

Section 6

Syllabus

The qualification is structured into seven sections, each with an indicative time allocation:

	Торіс	Time allocation
1.	Introduction and history of the organism	15%
2.	Legislation and guidance	15%
3.	Risk assessment of systems	25%
4.	Operational control	20%
5.	Outbreak investigation procedures	10%
6.	Record keeping	5%
7.	Case studies	10%

1. Introduction and history of the organism (15%)

Educational objectives

Candidates should learn about:

- The origins of legionella and the factors which allow it to proliferate to hazardous levels in man-made water systems.
- The main practical and theoretical conditions which cause legionella infection to occur in susceptible individuals.
- 1.0.1 The occurrence of legionella, sources and primary cause of growth in man-made water systems.
- 1.0.2 Types and significance of the bacteria.
- 1.0.3 The infection chain, susceptibility to infection, symptoms, treatment and prognosis.
- 1.0.4 Health effects on exposed people.
- 1.0.5 Review of data gathered by Public Health England (PHE) and others.

2. Legislation and guidance (15%)

Educational objectives

Candidates should understand the key pieces of legislation and guidance which underpin best working practice in managing and controlling legionella risk.

Tel: +44(0)1332 298101



2.0.1 Acts of Parliament.

2.0.2 Approved codes of practice, regulations, HSE guidance notes, British Standards. Other industry accepted good practice sources of information.

3. Risk assessment of systems (25%)

Educational objectives

Candidates should understand:

- The roles of people responsible for managing and controlling legionella risk.
- The different components of hot and cold water systems.
- The practical and theoretical principles of assessing the risk of exposure to legionella in domestic hot and cold water systems.
- 3.0.1 Role of the named duty holder and responsible person(s).
- 3.0.2 Definition of competent responsible person.
- 3.0.3 Key components of the management and control systems.
- 3.0.4 Design and operation of domestic type hot and cold water systems.
- 3.0.5 Importance of schematic diagrams and sentinel outlets.
- 3.0.6 Sentinel points on hot water systems with a circulation.
- 3.0.7 Significance of dead legs, blind ends and inaccessible parts of the water system.
- 3.0.8 Examples of other miscellaneous systems (e.g. emergency showers).

4. Operational control (20%)

Educational objectives

Candidates should have a detailed practical and theoretical understanding of how to implement legionella control regimes with suitable monitoring programmes and records.

- 4.0.1 Duties and responsibilities of responsible person(s).
- 4.0.2 The role, risks and responsibilities when subcontracting part of the task of the control strategy.
- 4.0.3 The written scheme of precautions, including routine temperature checks and routine condition inspection.
- 4.0.4 Other control strategies: ionisation, ClO², etc.
- 4.0.5 The role of general bacteriological testing as part of the control strategy.
- 4.0.6 Corrective or remedial actions.
- 4.0.7 Record keeping, the details required for effective management control and retention of monitoring data.



5. Outbreak investigation procedures (10%)

Educational objectives

Candidates should be able to identify a legionella outbreak and analyse, interpret and evaluate all relevant information in a hot and cold water system, and initiate the appropriate action to take in this instance.

- 5.0.1 The appointment and role of a Proper Officer and Incident Control Team.
- 5.0.2 Definition of an outbreak.
- 5.0.3 The roles of the investigating organisations (HSE, PHE, local authority).
- 5.0.4 Control and Investigation phases.
- 5.0.5 Interpreting the patterns of cases to trace the source; interpreting the microbiology to trace the source and the role of sequence-based typing (SBT).

6. Record keeping (5%)

Educational objectives

Candidates should understand which records they are required to keep for their water systems, in order to comply fully with legislation.

6.0.1 Regulatory requirements for record keeping.

7. Case studies (10%)

Candidates should be shown real-life case study examples of:

- 7.0.1 Causes of recent Legionnaires' disease outbreaks and the suspected water system sources.
- 7.0.2 Prosecutions.