

EMPLOYEE INFORMATION AND TRAINING
Lab-Specific: Chemical Safety

I. Training Requirements

All laboratory personnel will be provided chemical safety information and training by the laboratory supervisor. Information and training regarding chemical safety must include, at a minimum, the material in the following "Laboratory Chemical Hygiene Training Documentation Checklist."

NOTE: All attendance logs and other relevant training notes will be filed in this section.

LABORATORY CHEMICAL HYGIENE TRAINING DOCUMENTATION/ CHECKLIST

Employee: _____
Supervisor: _____
Department: _____

Starting Date: _____
Trainer: _____
Lab. # _____

I. PURPOSE

This training is provided in order to:

- Explain and comply with the provisions of the Occupational Safety and Health Administration (OSHA) *Occupational Exposure to Hazardous Chemicals in Laboratories Standard* (29 CFR 1910.1450), also known as the Lab Chemical Hygiene Standard
- Explain the means/methods Georgetown University Medical Center uses to implement the Lab Chemical Hygiene Standard
- Provide training in minimizing exposure to hazardous chemicals in the work area
- Provide lab specific information

II. CHECKLIST

This checklist is designed as a learning tool and instructional aid. Trainees should check each topic as it is explained and understood.

A. PROGRAM CONTENTS

The provisions of the OSHA *Occupational Exposure to Hazardous Chemicals in Laboratories Standard* include:

- A written program and the employees right to review the written program (Chemical Hygiene Plan);
- OSHA-mandated orientation (provided by EH&S) and laboratory-specific training (provided by the Principle Investigator) information and training must be provided at initial assignment; and,
- Additional laboratory-specific training must be provided each time a new hazardous substance is introduced into the work area.

B. HAZARD RECOGNITION AND MEASUREMENT

- Hazard assessment is performed by considering the properties of the chemical, the concentration, duration of exposure, changes to the chemical caused by reactions, and protocols in which the chemical is used.
- Chemical exposures can be evaluated and/or measured by performing bulk sampling, air sampling, and bioassays. Air sampling results must be compared to OSHA permissible exposure limits (PELs) or other standards.
- Exposure to chemicals is most likely occurring if:
 - 1) no control is used (e.g., chemical fume hood, ventilation, administrative control, personal protective equipment);
 - 2) personnel are detecting odors odors/experiencing symptoms;
 - 3) a warning system has been activated; or,
 - 4) an incident has occurred.

C. MEANS OF CONTROLLING EXPOSURE

- Engineering controls and hygiene controls must be used to the extent feasible to reduce exposures. Personal protective equipment is the last defense and is limited by a number of factors.
- Personal protective equipment is the last defense and may be limited by a number of factors. For any work in the laboratory PPE must include:
 - a lab coat;
 - closed-toed shoes; and,
 - gloves.Note: No more than one glove may be worn outside of the laboratory (common areas).
- Additional PPE may be required for specific tasks:
 - Safety glasses (when there is a reasonably anticipated risk of splash hazard (may be obtained through EH&S).
 - Respiratory protection (approval and training must be obtained through EH&S if respiratory protection is worn)

Laboratory specific controls-(List)

- Procedures are in place (and must be followed) for inspecting and maintaining personal protective equipment

D. PHYSICAL AND HEALTH HAZARDS IN THE WORK AREA

- An explanation of chemical groups in the work area has been presented. Contributing factors and terminology used to describe physical hazards and health hazards have been explained
- Material Safety Data Sheets (MSDSs) must be maintained and updated by your employer. MSDSs contain information regarding the hazards, safe handling, storage and disposal of hazardous chemicals. Other sources may be utilized to supplement MSDSs

E. SPILLS AND OTHER EMERGENCIES IN THE LABORATORY

- Emergency response/action measures for the laboratory were discussed, including:
 - Emergency response methods provided in Standard Operating Procedures
 - University Emergency Preparedness guidance (<http://preparedness.georgetown.edu>); and,
 - Initial emergency contacts as presented in the laboratory's Georgetown University Waste Disposal Guidelines flip-chart.

F. WORK AREA SPECIFIC INFORMATION

- The following laboratory Chemical Hygiene Plan elements were explained
 - Particularly Hazardous Substances/Standard Operating Procedures (<http://ehs.georgetown.edu/chemsafe/procedures/SOPs1.html>)
 - Control Measures
 - Laboratory Hood Requirements
 - Medical Consultation and Exams
 - Prior Approval Forms

- Designation of Personnel
- Additional Employee Protection

The written Lab Chemical Hygiene program is located _____.
The complete OSHA standard is incorporated into the written program as an appendix

Material Safety and Data Sheets (MSDSs) and other reference materials on the hazards, safe handling, storage and disposal of chemicals in the laboratory are located _____.

III. TRAINING DOCUMENTATION

I hereby acknowledge that I have received training in, and understood, all of the above information.

Employee's Signature : _____

Date: _____

Trainer's Signature: _____

Date: _____