Laboratory Emergency Plan

Purpose

This program outlines the response to medical emergencies, spills of hazardous materials, fires, and power outages in laboratories.

Scope

This program applies to Western Michigan University employees who perform or supervise activities in laboratories.

Guidelines

A. Medical Emergencies
   1. When working with hazardous materials, it is advisable to have a second person present, or at a minimum, maintain surveillance via telephone contact.
   2. A University employee who is physically on the premises must supervise under-graduate students working in laboratories.
   3. In the event of a chemical emergency, provide appropriate first aid or call 911 if outside assistance is necessary.
   4. Flush with water all splashes to the eye for a minimum of 15 minutes then seek medical attention.
   5. Flush splashes to the skin with water for 15 minutes or longer then seek medical attention. Do not use neutralizing agents.

B. Spills:
   1. In the event of chemical release that involves a fire, explosion, or an uncontrolled release of hazardous chemicals, activate the nearest fire alarm pull to evacuate the building.
   2. For controlled chemical spills or leaks, if safe to do so:
      a. Open the hood, turn on the emergency exhaust on the fume hood, and turn off open flames.
      b. Place sorbents on the spill.
      c. Notify others working in the area and restrict access to the spill area.
      d. Evacuate the lab and close the door.
      e. Notify your supervisor.
      f. Call EHS at 387-5590 for assistance and proper disposal.
      g. Call 911 to report the spill and location if the spill is unmanageable.
      h. Call 911 for medical emergencies.
   3. Contact EHS for all mercury spills.

C. Fire
1. Maintain exits, aisles, and safety equipment free of obstructions such as equipment, furniture, etc. Work areas and floors are not to be used for excessive storage. Unauthorized items shall not be stored in the corridors or stairwells.
2. Keep fire doors closed.
3. Know the location of the nearest exits, fire extinguishers, emergency showers and eyewashes, and fire alarm pull stations.
4. When the fire alarm sounds, take the following steps:
   a. Evacuate the building
   b. If it is safe to do so take the steps outlined below for Power Outage Response.
   c. Take your coat and keys.
   d. Close and lock the laboratory door.

D. Power Outage Response
1. Lower the sash on chemical fume hoods.
2. Turn off ignition sources.
3. Secure or isolate reactions that are underway.
4. Shut down all equipment (leave cooling water and purge gases on as necessary).
5. Place lids on all open containers of volatile liquids.

Responsibilities

A. Environmental Health and Safety (EHS):
   1. Provide backup for spills beyond the capability of the laboratory staff.
   2. Review spill response standard operating procedures for each laboratory.
   3. Provide fire extinguisher training.

B. Deans and Directors:
   1. Ensure financial support for spill response equipment.
   2. Ensure staff respond appropriately to alarms.
   3. Ensure laboratories have procedures in place for shutting down and restarting equipment from power failures.

C. Laboratory Supervisors:
   1. Include spill response procedures in the lab-specific standard operating procedure.
   2. Ensure that spill response equipment is available.
   3. Train employees on spill response and lab specific emergency response.
   4. Ensure that laboratory eyewashes are well maintained and accessible.
   5. Include shut down procedures for evacuations in the lab-specific standard operating procedures.
   6. Complete an Accident Injury Report Form for all incidents, injuries, illnesses or exposure incidents within 24 hours.
   7. Post emergency contact information for the laboratory.

D. Laboratory Workers
   1. Follow lab-specific and university emergency response guidelines.
   2. Inform laboratory supervisor of any medical or spill emergencies.