

British Occupational Hygiene Society
Faculty of Occupational Hygiene

Proficiency Module Syllabus

P901 – LEGIONELLA—Management and Control of Building Hot and Cold Water Services

Aim: To provide background and an overview of the risk of legionella infection and how it can be controlled in domestic type hot and cold water systems. *[This course is also a pre-requirement before undertaking course P902 – Management and control of evaporative cooling systems and other high risk systems.]*

Learning Outcome: On successful completion, the student shall be able to demonstrate management control in:

- Knowledge of the origins of legionella and the multiplication factors which allow it to proliferate in man-made water systems.
- Identification of the main conditions that need to coincide for legionella infection to take place and how they may be used to control risk.
- Awareness of legal requirements, approved codes of practice and best practice guidance.
- Implementation of legionella control regimes with suitable monitoring programmes and records.

Course Length: It is envisaged this course would be run over 1 day to include a short answer examination.

Content:	<i>Topic</i>	<i>Time Allocation</i>
1	INTRODUCTION AND HISTORY OF THE ORGANISM	15%
2	LEGISLATION AND GUIDANCE	15%
3	RISK ASSESSMENT OF SYSTEMS	25%
4	SYSTEM CONTROL	25%
5	CASE STUDIES	10%
6	OUTBREAK INVESTIGATION PROCEDURES	10%

Note: Reference is made in this syllabus to HSE guidance and or documentation. This may not be the most up-to-date relevant publications from HSE/other sources and is intended as guidance for candidates only.

1 INTRODUCTION AND HISTORY OF THE ORGANISM [15%]

The occurrence of legionella, sources and primary cause of growth in man made water systems. Types and significance of the bacteria.

The infection chain, susceptibility to infection, symptoms, treatment and prognosis.

Health Effects on exposed people.

Review of data gathered by the Health Protection Agency

2 LEGISLATION AND GUIDANCE [15%]

Acts of Parliament

Approved codes of practice, HSE guidance notes. Other industry accepted good practice sources of information.

3 RISK ASSESSMENT OF SYSTEMS [25%]

Role of the competent person.

Key components of the management and control systems.

General design and operation of domestic type hot and cold water systems.

Importance of sentinel points, dead legs and blind ends.

Miscellaneous Systems

4 OPERATIONAL CONTROL [25%]

Duties and responsibility of the responsible person and assigned management team.

The role, risks and responsibilities when subcontracting part of the task of the control strategy.

The written scheme of precautions including routine temperature checks and routine condition inspection.

Other control strategies—ionisation, ClO₂, etc.

The requirement to undertake general bacteriological testing as part of the control strategy.

Corrective or remedial actions.

Records keeping, the detail required management control and retention

5 CASE STUDIES [10%]

Recent outbreaks, number, location and type of water system.

6 OUTBREAK INVESTIGATION [10%]

The appointment and role of a Proper Officer and Incident Control Team.

Control phase and Investigation phase

Interpreting the patterns of cases to trace the source; interpreting the microbiology to

trace **the source**

Further Information

- 1) Approved Code of Practice & Guidance – Legionnaires’ disease The control of legionella bacteria in water systems – L8 – ISBN 0-7176-1772-6
- 2) Legionnaires’ disease A guide for employers. ISBN 0-7176-1773-4
- 3) Health and Safety Executive/Local Authorities Enforcement Liaison Committee (HELA) Legionnaires Disease LAC Number 46/1
- 4) Essential information for providers of residential accommodation. INDG376 – ISBN 0-7176-2207-X
- 5) Controlling Legionella in nursing and residential care homes ING253
- 6) The control of legionella hygiene, “safe” hot water, cold water and drinking water systems. Health Technical Memorandum 04-01
- 7) Health and Safety in care homes HSG220
- 8) The water supply (water fittings) regulations 1999 – ISBN 0-11-082552-7
- 9) HSE Legionella web site. <http://www.hse.gov.uk/legionnaires/>

7 EXAMINATION/ASSESSMENT

There is one element:

- 1 A 45 minute BOHS examination consisting of 20 short answer questions, Points are awarded for correct answers. There is no negative marking for wrong answers. Points are then calculated as a percentage. It is necessary to obtain 50% to pass the written examination.

Successful completion of the above will lead to a:

PROFICIENCY CERTIFICATE
in
LEGIONELLA—Management and Control of Building Hot and Cold Water Services