

## 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 that this course will be conducted over 1 day which includes the examination. This course will require 6 hours' study time.

Content:	Topic	Time Allocation
	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, ClO<sub>2</sub>, 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

20 short answer questions to be answered in 60 minutes.

Successful completion of the above will lead to a:

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