

CBE GRAD STUDENT FAQ ABOUT SAFETY

(A NON-EXHAUSTIVE LIST)



WHAT IS EXPECTED FROM ME IN THE LAB WITH REGARD TO SAFETY?

- Keep up to date on necessary Safety Training
- Wear appropriate PPE in the laboratory (safety glasses, long pants, close toed/heeled shoes at a minimum)
- Know where fire extinguishers, eye wash, safety shower, first aid and spill kits are located
- Know your emergency evacuation plan
- Know how fire alarm and chemical spill alarm sound
- Pick up after yourself!
 - Put chemicals back in designated space, watching for proper chemical segregation
 - EH&S has a nice factsheet that outlines chemical storage guidelines at <https://www.ehs.iastate.edu/sites/default/files/uploads/publications/policies/incchemicals.pdf>
 - Empty glass waste container into large bin in loading dock when full (Sweeney)
 - Take the garbage out yourself if it is full before biweekly cleaning by custodian in Sweeney
 - Cardboard should be placed in designated dumpsters near loading dock (Sweeney)
- Label and properly cover (could be turned upside down without spilling) containers
 - Sample Labeling details (important for first responders):
 - Labels should be legible
 - Label needs to be on the bottle, not on the cap (Caps can be switched)
 - Labels may contain chemical abbreviations if there is a definition list near the lab entrance
 - Labels should include (From Laboratory Safety Manual):

Sample ID (optional)	Date
Chemical name(s)	
Signal Word (danger, caution, warning)	
Hazard Statement (Flammable, fatal if swallowed, etc)	
Generator's Initials	

- If many of these details are the same, consider pre-printing sample labels with the chemical name signal word, hazard
- Follow, create or modify Standard Operating Procedures (SOPs) for the all of the major activities you perform in the lab (see later FAQ **Where do I find SOPs?** for more detail)
- Know how to safely shutdown experiments in case of an emergency
- Evaluate the hazards of an activity and try to minimize unnecessary dangers
- Report a near miss or injury (see **What do I do if I get injured in the lab?**)
- Keep Chemical Inventory accurate and up to date (lab safety officer)
- Dispose of unwanted chemicals as Hazardous waste
 - Keep adding information to tag as you add chemicals (omissions can be dangerous)
- Keep Safety in mind
 - Bring up concerns to
 - Supervisor
 - Safety Committee (Chaired by Dr. Loveland, 4-3024, prairie@iastate.edu)
 - or Lab Coordinator (Sarah Beckman, 4-4134, sezb@iastate.edu)
- Lab Safety Officer (designated by PI for each research group) should:
 - Make sure eyewash is flushed monthly
 - Make sure First Aid kit has unexpired supplies
 - Make sure spill kit is replenished if used
 - Keep Chemical Inventory accurate and up to date
 - Prepare lab for inspections
 - Maintain SDS database/binder

HOW DO I TAKE SAFETY TRAINING?

- After you receive your netID, you can go to Learn@ISU
 - Go to <https://www.ehs.iastate.edu/>, scroll down and click on training
 - Click on Safety training ISU Login (Learn@ISU)



WHAT SAFETY TRAINING DO I NEED TO TAKE?

- If you work in a laboratory, CBE expects you to be up to date on the following:
 - Fire Safety and Extinguisher Training (expires yearly)
 - Laboratory Safety: Core Concepts (expires in 3 years)
 - Laboratory Safety: Compressed Gas Cylinders (expires in 3 years)
 - Laboratory Safety: Chemical Storage (expires in 3 years)
 - Laboratory Safety: Fume Hoods (expires in 3 years)
 - Laboratory Safety: Spill Procedures (expires in 3 years)
- We recommend:
 - Personal Protective Equipment (PPE) (expires in 3 years)
 - Worker Right-to-Know OSHA Hazard Communication Standard Training
- Your PI may assign more training for your specific research requirements such as:
 - Autoclave Safety Training
 - Biological Risk Assessments for Researchers

WHERE DO I GET MY PPE?

- Supervisor may supply, or ask you to purchase:
- Safety glasses may be purchased from Chem Stores or Central Stores
- Lab coats and gloves may be purchased at Chem Stores or through CyBuy (Fisher or VWR)
- See Graduate Handbook for details on how to purchase items at ISU

WHAT'S WITH THAT EMERGENCY ACTION PLAN ON THE DOORS?

- Provides steps to take in a variety of emergencies
- Designed to be torn off the door in an emergency and carried with you to provide contact info.

WHERE DO I FIND SOPs?

- Talk to your Principal Investigator about the location of SOPs
- If you are starting a new process, fill out the [CBE Hazard Checklist](#) found on <https://www.cbe.iastate.edu/safety/>
- Create a new SOP with the template from EH&S or create your own <https://www.ehs.iastate.edu/sites/default/files/uploads/forms/soptemplate.pdf>
- Or word document at <https://www.ehs.iastate.edu/research/laboratory/forms>

WHAT DO I DO IF I GET INJURED IN THE LAB?

- Medical Treatment - cost will be covered
 - Life Threatening: Call 911 and request ambulance, **notify supervisor as soon as possible**
 - Minor injury: Lab First Aid Kit, **Report to Supervisor**
 - Non-Life Threatening Serious Injury: **Report to supervisor**
 - Day time: Supervisor should arrange medical care with McFarland Clinic, Occupational Medicine, P.C. 1018 Duff Avenue, Ames, IA (515) 239-4496
 - *If supervisor is not the one to call, you may be questioned whether it is really a work related incident when arriving at medical facility*
 - After Hours: Mary Greeley Medical Emergency Department (515) 239-2011
 - Notify staff when that injury is due to workplace injury or illness
- Reporting
 - Report (you or supervisor) within 24 hours using **ISU incident portal**

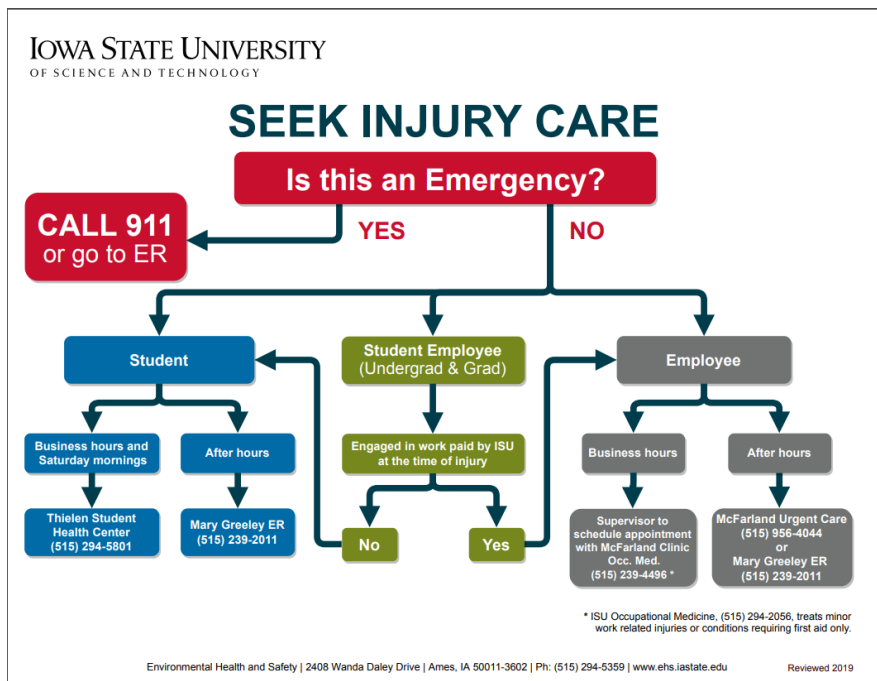


<https://www.ehs.iastate.edu/services/occupational/accidents-injuries>

- From EH&S main page click “Accidents and Injuries” link
- Click “Report a new Incident”
- Unless this happened while you were in a class, you are classified as an **ISU employee**
- Click “Report an Injury to an ISU employee”

HOW DO I REPORT A NEAR MISS IN THE LAB?

- A near miss is any serious event in the lab that did not result in injury but could have (i.e. Fire, equipment malfunction, etc.)
- Tell your supervisor
- Report to CBE
 - Fill out the Near Miss form located on the safety tab on CBE webpage <https://www.cbe.iastate.edu/safety/>
- Report to EH&S
 - Follow same steps for reporting an injury through the **ISU Incident Portal**
 - Click “report a near miss”



HOW DO I UPDATE THE CHEMICAL INVENTORY?

- If you are listed as an assistant, you may update the chemical inventory by:
 - Going to EH&S webpage and click on “Chemical Inventory”
<https://www.ehs.iastate.edu/research/laboratory/chemical-inventory>
 - This will take you to a login
 - Select the lab from the list
 - Download the list to Excel
 - Compare the list to actual inventory
 - Evaluate the amount and condition of the container
 - If container looks damaged or chemical has expired, move to satellite waste and remove from inventory
 - Edit the amounts and location as necessary



HOW DO I GET RID OF HAZARDOUS WASTE?

- Fill out both sides of the orange tag (found at satellite waste accumulation site) and attach to your waste bottle as soon as the first waste is added to container
 - Continue to update waste info as you add chemicals
 - Be accurate, unlisted items can cause problems for EH&S when waste is combined for disposal
- When waste container is full:
 - Go to EH&S webpage and click on “Waste Removal”
<https://www.ehs.iastate.edu/services/waste/wasteremoval>
 - Click on “Waste Removal Form”
 - Fill out a Pick Up Request
 - If you need more orange tags click on the Supplies Tab and check the box



WHAT DO WE DO WITH CHEMICALS IN THE LAB THAT WE NO LONGER NEED?

- Tag them as hazardous waste (see above)
- If available, EH & S has had a drive to take unidentified chemicals for free in October.

HOW DO I GET RID OF EXCESS EQUIPMENT?

- Policies found at:
<https://www.policy.iastate.edu/policy/equipment/disposal/>
- Contact Sarah Beckman (sezb@iastate.edu) and fill out form
- Laboratory Equipment should be cleaned and fill out this form:
http://www.centralstores.iastate.edu/sites/default/files/uploads/surplus_forms/LEDF.pdf
- Non laboratory equipment (computers, office furniture, etc) fill out:
http://www.centralstores.iastate.edu/sites/default/files/uploads/surplus_forms/EPDF.pdf

HOW DO I REPORT A LIGHT OUT, FUME HOOD ALARM, DOOR PROBLEM, OR OTHER FACILITY ISSUE?

- Go to FP&M webpage> Click on “**REPORT A PROBLEM**” in the menu bar > Fill out Form <https://www.fpm.iastate.edu/frontdoor/>
- Or email Laboratory Coordinator (Sarah Beckman, sezb@iastate.edu)