



TRAINING PROGRAM



Modern Laboratory Health And Safety Practices

Introduction:

There are many special procedures conducted within our laboratories, which require unique health and safety precautions. Departments will have additional procedures that apply to their own situations and work. In all cases the laboratory supervisor is ultimately responsible for teaching safe work practices and must insist upon the use of proper procedures to eliminate unnecessary hazards. This course provides standards and practices for the safe and healthy operation of a laboratory. It will help meet the requirements of the Occupational Health and Safety Act of Ontario (OHSA) for the purposes of the operation of a laboratory. It is required for all laboratory supervisors, researchers, staff, and students working in industrial, research and teaching laboratories. The course was meets the requirements set by Environmental Health and Safety Services (EHSS).

Who Should Attend?

Lab Managers, Technicians & Personnel, Supervisors, Environmental, Health & Safety Personnel & Professionals, Chemical Engineers & Technicians, Researchers, Risk Managers, Operations Managers, those responsible for ensuring that the lab is in compliance with EPA and local

hazardous waste regulations Environmental, Line Managers who have been assigned responsibilities of safety management system & in training employees in safety rules

Course Objectives:

By the end of this course delegates will be able to:

- Define health and safety responsibilities
- Outline specific policy application for laboratory operation
- Explain basic emergency procedures
- Provide information and standards for the healthy and safe operation of a laboratory.
- Define who is a supervisor and who is a laboratory worker
- Define the responsibilities of the supervisor and the laboratory worker for the safe operation of a laboratory
- Highlight sections of the OHSA which affect the operation of a laboratory
- Know a standard of good laboratory safety practices to meet the requirements of OHSA
- Gain an overview of laboratory hazards
- Understand the general guidelines and basic rules for the safe operation of a laboratory
- Protect all laboratory users from health and safety hazards
- Learn lab safety and effective lab safety techniques & procedures
- Learn how to apply regulatory requirements and preventive measures
- Identify and manage common chemical, biological and electrical laboratory
- Be familiar with emergency preparedness and fire control techniques
- Learn about handling glassware and hazardous material storage
- Gain insight in hazardous waste management
- Understand OSHA Lab Standards
- Learn about safety program planning
- Learn how to apply personal protective equipment (PPE)

Course Outline:

Introduction to OSHA Laboratory Safety Standard

Definitions

- Teaching Laboratory
- Research
- Supervisor
- Laboratory Worker/User
- Unattended Procedures/Equipment
- Hazardous Agent

Responsibilities of Supervisors

Responsibilities of Laboratory Workers

General Health and Safety Principles

Basic Safety Procedures

- Procedures for Unattended Work
- Working Alone
- Housekeeping
- Laboratory Equipment Maintenance
- Guarding
- Shielding
- Glassware
- Flammable and Combustible Material Hazards
- Cryogenic Materials and Cold Traps
- Systems under Pressure
- Back Flow Preventers
- Electrical Equipment and Apparatus
- Compressed Gas Cylinders

Personal Protective Equipment

- Gloves
- Eye Protection
- Skin
- Respiratory Protection
- Hearing Protection
- Head Protection