



Control of Legionella bacteria in water systems

Guidance

Doc control no: PRSG29.1 WELLBEING, SAFETY AND HEALTH MANAGEMENT SYSTEM

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Introduction

This guidance clarifies various roles as part of the management process in implementing the Standard. People in all schools and services could potentially be affected by exposure to legionella bacteria during the course of their work, research, study or visit here, so it's important that everyone is made aware of the University's requirements and how to fulfil them. Any questions should be directed to either the Responsible or Authorised Person for Legionella.

Legionella bacteria are widespread in natural water systems, e.g. rivers and ponds. However, the conditions are rarely right for people to catch the disease from these sources. Outbreaks of the illness occur from exposure to legionella growing in purpose-built systems where water is maintained at a temperature high enough to encourage growth, e.g. cooling towers, evaporative condensers, hot and cold water systems and spa pools used in all sorts of premises (work and domestic).

Most healthy people do not become infected with *Legionella* after exposure. However, certain risk factors can increase the likelihood of an individual contracting the disease:

- People over 45;
- Smokers and heavy drinkers;
- People suffering from chronic respiratory or kidney disease; and
- Anyone with an impaired immune system

The protocol covers all types of water systems as well as plant and fixed or mobile equipment which connects into these, in all buildings and sites where the University has responsibility for maintenance, monitoring and controlling activities. This includes air conditioning systems, open evaporative systems, water baths and portable units.

Definitions

Legionella - bacteria are widespread in natural water systems, e.g. rivers and ponds. However, the conditions are rarely right for people to catch the disease from these sources. Outbreaks of the illness occur from exposure to legionella growing in purpose-built systems where water is maintained at a temperature high enough to encourage growth, e.g. cooling towers, evaporative condensers, hot and cold water systems and spa pools used in all sorts of premises (work and domestic).

By maintaining and managing its water systems, plant and equipment, the University seeks to prevent the risk of exposure to legionella and any outbreaks that may ensue.

Cold water service - installation of plant, pipes and fitting in which cold water is stored, distributed and subsequently discharged.

Hot water service - installation of plant, pipes and fitting in which cold water is heated, distributed and subsequently discharged (not including cold water tank or cistern).

Dead leg - a length of redundant or abandoned leg of water system pipework.

Infrequently used outlet – an outlet (e.g. tap, shower, toilet, lab equipment etc.) that is unused or rarely used, which may increase the risk of legionella bacteria growth.

Domestic water - hot and cold water intended for drinking, washing, cooking, food preparation or other domestic purposes

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Legionella risk assessment – a risk assessment that is carried out by competent contractors appointed or approved by the Authorised Person for Legionella.

Legionella Management Records – all records associated with the process of managing the risk from legionella bacteria in water services e.g. records of flushing, temperature logs, cleaning of tanks.

Responsibilities

The health and safety responsibilities of staff, students or visiting personnel are set out in the [University Health and Safety Policy](#).

For the management of legionella, the following additional actions are specified for the role-holders listed below:

Vice-Chancellor

- Appoints the ‘Duty Holder ‘ in writing

Duty Holder: (Director of Facilities Directorate)

- Checks that the University is compliant with legal requirements and Approved Code of Practice
- Appoints the Responsible Person(s) for Legionella in writing

Responsible Person for Legionella: (Deputy Director of Estates Services – Maintenance and Operations)

- Appoints the Authorised Person(s) for Legionella in writing.
- Determines the terms of reference of the Legionella Management Group.
- Attends and advises the Legionella Management Group.

Authorised Person(s) for Legionella

- Confirms, in writing, the appointment of Legionella Competent Person(s) as put forward by the Heads of Schools/ Services.
- Authorises contractors and checks they are competent and that they follow the Control of Legionella Bacteria in Water Systems protocol and any other requirements.
- Attends and advises the Legionella Management Group.
- Carries out regular monitoring and checks that Legionella Risk Assessments are carried out and control measures and maintenance are effectively carried out, and all records are available for inspection.
- Advises when a Legionella Risk Assessment is required for plant and equipment, arranges for the assessment to be conducted and the plant/equipment added to the Legionella Asset List.
- Manages the Legionella Asset List and keeps records.
- Gives written approval (including terms as appropriate) to staff / contractors wishing to connect / disconnect plant or equipment to the hot and cold water systems
- In conjunction with the Head of Health and Safety and the University Physician, notifies the relevant enforcing authorities should there be a confirmed outbreak of Legionella.

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Head of School/Service

- Appoints local Legionella Competent Person(s) in writing in conjunction with the Authorised Person for Legionella.

Legionella Competent Person(s):

A role identified and appointed locally but confirmed in writing by the Authorised Person for Legionella. They are trained to have a thorough understanding and technical knowledge of the control of Legionella in the hot and cold water systems, plant and equipment in their area. These staff members are expected to:

- Attends training detailed in the Training Matrix.
- Monitors authorised contractors and in-house staff undertaking legionella testing and monitoring activities.
- Checks Legionella logbooks (both paper and electronic format) to ensure that all records are up-to-date and faults are reported and remedied.
- Carries out actions identified in the Legionella Risk Assessment for plant, equipment or hot and cold water services; check that all work is carried out to an agreed programme and is recorded.
- Attends the Legionella Management Group on invitation.
- Informs the Authorised Person for Legionella, in writing, of plant or equipment (fixed or mobile) using the water systems when made aware of these by local staff.
- Notifies the Authorised Person for Legionella, in writing, of all known infrequently used outlets.

Guidance

- 1. Roles and responsibilities** – The health and safety responsibilities of staff, students or visiting personnel are set out in the [University Health and Safety Policy](#). These are not duplicated in each of the protocols, however, due to the additional legal duties in relation to the Control of Legionella Bacteria in water systems, the following additional roles and duties holders are specified above. These role holders will be appointed in writing.
- 2. The Legionella Management Group** – It will set its own terms of reference and agenda and will consist of the Responsible Person for Legionella, Authorised Person for Legionella, Head of Capital Projects, Head of Health and Safety, and University Physician. It could also include the Legionella Competent people, but whether or not they are invited and/or attend, they are expected to send and receive relevant information from the Group.
- 3. Connecting or disconnecting to the water services** – All staff who want to connect to or disconnect from the water systems need to be fully aware of the procedure. They will need to complete the 'Permission to connect or disconnect to hot and cold water systems' ([minor works form](#)) and send it to Estate's Help Desk for written approval. Only after they have received this, along with any additional terms (e.g. use of external contractors etc) can the work be undertaken.

In all circumstances, plant or equipment connected to, or disconnected from the hot or cold water system (including the permanent fixing of a hose) must be approved by the Authorised Person(s) for Legionella. Usually it will be carried out by FD Estates themselves or their approved contractors as they have the

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knowledge and expertise to manage the water services to prevent conditions where Legionella bacteria could proliferate.

4. **Legionella risk assessments for each building and identified equipment-** FD Estates manage the process of carrying out the Legionella risk assessments for each building. Copies of these risk assessments are retained by FD Estates.
5. **Plant and equipment Legionella risk assessments** - If staff bring in any plant or equipment that require(s) connection to the hot/cold water system, or is standalone and uses water (e.g. a water bath for a laboratory, but not a kettle); a local Legionella Competent Person is to be notified prior to connection or first use. They in turn will inform the Authorised Person for Legionella who will then decide whether or not the plant or equipment needs a Legionella risk assessment and if so, let your staff know, arrange to carry it out and add it to the Legionella Asset List.

The Authorised Person for Legionella holds the Legionella Asset List which identifies all plant and equipment which is covered by these risk assessments. The Authorised Person manages the records.

6. **Control measures** – The Legionella risk assessment for each building or equipment sets out the specific control measures (e.g. flushing of taps/ showers or tank inspections etc) which need to be carried out. The actions identified in these assessments will need to be implemented.
7. **Breakdown or faults in hot and cold water services** – Staff are to report all faults, problems etc. in hot/cold water systems to competent person(s) or FD Estates Helpdesk. Facilities Directorate will deal with the fault and notify the Authorised Person for Legionella if it becomes necessary.
8. **Carrying out work on the hot and cold water services** – Heads of Schools/ Services will need to check that their staff are aware that work cannot be carried out on the hot/cold water systems unless the people involved (staff or approved contractors) are formally permitted to do so by the Authorised Person for Legionella.
9. **Legionella management records** – Monitoring records will need to be retained these will be based upon the management processes and risk assessments defined for your area.
10. **Training** – The Legionella Training Matrix will identify the training and competence needs. If you are required to undertake these roles you should ensure that you have the necessary level of competency. Please contact the Authorised Person for Legionella if you feel you need any additional training / competency.
11. **Referral to Occupational Health** – If you are a member of staff undertaking Legionella monitoring and testing activities you will need to be referred to the Occupational Health Service for an initial assessment using a Health Questionnaire. Occupational Health Service will determine whether or not health surveillance is required. This will occur as part of your appointment, please contact the Legionella Competent Person in your area if this has not occurred. You will also need to inform them of any changes to your medical condition that may be affected by these roles so that advice can be obtained from Occupational Health.
12. **All incidents relating to Legionella** – If any person (in particular staff carrying out legionella activities) has any health concerns they need to approach their GP for advice. If any person

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comes back to the University with a report from their GP that they have Legionnaire's disease this should be reported to Occupational Health as soon as possible. The Physician will inform the Health and Safety Manager, the Responsible and Authorised Persons for Legionella.

If the investigation identifies a confirmed outbreak of Legionella (as defined under The Prevention or Control of Legionellosis, Approved Code of Practice L8, (2013)), the Responsible/ Authorised Person for Legionella in conjunction with the Head of Health and Safety and the University Physician will notify the relevant authorities.

- 13. Variation to the Standard** - In very occasional circumstances a variation to the Standard may be required. If this is the case, it is to be agreed in writing (and include an authorised written procedure) by the Legionella Management Group. The Head of School/ Service would also be notified of this if it was within their remit.

Should you have any questions or comments please contact the Authorised Person for Legionella.

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