JOINT SAFETY TEAM

EMERGENCY RESPONSE

Yale Environmental Health & Safety

Preparedness - Never work alone when working with hazardous material.

- Always wear lab coats, gloves, goggles, and any other necessary PPE.
- Avoid distractions! Use only one headphone so you can hear what is happening around you.
  - Don't talk on the phone when setting up or quenching experiments.
- Use a blast shield for pressurized reactions (e.g. bomb flasks) or when generating peroxides.
- First aid kits, spill kits, and HF neutralizer gel (calcium gluconate) should be in each lab.
  - Always keep neutralizing solutions (NH_4Cl, $NaHCO_3$, $Na_2S_2O_3$…), spill pads, and sand nearby.
- Know the locations of safety showers, eye wash stations, and fire extinguishers.
  - Eye wash stations should be flushed weekly to ensure fresh water in emergencies.
- Work in the fume hood with the sash at the correct position for good ventilation. Work around an individual glass panel for extra protection.

Power Outages and Severe Storms - Close hood sashes and halt hazardous reactions.

- Stabilize experiments and turn off/unplug unnecessary equipment (e.g. hot plates).
- Emergency responders are delayed when responding to accidents during severe storms. Avoid hazardous or large-scale chemistry.

Chemical Spills - Alert people nearby and block off the area (put a sign on the door).

- Use emergency flow on fume hoods and call EHS if spill is hazardous or large scale.
- Identify the hazard (corrosive, odorous, toxic, biohazardous, radioactive, lachrymator, etc.)
- Utilize spill kits, neutralizers, and spill pads.
- Cleanup and properly dispose of materials (solids and spill pads in solid waste).
- Provide material and process information to assist emergency responders.

Fires - Do not panic! Call for someone nearby to help you.

- Common fires: reaction, electrical cord, burner, reagent, solvent, oil bath, stills, hot glass...
- **Small fires** - Use sand, salt, or a spare fireproof lab coat to smother the fire.
- **Large fires** – Use a fire extinguisher.
  - **Red** (ABC – general: paper, solvent, oil, electronics) in each bay
  - **Yellow** (D - pyrophoric metals) in hallways on each floor
- Each bay has an emergency gas shut off valve near the exit.

Exposure or Injury - Call for someone nearby to help you.

- Utilize safety showers, eye washes, and drench hoses in sinks.
  - Remove all contaminated clothing (chemicals pool at tight places such as waistbands).
  - Rinse affected areas **15 min** or hold eyes wide open and flush for **15 min.**
  - If highly toxic or corrosive materials, call **911** or Yale acute care center.

Contacts - Safety officers are appointed in every lab.

- **For Severe Injuries:** Call 911 then EHS for severe injuries. Yale has established protocols with local ambulance services.
- **For other injuries:** Call Yale acute care or go directly to the acute care center for medical attention *after full decontamination* with (M)SDS sheets.
- **After a fire:** Call EHS for incident reporting of all property damage and fire extinguisher use for replacement and cleanup.
- **Report near misses** anonymously to Yale JST website. http://jst.chem.yale.edu/safety-incidents

EHS Main Line: 203-785-3550
EHS Hazardous Waste Line: 203-432-6545
EHS Emergency Line: 203-785-3555
Yale Acute Care Center: 203-432-0123
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