



Emergency Response Guide

Department of Environmental Health & Safety

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Towson University
Department of Environmental Health and Safety
(EHS)
Division of Administration and Finance

**EMERGENCY
RESPONSE
GUIDE**

EMERGENCY RESPONSE – GENERAL GUIDELINES

FIRE

RADIOACTIVE MATERIAL SPILL

CHEMICAL SPILL

BIOLOGICAL SPILL

PERSONAL INJURY

MERCURY SPILL

BOMB THREAT

EMERGENCY RESPONSE (General Guidelines)

MEDICAL EMERGENCY: Immediate Procedures

(Ambulance)

Individual(s) shall:

- Remain calm.
- Initiate first aid/lifesaving measures if required and trained.
- Call for Emergency Response:

FROM A CAMPUS PHONE: 911

**FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911**

FROM A PAY PHONE: 911

- Do not move injured person unless there is danger of further harm.
- Keep injured person warm.

MAJOR INCIDENT: Immediate Procedures

(ASBESTOS, OIL/CHEMICAL/ BIOLOGICAL OR RADIOACTIVE MATERIAL SPILLS)

Individual(s) shall:

- Attend to injured or contaminated persons and remove them from exposure (if possible).
- Alert people to evacuate the area. Close door(s) to affected area.
- Activate fire alarm (if necessary).
- Call for Emergency Response (from a safe location):

FROM A CAMPUS PHONE: TU POLICE DEPARTMENT (x4-2133)

**FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911**

FROM A PAY PHONE: 911

- Have person knowledgeable of incident remain available at the nearest safe location to provide information to EHS and emergency personnel.

MAJOR INCIDENT: Immediate Procedures

(FIRE OR RESCUE)

Individual(s) shall:

- Alert people to evacuate the area. Close door(s) to affected area.
- Activate fire alarm.
- Call for Emergency Response (from a safe location):

FROM A CAMPUS PHONE: 911

**FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911**

FROM A PAY PHONE: 911

- Have person knowledgeable of incident remain available at the nearest safe location to provide information to EHS and emergency personnel.

NON-EMERGENCIES or INFORMATION regarding:

ASBESTOS	INSURANCE CLAIMS
FIRE & LIFE SAFETY	LABORATORY SAFETY
BIOLOGICALS	RADIOACTIVE MATERIALS
LEAD PAINT	WASTE WATER
ERGONOMICS	HEARING CONSERVATION
GAS CYLINDERS	INDOOR AIR/WATER QUALITY
DRIVER IMPROVEMENT PROGRAM	HAZARDOUS WASTE
HAZARD COMMUNICATION	SPECIAL MEDICAL WASTE
BLOOD BORNE PATHOGENS	OFFICE SAFETY
NOISE	LADDER SAFETY
PERSONAL PROTECTIVE EQUIPMENT	FORKLIFT SAFETY
CDL DRUG & ALCOHOL PROGRAM	LOCKOUT/TAG OUT
MATERIAL SAFETY DATA SHEETS (MSDS)	RESPIRATORY PROTECTION

CONTACT ENVIRONMENTAL HEALTH & SAFETY: (410-296-7593) or by e-mail at safety@towson.edu or refer to EHS's website at:

<http://wwwnew.towson.edu/adminfinance/adminservices/ehs/index.asp>

In incidents where required, outside agencies (e.g., MDE, Baltimore County, EPA, MOSH, etc.) will be contacted by EHS.

FIRE

Notes and Precautions: A fire emergency exists whenever there is the presence of smoke or the odor of burning, when there is an uncontrolled fire or imminent fire hazard in the building or surrounding area, when there is a spontaneous or abnormal heating of any material, or when the building evacuation alarm is sounding.

FIRE EMERGENCY PROCEDURE

Individual(s) shall:

- **Activate the building fire alarm** if it is not already sounding.
- If you can do so safely, shut off all equipment, close doors and stabilize laboratory experiments (as necessary) on your way out.
- **Leave the building**-via the nearest exit or stairway.
 - Before opening a door, feel it with the back of your hand. If hot, do not open the door. If cool, brace yourself against the door and open it slightly.
 - If fire, heat or smoke is present and you cannot evacuate, close the door and stay in the room. **Dial 911** to report your location and situation.
 - If smoke is in the room or corridor, keep low to the floor where the air is fresher. If cloth is available, hold it to your mouth and nose to filter some of the smoke.
- **DO NOT USE ELEVATORS.**
- **DO NOT FIGHT FIRES OR ATTEMPT RESCUE.** Firefighting and rescue should only be performed by the Baltimore County Fire Department.
- **Call for Emergency Response** (from a safe location):
 - **FROM A CAMPUS PHONE: 911**
 - **FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS EMERGENCY BUTTON OR DIAL 911**
 - **FROM A PAY PHONE: 911**
- **Assemble well away from the building** (at least 100 feet away) in a designated exterior assembly area to avoid obstructing others exiting the building and to allow emergency responders clear access to the building.
- **Establish accountability** of all personnel in your area to determine if everyone has evacuated the building.
- **Have personnel knowledgeable of the incident remain** available to provide information to EHS and emergency personnel.

Occupants shall not re-enter the building until told it is safe to do so by Police/Fire/Maintenance Personnel.

ALL FIRES MUST BE REPORTED TO THE TU POLICE DEPARTMENT - EVEN IF YOU THINK THE FIRE IS OUT.

If you cannot get out of the building:

Individual(s) shall:

- Try to get to an area of refuge (i.e. an enclosed stairwell) or open the windows, if possible, to let heat out and fresh air in.
- Hang something out of the window to attract attention.
- **Dial 911** to report your location and situation.

RADIOACTIVE MATERIALS SPILL

Notes and Precautions: Spreading of radiation beyond the spill area can easily occur by the movement of personnel involved in the spill or clean-up effort. Prevent spread by confining movements of personnel until they have been monitored and found free of contamination. The clean-up of radioactive materials spill should only be done by knowledgeable and experienced personnel. Perform remedial actions without the assistance of safety personnel **only** on spills resulting from the handling of small quantities of radioactivity (less than a few micro-curies). Larger spills must be supervised by Environmental Health and Safety personnel.

MINOR RADIATION SPILL

A minor spill is defined as a small spill area ($\leq 9 \text{ ft}^2$) in a restricted area with limited activity and personal exposure and no internal or external hazard.

The user shall:

- Notify personnel in the immediate area of the spill.
- Confine the spill immediately by placing absorbent paper towels over the spill.
- Have all potentially contaminated personnel stay in one area until they have been monitored and shown to be free of contamination.
- Attempt clean-up only if you have received appropriate training and have appropriate personal protective equipment, such as gloves and safety goggles, available.
- Clean area using standard cleaning agents.
- Dispose of all cleaning materials in radioactive waste container.
- Monitor area and repeat procedure until contamination can no longer be removed.
- Monitor area, hands, and shoes for contamination with appropriate survey meter.

Once the spill has been cleaned up, notify EHS's RSO at 410-296-7593 to provide the isotope and approximate activity of the spilled material.

MAJOR RADIATION SPILL

A major spill is defined as a spill area in excess of $>9 \text{ ft}^2$ either in or outside of a restricted area with activity greater than specified in Table 1 with either personal exposure or presenting either an internal or external hazard. Any spill with exposure $>5 \text{ mr/hr}$ at 1 meter.

Isotope	Activity (mCi)
H-3	10
C-14	5
S-35	5
P-32	2
I-125	1
Other	1

The user shall:

- Notify personnel in the area of the spill.
- Confine or stop source of spill with absorbent paper towels.
- **Call for Emergency Response** (from a safe location):

FROM A CAMPUS PHONE: TU POLICE DEPARTMENT (x4-2133)
FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911
FROM A PAY PHONE: 911

- Evacuate area/keep hoods running/turn off oscillating fans.
- Secure/isolate area to prohibit access. Stretch red warning tape across all access routes.
- Have all potentially contaminated personnel stay in one area until they have been monitored and shown to be free of contamination.
- Have personnel knowledgeable of incident and laboratory remain available to provide information to EHS's RSO and emergency response personnel.
- Follow instructions of EHS's RSO.
- Do not re-enter area until EHS's RSO gives approval.

CHEMICAL SPILL

Notes and Precautions: The nature and quantity of hazardous substances used on campus require preplanning to respond safely to chemical spills. Spill kits with instructions, absorbents, protective equipment and disposal bags and labels should be procured by Departments and available to clean-up minor spills. A minor chemical spill is one that the staff is capable of handling safely without the assistance of EHS or emergency personnel. (typically ≤ 5 gallon) All other chemical spills are considered major.

All laboratories utilizing hazardous chemicals must have standard operating procedures that address chemical spill response actions. These SOPs must identify appropriate response equipment, procedures and limitations.

In any incident involving an asbestos containing material (ACM), immediately evacuate room/area, and contact EHS (410-296-7593).

MINOR SPILL

The user shall:

- Alert people in immediate area of spill.
- Don protective equipment including chemical splash goggles, appropriate gloves and lab coat.
- Avoid breathing vapors from spill.
- Confine spill to small area. Use appropriate spill kit to absorb the spilled material.
- Clean spill area with water (or an appropriate compatible material).
- Bag cleanup material and label it with the EHS Hazardous Waste label and submit a Hazardous Waste Removal Form to EHS.

MAJOR SPILL

The user shall:

- Attend to injured/contaminated persons-remove them from exposure (if possible).
- Alert people in the room/area to evacuate. Close doors to affected area(s).
- If spill is flammable, turn off ignition and heat sources, evacuate area, activate fire alarm.
- **Call for Emergency Response** (from a safe location):

**FROM A CAMPUS PHONE: TU POLICE DEPARTMENT (x4-2133)
FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911
FROM A PAY PHONE: 911**

- If spill or its vapor migrates outside of laboratory to other occupied spaces, activate fire alarm.
- Have person knowledgeable of incident/chemicals remain available to provide information to EHS and emergency personnel.

BIOLOGICAL SPILL

(Bloodborne Pathogens)

NOTES AND PRECAUTIONS: The University's Housekeeping Contractor has staff trained in Bloodborne Pathogens (BBP) spill clean up. The clean up of blood, sewage, or other human body fluids should only be done by knowledgeable personnel. A departmentally procured biological spill kit should be kept at each location where Special Medical Waste (SMW) is collected.

The user shall:

- If applicable, attend to injured or contaminated person(s) and remove them from exposure (if possible).
- Alert people in immediate area of spill. Close door to affected area(s).
- If spill migrates outside of the room/area to other occupied spaces, alert people in the affected areas to evacuate. Only activate fire alarm if entire building is affected.
- Don protective gloves and lab coat. If splashing is likely, also wear goggles and surgical mask.
- Use forceps to pick up broken glass and discard into SHARPS container.
- Cover spilled material with paper towels.
- Carefully pour diluted disinfectant (commercially prepared or a 1:10 solution of bleach and water) onto paper towels in sufficient quantity to ensure effective microbial inactivation and wipe from the outside of the spill inward.
- Allow a 20-minute contact period.
- Pick up paper towels and dispose in biohazard waste container.
- Re-wipe spill area with disinfectant diluted to working strength.
- Place all contaminated materials, including Personal Protective Equipment (PPE), contaminated clothing, etc. into biohazard waste container.
- Thoroughly wash hands and other skin contacted areas with soap and water.

If the spill is beyond the user's capability to clean-up:

The user shall:

- **Call for Emergency Response** (from a safe location):
FROM A CAMPUS PHONE: TU POLICE DEPARTMENT (x4-2133)
FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911
FROM A PAY PHONE: 911
- Have person knowledgeable of incident remain available to provide information to EHS and emergency personnel.

PERSONAL INJURY

EMERGENCY RESPONSE PROCEDURES

In all “serious cases” requiring emergency treatment call for Emergency Response (from a safe location):

FROM A CAMPUS PHONE: 911

**FROM AN EMERGENCY BLUE LIGHT/YELLOW PHONE: PRESS
EMERGENCY BUTTON OR DIAL 911**

FROM A PAY PHONE: 911

In all instances, report incident to your supervisor. If necessary, obtain medical attention.

Individual(s) shall:

Clothing on Fire [Stop, Drop, Roll]

- Roll around on floor to smother flame.
- Only drench with water if safety shower is **immediately available**.

Radiological Spill on Body

- Remove contaminated clothing and place in radioactive waste container.
- Rinse exposed area thoroughly with water.
- [Notify EHS's RSO \(410-296-7593\)](tel:410-296-7593).

X-Ray Burns

- Shut off machine – **DO NOT** alter machine configuration.
- [Notify EHS's RSO \(410-296-7593\)](tel:410-296-7593).

Hazardous Material Splashed in Eye

- Immediately rinse eye and inner surface of eyelid with water continuously for 15 minutes.
- Forcibly hold eye open to ensure effective wash behind eyelids.

Biological Spill on Body

- Remove contaminated clothing, put it in a plastic bag and seal it.
- Vigorously wash exposed area with soap and water for 1 minute.

Chemical Spill on Body

- Remove contaminated clothing at once. Avoid contact with eyes. Put in a plastic bag and seal it.
- Flood exposed area with running water from faucet or safety shower for at least 15 minutes.
- Make sure chemical has not accumulated in shoes, cuffs and folds of clothing, or under jewelry.
- **Obtain medical attention even for minor chemical burns.**

Minor Cuts & Punctures

- Vigorously wash injury with soap and water for several minutes.
- Obtain medical attention to check tetanus status.

Mercury Spill Procedures

NOTES AND PRECAUTIONS: Due to its hazardous nature, as well as the difficulty and time involved in clean-up, TU recommends the use of non-mercury containing equipment. Every effort shall be made to provide secondary containment for mercury containing equipment. When a spill occurs, the following procedures should be used during clean-up, based on the size of the spill. There are small commercial mercury spill kits located in Chemistry, Biology & Physics Departments for spill cleanup. Always handle mercury with the utmost care.

For Small Mercury Spills ($\leq 5\text{mL}$):

The user shall:

- Alert personnel in the immediate area of the spill.
- Secure/isolate area to prohibit access and prevent spread of contamination.
- Don disposable gloves (polyethylene or nitrile), goggles or full-face shield, lab coat or impervious apron or clothing and disposable shoe covers.
- Pools and globules of mercury should be pushed together using 3x5 in. card and collected by either scooping onto another thin piece of paper; or vacuumed up using either an Erlenmeyer flask connected to a vacuum pump or sink aspirator; or using one of the commercial spill kits.
- Collected mercury should be placed in a sealed polyethylene bottle or vial.
- After initial cleaning, and with overhead lights off, the spill area should be checked by shining a flashlight parallel to the floor to reveal any remaining mercury.
- Once all visible mercury has been collected, decontaminate the area utilizing Mercury Spill Powder (MSP), mercury absorbent paper or mercury sponges.
- Bag clean-up material, including MSP, sponges, absorbent paper, etc., and label it with the EHS Hazardous Waste label and submit a Hazardous Waste Removal Form to EHS.
- Wash hands and other skin contacted areas with soap and water.

For Large Mercury Spills ($> 5\text{mL}$) such as barometers or manometers, etc.:

The user shall:

- Attend to injured or contaminated persons and remove them from exposure (if possible).
- Alert people in the room/area to evacuate.
- Contain the spill as much as possible; isolate to prevent spread of contamination.
- Close doors to affected area(s). Keep uninvolved people away.
- Contact EHS (410-296-7593) to assist with the cleanup. EHS has a commercial mercury vacuum cleaner available for use.

BOMB THREAT

REFER TO THE TOWSON UNIVERSITY POLICE DEPARTMENT
WEB SITE AT:

<http://wwwnew.towson.edu/adminfinance/facilities/police/index.asp>