



EMERGENCY PROCEDURE IN THE LABORATORY

Medical Emergency

Major	Minor
Remain calm	Initiate first aid
Initiate lifesaving measures if required	Report incident
Do not move person unless there is danger of further harm	
Keep person warm	
Call for emergency response	

Fire Emergency

Major	Minor
Alert people in area to evacuate	Alert people in laboratory and activate alarm
Activate nearest fire alarm or call Security number	Smother fire or use correct fire extinguisher
Close doors to confine fire	Aim extinguisher at base of fire
Evacuate to safe area or exit building through stairwell	Always maintain accessible exit
Do not use lift	Avoid smoke or fumes
	Wear protective equipment (fire masks, etc.)
	Call the fire department when the fire is large
	Report accident

Chemical Spill Emergency

Major	Minor
Attend to injured or contaminated persons and remove them from exposure	Alert people in immediate area of spill
Alert people in the laboratory to evacuate	Wear protective equipment, including safety goggles, gloves, and long-sleeve laboratory coat
If spilled material is flammable, turn off ignition and heat sources	Avoid breathing vapors from spill
Call for assistance	Confine spill to small area
Close doors to affected area	Use appropriate kit to neutralize and absorb inorganic acids and bases. Collect residue, place in container, and dispose as chemical waste
	Isolate and warn against leakage from the contaminated area
	Report accident

Biological Spill Emergency

Major	Minor
Attend to injured or contaminated persons and remove them from exposure	Wear disposable gloves
Alert people in immediate area of spill	Soak paper towels in disinfectant and place over spill area
Close doors to affected area	Place towels in plastic bag for disposal
Put on protective equipment	Clean spill area with fresh towels soaked in disinfectant
Cover spill with paper towels or other absorbent materials	Properly isolate and warn about the contaminated area or laboratory
Use paper towels to wipe up the spill, working from the edges into the center	Report accident
Clean spill area with fresh towels soaked in disinfectant	

Radioactive Spill Emergency

Major

Attend to injured or contaminated persons and remove him or her from exposure
Have potentially contaminated personnel stay in one area until they have been monitored and shown to be free of contamination
Close doors and prevent entrance into affected area

Minor

Alert people in immediate area of spill
Wear protective equipment, including safety goggles, disposable gloves, shoe covers, and long-sleeve lab coat
Place absorbent paper towels over liquid spill. Place towels dampened with water over spills of solid materials
Using forceps, place towels in plastic bag. Dispose in radioactive waste box
Conduct tests in the area of the spill to ensure that the area is not contaminated after the cleaning measures
Report accident

Clothing on Fire

Roll person around on floor to smother flame, or drench with water if safety shower is immediately available
Obtain medical attention, if necessary
Report incident to supervisor

Radioactive Spill on Body

Remove contaminated clothing
Rinse exposed area thoroughly with water
Obtain medical attention, if necessary
Report incident to supervisor

Chemical Spill on Body

Flood exposed area with running water from faucet or safety shower for at least 5 minutes
Remove contaminated clothing at once
Make sure chemical has not accumulated in shoes
Obtain medical attention, if necessary
Report incident to supervisor

Biological Spill on Body

Remove contaminated clothing
Vigorously wash exposed area with soap and water for one minute
Obtain medical attention, if necessary
Report incident to supervisor

Hazardous Material Splashed in Eye

Immediately rinse eyeball and inner surface of eyelid with water continuously for 15 minutes
Forcibly hold eye open to ensure effective wash behind eyelids
Obtain medical attention
Report incident to supervisor

Minor Cuts and Puncture Wounds

Vigorously wash injury with soap and water for several minutes
Obtain medical attention
Report incident to supervisor

Intensified Treatment of Burns and Frostbite

Burns:

Rinse: Rinse with running water (15-20°C) for 15-30 minutes until the burning feeling reduces

Soak: Continue soaking in 15-20°C water for 15 minutes to relieve pain and improve your health

Undressing: Take off the clothes carefully after completely soaking to avoid the burn blisters bursting; if necessary, use scissors to cut off and hold the part of the clothes; then you can continue soaking in 15-20°C water for 10-15min

Wrap: Wrap the wound with clean gauze and do not use any medicine at your own choice

Transport: Transport to a hospital for further treatment, except for very minor burns

Frostbite:

Get out of cold temperatures quickly and keep the affected area warm as soon as possible: place the frostbitten area in warm water at 40 °C for 20-30 minutes (do not exceed this temperature) or wrap it in a blanket or apply a similar method

If you have frostbite on your body, you should not exercise or try to keep warm with snow or ice water

In the case of severe frostbite, seek medical treatment as soon as possible and keep the frostbitten area warm at the same time