

## Assignment of Laboratory Safety Tasks to Laboratory Safety Coordinators

Per Stanford University’s Research Policy Handbook, the Principal Investigator/Laboratory Supervisor is responsible for the health and safety of laboratory personnel doing work in his/her laboratory. The PI/Lab Supervisor may delegate certain safety tasks to one or more lab members. These lab members are often referred to as Laboratory Safety Coordinators (LSCs), but may also be called Lab Safety Contacts or Lab Managers. The PI/Lab Supervisor still retains ultimate responsibility and must make sure that any delegated tasks are carried out.

### Instructions to the PI/Lab Supervisor

**Assigning Health and Safety Tasks:** If you elect to delegate routine health and safety tasks to one or more members of your lab, use this checklist or an equivalent form to document task assignments. You may use the “Other Duties” section to assign other safety duties you deem appropriate. If, at any point, a new laboratory safety coordinator is appointed, update this form accordingly. EH&S recommends that outgoing LSCs overlap with their replacement for an extended period of time (e.g. 1-3 months) to ensure adequate knowledge transfer.

**Completing Health and Safety Tasks:** Refer to the following pages for guidance on Commonly Delegated Health & Safety Tasks. Stanford EH&S can provide more in-depth training to LSCs. Contact your Research Safety Specialist or the EH&S office (650) 723-0448 to sign up for Orientation for Laboratory Safety Coordinators (EHS-5200).

**Lab Name:** \_\_\_\_\_

**Building/Rooms:** \_\_\_\_\_

Task	Name of Assignee(s)	Date Assigned
<b>A. Safety Training</b>		
<b>B. Standard Operating Procedures (SOPs) / Risk Assessment</b>		
<b>C. Laboratory Self-Inspections</b>		
<b>D. Chemical Inventory &amp; Management</b>		
1. Chemical Storage, Segregation, and Labeling		
2. Chemical Waste Management		
3. Life Safety Box Updates		
<b>E. Incident Reporting</b>		
<b>F. Additional Safety Support</b>		
1. EH&S Lab Visits		
2. Lab Ergonomics		
3. Biosafety (if applicable)		
4. Radiation Safety (if applicable)		
<b>G. External Regulatory Inspections</b>		
<b>H. Other Duties:</b>		

X \_\_\_\_\_  
PI/Lab Supervisor Signature

\_\_\_\_\_  
Date

## Commonly Delegated Health & Safety Tasks

### A. Safety Training

1. Train New Lab Members
  - a. **Tier I** Training is required for all personnel - General Safety & Emergency Preparedness - Available on-line in [AXESS/STARS](#). (EHS-4200)
  - b. **Tier II** Training is determined based upon your work responsibilities using the [Training Needs Assessment](#) on-line in [AXESS/STARS](#). Training will be assigned in STARS based upon the assessment.
  - c. **Tier III** is [Laboratory-specific training](#) for new lab members prior to conducting laboratory work. Include the [Personal Protective Equipment \(PPE\) Assessment Tool](#).
    - i. Recordkeeping - maintain all Tier III and other in-person training records for a minimum of one year (unless otherwise specified). Records may be stored in [BioRAFT](#) under the *Document* tab or as hard copies.
2. Develop and/or update Laboratory-specific training
  - a. Work with PI/Lab Supervisor to establish and maintain a system by which lab members can obtain additional training prior to new procedures involving new potential exposure situations and/or hazardous operations.
  - b. Assist PI/Lab Supervisor in development and revision of PI's Lab-Specific training program using the following templates:
    - i. [How to Develop Lab-Specific Training](#) or [Laboratory-Specific Checklist](#)
    - ii. [Personal Protective Equipment \(PPE\) Assessment Tool](#)

### B. Standard Operating Procedures (SOPs) / Risk Assessment

1. Work with PI/Lab Supervisor to ensure that the lab has appropriate SOPs in place.
  - a. Lab members must have an SOP approved by the PI/Lab Supervisor prior to working with [SU Restricted Chemicals](#) (e.g., [toxic gases](#) regulated by Santa Clara County, dimethylmercury, [hydrofluoric acid](#), *tert*-butyllithium, and DoT 1.1 explosives).
  - b. Lab members must consult with PI/Lab Supervisor to prioritize development of SOPs for work involving highly toxic chemicals, carcinogens, reproductive toxins, highly reactive materials, and other high risk operations. Refer to [General Use SOP for Highly Reactive/Unstable Materials](#).
  - c. Additional [SOP Guidance](#) include [templates](#) and General Use SOPs. EH&S is available to perform courtesy reviews of SOPs. Please use this form to submit your lab-specific SOPs if you would like EH&S to review them, or you are working with chemicals or procedures for which an EH&S review is required:  
<https://app.smartsheet.com/b/form/6af14bd85ac64e2b90ddd7f16ee91fdb>
  - d. [Safety Fact Sheets](#) for commonly used materials and procedures can serve as starting points and references for laboratory personnel.
2. Evaluate the risk of an experiment, analytical process or task, researchers can use [Stanford Laboratory Risk Assessment Tool](#). Contact EH&S at (650) 723-0448 with any questions or to request support in conducting a risk assessment.

### **C. Laboratory Self-Inspections**

1. Ensure [laboratory self-inspections](#) are completed using [BioRAFT \(https://stanford.bioraft.com\)](https://stanford.bioraft.com) or the templates linked below:
  - a. Required [quarterly](#) self-inspections for [lab areas](#) (Jan-Mar, Apr-Jun, July-Sept, Oct-Dec)
  - b. Required [monthly](#) self-inspections for [hazardous materials storage areas](#) (isolated areas not routinely occupied by lab personnel. Contact EH&S if you are unsure if a room requires monthly self-inspections)
  - c. If applicable, [quarterly self-inspections](#) for Controlled Substances (recommended)
  - d. If applicable, [annual self-inspection](#) for Laser Safety
2. Assist PI/Lab Supervisor in correcting any deficiencies identified during self-inspections, documenting corrective actions in BioRAFT or on self-inspection sheets, and reviewing findings from self-inspections during group meetings and via other internal lab communication systems.
3. Refer to the [Lab Compliance Cheat Sheet](#) for violations commonly cited by the County of Santa Clara during hazardous materials inspections.
4. Maintain records for a minimum of **three** years.

### **D. Chemical Inventory and Management**

- Ensure chemical inventory is maintained on an on-going basis using [ChemTracker](#). See the [Chemical Inventory Management](#) page for a list of materials that must be inventoried.
- Familiarize lab members with the ChemTracker application and inventorying requirements. Contact your [Research Safety Specialist](#) to arrange individual or lab-wide training.
  - Go to <http://chemtrackerhelp.stanford.edu> for account-related assistance, including creating new user accounts and resetting passwords for existing accounts.

#### **1. Chemical Storage, Segregation, and Labeling**

- a. Periodically check lab practices regarding chemical storage, segregation, and labeling.
  - i. Ensure flammable materials are stored in an appropriate flammables cabinet.
  - ii. Ensure that all hazardous chemicals are stored in appropriate secondary containment. Refer to the guidance on [Primary and Secondary Container Criteria](#).
  - iii. Ensure chemicals are stored compatibly using the [Stanford Storage Group system](#). Storage Groups for specific chemicals can be determined using the [Stanford Chemical Safety Database](#) (also accessible through ChemTracker).
  - iv. Ensure all containers are clean, free of cracks and other structural defects, and labeled with their full English name; chemical abbreviations and formulas are not sufficient.
  - v. Assist PI/Lab Supervisor in discussing findings during group meetings and via other internal lab communication systems to ensure lab-wide engagement and follow-through.

#### **2. Chemical Waste Management**

- a. Periodically check lab practices regarding labeling and [management of chemical waste](#).
  - i. Containers must be labeled with a waste tag before any waste is deposited.
  - ii. Waste tags can be created and managed via <http://wastetag.stanford.edu>
  - iii. Wastes must be stored compatibly and in secondary containment.
  - iv. EH&S maintains a list of [non-hazardous chemical wastes](#) and recommended methods for their disposal.

- v. Assist PI/Lab Supervisor in discussing findings during group meetings and via other internal lab communication systems to ensure lab-wide engagement and follow-through.
- b. Arrange for pickup of hazardous waste containers after 8 months of waste accumulation or when the container is full, whichever occurs first.
  - i. Pickup of containers labeled with barcoded waste tags must be requested through <http://wastetag.stanford.edu>
  - ii. Pickup of containers labeled with non-barcoded waste tags must be requested through <http://wastepickup.stanford.edu>

### **3. Life Safety Box Updates**

- a. Ensure contents of the Life Safety Box (emergency contact information and chemical storage map of laboratory) are current to within the last 12 months.
  - i. [Blank Emergency Contact Sheet \(University Main Campus\)](#)
  - ii. [Blank Emergency Contact Sheet \(School of Medicine\)](#)
  - iii. [Blank Chemical Storage Map](#)
- b. Request new ChemTracker inventory printout and cover sheet: If over a year old or significant changes to inventory: Go to <http://chemtrackerhelp.stanford.edu>

## ***E. Incident Reporting***

- 1. Be familiar with the [Serious Injury/Illness Reporting Procedures](#)
- 2. In the event of lab incidents, injuries, or near-misses, assist PI/Lab Supervisor and involved parties in the completion and submission of an Incident Investigation Report (eSU-17 form), available at <https://ehs.stanford.edu/esu-17>
- 3. Assist PI/Lab Supervisor in correcting conditions that were causal factors of the incident and documenting such efforts. Retrain lab personnel as appropriate.
- 4. Assist PI/Lab Supervisor in reviewing incidents and near-misses during group meetings and via other internal lab communication systems. This may involve:
  - a. Reviewing how to minimize reoccurrence
  - b. Reinforcement of correct use of engineering controls, work practices, and personal protective equipment (as appropriate)
  - c. Promoting reporting of near misses
  - d. Reviewing the University's Anti-Reprisal Policy, which allows for reporting of safety concerns without fear of negative repercussions.

## ***F. Additional Safety Support***

### **1. EH&S Lab Visits**

- a. Participate in laboratory visits with EH&S staff on topics such as:
  - i. General lab safety (e.g., SOP development, chemical inventory, hazardous materials storage, and waste management)
  - ii. Fire safety
  - iii. Biosafety (if applicable)
  - iv. Health Physics (if applicable)
  - v. Controlled Substances (if applicable)

- b. Address issues on the spot, when feasible (e.g., completion of hazardous waste tags, placing hazardous materials in secondary containment).
- c. Assist PI/Lab Supervisor with implementing any corrective actions or best practice suggestions identified by EH&S representatives.

## 2. Lab Ergonomics

- **Laboratory Ergonomics Training – EHS 4800:** Prior to beginning work in a lab, EHS recommends completion of Lab Ergonomics Training. Refer to STARS for the training schedule.
- **Laboratory workstation evaluations:** For assistance with your laboratory workstation setup and ergonomic products, please contact EH&S Ergonomics team [here](#).

[Laboratory Ergo Self Eval Form](#)  
[Laboratory Ergonomics Catalog](#)  
[Laboratory Ergonomics Matching Fund Program](#)  
[Ergo Tip Sheet Fume Hood](#)  
[Ergo Tip Sheet Microscopy](#)  
[Ergo Tip Sheet Pipetting](#)  
[Adjusting Lab Stools](#)  
[Microbreaks](#)

## 3. Biosafety (if applicable)

- a. Ensure biosafety cabinets (tissue culture hoods) are [certified annually](#).
- b. Arrange for pickup of [biohazardous waste](#). For assistance, call (650) 724-0794 (University Main Campus) or (650) 721-2146 (School of Medicine).

If the lab uses human or non-human primate cells (including tissue culture), blood, blood products, body fluids, organs, or other potentially infectious materials:

- Assist PI/Lab Supervisor in ensuring researcher compliance with [Universal Precautions](#). Refer to the [Biosafety Manual](#) or contact the [Biosafety program](#) for more information.

If the lab uses biologically hazardous agents (Biosafety levels 2 and higher) and/or non-exempt recombinant or synthetic nucleic acids:

- Assist PI/Lab Supervisor with submitting, revising, and renewing APB protocols through <http://eprotocol.stanford.edu>

## 4. Radiation Safety (if applicable)

If the lab uses/will use radioactive material or any machine that emits ionizing or non-ionizing radiation (including lasers):

- Visit the [radiation safety](#) and [laser safety](#) websites for a description of relevant safety duties.
- Contact Health Physics at (650) 723-3201 for additional assistance.

## G. External Regulatory Inspections

- Whenever possible, be present during external regulatory inspections to address questions posed by inspectors regarding laboratory operations, including hazardous materials storage/waste management and review of quarterly and monthly lab self-inspection records.
  - EH&S staff (and/or Departmental Health & Safety Programs staff) escort external regulatory inspectors, along with the local area contact.

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*Laboratory Safety Coordinator Guidance*

- Correct violations on the spot during the inspection, when feasible (e.g., completion of a hazardous waste tag) and as allowed.
- Assist PI/Lab Supervisor with: (1) correcting outstanding violations and (2) providing the required responses documenting abatement of violation to the local area contact within the required time frame.

**H. Other Duties**

Other lab-specific safety duties may be assigned as the PI/Lab Supervisor deems appropriate.

**Resources**

<b>EH&amp;S</b>	<a href="https://ehs.stanford.edu">ehs.stanford.edu</a>
<b>Emergency Preparedness Checklist</b> for students, faculty, staff, and visitors	<a href="https://ehs.stanford.edu/wp-content/uploads/EmerPrepChecklist.pdf">ehs.stanford.edu/wp-content/uploads/EmerPrepChecklist.pdf</a>
<b>Laboratory Continuity Planning</b>	<a href="https://ehs.stanford.edu/topic/emergency-preparedness/continuity-planning">ehs.stanford.edu/topic/emergency-preparedness/continuity-planning</a>
<b>Laboratory Ergonomics</b>	<a href="https://ehs.stanford.edu/wp-content/uploads/lab_ergo_tips.pdf">ehs.stanford.edu/wp-content/uploads/lab_ergo_tips.pdf</a> <a href="https://ehs.stanford.edu/wp-content/uploads/Lab-Ergo-Product-List.pdf">ehs.stanford.edu/wp-content/uploads/Lab-Ergo-Product-List.pdf</a>
<b>BioRAFT</b>	<a href="https://stanford.bioraft.com">stanford.bioraft.com</a>
<b>Chemical Inventory</b>	<a href="https://stanford.chemtracker.org">stanford.chemtracker.org</a>
<b>Chemical Safety Database</b>	<a href="https://chemsafetydata.stanford.edu">chemsafetydata.stanford.edu</a>
<b>Chemical Toolkit</b>	<a href="https://chemtoolkit.stanford.edu">chemtoolkit.stanford.edu</a>
<b>Free Chemicals</b>	<a href="https://freechemicals.stanford.edu">freechemicals.stanford.edu</a>
<b>Forms</b>	<a href="https://ehsforms.stanford.edu">ehsforms.stanford.edu</a>
<b>Hazmat Shipping</b>	<a href="https://hazmatshipping.stanford.edu">hazmatshipping.stanford.edu</a>
<b>Online Safety Store</b>	<a href="https://ehs.stanford.edu/safety-store">ehs.stanford.edu/safety-store</a>
<b>Online Training</b>	<a href="https://axess.stanford.edu">axess.stanford.edu</a>
<b>Radiation</b>	<a href="https://radsafety.stanford.edu">radsafety.stanford.edu</a>
<b>Waste Pickups</b>	<a href="https://wastepickup.stanford.edu">wastepickup.stanford.edu</a>
<b>Waste Tag</b>	<a href="https://wastetag.stanford.edu">wastetag.stanford.edu</a>

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