

The logo for BOHS (British Occupational Hygiene Society) features the letters 'BOHS' in a bold, white, sans-serif font. The letter 'O' is stylized with a white circle inside it, set against a dark blue background.

British Occupational  
Hygiene Society

The Chartered  
Society for Worker  
Health Protection

P400 Proficiency Qualification

# Asbestos Foundation Module

Course Syllabus

## Proficiency Module Syllabus

### P400 - Asbestos Foundation Module

#### Teaching Aims

To provide candidates with foundation background knowledge of the health risks associated with exposure to asbestos fibres, and to provide guidance on relevant legislation and safety procedures for managing asbestos-containing materials.

#### Prior Knowledge and Understanding

Candidates for this course are not expected to have prior knowledge and experience but having an awareness of the contents of both HSG248 Asbestos: The analysts' guide (July 2021) and HSG264 Asbestos: the survey guide January 2010), would be advantageous.

#### Learning Outcomes

On completion of this module, the candidate will be able to demonstrate their understanding of:

- The past uses of asbestos and the types commonly used
- The health risks posed by Asbestos
- Control limits and Exposure standards,
- Outline of the legislation and guidance pertinent to individual roles
- Individual roles and their need for integrity and independence
- The requirements for PPE, how to use it and decontamination procedures
- How to deal with incidents especially in the laboratory environment.

#### Content

The syllabus is structured into Four sections:

		<b>Time Allocation</b>
<b>1</b>	<b>Asbestos types, their utilisation, health effects, control, and exposure limits.</b>	<b>25%</b>
<b>2</b>	<b>Legislation and Guidance documents</b>	<b>17%</b>
<b>3</b>	<b>The role of the Analyst</b>	<b>33%</b>
<b>4</b>	<b>Personal protection and decontamination procedures</b>	<b>25%</b>

#### **Note:**

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

## **1 Asbestos types, their utilisation, health effects, control, and exposure limits. (25%)**

This section of the syllabus will provide suitable theoretical knowledge to ensure that the candidate understands the types and past uses of asbestos, the risks posed and the setting of control and exposure limits.

To achieve this the candidate will be expected able to learn and then demonstrate the following:

- 1.0.1 Understanding of past uses of asbestos, reasons for its use and when restrictions on these uses took effect. To have an awareness of imports from outside the EU/UK which may be outside these restrictions.
- 1.0.2 Understanding the uses and composition of other asbestos products likely to be used or found inside buildings, on plant machinery or domestic appliances (e.g., textiles, friction materials, seals, gaskets etc.)
- 1.0.3 Understanding of the properties and characteristics of all main asbestos types and in particular the regulated types. Also identifying that asbestos can be a contaminant in other minerals (talc etc.)
- 1.0.4 Understanding of the full range of health effects ranging from the benign (asbestos warts and pleural plaques) to the terminal (mesothelioma). The mechanisms of harm, relative potency of asbestos fibre types/groups and the latency effect.
- 1.0.5 Understanding of the cumulative nature of the risk/dose response relationship, the need to minimise exposure, uncertainty, or lack of evidence of safe exposure level. Be aware of the requirements for medical examinations for certain work and understand the added risks from smoking.
- 1.0.6 Understanding of the background to the setting of exposure/control limits and the requirement to minimise exposure below those limits.
- 1.0.7 Understanding of who are at most at risk now (building maintenance trades). Understand past industrial exposures regarding disease and the low-level risks in occupied buildings with ACMs but where there is no disturbance from occupation or maintenance activities.

## **2 Legislation and Guidelines Documents (17%)**

This section will provide suitable theoretical knowledge to ensure that the candidate understands the main points of the legal framework, legislation, and guidance pertinent to their role.

Training should also ensure that the candidate understands the purpose and importance of their role.

In order to achieve this the candidate will be expected to learn and then demonstrate the following by:

- 2.0.1 Understanding the requirements for management of asbestos in buildings under the Health and Safety at Work Act 1974 (in particular sections 3, 7 and 8), Management of Health and Safety at Work Regulations 1999, Control of Asbestos Regulations 2012, and The Construction (Design and Management) Regulations 2015.
- 2.0.2 Understanding the features and status of L143 Approved Code of Practice (7) guidance documents, HSG248 (Analysts' guide) (2) and HSG264 (Surveyors' guide) (3).
- 2.0.3 Understanding of other regulations and documents including COSHH regulations, UKAS guidance Lab 30 (10) and an overview of ISO 17025 (6).
- 2.0.4 Understanding the principles within COSHH Regulations and good laboratory practice including the hazards of processes commonly used in fibre identification procedures.
- 2.0.5 Understanding of the relevant main points in the CDM Regulations and HSG264 (full surveys and detailed knowledge are not included within this course). The role of the CDM client and that information should be given to them for the health and safety file as well as to a contractor.
- 2.0.6 Understanding how to advise a client on the selection of a competent analyst and contractor.

### **3 The Role of The Analyst (33%)**

This section will provide suitable theoretical knowledge to ensure that the candidate understands their role along with the need for integrity and independence.

In order to achieve this the candidate will be expected to learn and then demonstrate the following by:

- 3.0.1 Having an awareness of the roles of the analyst, including the implications of lone working and the need for integrity and independence from others.
- 3.0.2 Understanding the potential consequences for analysts and their employers of inaccurate work.
- 3.0.3 Understanding how typical asbestos removal and analyst work tasks relate to the control limit, STEL, and clearance levels.
- 3.0.4 Understanding how to assess if a third-party site is safe for them to enter to begin their own work.
- 3.0.5 Having an awareness of how to communicate clearly with colleagues and clients, and report findings in a formal manner.
- 3.0.6 Having an awareness of correct waste disposal procedures (including own kit and samples) in compliance with the Hazardous/Special Waste Regulations and be aware of relevant carriage of dangerous goods transport issues.

3.0.7 Understanding of the implications of lone working for analysts.

#### **4 Personal Protection and Decontamination Procedures (25%)**

This section will provide suitable theoretical knowledge to ensure that the candidate understands the need for suitable PPE, how to use it and also decontaminate including dealing with incidents in the laboratory.

In order to achieve this the candidate will be expected to be able to learn and then demonstrate the following by:

- 4.0.1 Understanding the need for suitable RPE, the selection process and fit testing. The donning and doffing procedures and care, maintenance, and inspection of RPE.
- 4.0.2 Having an awareness of potential threats to effectiveness of PPE/RPE, how much protection is likely and how it fits in with other methods of control.
- 4.0.3 Having the ability to carry out personal decontamination and have an awareness of emergency procedures.
- 4.0.4 Recognising the circumstances of when it might be necessary to use a DCU in non-licensed work (e.g., intrusive survey).
- 4.0.5 Being familiar with ways of checking/testing DCUs for general safety.
- 4.0.6 Having knowledge of how to react to an unplanned event in the laboratory (fume cabinet failure, or accidental release of bulk materials from the fume cabinet).

#### **References and Further Reading**

- (1) HSG247 (2006), Asbestos: The licensed contractors' guide, HSE
- (2) HSG248 (July 2021), Asbestos: The analysts' guide, HSE
- (3) HSG264 (2012), Asbestos: The survey guide, HSE
- (4) HSG53 (2013), Respiratory protective equipment at work: A practical guide, HSE
- (5) INDG223 (rev 5) (2012), Managing asbestos in buildings: A brief guide, HSE L143
- (6) ISO/IEC 17025 (2017), General requirements for the competence of testing and calibration laboratories
- (7) L143 (2013), Managing and working with asbestos. Control of Asbestos Regulations 2012, Approved Code of Practice, and guidance, HSE
- (8) Sanderson, B. (2007), Asbestos for Surveyors (second edition), EG Books
- (9) Thomas Telford DETR (1999), Asbestos and man-made mineral fibres in buildings: Practical Guidance
- (10) UKAS (2021), Lab 30, Edition 4: Application of ISO/IEC 17025 for Asbestos Sampling and Testing

### **Course Length**

This course will require at least **8** hours of study time, of which at least **6** hours will be taught (teaching and practical assessments) and **2** hours will be independent (in the candidates' own time).

### **Examinations and Assessment**

Candidates are required to pass the following examination to be awarded this qualification:

#### **Written Examination**

This is an open book, multiple-choice examination comprising of 20 questions (20 marks) to be answered within 30 minutes.

The examination covers **ALL** sections of the syllabus in proportion to the time allocation given on the front page of the syllabus and is overseen by a BOHS invigilator.

The overall pass mark is 65% with a requirement to reach at least 50% of the available marks in each section of the syllabus.

Further information is available in the P400 Examination Guidance document.

### **Certification**

Candidates who pass the examination within 12 months will be awarded a:

(P400) Foundation Certificate in Asbestos

### **Related Courses**

Further courses which would be beneficial to candidates following this career path:

- P401 Identification of Asbestos in Bulk Samples (PLM)
- P402 Surveying and Sampling Strategies for Asbestos in Buildings
- P402RPT Report Writing for Asbestos Surveys
- P403 Air Sampling and Fibre Counting (PCM)
- P404 Clearance Testing and the Requirements of a Certificate for Reoccupation
- P405 Management of Asbestos in Buildings