

PART A - Laboratory Specific Safety Training for All Laboratory Workers Provided by Principal Investigator

Each laboratory is organized and operated in a unique way. Hence, the principal Investigator provides training to supplement TEHS programs specific to that laboratory. There are two kinds of “new” in the laboratory. There are **new** laboratory staff members who need to learn how to respond in any emergency situation before working in the laboratory. Additionally, there are **new** materials, equipment and procedures that each individual must learn before performing an experiment. Before allowing any person to perform any new task involving hazardous materials or hazardous equipment, the Principal Investigator (PI) will insure that the individual demonstrates competency in the safety aspects of the materials, equipment or procedure. Competency is achieved through training and practice. This training can be accomplished by demonstrations, review of instruction manuals, and review of written SOPs or whatever method works in each laboratory. Note: The following topics represent the most frequent causes of injury; however there may be other equally important topics specific for this laboratory. Please document in section F. Other topics.

Trainer Initials/ Date	Topic THE TRAINER WILL EXPLAIN...	Trainee Initials/ Date
A. Response to emergencies: fire, hazardous materials contact, lacerations and other injuries requiring first aid or medical treatment.		
	THE location and will demonstrate the operation of emergency equipment: safety shower, eye wash, hazmat spill kit, first aid kit, fire alarm pull station	
	THE notification procedures in emergencies: police, fire, medical, lab supervisor or PI, EHS	
	THE evacuation plan - exit doors, stairways and area of gathering	
B. General laboratory safety information		
	THE list of procedures that require prior approval by PI or designee because of hazard.	
	THE limitations on laboratory tasks for persons under the age of 18	
	REVIEW the requirements in Active IBC Registrations and High Hazardous Chemical Registration forms	
	WHY food is not stored or consumed in the laboratory. The trainer will identify the designated break areas set aside for food storage and eating/drinking.	
	WHEN to use personal protective equipment (PPE) (gloves, goggles, safety glasses, face shield, lab coats)	
	How to get the PPE needed and where to store between uses	
	How street clothes (shirt, pants, long skirts) provide skin protection in the laboratory and why sandals, bare feet, tank tops, shorts are not allowed.	
	THAT open flames and hot equipment must be supervised at all times; review lab policies for working alone and for conducting unattended operations	
	THAT electrical wires, plugs and outlets cannot have exposed wires or be hot to the touch; grounding plugs present and power strip use is limited and controlled - know the restrictions.	
	HOW fire doors prevent passage of fire and smoke between areas: do not wedge or block fire doors open for any reason; check whether lab door is a fire door.	
	WHY you do not operate any equipment until you learn the correct operation of each piece of equipment via instruction manuals, SOPs, Q/A session. Dangerous equipment may require PI approval.	
	THE correct method of handling and disposing of broken glass, scalpels ,needles and all other sharps	
	THE housekeeping and cleaning schedule for the laboratory: removal of all wastes; limitations on use of sink drains for disposal of wastes.	
C. Chemical safety information		
	THE identification of all highly toxic, reactive or explosive chemicals in the laboratory	
	THE hazards and proper use of compressed and cryogenic gases	
	THE Safety Data Sheet location and use to select health protection such as laboratory hood or PPE	
	THE Safety Plan for all high hazard chemicals per Chemical Hygiene Plan	
	THE Chemical labelling system used in laboratory; all containers of chemicals must be fully labelled	
	THE Chemical storage, reuse and waste disposal procedures; rules of the satellite accumulation area(SAA) for chemical waste	
	THE Chemical use: when to use on open bench and when/how to use in the laboratory (fume) hood.	
	THE purchasing and receiving procedures for all chemicals: limit on amounts of chemicals; reducing chemical amounts in experiments; add all chemicals to active, current chemical inventory list	
D. Biological Safety information		
	AND identify all biological materials in the lab	
	THE use of exposure response plans for all hazardous biological materials	
	THE location, use and disposal of chemical disinfectants	
	THE waste disposal procedures for regulated medical wastes including sharps disposal; operation of autoclave if applicable	
	THE SOP for all procedures involving biohazardous materials	
E. Radiation and Laser Safety information		
	THE identification of all radiation sources in the laboratory: signs, labels and other warnings explained	
	THE safe operation of all radiation sources including lasers, x-ray machines. ultraviolet light and microwave/Rf sources	
	THE requirements of laboratory permit to use radioactive materials	
F. Other topics		

For clarification on each or any of these items, please visit the EHS website at <http://publicsafety.tufts.edu/ehs>

PART B - EHS Provided Safety Training/Courses for Laboratory Workers: 5 Year Record

Employee Name _____ Lab/Location _____

EMPLOYEE SAFETY ORIENTATION	Required* (Check)	Frequency	Initial Date (enter)	Renew Date (enter)	Renew Date (enter)	Renew Date (enter)	Renew Date (enter)	Renew Date (enter)	Training Provided by	Course Description
Safety Orientation		Initial Only								Required for all non-faculty laboratory workers
Other / Existing Employee Safety Orientation		As needed			N/A					As requested by supervisor
LABORATORY SAFETY										
Annual Laboratory Safety		Annual								Required for all laboratory workers
Respiratory Protection		Annual								As requested by supervisor
Laboratory Safety - Awareness		Annual								Required for all non-laboratory workers entering the laboratories
Fire Extinguisher		Annual								As requested by supervisor
CHEMICAL SAFETY										
Compressed gases and cryogenic liquids		By request								For persons handling gases, gas cylinders and cryogenic gas cylinders
Highly Hazardous Chemicals		Initial Only			N/A					For persons using chemical under Safety Plan
Chemotherapy Preparation and Safety		Initial Only			N/A					Required for all persons handling chemotherapeutic drugs
Controlled substances		By request								Review of DEA and Mass. regulations
RADIATION SAFETY										
Introduction to Radiation Safety		Initial Only								Required for all persons handling radioactive material and handle ionizing radiation sources
Annual Radiation Safety Refresher		Annual								Required for all persons handling radioactive material
X-Ray		Annual								Required for all persons operating x-ray machines or sources
Introduction to Laser Safety		Initial Only								Review of Laser Safety Program
Irradiator		Initial Only								Required for all persons operating irradiator
Irradiator Refresher		Annual								Required for all persons operating irradiator
Permit Holder		Initial Only								Required for all faculty before issuing radioactive materials permit
Initial Radiation Safety Awareness Level		Annual								Required for all persons who enter permitted areas but do not work with radioactive materials
BIOLOGICAL SAFETY										
Biosafety in Research Laboratory		3 Years								Required for all persons listed on IBC approved registration; initial lecture, 3yr refresher online
Recombinant or Synthetic Nucleic Acid Awareness		Initial Only								Required for all Principal Investigators
Bloodborne Pathogens		Annual								Required for all persons handling human cell lines, human blood, human tissue
Agent-Specific		Annual								May be required by IBC as condition of approval
Select Agents and Toxins (SAT)		Annual								Required for all persons handling SATs
BSL3 Non SAT		Annual								Required for all persons handling BSL3 agents
HAZARDOUS MATERIALS SHIPPING										
Infectious and Biological Materials Shipping		2 Years								For all laboratory workers required to ship biological materials domestic or foreign
Chemical Materials Shipping		2 Years								For all laboratory workers required to ship chemicals domestic or foreign
WASTE SHIPPING (IF APPLICABLE)										
Regulated Medical Waste		3 Years								For all laboratory workers who sign medical waste shipping manifests
SPECIFIC										
Preventing strain injuries in lab/pipetting		By request								

*The Principal Investigator will place an 'X' beside each course that a laboratory worker will need to conduct their experiments.

Explanations: Additional or re-training may be required if regulations and policies significantly change content of training. For scheduling and additional information, please contact ehs-training@tufts.edu