

Appendix D

LABORATORY EMERGENCY RESPONSE PROCEDURES

Life Threatening Emergency—call 911 or UPD at (510) 885-3791

1. Injury or illness (non-life threatening)

Students: Students can and should be seen by the Student Health Center for minor injuries.

Employees: Contact the Worker's Compensation Coordinator (WCC) immediately.

Notify EHS as soon as possible if the hazard has not been corrected.

If it is a chemical exposure, provide the Student Health Center and/or the WCC a copy of the chemical SDS (or material safety data sheet).

2. Serious Hazardous Materials Splashes (corrosive, toxic, radiologic, or biologic substances and/or large skin areas)

If chemical splashes to eyes:

- Use the EMERGENCY EYE WASH and flush eyes for about 15-20 minutes.
- Use hands to help hold eyelids open. Move eyes around by looking up and down and from side to side to rinse as much of the eyes as possible.
- Seek medical attention.

If chemical splashes to the skin:

- Immediately wash area with running water for about 15-20 minutes.
- If chemical got onto arms or hands, a sink can be used. If chemical splashes onto other part of the body, use the emergency shower.
- Seek medical attention.

3. Fire

Only try to put the fire out if it's small and you have trained. A small contained fire would be one in a waste basket. Otherwise:

- Evacuate the area immediately. Close the lab door as you leave.
- Pull the fire alarm.
- Once outside the building, call University Police.
- Assemble in the nearest Assembly Location.
- Report to the Volunteer Team Leader if you have information about the fire.
- Wait for additional instruction from the Volunteer Team Leader.

4. Power Outage in a laboratory

- Close chemical containers if safe to do so, especially flammable solvent.
- Evacuate the area and contact the Dean's Office or Facilities.

5. Earthquake

The best thing you can do is prepare your lab for the next earthquake.

- Place heavy items on lower shelves.
- Use seismic protection for hazardous materials storage and heavy and expensive equipment.
- Store hazardous materials in secondary containment and below eye level.

6. Hazardous Materials Spill

Many spills are small and incidental to daily lab activities. Prepare for these spills by having enough compatible spill supplies in your work area. **If you do not feel**

comfortable cleaning up even a minor spill, contact EHS for assistance.

Below is a guide for how to evaluate a chemical spill and who should clean it up.

	Level 1 Minor Spill: can be cleaned up without the help of EHS	Level 2 Major Spill: EHS assistance is required for cleanup	Level 3 Major Spill: 911 assistance is required
Hazard	Known hazards in <u>small</u> quantities: <ul style="list-style-type: none"> • Low toxicity • Low volatility • High toxicity (contained) • Flammable liquids (<1 liter) • Acids or bases • Biosafety Level 1 or 2 • Broken mercury thermometer • Radioactive materials 	Known hazards: <ul style="list-style-type: none"> • Highly toxic chemical • Flammables liquid (>1 liter) • Toxic powders • Inhalation hazard • Radioactive materials contamination to more than one area or to a person 	<ul style="list-style-type: none"> • Fire potential • Flammable liquids • Unknown hazard
Spill Location	<ul style="list-style-type: none"> • Benchtop or fume hood • Contained in one lab or room • No human, facility, or environmental contamination • Easily contained and cleaned 	<ul style="list-style-type: none"> • Environment release — air, soil, sewer, storm water drain • Building with recirculating air • Area has ignition sources (flammables) • Can be contained 	<ul style="list-style-type: none"> • Flammables in storm water or sanitary sewer drain • One or more buildings affected • Area has ignition sources (flammables) • Difficult to contain
Exposure	<ul style="list-style-type: none"> • No exposure or contamination 	<ul style="list-style-type: none"> • Contamination can be safely and easily removed from skin, eye, and clothing • There is no immediate emergency from the exposure 	<ul style="list-style-type: none"> • Immediate and serious health effects possible: Ex. Phenol on skin, concentrated acid/base in eye
Spill Supplies and Training	<ul style="list-style-type: none"> • Staff has sufficient spill supplies and training to clean-up spill. 	<ul style="list-style-type: none"> • Not enough supplies • Staff not sufficiently trained to clean up • Need additional PPE Ex. Respirator, special gloves etc. 	<ul style="list-style-type: none"> • Staff not trained to clean up
Action	<ul style="list-style-type: none"> • Notify others in the lab and adjacent areas • Isolate the area • Evacuate the immediate area • Clean-up with appropriate PPE • Bag and label hazardous waste 	<ul style="list-style-type: none"> • Call for EHS or call UPD to contact EHS • Area evacuation is required • Limit access • Isolate and decontaminate contaminated individuals if safe • Obtain MSDS • EHS will contact external contractors for assistance 	<ul style="list-style-type: none"> • Contact UPD to contact EHS • EHS or UPD evaluate situation, take appropriate action • This includes calling 911 and evacuating building(s)
Examples	<ul style="list-style-type: none"> • Spills in a lab hood • Spill from a car accident (brake, hydraulic fluids) • Spill that can be cleaned up with a 5 gallon spill kit 	<ul style="list-style-type: none"> • Larger quantities of spilled chemicals • Isolation of rooms or areas required • Air monitoring required after a spill before re-entry is allowed • Chemicals spilled on the ground – gasoline, oil • Non-flammable or combustible chemicals in storm drain 	<ul style="list-style-type: none"> • Flammable or combustible chemicals in storm drain • Corrosive spill with one or more injuries • Unknown chemical with one or more complaints