



University of
Nottingham
UK | CHINA | MALAYSIA

Health and Safety

Policy

Legionella and Water Hygiene
Management

SAF-POL-WAT



University of
Nottingham
UK | CHINA | MALAYSIA

Health and Safety Department

Approved
Document

Document Control

Document Details	
Reference	SAF-POL-WAT
Title	Policy – Legionella and Water Hygiene Management
Version Number	1
Approval Date	2 nd March 2021
Issue Date	2 nd March 2021
Review Date	2 nd March 2023
Status	Approved
Owners	Health and Safety Department
Author	Barrie Ellis

Document Revision History				
Revision	Date	Nature of Revision	Prepared by	Approved by

The Health and Safety Department will maintain the official version of this document. Before referring to any printed copies, please ensure that they are up-to-date.

Contents

	Page Number
1 Regulatory Background	4
2 Legionella and Water Hygiene Policy Statement	5
3 Roles and Responsibilities	6
4 Water Hygiene Logbook	12
5 Risk Assessment	13
6 Water Hygiene Management Group	13
7 Training, Competency and Supervision	13
8 Monitoring and Inspection	14
9 Incident Reporting	15
10 Emergency Plans	15

Legionella and Water Hygiene Management Policy

University policies establish standards and expectations for health and safety across the organisation and set the minimum standards expected.

Each working unit, which may be a Department, Site, Institute or School and will be referred to as a Business Unit in this policy, can produce its own arrangements, in order to locally implement these standards. Any standard(s) imposed at a local level must meet all requirements set out in this policy. Where there is a discrepancy, the University policy takes precedence.

1. Regulatory background

The Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH) are intended to protect against risks to health arising from exposure to hazardous substances, including biological agents. These are the principal regulations for management of Legionella and Water Hygiene but particular work activities can fall within the scope of more specific Regulations.

The University is committed to providing high quality water and the prevention and control of legionellosis and other bacteria from water systems on its estate and equipment used. The relevant regulations and industry guidance that need to be adhered to are:

- Health and Safety at Work Act 1974
- Control of Substances Hazardous to Health Regulations 2002
- Water Supply (Water Fittings) Regulations 1999
- Health and Safety Executive – Legionnaires’ Disease, The control of legionella bacteria in water systems (L8) 2013 4th Edition
- Health and Safety Executive – Legionnaires’ Disease: Technical Guidance - Part 1: The Control of Legionella bacteria in evaporative cooling systems HSG274 2014 Part 1
- Health and Safety Executive – Legionnaires’ Disease: Technical Guidance - Part 2: The Control of Legionella bacteria in hot and cold water systems HSG274 2014 Part 2
- Health and Safety Executive – Legionnaires’ Disease: Technical Guidance - Part 3: The Control of Legionella bacteria in other risk systems HSG274 2014 Part 3
- British Standard Specification BS8558:2015 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complimentary guidance to BS EN 806
- British Standard Specification BS8580-1:2019 Water quality – Risk assessments for Legionella control – Code of practice

- The Chartered Institution of Building Services Engineers TM13 2013 COP Minimising the Risk of Legionellosis
- British Standard Specification BS7592-2008 Sampling for legionella in water systems Code of Practice 2008
- British Standard Specification BS 8554:2015 Code of practice for the sampling and monitoring of hot and cold-water services in buildings
- British Standard Specification BS 8680:2020 Water quality. Water safety plans. Code of practice
- Department of Health Technical Memorandum 04-01: Safe water in healthcare premises (Parts A & B) 2016 HTM 04-01 for all relevant University Premises
- BSRIA BG50 Water Treatment for Closed Heating and Cooling Systems (BG 50/2013)
- BG 29/2020 Pre-Commission Cleaning of Pipework Systems 6th edition
- BS2486: 1997 Recommendations for Treatment of water for steam boilers and water heaters
- BS EN 16941-1:2018 On-site non-potable water systems. Systems for the use of rainwater

2. Legionella and Water Hygiene Policy Statement

The health, safety and wellbeing of our staff, students and visitors, who collectively make up our University Community, is vitally important to us. Furthermore, we understand that health and safety has a vital role in supporting and enabling world leading teaching and research.

In order to achieve this, The University will ensure effective management of our risk by setting, implementing and reviewing a health and safety management system, through continual improvement and by allocating the resources necessary to attain these. We will also define clear management systems and ensure involvement of staff at all levels, when considering the actions necessary to meet this policy.

The University in line with the Health and Safety Executive Approved Code of Practice L8 and associated guidance will identify and assess potential sources of Legionella bacteria, determine the correct operation of water systems and will ensure that necessary maintenance/monitoring is being carried out by competent personnel. For this all relevant procedures and records relating to the programme will be kept and will be maintained and reviewed as necessary. Appropriate training will be provided for all those with designated responsibilities for the implementation of the University's policy and associated arrangements.

Primary Control for Legionella

Legionnaire's disease can occur from exposure to legionella bacteria in airborne water aerosols generated from systems such as cooling towers, evaporative condensers, hot and cold water systems and spa pools. The propagation of Legionella bacteria is enhanced by the following conditions:

- Water temperatures between 20°C and 45°C
- Stagnation of water within systems and equipment
- Where conditions are present providing nutrients to the bacteria such as the presence of biofilms, scale, rust or sludge

The University will adopt the principles of control set out in the HSE publication ‘Legionnaires’ disease: The control of legionella bacteria in water systems- Approved Code of Practice and Guidance (L8)’ and the associated guidance HSG274 part 1 to 3 to monitor and prevent the above conditions occurring.

The management of legionella risk will be a continual commitment by the University involving regular management and progress meetings, a risk assessment program, monitoring, inspection and record keeping.

The University will ensure that all supplies to drinking water systems shall be of potable quality.

The University will ensure that manufacturers/suppliers of plant and water systems to all their sites will design them in such a way as to not contribute to risk of legionellosis. Necessary information, testing and training in the supply of plant and other water systems will be provided by the manufacturers/suppliers.

Water treatment services or consultancies engaged by the University to assist in implementing the policy and arrangements will be competent and members of the Legionella Control Association.

3. Roles and Responsibilities

University Council will

- Receive annual assurance reports from the Health and Safety Department in association with the Director of Estates and Facilities on Legionella and Water Hygiene safety

The University Health and Safety Committee will

- Be the formal oversight and compliance committee for the University and will provide assurance to University Council
- Promote good practice among University staff and students in relation to the management of water systems
- Consider and advise on University legionella and water hygiene management policy and arrangements
- Be notified of any significant accident, incident or enforcement action
- Receive annual report of audits and assurance monitoring

University Executive Board (UEB) will

- Ensure that they are provided with information on the significant risks from legionella and water hygiene related hazards facing the institution
- Consider the risk implications of strategic decisions such as large projects
- Seek assurances that emergency plans are in place in case of significant counts of bacteria found or confirmed cases
- Seek assurances that all mandatory requirements for legionella and water hygiene management are met
- Seek assurances that all health and safety arrangements for Legionella and water hygiene management are adequately resourced

- Seek assurance that risk control measures to ensure safety from legionella are in place and are being acted upon
- Seek assurances that those with legionella and water hygiene management responsibilities are adequately trained and competent
- Seek assurance that there is a process for auditing health and safety performance for the management of University water systems and equipment
- Seek assurance that competent health and safety advice is available to assist in managing and assessing risks from Legionella and water hygiene issues
- Be notified of any significant accident, incident or enforcement action

The Water Hygiene Management Group will

- Be chaired by the Chief Finance Officer
- Ensure a suitable and sufficient Water Safety Plan (WSP) is developed by the Appointed Responsible Person
- Be convened quarterly to consider issues requiring review or direction of immediate action
- Comprise of representatives with a direct interest or responsibility in water hygiene activities from across all areas of the University
- Seek assurances that all mandatory requirements for legionella and water hygiene management are met from all relevant Business Units
- Provide regular reports to the University Health and Safety Committee on water hygiene

The Health and Safety Department will

- Provide and keep updated, policies, arrangements and guidance to ensure any statutory requirements for the management of legionella and water hygiene are met
- Provide competent advice and support on water hygiene management to the University
- Ensure appropriate oversight for compliance with Control of Substances Hazardous to Health Regulations (specifically HSG274 (L8)) and provide reports to University Safety Committee and UEB
- Have an oversight of all water hygiene related safety training received and ensure adequacy through routine review
- Have an oversight of reported incidents concerning legionella and make recommendations where necessary
- Have oversight in situations where lack of potability, legionella or other bacteria is discovered and carry out an investigation with the assistance of the Appointed Responsible Person(s) and report findings to the University Health and Safety Committee and UEB
- Lead on and coordinate visits by external agencies, including the Health and Safety Executive
- Receive annual assurance reports from the Director of Estates and Facilities on water hygiene management
- Monitor Business Units and contractors are adhering to the University Policy by carrying out audits (see University Health and Safety Monitoring Policy)

The Chief Finance Officer will

- Establish and chair the Water Hygiene Management Group
- Ensure that a suitable Terms of Reference is developed for the Water Hygiene Management Group
- Ensure that management of legionella and water hygiene meets the requirements as set out in University policy and associated arrangements
- Ensure a suitable and sufficient Water Safety Plan (WSP) is developed by the Appointed Responsible Person
- Ensure that the Appointed Responsible Person(s), Responsible Person(s) within the Business Units and deputy are appointed formally. As per the requirements as set out in the University arrangements Safety Critical Roles
- Ensure that the Appointed Responsible Person(s), Responsible Person(s) within the Business Units and deputy have sufficient training, experience, knowledge, time and resources to enable them to meet all of the statutory provisions
- Ensure that adequate resources are allocated to the legionella and water hygiene management
- Ensure that an internal health and safety inspection programme is in place in accordance with this policy and ensure reports are considered by the Estates health and safety committee
- Lead on any campaigns associated with Water hygiene risk management
- Lead by example e.g. undertake leadership walk rounds
- Ensure that following any significant incident or enforcement action that an appropriately investigated is undertaken and any findings implemented

Director of Estates and Facilities will

- Ensure that management of legionella and water hygiene meets the requirements as set out in University policy and associated arrangements within area of responsibility
- Ensure that a Water Safety Plan is implemented which meets the requirements of University policy within area of responsibility
- Ensure that the Appointed Responsible Person(s) and deputy are appointed formally (in writing). As per the requirements as set out in the University arrangements Safety Critical Roles
- Ensure that the Appointed Responsible Person(s) has sufficient training, experience, knowledge, time and resources to enable them to meet all of the statutory provisions
- Ensure the consideration of water hygiene risk implications of strategic decisions such as new projects and relevant construction work
- Lead on any campaigns associated with Water hygiene risk management
- Lead by example e.g. undertake leadership walk rounds
- Ensure that following any significant incident or enforcement action that an appropriately investigated is undertaken and any findings implemented
- Ensure that water hygiene management is included as relevant in a memorandum of understanding for shared facilities

Appointed Responsible Person(s) (Estates and Facilities) will

- Ensure that responsibilities of the role are understood and the formal appointment is accepted (in writing)
- Implement systems to ensure legionella and water hygiene management meets the requirements as set out in University policy and associated arrangements
- Produce and implement the Water Safety Plan to ensure that appropriate measures of controlling the risks from legionella bacteria are undertaken
- Ensure that an appropriate plan of works is in place and approved prior to commencing work on water systems
- Ensure that the online Water Hygiene Logbook is up-to-date
- Ensure that the online Water Hygiene Logbook is reviewed after works to University water systems
- Ensure surveys and Legionella Risk Assessments are suitable and sufficient for all University buildings and they meet the standards required in BS8580-1:2019
- Ensure a written scheme for the control of identified risks is in place
- In conjunction with the Health and Safety Department, assist investigating any confirmed legionella cases
- Ensure that regular monitoring of water system assets or equipment are carried out as identified by the online Water Hygiene Logbook schedule and updated as required
- Ensure that suitable competent water hygiene management contractors are used for any monitoring of water systems
- Ensure that any Water Hygiene Contractor duties as detailed below are contained in within a contract between the University and these parties
- Liaise with the construction principal contractors over site works, including pre-start meetings, site visits and reviews on completion of works on matters of water hygiene
- Ensure that any University staff who commission works (either by external contractors or internal maintenance staff) have the appropriate Construction Phase Plan or Risk Assessments and Method Statements prior to the commencement of the works in relation to management of water hygiene
- In collaboration with the Health and Safety Department, provide information, support and advice to Responsible Person(s) within the Business Units on all matters concerning the management of water systems and water containing equipment
- Ensure that appropriate information is communicated to University staff, students and contractors
- Manage performance of Water Hygiene Contractors providing feedback at contract meetings and to the Director of Estates and Facilities
- Ensure that appropriate training is delivered to all relevant persons and that robust records are kept in accordance with University policy
- Ensure monitoring of water systems as per University policy and arrangements
- Provide regular reports to the Water Hygiene Management Group on non-conformities and new or modified water systems

Deputy Appointed Responsible Person (Estates and Facilities) will

- Assist the Appointed Responsible Person and undertake a holding role in their absence

Heads of Business Unit will

- Ensure the dissemination of the University's arrangements for the management of legionella and water hygiene to relevant people within the Business Unit
- Ensure that Responsible Person(s) within the Business Units are appointed
- Ensure that the condition of water within equipment is monitored and ensure appropriate action is taken to manage the risk from bacterial growth
- Ensure arrangements are in place for the identification of infrequently used (little used) outlets and that suitable flushing of these outlets is undertaken and recorded on the online Water Hygiene Logbook
- Ensure records of checks carried out on equipment and that records of any remedial work are kept
- Ensure appropriate staff are identified and ensure delivery of appropriate training
- Ensure no connection to or work that will take place on the domestic water systems without the authorisation of the Estates Responsible Person

Responsible Person(s) within Business Units will

- Ensure that responsibilities of the role are understood and the formal appointment is accepted (in writing)
- Implement systems to ensure legionella and water hygiene management meets the requirements as set out in University policy and associated arrangements
- In conjunction with the Health and Safety Department, assist investigating any confirmed legionella cases
- In collaboration with the Appointed Responsible Person provide information on all matters concerning the management of infrequently used outlets and water containing equipment within the Business Unit
- Ensure a written scheme (flushing regime) for the control of identified risks is in place
- Ensure that regular flushing and monitoring of infrequently used outlets and water containing equipment are carried out as identified by the online Water Hygiene Logbook schedule and updated as required
- Ensure that appropriate information is communicated to University staff, students and contractors
- Ensure that training records are kept in accordance with University policy
- Provide regular reports to the Water Hygiene Management Group on non-conformities and new additions/alterations to water systems

Line Managers will

- Comply with all policies, arrangements and guidance both at a University and local level
- Take appropriate action in the event of an emergency as per University emergency procedure
- Inform the Responsible Person(s) within the Business Units of all equipment within their area of responsibility that contains water
- Ensure all equipment containing water is adequately risk assessed to identify suitable arrangements for the control of legionella and other bacteria
- Ensure that staff they're responsible for, receive relevant legionella training and that this is recorded on personnel records

- Report any shortcoming or defect in the current control measures
- Ensure that any connections to the domestic water system are reported to the Appointed Responsible Person

All Staff / Students will

- Take appropriate action in the event of an emergency as per University emergency procedure
- Ensure no connection is made to or work that will take place on the domestic water systems without the authorisation of the Appointed Responsible Person

Estates / Project Staff (Responsible for appointing or managing works) will

- Register any work with the Appointed Responsible Person and collate and supply necessary documentation and specifications as required
- Ensure that, prior to the commencement of any works that may have the potential to alter domestic water systems the Appointed Responsible Person is consulted
- Distribute / communicate existing water hygiene arrangements to CDM Principal Designer and other relevant personnel
- Ensure no work is undertaken on domestic water systems without the approval of the Appointed Responsible Person
- Provide direct labour / contractor with information regarding water hygiene prior to works commencing
- Attend any mandatory training when requested
- Ensure designs for new domestic water systems comply with the relevant Water Regulations
- Ensure that all components or materials used are WRAS approved
- Ensure once a domestic water system is made live suitable legionella management arrangements are in place until handover of a new/altered water system

Direct Labour / Contractor / Sub-Contractor will

- Can demonstrate awareness of Legionella and associated risks and to understand the Emergency Procedures for water management on site
- Consult the Appointed Responsible Person or deputy before commencing intrusive work into domestic water systems and ensure only approved methods and materials are used
- Report any defects with domestic water systems (such as deadlegs) prior to starting / continuing with work to the Appointed Responsible Person
- Ensure that suitable Risk Assessments, Method Statements and Standard Operating Procedures are in place for the specific works being undertaken and these are adhered to HSE guidance document HSG274 and relevant Water Regulations.
- Attend any necessary training when requested

Water Hygiene Risk Assessor Consultant will

- Ensure that they hold valid insurances with adequate cover for the works to be undertaken
- Hold and maintain Legionella Control Association accreditation
- Undertake Legionella Risk Assessments that meet BS 8580-1:2019

- Inform Appointed Responsible Person if matter of concern arise whilst undertaking risk assessments
- Operate independently of any Water Hygiene Monitoring contractor
- Provide support to the Appointed Responsible Person including emergency advice

Water Hygiene Monitoring Contractors will

- Ensure that they hold a valid membership to the Legionella Control Association
- Ensure that they hold valid insurances with adequate cover for the works to be undertaken
- Ensure that all monitoring activities on University premises are in compliance with current legislation and all relevant Approved Codes of Practice and Guidance Notes
- The Monitoring contractor must raise any issues relating to health and safety with the Appointed Responsible Person
- Provide written Risk Assessments, Method Statements and SOPs for all the monitoring activities undertaken on University premises
- Undertaken monitoring activities as directed by the Appointed Responsible Person
- Record results from monitoring activities on designated system
- Raise matters of urgent concern to the Appointed Responsible Person
- Ensure methods for obtaining Legionella samples meets BS 7592:2008
- Provide statutory information to the Health and Safety Executive on request.
- Comply with the University Contractors Site Rules

CDM Principal Designer

- Assess and provide water hygiene management information at Pre-Construction Stage

4. Water Hygiene Logbook

In order to be able to manage risks from Legionella bacteria in our domestic water systems, the University needs to know the current status of these water systems. A Legionella Risk Assessment is carried out for the purpose of identifying critical components of a water system to establish a written scheme and logbook.

The University utilises an electronic logbook (ZetaSafe) which will contain:

- Legionella Risk Assessment (including water system schematics)
- System Maintenance Records
- Routine monitoring data
- Water treatment and service reports
- Cleaning and disinfection records
- Legionella and other microbial analysis results
- Relevant Business Unit equipment

The University will maintain one single Water Hygiene Logbook for all UK campuses and buildings. The Logbook will be maintained and be available to relevant parties. As per the responsibilities, the Appointed Responsible Person is responsible for ensuring the Logbook is accurate and updated.

University arrangements detail the requirements for the various monitoring activities.

5. Risk Assessments

Legionella risk assessments will meet the requirements of the British Standard Specification BS8580-1:2019 Water quality – Risk assessments for Legionella control – Code of practice, HSG274 Parts 1-3, HTM 04-01 2016 and HSC Approved Code of Practice L8 2013 4th Edition.

All equipment (e.g. water baths, ice machines, etc) that contain water will be risk assessed in accordance with the University risk assessment management arrangement SAF-MAN2.3 to identify suitable monitoring and maintenance activities.

6. Water Hygiene Management Group

The Water Hygiene Management Group has members for across the University to undertake the development of the Water Safety Plan (WSP). It also advises on the remedial action required when water systems are found to be contaminated and risk is increased.

The objectives of the group are:

- To create and communicate mechanisms for achieving consistent compliance with the HSE Approved Code of Practice (ACOP) L8 and HSG274
- To embed best practice for water hygiene within the University of Nottingham project delivery through Water Safety Plan, education and training
- To share information and exchange views on water hygiene issues that impact upon the management of Water Hygiene in the University campuses
- To identify priorities for action and to develop strategic and practical solutions
- To seek ways of involving the workforce in managing and raising awareness of water hygiene risks
- To consider relevant information and advice from the Health and Safety Executive and other such bodies
- To direct and recommend the practical application and implementation of policies, procedures and arrangements at a strategic level
- To keep under review planned inspections, surveys, incidents and audits

7. Training, Competency and Supervision

The University will ensure that all relevant staff who manage or may encounter the risk from Legionella bacteria as part of their daily duties will receive the appropriate level of training as set in the University Competency Policy.

All direct labour and contractors used on any maintenance or refurbishment works must have had Legionella Awareness training or a refresher session within the last three years.

The Appointed Responsible Person(s) and deputy must hold the qualification listed below and have Refresher training every 3 years.

Role	Training Required
Director of Estates and Facilities (Dutyholder)	Legionella management training
Appointed Responsible Person	Legionella management training
Appointed Deputy Responsible Person	Legionella management training
Projects Team	Legionella Awareness – Projects Specific if available
Health and Safety Department (Lead Advisor)	Legionella Management Training
Legionella Risk Assessor	Member of the Legionella Control Association with relevant competencies
Direct Labour	Nationally recognised Legionella Awareness training, members of WaterSafe
Contractors / Sub-Contractors working on water system	Nationally recognised Legionella Awareness training, members of WaterSafe
Water Hygiene Monitoring Contractors	Nationally recognised Legionella management training, Nationally recognised Legionella Awareness training, members of the Legionella Control Association, relevant technical training
Responsible Person within Business Units / Building Managers	Relevant Legionella Awareness training
Estates / Project Staff	Nationally recognised Legionella Awareness training – Projects Specific
Business Unit Staff	Relevant Legionella Awareness training as delivered by the Appointed Responsible Person and the Health and Safety Department

8. Monitoring and Inspection

The University will ensure appropriate monitoring and inspection regimes are in place to manage our water systems and equipment.

Additional monitoring and inspection of processes and contractors will be conducted by the Appointed Responsible Person. Oversight and audit are completed by the Health and Safety Department.

All water system assets and equipment identified will be monitored as per the written scheme set by the Appointed Responsible Person on the Water Hygiene Logbook as per the Water Safety Plan.

The University standard is to carry out monitoring and inspection in all areas in accordance with the University Monitoring and Inspection Policy.

The Director of Estates and Facilities will undertake leadership walk round as per University Policy.

Regular internal checks of the Water Hygiene Logbook will be carried out according to the relevant procedures. These will examine:

- Whether the monitoring of water assets is performed on time and the results recorded.
- A review of the list of Legionella/Water Hygiene Contractors.
- A periodic audit of a project that modifies or creates a water system or equipment to confirm adequate records are retained.
- Training requirements and records.

The Appointed Responsible Person along with the Health and Safety Department will carry out these checks. The Health and Safety Department will audit the system every 3-5 years as per University policy.

9. Incident Reporting

In any emergency the primary concern should always be the immediate safety of those affected as a result of an emergency. An emergency procedure is detailed in Section 10 of this policy.

When the immediate situation has been dealt with and people are no longer at risk, the incident must be reported locally, and to the Health and Safety Department who will inform the Appointed Responsible Person. The Health and Safety Department, in collaboration with the Appointed Responsible Person will inform the HSE or Public Health England, if necessary. All incidents will be investigated with the aim of identifying lessons learned and preventing similar occurrences in future. Any remedial actions required must be implemented immediately where possible and lessons learnt communicated widely to all who can benefit.

In some cases HSE must be notified by the University Health and Safety Department under the Reportable Incidents, Diseases and Dangerous Occurrences (RIDDOR) regulations. If any notifications are made to the HSE these must be copied to the University Insurance Manager.

Where non-conformities are identified within the Water Hygiene Logbook each of these will be investigated to establish root causes so that suitable remedial action can be taken and reported to the Water Hygiene Management Group.

Copies of the incident report will be kept by the Health and Safety Department and a copy provided to the person involved on request.

If in doubt advice can be sought from the Health and Safety Department

10. Emergency Plans

Failure of the Controls

Each failure must be investigated in detail and root causes identified and suitably addressed. Details of the remedial action required are detailed in the Water Safety Plan.

Legionella Contamination Detected

The risk assessment or failure of the controls may identify the need for sampling of water for microbiological quality under certain circumstances or at specified frequencies. The following actions will be initiated depending upon the results of sampling.

If Legionella bacteria is detected the Appointed Responsible Person must be immediately informed and the system re-sampled, if a similar count is found again, a review of the control and risk assessment carried out must be carried out to identify any remedial actions necessary. If two or more counts are at 100 cfu the system may be colonised albeit at low level. Disinfection of the system should be considered but an immediate review of the control measures and risk assessment must be carried out to identify any other remedial action required. Shower outlets in the affected system will be taken out of service.

Action to take if there is an outbreak of Legionellosis

Legionnaires disease is notifiable under the Health Protection (Notification) Regulations 2010. Under these regulations, human diagnostic laboratories must notify Public Health England of microbiologically confirmed cases of legionnaires disease.

An outbreak is defined as two or more cases where the onset of illness is closely linked in time (weeks rather than months) and where there is epidemiological evidence of a common source of infection, with or without microbiological evidence. An incident/outbreak control team should always be convened to investigate outbreaks. It is the responsibility of the Proper Officer to declare an outbreak. The Proper Officer, appointed by the Local Authority, is usually a Consultant in Communicable Diseases Control (CCDC). If there are suspected cases of the disease, medical practitioners must notify the Proper Officer in the relevant local authority.

If an outbreak is suspected, then the Health and Safety Department and the Appointed Responsible Person will work in collaboration with the Proper Officer to establish the source of contamination. This is a specialist task which involves epidemiological studies and taking water samples.

It is essential that suspected water systems or equipment are not drained or disinfected before samples can be taken.

The Appointed Responsible Person may authorise or require the shut down of any processes that are capable of generating and disseminating airborne water droplets until sampling procedures and any remedial cleaning/disinfection or other work has been done. The enforcing authority may insist that they give final clearance to restart the system. The Appointed Responsible Person will inform Business Units of such actions that could affect experiments and processes that may be running.

The Appointed Responsible Person will authorise or require samples to be taken from systems before any emergency disinfection is carried out. This is to aid any investigation into the causes/source of the outbreak. The investigating officers from the relevant agencies may take samples or require them to be taken.

The Health and Safety Department and the Appointed Responsible Person shall notify the Occupational Health Physician who will co-ordinate the medical aspects of the University's response.

Confirmed infections that are attributable to the University's systems are reportable to the Health and Safety Executive under the Reporting of Accidents, Diseases and Dangerous Occurrences

Regulations. Such notifications will be made by the Health and Safety Department. Under other circumstances consideration shall be given to making an informal, courtesy notification.

If an outbreak of Legionnaires Disease occurs within the University or due to its activities, then the guidelines outlined in appendix 2.3 of HSG274 Part 2 will be followed.