

Appendix G

Training For Laboratory Personnel

The OSHA Laboratory Standard (Appendix B) requires that laboratory workers be trained. This Appendix outlines a training program based on reading sections and answering review questions at the end of the chapter, understanding the laboratory's Chemical Hygiene Plan and reading Material Safety Data Sheets for the chemicals that will be used. Supplemental training can be provided on the job, by videos or other readings on chemical safety or by attending the Safety Department's "Working Safely with Chemicals." OSHA requires that training be documented to demonstrate compliance. A training documentation form is provided at the end of Appendix C, *Chemical Hygiene Plan*.

G.1 New Laboratory Personnel

Read these sections of the *Guide* and complete the corresponding review questions:

Part and Section	Read Pages
Chapter 1: Your Safety Network	Scan
Chapter 2: Understanding Chemical Hazards	
2.1 Physical Hazards of Chemicals	7 - 15
2.2 Health Hazards of Chemicals	15 - 24
2.3 Sources of Chemical Safety Information	24 - 30
2.4 Toxicology Overview	30 - 36
Annex 2-2. Quick to Hazardous Chemical Risk Assessment	46 - 49
Chapter 4: Laboratory Safety Procedures	All
4.1 Overview of Safety Procedures	75 - 80
4.2 Chemical Storage and Management	80 - 86
4.3 Personal Protective Equipment	86 - 90
4.4 Reducing Your Exposure to Chemicals	90 - 95
4.5 Chemicals Requiring Special Precautions	95 - 106
4.6 Laboratory Equipment Hazards	106 - 118
Chapter 5: Emergency Procedures	All
5.1 In an Emergency -- Notify	Scan 125 - 127
5.2 Prepare for Emergencies	127 - 130
5.3 Major (i.e., High Hazard) Emergencies	130 - 132
5.4 Skin Contamination and Injuries	132 - 134
5.5 Small or Simple Spills	134 - 136
5.6 Hydrofluoric Acid (HF) Spills	136
5.7 Mercury Spills	136 - 137
Annex 5-1. Chemical Spill Cleanup Procedures / Supplies	140
Chapter 7: Chemical Disposal Procedures	Scan
Chapter 8: Laboratory Animals and Animal Tissue Disposal	Scan, if appropriate
Chapter 9: Bloodborne Pathogens, Sharps and Medical Waste	Scan, if appropriate
Appendix C: Chemical Hygiene Plan	Review, your labs

Laboratory personnel must also review and understand their laboratory's Chemical Hygiene Plan and review MSDSs for all of the chemicals that they will be using. Talk to your Chemical Hygiene Officer for details. Appendix C explains Chemical Hygiene Plan contents in detail. In addition, if the laboratory works with **animal tissue**, review Chapter 8, *Laboratory Animals and Animal Tissue Disposal*. Review other chapters as appropriate.

G.2 Persons Working with Particularly Hazardous Substances

Workers should refer to Appendix D, *Particularly Hazardous Substances* to determine whether they will be working with particularly hazardous substances (carcinogens, reproductive toxins and compounds with a high degree of toxicity). Besides the requirements listed above, read the following parts of the *Guide* with a view to applying the information to your specific project:

Part and Section	Read Pages
Chapter 2. Chemical Hazards in Laboratories	
2.4 Toxicology Overview	30 - 36
Annex 2-2. Quick to Hazardous Chemical Risk Assessment	46 - 49
Chapter 4. Laboratory Safety Procedures	
4.5 Chemicals Requiring Special Precautions	95 - 106
Appendix D. Particularly Hazardous Substances	All

Also, review the laboratory's Chemical Hygiene Plan and MSDSs for all the chemicals that will be used. Talk to your Chemical Hygiene Officer for details, review the lab's Particularly Hazardous Substance Use Approval Form for the hazards you will be using.

G.3 Principle Investigators, Supervisors and Laboratory Managers

Principal investigators, laboratory directors, supervisors and managers should be more informed about chemical safety at the University of Wisconsin than their personnel. Review all sections of the *Laboratory Safety Guide* that your workers read so you can provide guidance or assistance, as appropriate: Additionally, review the following appendices so you will have a better understanding of your responsibilities.

- ♦ Appendix B: OSHA Laboratory Standard
- ♦ Appendix C: Chemical Hygiene Plan
- ♦ Appendix D: Particularly Hazardous Substances
- ♦ Appendix F: Preventing Chemical Incompatibility
- ♦ Appendix H: EPA's Hazardous Waste Law
- ♦ Appendix I: Miscellaneous Anecdotal Information

G.4 Chemical Hygiene Officers

Chemical Hygiene Officers should be knowledgeable about chemicals and chemical hazards. Additionally, because they will be reviewing protocols, they should be aware of requirements for Particularly Hazardous Substances. Review the *Laboratory Safety Guide* and pay particular attention to the following appendices:

- ♦ Appendix B: OSHA Laboratory Standard
- ♦ Appendix C: Chemical Hygiene Plan
- ♦ Appendix D: Particularly Hazardous Substances
- ♦ Appendix E: Laboratory Safety Survey
- ♦ Appendix F: Preventing Chemical Incompatibility
- ♦ Appendix H: EPA's Hazardous Waste Law
- ♦ Appendix I: Miscellaneous Anecdotal Information