

## WATER SAFETY POLICY INCLUDING LEGIONELLA AND OTHER WATERBOURNE PATHOGENS

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## DOCUMENT CONTROL

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## 1. INTRODUCTION

- 1.1 Legionnaires' disease is a potentially fatal form of pneumonia which can affect anybody, but which principally affects those who are susceptible because of age, illness, immunosuppression, smoking etc. It is caused by the bacterium *Legionella pneumophila* and related bacteria. 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.
- 1.2 As Legionella is a naturally occurring organism widely dispersed in nature, it must be accepted that there is a constant risk of the bacteria entering the building services of **Trust** managed properties.
- 1.3 The size and complexity of the properties under **the Trust's** control naturally increases this likelihood.
- 1.4 What must not be accepted, and neither will the Law allow **the Trust to** accept, is that if it should enter our buildings, due to a fault in design or maintenance, the bacteria may find favorable conditions for growth, multiplication and possibly ultimately infection of people by being conveyed in aerosols created by our building services.
- 1.5 The measures to be taken for our management of this Risk are contained within this document.
- 1.6 Although this document is specifically for Legionnaires disease, guidance for other water borne related bacteria such as *Pseudomonas aeruginosa* could be added as identified.

## 2. PURPOSE & SCOPE

- 2.1 The aim of this Policy is to introduce a structured Procedure and Reporting Schedule, for the Management and Control of Legionellosis, including Legionnaires Disease, in compliance with current Guidelines (HTM's, HBN's, Model Engineering Specifications and Approved Codes of Practice), Legislation and Water Supply Regulations.
- 2.2 As required by the Health and Safety Commissions (2000) Approved Code of Practice (L8), the Trust will look to improve steps already taken to reduce the possibility of exposure to Legionella and incorporate the latest guidance available, tailored to meet the needs of the Trust premises as they currently exist, by undertaking the following:
- identify and assess sources of risk;
  - prepare a scheme for preventing, reducing or controlling the risk;
  - implement and manage and monitor precautions;
  - keep records of the precautions implemented and will do so for each of the health care premises within the Trust's control.
  - appoint a person managerially responsible – responsible person
- 2.3 Management has the overall responsibility for the implementation of these procedures to ensure that safe, reliable hot and cold water supply, storage and distribution systems operate within the Trust.

- 2.4 The primary defence strategy for reducing the risk from Legionella will be a maintained temperature control regime. This regime may be supplemented by the addition of chemical and other water treatments where considered necessary and appropriate.
- 2.5 When it is proposed to carry out works on cold water distribution systems management will ensure that the legal duty to notify the water undertaker is carried out and documented.
- 2.6 Management has a statutory duty to ensure that compliance with this policy and procedures is continual and not notional. The Trust will be able to demonstrate it has identified all the relevant factors, has instituted corrective or preventive action and is monitoring the implemented plans.
- 2.7 For the purposes of this Policy, the Estate comprises all the buildings currently owned or occupied (under a full maintenance lease or otherwise) by the Trust. For the purposes of this Policy, any leased properties owned by the Trust, unless it is deemed within the lease agreement that the Landlord (Trust) discharges all its responsibility for maintenance, including the control and monitoring of legionella, for the duration of the lease; then there is a requirement for the Landlord to provide a suitable and sufficient assessment to identify and assess the risk of exposure to legionella bacteria from work activities and water systems on the premises and undertake any necessary precautionary control and monitoring measures. There is full list of properties/ buildings and status of occupation available on request from the Trust's Head of Estates and Facilities.
- 2.8 For the purposes of this Policy, the Service Providers are organisations that supply the Trust with services pertaining to "Legionellosis Management & Control", whether accommodation, and or Facilities Management, Water Treatment, Consultancy, etc.

### **3. DUTIES AND RESPONSIBILITIES**

#### **3.1 Employer's Duties**

- Somerset Partnership NHS Foundation Trust, here after known as the Trust, as employers have a general duty under The Health and Safety at Work Act etc. 1974 to ensure so far as is reasonably practicable, the health, safety and welfare of all their employees.
- HSWA 2(1) requires employers to:
  - provide and maintain plant and systems of work that are safe and free from health risks;
  - make arrangements for ensuring safety and the avoidance of health risks in connection with the use, handling, storage and transportation of articles and substances [HSWA 2(2)b];
  - provide such information, instruction, training and supervision to ensure the health and safety at work of their employees [HSWA 2(2)c];
  - provide a safe working environment [HSWA 2(2)e];

- those in control of premises must ensure that they are safe and that any plan or substance do not endanger health of all persons at work and the general public [HSWA 4]

### 3.2 **Employees' Duties**

- Under Section 7 of the Health and Safety at Work Act etc., 1974 employees have a duty to take reasonable care for their own health and safety and of that of others who may be affected by their acts or omissions at work. Section 7 also requires the employees co-operation with their employer to enable the employer to comply with statutory duties for health and safety.
- Employees should correctly use all work items provided by their employers, in accordance with their training and the instructions they receive to enable them to use/operate the items safely.
- Employers or those they appoint (e.g. under Regulation 6) to assist them with health and safety matters therefore need to be informed, without delay, of any work situation which might present a serious and imminent danger. The danger could be to the employee concerned or a result of the employee's work to others.
- Employees should also notify any shortcomings in the health and safety arrangements, even when no immediate danger exists, so that employers in pursuit of their duties under the HSWA Act and other statutory provisions can take such remedial action as may be needed. The Trust delegates to the Chief Executive, responsibility for the implementation of this Policy (directive).

### 3.3 **Chief Executive**

- Has overall responsibility for all aspects of the quality of water supplies within ALL the Trust properties.
- Shall nominate, in writing, a "Responsible" person and a deputy or deputies "Responsible" Persons for each of the Trust's properties.

### 3.4 **Management**

Management is defined as the owner, occupier, employer, general manager, chief executive or other person who is ultimately accountable, and on whom the duty falls, for the safe operation of healthcare premises. A person intending to fulfil any of the staff functions specified below should be able to prove that they possess sufficient skills, knowledge and experience to be able to perform safely the designated tasks.

### 3.5 **Infection Prevention and Control-Doctor (ICD)**

- The ICD or Consultant Microbiologist (if not the same person), is the person nominated by management to advise on policy and to have responsibility for the maintenance of water quality.
- The ICD shall attend the Water Hygiene Group

- Legionella Control and Procedures shall be acceptable to the Infection Prevention and Control Lead Nurse who should agree any amendment to policy.
- The Infection Prevention and Control Lead Nurse shall be responsible for supporting the Infection Control Doctor in managing the bacteriological quality of the water. A member of the Infection Prevention and Control Team shall attend the Water Hygiene Group

### 3.6 **Responsible Person (water) Estate Manager & Deputy Responsible Person (water) Estate Officers**

- Possesses adequate professional knowledge and with appropriate training, should be appointed in writing by management to devise and manage the necessary procedures to ensure that the quality of water in the healthcare premises is maintained.
- The Estate Manager will fulfil the role of Responsible Person (water) to ensure that all operational procedures are carried out in an effective and timely manner. The Estate Officers will fulfil the role of Deputy Responsible Persons (water).
- Be required to liaise closely with other professionals in various disciplines.
- Be supported by specialists in specific subjects such as water treatment and microbiology, but he/she must undertake responsibility for calling upon and coordinating the activities of such specialists.
- Be aware that manufacturers, suppliers, installers and service providers have specific responsibilities that are set out in the Health and Safety Commission's (2013) Approved Code of Practice L8.
- Appoint a deputy or deputies to whom delegated responsibilities may be given. The deputy or deputies should act for the Responsible Person (Water) on all occasions when he/she is unavailable.
- In addition, the Responsible Person (Water) should possess a thorough knowledge of the control of Legionella and, where possible, would ideally be a chartered engineer, microbiologist or other professionally qualified person.
- This role, in association with the **Infection Control Doctor** and maintenance staff involves:
  - Accepting management responsibility for Legionella control.
  - With the assistance of the Water Hygiene Group, prepare an Operational Policy on Legionella control (Policy and Procedures Documents).
  - Nominate, in writing, an "Estates Legionella Control Team" whose duties will be to implement and manage the Trust's Management & Control Policy for Legionnaires' disease.
  - The Trust will convene a **6-Monthly** meeting of the "Water Hygiene Group" in order to ensure that the Trust's Management & Control Policy for Legionnaires' disease is being correctly implemented.

- Assess the training needs for training of staff in Control of Legionella in conjunction with the Trust's External Authorizing Engineer (Water).
- Ensure personal training records are kept up to date.
- Carry out Risk Assessments and two-yearly Risk Assessment Reviews on all water systems and air conditioning plant.
- Advising on potential areas of risk and identifying where systems do not adhere to this policy and procedures document,
- Liaising with the water undertakers and environmental health departments and advising on the continuing procedures necessary to ensure acceptable water quality,
- Monitoring the implementation and efficacy of those procedures,
- Approving and identifying any changes to those procedures,
- Ensuring equipment that is to be permanently connected to the water supply is correctly installed,
- Ensuring adequate operating and maintenance instructions exist and adequate records are kept.
- The implementation of an effective maintenance policy must incorporate the preparation of fully detailed operating and maintenance documentation and the introduction of a logbook system.
- The Responsible Person (Water) should be fully conversant with design principles and requirements of water systems and should be fully briefed in respect of the cause and effect of water-borne organisms, for example Legionella pneumophila.
- Maintain record keeping for a period of 5 years
- Ensure the Monitoring and Scheme of Control detailed in Appendix D is in place for all Trust properties
- Have an overseeing Audit role of the PFI who manage West Mendip Hospital to ensure they are maintaining the water systems in a safe manner in line with current legislation and guidance

### **3.7 Deputy Responsible Person (water) - Locality**

- Will be appointed in writing by the responsible person (water), confirming delegated property portfolio.
- Ensure risk assessments and two-yearly risk assessment reviews are carried out on all water systems and air conditioning plant.
- Liaising with water undertaker and other health departments to ensure acceptable water quality.
- Carry out planned maintenance of water systems using external or in-house providers in accordance with relevant up-to-date guidance.



- Ensure adequate records/log book are kept up-to-date and available for inspection.
- Have membership of the Water Hygiene Group and attend 6 monthly meetings.
- Completed relevant training, at least bi-annually, recorded and maintained for inspection.
- Ensure external or in-house maintenance providers have completed relevant training at least bi-annually, recorded and maintained for inspection.
- Ensure the Monitoring and Scheme of Control detailed in Appendix D is in place for all Trust properties

### **3.8 Capital Projects Manager**

- Ensure all new and refurbished water services designs are in compliance with current legislation and guidance
- Ensure each new or refurbished system has a suitable Legionella Risk Assessment undertaken
- Ensure a suitable handover procedure is completed for each new or refurbished system.

### **3.9 Trust External Authorising Engineer (Water)**

- Carry out an annual Compliance Status Audit
- Attend the Trust's 6 Monthly Water Meetings
- Manage the Risk Assessments and Reviews programme
- Provide ongoing support and advice
- Audit the service providers to ensure the Monitoring and Scheme of Control detailed in Appendix D is in place for all Trust properties
- To provide training for the Trust's RP, DRP, COI and SLA providers as required

## **4. EXPLANATIONS OF TERMS USED**

- 4.1 The Trust accepts its responsibility under the Health and Safety at Work etc. Act 1974 and the Control of Substances Hazardous to Health Regulation 2002 (as amended), to take all reasonable precautions to prevent or control the harmful effects of contaminated water to residents, patients, visitors, staff and other persons working at or using its premises.
- 4.2 This policy document applies to all Trust premises.
- 4.3 It is the Trust's Policy, to manage the operation and maintenance of all its Domestic Water and Air Handling systems in line with current best practice, complying with all current and relevant guidelines and legislation relating to

the management and control of Legionellosis including Legionnaires' Disease and Safe Water Temperatures.

4.4 Measures to be taken to attain this objective include:

- the appropriate selection, design, installation and maintenance of plant.
- the appointment of a "Responsible Person" competent to:
  - liaise with all other organisations that supply the Trust with services pertaining to Legionellosis Management and Control, whether accommodation, facilities management, water treatment, consultancy etc;
  - identify and assess the risk of Legionellosis resulting from work activities to include breakdowns and abnormal situations;
  - develop, implement and maintain appropriate and suitable Management Systems, Personnel Training Programmes and plant treatment procedures;
  - develop and maintain adequate records in order to demonstrate compliance with best practice and fulfil legal obligations;
  - ensure compliance with this policy.
- the regular monitoring of all implemented Management Systems, Training Programmes and treatment procedures, to establish and ensure their continuing efficacy and legislative compliance.
- the Trust has a procedure document which includes:
  - letter of appointment – Responsible Person (water)
  - procedural specifications
  - pre-planned maintenance programme: tasks
  - engineering contingency measures: temperatures
  - engineering contingency measures: biological analysis
  - record keeping
  - course of action if an outbreak of legionnaires' disease suspected
  - major outbreak plan
  - on-going monitoring and audit

4.5 **Tradesperson**

- A tradesperson is someone who is appointed in writing by the responsible person (water) to carry out, under the control of the maintenance technician, work on water, storage and distribution systems.

#### 4.6 **Installer**

- An installer is the person or organisation responsible for the provision of the water, storage and distribution system.

#### 4.7 **Contractor**

- A contractor is the person or organisation designated by management to be responsible for the supply, installation, validation and verification of hot and cold water services, and for the conduct of the installation checks and tests. In relation to the control of Legionella, it is essential to ensure that contractors have suitable qualifications (For example companies/individuals who are members of the Legionella Control Association)

#### 4.8 **Contract supervising officer/authorised officer**

- The person nominated by management to witness tests and checks under the terms of contract. He/she should have specialist knowledge, training and experience of hot and cold water supply, storage and mains services.

#### 4.9 **Designer/responsible project officer**

- Designers and installers of hot and cold water distribution systems are required by the Water Supply (Water Fittings) Regulations 1999 to notify the water undertaker of any proposed installation of water fittings and to have the water undertakers' consent before installation commences. It is a criminal offence to install or use water fittings without their prior consent.
- Capital project managers will consult the Trust's appointed external Water Authorising Engineer with respect to the Legionella compliance.
- All new and altered water systems shall comply with the requirements of L8, HTM 04-01. In this respect, at the design stage the consulting engineer shall liaise with Trust's appointed external Water Authorising Engineer, retained by the Trust to provide advice in respect of compliance with the necessary H&S requirements as they relate to water systems and Legionellae. The Trust's appointed external Water Authorising Engineer will provide input advice to the design process in respect to the construction phase and for the subsequent operational service thereafter.
- In any event the Trust will require a risk assessment and certificate of compliance for the water systems upon completion, to be provided via the consulting engineer.
- In addition, there are specific issues around quality control of the works on site, the site installation and commissioning procedures, these will need to be addressed as part of the commission.
- The specification and the consulting engineer's competence and interpretation of the requirements.
- The contractor's competence and his interpretation of the requirements.

- The plumber's competence and interpretation with respect to site conditions, the existing and new installation and commissioning requirements.
- The CoW's competence and interpretation of the requirements.
- Operating and maintenance manuals shall be provided in accordance with the Estates Capital Investment System (ECIS) and comply with the requirements of BSRIA's Application Guide 1/87 Operational and Maintenance Manuals for building services installations.

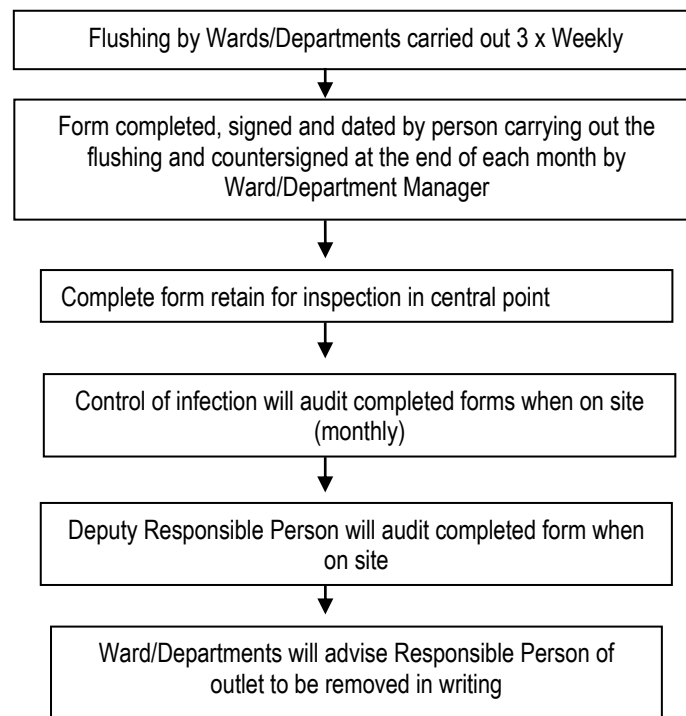
#### 4.10 **Water Hygiene Group**

- The Group shall meet **6-Monthly** and provide a report to The Infection Control Group. The Responsible Person (Water) shall arrange and chair the meetings. The basis of the Team will be to:
  - Monitor and review the development and use of Policies and Procedures for the prevention of Legionnaires' disease.
  - Prioritise the identified tasks into action plans identifying, initially, cost and service implications and then on to structured and timetabled progress targets.
  - Review and approve changes to the Policies and Procedures.
  - Assist the Trust's Control of Infection Outbreak Plan and co-ordinate relevant personnel in the event of an outbreak.
  - Ensure that Legionella Management & Control issues are communicated to all relevant staff throughout the organisation and to relevant stakeholders, i.e. University, Local Government and HSE.
  - Provide guidance on issues faced by the Trust in relation to Legionella Management & Control.
  - Be a forum for the communication of issues faced, developments made in Legionella Management & Control to ensure a standard approach is adopted across the Trust.
- The Group's membership shall consist of:
  - Responsible Person (Water)
  - Deputy Responsible Person(s) (Water)
  - Locality Responsible Person (water)
  - Legionella Control Consultants - AE
  - Representative for Trust's Control of Infection Team
  - Infection Prevention and Control Doctor
  - SLA Providers Representatives
  - PFI Representatives

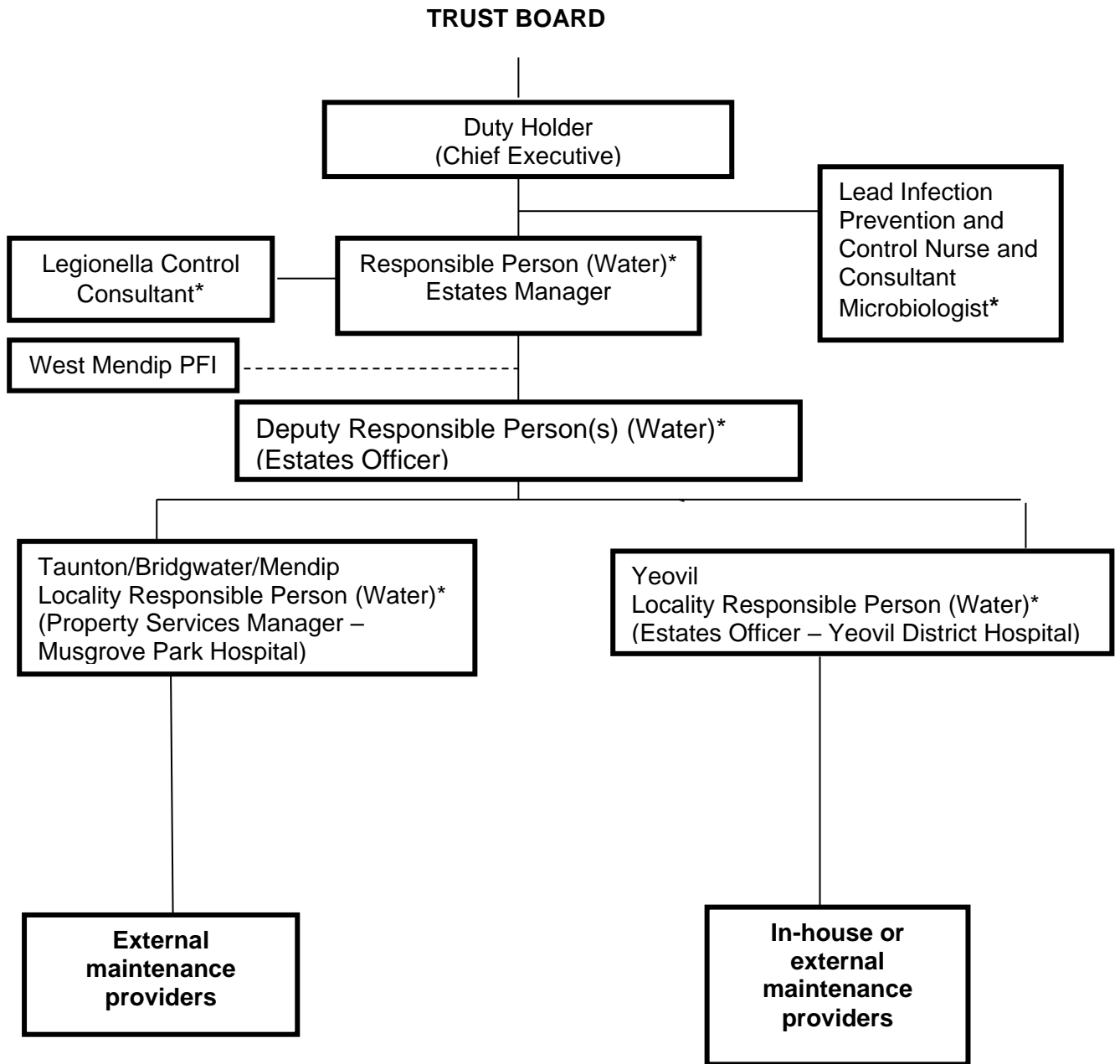
#### 4.11 Managers of wards/departments/buildings/site leads

Shall have responsibility for:

- ensuring that water outlets are regularly cleaned and de-scaled, as a minimum, shower heads must be de-scaled on a quarterly basis;
- shall inform the Responsible Person or Deputy of any new equipment intended to be purchased that uses water or water systems to ensure that any maintenance regimes are fully assessed prior to purchase;
- identifying all infrequently (defined as those outlets used less than three times a week for at least one minute) used outlets within their area and subjecting these to a thrice-weekly flushing programme as described in Dead-leg Flushing Proforma (See Appendix 2) Written evidence of flushing undertaken is to be recorded locally within the Flushing Log file;
- where infrequently used outlets are deemed by the war/department staff to be no longer required, they should notify the Estates Department in writing so that they can be removed;
- this process is depicted below:



4.12 Legionella Management Arrangements



\* Water Hygiene Group

## **5. TRAINING REQUIREMENTS**

- 5.1 The Responsible Person shall ensure that the Estates Legionella Control Team and all other staff involved in or associated with the Management & Control of Legionnaires' disease will undertake regular in-depth training courses to ensure they kept updated on new developments in the management and control of water services.

Training will be carried out every three years to ensure the competent staff can fulfil the performance of their specific duties. Attendance will be recorded and maintained ready for inspection if required.

- 5.2 In order to allow the associated persons to act as effectively and cost-effectively as possible, all relevant and associated members of staff should be offered scheduled and appropriate training. The training should cover relevant topics such as:

- General knowledge on the Management and Control of Legionellosis
- Legal responsibilities
- The Policy
- COSHH
- On-going monitoring
- On-going maintenance
- Disinfection Procedures
- On-going inspections
- Logging required
- Emergency procedures

- 5.3 Staff with specific responsibilities for managing the water system should be given additional training in how to carry out those particular tasks.

- 5.4 Deputies should receive equivalent training to the person whose function they are covering. The training required will vary from individual to individual according to their background and responsibilities.

- 5.5 Individual records should be kept for these staff, and staff should not be allowed to perform their duties without supervision until their training is completed. Training records should be signed by the appropriate *"Responsible Person" (water)*.

## **6. EQUALITY IMPACT ASSESSMENT**

- 6.1 All relevant persons are required to comply with this document and must demonstrate sensitivity and competence in relation to the nine protected characteristics as defined by the Equality Act 2010. In addition, the Trust has identified Learning Disabilities as an additional tenth protected characteristic. If you, or any other groups, believe you are disadvantaged by anything contained in this document please contact the Equality and Diversity Lead who will then actively respond to the enquiry.

## 7. MONITORING COMPLIANCE AND EFFECTIVENESS

### 7.1 Monitoring arrangements for compliance and effectiveness

- Overall monitoring will be by the Water Hygiene Group

### 7.2 Responsibilities for conducting the monitoring

- Water Hygiene Group for the Trust will monitor procedural document compliance and effectiveness where they relate to clinical and non clinical areas.

### 7.3 Methodology to be used for monitoring

- external auditor investigations and reports.
- incident reporting and monitoring.

### 7.4 Frequency of monitoring

- As per the recommendations of Responsible Person/External Consultants

### 7.5 **Process for reviewing results and ensuring improvements in performance occur.**

Report will be provided quarterly to the Estates & Facilities Governance Group and any risk issues and areas of concern will be escalated to the Regulation Governance Group.

## 8. COUNTER FRAUD

8.1 The Trust is committed to the NHS Protect Counter Fraud Policy – to reduce fraud in the NHS to a minimum, keep it at that level and put funds stolen by fraud back into patient care. Therefore, consideration has been given to the inclusion of guidance with regard to the potential for fraud and corruption to occur and what action should be taken in such circumstances during the development of this procedural document.

## 9. RELEVANT CARE QUALITY COMMISSION (CQC) REGISTRATION STANDARDS

9.1 Under the **Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3)**, the fundamental standards which inform this procedural document, are set out in the following regulations:

Regulation 15:	Premises and equipment
Regulation 16:	Receiving and acting on complaints
Regulation 17:	Good governance
Regulation 18:	Staffing
Regulation 19:	Fit and proper persons employed
Regulation 20:	Duty of candour
Regulation 20A:	Requirement as to display of performance assessments.

9.2 Under the **CQC (Registration) Regulations 2009 (Part 4)** the requirements which inform this procedural document are set out in the following regulations:

Regulation 18:	Notification of other incidents
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- 9.3 Detailed guidance on meeting the requirements can be found at <http://www.cqc.org.uk/sites/default/files/20150311%20Guidance%20for%20providers%20on%20meeting%20the%20regulations%20FINAL%20FOR%20PUBLISHING.pdf>

### **Relevant National Requirements**

- Health & Safety Commission Approved Code of Practice & Guidance 2013 - The Control of Legionella bacteria in water systems (L8)
- Health and Safety at Work etc., Act 1974, Sections 2, 3 and 4 (HSW)
- The Management of Health and Safety at Work Regulations 1992
- Control of Substances Hazardous to Health Regulations 2002, Regulation 6 (COSHH)
- The Public Health (Infectious Diseases) Regulations 1988
- The Water Supply (Water fittings) Regulations 1999
- The Water Supply (Water Quality) Regulations 2000
- BS 1710 – 1984 - Specification for identification of pipeline services
- BS EN 806-2:2005 Specification for installations inside buildings conveying water for human consumption.
- Food Safety Act 1990
- The Control of Legionella, hygiene, “safe” hot water, cold water and drinking water systems HTM 04-01 Part A and Part B
- Ventilation in healthcare premises – HTM03-01: Specialised ventilation for healthcare premises Part A and Part B
- HTM 04-01 Addendum Pseudomonas aeruginosa – advice for augmented care unit
- BS EN 806-5 2012 Specification for installations inside buildings conveying water for human consumption. Operation and maintenance.
- BS 8558: 2015 Guide to the design, installation, testing, operation and maintenance of services supplying water for domestic use within buildings and their curtilage.

## **10. REFERENCES, ACKNOWLEDGEMENTS AND ASSOCIATED DOCUMENTS**

### **10.1 References**

- Health Guidance Note “Safe” hot water and surface Temperatures – 1998
- National Health Service Model engineering specifications D 08 Thermostatic mixing valves (Healthcare Premises)
- Model Engineering Specification C07 1997 rev 3
- Health Building Note 25 – Laundry – 1994:Archived

## 10.2 **Cross reference to other procedural documents**

Cleaning of Equipment and Decontamination Policy

Infection Prevention and Control

Learning Development and Mandatory Training Policy

Outbreak Management

Risk Management Policy and Procedure

Staff Training Matrix (Training Needs Analysis)

Untoward Event Reporting Policy and procedure

All current policies and procedures are accessible in the policy section of the public website (on the home page, click on 'Policies and Procedures'). Trust Guidance is accessible to staff on the Trust Intranet.

### **Relevant Objective within Trust Strategy**

Five-year Integrated Business Plan

## 11. **APPENDICES**

11.1 For the avoidance of any doubt the appendices in this policy are to constitute part of the body of this policy and shall be treated as such. This should include any relevant Audit Standards.

Appendix A **Flushing of Infrequently Used Outlets**

Appendix B **Legionellosis Management & Control Log-Book**

Appendix C **Pseudomonas Aeruginosa – Best Practice Advice**

Appendix D **Water Services Monitoring and Scheme of Control - Estates**

### SOMERSET PARTNERSHIP NHS FOUNDATION TRUST

#### OPERATIONAL GUIDANCE NOTE

#### GUIDELINES FOR THE PREVENTION OF LEGIONELLA IN HEALTHCARE PREMISES; THE FLUSHING OF INFREQUENTLY USED WATER OUTLETS

For the attention of all Wards and Departments

### 1 INTRODUCTION


- 1.1 Legionnaires' disease is a bacterial infection that may cause severe pneumonia. The majority of cases are reported as single (isolated) cases but outbreaks can occur.
- 1.2 The bacteria are found in water and the infection is spread through the air from a contaminated water source. Person to person spread does not occur. Breathing in aerosols from a contaminated water system is the most likely route of transmission.
- 1.3 Recent cases of legionella infection in healthcare facilities have indicated that a significant prevention measure is to ensure that infrequently used outlets are identified and flushed to prevent stagnation of water. Health Technical Memorandum 04-01 requires infrequently used water outlets to be flushed; therefore the following procedure is to be adopted by all wards and departments. The Trust sees temperature control is the means of managing the control of Legionella throughout the Estate.

### 2 THE PROCEDURE

- 2.1 With reference to form 1, the following preventative measures must be employed in ward/department areas:
  - detail the name of your ward / department on the log form
  - constant evaluation of all water outlets in the area under your jurisdiction. This involves a simple assessment of whether any outlets may not be used less than three times a week. Confirm this has been carried out by stating yes to question 1
  - if there are outlets that will be infrequently used, confirm this in question 2. If not, state in the 'no' column, sign the sheet and file within your ward/departmental logbook
  - if the answer to question 2 is yes, then list all outlets in the table below
- 2.2 Assign a member of staff during the week to carry out the flushing of the outlets identified as per the following procedure:

- ensure that the purging of water from outlets does not create any unnecessary amount of aerosol at least no more than would normally be created when the outlet is operated normally
- ensure that 'splash back' is minimised, where practicable, by placing a sponge or another material capable of absorbing some of the force of the water against the surface of the appliance
- purge the hot and the cold or the mixed water in turn for a minimum of 2 minutes
- Where showers need to be flushed, it is important to ensure that, where practicable, the showerhead is removed in order to reduce the potential of aerosol production. Where the head is fixed, exposure to the aerosol produced must be minimised
- Always consider whether the system / outlet can be removed negating further flushing. Contact the Estates Manager (Responsible Person) in writing if this is the case
- the log sheet must be completed for each day flushing takes place
- at the end of each week log sheets must be filed within the ward/department and available for scrutiny, to provide evidence for audit purposes and assurance that flushing regimes are being undertaken
- where a building or sections of the system remain unused for long periods of time the Matron or Head of Department must notify the Estates Manager (Responsible Person) in writing, who will subsequently employ regimes to ensure stagnation of water does not occur i.e. consider draining system

APPENDIX B

		DEPARTMENT.....				Somerset Partnership  NHS Foundation Trust		
		Legionellosis Management & Control Log-Book						
		<b>Usage Evaluation and Outlet Flushing</b> <b>3 X WEEKLY</b>						
1. Has a usage evaluation of outlets been carried this week?	Yes	No	Date	2. Have outlets been identified as infrequently used which required flushing?	Yes (List below)	No	Signature of Ward Sister/Ward Manager/Building Manager	
Listing of outlets to be flushed								
Room No.	Type of outlet	Completion Signatures						Comments
		Monday		Wednesday		Friday		
		Date	Signature	Date	Signature	Date	Signature	
							<b>FORM No. 1</b>	
<b>This form to be signed, dated, filed and available for scrutiny within each department at the end of each week.</b>								

## *Pseudomonas aeruginosa*

### **BEST PRACTICE ADVICE RELATING TO ALL CLINICAL WASH-HAND BASINS IN SOMERSET PARTNERSHIP MANAGED HEALTHCARE FACILITIES**

#### **BACKGROUND**

In recent years there has been an increase in published evidence relating to outbreaks and incidents in augmented care units related to *Pseudomonas aeruginosa*.

In March 2012, the Department of Health published 'Water sources and potential *Pseudomonas aeruginosa* contamination of taps and water systems: advice for augmented care units'. Clinical wash-hand basins are particularly high risk. It is therefore important to ensure the cleaning of these basins and the taps is undertaken in a way that does not allow cross-contamination from a bacterial source to the tap.

During cleaning of basins and taps, there is a risk of contaminating tap outlets with microorganisms if the same cloth is used to clean the bowl of the basin or surrounding area before the tap. Waste-water drain outlets are particularly risky parts of the basin/system and are almost always contaminated (see Breathnach et al. 2012).

Bacteria may be of patient origin, so it is possible that bacteria, including antibiotic-resistant organisms, could seed the outlet, become resident in any biofilm and have the potential to be transmitted to other patients.

An addendum to Health Technical Memorandum 04-01 builds on and supersedes the March 2012 guidance. The document is concerned with controlling/minimising the risk of morbidity and mortality due to *P. aeruginosa* associated with water outlets and provides guidance as over.

**Infection Prevention and Control and Estates Advice maybe be sourced via  
01278 432000**

## SOMERSET PARTNERSHIP LOCAL BEST PRACTICE

- Use the clinical wash-hand basin only for hand-washing:
- Do not dispose of body fluids at the clinical wash-hand basin – use the slop hopper or sluice in the dirty utility area.
- Do not wash any patient equipment in clinical wash-hand basins
- Do not use clinical wash-hand basins for storing used equipment awaiting decontamination
- Do not touch the spout outlet when washing hands
- Clean taps before the rest of the clinical wash-hand basin. Do not transfer contamination from wash-hand basin to wash-hand basin
- Do not dispose of used environmental cleaning agents at clinical wash-hand basins.
- Make sure that reusable containers containing environmental cleaning agents are used in a manner that will protect them from contamination with *P. aeruginosa* (see Aumeran et al. 2007; Ehrenkranz et al, 1980; Sautter et al., 1984).
- Use non-fillable single-use bottles for antimicrobial hand-rub and soap
- Consider the appropriate positioning of soap and antimicrobial hand-rub dispensers. The compounds in the products can be a source of nutrients to some microorganisms. Therefore, it is advisable to prevent soiling of the tap by drips from the dispensers or during the movement of hands from the dispensers to the basin when beginning hand-washing
- Identify and report any problems or concerns relating to safety, maintenance and cleanliness of wash-hand basins to the WSG. Escalate unresolved issues to higher management and/or the IPC team as appropriate
- All staff with responsibility for cleaning should be adequately trained and made aware of the importance of high standards of cleanliness. Refresher training should be given where a specific area does not maintain the expected standard of cleanliness. Visual monitoring of If Point of Use (POU) filters are fitted to taps, the same cleaning regimen applies to the wash-hand basin, but clean the filter itself according to the manufacturer's instructions (this is undertaken by the Estates Team). Take care to avoid contaminating the external surface and outlet of the filter.
- Domestic staff should be undertaken by means of regular audits.

- If Point of Use (POU) filters are fitted to taps, the same cleaning regime applies to the wash-hand basin but clean the filter itself according to the manufacturer's instructions (this is undertaken by the Estates Team). Take care to avoid contaminating the external surface and outlet of the filter.



## APPENDIX D

### WATER SERVICES MONITORING AND SCHEME OF CONTROL - ESTATES

#### Cold Water Storage Tanks

Task	Task Required	Minimum Required Frequency
Temperature monitoring	Yes	6 Monthly
General visual inspection	Yes	6 Monthly
Clean /Disinfection	Yes	As Required
Flush expansion vessels (Non Flow-through)	Yes	Monthly
Microbiological Sampling	Yes	As Required

#### Instant Water Heaters

Task	Task Required	Minimum Required Frequency
Check temperatures	Yes	6 Monthly
General visual inspection	Yes	6 Monthly

#### Plate Heat Exchangers and Storage Calorifiers

Task	Task Required	Minimum Required Frequency
Flow / return temperatures	Yes	Monthly
Clean / disinfection	Yes	As Required
General visual inspection (Internal if Possible)	Yes	Annual
Drain Flush (If Applicable)	Yes	3 Monthly

**Cold and Hot Water Outlets**

Task	Task Required	Minimum Required Frequency
Temperature monitoring (sentinel)	Yes	Monthly
Temperature monitoring (representative)	Yes	Annual
Clean / disinfection	Yes	As Required
Microbiological analysis	Yes	As Required

**Thermostatic Mixing Valves (Hand Wash Basins)**

Task	Task Required	Minimum Required Frequency
Temperature monitoring	Yes	6 Monthly
General visual inspection	Yes	6 Monthly
Clean / disinfection	Yes	Annual
Fail-safe testing	Yes	Annual

**Showers**

Task	Task Required	Minimum Required Frequency
Temperature monitoring	Yes	3 Monthly
General visual inspection	Yes	3 Monthly
Clean / disinfection	Yes	3 Monthly

**WATER SERVICES MONITORING AND SCHEME OF CONTROL****Site/Ward Inspections- COI Team**

Task	Task Required	Minimum Required Frequency
Inspection of little used outlet records	Yes	Monthly