

# WATER SAFETY POLICY

## Policy information

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## Summary of document:

This policy sets out instructions and expectations for management to fulfil its responsibilities to effectively manage water systems for Hywel Dda University Health Board (HDUHB).

## Scope:

This policy applies to all staff at all premises owned or occupied\* by HDUHB.

(\* where the responsibility for operational maintenance resides with the HDUHB)

## To be read in conjunction with:

This policy must be read in connection with all other relevant supporting documentation such as Water Safety Plans (WSP's), which sets out the criteria for ensuring that the appropriate measures are implemented by local operational maintenance departments to maintain the supply of safe hot, cold and drinking water supplies in all HDUHB's premises.

## Owning group:

Water Safety Group

02/02/2023

## Executive Director job title:

Andrew Carruthers – Executive Director of Operations

## Reviews and updates:

- 1 New policy 9.3.2015
- 2 Full review with minor amendments only 5.3.2019

## ADDITION OF APPENDIX 5 - LEGIONELLA RUN OFF LOG FORM

3 Full review with minor amendments only 02.02.2023

4 Additional clarity for run off procedure p14, and removal of Appendix 5 (HSC 7.5.2024)  
Uploaded with corrected review date as per SBAR approval of three years 23.3.2026

### Keywords

Maintenance, Estates, Water Quality, Infection Prevention, Pseudomonas Aeruginosa, Legionella, Legionellosis

### Glossary of terms

HUHB	Hywel Dda University Health Board
COSHH	Control of Substances Hazardous to Health
WSP	Water Safety Plans
HSG	Health and Safety Guidance
WSG	Water Safety Group
ACoP	Approved Code of Practice
LCA	Legionella Control Association
HSE	Health and Safety Executive
DH/DP	Duty Holder / Designate Person
WHTM	Welsh Health Technical Memorandum
RPW	Responsible Person Water
DRPW	Deputy Responsible Person Water
PPM	Planned Preventative Maintenance
IPT	Infection Prevention Team
IPSSG	Infection Prevention Strategic Steering Group
CP	Competent Person
AE	Authorising Engineer
BSRIA	Building Test Research & Instrument Information Association
CCDC	Consultant in Communicable Disease Control

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## Introduction

This policy has been prepared to outline the arrangements that the Hywel Dda University Health Board, hereinafter referred to as the Health Board will implement to ensure that effective Water Safety Management procedures and protocols are adopted in order to satisfy all relevant legislation and guidance.

## Policy statement

The Health Board, accepts its responsibility under the Health and Safety at Work etc. Act 1974, the Control of Substances Hazardous to Health (COSHH), and the Management of Health and Safety at Work Regulations, 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.

The effectiveness of this policy relies heavily on the commitment of all participating stakeholders, and senior management alike. Collaborative efforts will therefore ensure that the objectives and principles of this policy are understood and are being met accordingly. This can only be achieved with the appropriate staff resources equipped with effective competency, knowledge, instruction and training

## Scope

The scope of this policy comprises of all the buildings currently owned or occupied (under a full maintenance lease or otherwise) by the Health Board. A full list of properties/ buildings and status of occupation is available on request from the Health Board's Estates Department, Properties team.

The Health Board will take steps to ensure any other organisations which may control any area within the estate undertake all reasonable steps to ensure that all water systems, and other sites where legionella and Pseudomonas Aeruginosa bacteria may form, operate safely and reliably within their area of control.

This policy must be read in connection with all other relevant supporting documentation such as Water Safety Plans (WSP's), which sets out the criteria for ensuring that the appropriate measures are implemented by local operational maintenance departments to maintain the supply of safe hot, cold and drinking water supplies in all premises.

Copies of each WSP can be obtained from the appointed operational estates staff, responsible person's water (RPW) and deputy responsible persons water (DRPW).

## Aim

The aim of this policy is to empower a structured procedure and reporting process, for the management and control of Legionella and P. Aeruginosa in compliance with current legislation and guidance, such as Health and Safety Guidance "HSG" 274 and Approved Code of Practice "ACop" L8 – The Control of Legionella Bacteria in Water Systems, in addition to other related standards such as Welsh Health Technical Memorandums WHTM, Health Building Note, Model Engineering Specifications Legislation and Water Supply Regulations. This will involve the continued implementation of a multi-disciplinary group to be known as the Water Safety Group (WSG) and all relevant participating stakeholders.

To achieve the aim of this policy and as required by Welsh Health Technical Memorandum best practice NHS engineering guidance WHTM 04-01 and Health and Safety Executives approved code of practice (ACop) L8 (Fourth edition) the Health Board will undertake to:

- Make appointments for responsibility.
- Identify and assess sources of risk through comprehensive Risk Assessments.
- Remove sources of risk whenever possible and only manage risk appropriately if it becomes the only option.
- Consider infection prevention at water system design stage.
- Construct and repair water systems only with materials that have been tested and approved by the Water Research Advisory Scheme (WRAS).
- Prepare a written control scheme for minimising the risks posed by Legionella, P.aeruginosa and other water borne pathogens to be known as Site Water Safety Plans (WSPs).
- Implement, manage and monitor the control scheme.
- Sample water for Legionella and P.aeruginosa when indicated necessary by the Water Safety Group (WSG).
- Train staff to understand the risks posed by Legionella and P.aeruginosa, as well as how to fulfil their roles and responsibilities as identified in the control scheme.
- Only use service providers that can demonstrate capability and competence such as membership of the Legionella Control Association (LCA).
- Maintain records in accordance with HSE guidance of all training, policies, WSP and associated procedures, risk assessments and monitoring and testing.
- Regularly review performance and provide information to promote continued diligence with water quality protection.

## Objectives

The objectives of this policy are to implement appropriate arrangements and management protocols, in order to prevent opportunities for Legionella bacteria and other waterborne contaminants to proliferate within the water system.

## Main body

### Legionella Bacteria

Legionella bacteria cause a number of illnesses which are collectively called legionellosis. The most well-known and concerning legionellosis is Legionnaires Disease which is a potentially fatal form of pneumonia that 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 that can be found naturally in environmental water sources such as rivers, lakes and reservoirs, usually in low numbers. As they are commonly found in environmental sources they may also be found in purpose built water systems such as cooling towers, evaporative condensers and whirlpool spas.

If conditions are favourable the bacterium may grow creating conditions in which the risk from Legionnaires disease is increased. It is therefore important to control the risks by introducing measures outlined in HSE ACoP L8 (2013) and HSG274 Parts 1-3.

## **Pseudomonas aeruginosa**

Pseudomonas is a relatively common type of infection encountered in UK hospitals. Figures suggest that the number of Pseudomonas infections is fairly steady, with between 3,700 and 4,000 cases reported to the Health Protection Agency each year. Nine out of 10 of these were the Pseudomonas aeruginosa (P. aeruginosa) strain.

P.aeruginosa does not usually cause illness in healthy people, but is described as an "opportunistic" organism, causing serious infection when our normal defences are weakened.

The severity and type of the illness it causes depends on its route into the body, but infections in the chest, blood, and urine are most common.

Once established in a weakened patient, a P.aeruginosa infection is potentially a severe problem which requires immediate treatment.

It is a particularly adaptable organism and has the ability to survive for up to several days on surfaces, further increasing the risk of it being passed on to patients.

The transition is through contaminated hands or medical equipment such as catheters and feeding tubes. However, the water system, maybe in some instances the source of the bacteria. Infection prevention measures such as regular hand washing and decontamination of equipment are the most effective measures to prevent its spread. Ensuring water quality is being protected will also help limit the potential for infections to occur.

## **Training requirements**

The Responsible Person (Water) & Deputy Responsible Person (Water) shall ensure that the Estates Operational Maintenance Staff 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 are kept updated on new developments in the management and control of water services.

Training will be carried out regularly (as determined by the training needs analysis, to a level of City and Guilds for the co-ordinating CP's) to ensure the competent staff can fulfil the performance of their specific duties. Attendance will be recorded and maintained ready for inspection if required.

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:

- Principles of good Health and Safety Management
- General knowledge on the Management and Control of Legionella
- Legal responsibilities
- The Policy
- Risk Assessments
- COSHH
- On-going monitoring
- On-going maintenance
- Disinfection Procedures
- On-going inspections
- Logging required

- Emergency procedures

Individual records should be kept for these staff. Training records should be signed by the Responsible Person. The level of knowledge should be regularly assessed and should be programmed and continuous, the Responsible Person should be assessed and approved by NHS Wales Shared Services Authorising Engineer (Water System).

All relevant estates staff will undertake a three yearly refresher course as directed by the Responsible Person.

Cascading of training and learning outcome on specific tasks can be given to other nominated staff, however it must only be carried out via the trained co-ordinating CP and must be witnessed and signed off by the RPW. Regular reviews will be required to ensure competency is maintained at all times.

### **Implementation**

The policy will be implemented and monitored only through effective and clear lines of communications of all relevant stakeholders, who are responsible for the delivery of this policy content. The collaborative efforts of the members of the Water Safety Group, the Senior Operational Managers, key operational staff and Ward Sisters (including other nominated departmental staff) will be fundamental to the effectiveness of this policy.

Regular reviews and consultations engaging all parties will need to be maintained continuously to promote and sustain adequate levels of compliance for this statutory discipline.

## **Roles and Responsibilities**

### **Employers Duties**

The Health Board as employers have a general duty under The Health and Safety at Work etc. Act (HSWA), in particular Section 2, to ensure that, so far as is reasonably practicable, the health, safety and welfare of all their employees and others who may be affected by their undertaking e.g. Patients.

### **Employees Duties**

Under Section 7 of the HSWA, employees have a duty to take reasonable care for their own health and safety and of others who may be affected by their acts or omissions at work. Section 7 also requires the employee's co-operation with their employer to enable the employer to comply with statutory duties for health and safety.

### **Responsibility**

Responsibility for the effective implementation of this policy principally resides with a collection of staff as referred to in the [management hierarchy diagram](#) section.

### **Chief Executive's Responsibilities**

The Chief Executive Officer has overall accountability for all aspects of the quality of water supplies within all Health Board properties.

The Chief Executive has the overall accountability for the implementation of these policy aims to ensure that all water systems operate safely and reliably within the Health Board. They must appoint a designated duty holder /designated person (DH/DP) of sufficient seniority at board level to take responsibility for ensuring effective systems are in place for the Health Board.

### **Executive Director of Operations - Duty Holder/Designated Person (DH/DP)**

The Board Level Director, the Director of Operations/ Deputy Chief Executive is appointed as the Duty Holder/Designated Person DH/DP with responsibilities for Water Management as defined under WHTM 04-01 Part B and is therefore responsible for ensuring that an appropriate management structure has been formulated to professionally support and deliver the requirements of this policy. Furthermore, is required to communicate all relevant issues to the Board that may impact on the delivery and effectiveness of this policy.

The DH/DP must also appoint senior management staff as deputies. The DH/DP or nominated deputy will appoint in writing Responsible Person(s) Water (RPW) and Deputy Responsible Person(s) Water to manage water safety within their designated areas.

### **Senior Estates Management – Deputy Duty Holders**

The Director of Facilities, Estates & Capital Planning and The Head of Operations are collectively responsible within the estates department for ensuring that adequate trained resources and expertise is made available to formulate an estates structure that will enable the Water Safety of Health Board to be managed and controlled to meet the requirements of ACoP L8 (2013), HSG274 and WHTM 04-01.

They will also collectively act as deputy duty holders and are therefore responsible as directed by the DH/DP for nominating in writing, Responsible Persons Water (RPW) and Deputy Responsible Persons (DRP) whose duties will be to implement and manage the Health Board's Policy for Water Safety Management. This will be an official appointment in writing following assessment and recommendation from the externally appointed Authorising Engineer for Water.

### **Head of Maintenance and Engineering**

The Head of maintenance and engineering is responsible for overseeing and coordinating the activities of the operational maintenance functions at each of the acute hospital sites. They are also responsible for ensuring that there is sufficient resources and expertise within the operational maintenance function to adhere to this Water Safety Policy, including any subsequent operational procedures and associated Planned Preventative Maintenance activities. They will also undertake periodic performance reviews on maintenance achievements to inform the Head of Operations and the Head of Estates Risk & Compliance of any concerns, risks or non-compliance activity in connection with water safety compliance.

### **Assistant Site Operations Managers - Responsible Person Water (RPW)**

The RPW will be the Assistant Site Operations Manager or Senior Estates Officer in each locality and have overall operational responsibility for all aspects of Legionella, Pseudomonas and general water safety management within the buildings for which they have Estates operational responsibility, by ensuring that the requirements of the Policy together with WHTM 04-01, ACoP L8 (2013- 4th Edition), HSG274 and other mandatory standards are implemented.

The appointed RPW will ensure that the water systems in which they are responsible for are managed appropriately and in accordance with legislation and published guidance. Furthermore, that they have developed sufficiently comprehensive written schemes of examinations / water safety plans to ensure water systems remain safe.

Persons intending to fulfil any of the specific 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.

The RPW must (this list is not exhaustive):

- Possess adequate professional knowledge and experience of the areas under their management control, have successfully acquired a city and guilds qualification on the role of the responsible person. They will be appointed to devise and manage the necessary procedures to ensure that the quality of water in the healthcare premises (under their management control) are maintained appropriately.
- Be a senior manager with sufficient authority and budgetary control within their remit to ensure that all operational procedures are carried out in an effective and timely manner. Be required to liaise closely with other professionals in various disciplines and be supported by specialists in specific subjects such as water treatment and microbiology, but their 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 L8 Fourth edition and HSG 274.
- Nominate and appoint a suitably qualified Deputy Responsible Person Water (DRPW) who co-ordinates activities at site level, to which delegated duties may be given during periods of absence. The deputy should act for the RPW on all occasions when they are unavailable.
- Carry out remedial work highlighted during Risk Assessments and if capital is required, ensure appropriate funding is requested.
- Produce minutes of any relevant meetings held and retain with Legionella management records for a minimum of 5 years and ensure records of Risk Assessment and associated precautions are implemented and maintained.
- Implement maintenance and inspection routines, as described in the Risk Assessment (or Risk Assessment Review) for the control of Legionella as required in WHTM 04-01 and other relevant and associated guidance documents.
- Keep maintenance and monitoring records and make available for inspection. Written and computer records will be kept for a minimum 5 years.
- Where equipment is used for temperature monitoring and water sampling, ensures that it is kept in good working order and calibrated where appropriate.
- Ensure record drawings of systems are available and kept updated.
- Ensure the competence of staff or external contractors used for any aspect of monitoring and/or maintaining the precautions for Legionella control.
- Audit Precautions on the Control of Legionella. This must include the audit of the flushing regimes for infrequently used outlets.
- Issue a compliance report to the compliance manager & head of operations, as requested.
- Submit a status report to the Water Safety Group every quarter in the form of an SBAR or Key Actions Report, which can be circulated to the IPSSG (Infection Prevention Strategic Steering Group), which shall include the following details:
  - Review of PPM (Pre Planned Maintenance) regimes to ensure that they are appropriate and are being carried out.
  - Review PPM omissions, analyse reasons for omissions and include in the status report.
  - Carry out compliance audit on ward flushing regimes of infrequently used outlets and monitor requests for removal of outlets.

- The RPW must possess a thorough knowledge of the control of Legionella and, where possible be a chartered engineer or similar professionally qualified and experienced person.

This role of the RPW, in association with the WSG, IPSSG Infection Prevention Strategic Steering Group and the Health Board's maintenance staff involves:

- Accepting management responsibility for Legionella control.
- Assistance of the IPT, prepare Operational procedures on Legionella control.
- Carry out a 6-Monthly de-briefing meeting and Audit with the Estates Team in order to ensure that the Health Board's water safety policy is being correctly implemented.
- Report to the Health Board's WSG the status of implementation and efficacy of the Health Board's Policy.
- Attending the HB's Water Safety Group, or if unavailable ensure that the DRPW is instructed to attend.
- Use the expertise of the Appointed Authorising Engineer Water and Water Safety Consultant to provide specialist advice and training on the water safety management.
- Assess the training needs for training of staff.
- Liaise between suitable training establishments and consultants to provide approved courses.
- Ensure personal training records are kept up to date for themselves and for their workforce.
- Initiate Risk Assessments and regular 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, and advising the head of operations and the director of facilities as appropriate.
- Liaising with the water undertakers, such as Welsh Water and environmental health departments and advising on the continuing procedures necessary to ensure acceptable water quality.
- Monitoring the implementation and efficacy of the procedures.
- Approving and identifying any changes to those procedures.
- Ensuring equipment that is to be permanently connected to the water supply is properly installed.
- Witnessing tests and checks, when appropriate, for work associated with water systems.
- Ensuring adequate operating and maintenance instructions exist and adequate records are kept.
- Liaise with the Operations Compliance Manager on high risk situations that will involve capital funding or highlighting on the corporate risk register.
- Liaise with major capital projects and discretionary capital project teams on all refurbishments/new builds that will affect the water infrastructure to ensure compliance with the published standards.
- 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 RPW must 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.

### **Deputy Responsible Person Water (DRPW)**

The Deputy Responsible Person Water will either be the Operations Support Officer, Estates Officer or Site Works Supervisor in each locality and will be officially nominated and appointed in writing, they must: (this list is not exhaustive):

- Possess adequate professional knowledge and experience of the areas under their management control, have successfully acquired a city and guilds qualification on the role of the responsible person.
- Carry out remedial work highlighted during Risk Assessments and if capital is required, ensure appropriate funding is requested.
- Ensure records of Risk Assessment and associated precautions are implemented and maintained.
- Implement maintenance and inspection routines, as described in the Risk Assessment (or Risk Assessment Review) for the control of Legionella as required in WHTM 04-01 and other relevant and associated guidance documents.
- Keep maintenance and monitoring records and make available for inspection. Written and computer records will be kept for a minimum 5 years.
- Where equipment is used for temperature monitoring and water sampling, ensures that it is kept in good working order and calibrated where appropriate.
- Ensure record drawings of systems are available and kept updated.
- Ensure the competence of staff or external contractors used for any aspect of monitoring and/or maintaining the precautions for Legionella control.
- Audit Precautions on the Control of Legionella. This must include the audit of the flushing regimes for infrequently used outlets.
- Witnessing tests and checks, when appropriate, for work associated with water systems.
- Ensuring adequate operating and maintenance instructions exist and adequate records are kept.
- To ensure that there is adequate control of contractors on all associated works carried out on water system infrastructure. This must be controlled via a general works permit.

### **Estates Competent Persons (CP)**

The estates department must be resourced with trained & competent persons (CP's). CP's who are expected to participate in water safety management activities must have undertaken as a minimum a recognised qualification, such as City and Guilds or equivalent in a Water Safety Management related discipline.

These qualified individuals will then be designated as co-ordinating CP's, and will be expected to cascade their learning outcome to other nominated CP's who will also be required to participate in the same water safety management activities. This cascading will only be granted and supported if appropriately witnessed by the co-ordinating CP & also the RPW to ensure they have fully understood the task. These internal training records will be maintained by the RPW and reviewed regularly. This will ensure competency is maintained to support the delivery of this policy and the associated pre planned maintenance (PPM) activities.

The various PPM tasks are contained within the Water Safety Plan and the local Maintenance Management system held for each acute site.

### **External Authorising Engineer (AE)**

The HB is required to officially appoint in writing an independent Authorising Engineer to support the HB in a professional and technical capacity on all aspects of water safety management. This appointment is instructed by the DH/DP or nominated deputies. The AE is expected to carry out assessments of competency of the RPW's and DRPW's, attend HB WSG providing advice as required.

### **Operations Compliance Manager**

The Operations Compliance Manager along with the WHTM Compliance officer has a strategic involvement within the estates department to ensure that changes in legislation that may affect the delivery of this policy are effectively communicated to the RPW & DRPW. The compliance manager will also be required to submit capital bids to acquire statutory funding for ongoing risk reduction works as and when instructed by the RPW.

Periodic reviews shall be undertaken of the working procedures to ensure they remain effective. The compliance manager will undertake a periodic review of the working procedures to ensure they remain effective.

### **Consultant Microbiologist/Infection Control Doctor**

The Consultant Microbiologist is the person nominated by management to give advice on infection control policy, furthermore to professionally support all relevant stakeholders who have the responsibility for the maintenance of the bacteriological quality of the water systems.

This Water Safety Policy and associated procedures shall be acceptable to the IPSSG Infection Prevention Strategic Steering Group and they should agree any amendments to the policy.

### **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 individuals employed by contractors have suitable qualifications (for example, companies/individuals who are members of the Legionella Control Association or have Chartered Engineering Status).

### **Capital Projects**

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 must consult with the Health Board's Appointed Authorising Engineer, RPW, DRPW and WSG on all schemes where adjustments are made to the water system, where appropriate, with respect to Legionella compliance.

All new and altered water systems shall comply with the requirements of L8, HSG274, WHTM 04-01. In this respect, at the design stage the consulting engineer shall liaise with the Health Board's appointed Authorising Engineer to provide advice in respect of compliance with the necessary H&S requirements as they relate to water systems and Legionella.

The Health Board's appointed Authorising Engineer will provide input advice to the design process in respect to the construction phase and for the subsequent operational service thereafter.

The Health Board will require a risk assessment and certificate of compliance for the water systems upon completion, to be provided from the Consultants/Designers.

Additionally, there are specific issues around the quality control of all project works on site, and 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 their interpretation of the requirements.
- The installer's competence and interpretation with respect to site conditions, the existing and new installation and commissioning requirements.
- The Clerk of Works' competence and interpretation of the requirements where appropriate.

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.

### **Wards/Departmental Staff**

The Health Board must effectively communicate good working practice of water management principles, water flushing regimes and any change in accommodation activity that may cause the build-up of redundant/stagnant water thus increasing the risk of water bacteria. This should be discussed at any opportunity by ward or department managers.

### **Ward Sisters & Heads of Department Responsibilities**

Informing the Estates Department before any plant or equipment containing or concerned with any form of water system is purchased, taken into use, modified, or removed, to ensure all equipment used within the Health Board's buildings is appropriate for its use and does not constitute a significant legionella or pseudomonas risk. This includes 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. Before any equipment of this type is taken into use a risk assessment must be carried out by the RPW.

Informing the Estates Department, via the Maintenance Helpdesk numbers on page 15 of any malfunction with any water system as soon as the problem is noted.

Informing the Estates Department when areas are to be vacated for more than 4 days. This will allow the Estates Department to take the required action to control the risk from exposure to Legionella bacteria. Staff are asked to obtain form (Advice Note LEG 07.2 from the various maintenance departments)

Similarly, informing the Estates Department when areas are to be re-opened after a prolonged closure. This will allow the Estates Department to take the required action to control the risk from exposure to Legionella bacteria. Staff are asked to obtain form (Advice Note LEG 07.03 from the various maintenance departments)

Identifying all infrequently used outlets within their area and subjecting these to a minimum twice weekly (or at the discretion of the IPSSG) flushing programme as regularly communicated via the Health Board's global e-mail system in accordance with the form available at- <http://howis.wales.nhs.uk/sitesplus/862/document/450132> - opens in a new tab..

A record of the process shall be recorded on the Legionella run off sheet and retained by the department. In addition to this a copy shall also be sent to the nominated Responsible Person for Water (RPW) for the site. For the details of the nominated site RPW's and any queries please contact the maintenance help desk numbers below. These sheets shall be periodically audited by the estates department.

Where infrequently used outlets are deemed by the ward/department staff to be no longer required, they should notify the Estates Department in writing so that they can be removed.

Where a building or sections of the system remain unused for long periods of time, steps shall be taken as follows:

- Flush all water facilities (including toilet and urinal cisterns) thoroughly on a twice weekly basis whilst the building is not in use.
- Flush all water facilities (including toilet and urinal cisterns) thoroughly at least one day prior to the building being used.
- All completed flushing routines must be entered onto the Legionella water run off sheet, retained by the department. These sheets will be periodically audited to ensure they are being completed.
- To cascade any associated actions that are raised through the Water Safety Group on water safety compliance.

### **Responsibilities of all Health Board Staff**

Identifying outlets that are infrequently used and advising their line manager.

Identifying any malfunction in any water system and advising the relevant Estates Maintenance Line on the following numbers:

Glangwili General Hospital	01267 235151 ext 2942
Bronglais General Hospital	01970 623131 ext 5770
Prince Philip Hospital	01554 756567 ext 3689
Withybush General Hospital	01437 764545 ext 3463

### **Strategic/Operational Groups**

#### **Senior Estates Operational Management Meetings and Escalation Process**

Legionella/Water Safety Management shall be a specific item on the agenda of the Health Board's monthly Senior Operational Managers Meetings, chaired by the Head of Operations.

High risk actions that may impact on the quality of water services will be escalated to the director of facilities, estates and capital planning via the head of operations and communicated to the DH/DP as necessary.

Membership of this group will consist of:

- Head of Operations (Chair)
- Head of Maintenance & Engineering
- Head of Estates Risk & Compliance
- Head of Facilities
- Site Operations Managers (When required)
- Head of Property and Performance (When required)
- Responsible person (When Required)
- Deputy Responsible person (When Required)
- Senior Estates Officer (When required)
- Authorising Engineers (When Required)

#### **Water Safety Group (WSG)**

The HB has formulated a Water Safety Group (WSG), which is a sub group of the IPSSG Infection Prevention Strategic Steering Group the purpose of the group is to advise and support on all aspects relating to water safety, including Legionella, Pseudomonas Aeruginosa.

Membership will include: Consultant Microbiologists, Senior Nurse Infection Prevention, various Estates representatives, such as the Head of Maintenance & Engineering, Head of Risk & Compliance, Assistant Operations Managers, Compliance Manager, WHTM Compliance Officer, Responsible

Person/Deputy for Water, Health & Safety Manager, Nursing Representative, Authorising Engineer (Water) and any other co-opted members as deemed appropriate.

The WSG shall meet quarterly and the minutes/actions of the meetings shall be sent to the IPSSG Infection Prevention Strategic Steering Group for information. The purpose of the meetings can be found in the T.O.R.

The Chair of the group will be the Senior Nurse Infection Prevention or nominated deputy. The Head of Engineering & Maintenance and the Head of Estates Risk & Compliance, Assistant Operations Managers and the Compliance Manager are representatives at both of the above groups and therefore will periodically provide a status update at the Health Board's quarterly Health and Safety and Emergency Planning Sub Committee, which is chaired by the DP/DH – Deputy Chief Executive.

### **Sub Water Safety Group**

The HB has formulated a Sub Water Safety Group (Sub WSG), which is a sub group of the Water Safety Group, the purpose of the group is to resolve, advice and support on all actions raised by the WSG and update the tracker that has been developed by the Compliance team.

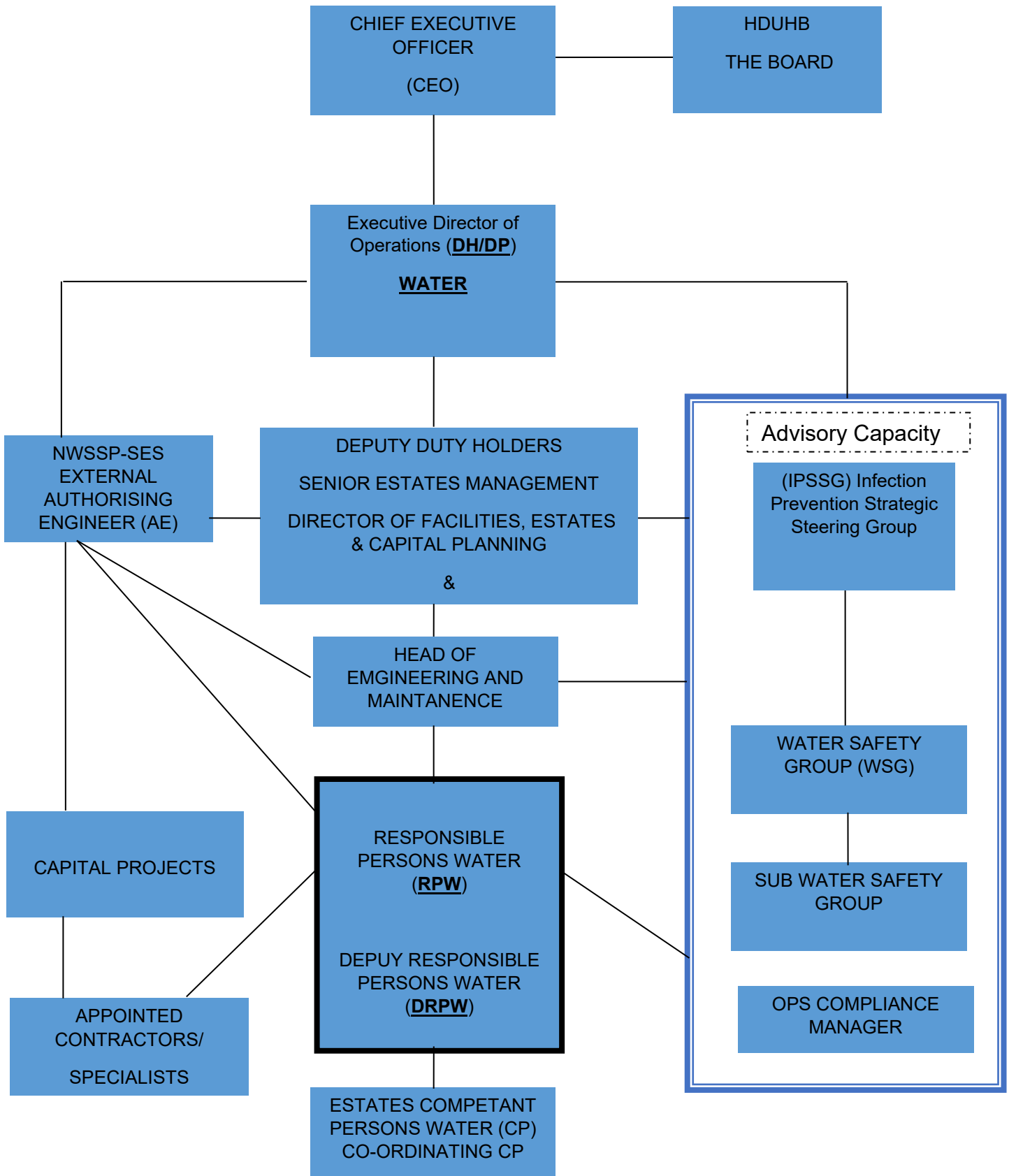
Membership will include: , such as the Assistant Operations Managers Compliance Manager, Responsible Person/Deputy for Water, WHTM Compliance officer.

The Sub WSG shall meet twice before the main WSG, the purpose of the meetings shall be to address key actions raised in the main WSG.

The Group's membership shall consist of:

- Responsible persons
- Deputy responsible person
- WHTM Compliance Officer
- Compliance Manager

# Management Hierarchy



## References

The Health Board, in implementing this policy, will use as a general source of practical guidance, and as a minimum, the documents listed below. Full details are available through the appropriate publications section via NHS Wales Shared Services.

- Health & Safety at Work, etc Act 1974 – (C37) The Stationary Office 1974 ISBN 978 0 10 543774
- Control of Substances Hazardous to Health Regulations - Health & Safety Executive. HSE books 2013. Approved Code of Practice and Guidance L5 (Sixth edition) ISBN 978 0 7176 6582 2  
[www.hse.gov.uk/pubns/books/l5.htm](http://www.hse.gov.uk/pubns/books/l5.htm) - opens in a new tab
- The Management of Health Safety at Work Regulations SI 3242/1999 The Stationary Office
- Legionnaires' Disease: A guide for duty holders leaflet INDG458 HSE books 2012  
[www.hse.gov.uk/pubns/indg458.htm](http://www.hse.gov.uk/pubns/indg458.htm) - opens in a new tab
- L8 (Fourth edition) Legionnaires' disease, the control of legionella bacteria in water systems
- HSG274 Legionnaires' Disease: Technical Guidance Parts 1 to 3  
[www.hse.gov.uk/pubns/books/hsg274.htm](http://www.hse.gov.uk/pubns/books/hsg274.htm) - opens in a new tab
- Managing for Health and Safety HSG65 HSE books 2013 ISBN978 0 7176 6456 6  
[www.hse.gov.uk/pubns/books/hsg65.htm](http://www.hse.gov.uk/pubns/books/hsg65.htm) - opens in a new tab
- The control of legionella the recommended code of conduct for service providers the Legionella Control Association [www.legionellacontrol.org.uk](http://www.legionellacontrol.org.uk) - opens in a new tab
- BS 8558: 2015 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages.
- BS 8580-1:2019 Water quality. Risk assessments for Legionella control. Code of Practice British Standards Institution.
- BS 8580-2:2022 Water quality risk assessments for Pseudomonas aeruginosa and other waterborne pathogens : code of practice
- BS 7592:2022 Sampling for Legionella bacteria in water systems. Code of practice
- Minimising the Risk of Legionnaires' Disease. TM13: Chartered Institution of Building Services Engineers.
- Water Fitting and Materials Directory, Water Regulations Advisory Scheme  
[www.wras.co.uk/directory](http://www.wras.co.uk/directory) - opens in a new tab
- Water Supply (Water Fittings) Regulations SI 1148/1999 The Stationary Office
- Reporting accidents and incidents at work: A brief guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) Leaflet INDG453(rev 1) HSE Books 2013  
[www.hse.gov.uk/pubns/indg453.htm](http://www.hse.gov.uk/pubns/indg453.htm) - opens in a new tab
- BS 1710 – 2014 - 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 WHTM 04-01 Part A and Part B.
- Specialised ventilation for healthcare premises - WHTM 03-01 Pt A and Pt B.
- National Health Service Model engineering specifications D 08 Thermostatic mixing valves (Healthcare Premises).
- Model Engineering Specification C07 1997 rev 3.

## Appendix: 1 – Outbreak Plan

The Course of Action if an Outbreak of *P.aeruginosa* or Legionnaires' Disease is suspected

The Responsible Person (Water) will be informed of a suspected case of *P.aeruginosa* or Legionnaires Disease by a member of the Infection Prevention Team or Consultant Microbiologist. If an outbreak is suspected or confirmed then the Infection Prevention Team will convene an Outbreak Control Team (OCT) meeting. The membership of this group will depend on the extent and severity of the outbreak. The OCT will normally work in association with the WSG, Consultant in Communicable Disease Control (CCDC), Health Protection Team, Director of Public Health and staff in the area of concern to search for the source of the causative organism. This search is a specialist task which may involve epidemiological studies and taking water samples for analysis.

The Health and Safety Executive may be involved in the investigation of cases under the Health and Safety at Work Act 1974. Local authority environmental health officers may also be involved.

It is essential that the Health Board maintenance team do not drain or disinfect the systems before samples have been taken. The maintenance team's role is an important one - guiding specialists to the various water systems within the building, and, in particular, to the points from which samples can be taken. Easy access to these sampling points is essential.

An investigation would concentrate upon all potential sources of *P.aeruginosa*/ Legionella infection including:

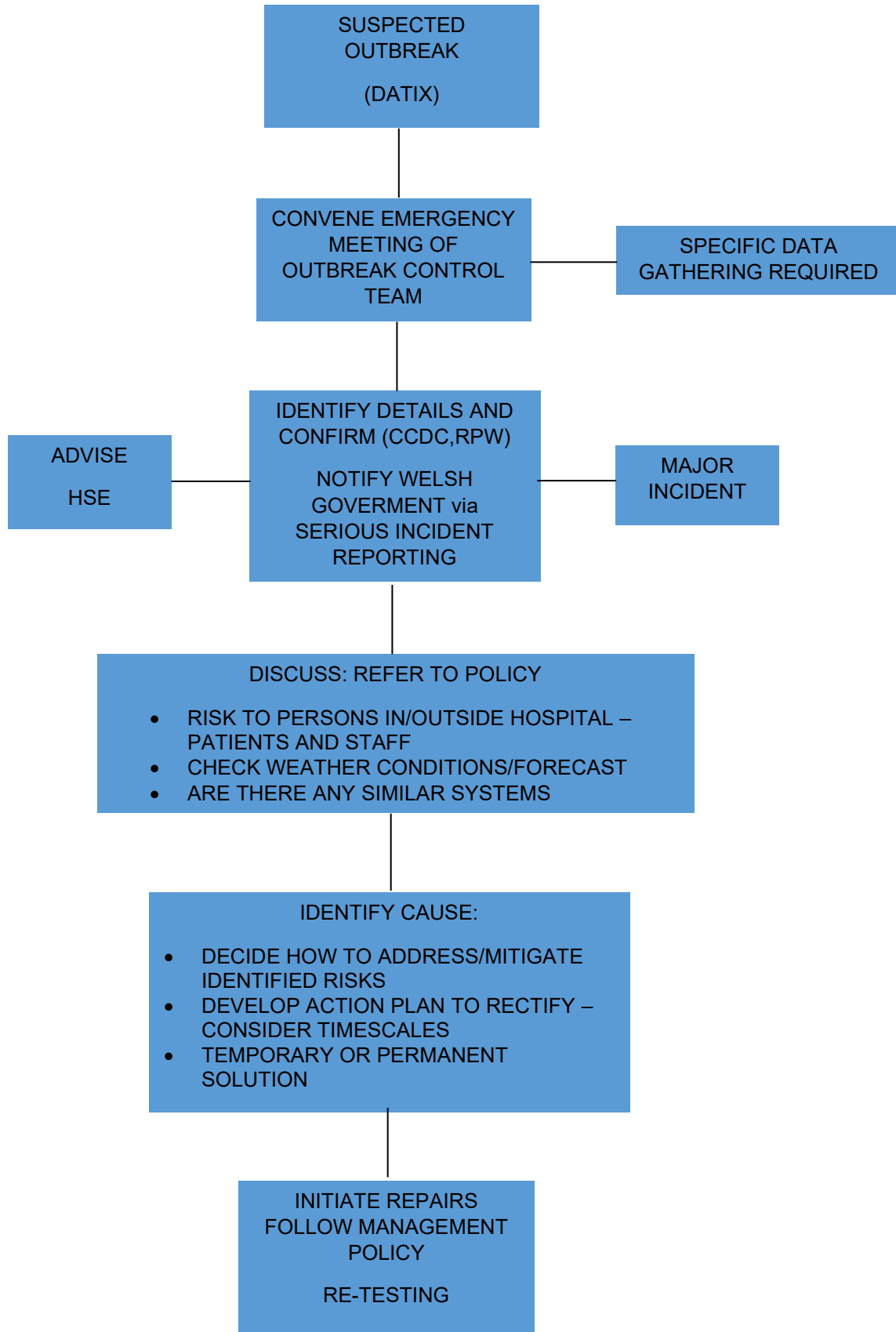
- The domestic hot and cold water system distribution
- Showers or spray washing equipment
- Drainage systems and taps
- Whirlpool baths or therapy pools
- Humidifiers in ventilation systems
- Cooling coils in air conditioning systems
- Fountains and sprinklers
- Ice machines

To assist in such investigations the maintenance team will need to be able to provide details of all associated equipment, its location, technical data, the operating maintenance and spares information on all the above installations. They must assist by advising the investigating team as to the extent of servicing on the site and locating taps and sample points.

Off-site information will also be required such as whether there has been any local excavation or earth moving works; alterations to water supply systems or drainage systems or any other factors which may have a bearing on the site.

The Infection Prevention Team is responsible for co-ordinating the identification of the cause of infection and will advise on cleaning, disinfection, they will also work closely with the RPW/DRPW's to devise engineering modifications and long-term control measures.

## Appendix: 2 – Major Outbreak flow diagram



## Major outbreak plan introduction

*P.aeruginosa* & *Legionella* species occur naturally in the environment and are particularly associated with water sources. Outbreaks of human disease can be associated with a particular water source, which on occasions has proved to be a health care establishment.

Acute hospitals may be affected by any outbreak, whatever the source. The normal running of the hospital may be affected if large numbers of cases admission are involved that require hospitalisation. The Health Board microbiology laboratories may also be required to process large numbers of diagnostic or environmental samples, alternatively, these may be sent to alternative Testing Laboratories.

However, this plan is limited to the actions that should be taken if the source of the outbreak is thought to be one of the hospitals within the Health Board.

### **Definition of an Outbreak**

A *Legionella* outbreak is defined by the Health Protection Agency as two or more confirmed cases of Legionellosis occurring in the same locality within a period of weeks rather than months, as defined by HSG 274 PART 2 appendix 2.3. Location is defined in terms of the geographical proximity of the cases and requires a degree of judgement. It is the responsibility of the Consultant in Communicable Disease Control (CCDC) for the declaration of an outbreak. The CCDC is appointed by the local authority under public health legislation.

### **Detection of an outbreak**

An outbreak may be detected by a variety of routes and personnel. Clinical, Infection Prevention Team, Microbiology and Health Protection Team staff should always consider the possibility of an outbreak when dealing with any case of definite or suspected *Legionella* infection.

Any person, whatever their profession, should contact the local Infection Prevention Team immediately, if they suspect that an outbreak of *Legionella* infection may be occurring within the Health Board. For further advice please contact a member of the IP Team via the main acute hospital's switchboard and for out of hours and weekends please contact the on call Consultant Microbiologist via the hospital switchboard.

The IP Team will investigate the situation and the Consultant Microbiologist responsible for the site(s) affected will decide whether to instigate the 'Outbreak Control Plan – *Legionella*'.

It should be noted that when determining whether an outbreak of *Legionella* infection is occurring, cases may not be confined to patients but may also occur in visitors and staff. These will have been reported to the Health Protection Team.

### **Outbreak control plan**

The main objectives of the Outbreak Control Plan are as follows:

- To identify and define at the earliest stage if a *Legionella* outbreak has occurred and if this is associated with the Health Board premises.
- To organise satisfactory communication with appropriate internal and external agencies, patients and relatives.
- To identify the source of the infection.
- To stop further spread and prevent its recurrence.

The responsibility for co-ordinating the above objectives, lies with the Consultant in Communicable Disease Control supported by the Director of Public Health.

### **Outbreak control team – legionella**

The Health Board is a large organisation on several different sites. A Legionella outbreak may affect one or more sites. The relevant personnel for each site affected should be included in the Outbreak Control Team. Some of the roles detailed below will be filled by the same person e.g.

The Outbreak Control Team must be called together rapidly and will comprise:

- Consultant Microbiologist
- CCDC (Consultant in Communicable Disease Control)
- Infection Prevention Nurse(s)
- Responsible Person (Water) or Deputy
- Medical Director
- Medical, Nursing and Managerial staff from the site(s) affected
- Clinical Risk Manager and / or Health and Safety Manager
- Health and Safety Managers
- Director of Public Health

Additional members may be invited to attend the outbreak meeting and may include:

- Senior Bed Manager
- Medical Records Manager
- Regional Epidemiologist
- Public Relations Officer
- Representative from the Health and Safety Executive
- Environmental Health Officers
- Local Authority
- Communication Officer
- Pharmacy lead

Secretarial and clerical support must be made available to the Team and regular reports distributed to all Team members.

### **Procedure for outbreak control team meetings**

The first Outbreak Control Team meeting will be co-ordinated by the Infection Prevention Nurse for the site(s) affected.

The terms of reference of the Team are:

- To investigate the source and cause of the outbreak
- To implement measures necessary to control the outbreak
- To monitor the effectiveness of the control measures
- To provide clear guidelines for communication with patients, patients' relatives, media, staff, other health authority services within and outside the Hospital

Particular topics that should be considered by the Team are:

- Detection of the source and implementation of any remedial measures required
- Case definition and detection of cases
- Diagnostic procedures and the effect on the microbiology laboratory
- Treatment of cases and any change in local empirical prescribing policy
- Effect on the normal running of the hospital

- Managing communication with patients, staff, public and the media
- Funding of the above activities
- Defining the end of the outbreak
- Future monitoring and control measures

The Consultant Microbiologist – responsible for the site(s) affected will initially act as chairperson and outbreak co-ordinator. The Team should decide at the first meeting the roles to be undertaken by each Team member. The chairperson and co-ordinator roles may be reassigned if the Team so wish. Each member should keep a daily record of their actions in respect of the outbreak and retain them in case the handling of the outbreak is reviewed/ challenged at a later date.

It should be noted that the Estates Department plays a pivotal role in the detection of the source of the outbreak and implementing any remedial measures.

Subsequent meetings will systematically review the outbreak. The need to obtain further assistance should be formally considered at each meeting. It should be recognised that regional and national expert support is available for Legionella outbreaks and the Team should make best use of this.

#### **At the end of the outbreak**

After the outbreak is officially considered over, a final meeting of the Outbreak Team should be held to:

- Review the action taken by all participants and to identify any areas for further improvements
- Recommend if necessary changes which will reduce the chance of recurrence of the outbreak
- Compile an Outbreak Report

#### **Interim and final reports**

The Outbreak Control Team is responsible for providing any interim reports required by the hospital and the final report at the conclusion of the outbreak, which must be signed by:

- Consultant Microbiologist – responsible for the site(s) affected
- Responsible Person (Water) - responsible for legionella control at the site(s) affected
- CCDC
- Director of Public Health
- Health and Safety Managers

## Appendix: 3 - Record Keeping

To ensure that precautions continue to be carried out and that adequate information is available for checking what is done in practice, a record should be kept and maintained for at least five years showing the information specified in the L8 Fourth edition and WHTM 04-01.

Precautionary measures and treatments, monitoring results and remedial work should be logged and signed or initialled by the person who has carried out the work. Sufficient information should be recorded to show what measures have been taken and how they have been monitored.

The detailed information required in the log will depend on the type and complexity of the system or water service to which it applies.

The purpose of a Log-Book system is to improve the efficiency and effectiveness of installation and maintenance, and also to provide a record of various tasks and observations so that the plant history can be reviewed at any time by the maintenance staff. It will prove essential to the maintenance engineer in the operation of a planned plant maintenance scheme, and, if properly followed, will prevent unacceptable conditions developing as a result of ineffective maintenance.

The Log-Book will:

- Identify the installation requiring attention and how it operates.
- Record results of the initial commissioning (if available) and any re-commissioning so that observations made during maintenance checks can be compared.
- Define the maintenance task or observation required and the frequency.
- Provide for the recording of maintenance observations and results and for comments to be made in respect of any defect seen during the inspection.
- Provide preliminary guidance on fault diagnosis and checking to assist with immediate on-site correction or adjustment.
- Provide for, and make reference to, any separate observation sheet required to record extensive or abnormal observations which cannot be noted on the routine inspection sheets.
- Provide dates and results of inspections, tests and all associated works and procedures.
- Provide dates for next scheduled inspection, test and associated works visits.

These entries should bear the signature of the person carrying out the task and should be kept available for inspection for at least five years from completion.

Details of operational and functional tasks must be drawn up for the site by the "Responsible Person". These, together with the completion of Log-Books, will enable a proper historical record to be compiled of all works carried out and observations made.

Frequencies are indicated for initial guidance only, as they will vary to suit the operation of the system on site, its location, the design parameters and particular provisions, for example manual operation rather than automatic control methods.

The user's needs must be considered before commencing any operational or maintenance tasks and the timing for these tasks must be considered and carefully planned in order to minimise inconvenience.

The control of Legionella is a continuing responsibility. Effectiveness of precautionary measures should be continually monitored and a continuing programme to ensure awareness should be devised. Although knowledge of Legionellosis has improved markedly in recent years, there is a continuing misunderstanding about the method of dissemination.

## Appendix: 4 - On-going monitoring and audit

The Responsible Person will be responsible for arranging all monitoring and auditing procedures.  
6 monthly- The RPW shall ensure an audit is undertaken (either directly or indirectly using a suitably qualified person) using the management audit pro-forma to ensure compliance with the Control of Legionella, hygiene, “safe” hot water, cold water and drinking water systems – WHTM 04-01 Part A and-B.

Regularly: The co-ordinating CP’s shall carry out spot checks and action non-compliance  
2-Yearly Or change To the system: The Responsible Person may appoint a suitably qualified external consultant to review all Risk Assessments and relevant documentation and verify compliance with the approved Code of Practice L8 and the Department of Health Technical Memorandum WHTM 04-01 Part A and B.