

#### **MEMORANDUM**

Date: January 17, 2024

To: Principal Investigators and Permit Holders

From: Deona Willes, MPH, CLS,

Executive Director, Environmental Health & Safety

Subject: Annual Laboratory Safety Refresher Training Memo

Happy New Year! As you embark on a new year of groundbreaking research, it is imperative that we uphold the highest standards of laboratory safety to keep everyone healthy and safe. In 2024, all Principal Investigators and Permit Holders are reminded to renew their Annual Laboratory Safety Refresher Training. Please complete the following within the next 60 days:

- 1. Review applicable topics on the Annual Safety Refresher (ASR) checklist with your lab staff.
- 2. Check off the safety topics that you discuss with your group.
- 3. Document attendance on the Site-Specific Training Record (SSTR).
- 4. Submit the SSTR to EH&S via the online form at <a href="http://tiny.cc/usc-train-ann-rfrsh">http://tiny.cc/usc-train-ann-rfrsh</a>.

Please note: This year we have added a separate *Radiation Safety Refresher Topics* checklist page. The checklist is for any labs working with radioactive materials and should be completed on an annual basis. Please ensure that the *Rad Safety Refresher* checkbox is marked on the *SSTR* document.

Here are a few salient points to keep in mind:

- Safety Trends: Review the infographics later in this memo for insights into the *Top 3 Inspection Findings by Category* based on our inspections across the university as well as our 2024 *Keys to Success in Safety*.
- Exposures and Injury Procedures: Follow the necessary steps outlined on the <a href="Emergency">Emergency</a>
  <a href="Motification and Incident Reporting webpage">Notification and Incident Reporting webpage</a> for any exposure or injury incident. Please report all incidents, regardless of exposure or injury, so EH&S may follow up accordingly.
- Inspections and Chemical Inventory: The Risk and Safety Solutions (RSS) platform continues to roll out at labs across campus for chemical inventory management, inspections, waste requests and more. Review the attached flyer for pertinent role-specific information.



- Pathogen Safety Data Sheets (PSDS): <u>Pathogen Safety Data Sheets</u> (PSDS) are available on the EH&S website and offer detailed information (e.g., characteristics, health hazards, and medical precautions/treatment) on pathogens used in research at USC. Labs must keep a printed PSDS and signed <u>PSDS Acknowledgement Record</u> for trained personnel.
- Hazardous Waste Requests: Labs that have transitioned to the RSS web application should
  utilize the WASTe module to request waste pickups. RSS can also use the software to print a
  customized waste tag. The Waste tag includes an RSS Tracking number and helps identify
  hazard information about that waste container's contents. Waste pickup requests must be
  submitted online. More information at the Request a Hazardous Waste Pickup Page.
- Safety Training Modules: EH&S continues to provide periodic instructor-led live safety training courses and continues to expand or improve e-Learning course offerings via Trojan Learn. New modules include:
  - Radiation Safety Refresher Training Online (TrojanLearn)
  - Viral Vector (VVT) and BSL-2+ Safety Training (<u>TrojanLearn</u>)
  - Principles of Biosafety (BIO) Online (<u>TrojanLearn</u>)
  - How to Use the Emergency Eyewash and Safety Shower in a Lab at USC (<u>YouTube video</u>)

Here are training projects that are coming soon:

X-ray Safety (TrojanLearn)

Additionally, we are pleased to announce that our <u>How to Use a Biosafety Cabinet at USC</u> video was recognized by *The American Biological Safety Association (ABSA)*, winning First Prize in the 2023 Biosafety Month Promotional Awards. Visit our <u>USC EH&S Youtube Channel</u> to find more informational/instructional videos.

Lastly, EH&S continually strives to improve itself and enhance its programs for you, our clients. We invite you to share your thoughts about EH&S by participating in a <u>brief customer survey</u>.

Thank you again for your continuing efforts to protect the health and safety of the campus community. We look forward to a prosperous and safe 2024 at USC.

Sincerely,

Deona Willes, MPH, CLS,

Executive Director, USC Environmental Health & Safety

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# CheckList

## Annual Safety Refresher Topics

Choose safety refresher topics below based on relevance to your research and operations.

- 1. Check off the topics that you cover during your annual refresher training
- 2. Document attendance using the <a>Site-Specific Training Record (SSTR)</a>
- 3. Submit the SSTR to EH&S via the online form.

$\square$	Торіс	Description
	Biohazard Reporting Guidelines	Review the procedures and policies for reporting incidents, accidents, spills, and losses including incidents with recombinant DNA (r-DNA). Review Appendix G-II-B-2-k of the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules April 2019 for more information.
	Biohazardous Substances Registration	Review the guidelines for using biological materials at USC and ensure there is an up to date Biohazard Use Authorization in <u>iStar</u> for the use of microorganisms, recombinant and/or synthetic nucleic acid molecules (DNA, RNA), toxins of biological origin, and chemicals used in biomedical research.
	Chemical Inventory Management	All labs are required to maintain an updated chemical inventory in accordance with Cal-OSHA and USC policies. An accurate chemical inventory is essential for emergency planning and incident response. USC will be transitioning from EHSA to <i>Risk &amp; Safety Solutions</i> for chemical inventory management. EH&S will reach out to individal labs to assist with the transition. Learn more at: <a href="https://ehs.usc.edu/research/lab/chemical-inventory/">https://ehs.usc.edu/research/lab/chemical-inventory/</a>
	Controlled Substances	Per DEA regulation 1301.12, "A separate registration is required for each principal place of business or professional practice where controlled substances are stored, administered, or dispensed by a person." Therefore, the address on your DEA license should correspond to the address where you store and use controlled substances.  Ensure compliance with Federal and State regulations. Review requirements for security and storage, recordkeeping, handling, usage, and disposal. Furthermore, PIs must complete and submit a physical inventory of CS annually to USC EH&S (CS Form C).  Learn more at: <a href="https://ehs.usc.edu/research/cspc/">https://ehs.usc.edu/research/cspc/</a>
	Driver Safety	Ensure any personnel driving a University Vehicle (including electric carts, golf carts, GEM vehicles, and Low Speed Vehicles) complete the Driving Defensively eLearning course on Trojan Learn. <b>Questions?</b> Contact <a href="mailto:injuryprevention@usc.edu">injuryprevention@usc.edu</a> .
	Emergency Equipment	Ensure all personnel are aware of the location of fire extinguishers, emergency showers, emergency eyewashes, drench hoses, <u>first aid kits</u> , <u>spill kits</u> , <u>HF burn kits</u> , and <u>phenol first-aid kits</u> . Inspect the items in first aid kits, HF burn kits, and phenol first aid kits and replace any which are past the expiration date.

Ø	Topic	Description
	Emergency Response and Notification	Discuss reporting accidents and incidents that involve hazardous materials (including biologicals), and what to do following an exposure, including how and where to obtain medical attention, and what documentation is required. See <a href="Emergency Notification Protocol">Emergency Notification Protocol</a> web page.
	Seek Medical Treatment	Review the following publications:  • USC Workers' Compensation Website  • USC EH&S Website  • Seeking Medical Treatment
	Engineered Sharps/ Safe Sharps Disposal	Use safety engineered sharps whenever possible. Emphasize that users don't recap needles, leave needles or other sharps unattended, or place any needles in trash or biohazard bag! Refer to EH&S' Needle/Syringe Selection and Usage webpage for more information.
	Fume Hood Use	<ol> <li>Watch and discuss the video <u>How to Properly Use and Operate a Fume Hood</u> on the EH&amp;S YouTube page. The video encourages learners to:         <ol> <li>Check airflow - If zero airflow, place a service request with FPM,</li> <li>Remove clutter - Overcrowding disrupts air flow and reduces fume hood efficiency,</li> <li>Work at minimum practical sash height - Maximum working height is listed on yellow certification sticker,</li> <li>Conduct work &gt; 6 inches inside fume hood,</li> <li>Close sash fully when not in use,</li> <li>And, wear appropriate PPE (e.g. eye protection, lab coat, gloves) when using the fume hood.</li> </ol> </li> </ol>
	Fact Sheets	Select pertinent Fact Sheets for group discussion at <a href="https://ehs.usc.edu/fact-sheets/">https://ehs.usc.edu/fact-sheets/</a> .
	HF Safety	Hydrofluoric acid can be fatal if improperly handled! If your lab uses hydrofluoric acid, review your <a href="https://www.calgonate.com/safety_info.php">HF Safety SOP</a> , relevant safety information ( <a href="https://www.calgonate.com/safety_info.php">https://www.calgonate.com/safety_info.php</a> ) and the <a href="https://www.calgonate.com/safety_info.php">EH&amp;S Fact Sheet</a> , and ensure your lab is outfitted with HF first-aid supplies (calcium gluconate gel). Please ensure all HF users are trained in safe use and handling. Training must be documented.
	Housekeeping	Stress good housekeeping practices. Remember, "A Clean Lab is a Safe Lab."
	Laboratory Hazard Assessment	Review all potential chemical, biological, radioactive and physical hazards used in your laboratory(s) and the tasks performed by lab staff that may cause exposure to these agents; use the Lab Hazard Assessment Tool (LHAT) - PDF or RSS - as a guide. Determine how to mitigate these hazards by employing protective measures in terms of engineering, administrative, and PPE controls. Volatile health hazardous chemicals and radioactive materials should only be handled inside a certified fume hood. Furthermore, review the USC PPE Standards and seek guidance from EH&S for specific activities or hazards.
	Laboratory Inspections	Review recent findings from EH&S safety inspections/audits of your laboratory(s) with your research group. If EH&S conducted your inspection via the <i>Risk &amp; Safety Solutions</i> (RSS) web application, there is a RSS Inspect Responsible Party SOP available to assist. As a reminder, you may also develop a self-inspection plan and discuss ways of improving overall lab safety.



	,	Annual Safety Refresher Topics Checklist Page 3
☑	Торіс	Description
	No Food, Drink, or Chewing Gum in the Laboratory	Food, drinking water, powdered milk, cosmetics, smoking materials, etc. are not allowed in any laboratory containing hazardous materials (including at writing desks in labs) unless used specifically for research purposes. Food, beverages, water or cosmetics intended for research purposes must be individually labeled: "For Lab Use Only" or "For Research Use Only." Refer to Food and Drink in Laboratories Fact Sheet.
	Phenol Safety	If your lab uses phenol or phenol-containing reagents (e.g. phenol-chloroform, TRI Reagent®), please your <a href="Phenol Safety SOP">Phenol Safety SOP</a> and the <a href="Phenol Safety Fact Sheet">Phenol Safety Fact Sheet</a> . Ensure phenol users utilize appropriate PPE (as detailed in the Fact Sheet) and outfit the lab with a phenol first aid kit.
	Record Keeping	Review record-keeping procedures detailed on the EH&S webpage, such as Controlled Substance Request forms (CS Form G), Controlled Substance Use Authorization forms (CS Forms A, C), Controlled Substance Usage and Disposal Logs (CS Forms B, B-1), Radioactive Material Usage Records, Transfer of Radioactive Material forms, and Wipe Test results (if required).
	Safety Data Sheets (SDS)	Ensure personnel have access to and understand SDS for all hazardous materials in the lab. Include discussions on hazards, safe handling, PPE, emergency information, etc. A printed copy of a current SDS should be physically available in the vicinity of any work with materials of very high acute health hazard. Learn more at: <a href="http://ehs.usc.edu/research/lab/sds/">http://ehs.usc.edu/research/lab/sds/</a> .
	Security for Substances of Interest	Discuss your procedures for assuring that Radioactive Material, Select Agents, Controlled Substances, and highly acute toxicants are securely stored and security precautions are in place when used.
	Standard Operating Procedures (SOPs)	Develop, review, and train personnel on content present in the <u>SOPs for hazardous materials</u> , lab-specific operations, and specialized equipment. Review SOPs on an initial an annual basis for all lab personnel. NOTE: The PI and/or Lab Manager must retain training records for all internal training.
	Time-Sensitive Chemicals (Including Organic Peroxide Formers)	Ensure that all time-sensitive chemicals, including peroxide formers, are dated with "received date" and "date when opened." Time-sensitive chemicals shall be tested or disposed when they reach their maximum storage time. Consult the <a href="https://example.com/EH&amp;S Time-Sensitive Chemicals webpage">EH&amp;S Time-Sensitive Chemicals webpage</a> for comprehensive information and instructions.
	Waste Disposal	Review hazardous waste disposal procedures, including waste segregation, labeling, appropriate use/placement of containers, placing lids on bio-cans and table top containers when not in use, and record keeping. Only appropriate, properly labeled containers can be picked up. Chemical waste containers must be labeled with the official "Hazardous Waste" label, and the accumulation start date clearly marked. The label must also include: (a) composition (NO abbreviations or chemical formulae); (b) solid/liquid; (c) hazardous properties (e.g. flammable); (d) PI name; and (e) lab location. Review biohazardous and pathological waste disposal procedures, and sharps disposal.  Learn More:  • Hazardous Waste Disposal Guide Sheet: <a href="http://tiny.cc/usc-hzwst-disp-gs">http://tiny.cc/usc-hzwst-disp-gs</a> • Hazardous Waste Labeling Guide Sheet: <a href="http://tiny.cc/usc-hzwaste-lblng">http://tiny.cc/usc-hzwaste-lblng</a> • Waste Pickup Request - <a href="http://tiny.cc/hazmat-pickup">http://tiny.cc/hazmat-pickup</a> • EHSA <a href="http://tiny.cc/ehsa-waste-PU">http://tiny.cc/ehsa-waste-PU</a> • RSS <a href="http://tiny.cc/usc-rss-WASTe-tutorial">http://tiny.cc/usc-rss-WASTe-tutorial</a>



# CheckList

# Annual Bloodborne Pathogens (BBP) Refresher Training

The minimum required training topics for BBP are listed below. **BBP refresher training may also be completed online via <u>Trojan Learn</u> or by registering for an instructor-led session via the <u>USC EH&S Training Page</u>. Additional training is required for employees of HIV, HBV, and HCV Research Laboratories. Questions? Contact EH&S at <u>biosafety@usc.edu</u>. More information:** 

- OSHA's Bloodborne Pathogens and Needlestick Prevention
- USC Bloodborne Pathogen Program

	Topic	Description
1.	An Accessible Copy of the BBP Standard	Inform personnel of where to find the Cal/OSHA Bloodborne Pathogens Standard and an explanation of its contents ( <a href="www.dir.ca.gov/title8/5193.html">www.dir.ca.gov/title8/5193.html</a> ).
2.	Epidemiology and Symptoms	Explain general epidemiology and symptoms of bloodborne pathogens.
3.	Modes of Transmission	Explain the modes of transmission of bloodborne pathogens.
4.	Risk Assessment	Explain the appropriate methods to recognize tasks and other activities that may involve exposure to blood and other potentially infectious materials (OPIM).
5.	Exposure Control Plan	Explain your lab's Exposure Control Plan and how employee(s) can obtain a copy of the written plan. Review what to do in case of exposure or spill.
6.	Pathogen Safety Data Sheets (PSDS)	Review the PSDS for <u>Human and Non-Human Primate Materials</u> as well as any other pertinent <u>PSDSs</u> applicable to your lab.
7.	Methods of Compliance	Explain the use and limitations of methods to prevent or reduce exposure, including appropriate engineering (engineered sharps, biosafety cabinets), administrative or work practice controls, and personal protective equipment (gloves, safety glasses).
8.	Decontamination and Disposal	Review proper decontamination and disposal procedures.
9.	Personal Protective Equipment (PPE)	Discuss selection, proper use, location, removal, handling, decontamination and disposal of personal protective equipment for work in your lab.
10.	Hepatitis B Vaccination	Remind personnel about the Hepatitis B vaccine, its efficacy, safety, benefits of being vaccinated, and that it is provided free of charge to employees through the USC Medical Surveillance Program at (323) 442-2200 or <a href="mailto:biosafety@usc.edu">biosafety@usc.edu</a> .
11.	Emergencies	Review emergency notification procedures as outlined on the <u>Emergency Notification and Incident Reporting webpage</u> .
12.	Exposure Incident, Post- Exposure Evaluation, and Follow-Up	Explain exposure incident procedures, including how to report an incident, location of medical facilities, and that medical follow-up that will be available. Note: If a Sharp is involved, record the incident in the <i>For Needle Sticks Only</i> section of the <u>Manager's Report of Incident Form</u> . This is necessary for OSHA recordkeeping.
13.	Signs and Labels	Explain all signs, labels, and/or color coding required in the lab.
14.	Interactive Questions & Answers	Provide an opportunity for interactive questions and answers.



# CheckList

## Radiation Safety Refresher Topics

A Radiation Safety Refresher is required annually for anyone working with radioactive materials (RAM). Review the topics below and check off the items that you cover with your lab staff. Upon completion, ensure that you: 1) **Document** attendance using the Site-Specific Training Record (SSTR); and, 2) **Submit the SSTR to EH&S** via the online form.

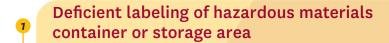
Topic	Description
Laser Safety Requirements	If your lab uses Class 3B and Class 4 open laser setups, make sure lab doors are properly posted, all lab personnel are aware of lab-specific laser standard operating procedures and beam alignment procedures when applicable and have appropriate eye protection available. Lab should maintain copies of these procedures signed by lasers users. Learn more at: <a href="https://ehs.usc.edu/research/laser/">https://ehs.usc.edu/research/laser/</a>
No Food, Drink, or Chewing Gum in the Laboratory	Automatic suspension of a radioactive materials permit can be enforced if evidence of food is found where radioactive materials are used. [Regulatory references: Cal-OSHA §3368; §5191 Appendix A; §5193 (d) (3) (B).]
Radiation Contamination Control	Review the defined work areas in your lab that are required for radioactive materials; selection of appropriate instrumentation and survey methods; and the need for frequent monitoring, visual indication of area boundaries, and prompt decontamination and documentation of spills. Each lab must document monthly contamination checks for all rooms on the Radiation Permit on EHSA. Remind laboratory personnel that potentially contaminated items, including PPE and laboratory samples, are not permitted in offices.
Radioactive Contamination Survey Instruments	Review the proper use of survey instruments (portable, LSC, gamma counters, etc.) to detect possible contamination, and the need to monitor hands with disposable gloves before, during and after handling radioactive material.
Radioactive Material Inventory Control	Review your specified locations and procedures for radioactive material use/storage. Stress the requirement for accurate and timely entries in the online EHSA system and placing the inventory number, radionuclide, amount of activity and date on all stock vials, tubes, or on the box that the radionuclide is stored in.
Radioactive Material Order	Review how to order radioactive materials using Workday. Instructions can be found on the USC EH&S Ordering Radioactive Materials (RAM) webpage. All deliveries must be made to the HSC EH&S Office at 2001 N. Soto St, SBA 329 Los Angeles, CA 90032.
Radioactive Material Transfer	Discuss protocols for transfer(s) of radioactive material either to another campus location or to another institution. Note that this requires prior written approval by Radiation Safety.
Radioactive Material Use Permit Changes	Discuss any changes or amendments to your Use Permit in the last 12 months (e.g., new research protocols; new authorized users; addition of new radionuclides; changes in possession or procedure limits, or authorized locations).
Radioactive Monitoring Personal Dosimeters	Emphasize the proper use and care of personal dosimeters (Whole Body & Ring dosimeters). Review how to return dosimeters to Radiation Safety, how to report lost/damaged dosimeters, personnel changes, and any exposure concerns. Remind staff that if they are issued a personal dosimeter or finger ring, they must wear the dosimeter while they are working in the laboratory, even though they may not be using radioactive materials. More information at: <a href="https://ehs.usc.edu/research/rad/dosimeter/">https://ehs.usc.edu/research/rad/dosimeter/</a>





## TOP LABORATORY INSPECTION FINDINGS **BY PROGRAM**

### LAB SAFETY





Personnel have not received appropriate initial or refresher training.



### **BIOSAFETY**

- Bio/biomedical research not registered with the IBC
  - Personnel working with biohazards not listed on IBC protocol
    - Non-sharps in sharps waste container

### **RADIATION SAFETY**

- Missing or incomplete safety training for authorized users
  - Unsatisfactory lab contamination survey records
    - Unsatisfactory radioactive waste disposal practices



### **Moving or Closing a Lab?**

**Keep it Safe:** Notify EH&S when moving or closing your lab. Special safety and regulatory considerations (e.g., decommissioning) require proper handling of equipment and materials. This ensures proactive collaboration and minimizes risks associated with unattended chemicals and other hazardous materials or equipment.

To move or close your lab, follow the steps outlined on the EH&S website:

#### Move or Close a Lab Webpage:

https://ehs.usc.edu/hazmat-mgmt/move-or-close-a-lab/

### Risk & Safety Solutions (RSS) Implementation

**ALREADY USING RSS?** 

#### **Hazardous Waste in RSS**

- Add waste containers to RSS when you begin accumulating
- Print a waste tag using RSS and affix it to your waste container. If you choose to use a non-RSS waste label, please ensure that the RSS tracking # is included at time of pickup.
- Request a chem, bio, or universal waste pickup via RSS

#### **Chemical Inventory in RSS**

- Actively add new chemicals and remove old, used, or unwanted chemical containers from the system
- EH&S Inventory Specialists available for support and check-ins

#### **RSS SOPs and Resources at:**

http://tiny.cc/usc-rss-info

#### **Recommended Actions:**

Utilize the WASTe module to efficiently manage your lab's

hazardous waste.

3.

Complete your Lab Hazard Assessment online Ensure that you routinely maintain your chemical inventory

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#### STILL AWAITING RSS IMPLEMENTATION?

- EH&S will contact research groups via email to schedule initial chemical inventory process
- Prepare your lab by organizing and disposing any empty or unwanted chemical containers
- For large scale disposals (>30 chemical containers), email hazmat@usc.edu

#### **Radioactive Materials Users**

- Inventory practices remain unchanged until further notice
- EH&S has begun utilizing the RSS system to manage Radiation Safety and X-Ray Inspections





### **ENVIRONMENTAL HEALTH & SAFETY FACT SHEETS & GUIDE SHEETS**

#### **BIOSAFETY**

**Animal Allergies** http://tiny.cc/usc-ehs-AA-fs http://tiny.cc/usc-ara-fs Animal Exposure Risk Assessment

BSL-2+ Guidelines for Using SARS-CoV-2 Clinical Specimens http://tiny.cc/usc-bsl2-sars-cov http://tiny.cc/usc-bio-cleanup Biohazardous Spill Clean-Up http://tiny.cc/usc-bscII-fs Class II Biosafety Cabinets

Common Disinfectants for the Laboratory http://tiny.cc/usc-comdisinfct-gs

http://tiny.cc/usc-microtome-cryostat-gs Cryostats and Microtomes

http://tiny.cc/usc-ehs-DURC-fs Dual Use Research of Concern (DURC)

http://tiny.cc/usc-glove-don-doff Glove Donning and Doffing

http://tiny.cc/usc-BSCuse-fs Proper Use of Class II Biosafety Cabinets Safe Alternatives to Open Flames in a BSC http://tiny.cc/usc-alt-flame-fs Transfer of Biological Materials http://tinv.cc/usc-ehs-xfer-bio

http://tiny.cc/usc-ehs-transprt-bio Transport of Biological Materials Transport of Patient Specimens for COVID-19 Research http://tiny.cc/usc-transport-CoV2

http://tiny.cc/usc-smIPx-vac Vaccinia Vaccine

#### CONTROLLED SUBSTANCES AND PRECURSOR CHEMICALS

http://tiny.cc/usc-csua-gs Controlled Substances Use Authorization (CSUA) Controlled Substance Purchase Guide Sheet http://tiny.cc/usc-csPrchs-gs http://tiny.cc/usc-cs-inv-gs Controlled Substances Recordkeeping & Inventory Waste Disposal of Controlled Substances http://tiny.cc/usc-cs-disp-gs **DEA Registration & Renewal** http://tiny.cc/usc-ehs-dea-RR-fs Precursor Chemical Purchase Guide Sheet http://tinv.cc/usc-pcPrchs-gs

**GENERAL** 

**EH&S Services Guide Sheet** http://tiny.cc/usc-ehs-services http://sc-ctsi.org/training-matrix/ Research Training Finder

#### HAZMAT/ENVIRONMENTAL COMPLIANCE

Aboveground Storage Tanks (AST) http://tiny.cc/usc-ast-fs http://tiny.cc/usc-aerosol-fs Aerosol Can Management Air Pollution Emission http://tiny.cc/usc-emisisons-fs Battery Recycling (Sustainable Practice) http://tiny.cc/usc-ehs-btry-fs California Environmental Reporting System (CERS) http://tiny.cc/usc-cers-fs

Compressed Gas Cylinder Disposal http://tiny.cc/usc-ehs-gasdisp-fs http://tinv.cc/usc-cmpGas-fs Compressed Gas Cylinder Storage



## ENVIRONMENTAL HEALTH & SAFETY FACT SHEETS & GUIDE SHEETS

#### HAZMAT/ENVIRONMENTAL COMPLIANCE (CONTINUED)

Defrosting Research Freezers & Refrigerators

EHSA Waste Pick-up SOP + Waste Supplies Hazardous Waste Disposal

Hazardous Waste Labeling

Hazardous Waste Prep and Staging

Recycling Hazardous Waste

Universal Waste Management

http://tiny.cc/usc-defrst-frzr-gs

http://tiny.cc/ehsa-waste-PU

http://tiny.cc/usc-hzwst-disp-gs

http://tiny.cc/usc-hazwaste-lblng

http://tiny.cc/usc-ehs-hazwastePrp

http://tiny.cc/usc-hazwasrec-fs

http://tiny.cc/usc-univ-fs

#### LAB SAFETY

Biological Abbreviations and Formulas

Chemical Abbreviations and Formulas

Chemical Spill Kit Guide Sheet

Chemical Spill Response Guide Sheet

Chemical Waste Disposal

Cryogen Safety

Eye Protection

Food and Drink in Laboratories

Footwear: Shoes

Goggle/Face Shield for Splash Hazards

Hydrogen Fluoride Safety

Lab Coat Loaner Request Form

Lab Coat Selection and Laundering Service

10-Minute Lab Safety Talks

**Laboratory Security** 

Mercury Safety

Phenol Safety

PPE at Desk in Laboratory Guide

Sharps and Broken Glass Disposal

**Soldering Safety** 

Student Lab Coat Laundering

Ultraviolet Radiation

**Unattended Hazardous Operations** 

Waste Hierarchy

http://tiny.cc/usc-bio-abbr-gs

http://tiny.cc/usc-chm-abbr-gs

http://tiny.cc/usc-ehs-chmSplkit-gs

http://tiny.cc/usc-chmSpl-resp-gs

http://tiny.cc/usc-chm-dsp-gs

http://tiny.cc/usc-ehs-cryo-fs

http://tiny.cc/usc-ehs-EP-fs

http://tiny.cc/usc-food-in-labs-gs

http://tiny.cc/usc-ehs-fs-ppeFoot

http://tiny.cc/usc-ggl-fshld-fs

http://tiny.cc/usc-ehs-fs-HF

http://tiny.cc/labCoat-loaner

interprite in proof to be code to differ

http://tiny.cc/labCoat-select

http://tiny.cc/usc-safety-script

http://tiny.cc/usc-lab-security-fs

http://tiny.cc/usc-Hg-fs

http://tiny.cc/usc-phenol

http://tiny.cc/usc-ppe-labdesk

http://tiny.cc/usc-shrpsGlass-disp

http://tiny.cc/usc-solder-safT-gs

http://tiny.cc/usc-stu-labcoat

http://tiny.cc/usc-ehs-UV-fs

http://tiny.cc/usc-unattended-operations

http://tiny.cc/usc-waste-hrchy-gs



## ENVIRONMENTAL HEALTH & SAFETY FACT SHEETS & GUIDE SHEETS

#### **OCCUPATIONAL HEALTH & SAFETY**

Cal-OSHA Inspections

Carbon Monoxide (CO)

Cuts and Lacerations

**Electrical Safety** 

**Emergency Eyewash & Shower Activation** 

Ergonomics in the Workplace

First Aid Kits

**Food Safety** 

Globally Harmonized System

El Sistema Global Armonizado (GHS Spanish version)

Hand and Power Tools Safety

Hearing Conservation and Noise Control

Heat Illness Prevention

Heat Illness Prevention - Spanish

Heat Illness Prevention for Supervisors

Hierarchy of Controls

IIPP Administrator Guide

IIPP Fact Sheet

Indoor Air Pollution: Gas Stoves

Indoor Air Quality: Workplace Odors

**Ladder Basics** 

Lifting and Back Safety

**Mold Prevention** 

Mold Prevention in Cold Rooms

Prescription Safety Glasses Form - USC Roski Eye Institute

Respiratory Protection Program

Safe Operation of Low Speed Vehicles

Safe Operation of Utility Carts

Slips, Trip, and Fall Prevention

Vehicle/Driver Safety

Water Damage and Restoration

http://tiny.cc/usc-calosha-fs

http://tiny.cc/usc-co-fs

http://tiny.cc/usc-cutslac-fs

http://tiny.cc/usc-electSaft-gs

http://tiny.cc/usc-eyewash-shower-gs

http://tinv.cc/usc-ergo-fs

http://tiny.cc/usc-1st-aid-kits-gs

http://tiny.cc/usc-foodsafety-fs

http://tinv.cc/usc-hazcom-ghs

http://tiny.cc/usc-hazcom-ghs-sp

http://tiny.cc/usc-powertools-fs

http://tiny.cc/usc-ehs-hearcnsrv-fs

http://tiny.cc/usc-heat-fs-en

http://tiny.cc/usc-heat-fs-sp

http://tiny.cc/usc-heat-fs-sup

http://tiny.cc/usc-hierarchycon-fs

http://tiny.cc/usc-iipp-admin-gs

http://tiny.cc/usc-iipp-fs

http://tiny.cc/usc-IAQ-gas-stoves-fs

http://tiny.cc/usc-IAQ-fs

http://tiny.cc/usc-ladder-fs

http://tiny.cc/usc-liftsafe-fs

http://tiny.cc/usc-moldprev-fs

http://tiny.cc/usc-ehs-mold-CR-fs

http://tiny.cc/uscRoski-eyeprtct

http://tiny.cc/usc-ehs-RPP-fs

http://tiny.cc/usc-lsv-fs

http://tiny.cc/usc-utility-carts-FS

http://tiny.cc/usc-slips-fs

http://tiny.cc/usc-drivesafe-fs

http://tiny.cc/usc-h2o-damage-restore-gs

#### **RADIATION SAFETY**

Cleaning Radioactive Contamination

Electron Microscope Safety Guide Sheet

Fluoroscopy in Research

http://tiny.cc/usc-clean-rad-contam

http://tiny.cc/usc-EMsafety-gs

http://tiny.cc/usc-fluoros-fs



## **ENVIRONMENTAL HEALTH & SAFETY FACT SHEETS & GUIDE SHEETS**

#### **RADIATION SAFETY (CONTINUED)**

Generally Licensed Radioactive Material

Iodination Safety

Laser Safety

Laser Safety Eyewear

Personnel Monitoring Devices

Rad Waste Disposal

Radioactive Contamination Checks

Radioactive Material Handling

Radioactive Material Purchase

Radioactive Material Transport/Shipment

Radiation Use Authorization (RUA) - Radioactive Materials (RAM)

Radiofrequency Radiation

**Rodent Irradiation** 

**Uranyl Compounds** 

X-ray Producing Device Registration

http://tiny.cc/usc-genL-RAM-gs

http://tiny.cc/usc-iodination-safety

http://tiny.cc/usc-lasersafety-fs

http://tiny.cc/usc-lasereyewear-fs

http://tiny.cc/usc-ehs-fs-radMntr

http://tiny.cc/usc-radwst-gs

http://tiny.cc/usc-ehs-radchk

http://tiny.cc/usc-rad-handling

http://tiny.cc/usc-ehs-RAM-purchase

http://tiny.cc/usc-ehs-RAM-xprt

http://tiny.cc/usc-fs-rua

http://tiny.cc/usc-rf-rad-fs

http://tiny.cc/usc-rodentIrrad-gs

http://tiny.cc/usc-ehs-fs-Ucmpds

http://tiny.cc/usc-xray-registration

#### **SUSTAINABILITY**

Greenhouse Gases (GHG)

Waste Diversion

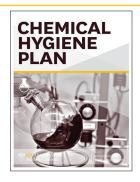
http://tiny.cc/usc-ghg-fs

http://tiny.cc/usc-waste-diversion-fs

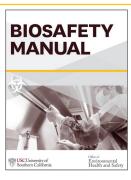


## ENVIRONMENTAL HEALTH & SAFETY PROGRAM MANUALS

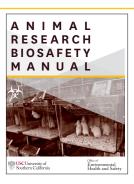
#### **RESEARCH SAFETY**



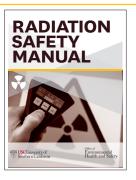
Chemical Hygiene Plan http://tiny.cc/chem-hygiene-plan



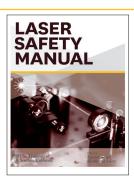
Biosafety Manual http://tiny.cc/uscehs-bio-manual



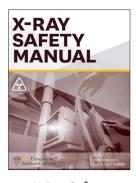
Animal Research Biosafety Manual http://tiny.cc/usc-arbsm



Radiation Safety http://tiny.cc/usc-RSM

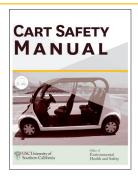


Laser Safety http://tiny.cc/uscehs-LSM



X-Ray Safety http://tiny.cc/usc-XSM

#### **OCCUPATIONAL HEALTH & SAFETY**



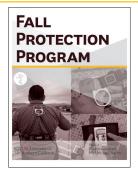
Cart Safety Manual http://tiny.cc/usc-cart-SafT-prgm-manl



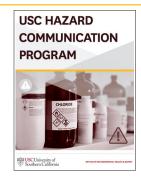
Confined Space Entry Program http://tiny.cc/usc-csep-manual



Dive Safety Manual http://tiny.cc/usc-dive-manual



Fall Protection Manual http://tiny.cc/usc-fpp



Hazard Communication Program http://tinv.cc/usc-hazcom-program



## **ENVIRONMENTAL HEALTH & SAFETY PROGRAM MANUALS**

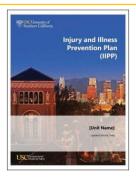
#### **OCCUPATIONAL HEALTH & SAFETY CONTINUED**



Hearing Conservation Program http://tiny.cc/usc-hcp



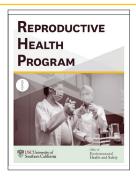
Heat Illness Prevention Program http://tiny.cc/usc-heat-ill-pp



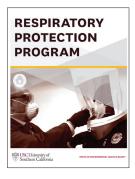
Injury and Illness Prevention Plan http://tiny.cc/usc-iipp-template



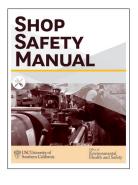
Machine Guarding Program (MGP) http://tiny.cc/usc-mgp



Reproductive Health Program (RHP) http://tiny.cc/usc-rhp



Respirator Protection Program (RPP) http://tiny.cc/usc-RPP



Shop Safety Manual http://tiny.cc/usc-shop-SSM

#### HAZMAT/ENVIRONMENTAL COMPLIANCE



Hazardous Waste Management Manual http://tiny.cc/usc-hazwaste-mgmt



### SITE-SPECIFIC TRAINING RECORD

Document any site-specific safety training sessions. Place a copy with your departmental training records.

Refresher Type	heck all that apply						
Annual Lab Safet	y Refresher 🏻	BBP Ref	resher 🗆	Rad Safet	ty Refresher 🗆	]	
SOP Refresher To	<b>Opics</b> Check all that appl	y					
Acute Toxicants		Carcinogens		Corrosives		Cryogens and Dry Ice	
Flammables		Oxidants		Phenol		Reproductive Toxicants	
RAM		PSDS		Other			
<b>Training Details</b>							
Video Conference	e (e.g., Zoom) 🗖			In-Person □			
PI Name						Date	
Trainer Name						Date	
Location (If applicable)						Duration	
I hereby certify th	nat the information	on provided is o	correct to the	best of my abi	lity: 🗆		
Trainer Signature							
	Name		En	nail		10-Digit USC ID#	