Lab Safety Supervisors
Roles and Responsibilities

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919-962-5721
Agenda

- Safety Culture - Lab and Chemical Safety Committee
- Defining Lab Safety Supervisors (LSS)
- Roles and Responsibilities
- Condensed Review of Common Safety Issues
- Questions and Comments
- (Optional) Lab Safety Plan Basics
- More Questions
Lab and Chemical Safety Committee

• University committee consisting of volunteers from across campus
  • Professors, post-docs, staff, and graduate students

• Discuss and review
  • Laboratory policies
  • Accidents and incidents
  • New policies and procedures
  • Created this training for lab safety supervisors
## Lab and Chemical Safety Committee

<table>
<thead>
<tr>
<th>Committee Member</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Lorraine Alexander (Chair)</td>
<td>Clinical Associate Professor, Epidemiology;</td>
</tr>
<tr>
<td>Pat Boone, MSPH, CIH</td>
<td>Assistant Director, UNC Healthcare Environmental, Health and Safety</td>
</tr>
<tr>
<td>Cathy Brennan</td>
<td>Interim Director and Chemical Hygiene Officer, Environment, Health and Safety</td>
</tr>
<tr>
<td>Lisa Cremeans</td>
<td>Clinical Assistant Professor, Department of Allied Health Sciences</td>
</tr>
<tr>
<td>Todd O’Buckley</td>
<td>Research Specialist, Alcohol Studies Center</td>
</tr>
<tr>
<td>Dr. Nick Tsihlis</td>
<td>Research Associate Professor, Department of Surgery, School of Medicine</td>
</tr>
<tr>
<td>Dr. Nita Eskew</td>
<td>Director of Undergraduate Labs, Department of Chemistry</td>
</tr>
<tr>
<td>Michael Liang</td>
<td>Graduate Student, Chemistry</td>
</tr>
<tr>
<td>Dr. Kathryn Reissner</td>
<td>Assistant Professor of Psychology</td>
</tr>
<tr>
<td>Dr. Anthony Hackney</td>
<td>Professor, Physiology and Nutrition, Exercise and Sport Science</td>
</tr>
<tr>
<td>Dr. Rihe Liu</td>
<td>Associate Professor, Medicinal Chemistry &amp; Natural Products, Pharmacy</td>
</tr>
<tr>
<td>Dr. Sarah Scarry</td>
<td>Research Assistant Professor, Center for Integrative Chemical Biology and Drug Discovery, School of Pharmacy</td>
</tr>
<tr>
<td>Jim Potts</td>
<td>Associate Chemical Hygiene Officer, Environment, Health and Safety</td>
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</tbody>
</table>
Safety Culture

• Safety culture refers to the organization’s (university; lab setting) shared values, assumptions, and beliefs specific to workplace safety
  • How important is safety in your lab?
• In a lab with a strong safety culture, everyone feels responsible for safety and pursues it on a daily basis
• Rules, processes, and equipment have little impact on behaviors, actions, and choices people make as they perform their jobs and related tasks.
• As workers begin to accept safety as a personal value that will not be compromised regardless of the situation, less injuries will occur, workers will develop pride and ownership in their actions.
Creating and Sustaining Safety Culture

1. Share your safety vision
2. Define safety responsibilities
3. Build trust
4. Enforce accountability
5. Open communication
6. Report incidences
7. Celebrate success
Safety Culture Review

• As a **safety leader**, it is up to **you** to decide what you can implement to create a positive safety culture in your laboratory

• You do have influence with your lab mates and your PIs– by what you say and what you do

• Further reading: “Creating Safety Cultures in Academic Settings”

“COS
CULTURE OF SAFETY”
Lab and Chemical Safety Committee

• Interested in joining the committee?
• Have safety concerns that you would like to have brought to the committee’s attention?
• Email Cathy Brennan: crbrennan@ehs.unc.edu
• We look forward to hearing from you!
Lab Safety Supervisors

Thank you!
Who are Lab Safety Supervisors @ UNC?

• Graduate students
• Lab managers/staff
• Post-docs
• Undergraduates
• Principle Investigators
• Professors
Importance of Lab Safety Supervisors

• Generally, lab safety supervisors are the eyes and ears of the lab
• Knowledgeable about the ins-and-outs of the lab on a day-to-day basis
• Help the PI with compliance issues and trainings
• Responsible for enforcing safety policies as well as proper experiment techniques
• Environment, Health and Safety (EHS) appreciates the central role that LSSs have in safety and compliance in the lab
LSS’s Common Roles and Responsibilities

• In-lab
  • PPE compliance
  • Safe work practices
  • Writing standard operating procedures (SOPs)
  • Training
  • Hazardous waste compliance
  • EHS lab inspection liaison

• Online
  • Lab safety plan
  • Training compliance
  • Chemical and radioactive material inventory
  • Lab entrance signage
  • Hazardous waste pick-up requests
Responsibilities: PI vs LSS

Principal Investigator

- Prepare a Laboratory Safety Plan (LSP) as described in Chapter 2, to complement the Laboratory Safety Manual (LSM). These documents constitute your Chemical Hygiene Plan as required by OSHA.
- Ensure that laboratory personnel meet the training requirements of the Laboratory Standard, including chemical hazard information, safety rules and good work practices.
- Ensure that staff and visitors observe safety rules and don proper Personal Protective Equipment (PPE) when working in or visiting the laboratory.
- Ensure that proper safety supplies and equipment, such as gloves, safety glasses and/or goggles, lab coats, and respirators* are available for all people in the laboratory. *Note: if respirators are required, the PI is also responsible for the cost of medical and/or pulmonary function tests that may be required for respirator use.
- Obtain safety data sheets (formerly known as material safety data sheets) for hazardous chemicals used in the laboratory and make these available to the laboratory staff.
- Post appropriate hazard information signs within the laboratory.
- Provide information to EHS in a timely manner so that it may post appropriate signage at laboratory entrances.
- Conduct an “exit interview” with laboratory workers prior to their departure to ensure that they have properly labeled and prepared hazardous materials for disposal by EHS or use by other workers.
- Notify EHS prior to vacating laboratory space when moving on campus and notify department chair and EHS of planned departure from UNC or discontinuance of the use of hazardous materials. Decontaminate laboratory surfaces and prepare hazardous materials for disposal by EHS or use by other laboratories. Refer to EHS guidelines on vacating laboratory space.
- Provide initial training to laboratory personnel, upon employment, on the contents of the Chemical Hygiene Plan. Employees document this training through the online Lab Safety Plan application.
- Provide annual training to all laboratory employees on the contents of the Chemical Hygiene Plan. Employees document this training through the online Lab Safety Plan application.

Laboratory Safety Supervisor

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What It May Feel Like

Principal Investigator

- Grant writing
- Publications
- Conferences

Laboratory Safety Supervisor

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- Post appropriate hazard information signs within the laboratory.
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- Conduct an “exit interview” with laboratory workers prior to their departure to ensure that they have properly labeled and prepared hazardous materials for disposal by EHS or use by other workers.
- Notify EHS prior to vacating laboratory space when moving on campus and notify department chair and EHS of planned departure from UNC or discontinuance of the use of hazardous materials. Decontaminate laboratory surfaces and prepare hazardous materials for disposal by EHS or use by other laboratories. Refer to EHS guidelines on vacating laboratory space.
- Provide training to laboratory personnel on the contents of the Chemical Hygiene Plan and lab safety plan, and lab specific trainings on procedures, waste handling, and equipment use.
## Quick Links to Make This Easier

### Condensed LSS Responsibilities

1. Prepare and update the Laboratory Safety Plan (LSP).
2. Ensure that laboratory personnel are properly trained.
3. Ensure that everyone follow safety rules and wear their PPE inside of the laboratory.
4. Ensure that proper PPE and safety equipment are available for all people in the laboratory.
5. Review SDSs online and inform lab how to access them.
6. Post appropriate hazard information signs within the laboratory.
7. Request Lab Entry Signs from EHS (online).
8. Don’t let anyone leave the lab without cleaning and organizing their work spaces.
9. Follow proper procedures when vacating a lab space.
10. Provide training to laboratory personnel.

### Links, if applicable

1. [https://ehs.cloudapps.unc.edu/LabSafetyPlan/](https://ehs.cloudapps.unc.edu/LabSafetyPlan/)
2. [https://ehs.unc.edu/training/](https://ehs.unc.edu/training/)
3. Ensure that everyone follow safety rules and wear their PPE inside of the laboratory.
4. Your lab’s preferred vendor
5. [https://www.sigmaaldrich.com/united-states.html](https://www.sigmaaldrich.com/united-states.html)
6. [https://ehs.unc.edu/lab/labels/](https://ehs.unc.edu/lab/labels/)
7. [https://ehs.cloudapps.unc.edu/EHS/?reqPage=LabSign](https://ehs.cloudapps.unc.edu/EHS/?reqPage=LabSign)
8. Unknown chemicals/samples sit for decades
9. [https://ehs.unc.edu/lab/move/](https://ehs.unc.edu/lab/move/)
10. [https://ehs.unc.edu/training/services/](https://ehs.unc.edu/training/services/)
Environment, Health, and Safety Support

- EHS is a partner
- Answering your lab safety questions (EHS Main #: 919-962-5507)
- Provide support for the online safety websites
  - Lab safety plan
  - Chemical & radioactive material inventory
  - Hazardous waste pick-up requests
  - Lab entry signs
- Provide online trainings or in-person training by request
- Help to locate resources
- Inspect labs to provide compliance assistance
- Discuss comments and concerns made by LSSs and make changes to our systems (chemical inventory upload/download)
Environment, Health, and Safety Support

• Safety Manuals [https://ehs.unc.edu/manuals/](https://ehs.unc.edu/manuals/)
  • EHS
  • Laboratory
  • Biological
  • Radiation
  • Laser

• The following slides are a quick overview of general lab safety. Please contact EHS or peruse the above safety manuals for more information.
Commonly Delegated LSS Tasks

- Safety Training
- Laboratory Inspections
- Chemicals: Inventory, Storage, and Waste Management
- Biosafety
- Radiation Safety
- Incident Reporting
- Other Duties
Commonly Delegated LSS Tasks

• Self-Inspection Checklist
  • https://ehs.unc.edu/lab/lip/
Safety Training

• Train new lab members
  • Ensure that all lab workers have filled out a “Worker Registration Form” and have selected and completed the appropriate trainings for the hazards that they will encounter in the lab
  • Verify all lab personnel are current with training*

• Assist PI in developing and updating laboratory-specific training
  • Create written standard operating procedures (SOPs) for lab/worker specific operations and attach them to the Schedule A of the Lab Safety Plan (EHS can reviews SOPs but not usually required)

• Assist lab workers in evaluating the risk of an experiment, process, or task
Training Compliance Through the LSP

Providing a safe and healthy place to teach, learn and serve

Environment, Health and Safety is committed to providing a safe and healthful environment for the Carolina campus and local community through education, training, consultation, recognizing and controlling health and safety hazards, ensuring regulatory compliance and minimizing potential liabilities.

EHS Applications and Compliance Portal

Use the links below to log in to the specific application you wish to access. Onyen required!

- Waste Disposal Request
- Chemical Inventory
- EHS Compliance Portal
- Hazards Management Plan
- Laboratory Safety Plan
- UEOHC Appointment System
- Worker Registration Form
- EHS Permit (Hot Work)
Training Compliance:
Through the Lab Safety Plan
Training Compliance:
Through the Lab Safety Plan

*Note: There are additional trainings not shown on this compliance page.
<table>
<thead>
<tr>
<th>LSP Name for Training</th>
<th>Course Title</th>
<th>Initial</th>
<th>Refresher Due?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab</td>
<td>Laboratory Environment Orientation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Rad.</td>
<td>Radiation Safety Orientation Course (in-person session)**</td>
<td>If applicable</td>
<td>No</td>
</tr>
<tr>
<td>Bloodborne*</td>
<td>Bloodborne Pathogens in the UNC-Chapel Hill Laboratory Setting</td>
<td>If applicable</td>
<td>Annually*</td>
</tr>
<tr>
<td>BSL 2</td>
<td>Biological Safety Level 2 for Laboratory Workers at UNC-Chapel Hill</td>
<td>If applicable</td>
<td>No</td>
</tr>
<tr>
<td>Lasers</td>
<td>Laser Safety</td>
<td>If applicable</td>
<td>No</td>
</tr>
<tr>
<td>X-Rays</td>
<td>Multiple courses</td>
<td>If applicable</td>
<td>No</td>
</tr>
<tr>
<td>Shipping*</td>
<td>Shipping Infectious Substances and Other Biomedical Materials</td>
<td>If applicable</td>
<td>Every 2 years*</td>
</tr>
<tr>
<td>NIH</td>
<td>Recombinant DNA</td>
<td>ALL PIs</td>
<td>No</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>Formaldehyde</td>
<td>If applicable</td>
<td>No</td>
</tr>
<tr>
<td>LSP Annual Review*</td>
<td>Lab Safety Plan</td>
<td>If applicable</td>
<td>Annually*</td>
</tr>
<tr>
<td>Subpart K</td>
<td>Laboratory Waste Management</td>
<td>If applicable</td>
<td>No</td>
</tr>
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</table>
Chemicals: Inventory and Storage

- Update lab chemical inventory on an on-going basis while EHS update annually
- Physically verify your inventory annually
- Chemical Storage, Segregation, and Labeling
  - Periodically check lab practices regarding chemical storage, segregation, and labeling.
    - Segregated according to their hazard class and reactivity
    - All containers and lids are clean, free of cracks and other structural defects
    - Labeled with their full English name—chemical abbreviations and formulas are not sufficient (OSHA).
- Maintaining an excel file is the easiest way for most labs to complete the annual inventory
- You can download your current chemical inventory as an excel file @ https://ehs.cloudapps.unc.edu/ChemInventory/
Chemicals: Inventory, Storage, and Waste Management

Inventory Template
Import/Export Training
Export (Download) Current Inventory Excel File
Chemical Waste

• NO CHEMICAL WASTE POURED DOWN THE DRAIN

• LSS Responsibilities
  • Periodically check lab practices regarding labeling and management of chemical waste (4Ls)
    • Labels: “Unwanted materials”
      • [https://ehs.unc.edu/lab/labels/] (Avery 60504 template stickers)
    • Leaks: Compatibly and in secondary containment
    • Lids: Hand-tightened
    • Location: At or near the point of generation
  • Waste must be picked up by EHS within 12 months from the accumulation start date (or when full)
    • [https://ehs.cloudapps.unc.edu/HazMat_Pickup/]
Chemicals: Waste Labels

- UNC implemented new “unwanted material” labels in 2018
- ALL lab workers required to take training: Subpart K
- 4 things needed for waste labels
  1. Accumulation Start Date
  2. Used/Unused=(in original container)
  3. Chemical name
  4. Estimated % of total for each chemical (do your best)
- If your lab creates the same waste from an experiment or piece of equipment, you can print out completed labels

*“Fun” Fact: If there are waste handling/storage/labeling issues in your lab and the lab is cited for them, EVERYONE in the lab must retake Hazardous Waste Training and the lab is also re-inspected 3 months later.
Chemical Fume Hoods

- Training [https://apps.fo.unc.edu/ehs/training/fume-hood-safety/](https://apps.fo.unc.edu/ehs/training/fume-hood-safety/)
- Do not store chemicals inside the work space
- 18” max sash working height (the lower the safer)
- Shut the sash when done working (safety/energy savings)
- Keep them clean!

  - **Mandatory PPE when working in a CFH:**
    - Gloves
    - Eye protection
    - Lab Coat
    - Closed toe shoes
    - Long pants

EHS Contact: Jim Potts – [jdpotts@ehs.unc.edu](mailto:jdpotts@ehs.unc.edu) 919-962-5721
Gas Cylinders

• Caps on tank unless in use
• Secured to solid structure
• Toxic gas use must follow UNC’s toxic gas policy
  • Ammonia
  • Carbon Monoxide
• Compressed Gas Safety Training
  • https://apps.fo.unc.edu/ehs/training/compressed-gas/
DEA Controlled Substances

- DEA Controlled Substance Training
  - https://apps.fo.unc.edu/ehs/training/dea-controlled-substances/
- License must be obtained from state DEA agency then Federal
  - EHS not involved in this
- Substances must be listed in the Schedule B, not the chemical inventory
- EHS coordinates DEA Controlled Substance waste disposal with state DEA agent
  - State agent must be present to destroy substances (more than experimental excess)
- EHS Contact: Nick Caligari- 919-962-7831
Sharps Disposal @ 2/3 Full

• Broken Glass- line with bag
  • Non-contaminated: Top taped closed and placed in the hallway
  • Contaminated: Top taped closed and EHS haz-waste pickup request

• Sharps Disposal (all types must be in a puncture proof container)
  • Non-hazardous
    • No chemicals left in syringes
    • No heavy metals
    • If solvents are used, they will evaporate and are considered non-hazardous if syringes are empty
    • Taped closed, labeled as “non-hazardous sharps” and thrown in the trash

• Hazardous (chemical)
  • Chemicals left in syringes
  • Heavy metal use
  • EHS Haz-waste pickup request

• Biological
  • Must be autoclaved prior to disposal in regular trash
Biological Safety

• Lab Safety Plan
  • Schedule F now includes BSL-1 agents, please update your Schedule F to include these
  • If your lab uses recombinant or synthetic nucleic acids:
    • Schedule G, H or both

• Select Agent Use
  • Refer here: https://ehs.unc.edu/biological/agents/
  • Agents are registered in the Schedule F
Biological Waste

- Liquid Waste
  - Disinfected in method described in Schedule F
  - Emptied daily
- Solid Waste
  - Orange autoclavable bags in red, hard-walled containers with lid
  - Autoclave: https://apps.fo.unc.edu/ehs/training/autoclave-usage-and-safety/
    - Bags always in secondary containment (including cart)
    - Autoclave tape over the biohazard symbol
    - Disposed of in regular trash
    - Autoclave bioindicator log maintained
Biosafety Safety: BSCs

- Biosafety cabinets (BSCs, tissue culture hoods)
  https://apps.fo.unc.edu/ehs/training/biosafety-cabinets/
- **Mandatory PPE when working in a BSC:**
  - Gloves
  - Eye protection
  - Lab Coat
  - Closed toe shoes
  - Long pants
- EHS recommends that all BSCs are certified annually
- HEPA filters on house vacuum lines
- Biological liquid waste disinfection
- EHS Contact: Erika England 919-962-5712
Hazardous Material Shipping Safety

• Shipping Infectious Substances and Other Biomedical Materials
  • [https://apps.fo.unc.edu/ehs/training/shipping-infectious-substances/](https://apps.fo.unc.edu/ehs/training/shipping-infectious-substances/)

• Shipping with Dry Ice
  • [https://apps.fo.unc.edu/ehs/training/dry-ice/](https://apps.fo.unc.edu/ehs/training/dry-ice/)

• Export Control Basics (shipping outside of the country)
  • [https://apps.fo.unc.edu/ehs/training/export-control-basics/](https://apps.fo.unc.edu/ehs/training/export-control-basics/)
Radiation Safety

- Entry signs: [https://ehs.cloudapps.unc.edu/EHS/?reqPage=LabSign](https://ehs.cloudapps.unc.edu/EHS/?reqPage=LabSign)
- Mandatory posting in radioactive material use spaces
  - “Notice to Employees” [https://unc.policystat.com/policy/5907469/latest/#attachments](https://unc.policystat.com/policy/5907469/latest/#attachments)
  - “Page 11, 20, and Appendix 1” [https://ehs.unc.edu/files/2015/10/postings.pdf](https://ehs.unc.edu/files/2015/10/postings.pdf)
- Complete the “daily use” and monthly inventory documentation
- Complete monthly surveys or “statements of no-use”
- FAQs: [https://ehs.unc.edu/radiation/faq/](https://ehs.unc.edu/radiation/faq/)
- Making your radiation license inactive
General Lab Safety

• Entry Signs: https://ehs.cloudapps.unc.edu/EHS/?reqPage=LabSign
• Lab is organized and walkways/exits are not blocked
• Don’t plug power strips into power strips (daisy chained)
• Electrical panels access not blocked (36” clearance)
• Eyewashes activated monthly
  • Must be documented (inspection sheet available online)
• "No Food or Drink" sign posted on lab fridges
• Fridges and freezers must have lab contact information posted
• Discuss safety topics/issues during lab meetings
• Conceptus Protection Program for expecting women
Laboratory Inspections

• Schedule date and time with EHS inspector for annual lab inspection
  • Quarterly Radiation Inspections do not require a scheduled inspection time with lab

• **Self Inspection Checklist**

• Participate in laboratory visits with EHS staff
  • **Address issues on the spot, when feasible** (e.g., completion of hazardous waste tags, placing hazardous materials in secondary containment)
  • Involve other lab members when deficiencies are present

• Assist PI in discussing findings during group meetings and via other internal lab communication systems to ensure lab-wide engagement and accountability
LSS role: Incidents and Injuries Reporting

• Ensure that the injured employee receives prompt treatment
• Call the UEOHC (919-966-9119) to provide information about the injury
• Accompany injured employee to UEOHC or ER
• Notify PI
• Ensure that the proper paperwork is filed
  • Injured employees: (3 forms) will complete Form 18, Form 19 from the Industrial Commission, and the Employee Incident Form
  • PI: (1 form) will complete the Supervisor Incident Form
• Assist PI in correcting factors that caused the incident
  • Retrain lab personnel as appropriate
  • Discuss incidents during lab meetings
What is the UEOHC?

University Employee Occupational Health Clinic
The UEOHC is located at 145 N. Medical Drive.
Other Duties

- EHS recommends that outgoing LSSs overlap with their replacement for an extended period of time (e.g. 1-3 months) to ensure adequate knowledge transfer.
- This is not a complete listing of roles or responsibilities that may be required of a lab safety supervisor. Other lab-specific safety duties may be assigned as the PI/Lab Supervisor deems appropriate.
- It is also possible that specific lab safety duties are assigned to other lab members by the PI or LSS.
- EHS Manuals: [https://ehs.unc.edu/manuals/](https://ehs.unc.edu/manuals/)
EHS Website Updates

• Website for lab safety supervisors
  • Will provide guidance on commonly asked questions
• FAQ link directly on the lab safety plan main page
• This presentation will be available online soon
  • https://ehs.unc.edu/lab/
Questions?

Jim Potts
919-962-5721
jdpotts@ehs.unc.edu
More Questions?

EHS.UNC.EDU
919-962-5507
EHS Staff Contact Information

Can’t find something on our website? Use our search function!
The Lab Safety Plan
What is the Lab Safety Plan?

• Required online document that describes work involving chemicals, radioactive materials, x-Rays, lasers, hazardous chemicals, and biological hazards including:
  • Lab locations
  • Hazards
  • Safety equipment
  • Emergency procedures
  • Trainings
  • Lab personnel

• Very useful if very detailed:
  • Add SOPs
  • Provide detailed information on experimental procedures and hazards that are accessible to all lab members at all times
  • In case of emergency, a detailed LSP is much more helpful for all parties involved
    • Contact information
    • Annually updated chemical inventory, radioactive inventory, biological hazards, lasers
    • Detailed floor plans

• EACH building in which your lab has space will require a separate laboratory safety plan
Where do I start?

- EHS Home Page
- Lab Safety Plan
- Chemical Inventory
- Worker Registration Form
- Training Compliance Portal
- Hazardous Material/Waste Pick-up Request
- Lab Entrance Signage
Providing a safe and healthy place to teach, learn and serve

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EHS Applications and Compliance Portal
EHS.UNC.EDU

Environment, Health and Safety

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EHS Applications and Compliance Portal
Employee Orientation
Safety Manuals and Forms
Self-Study Units
About EHS
Training Compliance!

• How do I check on a worker’s training compliance?
  • [LSP Main Menu](#)
  • [EHS Compliance Portal](#)
Training Compliance: Through the Lab Safety Plan
Training Compliance: Through the Lab Safety Plan

*Note: LSP only shows certain trainings.*

<table>
<thead>
<tr>
<th>Laboratory Personnel Training Compliance</th>
</tr>
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<tbody>
<tr>
<td><strong>Principal Investigator:</strong> JAMES D POTTS</td>
</tr>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td>NICOLLA CALIGARI</td>
</tr>
<tr>
<td>JAMES POTTS</td>
</tr>
<tr>
<td>TRAVIS WILSON</td>
</tr>
</tbody>
</table>

**Notes:**
- PID: All UNC-CH employees and students have been assigned a PID #, listed at the bottom of their UNC ONE CARD.
- Lab: General Lab Environment Training. This orientation is designed to satisfy the OSHA Laboratory Standard and EPA Hazardous Waste Management requirements by familiarizing recently hired laboratory personnel in general safety procedures for laboratories. The course covers fire prevention strategies and fire extinguisher use.
- Rad: For radioactive materials work, if the person has not had experience with radioactive materials at another institution, they can complete the Radiation Safety Review Self Study unit. It is located at [http://ehs.unc.edu/training/self_study/rad/](http://ehs.unc.edu/training/self_study/rad/).
- Bloodborne: Bloodborne Pathogen Training. This training meets the first two requirements in accordance with the Occupational Safety and Health Administration’s (OSHA) Bloodborne Pathogens (BBP) Standard, 29 CFR 1910.1039. The second requirement under the BBP standard is the Hepatitis B vaccinator. This training covers the following: Introduction to Bloodborne Pathogens Training, Exposure Determination in the UNC lab, General Risks and Transmission, Responding to an Incident in Your Lab and Preventing Incidents at UNC-CH.
- LSP Annual Review: One of the requirements of the University’s Chemical Hygiene Plan is initial and annual review of the Lab Safety Plan for all personnel working in your lab. The Lab Safety Plan review and documentation of this review is now done online. Each employee logs into the online lab safety plan using their OXYGEN, reads and then verifies that they have understood the plan. Once submitted, this date is stored as that employee’s annual review.
- BSL 2: This is a one-time requirement designed to provide a foundation of understanding for workers at BSL-2 at UNC-CH. The training gives an overview of BSL-2 risk assessment, safe work practices and biosafety rules. In addition, this training includes an introduction to bloodborne pathogens training, exposure determination in the UNC lab, general risks and transmission, and responding and preventing an incident in the lab.
- Lasers: This safety training is designed for personnel that will be working with Laser systems in a research setting. This course covers specific risks associated with the operation of Laser equipment and control measures to reduce those risks.
- X-Rays: These training modules are for specific types of X-ray equipment found in either a clinical or research setting. Each module is designed to provide radiation safety training to employees and students and to satisfy the requirements of the North Carolina Regulations for Protection Against Radiation, 15A NCAC 11. For the correct training module see Radiation Safety Table on Self-Study Units Lab training page.
- Shipping: This training certifies you to ship hazardous materials. The training specifically covers dry ice, biological materials including infectious substances, patient samples and cultures, and common laboratory chemicals. Completion of this training involves submitting a quiz. The training certificate is valid for two years. If a worker who does not handle hazardous shipments shows above as non compliant, you can click on the date under the shipping column to mark the lab worker as N/A.
Welcome to the EHS Compliance Portal. From the menu to the left you can select options to view your EHS training history and immunization history. Below you can view your required training and medical surveillance status and see if any action is needed.

**Training - Non-Compliant**

>> [Click here to view details] <<

**Medical Surveillance - Compliant**

**Flu Shot** - 10-03-2019 - Compliant
EHS Compliance Portal: Your Training Compliance

Click Here

Training Hyperlinked
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>>> Click here to view details <<<

**Medical Surveillance - Compliant**

**Flu Shot - 10-03-2019 - Compliant**
EHS Compliance Portal: Your Training History

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<tr>
<th>Date</th>
<th>Course Name</th>
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EHS Compliance Portal: Your Lab Worker’s Compliance

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ALL lab workers training history
EHS Compliance Portal: Your Lab Worker’s Compliance
EHS Compliance Portal: Your Training Compliance
Adding/Deleting Lab Workers

• How do I add a lab worker?
  • Through the worker registration form:
    • [https://ehs.cloudapps.unc.edu/LabRadWorker/](https://ehs.cloudapps.unc.edu/LabRadWorker/)
    • LSP Main Menu can send them a link to the worker registration form

• How do I delete a lab worker?
  • LSP Main Menu
Training Compliance: Through the Lab Safety Plan

Add Workers to your LSP
Delete Workers from your LSP
Updating/Editing Lab Safety Plan

- Lab Safety Plans must be updated annually or anytime changes in procedures or lab spaces
- FAQ: How do I UPDATE my lab safety plan?
  - Must be updating your “Plan in Process”
Updating the Lab Safety Plan

No Plan in Process!  No Problem!

Clicking “Update” allows you to make changes to the entire plan.
Updating the Lab Safety Plan

This starts the ‘Plan in Process’
Updating the Lab Safety Plan

‘Plan in Process’ is visible

Click to edit LSP
Updating the Lab Safety Plan

- Add Room to LSP
- Select Hazards Present in each room separately
- Delete Room from LSP

Click to Continue
Updating the Lab Safety Plan

"Schedules" are created based off of the hazards selected on the "Room Use" page.

- No green check mark. Click on the ‘Schedule’ and input the missing information.
- Once complete, the green check will appear on the “main page” and you can submit LSP for EHS approval.
Changing Lab Safety Supervisor

• The lab safety supervisor graduated, how do I become the lab’s LSS?
  • First page of the Schedule A
    • Only the PI or former lab safety supervisor can make this change.
Floor Plans

- What needs to be on the room’s floor plan?
  - Every lab space your lab’s workers use must have a floor plan
  - Yes, even shared spaces
Ideal Floor Plan

• Building and Room Number
• Doors, Tables, Equipment, Storage, Food Areas, Desks
• Locations of Safety Equipment
  • Fire Extinguishers, Safety Showers, Eyewashes, Chem/Bio/Rad Spill Kits, etc.
  • Chemical Fume Hoods and Biosafety Cabinets
• Locations of Hazards
  • Chem/Bio/Rad Storage, Compressed Gas Cylinders, Lasers, UV Lights, etc.
  • Hazardous Waste, Broken Glass, Sharps, etc.
• Not only does this provide EHS and Emergency Responders necessary information, it also allows lab personnel to familiarize themselves with the space.
Thanks