

**SAFETY
FIRST**

**SAFETY IS
EVERYONE'S
RESPONSIBILITY**

John Sawyer
LLE Fire Safety Officer
LLE Facility Manager

*****Everyone has the right to “Stop work” if they feel unsafe.*****

Access to LLE is restricted - Do NOT allow unauthorized persons to enter the building



- Visitors must sign in at the receptionist's desk
- Call UR Public Safety if you see suspicious activity in or around LLE
- Everyone must visibly display (e.g., above the waist) their UR/LLE ID or visitors pass while in the building



Never allow people to enter LLE unless they are known to you and escorted by you

Plan ahead – schedule your work



- **With proper planning, hazards in a work area often can be disabled before workers enter**
- **Get permission from a responsible person before entering a laboratory. Every lab has a sign with names and phone numbers of the responsible people**



Knock before entering a lab; ask for permission to enter

Everyone has the right to “Stop Work” if they perceive an unsafe condition

- **STOP, get the right people involved** to resolve the problem:
 - Supervisors, experienced co-workers, Safety Officers
- **Provide feedback** to the Safety Officers and peers to
 - reduce future risks and
 - improve planning



Do not start a job until you have received instructions, understand the hazards involved, and are authorized to begin

Respond immediately to fire alarms



Evacuate via the most direct, safe route

- close windows and doors while exiting, if safe to do so
- use *stairs*, not elevators
- move to a location *at least 50'* from the building and emergency equipment, and
- Do *not* re-enter the building until alarms are silenced and beacons are off

Follow the lighted exit signs:

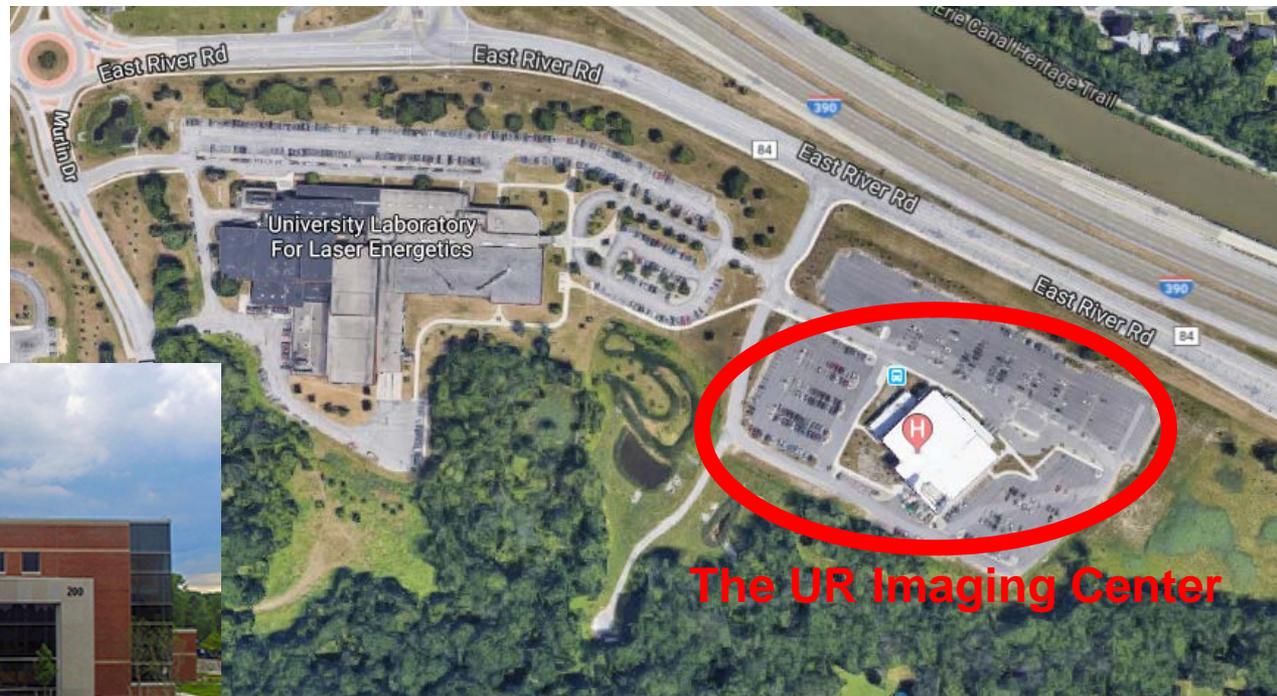


After getting to safety, notify (call or text message) a **RESPONSIBLE** Individual (ex. Supervisor) before leaving (e.g., lunch, home, etc.)

The UR Imaging Center is LLE's assigned meeting location during an emergency evacuation



If an emergency prevents employees from re-entering LLE, all employees must go to The UR Imaging Center at 200 E. River Rd (first building east of LLE)



Reporting Medical Emergencies



- During working hours (M-F, 8:30am – 5:30pm)
 - Call an LLE receptionist and state “**MEDICAL EMERGENCY**”. The Receptionist will notify the Medical Emergency Response Team
 - If no response, call UR Public Safety
- Off-hours (nights, weekends)
 - Call UR Public Safety, or use any “Blue” phone outside
 - If no response, call Local Emergency Services (911)

From an LLE Phone:

Emergency Numbers
During working hours:
55101 or 53941
After hours:
13 (UR Public Safety)
If no response, dial 9-911

From a Cell Phone:

Emergency Numbers
During working hours:
275-5101 or 275-3941
After hours:
275-3333 (UR Public Safety)
If no response, dial 911

Personal Protective Equipment (PPE)

PPE does not prevent accidents, just reduces their severity

PPE is designed to protect the worker's head, hands, feet, eyes, face, hearing, respiratory system, and more.



Personal Protective Equipment (PPE)



Engineering controls minimize or eliminate hazards and are far more effective than personal protective equipment.

Respiratory System - Respirators protect against harmful gases and vapors, oxygen deficient atmospheres, airborne particles, and biological agents.

Head - Hard hats protect from falling objects, shield head bumps, and absorb shock.

PPE for the head and respiratory system should not be necessary for the tasks of ESWs. If you believe that you require these types of PPE, talk to a safety officer.

ALWAYS wear nitrile gloves and protective eyewear with side-shields when hazards could be present



Hazards include (but are not limited to):

- Using cleaning chemicals
- Emptying garbage cans
- Cleaning up spills involving body fluids (vomit, urine, blood, etc.)

WRONG!

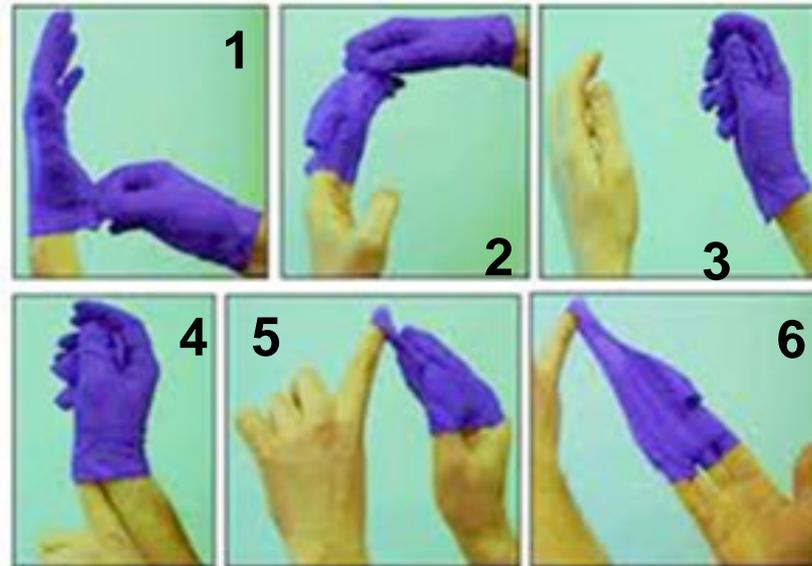


RIGHT!



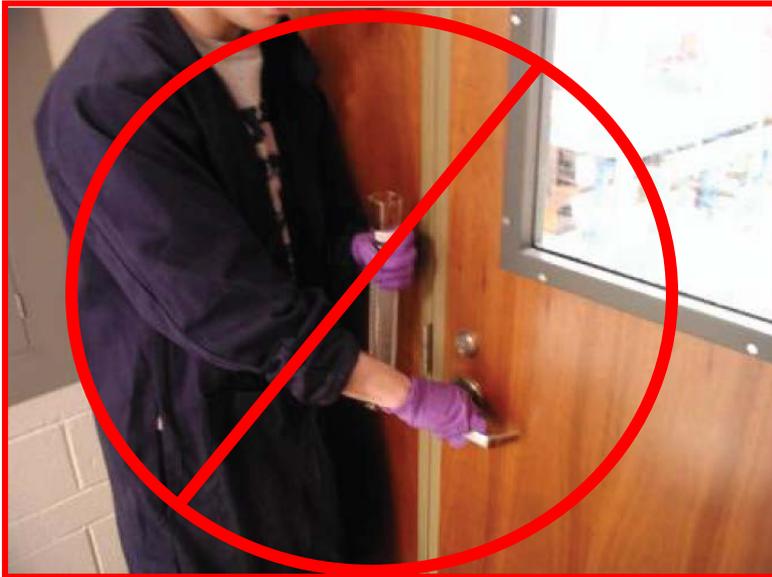
Always practice good housekeeping and good hygiene!

Proper donning and doffing of gloves is necessary to prevent cross-contamination



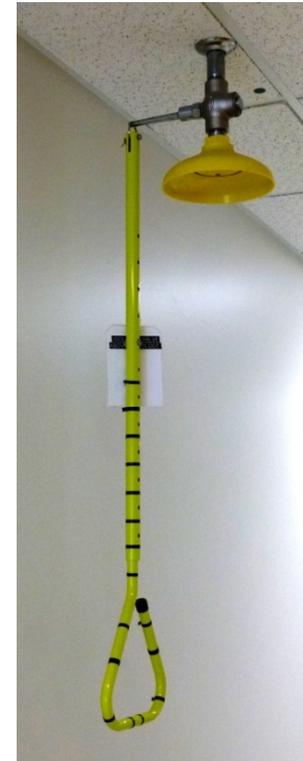
1. Pinch the outside of the glove near the wrist (careful not to touch exposed skin below)
2. Pull glove up *slowly*, turning the glove inside out
3. Ball up the used glove and grasp it with the gloved-hand
4. Using non-gloved hand, put finger inside cuff of glove
5. Pull glove up *slowly*, turning glove inside-out *and* encapsulating the balled glove
6. Finish removing glove and dispose of properly

Remove gloves before touching door handles, telephones, or leaving a work area



Eyewash Stations and Safety Showers

Eyewash stations and safety showers are located throughout the facility. Know where they are and how to use them in case of a chemical exposure to eyes or skin.



Follow the warning signs on the doors

Always wear the required Personal Protective Equipment indicated on the door signs

Mechanical, Chemical or Laser Safety Eyewear:



**Slip-resistant, steel-toed shoes
(*always required*)**



Hearing Protection:



Hand/skin protection:



Mechanical Rooms

Some rooms require hearing protection

There are different types;
find what works best for you.



You are *always* required to wear safety
eyewear.

Food & drink are *never* allowed in any
labs or mechanical rooms



Slip-resistant, steel-toed shoes are
always required in Mechanical Rooms



Laser Labs

When signs indicate lasers are on in an area:

- Always knock and verbally announce your presence. Wait for an escort before entering
- You may enter a laboratory without an escort only if all warning signs are disabled (not lighted).



Chemical Safety

Protect your eyes and skin while working with or near chemicals



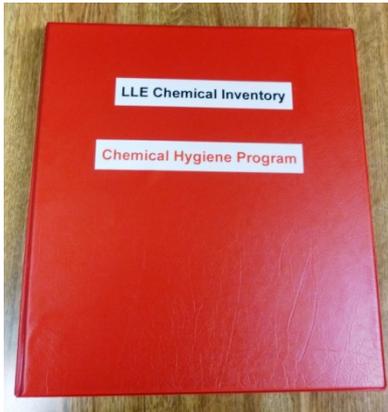
Hazard Communication



The following chemicals are hazardous. ALWAYS WEAR PPE (CHEMICAL RESISTANT GLOVES AND SPLASH GOGGLES) WHEN USING THEM!



Informational binders are located in each of the custodial supply closets



A product's Safety Data Sheet provides information about the:

- types of hazards
- severity of hazards
- personal protective equipment that must be worn

Look for the hazard symbols labeled on the containers:



* Flammable



* Explosives



* Oxidizers



* Acute Toxicity (fatal or toxic)



* Health Hazard
* Carcinogen



* Corrosives



* Irritant
* Skin Sensitizer

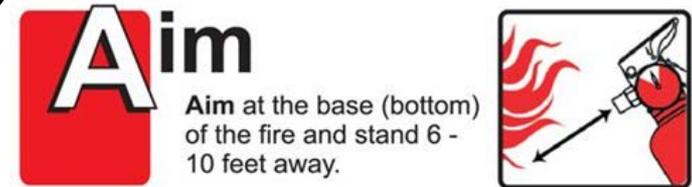
Know the potential hazards of the products you use and come in contact with. STOP and ASK if uncertain

LLE personnel *may* fight a fire once *trained*



- LLE personnel are **NOT** required to fight a fire
- **Trained** personnel **MAY** fight a fire after:
 - Activating the building fire alarm
 - Assisting persons in immediate danger
 - Assessing the risks (*follow your instincts!*)
 - Is there heavy smoke or strong odor?
 - Is fire small and contained?
 - Is there an unobstructed exit?
- **Evacuate immediately** if:
 - the fire spreads beyond the point of origin
 - the fire could block your exit
 - one fire extinguisher is insufficient

Remember the **PASS** Word



Fire Safety Violations

- Fire doors propped open
- Items on electrical raceways
- Items attached to, or draped over, fire sprinklers or pipes
- Use of personal appliances in offices (heaters, toasters, coffee makers, refrigerators, microwave ovens, halogen lamps, decorative lights, etc.)
- Parking within 15 feet of a fire hydrant



Inform a safety officer of any observed violations!

Always Be Aware of Your Surroundings

Slips...



- Always wear slip resistant shoes
- Provide warning signs
- Clean up spills immediately

Trips and falls...

Obstructions in walkways and stairs can lead to trips and falls.

- Remove any debris or clutter in aisles or pathways
- Make sure to have a clear view of the path ahead



Stay alert!

Walking/Working Surfaces

Slips, trips, and falls account for the majority of workplace injuries.

Wet floors are the #1 cited OSHA violation, as it causes a large number of injuries, yet it is easy to identify and correct.

Practice good housekeeping and sanitation!

Exposed pipes and cords should be covered.

Stairs must be clean and have handrails.

Good footwear prevents injuries.
Be aware of your surroundings!



Electrical Safety



Risks of shock include: burns, hearing loss, cardiac arrest, and *death*

DO NOT:

- *Overload circuits,*
- *Daisy chain plugs/extension cords*
 - *Use broken equipment*

IF SHOCK OCCURS

- Call for emergency assistance
- Do not touch a person being shocked
- Turn off power or use an object to separate the person from the circuit
- IF TRAINED, provide first aid until help arrives
- Report all shocks to electrical safety officer (Scott Householder)
- High voltage and Energized work may NOT be performed by ESW personnel

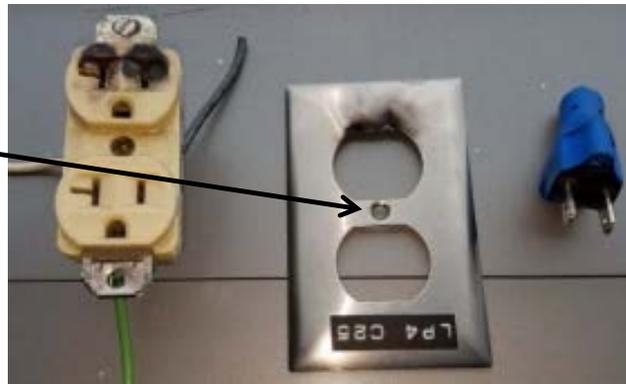
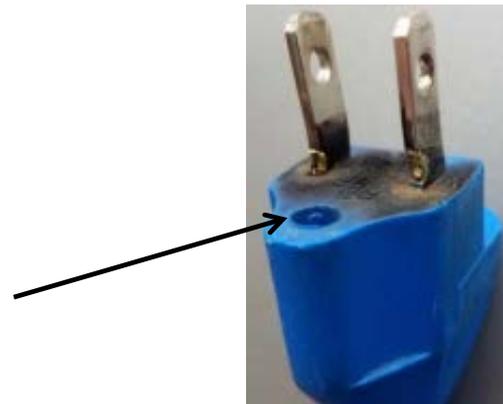
Electrical Safety

Notice any of these problems? Report it to your supervisor immediately:

- Broken electrical plugs
- Damaged power cords
- Leaking fluids
- Unusual smells
- Unusually warm equipment

A missing ground prong makes equipment unsafe. The user could have been shocked.

Missing screw on outlet cover caused a short circuit.



Lockout Tagout (LOTO)



The purpose of LOTO is to control hazardous energy to prevent harm to workers and equipment.

Authorized worker = person adding lock/tag to perform maintenance.

During service/maintenance activities, LOTO prevents:

- Accidental release of stored energy.
- Accidental start-up of machinery.
- Unintended motion.
- Contact with a hazard when guards are removed.

NEVER REMOVE A LOCK/TAG WITHOUT CONTACTING OWNER FIRST



Use extreme care when handling body fluids



- **Contact with other people's body fluids such as blood and vomit can spread disease through Blood-borne pathogens (BBP). These diseases can be extremely serious.**
- **Common routes of infection in the workplace are:**
 - **Break in the skin, such as an open sore, or dry cracked skin**
 - **Splashing into mucous membranes (e.g., mouth, eyes, or nose) while cleaning up a spill**
 - **Puncturing skin with contaminated needle, glass, razor, etc.**

Always wear nitrile gloves and safety glasses with side-shields when handling body fluids



Minimize risk of exposure to blood-borne pathogens

- Treat all blood and body fluids as though they are infectious
 - **Wet or Dry!**
- Put contaminated waste in a sealed red plastic bag, labeled with the biohazard emblem



Call the University Health Service (275-1164) to schedule a post-exposure evaluation immediately after any suspected exposure to blood-borne pathogens

Employ safe work practices to reduce risk of exposure

- Hand washing is one of the most important and easiest work practices to prevent infection from bacteria and viruses.
- Clean up potentially infectious spills using a 10% bleach solution, letting it set or soak in for 10 minutes to kill any pathogens
 - Use a properly labeled bag for disposal, put in the hazardous waste storage area on the shipping dock, and call the University Hazardous Waste Management Unit (275-2056) for pick-up
- Properly remove and dispose of soiled gloves
- Store sharps such as needles, and razor blades in designated sharps containers

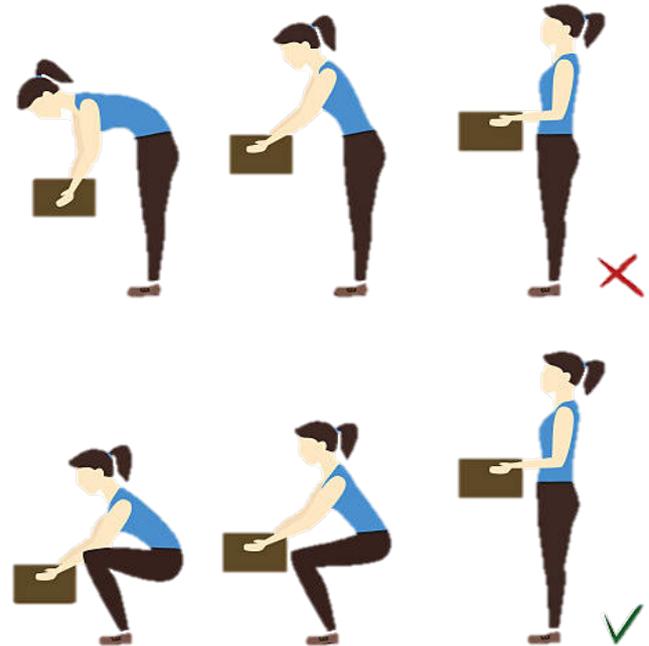


Ergonomics

Ergonomics- the study of the interaction between workers and their environment.

The main risk factors for ergonomic related injuries are *repetition*, *force*, and *bad posture*.

Goals: to decrease risk of injuries, illnesses, and discomfort, and to improve performance and quality of work life.



LLE Safety Department Can Help You!

We can provide:

- Information and training
- Ergonomic assessment
- Help in selecting appropriate equipment
 - Help with vendor interaction

Questions? Contact:

LLE Chief Safety Officer – Doug Jacobs-Perkins

LLE Safety Officer – Karen Cera

To Prevent Injury:

- Slide instead of lift, or use dollies/carts when possible.
- Limit time working in awkward positions.
- Don't sit or stand for too long.
- Alternate repetitive tasks.
- Break up “heavy” work.
- Maintain good posture.

Never lift more than you can handle!

Ladder Safety

- Always inspect ladder before use for rust, splintering, broken or deteriorating pieces, bending, warping, and any other abnormalities.
- Don't lean, sit, or move the ladder while in use.
- Never step above the highest approved rung.
- Use tool belt not hands for carrying items.
- Always maintain 3 points of contact.
- Climb facing the ladder.



Confined Spaces

What is a confined space?

1. Large enough for a person to enter
2. Limited means of entry/exit
3. Not designed for human occupancy

Ex: storage tanks, pits, underground utility vaults, boiler, furnace, reaction vessel

Confined spaces can be hazardous due to: lack of oxygen, risk of getting trapped, and other hazards

Do not try to rescue someone from a confined space without contacting others for help. You could become another victim.

What this means for you:

DO NOT ENTER CONFINED SPACES!



Asbestos Awareness

Asbestos is a mineral fiber that was formerly a popular building material due to its high resistance to heat.

When the fibers are disturbed (like during removal and manufacture) they become airborne and can enter the lungs. Lung diseases and cancer can develop long after exposure.

Asbestos in the LLE is found in the lab countertops in some older labs as well as some floor tile adhesive and ceiling tiles.



LLE personnel are NOT authorized to cut, drill, abrade or modify asbestos-containing items. These items are safe as long as they are not disturbed.

Summary

- You must complete the on-line [G_010 quiz](#)
- Submit [LLE Safety Suggestions](#) any time

****Use any web browser to access these links on the LLE Safety Zone, “Training” tab****



- You must complete the G_010 quiz to satisfy your training requirement