



## HOW TO DEVELOP LAB-SPECIFIC TRAINING

### SUMMARY

University of Maryland Chemical Hygiene Plan requires that all lab members be trained on the specific hazards that exist in their lab and the procedures, equipment, and resources available in their lab for working safely with these hazards.

Lab-specific training must be: (1) documented and (2) provided to all lab personnel at the time of initial assignment to the lab and prior to work involving new exposure situations and hazardous operations.

### HOW TO USE THIS TEMPLATE

The template below may be used to develop a lab-specific training handout and for documenting the training. After reviewing the training goals in the left-hand column, describe in the right-hand column how your lab fulfills these goals. Guidance text provided in **gray** should be modified and adapted to reflect your lab's practices. The guidance text may be deleted.

	TRAINING GOAL	HOW LAB FULFILLS TRAINING GOAL
<b>TRAINING</b>	Ensure completion of all safety training before beginning lab work.	Identify required training for each new lab member. At <u>minimum</u> should include completion of: <ul style="list-style-type: none"> <li>◦ Chemical Hygiene Training for Laboratory Workers – available online via DES website</li> <li>◦ Hazardous Waste Generator – available online via DES website</li> <li>◦ Lab-Specific Training</li> </ul> To determine if additional safety training is required: <a href="http://www.des.umd.edu/risk_comm/edu/guide/index.htm">http://www.des.umd.edu/risk_comm/edu/guide/index.htm</a> <b>***Document all lab specific training provide by Principal Investigator/Lab Manager***</b>
<b>SAFETY ROLES</b>	Know the health and safety responsibilities of the principal investigator, lab safety coordinator, and all group members.	Describe the process for discussing and addressing health and safety concerns in the lab. Include information on expectations for all lab members. Identify additional key personnel for the building and/or department such as the facilities manager, department compliance officer, DES, Human Resources, etc.
<b>SAFETY INFO</b>	Know where to find material safety data sheets (MSDS), standard operating procedures (SOP), user manuals for equipment, journals, textbooks, etc.	Identify and list how to locate relevant safety resources. Focus on resources specific to the lab such as a lab-specific MSDS binder (if any), SOPs, etc.
<b>LAB OPERATIONS</b>	Know the Chemical Hygiene Plan SOP requirements and the lab's process for developing and reviewing new SOPs.	Chemical Hygiene Plan requires that the following materials should receive priority for SOP development: highly toxic chemicals, carcinogens, reproductive toxins, and highly reactive materials. In addition, this section should review the PI's expectations for when written SOP development is triggered.

<b>Lab Operations</b>	Know the lab's chemical ordering, usage, and disposal procedures.	Include: Where lab chemicals are stored, including flammable cabinet locations. Know the procedures for handling and disposal of hazardous waste. Refer to Waste Disposal Guidelines wall chart; copies are available through DES.
	Know the required personal protective equipment (PPE) for working in the lab, including where lab-provided PPE is stored (i.e. safety glasses/goggles, cryogenic gloves, etc.).	<p>Conduct hazard assessments and ensure that employees are informed, trained, and provided with appropriate PPE to be protected from potential hazards associated with job tasks. If PPE is not required at all times in the lab then identify the areas, times, and/or situations when eye protection, proper lab attire, etc. are not necessary.</p> <p>Refer to the Personal Protective Equipment Program at <a href="http://www.des.umd.edu/os/ppe/program.html">http://www.des.umd.edu/os/ppe/program.html</a></p> <p>Personal Protective Equipment Hazard Assessment form is located at: <a href="http://www.des.umd.edu/os/ppe/ppeform.pdf">http://www.des.umd.edu/os/ppe/ppeform.pdf</a></p>
	Know the specific hazards that exist in the lab	In this section provide a basic overview of hazards present in the lab and any controls or alarms that all lab members should be aware of. For example, presence of lasers, biohazards, reproductive hazards, reactives, toxic gas, etc.
	Know the procedures for being trained on and authorized to use the lab's specialized equipment, e.g., centrifuge, rotary evaporator, glove box, etc.	In most cases this equipment should have a separate SOP which can be used in conjunction with any owner manuals as a training tool for that piece of equipment.
	Know the lab's "Do's and Don'ts"	For example, what are the lab procedures regarding propping open lab doors, working after hours, housekeeping, etc.
<b>EMERGENCY EQUIPMENT &amp; PROCEDURES</b>	Know where to find safety equipment.	Includes spill kits, fire extinguishers, emergency alarm boxes, safety eyewash and showers, and first aid kits. List safety equipment relevant to your lab in this box and either describe location or as part of training, show new lab personnel the location during lab walkthrough.
	Know the procedures for chemical, fire, and weather emergencies.	<p>Post UM Emergency Response Guide wall chart in each laboratory, ideally adjacent to a telephone, to provide immediate response actions in the event of injuries, spills or fires. In addition, lab specific procedures should be provided such as:</p> <ul style="list-style-type: none"> <li>○ What equipment do I need to quickly turn off before evacuating (heat sources, gases, vacuums, etc.)?</li> <li>○ Identify at least two evacuation routes out of the building and establish a meeting place</li> </ul>
	Know the incident and injury reporting procedures.	<p>Include:</p> <ul style="list-style-type: none"> <li>○ How to call 911 from a campus phone and cell phone</li> <li>○ How to contact the Occupational Health Center and Environmental Safety Office</li> <li>○ Ensure laboratory caution sign is up-to-date with emergency contact information and hazard warning labels</li> </ul>
<p>Lab member: _____</p> <p>Lab member's signature: _____</p> <p>Trainer's name: _____ Training date: _____</p> <p>Signature of PI: _____</p>		