

# Stanford University

## Laboratory Safety Coordinator Guidance

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 for which he/she is responsible to one or more lab members. These lab members, usually research staff, post-docs, or graduate students, are often referred to as Laboratory Safety Coordinators (LSCs), but may also be called Lab Safety Contacts or Lab Managers. The PI/Lab Supervisor must make sure that any delegated tasks are carried out.

**Instructions to PI/Lab Supervisor:** Review the list of commonly delegated health and safety tasks below and consider which, if any, you wish to formally delegate to lab members. Then, use *Stanford University Assignment of Laboratory Safety Tasks* (at the end of this document) or an equivalent form to document assignments.

**Instructions to LSCs:** This document provides guidance for the health and safety tasks that your PI/Lab Supervisor may delegate to you. Stanford EH&S can provide more in-depth training on executing the tasks listed below; contact your [Safety & Compliance Advisor](#) or the EH&S office (723-0448).

All words in bolded blue text are hyperlinks accessible through the electronic version of this document, available at <http://LSCguidance.stanford.edu>

### Commonly Delegated Health & Safety Tasks

What to do?	How to do this?
<b>A. Safety Training</b>	<p><u>Development/Revision of Tier III (Lab-Specific) Training:</u></p> <ol style="list-style-type: none"> <li>1. Assist PI/Lab Supervisor in development and revision of PI's Tier III training program. See <a href="#">How to Create Lab-Specific Training</a> for what needs to be included in such a training program.</li> </ol> <p><u>Training New Lab Members:</u></p> <ol style="list-style-type: none"> <li>2. Refer new lab members to PI/Lab Supervisor for discussion of their training plan, which includes completion of Tier II (general laboratory safety) and Tier III (lab-specific) training prior to conducting laboratory work.               <ul style="list-style-type: none"> <li>o In conjunction with PI/Lab Supervisor, new lab members are to identify required Tier II Training using the <a href="#">Safety Training Advisor</a>.</li> </ul> </li> <li>3. Deliver Tier III training and/or refer new members to other lab personnel authorized by PI/Lab Supervisor to provide such training.</li> <li>4. 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.</li> </ol> <p><u>Recordkeeping:</u></p> <ol style="list-style-type: none"> <li>5. Maintain training records for a minimum of one year (unless otherwise specified).</li> </ol>
<b>B. Standard Operating Procedures (SOPs)</b>	<ol style="list-style-type: none"> <li>1. Work with PI/Lab Supervisor to ensure that the lab has appropriate SOPs in place.               <ul style="list-style-type: none"> <li>o Lab members must have an SOP approved by the PI/Lab Supervisor prior to working with <a href="#">SU Restricted Chemicals</a> (e.g., <a href="#">toxic gases</a> regulated by Santa Clara County, dimethylmercury, <i>tert</i>-butyllithium).</li> <li>o 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.</li> <li>o See <a href="#">Creating Standard Operating Procedures</a> for a template and additional information. EH&amp;S is available to perform courtesy reviews of SOPs.</li> </ul> </li> </ol>

<b>C. Laboratory Self-Inspections</b>	<ol style="list-style-type: none"> <li>1. Ensure <b>laboratory self-inspections</b> are completed: <ol style="list-style-type: none"> <li>a) Quarterly self-inspections for <b>labs</b> and <b>shop areas</b></li> <li>b) If applicable, <b>monthly self-inspections</b> for hazardous materials storage areas (not routinely occupied by lab personnel)</li> <li>c) If applicable, <b>quarterly self-inspections</b> for Select Agent Toxins</li> <li>d) If applicable, <b>quarterly self-inspections</b> for Controlled Substances</li> </ol> </li> <li>2. Assist PI/Lab Supervisor in correcting any deficiencies identified during self-inspections, documenting corrective actions on self-inspection sheets, and reviewing findings from self-inspections during group meetings and via other internal lab communication systems.</li> <li>3. Maintain records for a minimum of three years.</li> </ol>
<b>D. Life Safety Box Updates</b>	<ol style="list-style-type: none"> <li>1. Ensure contents of the Life Safety Box (emergency contact information and chemical storage map of laboratory) are current to within the last 12 months. <ul style="list-style-type: none"> <li>o <b>Blank Emergency Contact Sheet (University Main Campus)</b></li> <li>o <b>Blank Emergency Contact Sheet (School of Medicine)</b></li> <li>o <b>Blank Chemical Storage Map</b></li> </ul> </li> </ol>
<b>E. Chemical Inventory</b>	<ol style="list-style-type: none"> <li>1. Ensure chemical inventory is maintained on an on-going basis using <b>ChemTracker</b>. See the <b>Chemical Inventory Management</b> page for a list of materials that must be inventoried.</li> <li>2. Familiarize lab members with the ChemTracker application and inventorying requirements. Contact your <b>Safety &amp; Compliance Advisor</b> to arrange individual or lab-wide training. <ul style="list-style-type: none"> <li>o Go to <a href="http://chemtrackerhelp.stanford.edu">http://chemtrackerhelp.stanford.edu</a> for account-related assistance, including creating new user accounts and resetting passwords for existing accounts.</li> </ul> </li> </ol>
<b>F. Chemical Storage, Segregation, and Labeling</b>	<ol style="list-style-type: none"> <li>1. Periodically check lab practices regarding chemical storage, segregation, and labeling. <ol style="list-style-type: none"> <li>a) Ensure flammable materials are stored in an appropriate flammables cabinet.</li> <li>b) Ensure that all hazardous chemicals are stored in appropriate secondary containment. The requirements are listed in the <b>Chemical Waste Program FAQs</b> and are applicable to both stock chemicals and chemical waste.</li> <li>c) Ensure chemicals are stored compatibly using the <b>Stanford Storage Group system</b>. Storage Groups for specific chemicals can be determined using the <b>Stanford Chemical Safety Database</b> (also accessible through ChemTracker)</li> <li>d) 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.</li> <li>e) 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.</li> </ol> </li> </ol>
<b>G. Chemical Waste Management</b>	<ol style="list-style-type: none"> <li>1. Periodically check lab practices regarding labeling and management of chemical waste. <ol style="list-style-type: none"> <li>a) Containers must be labeled with a waste tag before any waste is deposited.</li> <li>b) Waste tags can be created and managed via <a href="http://wastetag.stanford.edu">http://wastetag.stanford.edu</a></li> <li>c) If the online waste tag system is unavailable, your Safety &amp; Compliance Advisor can also provide pre-printed waste tags. These must be managed outside of the online system.</li> <li>d) Wastes must be stored compatibly and in secondary containment.</li> <li>e) EH&amp;S maintains a list of <b>non-hazardous chemical wastes</b> and recommended methods for their disposal.</li> <li>f) 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.</li> </ol> </li> <li>2. Arrange for pickup of hazardous waste containers after 8 months of waste accumulation or when the container is full, whichever occurs first. <ul style="list-style-type: none"> <li>o Pickup of containers labeled with barcoded waste tags must be requested through <a href="http://wastetag.stanford.edu">http://wastetag.stanford.edu</a></li> <li>o Pickup of containers labeled with non-barcoded waste tags must be requested through <a href="http://wastepickup.stanford.edu">http://wastepickup.stanford.edu</a></li> </ul> </li> </ol>
<b>H. Radiation Safety (if applicable)</b>	<p><u>If the lab uses/will use radioactive material or any machine that emits ionizing or non-ionizing radiation (including lasers):</u></p> <ol style="list-style-type: none"> <li>1. Visit the <b>radiation safety</b> and <b>laser safety</b> websites for a description of relevant safety duties. Contact <b>Health Physics</b> for additional assistance.</li> </ol>

<p><b>I. Biosafety (if applicable)</b></p>	<ol style="list-style-type: none"> <li>1. Ensure biosafety cabinets (tissue culture hoods) are certified annually.</li> <li>2. Arrange for pickup of biohazardous waste. For assistance, call 724-0794 (University Main Campus) or file a <b>work order</b> with SOM Facilities (School of Medicine).</li> </ol> <p><u>If the lab uses human or non-human primate cells (including tissue culture), blood, blood products, body fluids, organs, or other potentially infectious materials:</u></p> <ol style="list-style-type: none"> <li>3. Assist PI/Lab Supervisor in ensuring researcher compliance with <b>Universal Precautions</b>. Refer to the <b>Biosafety Manual</b> or contact the <b>Biosafety program</b> for more information.</li> </ol> <p><u>If the lab uses biologically hazardous agents (Biosafety levels 2 and higher) and/or non-exempt recombinant or synthetic nucleic acids:</u></p> <ol style="list-style-type: none"> <li>4. Assist PI/Lab Supervisor with submitting, revising, and renewing APB protocols through <a href="http://eprotocol.stanford.edu">http://eprotocol.stanford.edu</a></li> </ol>
<p><b>J. EH&amp;S Lab Visits</b></p>	<ol style="list-style-type: none"> <li>1. Participate in laboratory visits with EH&amp;S staff on topics such as: <ol style="list-style-type: none"> <li>a) General lab safety (e.g., SOP development, chemical inventory, hazardous materials storage, and waste management)</li> <li>b) Fire safety</li> <li>c) Biosafety (if applicable)</li> <li>d) Health Physics (if applicable)</li> <li>e) Select Agent Toxins (if applicable)</li> <li>f) Controlled Substances (if applicable)</li> </ol> </li> <li>2. Address issues on the spot, when feasible (e.g., completion of hazardous waste tags, placing hazardous materials in secondary containment).</li> <li>3. Assist PI/Lab Supervisor with implementing any corrective actions or best practice suggestions identified by EH&amp;S representatives.</li> </ol>
<p><b>K. External Regulatory Inspections</b></p>	<ol style="list-style-type: none"> <li>1. 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 monitoring records. <ul style="list-style-type: none"> <li>o EH&amp;S staff (and/or Health &amp; Safety Programs staff, in the School of Medicine) escort external regulatory inspectors, along with the local area contact.</li> </ul> </li> <li>2. Correct violations on the spot during the inspection, when feasible (e.g., completion of a hazardous waste tag) and as allowed.</li> <li>3. 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.</li> </ol>
<p><b>L. Incident Reporting</b></p>	<ol style="list-style-type: none"> <li>1. 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 (SU-17 form), available at <a href="http://su17.stanford.edu">http://su17.stanford.edu</a> <ul style="list-style-type: none"> <li>o Stanford employees will complete the <b>SU-17 form</b></li> <li>o Non-employees (including students) will complete the <b>SU-17b form</b></li> </ul> </li> <li>2. Assist PI/Lab Supervisor in correcting conditions that were causal factors of the incident and documenting such efforts. Retrain lab personnel as appropriate.</li> <li>3. Assist PI/Lab Supervisor in reviewing incidents and near-misses during group meetings and via other internal lab communication systems. This may involve: <ol style="list-style-type: none"> <li>a) Reviewing how to minimize reoccurrence</li> <li>b) Reinforcement of correct use of engineering controls, work practices, and personal protective equipment (as appropriate)</li> <li>c) Promoting reporting of near misses</li> <li>d) Reviewing the University's Anti-Reprisal Policy. The anti-reprisal policy can be found in section 4.7 of the <b>Injury &amp; Illness Prevention document</b>.</li> </ol> </li> </ol>
<p><b>M. Other Duties</b></p>	<ol style="list-style-type: none"> <li>1. Other lab-specific safety duties may be assigned as the PI/Lab Supervisor deems appropriate.</li> </ol>

# Stanford University

## Assignment of Laboratory Safety Tasks

### Instructions to the PI/Lab Supervisor:

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. Review the procedures of each task and their frequency with lab members and routinely validate that assigned tasks are being carried out. Update the form if the assignment of safety tasks changes.

<b>Name of Principal Investigator/Lab Supervisor:</b> _____ <b>Building:</b> _____ <b>Room(s) Covered by Assignment:</b> _____
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Task	Name of Assignee(s)	Date Assigned
<b>A. Safety Training</b>		
<b>B. Standard Operating Procedures</b>		
<b>C. Laboratory Self-Inspections</b>		
<b>D. Life Safety Box Updates</b>		
<b>E. Chemical Inventory</b>		
<b>F. Chemical Storage, Segregation, and Labeling</b>		
<b>G. Chemical Waste Management</b>		
<b>H. Radiation Safety</b>		
<b>I. Biosafety</b>		
<b>J. EH&amp;S Lab Visits</b>		
<b>K. External Regulatory Inspections</b>		
<b>L. Incident Reporting</b>		
<b>M. Other Duties:</b>		

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 PI/Lab Supervisor signature

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 Date