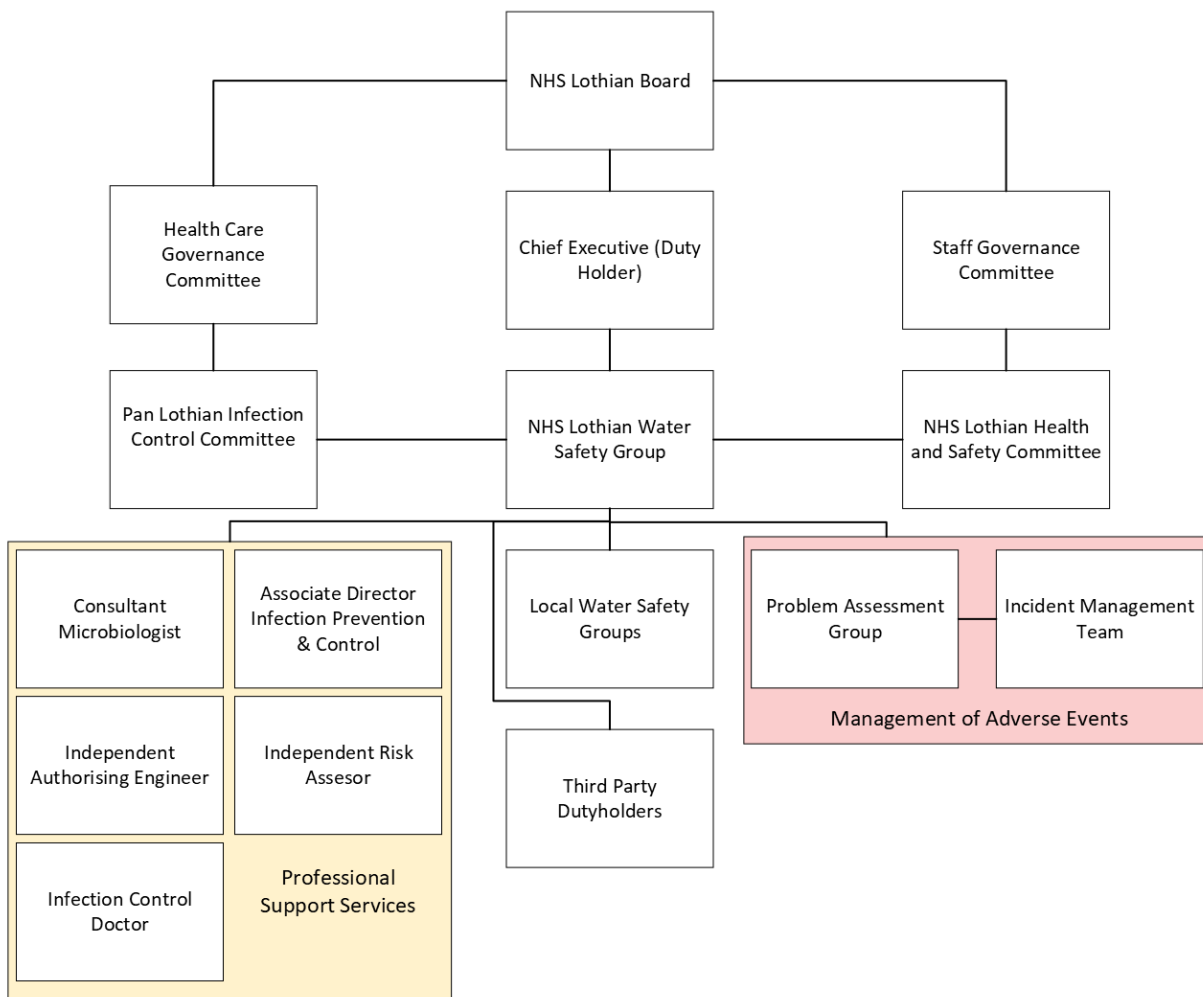
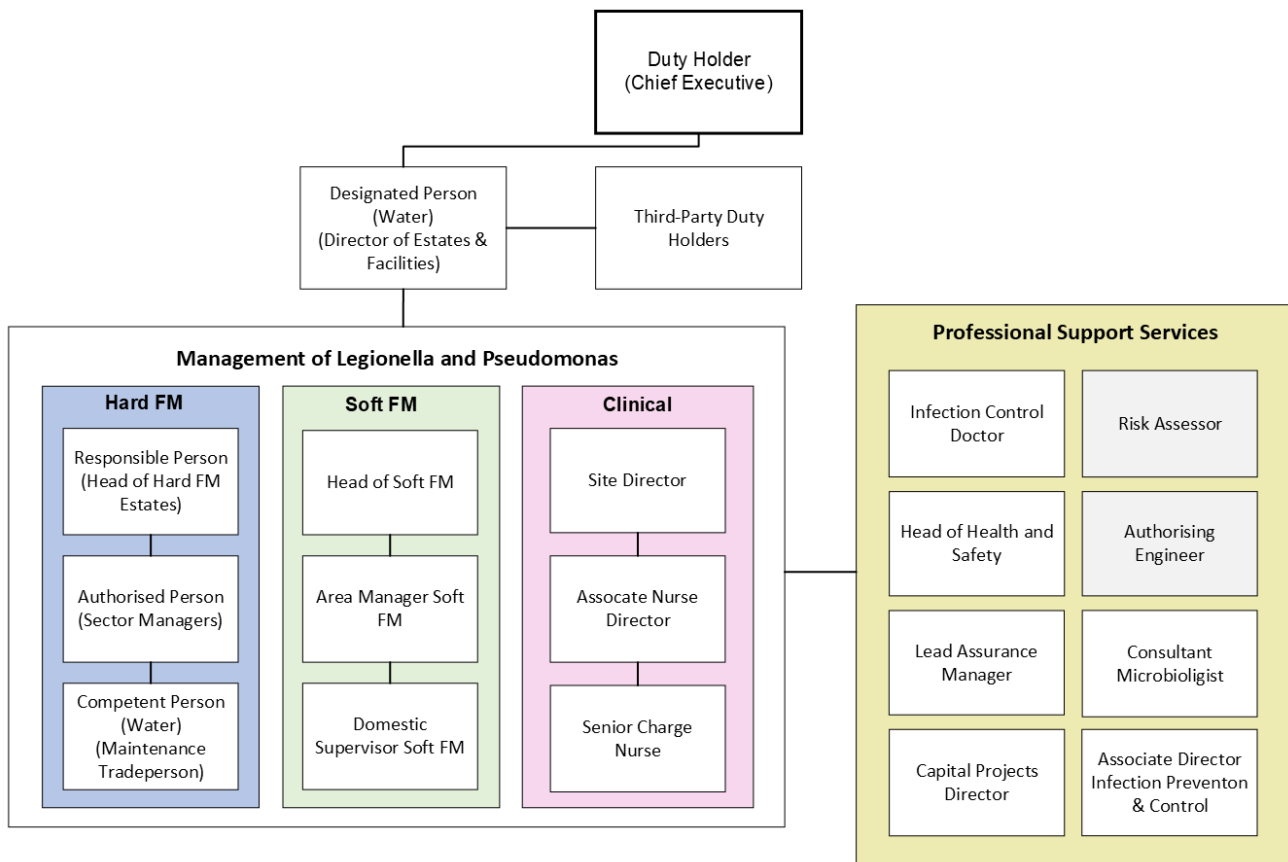


Figure 2 below illustrates the operational management structure of water safety, and the designated staff functions necessary to ensure efficacy of the water systems.

Figure 2 Designated Staff Functions for the Operational Safety of Water



3.0 Scope

The scope of this policy applies to NHS Lothian premises to ensure a risk-based approach is adopted to the microbiological safety of water to prevent and control infection from water distribution and supply systems, and associated equipment. This policy applies in any undertaking involving a work activity managed by NHS Lothian or on our behalf.

4.0 Definitions

Competence Management should implement a programme of training to ensure those appointed to devise strategies and undertake control measures are suitably informed, instructed and trained on practices affecting water hygiene, and they can interpret relevant technical guidance, and codes of practice, to perform their tasks in a safe and technically competent manner.

A **Competent Person** is appointed in writing by the Authorised Person (Water) to carry out work on the water, storage, and distribution system.

Dead-Legs Pipes leading to a fitting through which water only passes infrequently when there is draw-off from the fitting, redundant or abandoned legs of pipework.

Flushing Controlled draw off from water outlets to promote the removal of bacteria or debris from a water system.

HAI-SCRIBE (Healthcare Associated Infection Systems for Controlling Risk in the Built Environment) is an online risk management tool. The tool assists in the identification of infection risks and advises on collaboration with others to manage or mitigate risks.

Health Facilities Scotland (HFS) is a division of National Services Scotland and provides operational guidance to NHS Scotland bodies on a range of healthcare facilities topics.

Legionnaires' disease a form of pneumonia caused by bacteria of the genus *Legionella*, normally contracted by inhaling small droplets of water or aerosols, suspended in the air, containing the bacteria.

Legionella is a single bacterium of the genus *Legionellae*.

Legionellae is the name of a genus of bacteria which includes over 50 species and belongs to the family *Legionellaceae*. They are ubiquitous in the environment and found in a wide spectrum of natural and artificial collections of water.

Legionella pneumophila is one of the causative organisms of Legionnaires' disease.

Legionellosis any illness caused by exposure to *Legionella*.

Outbreak of Legionellosis An outbreak is defined as two or more linked cases of the same illness where the onset of illness is closely linked in time (SHTM 04-01 Part G Part G: Operational procedures and Exemplar Written Scheme). However, a single case of legionellosis requires immediate investigation under the Public Health Act.

Pathogenic bacteria can cause mild to life-threatening diseases in human beings or other organisms. Pathogenic bacteria reproduce within the host and cause the body to become ill during the process of replication.

Pseudomonas aeruginosa is a bacterium that can cause infections sometimes associated with contact with contaminated water, particularly in those with a weakened immune system, for example cancer patients, new-borns and people with severe burns, diabetes mellitus or cystic fibrosis.

RIDDOR The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 requires employers who have control of work premises, to report to the Health and Safety Executive, accidents and some diseases that arise out of or in connection with work, including cases of legionellosis, where applicable.

Risk assessment identifies and assesses the risk of adverse exposure to any water associated micro-organism from work activities and water sources on premises and determines any necessary precautionary measures.

Sampling is the collection of water samples for analysis to determine the presence of bacteria.

Schematic diagram is a simplified but accurate illustration of the layout of the water system, including parts temporarily out of use.

Scottish Health Protection Network (SHPN) Guidance Group oversees the process for ensuring the quality of the SHPN produced guidance that supports health protection practice in Scotland. Their main role is to encourage consistent high standards of health protection practice by promoting a multidisciplinary approach to the development of quality assured guidance.

Service provider companies or individuals or their sub-contractors who are involved with providing advice, consultancy, operating, maintenance and management services or the supply of equipment or chemicals to the owner or occupier of premises.

SHTM 04-01 Scottish Health Technical Memorandum 04-01 Parts A, B, C, D, E F and G: water safety for healthcare premises.

Stagnation is the condition where water ceases to flow and is therefore liable to microbiological growth.

Water Supply The source of water supply to healthcare premises is by one or more service pipe connections from the mains of the water supply authority.

Water System The main purpose of water supply system is the distribution of water to all its users. Dead-end mains are undesirable. In general, the system includes, but are not limited to, water pipelines, tanks, pumps, calorifiers, feed tanks, valves, showers, heat exchangers, quench tanks, water softeners, chillers and shall be sized to handle the highest demand on the system and provide peak demands as well as the maximum daily demand. Equipment can include non-disposable nebulisers used for respiratory therapy, and autoclaves, in a clinical environment.

Water Safety Plan (WSP) describes the entire water distribution system including, but not limited to, schematic diagrams, water related assets on the property written operating procedures, maintenance arrangements on the water system, contingency plans for disruptions to the incoming water supply, and audit arrangements.

WRAS The Water Regulations Approval Scheme is an independent UK certification body for plumbing products and materials, or water fitting, of suitable standard against The Water Supply (Water Fittings) (Scotland) Byelaws 2014.

Written Scheme provides details on how to use and carry out the control measures and water treatment routines and describes the correct operation of the water system plant.

5.0 Implementation roles and responsibilities

5.1 Chief Executive (Duty Holder)

The Chief Executive is appointed under this policy as the Duty Holder in accordance with the Approved Code of Practice and Guidance on Regulations, 'Legionnaires' Disease: The control of *Legionella* bacteria in water systems' (2013).

The Duty Holder is ultimately accountable, and on whom the duty falls, for the safety of water to prevent and control infection. Under Health and Safety law, Duty Holders must ensure the health and safety of their employees or others who may be affected by their undertaking.

The Duty Holder is responsible for:

- appointing a competent person or persons (in writing) to take day-to-day responsibility for controlling any identified risk from *Legionella* bacteria, known as the 'responsible person' who will have sufficient authority, competence, and knowledge of the installation to help undertake the measures needed to comply with the requirements in statute
- ensuring that the person who carries out the Legionella risk assessment and provides advice on prevention and control of exposure is competent to do so
- all aspects of water safety to be optimal where there is a recognised microbiological hazard i.e. identifiable risk from any water associated micro-organism.
- making reasonable enquiries, with the help of the appointed responsible person to ensure that organisations such as third-party water treatment service providers, or consultants, are competent and suitably trained and have the necessary equipment to carry out their duties in the written scheme.

5.2 Designated Person (Water) - Director of Estates and Facilities

The Designated Person (Water) provides the link between the NHS Board and professional support services represented on the Water Safety Group.

The Designated Person (Water) shall:

- be appointed by the Duty Holder in writing
- provide an informed position at Board level for the safety of water
- communicate all relevant issues to the Board that may impact on the delivery and effectiveness of this policy
- ensure the Board make adequate resource provision for the implementation of this policy.

The Designated Person (Water) is responsible for:

- all aspects of water safety to be optimal where there is a recognised microbiological hazard i.e. identifiable risk from any water associated micro-organism, to include fungi such as mould so the scale of hazard is wider than just bacteria.

- ensuring contractual arrangements are in place to ensure the third-party Duty Holders comply with this Policy
- advising the Board on the potential areas of water-related risks and identifying where systems do not adhere to this guidance
- appointing a suitable Estate’s manager to act as the Responsible Person (Water), as defined in appointment letters, to assume day-to-day responsibility for controlling and managing any identified risk from *Legionella* and *Pseudomonas* bacteria
- appointing in writing an independent professional advisor to act as the Authorising Engineer (Water), with a brief to provide services in accordance with relevant National Services Scotland, Scottish Health Technical Memorandum (SHTM) 04-01 Parts A, B, C, D, E F and G: Water safety for healthcare premises, and relevant statute.
- appointing in writing an independent professional to act as Risk Assessor for *Legionella*, with a term of reference to provide services in accordance with SHTM and statute
- appointing in writing Authorised Persons (Water).

5.3 Responsible Person (Water) - Head of Hard FM Estates

The Responsible Person (Water) reports to the Designated Person (Water). The Responsible Person (Water) should have sufficient authority to ensure that all operational procedures are carried out.

The Responsible Person (Water) is operationally responsible for:

- day-to-day responsibility for controlling and managing any identified risk associated with the safe operation and management of the water systems
- management and control of *Legionella* and safe hot water management throughout the premises

Note: The Responsible Person (Water) will take cognisance that *Legionella* monitoring of hot and cold-water systems will be carried out and review frequency of sampling where there is doubt about the efficacy of the control regime or it is known that recommended temperatures, disinfectant treatments, or other precautions are not being consistently achieved throughout the system.

- sampling for *Legionella* organisms in water systems will be in accordance with BS 7592:2022. The analysis of water samples for the detection and enumeration *Legionella* must also be performed in UKAS accredited laboratories.
- the sampling strategy must identify patients at increased risk, to include, but not limited to, areas of immuno-compromised patients, for example, oncology, haematology, and transplant units. The regime for sampling should identify all components of the recirculating water system in those areas, and representative outlets where water samples can be taken, and results interpreted to determine the level of colonisation.
- re-testing outlets that have recently tested positive and where there is a higher risk of biofilm regrowth and recurrence of the organism in the water.

- HSG274 Part 2 gives guidance on action to take if *Legionella* is found in the water system for healthcare premises with vulnerable patients.
- taking all reasonable steps to ensure the competence of those carrying out work who are not under their direct control, including risk assessors, Authorising Engineer, and water treatment service providers
- ensuring that *Legionella* risk assessments are carried out every two years, or sooner. if there is a significant change to a water distribution system or change of use by the user
- risk assessments must record the significant findings and records must be kept. This should include any groups of employees identified as being particularly at risk and the steps taken to prevent or control risks.
- records of risk assessments must be retained throughout the period they are current and for at least two years afterwards
- considering the risk assessment findings and prioritise any remedial works
- ensuring that necessary precautions identified by risk assessment are applied
- instructing and supervise the completion or review of risk assessments
- once the risk has been identified and assessed, a written scheme should be prepared for preventing or controlling it. In particular, the written scheme should contain the information about the water system needed to control the risk from exposure.

Note: Employers must consult employees or their representatives on the identified risks of exposure to *Legionella* bacteria and the measures and actions taken to control the risks. Employees should be given an opportunity to comment on the assessment and control measures and the employer should take account of these views, so it is important for employers to publicise to employees that a Legionella risk assessment has been performed

- ensuring water safety compliance with NHS Lothian’s statutory obligations
- seeking advice in relation to an adverse event for any detection of *Pseudomonas aeruginosa* or *Legionella* spp. from a consultant microbiologist, the Infection Prevention and Control Team, and the Authorising Engineer, to advise and lead on these issues.
- ensuring that all operational procedures are carried out effectively

Note: Estates and Facilities employees must ensure that before equipment containing or concerned with any form of water system is purchased, taken into use, modified, or removed, to ensure all equipment used within NHS Lothian’s buildings is appropriate for its use and does not constitute a significant *Legionella* or *Pseudomonas aeruginosa* risk.

Equipment includes, but is not limited to, water coolers (including bottled water type), air conditioning units, humidifiers, de-humidifiers, ice making machines and any equipment which has a device for holding water or producing spray, mist, or water vapour.

- ensuring good liaison between the estate’s employees, maintenance service providers, and clinicians, to ensure that water services are sufficiently used to prevent the growth of water-borne pathogenic microorganisms such as *Legionella*.

5.4 Authorised Person (Water) – Sector Manager

The Authorised Person (Water) reports to the Responsible Person (Water). The Authorised Person (Water) is responsible for:

- implementation of the operational requirements of the Water Safety Plans
- publishing a Water Safety Plan, incorporating risk assessment, for NHS Lothian healthcare facilities in accordance with water safety for healthcare premises, SHTM 04-01, and Legionnaires' Disease, Technical guidance HSG274
- reviewing the Water Safety Plan on an annual basis and when there are alterations, repairs, changes of use, building works, or critical incidents.
- ensuring those specifically appointed to implement the control measures are suitably informed, instructed and trained and their suitability assessed. They must be properly trained to a level that ensures tasks are carried out in a safe, technically competent manner; and receive regular refresher training.
- maintaining records of all training for anyone working on the water system. Records, either written or electronic, should contain accurate information about who did the work and when it was carried out.

Note: The Authorised Person (Water) must be aware that manufacturers, importers, suppliers, installers, and service providers have specific responsibilities that are set out in the Health and Safety Executive’s Approved Code of Practice L8.

- maintaining up-to-date schematic diagrams showing the layout of the plant or system, including parts temporarily out of use, and which will include dead-legs.
- once the risk has been identified and assessed, preparing a written scheme about the water system for preventing or controlling it.
- ensuring that HAI-SCRIBE (Healthcare Associated Infection Systems for Controlling Risk in the Built Environment) is completed before any work is undertaken that may compromise water quality to clinical areas.
- ensuring that an accurate record of all assets relating to the hot and cold-water distribution systems are set up and regularly maintained
- ensuring employees are retested for FFP3 masks by the RPE Technician as required
- retaining records of any monitoring inspection, test or check carried out, for at least five years.
- demonstrating familiarisation with the system with having appropriate skills, knowledge (attendance of professional courses), and experience.
- ensuring no work will be carried out on the water system without the knowledge and written consent of the Authorised Person.

- ensuring that delegated projects comply with this Policy and NHS Board’s Water Safety procedures.
- for establishing and maintaining the roles and validation of Competent Person (Water) who may be employees of the organisation or appointed contractors.

Note: As a minimum, the names, and positions of those responsible for performing the various tasks under the written scheme must be recorded

All records should be signed and authenticated by those performing the tasks assigned to them, for example, inspections, maintenance, and treatments.

- Larger sites may require more than one Authorised Person (Water)

5.5 Competent Persons

- a trade or specialist service provision that undertakes works on the water system
- replace point of use filters in accordance with standard operating procedures

Note: No work should be carried out on the water system without knowledge and written consent of the Authorised Person (Water).

5.6 Associate Director and Head of Soft FM Services

The Associate Director (of Estates & Facilities) and Head of Soft FM Services are responsible for:

- ensuring that suitable arrangements are in place to facilitate the necessary cleaning activities required for water safety hygiene.

5.7 Area Managers Soft FM

The Area Managers for Soft FM Services are responsible for:

- ensuring suitable training and resource is provided to meet the standards of cleaning required
- ensuring that sufficient competent staff are available to carry out the specified cleaning activities in relation to water safety hygiene
- maintaining water quality, but limited to cleaning of sanitary items, hand wash basins and sinks.

5.8 Site Services Manager and Assistant Managers

Site Services Manager (including Domestic Services) and Assistant Managers are responsible as part of the management structure for:

- overseeing the implementation of the NHS Scotland National Cleaning Services Specification
- overseeing the implementation and effective use of cleaning schedules
- provision of advice and support relating to cleaning issues

- allocation of resources to ensure that the requirements of the cleaning specification can be achieved.

5.9 Domestic Supervisors Soft FM

The Domestic Supervisors Soft FM are responsible for:

- supervision of cleaning services daily
- ensuring relevant instruction, information, and supervision, is provided to meet the required hygiene standards to prevent the proliferation of micro-organisms at water outlets
- reviewing areas of responsibility using risk assessments
- auditing the clinical environment ensuring that the Domestic Assistants are fulfilling their duties

ensuring that NHS Scotland's national cleaning services specification is effectively used

- ensuring the 'run through' of water outlets is maintained in accordance with local standard operating procedures
- maintaining records of tasks undertaken in accordance with water safety operating procedures and retain for five years
- reviewing exception reports and escalating concerns where cleaning is unable to proceed in accordance with the specified cleaning regimes
- ensuring domestic cleaning employees are tested for, and provided with FFP3 face masks, in the event of cleaning water outlets where *Legionella* has been detected
- ensuring employees are retested for FFP3 masks by the RPE Technician as required
- surface cleaning point of use filters in accordance with standard operating procedures.

5.10 Authorising Engineer

The Authorising Engineer (Water) will be appointed by the Designated Person (Water).

This person acts as an independent professional advisor to the NHS Lothian Board, to ensure that the organisation provides a system for the safe operation and management of water safety in accordance with the Approved Codes of Practice and Guidance and the relevant SHTM guidance, and other related publications.

The Authorising Engineer (Water) is a member of the NHS Lothian Water Safety Group.

5.11 Capital Planning Director

The Capital Planning Director is responsible for:

The compliance with all current, relevant national guidance that relates to Water Safety and its provisions this includes new buildings, major refurbishment, upgrades, department closures or re-

commissioning which involves the introduction of new water services, disruption and cutting into water services must fully comply with this policy at all stages of the project/contract.

Ensuring the water systems are designed, installed, and commissioned in line with the current legislation and standards, which includes, the Construction (Design and Management) Regulations 2007 (CDM) and the Building (Scotland) Regulations 2004 (and associated amendments).

5.12 Lead Assurance Manager

The Lead Assurance Manager ensures the water safety risk management is audited to inform the organisation's assurance framework.

Audit will require inspection of water systems and their records, to establish both the degree of compliance of records present and the accuracy of the records.

The audits establish:

- the required level of service is being met
- system performance monitoring involves more than just microbiological testing of water. Water temperature monitoring is crucial and best performed continually by an electronic building management system with periods of temperature excursion being captured, investigated, report to WSG and audited.
- plant maintenance is being carried out to the agreed standard
- records are being correctly maintained
- health and safety requirements are being complied with
- only agreed contractors and subcontractors with the appropriate knowledge and competence are being employed
- arrangements for ensuring compliance with the Water Safety Plan are achieved.

The results of these verification audits will be reported to the Water Safety Group. The Lead Assurance Manager is a member of the Water Safety Group.

5.13 Employees

Employees are responsible for:

- reporting any problems or concerns as soon as they are identified that relate to the safety, maintenance, reduced use of water outlets, or any other changes in use or cleanliness of water outlets
- where infrequently used outlets are deemed to be no longer required, they should notify the Estates and Facilities department so that they can be removed.
- inform the Estates and Facilities department when unoccupied areas are to be re-opened after a prolonged closure. When they are brought back online, they can cause heavy contamination, which could disrupt the efficacy of the water treatment regime.

5.14 Consultant Microbiologist

The Consultant Microbiologist will:

The role of a consultant microbiologist is primarily in relation to assessing risk of infection to patients from the water system and liaison with the NHS Lothian microbiology laboratory and reference laboratories when there are HAI investigations and to advise on optimal patient infection management. They work in conjunction with the ICD and IPCT to:

- provide advice in relation to discovery of an organism of interest in a water system itself or in a person who has been exposed to a contaminated water system
- liaise with the Authorising Engineer, and the Infection Prevention and Control Team, for overseeing the management of adverse events.

The Consultant Microbiologist is a member of the Water Safety Group.

5.15 Infection Control Doctor

The Infection Control Doctor is a medically qualified consultant or consultant clinical scientist. This is an infection specialty provided with dedicated time allocation by NHS Lothian to advise on microbiological aspects of water quality with regards to *Legionella* species and *Pseudomonas aeruginosa* and interpret clinical risk of infection from water after undergoing specialist postgraduate training. The Infection Control Doctor may perform the role of the consultant microbiologist if qualified to do so. Additionally, they are able to advise on infection control policy, and have shared responsibility for the maintenance of water quality from the point it leaves the tap along with the other core members of the Water Safety Group.

5.16 Associate Director for Infection Prevention and Control

The Associate Director for Infection Prevention and Control advises on clinical procedure for the prevention and control of water borne pathogens and is usually done in conjunction with ICDs and microbiology.

- advise on the procedure for the prevention and control of waterborne pathogens
- advise on the location of 'high risk' patient services and potential areas of risk

5.17 Head of Health and Safety

The Head of Health and Safety will:

- be responsible to ensure there is H&S staff representation present at water related IMT's
- provide advice in respect of compliance with statutory obligations
- help carry out the measures needed to comply with the law
- act as key liaison with the HSE during any visits
- advise on risk assessments and policy on the security of water systems

- provide a person (RPE Technician) with adequate knowledge and training to undertake FFP3 respirator face fit testing.

The Head of Health and Safety is a member of the Water Safety Group.

5.18 Site Director

The Site Director will:

- ensure that all water management issues are carried out in accordance with the relevant legislation
- provide sufficient resources to ensure that all water management issues are dealt with in accordance with the relevant legislation
- ensure that this policy is implemented and adhered

5.19 Associate Nurse Director

The Associate Nurse Director will:

- ensure training needs are fulfilled for those persons involved in the management of risk of diseases due to water borne pathogens
- ensuring good liaison between the estate's employees, maintenance service providers, and clinicians, to ensure that water services are sufficiently used to prevent the growth of water-borne pathogenic microorganisms such as *Legionella*.

5.20 Senior Charge Nurse (from relevant Augmented Care units)

The Senior Charge Nurse will:

- ensure that 'running' water outlets is performed by domestic services employees.
- ensure that water services are sufficiently used to prevent the growth of water-borne pathogenic microorganisms such as *Legionella*
- ensure that all water management issues are carried out in accordance with the Water Safety Plan
- identify and report any concerns relating to reduced use, changes in use, or problems associated with maintenance or cleanliness of water outlets to the Estates and Facilities department and the Infection Prevention and Control Team (IPCT).

Note: During temporary closure of wards or departments, a procedure for flushing the hot and cold-water service systems should be instituted. This will be the responsibility for Estates and Facilities.

5.21 Third Party Duty Holders

Premises with several Duty Holders in one building must have an explicit agreement that defines the responsibilities for water safety management, such as a contract agreement. The extent of the duty will depend on the nature of that agreement.

The management contracts must specify who has responsibility for maintenance and safety checks, including managing the risk from *Legionella*.

Where there is no contract or agreement in place or it does not specify who has responsibility, the duty is placed on whoever has control of the premises and the water system in it.

Those who have control of premises for work-related activities or the water systems in the building, have a responsibility to those who are not their employees, but who use those premises.

In respect of this water safety policy, the third-party duty holder is responsible for:

- the design and construction of facilities
- appointing and monitoring a competent facilities management provider to ensure that the facilities provided remain fit for purpose and are maintained in good order and in compliance with the obligations set out in legal standards
- cooperating with the Board and its representatives in maintaining a safe environment for patients, visitors and staff and complying with this policy and all relevant water safety legislation and applicable guidance.
- ensuring that appropriate Authorised and Competent Persons are appointed by the services provider to carry out the 'day-to-day' duties in accordance with the Water Safety Plan and its contractual obligations as set out in the terms of the contract including relevant legislation, best industry practice and Healthcare specific guidance
- cooperating with the Board and its representatives in maintaining a safe environment for patients, visitors and staff and complying with this policy and all relevant water safety legislation and applicable guidance
- providing reports of maintenance activity, audits, and performance of water systems for all premises covered by the contract
- providing a quarterly exception report to the Water Safety Group
- advising the Water Safety Group of any operating conditions or exceptions which increases risk
- ensuring the 'day-to-day' duties are carried out in accordance with the Water Safety Plan and its contractual obligations.

5.22 The Water Safety Group

The Water Safety Group is accountable to the NHS Lothian Board and is a sub-group of the Pan Lothian Infection Control Committee and the NHS Lothian Health and Safety Committee, to which it reports. Local Water Safety Groups report to The Water Safety Group.

The NHS Lothian Water Safety Group provides a multi-disciplinary group for ensuring it identifies microbiological hazards, assesses risks, identifies, and monitors control measures and develops incident protocols.

The Water Safety Group considers routine maintenance reports, *Legionella* control and testing, water quality testing and compliance with Public Health Scotland requirements, including testing of augmented care areas.

The Water Safety Group is pivotal in ensuring that decisions affecting the safety and integrity of the water systems and associated equipment do not go ahead without being agreed by them. This includes consultations relating to decisions on the procurement, design, installation and commissioning of water services, equipment, and associated treatment processes.'

5.23 Problem Assessment Group

Suspected cases of Legionnaires' disease possibly acquired in healthcare premises will be managed in line with the National Infection Prevention and Control Manual and investigated by the Problem Assessment Group (PAG) who will identify and facilitate the remedy for potential sources of infection.

The Management of Adverse Events (Figure 1 Governance Arrangements for Management of Water Systems) refers to discovery of micro-organisms within surveillance or targeted water cultures, for which there are interpretative criteria and explicit actions to take.

A PAG leading to an IMT lends itself more to Healthcare Related patient infections and investigation of Healthcare Associated Infection with a potential water source than to routine corrective action of the water system.

The responsibility is on members of their own teams to communicate with them about greater detail or by their attendance at the PAG/IMT.

5.24 Incident Management Team (IMT)

If a water system is implicated in an outbreak of Legionnaires' disease (led by the ICD/IPCT), the outbreak would be managed by Public Health in line with legislation.

Best practice emergency treatment of that system should be carried out as soon as possible. An incident control team will always be convened to investigate outbreaks of legionellosis.

The management arrangements for any investigation are in line with the National Infection Prevention and Control Manual.

6.0 Associated materials

[Estates & Facilities Outlet Cleaning and Water Run Through Standard Operating Procedure \(Soft FM\)](#), approved by the Director of Estates & Facilities, 2022

[Augmented Care Programme TVC Guidance](#), approved by Head of Operations (Hard FM), NHS Lothian Estates and Facilities, 2022

[Water Safety Standard Operating Procedure \(Facilities\)](#), approved by the NHS Lothian Water Safety Group, 2020

[Water Safety Management Pack \(for H&S Chairs\)](#), approved by the NHS Lothian Water Safety Group, 2020

Management of Water Safety in New Build and Refurbishment Projects (2023) *[under development]*

NHS Lothian Water Safety Group (WSG) Terms of Reference (2021)

[Standard Operating Procedure SUP05 Provisions of Drinking Water – NHS Lothian Procedures \(2022\)](#), approved by the Director of Estates & Facilities, 2022

7.0 Evidence base

- [World Health Organisation \(WHO\) Water Safety in Buildings](#), March 2011.
- [Control of Substances Hazardous to Health 2002 \(COSHH\)](#)
- [Managing for health and safety \(HSG65\)](#), 2013
- [Management of Health and Safety at Work Regulations 1999](#)
- [The Health and Safety at Work etc Act 1974](#)
- The Water Fittings and Materials Directory [Water Regulations Advisory Scheme](#)
- [The Water Supply \(Water Fittings\) \(Scotland\) Byelaws 2014](#)
- [BS 7592:2022 Sampling for Legionella organisms in water systems. Code of Practice](#)
British Standards Institution
- [Legionnaires’ disease Part 2: The control of legionella bacteria in hot and cold-water systems HSG274 Part 2](#) Published 2014
- [Legionnaires’ disease Part 3: Technical guidance: The control of legionella bacteria in other risk systems](#) Published 2013
- [Legionnaires’ disease A brief guide for Duty Holders](#) Published by the Health and Safety Executive 04/12 INDG458
- [The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013](#)
- [The Safety Representatives and Safety Committees Regulations 1977](#) and the [Health and Safety \(Consultation with Employees\) Regulations 1996](#)
- [Scottish Health Technical Memorandum 04-01](#) Parts [A](#), [B](#), [C](#), [D](#), [E](#), [F](#) and [G](#): water safety for healthcare premises
- [BS 8580-2:2022 Water quality Part 2: Risk assessments for Pseudomonas aeruginosa and other waterborne pathogens – Code of practice](#)
- [Public Health \(Notification of Infectious Diseases\) \(Scotland\) Regulations 1988](#)
- [The control of Legionella bacteria in water systems. Approved Code of Practice and Guidance \(L8\) \(2013\)](#)

-
- [HPS Guidance \(2018\) for Neonatal units \(NNU's\) \(Levels 1,2 &3\) Adult and paediatric Intensive care units \(ICUs\) in Scotland to minimise the risk of Pseudomonas aeruginosa infection from water](#)
 - [HPS Guidance: CEL 08 \(2013\) Water sources and potential infection risk to patients in high-risk areas](#)
 - [HPS Guidance for Prevention and management of healthcare water-associated infection incidents/outbreaks \(2019\)](#)
 - [ISO 11731: 2017 UKAS Water quality - Enumeration of Legionella](#)
 - [Building \(Scotland\) Regulations 2004](#)
 - [National Infection Prevention and Control Manual \(2022\)](#)
 - [Health Facilities Scotland The NHS Scotland National Cleaning Services Specification 2016](#)
 - [Guideline on Management of Legionella Incidents, Outbreaks and Clusters in the Community \(Health Protection Scotland, 2014\)](#)

8.0 Stakeholder consultation

By law, employers have a duty to consult with their workforce on health and safety matters. As part of this requirement consultation for this policy included trade unions, health and safety representatives, the Water Safety Group, and members of health and safety committees. Technical advice was sought from Clinical, Infection Prevention and Control, Hard and Soft Estates & Facilities Management, Capital Planning, and the Authorising Engineer (Water).

9.0 Monitoring and review

This policy document shall be subject to review every two years from the date of issue, or sooner if an audit or review of the water safety management system has identified shortcomings in preventative or protective measures, failures, or omissions.

The effectiveness of this policy may also be monitored and evaluated using outputs from adverse events, complaints, and DATIX investigations.