Control of Legionella bacteria in water systems

Standard
Introduction

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

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.

The protocol covers all types of water systems as well as plant and fixed or mobile equipment which connect 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.

*For definition see guidance document.*

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 conducted and control measures and maintenance are effectively completed, with all records 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.

Head of School/Service

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

Legionella Competent Person(s):

• Attends training detailed in the Training Matrix.
• Monitors authorised contractors and in-house staff undertaking legionella monitoring and testing 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 of all known infrequently used outlets.

If you have any questions about equipment which may or not be included please contact the Authorised Person for Legionella.

Standard

The University takes a management approach based on the adequate control of the risks backed up by the need for legal compliance and expects that:

1. A ‘Duty Holder’, ‘Responsible Person for Legionella’, Legionella Authorised person(s), and ‘Legionella Competent Person(s)’ are identified and appointed in writing.

2. A Legionella Management Group is in place, with documented terms of reference.

3. The ‘Permission to connect to, or disconnect from the hot and cold water system’ form is submitted and authorised in writing by the Authorised Person(s) for Legionella before alteration, connection or disconnection to/from the hot and cold water system (including any plant or equipment) is undertaken.

4. The Authorised Person for Legionella is informed (in writing) of all plant and equipment (fixed or mobile) which may need a Legionella risk assessment. The Authorised Person for Legionella then determines whether or not such a risk assessment is required; if so, the plant or equipment is added to the current FD Legionella asset list.

5. The Authorised Person for Legionella is informed (in writing) of all known infrequently used outlets.
6. Legionella risk assessments are in place for all buildings across the University and identified equipment. Copies of these assessments are retained.

7. Control measures, maintenance activities and monitoring regime are:
   - Identified through the Legionella risk assessment
   - Set out in the Legionella logbook authorised by the Authorised Person(s) for Legionella
   - Assigned to Legionella Competent Person(s)
   - Implemented.

8. Breakdown or faults in/with the hot and cold water systems are reported to FD Estates Helpdesk and those related to Legionella are recorded in the Legionella logbook.

9. Only staff and contractors approved by the Authorised Person for Legionella may carry out work on the hot and cold water systems.

10. Legionella management records are maintained and retained for a minimum of 5 years.

11. Training is provided in accordance with the Training Matrix.

12. Staff who carry out Legionella monitoring and testing activities are referred to the Occupational Health Service for an initial assessment using a Health Questionnaire.

13. In case of a confirmed outbreak of Legionnaires’ disease the Responsible Person for Legionella, the University Physician and the Head of Health and Safety notify the authorities.

14. Any variation to this Standard is formally agreed in writing (including a written procedure) by the Legionella Management Group.

Relevant Legislation

- Legionnaires’ disease: The control of legionella bacteria in water systems. Approved Code of Practice (L8) including the HSG (274) Guidance
- Health and Safety at Work Act 1974 (HSWA)
- The Management of Health and Safety at Work Regulations 1999 (MHSWR)
- The Control of Substances Hazardous to Health Regulations 2002 (COSHH)