PACE UNIVERSITY

Work toward greatness.

EMERGENCY RESPONSE AND WASTE DISPOSAL GUIDE

DIAL 777 FROM ANY PACE PHONE IN THE EVENT OF AN EMERGENCY OR PRESS THE SECURITY BUTTON ON YOUR PACE PHONE.

Important Telephone Numbers

Security	New York City: B-Level, East Wing (Schimmel Ent.)	(212) 346 - 1800
	Pleasantville: Goldstein Fitness Center Lobby	(914) 773 - 3400
	Briarcliff: Dow Hall Lobby	(914) 923 - 2700
	Graduate Center-White Plains: Lobby	(914) 422 - 4166
	School of Law-White Plains: Preston Hall Lobby	(914) 422 - 4300
University Health Care Units	New York City: 41 Park Row, Suite 313	(212) 346 - 1600
	Pleasantville: Goldstein Fitness Center, Room 125	(914) 773 - 3760
Facilities Operations		(914) 923-2842
Environmental Health & Safety		(914) 923-2818

[Environmental Health and Safety]

Fire/ Smoke | Fire/ Smoke 2 | Biological Waste | Biological Spill | Hazardous Waste | Chemical Spill | Personal Injury | Personal Injury 2

FIRE / SMOKE

The most effective method of fighting fires is to prevent them from occurring. All Pace University students, faculty, and employees are responsible for contributing to the University's fire prevention efforts. Personnel should neither create nor tolerate conditions that could cause or fuel a fire.

In the event of a fire, REMEMBER: **RACE** and **PASS**

RACE (in the event of a fire)

R = RESCUE anyone in danger

A = ACTIVATE the nearest ALARM

C = CONTAIN the fire (close doors as you leave)

E = EXTINGUISH small manageable fires or EVACUATE

And

PASS (for fire extinguisher use)

P = PULL the pin

A = AIM the nozzle at the base of the fire

S = SQUEEZE the handle

S = SWEEP from side-to-side

Protect yourself by remembering these tips:

- If in a smoke condition "Stay low and go" crawl under smoke and head towards exit.
- Use stairwells to exit 2 floors below the fire—DO NOT use elevators.
- Never assume that a fire alarm is a false alarm.
- Never enter a room that is filled with smoke or if the door or door handle is warm to the touch.
- If your clothing is on fire, STOP, DROP and ROLL.

FIRE / SMOKE (CONTINUED)

A **CONTROLLABLE** fire is one that can be smothered with one fire extinguisher if properly trained and without evacuation. All other fires are considered to be **UNCONTROLLABLE**.

CLASSES OF FIRES	TYPES OF FIRES	PICTURE SYMBOL
A	Wood, paper, cloth, trash & other ordinary materials.	
B	Gasoline, oil, paint and other flammable liquids.	
C	May be used on fires involving live electrical equipment without danger to the operator.	
D	Combustible metals and combustible metal alloys.	
K	Cooking media (Vegetable or Animal Oils and Fats)	

Procedures for **CONTROLLABLE FIRES:**

- Pull the fire alarm for Fire Department response and alert people in immediate area of "FIRE."
- A small fire (e.g. in a container) can be smothered with a nonflammable cover. If the area of the fire is free of other fuels, it can be extinguished with an appropriate fire extinguisher (see table to right).
- Avoid smoke and/or fumes.
- Notify Security at **777** from a campus phone after evacuating.

Procedures for **UNCONTROLLABLE FIRES:**

- DO NOT stay to fight a large or rapidly growing fire.
- Alert people in the area to evacuate.
- Activate the nearest fire alarm.
- If it can be done safely, on your way out of the room, turn off equipme and move any flammable/explosive materials away from ignition sour
- Remember to close doors as you leave to confine the fire.
- Notify Security at **777** from a campus phone after evacuating.

BIOLOGICAL WASTE

Biological Waste Management Overview

Biological waste, also known as regulated medical waste (RMW), must be managed in a manner that protects all University personnel and visitors from laboratory-acquired infections, provides environmental protection to those outside the laboratory and beyond the Campus, and complies with Federal, New York State and New York City regulations.

Disposal Media	Appropriate Contents
RED BAGS	• Disposable gloves • Test tubes, Eppendorf tubes, culture dishes, tissue culture flasks, bench-top liner • Cultures/stocks of infectious agents, any items contaminated with blood, body fluids, or any other infectious materials or microbial cultures
SHARPS CONTAINERS	• **All used and unused:** needles, syringes, scalpel/razor blades, serological / pasteur pipettes (glass & plastic), blood vials, slides and cover slips, micro-pipette tips • **DO NOT** fill sharps containers beyond ¾ of their capacity • **DO NOT** use sharps containers for clean, uncontaminated glassware, scrap paper or any other non-RMW materials

- RMW containing BL-2 microorganisms should be autoclaved or otherwise decontaminated by laboratory staff prior to disposal.
- Call EH&S if you need additional information about disinfection methods. If you use an autoclave, be sure that it is functioning properly.
- Each red bag and sharps container MUST be identified with the room number and name of the Principal Investigator; this information is most easily recorded on a piece of tape affixed to the bag or container. Red bags must be sealed with a "twist tie" or appropriate tape prior to removal.
- RMW mixed with chemical waste must be handled using special procedures. Please contact EH&S for further information.

BIOLOGICAL SPILL

Biological Spill Management Overview

Biological spills outside of biological safety cabinets (tissue culture hoods) can generate aerosols that can be dispersed throughout the laboratory.

Proper Personal Protective Equipment (PPE) required to decontaminate spills involving:

BL-1 agents: Safety glasses, disposable gloves, and lab coats.

BL-2 agents: Disposable long sleeve gown, booties, safety glasses, dust mask or face shield, and gloves.

Spills Involving a Microorganism Requiring BL-1 or BL-2 Containment

Moderate risk agents associated with diseases of varying severity, such as Hepatitis B virus, salmonellae.

Includes human blood and body fluids.

- Alert people in immediate area of spill.
- Put on protective equipment and double pairs of gloves.
- Cover spill with paper towels or other absorbent materials.
- Carefully pour freshly prepared 1 in 10 dilution of household bleach around the edges of the spill and then into the spill.
- Allow a 20-minute contact period.
- Wipe down any contaminated equipment or furniture with disinfectant. Use forceps, tongs, or broom to remove broken glass and other items.
- Discard waste in sharps container or red bag.
- Use paper towels to wipe up the spill, working from the edges into the center.
- Clean spill area with fresh towels soaked in disinfectant.
- Place towels and disposable PPE into a plastic bag and decontaminate in an autoclave.

HAZARDOUS WASTE

Hazardous Waste Management Overview

In the laboratory, chemicals with no intended use or re-use are managed as Hazardous Waste to ensure the protection of faculty and staff, students, the public, and the environment. Hazardous Waste includes, but is not limited to: spent reagents, unwanted virgin materials, reaction products and spill clean-up materials. Contact EH&S for guidance if you are unsure how to handle any material or need assistance in making a waste determination.

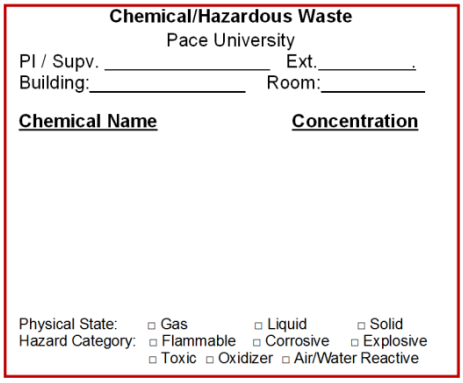
Note the following items to properly manage hazardous waste produced in lab operations or activities:

Collection — All Hazardous Wastes (any material that is flammable, reactive, corrosive or toxic) must be collected. Pace University labs are not permitted to treat, drain dispose, or evaporate their hazardous waste. Contact EH&S if you need assistance in making a waste determination.

Container — Choose the correct container for your waste, something both chemically compatible with the material and appropriately sized. Do not put a small amount of waste in a large container unless you know you will be collecting a large amount.

Label — Every container holding hazardous waste MUST be labeled at the time the waste is first added. The label must have the words "hazards waste", list of components (full proper names only. No abbreviations or formulas) and hazards of the material (Ignitable, Corrosive, Reactive, Toxic, etc.)

Labels are available from your Lab Director or a template can be found on the EH&S website.


Chemical/Hazardous Waste
Pace University
PI / Supv. _____ Ext._____.
Building:_____ Room:_____
Chemical Name Concentration
Physical State: □ Gas □ Liquid □ Solid
Hazard Category: □ Flammable □ Corrosive □ Explosive
□ Toxic □ Oxidizer □ Air/Water Reactive

Closure — Wastes in storage in your work area must meet the following requirements:

Unless actively adding materials, waste containers must be kept closed at all times.
HPLC machines need tightly fitting specialty caps to maintain a seal and accommodate any tubing.
If using safety funnels, ensure they are latched closed after adding materials.

Storage — Wastes in storage in your work area must meet the following requirements:
- Secondary Containment for all liquid wastes.
- Segregation from incompatible wastes

Chemical Waste Segregation — Chemicals needed to be stored according to their hazard class, both in lab storage and in the waste area. Proper segregation helps to prevent the mixing of incompatible materials in storage. The general classes for storage include: Inorganic Acids, Organic Acids, Mercury & Metals, Peroxide Formers, Water Reactive Materials, Alkaline Bases, Flammable Bases, Flammable Liquids, Oil, Halogenated Solvents, and Oxidizers. More information on chemical storage and incompatible materials can be found the Guidelines, Manuals, and Policies webpage.

CHEMICAL SPILL

Chemical spills are either **manageable** or **unmanageable**. A manageable spill is one that will not spread rapidly, does not pose an immediate risk to health, and can be handled safely by trained lab personnel. Labs must maintain a spill kit/spill supplies suitable for use on a manageable spill. All other chemical spills are considered unmanageable.

Manageable Chemical Spill Procedures

- **Alert** people in the area and post a warning sign, if possible. Quickly and safely determine the identity and quantity of spilled material.
- **Consult** the Safety Data Sheet for hazardous properties, incompatibilities, and confirm proper spill clean-up procedures & neutralizer.
- **Wear** appropriate personal protective equipment (safety glasses, gloves, lab coat).
- **Confine** the spill to a small area. Create a dike with absorbent/neutralizer and then mix with spilled material (See chart below for spill cleanup supplies). Ventilate area if necessary.

Type of Chemical	**Neutralizing Agent/Clean-Up Supplies**
Acid (not HF)	Sodium Bicarbonate
Bases	Citric Acid
Organic Solvents	Absorbent pads, charcoal if available
Mercury	Amalgam sponges
Metals or metallic hydrides (e.g., sodium)	Sand, Class D fire extinguishers
Other chemicals	Absorb with vermiculite, dry sand, diatomaceous earth
Note: Pre-packaged spill kits can be ordered through various laboratory supply vendors.	

- **Collect** absorbed, neutralized residue in container and label a Hazardous Waste.
- **Clean** spill area repeatedly with detergent and water.
- **Notify** your Principal Investigator or Lab Supervisor, and contact EH&S for guidance on proper disposal of contaminated spill cleanup materials.

Unmanageable Chemical Spill Procedures

DO NOT attempt to clean up unmanageable spills.

- If the spilled material is flammable, turn off all ignition and heat sources if it can be done safely.
- Alert people in the area and tell them to evacuate.
- Close the doors to the affected area and post a warning sign.
- **From a safe location,** Call Security at X777 and EH&S (914)923-2818.
- Have a person knowledgeable of the incident and laboratory available when EH&S and Security arrives. Be prepared to offer information on the incident, including: chemical name, volume, location, and other details.

PERSONAL INJURY

While all employees should endeavor to work as safely as possible, personal injury could occur. It is imperative that all employees be prepared to respond to such an occurrence to mitigate the adverse effects of an accident in the workplace.

From and campus phone, security can be reached by dialing 777. Dialing 911 from a non-campus phone will reach the Westchester County or New York City emergency services dispatcher, which is less desirable because calling Security will provide faster fire, ambulance and police response. Outside responders will not be familiar with the names, locations or fastest routes to particular buildings. When you call Security, they will send immediate assistance, call outside emergency responders for you and direct them to the scene, and provide escorts as necessary.

	Westchester Campuses	**NYC Campus**
Business Hours	University Health Care Unit Goldstein Fitness Center, Room 125 861 Bedford Road, Pleasantville Telephone: (914)773-3760	University Health Care Unit 41 park Row, Suite 313 New York, NY 10038 Telephone: (212)346-1600
After Hours	Phelps Memorial Hospital ER 701 Broadway Sleepy Hollow NY	NY Downtown Hospital Emergency Services 170 Williams St New York, NY

When Calling About Any Emergency:

- Give your name (confidentiality will be respected).
- Give your extension.
- Give the building name and room number or other specific location.
- Describe the condition clearly and accurately. (Injuries sustained, chemical (w/ Spelling) & volume, etc.)
- Don't hang up! You may be an important link in an emergency. Other information may be needed and special instructions may be provided. Let the person you are talking to end the conversation.

Prepare Before an Emergency:

Supervisors of laboratories using hazardous materials will assure appropriate emergency preparedness measures are in place. Such measures are detailed in Pace University's Chemical Hygiene Plan and include:

- Emergency eyewashes (Labs test weekly)
- Emergency showers (B&G test annually)
- Appropriate fire extinguishers & spill kits
- Access to Safety Data Sheets and emergency contact information
- Evacuation routes

PERSONAL INJURY (CONTINUED)

Procedures to follow if the incident involves:

Chemical Splash in the Eye:

· Immediately flush the eyes with water for 15 minutes.
· Hold the eyelids away from the eyeball. Move the eye up, down and sideways to wash thoroughly behind the eyelids. Obtain a Safety Data Sheet (SDS).
· Obtain medical attention (see table below).
· Report the incident to your supervisor and Security/EH&S.

Chemical Spill on Body:

· Do not attempt to wipe or brush hazardous chemicals from clothing or skin.
· Flush the exposed area with tepid water from the emergency shower, faucet or deluge hose for 15 minutes.
· Remove contaminated clothing at once. To prevent eye and facial contamination, cut garments away rather than pulling them over the head.
· Remove shoes to ensure that chemical and contaminated water has not accumulated.
· Obtain material safety data sheet (MSDS) for hazard information.
· Obtain medical attention (see table below).
· Report the incident to your supervisor and Security/EH&S.

Report all incidents to your supervisor and notify Security & EH&S.

Security X777 - EH&S X2-2818

Clothing on Fire:

· If your clothing is on fire, do not run!, STOP, DROP and ROLL.
· Use an overhead shower, deluge hose, extinguisher or blanket to extinguish fire
· Obtain medical attention (see table below).
· Report the incident to your supervisor and Security/EH&S.

Biological Spill on Body:

· Remove contaminated clothing.
· Vigorously wash exposed area with soap and water for 5 minutes.
· Obtain medical attention (see table below).
· Report the incident to supervisor and Security/EH&S.

Accidental Inhalation or Ingestion of Hazardous Chemicals:

· Immediately notify Security X777 and EH&S (914)923-2818.
· Try to determine the identity of the inhaled or ingested material. Obtain a Safety Data Sheet and/or call a Poison Control Center (212)340-4494 or (914)330-3030.
· If the employee is conscious and there is no further threat to health, move the employee to fresh air.
· If an employee is found unconscious in an area of the laboratory where chemical vapors may pose an immediate threat, do not enter the area. Immediately call Security for assistance.
· Monitor the employee from a safe distance.
· Obtain medical attention (see previous page)