

Safety in the Workplace

UK Training

PARTNER



Safety in the Workplace

Introduction

This comprehensive training course is designed to provide Senior Laboratory Assistants and laboratory personnel with the essential knowledge required to maintain a safe and compliant laboratory workplace.

The course covers the key occupational hazards associated with laboratory environments, with a focus on hazard identification, prevention, control measures, emergency preparedness, and safe working practices.

Topics include chemical, biological, physical, electrical, mechanical, fire, ergonomic, and environmental hazards, as well as laboratory equipment safety, personal protective equipment, chemical storage, waste management, incident reporting, and emergency response.

The programme is structured as a single-instructor, five-day course, with 4 hours of training per day, ensuring consistent and comprehensive coverage of all topics.

Course Objectives

By the end of this course, participants will be able to:

- Identify the main occupational hazards associated with laboratory environments.
- Understand laboratory safety principles, responsibilities, and safe working practices.
- Recognize chemical, biological, physical, electrical, mechanical, fire, and ergonomic hazards.
- Understand laboratory risk assessment and appropriate risk-control measures.
- Apply safe principles for chemical handling, labeling, storage, and transportation.
- Understand the correct selection and use of Personal Protective Equipment PPE.
- Recognize laboratory equipment and electrical safety requirements.
- Understand procedures for preventing and responding to chemical spills, fires, and exposure incidents.
- Apply appropriate laboratory waste segregation, handling, and disposal principles.
- Understand incident, accident, and near-miss reporting requirements.
- Support effective laboratory safety inspections and continuous safety improvement.
- Contribute to a strong and proactive laboratory safety culture.

The logo for UK Training Partner features the text 'UK Training' in a small, sans-serif font above the word 'PARTNER' in a large, bold, sans-serif font. The text is positioned over a background of concentric circles and a chessboard pattern. In the foreground, there are three chess pieces: a gold king, a silver pawn, and a gold pawn.

Course Outlines

Day 1: Laboratory Safety Fundamentals & Hazard Identification

1. Principles of occupational safety and responsibilities in the laboratory workplace.
2. Identification and classification of laboratory hazards.
3. Chemical, biological, physical, electrical, mechanical, and ergonomic hazards.
4. Safety signs, labels, hazard communication, and Safety Data Sheets SDS.
5. Laboratory risk assessment, hierarchy of controls, and prevention strategies.

Day 2: Chemical, Biological & Personal Safety

1. Safe handling, transportation, labeling, and storage of laboratory chemicals.
2. Chemical incompatibilities, exposure risks, and hazardous substances.
3. Biological hazards, contamination prevention, and safe handling of biological materials.
4. Personal Protective Equipment PPE: selection, use, inspection, and storage.
5. Safe housekeeping, personal hygiene, and prevention of laboratory contamination.

Day 3: Laboratory Equipment, Electrical & Fire Safety

1. Safe operation and maintenance principles for laboratory equipment and instruments.
2. Electrical safety and prevention of equipment-related accidents.
3. Safe handling of glassware, sharps, compressed gases, and other physical hazards.
4. Laboratory ventilation, fume hoods, and exposure-control systems.
5. Fire prevention, fire protection equipment, emergency exits, and evacuation requirements.

Day 4: Emergency Preparedness, Spill Response & Incident Management

1. Laboratory emergency preparedness and emergency response procedures.
2. Chemical spill prevention, containment, and response principles.
3. Response to chemical exposure, biological incidents, injuries, and contamination.
4. Laboratory fire, evacuation, first-response principles, eyewash stations, and emergency showers.
5. Accident, incident, and near-miss reporting, investigation, root-cause analysis, and corrective actions.

Day 5: Waste Management, Safety Inspection & Safety Culture

1. Classification, segregation, storage, handling, and disposal of laboratory waste.
2. Chemical, biological, sharps, and general laboratory waste management.
3. Laboratory safety inspections, audits, checklists, and compliance monitoring.
4. Corrective and preventive actions CAPA and continuous safety improvement.
5. Developing and maintaining a proactive laboratory safety culture and safe working environment.

UK Training

PARTNER

A graphic of a chessboard with several chess pieces (a king, a queen, a rook, and a pawn) positioned on it. The board is white and black, and the pieces are gold and silver.

Why Attend This Course? Wins & Losses!

Wins

- Gain comprehensive knowledge of laboratory workplace safety.
- Improve the ability to recognize and control laboratory hazards.
- Strengthen understanding of chemical and biological safety requirements.
- Improve awareness of laboratory equipment, electrical, and fire safety.
- Understand effective emergency and spill-response procedures.
- Enhance knowledge of laboratory waste management and disposal.
- Improve incident reporting and accident prevention practices.
- Support stronger safety compliance and workplace safety culture.

Losses

Without adequate laboratory safety knowledge, organizations may face:

- Increased exposure to hazardous chemicals and biological materials.
- Higher risks of laboratory accidents and occupational injuries.
- Improper storage or disposal of hazardous substances.
- Equipment-related incidents and electrical hazards.
- Ineffective response to spills, fires, and emergency situations.
- Regulatory and safety compliance issues.
- Increased operational disruption and potential property damage.

Conclusion

Safety in the Workplace - Laboratory provides a comprehensive foundation in laboratory occupational safety, covering the hazards, procedures, controls, and emergency requirements relevant to modern laboratory environments.

The five-day programme is specifically structured for Senior Laboratory Assistants and laboratory personnel, providing a clear understanding of the safety responsibilities associated with their roles.

Upon completion of the course, participants will be better equipped to recognize hazards, follow safe working procedures, prevent incidents, and contribute to a safer laboratory workplace.

Frequently Asked Questions FAQ

1. Who should attend this course?

The course is designed primarily for Senior Laboratory Assistants, Laboratory Technicians, Laboratory Supervisors, and Laboratory Support Personnel.

UK Training

PARTNER



2. Is previous laboratory safety experience required?

No. However, participants are expected to have basic familiarity with laboratory operations and workplace procedures.

3. What types of hazards are covered?

The course covers chemical, biological, physical, electrical, mechanical, fire, ergonomic, and environmental hazards.

4. Does the course cover chemical safety?

Yes. Chemical handling, labeling, storage, incompatibilities, exposure prevention, spill response, and chemical waste management are covered.

5. Does the course cover emergency procedures?

Yes. Emergency preparedness, chemical spills, exposure incidents, fires, evacuation, eyewash stations, emergency showers, and incident reporting are covered.

6. Is the course suitable for Senior Laboratory Assistants?

Yes. The content is specifically structured around the responsibilities and safety requirements relevant to Senior Laboratory Assistants.

7. How long is the training?

The course is delivered over 5 days, 4 hours per day, for a total of 20 training hours.

8. Will the course be delivered by one instructor?

Yes. The programme is designed to be delivered by one qualified instructor throughout the five days, ensuring consistency and continuity across all topics.

The graphic features the text 'UK Training' in a small, grey font above the word 'PARTNER' in a large, bold, black font. This text is positioned over a background of concentric grey circles and a chessboard pattern. In the foreground, three chess pieces (a king, a queen, and a pawn) are visible, rendered in a 3D style with gold and silver finishes.

UK Training
PARTNER