EMERGENCY RESPONSE GUIDE

Research and Graduate Studies
Manager Laboratory Safety
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IMMEDIATE EMERGENCY PROCEDURES

MEDICAL EMERGENCY: Immediate Procedure

- Remain calm.
- Provide first aid measures if required.
- Call for **Emergency Response:**

911

- Do not hang up phone until operator says it is OK to do so.
- Do not move injured person unless there is a danger of further harm.
- Keep injured person warm.

FIRE or MAJOR CHEMICAL SPILL

- Attend to injured or contaminated persons and remove from exposure.
- Alert people to evacuate the area. Pull fire alarm.
- Call for **Emergency Response:**

911

- Close doors to affected area.
- Have person knowledgeable of incident and laboratory assist emergency personnel

FIRE

CAUTION: Some small fires can be controlled with a fire extinguisher. Fire extinguishers should only be used by trained personnel. Never enter a room that is filled with smoke. Never enter a room if the door is warm to the touch. Never enter a room containing a fire without a backup person and a clear exit. Never endanger yourself to put out a fire.

Small Fire

- Alert all people in immediate are and activate alarm.
- If trained, use appropriate fire extinguisher.
- **P**ull pin
- **A**im at base of fire
- **S**queeze trigger
- **S**weep side to side
- Always keep back to safe way out.
- Avoid smoke and fumes.

Major Fire

- Do not attempt to extinguish.
- Activate nearest fire alarm and call **911.**
- Close doors to confine fire.
- Evacuate to safe area, exit building via stairwell; **DO NOT USE ELEVATOR.**
- Have a person knowledgeable of incident and laboratory available to assist emergency personnel.

RADIATION SPILL

CAUTION: Spreading of radioactive contamination beyond the spill area can easily occur by the movement of personnel involved in the spill or cleanup effort. Prevent spread by confining movement of personnel until they have been monitored and found free of contamination. A minor radiation spill is one that the laboratory staff is capable of handling safely without assistance of Radiation Safety officer, typically less that 1 mCi. All other radiation spills are considered major.

Minor Radiation Spill (<1 mCi)

- Alert people in immediate area of spill.
- Don protective equipment, such as safety glassed, disposable gloves, shoe covers, and long-sleeve lab coat.
- Confine movement of potentially contaminated personnel until they are monitored and found free of contamination.
- Place absorbent paper towels over liquid spill. Place towels dampened with water over spills of solid materials.
- Pick towels with forceps and place in plastic bag. Dispose in radiation waste container.
- Monitor area, hands and shoes for contamination. Repeat cleanup until less than 200 dpm/100cm^{2} is detected.
- Notify Radiation Safety Officer, Tom Bialke, 2-4996

Major Radiation Spill (>1mCi)

- Alert people in the laboratory to evacuate.
- Call Radiation Protection Officer, Tom Bialke, 2-4996, after hours call Cell Phone 330-671-6352
- Place absorbent paper towels over liquid spill. Place towels dampened with water over spills of solid materials.
- Confine movement of potentially contaminated personnel until they are monitored and found free of contamination.
- Remove and store contaminated clothing for evaluation by Radiation Protection Officer.
- Close and lock doors to prevent entrance into contaminated area. Placard door with “Do Not Enter. Spill Area”

PERSONAL INJURY

Clothing on Fire

- Roll person around on floor to smother flame, using a fire blanket, if available, **OR** drench with water if safety shower is immediately available.
- Obtain medical attention.
- 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 and Radiation Safety Officer.

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.
- Remove shoes.
- Obtain medical attention, in necessary.
- Report incident to supervisor.

Biological Spill on Body

- Remove contaminated clothing.
- Vigorously wash exposed area with soap and water for 1 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.

CHEMICAL SPILL

CAUTION: Pre-planning is required to safety respond to chemical spills. Read and understand MSS for all the chemicals you will be using. Spill kits with instructions, absorbents, reactants, and protective equipment must be available in laboratories to clean up incidental spills. Incidental spills are those that the laboratory staff is capable of handling without the assistance of the local spill response team.

Incidental Spills (<4 liters, low toxicity. Little of no fire or life hazard)

- Alert people in immediate area of spill.
- Wear safety goggles, nitrile gloves, and long-sleeve lab coat.
- Avoid breathing vapors from spill.
- Confine spill to small area by placing booms around spill.
- Call DCHO to coordinate spill clean up.
- Inorganic acids and bases: Neutralize, absorb, collect residue, and place in container. Dispose as chemical waste.
- Other Chemicals. Use appropriate materials from kit, place in container and dispose as chemical waste.
- Clean spill area with water.

Major Chemical Spill (> 4 Liters, high toxicity or poses fire or life hazard)

- Attend to injured or contaminated persons and remove from exposure.
- Alert people in the laboratory to evacuate.
- If flammable, turn off ignition and heat sources.
- Call *911* all hours.
- Call Laboratory owner.

BIOLOGICAL SPILL

CAUTION: Biological spills outside the biological safety cabinets may generate aerosolized that can be dispersed in the air throughout the laboratory. Such spills are very serious if they involve agents that require Biosafety Level (BL) 3 containment. To reduce the risk of inhalation exposure in such an incident, occupants should hold their breath and immediately leave the laboratory. The laboratory should not be reentered to decontaminate and clean up the spill for at least 30 minutes. During this time the aerosol will be removed from the laboratory by the exhaust air ventilation system. Appropriate protective equipment is particularly important in decontaminating spills involving microorganisms that require either BL2 or BL3 containment. This equipment includes lab coat with long sleeves, back-fastening gown or jumpsuit, disposable gloves, disposable shoe covers, and safety goggles and mask or full face shield. Use of this equipment will prevent contact with contaminated surfaces and protect the eyes and mucous membranes from exposure to splattered materials.

Spill Involving A Microorganism Requiring BL 1 Containment

- Wear disposable gloves.
- Soak paper towels in disinfectant and place over spill area.
- Place towels in plastic bag for disposal.
- Clean up spill area with fresh towels soaked in disinfectant.

Spill Involving A Microorganism Requiring BL 2 Containment

- Alert people in immediate area of spill.
- Put on protective equipment.
- Cover spill with paper towels or other absorbent materials.
- Carefully pour freshly prepared 1:10 dilution of household bleach or other appropriate disinfectant onto the spill, beginning at the edges and avoiding splashing.
- Allow a 20-minute contact period.
- 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 in red plastic bag and dispose of with biohazardous waste.

EMERGENCY RESPONSE GUIDE

FOR ROOM _____

IN _____HALL

IMPORTANT NAMES AND PHONE NUMBERS:

911 WILL CONNECT TO UNIVERSITY EMERGENCY OPERATOR

Principle Investigator:

Department Safety Officer:

Department Chair:

University Radiation Protection Officer:

Tom Bialke	**Office:**	**2-4996**
	Cell:	**330-671-6352**

University Director of Safety and Health:

Jim Dunlap	**Office:**	**2333**

University Chemical Hygiene Officer:

Tom Bialke	**Office:**	**4996**

Other Important Names and Phone Numbers: