

PO Box 245101 Tucson, AZ 85724-5101 Voice: (520) 626-6850 FAX: (520) 626-2583 rlss.arizona.edu

Welcome to the University of Arizona Laboratory Chemical Safety Program (LCSP)

The <u>Laboratory Chemical Safety Program (LCSP)</u> is an OSHA-mandated safety and compliance program administered by Research Laboratory & Safety Services (RLSS) at the University of Arizona. The LCSP is charged with ensuring laboratory compliance to OSHA regulations and promulgating chemical health and safety. **All University of Arizona research laboratories that utilize hazardous chemicals, as <u>defined by OSHA</u>, must participate in the LCSP.**

The LCSP promotes and assists in achieving compliance with the following regulations:

- 29 CFR 1910.1405: Use of Hazardous Chemicals in the Laboratory
- 29 CFR 1910.1200: Hazard Communication
- Additional OSHA standards, EPA regulations, and industry best practices:
 Compressed Gas Association (CGA), National Fire Protection Agency (NFPA),
 American Conference of Governmental Industrial Hygienists (ACGIH), National Institute of Occupational Health and Safety (NIOSH), and more.

As the Principal Investigator or otherwise Responsible Official, you are responsible for meeting or exceeding the requirements of these regulations and industry best practices. Unfortunately, recent chemical health and safety injuries and incidents have demonstrated the importance of maintaining compliance with health and safety regulations. Adhering to these regulations not only promotes a culture of safety and health within your lab, but also aids in avoiding undesirable ramifications for faculty, staff, and students.

RLSS understands that regulatory compliance does not happen overnight and can confusing. To ease the pathway to compliance and safety in the lab, we have created the following clear and concise list of actions for you and your lab to take and continue to practice. The <u>RLSS User Dashboard</u> and <u>website</u>, as well as our highly trained and capable staff, are here to assist in achieving these compliance metrics, creating and maintaining a safe lab, and addressing your questions and concerns.

This guidance is not comprehensive and should be supplemented through routine conversations, consultations, and guidance from RLSS. We appreciate your time, patience, and most importantly your partnership in this pathway to regulatory compliance and safety. You can always reach the RLSS team at 520-626-6850 and/or rlss-chem-support@email.arizona.edu with your questions, concerns, or for assistance.

Welcome to the LCSP, we look forward to working with you!



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Pathway to Laboratory Chemical Safety Compliance

1. Add all workers in your lab group to your RLSS Approval.

a. Add via the <u>User Dashboard</u> or by emailing <u>RLSS-help@email.arizona.edu</u>.

2. Provide your chemical inventory to RLSS (required by 29 CFR 1910.1200).

- a. Complete the "<u>Hazardous Chemical Inventory Template</u>" (excel file) and email to <u>rlss-chem-support@email.arizona.edu ASAP</u>.
- b. RLSS will assist in compliance by uploading this inventory to your User Dashboard.
 - i. Once uploaded, you automatically have a Safety Data Sheet (SDS) Library and the ability to print OSHA-compliant labels for all chemical containers.

3. Complete all required trainings (required by 29 CFR 1910.1200 & 1910.1450).

- a. General Laboratory Chemical Safety Training
 - i. All lab workers must complete this online training.
- b. Laboratory Specific Training
 - i. A template can be downloaded from <u>RLSS website</u>; maintain either a physical or digital copy for inspection.
 - ii. All workers must be trained <u>before</u> working in the laboratory for the first time or <u>as soon as possible</u> if the training is documented retroactively.
- c. University Chemical Hygiene Plan (UCHP)
 - i. This plan defines the LCSP and provides all information about laboratory chemical health and safety on campus; it is available on the RLSS User Dashboard and website.
 - ii. All workers will need to "affirm" they are aware of this plan and its contents.
 - iii. Lab workers are NOT required to read the plan in its entirety.

d. Fire Extinguisher Training (two options; completed on UAccess, NOT RLSS website)

- i. **Required**: All lab workers must complete the online Fire Safety Awareness Training (UA-1236). Ensure lab workers print or email their certificate and maintain for RLSS inspection.
- ii. **Optional**: Lab members, Approval Holder, or Safety Coordinator, completes the in-person Fire Extinguisher Training (UA-1237) and prints the certificate.

4. Create a Laboratory Chemical Hygiene Plan (LCHP) (required by 29 CFR 1910.1450).

- a. Download the LCHP template from the <u>RLSS website</u> and fill-in blank sections to the best of your ability.
- b. Once completed, send drafts to rlss-chem@email.arizona.edu for review.
- c. RLSS will send feedback and or inquire further about your chemical inventory and processes; work collaboratively until you and RLSS have no further changes.
- d. RLSS will publish to your User Dashboard and all workers will be required to "affirm" they have read and understand all content within the plan.
- e. This plan must be <u>updated at least annually</u>; RLSS is here to assist with these plans any time of year, not just during inspections.

5. Confirm the presence and performance of emergency response equipment.

- a. See <u>RLSS website for guidance</u> on the required components of the OSHA first aid and chemical spill kits.
 - i. Chemical and biological spill kits may be combined as they contain all required materials.



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ii. Consult with RLSS to determine additional first aid kit and/or chemical spill items are required. (e.g. antidote for hydrofluoric acid).

- b. Safety showers, eyewash or dousing stations, fire extinguishers, and any alarms present in your facility.
 - i. Safety showers, eyewash, and dousing stations are required for injurious corrosives and must be located within 10 seconds and 100 ft from the hazard and checked quarterly (see tag on equipment for test dates).
 - ii. Fire extinguishers must be no more than 75 ft from the hazard and checked annually (see tag on equipment for test dates).

6. Provide and post all required hazard communication labels.

- a. Labels are provided during inspections and are also available on the RLSS website.
- b. The following labels are required in the lab:
 - i. *Flammable Storage Labels* for flammable storage locations (e.g. flammable cabinets).
 - ii. *Designated Area Label* for **both use and storage areas** of the following chemicals: acute toxicants (fatal if exposed), developmental and/or reproductive toxicants, and carcinogens.
 - iii. *Emergency Information* on routes of egress (e.g. lab exit door(s)).
 - iv. *No Food and Drink* labels on refrigerators, freezers, microwaves, and/or any food used for research purposes.
- c. All permanent containers and temporary/secondary containers of hazardous chemicals require GHS-compliant labels.
 - i. These can be printed from your Chemical Inventory on the User Dashboard. Please read the "Chemical label generation from RLSS user dashboard" guidance for instructions.

7. Verify general lab hygiene and safety.

- a. Ensure compatible chemicals are properly segregated and stored appropriately.
- b. Fume hoods must be certified annually and free from excess clutter (little chemical storage, no large pieces of equipment, etc.).
- c. Hazardous waste must be stored in a designated location, labeled with a waste card, and removed regularly. Please find more information on the <u>Risk Management website</u>.
- d. Gas cylinders must be chained securely and have caps if not in use.
- e. Lab benches, sinks, and pathways of egress from the lab should be free from excess clutter and free from chemical spills.

8. Prepare all documents and training records for inspection.

- a. Lab Chemical Hygiene Plan, Lab Specific Training, Fire Safety Training.
- b. Additional requirements, as applicable:
 - i. DEA registration and records. Please see the "<u>Use of Controlled Substance for Research</u>" guidance on the RLSS website for more information.
 - ii. ATF license and records.
 - iii. Respirator Fit Testing records.
 - iv. Hazardous Material Shipping Training and Shipping records.

9. Perform a self-inspection using the RLSS <u>Lab Safety Checklist</u>.