



# LABORATORY EMERGENCY RESPONSE GUIDE



# EMERGENCY CONTACTS

<b>MEDICAL EMERGENCY (LIFE THREATENING)</b>	<b>911</b>
<b>PUBLIC SAFETY</b>	<b>215.895.2222</b>
<b>ENVIRONMENTAL HEALTH &amp; RADIATION SAFETY (EHRS)</b>	<b>215.895.5919</b>
<b>FACILITIES MANAGEMENT</b>	<b>215.895.1700</b>
<b>CENTER CITY CAMPUS SECURITY</b>	<b>267.359.2380</b>
<b>QUEEN LANE CAMPUS SECURITY</b>	<b>215.991.8102</b>
<b>ACADEMY OF NATURAL SCIENCES SECURITY</b>	<b>215.299.1019</b>
<b>WEST READING CAMPUS SECURITY</b>	<b>484.659.8100</b>

## MINOR SPILL:

- Alert people in the immediate area of the spill.
- Leave biological safety cabinet turned ON.
- Wear appropriate PPE: disposable gloves, lab coat, safety goggles, and any additional PPE required for handling the biohazardous material of interest.
- Pick up sharps and broken glass with tongs or forceps and discard into biohazard sharps containers. **DO NOT TOUCH SHARPS EVEN WHEN WEARING GLOVES.**
- Cover spill with paper towels or absorbent materials.
- Slowly pour disinfectant first around the edges of the spill, then into the spill, in quantities sufficient to completely cover the entire affected area.
- Wait 20 minutes for disinfectant contact time on spill.
- Use paper towels dampened with disinfectant to wipe up spill, working from the spill's edge toward the center.
- Place non-sharp contaminated materials in red biohazard waste bags.
- Repeat as necessary until all material is removed.

## MAJOR SPILL:

If an incident occurs outside of a biological safety cabinet that involves a large quantity of potentially infectious liquids (> 500 mL), any quantity of potentially infectious material that is rendered airborne as droplets or aerosols, or select biohazardous agents:

- Evacuate all personnel and move to another location equipped with hazardous exhaust, eye wash stations, and safety showers.
- Contact Drexel Public Safety at 215.895.2222 and provide them with your name, location of the spill/release, and the nature of the material.
- Drexel EHRS will respond to contain and remediate the spill and will work with affected personnel to ensure proper decontamination and will obtain medical support if needed.

# BIOLOGICAL SPILLS



## **MINOR CHEMICAL SPILLS:**

- Less than 500g or 500mL of non-acutely hazardous chemical.
- Can be cleaned by lab personnel.

### **Procedures:**

- If injured or contaminated with hazardous chemicals, immediately proceed with Personal Decontamination Procedures.
- Proper personal protection equipment shall be donned during clean-ups.
- All non-disposable personal protective equipment shall be decontaminated and stored.
- All disposable personal protective equipment and clean-up materials shall be disposed as hazardous waste.

## **MAJOR CHEMICAL SPILLS:**

- Greater than 500g or 500mL of non-acutely hazardous chemical.
- Any amount of mercury and other heavy metals, hydrofluoric acid, or hazardous gas released.

### **Procedures:**

- Notify people in the laboratory to evacuate to a safe distance.
- Avoid breathing vapors, mists, or dust from spilled material.
- Turn off all ignition and heat sources, if this can be done safely.
- If injured or contaminated with hazardous chemicals, immediately proceed with Personal Decontamination Procedures.
- Evacuate the area and close the door to the room.
- Contact Drexel's 24-Hour Call Center at 215.895.2222. Provide the following information when reporting a major spill:
  - Name and call-back number
  - Location of spill (building & room number)
  - Type of material spilled
  - Amount of material spilled

# **CHEMICAL SPILLS**

## MINOR SPILL:

A release of radioactive material is considered a minor release when the nature and potential hazards are known, and there is no radiation hazard to personnel. In the event of a minor radioactive spill:

- Notify all other personnel in the area where the spill occurred.
- Prevent spread of contamination by covering spill with absorbent material.
- Decontaminate the area, using paper towels to clean the spill starting from the outside and moving toward the center.
- Survey area and all potentially contaminated individuals with a G-M survey meter. Survey removable contamination with wipe samples.
- Report incident to EHRS.

## MAJOR SPILL:

Involves potential radiation hazard to personnel, personal contamination, actual or potential uptake of radioactive material, or a spill that threatens to restrict use of the facility. In the event of a major spill:

- Clear the area and vacate the room.
- Cover the spill with absorbent paper. DO NOT attempt to clean it yourself.
- Assemble all potentially contaminated personnel near room entrance. Close and prevent entry into the room.
- Immediately contact EHRS (**215.895.5919**).
- Survey personnel for contamination. Contaminated clothing should be removed and stored for evaluation by EHRS. Contaminated skin should be flushed thoroughly and then washed with mild soap and lukewarm water.

**UNIVERSITY HEALTH &  
RADIATION SAFETY OFFICE**

**215.895.5919**

**RADIATION SAFETY OFFICER**

**215.203.6733**

# RADIOACTIVE SPILLS

# CHEMICAL FUME HOOD FAILURE

When a chemical fume hood fails to function properly:

- Immediately stop all activities inside the hood.
- Notify all laboratory personnel that the fume hood is not functioning.
- Post a sign on the hood stating “Do Not Use”.
- Contact the Office of Environmental Health and Radiation Safety at **215.895.5919**.
  - Facilities Management will perform maintenance to the exhaust system to ensure the hood is functioning at a level consistent with the manufacturer’s specifications.
  - Once maintenance has been completed, EHRS will perform an updated certification.
- Do not conduct work in the hood until it is properly functioning.

**CHEMICAL FUME HOOD FAILURE** 

## FIRE RESPONSE: R.A.C.E

**Remove:** Remove everyone in immediate danger if you can do so without endangering yourself.

**Alarm:** Sound the alarm by pulling a fire box. Call the Public Safety 24-Hour Call Center **(215.895.2222)**. Notify the dispatcher of the precise location of the fire.

**Confine:** Confine the smoke and fire by closing all doors and windows. Shut off the piped and compressed gas as you evacuate.

**Evacuate:** Evacuate the building.

## EVACUATION PLAN

- In case of alarm, evacuate the building using the nearest exit. Identify a backup exit.
- Do not use elevators during a fire alarm.
- Do not enter a room if the door is warm to the touch or if the room is filled with smoke.
- Make sure stairwell doors remain closed and unobstructed at all times.
- Account for all staff at your departments designated muster location.

## OPERATING A FIRE EXTINGUISHER: P.A.S.S

**\*\*\* Only attempt to extinguish a fire if you have been trained in the proper use of an extinguisher. Only small fires can be extinguished; always be prepared to evacuate.\*\*\***

**Pull** the pin

**Aim** at the base of the fire

**Squeeze** the handle

**Sweep** from side to side

## ALL LOCATIONS

Environmental Health & Radiation Safety 215.895.5919

### UNIVERSITY CITY CAMPUS

Drexel Public Safety 215.895.2222

Facilities Management 215.895.1700

### CENTER CITY CAMPUS

Drexel Public Safety 215.895.2222

Facilities Management 267.663.2077

New College Building Security 267.359.2380

### QUEEN LANE CAMPUS

Drexel Public Safety 215.895.2222

Facilities Management 215.991.8484

Queen Lane Security 215.991.8102

### ACADEMY OF NATURAL SCIENCES

Drexel Public Safety 215.895.2222

Facilities Management 215.299.1030

Academy of Natural Sciences Security 215.299.1019

### WEST READING CAMPUS

Drexel Public Safety 215.895.2222

Facilities Management 484.955.2954

West Reading Security 484.659.8100

## FLOOD RESPONSE PROCEDURES:

- Contact the Public Safety 24-Hour Call Center at 215.895.2222, followed by building security.
- Public Safety will contact the building's Facilities Management.
- Power down, turn off, and unplug any affected electronics or high voltage equipment.
- Secure any water-reactive materials. If this cannot be done safely, you should contact Environmental Health and Radiation Safety for assistance.

# FLOOD RESPONSE





# NEEDLE STICK, INJECTION, OR CUT WITH CONTAMINATED NEEDLE, GLASS, OR OTHER SHARPS

- Irrigate the exposure wound with copious amounts of water.
- Notify your supervisor.
- Your supervisor will contact Public Safety at 215.895.2222.
- Obtain medical attention at Employee Health, or at the nearest Emergency Room including post-exposure evaluation and follow-up; source specimen may need to be tested for the presence of bloodborne pathogens (Hepatitis B, HIV, etc.).

## Employee Health Resources

- **Concentra Urgent Care**  
**219 N. Broad St.,**  
**Philadelphia, PA**  
**215.762.8525**
- **Concentra Urgent Care**  
**4050 S. 26<sup>th</sup> St.,**  
**Philadelphia, PA**  
**215.467.5800**

**SHARPS INJURIES** 

# ANIMAL EXPOSURE

Potential risks involved in working with research animals in the laboratory include injuries or illnesses related to animal bites, scratches, or other direct exposure. The proper response following an exposure to a laboratory animal includes:

- Flushing the affected area of the body with antiseptic soap and water for 15 minutes.
- Reporting the injury promptly to your supervisor, who will then contact Public Safety at **215.895.2222**.
- Obtaining medical attention if necessary and informing the healthcare professional of the type of animal causing the exposure and how the exposure occurred.
- Submit a Report of Employee Injury.

## HAZARDOUS MATERIAL ON SKIN

### **Chemical Exposure:**

- Remove contaminated clothing, shoes, jewelry, etc.
- Flood exposed area with water from faucet or safety shower for at least 15 minutes.
- Review the SDS for hazard and safety information.
- Notify your supervisor.
- Your supervisor will contact Public Safety at 215.895.2222.
- Public Safety will contact the Office of Environmental Health & Radiation Safety.

### **Biological Exposure:**

- Thoroughly wash exposed skin with soap and water; avoid breaking skin.
- Flush exposed mucous membranes with water.
- Notify your supervisor.
- Your supervisor will contact Public Safety at 215.895.2222.
- Public Safety will contact the Office of Environmental Health and Radiation Safety.
- Obtain medical attention at Employee Health, if necessary.
- Submit a Report of Employee Injury.

## HAZARDOUS MATERIAL IN EYES

- Immediately flush the eyes with water at an eyewash station for at least 15 minutes.
- Forcibly hold eyes open to ensure effective wash behind both eyelids
- If it is a chemical eye exposure, review the SDS for hazard and safety information.
- Notify your supervisor.
- Your supervisor will contact Public Safety at 215.895.2222.
- Public Safety will contact the Office of Environmental Health & Radiation Safety.
- Obtain medical attention at Employee Health, if necessary.
- Submit a Report of Employee Injury.

*\*\*\* The above information is appropriate for most types of hazardous material exposures to the skin or eyes. Immediately seek medical attention if you have questions or concerns \*\*\**

# SKIN AND EYE EXPOSURE

## LIFE-THREATENING INJURIES

University City Campus:

- Immediately call the 24-hour Public Safety Call Center at **215.895.2222**.
- Stay on the line as Public Safety initiates a call to 911. Public Safety will direct responders to the incident site.

All Other Campuses:

- Immediately call 911 and answer the operator's questions and follow instructions provided

## NOT LIFE-THREATENING INJURIES

- Immediately notify your supervisor.
- Your supervisor will contact Public Safety at **215.895.2222**.

## HEALTH RESOURCES

### ALL LOCATIONS

Public Safety	215.895.2222
Environmental Health & Radiation Safety	215.895.5919
Concentra Urgent Care (Center City)	215.762.8525
Concentra Urgent Care (South Philadelphia)	215.467.5800

### UNIVERSITY CITY CAMPUS

Student Health Services	215.220.4700
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# OTHER INJURIES

The Office of Environmental Health & Radiation Safety (EHRS) is staffed with specialists in industrial hygiene, biological safety, environmental regulations, laboratory and chemical safety, hazardous waste management, and emergency preparedness. The primary responsibility of EHRS is to provide technical support and guidance to the Drexel University community through the development and implementation of occupational and environmental safety policies and procedures. EHRS provides technical assistance in areas, including:

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- Training on safety and health topics.
- Establishing waste collection and disposal, appropriate signage, chemical storage consultation, etc. for new laboratory startups.
- Decommissioning labs from the use of chemicals and biological agents during laboratory closeouts.
- Regulatory compliance assistance and laboratory safety audits; performing safety evaluations, risk assessments, and recommending appropriate engineering controls and personal protective equipment for exposure control.
- Chemical fume hood certifications, safety shower and eyewash certifications, biological safety cabinet certifications, chemical waste management.
- Exposure monitoring, respirator fit-testing and training.
- Technical assistance for responding to hazardous material spills and other safety and health emergencies; investigating and maintaining Incident Report Forms.

**You may contact the Office of Environmental Health & Radiation Safety at 215.895.5919 or by email at [ehrs@drexel.edu](mailto:ehrs@drexel.edu).**

**Please visit the EHRS website at [www.drexel.edu/facilities/healthsafety](http://www.drexel.edu/facilities/healthsafety) to access safety information and safety documents.**

**EHRS SERVICES** 