

Laboratory Safety and Chemical Hygiene Plan

Instructions: This form is to be used as a template. Please read and complete **all applicable** sections. This document will assist your laboratory as well as EH&S in ensuring all personnel are aware of and have been trained appropriately on hazards, safety measures, and general laboratory procedures and expectations. There may be sections that do not apply to your laboratory, when this is the case, **please do not modify the template** just put “n/a” or “does not apply” in the section. **Please do not leave it blank.**

1.0 Laboratory Administrative Information

Principal Investigator: Signature:	Date Plan Created:	Lab Location (List all rooms/ bays): List rooms used for storage of chemical stocks: Department:
Designated Laboratory Chemical Hygiene Officer: Phone: Email: Signature:	Contact Info for PI: Phone: Email:	Date of EH&S Review/Approval:
Building Administrator:	Building Admin Contact Info – Phone: Email:	UAB Police: 205-934-3535 UAB EH&S: 205-934-2487

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2.0 Laboratory Personnel and Training

2.1 Personnel List (Copy and paste from lab demographics, update annually)

2.2 Initial Orientation and Training Courses (Put "N.A." if not applicable)

General Laboratory Safety Name: _____	Date Completed:	Method:
Emergency Evacuation Plan		☐ In-Person ☐ Online
Medical Emergency Procedures		☐ In-Person ☐ Online
Non-Medical Emergency Procedures		☐ In-Person ☐ Online
Loss of Utilities, gas leaks and flooding		☐ In-Person ☐ Online
Laboratory Security		☐ In-Person ☐ Online
Workplace Violence		☐ Online
Fire Extinguishers Fire Alarm Pull Stations – Location(s) & Proper Use		☐ In-Person ☐ Online
Physical and/or Electrical Laboratory Hazards		☐ In-Person
Spill Kit - Location & Proper Use		☐ In-Person
Biosafety		
Bloodborne Pathogen Exposure Control Plan		☐ In-Person
Autoclave- Location & Proper Use		☐ In-Person
Disinfectant Solutions – Selection & Proper Use		☐ In-Person
Broken Glass Discard Box – Proper Use & Disposal		☐ In-Person
UAB Campus Learning System		Required For
Chemical Safety Training (once)		Chemical use
Hazardous Waste Handling and Packing (annually)		Hazardous waste
Medical Waste Management for Labs (every 3 years)		Medical waste
Basic Biosafety Training (once)		BSL-1/2 work
Biosafety Cabinets and Fume Hoods (once)		Fume hoods/BSCs
NIH Guidelines for Recombinant DNA and Synthetic Nucleic Acid Molecules (once)		rDNA
Hazard Communication (once)		All labs
Bloodborne Pathogens (annually)		Bloodborne pathogens
Using PPE in the Laboratory (once)		All labs
Managing Compressed Gas Cylinders (once)		Compressed gases
Shipping with Dry Ice (every 2 years)		Dry ice
Additional Training as Required: _____		Cat A, Cat B, etc.

3.0 Hazard Inventory & Risk Assessment

3.1 Chemical Inventory Location

[Environmental Health and Safety Assistant \(online\)](#)

3.2 Biological Agents (if applicable)

Reference Agent Specific Data and Safety Plans (appended to lab safety binder, required for Risk Group 2 or higher human pathogens, contact biosafety@uab.edu for questions)

3.3 Select Agents/Toxins

Reference [Federal Select Agent Lists](#) and UAB Toxin SOP (appended to lab safety binder, contact biosafety@uab.edu for details).

3.4 Highly Hazardous Equipment

Equipment (High pressure reactors, irradiators, class 3B or 4 lasers, distillation systems, etc.)	Hazard	Location

3.5 Table of Highly Hazardous Tasks

Task(work with HF, pyrophorics chemicals, RG3 Biologicals, Class 3B/4 lasers)	Hazard	Required PPE	Engineering Controls

4.0 Standard Operating Procedures

Please list the SOPs available in the lab for guidance on safe conduct of work or handling of hazardous agents in this space.

5.0 PPE and Engineering Controls

5.1 General PPE Check all PPE that applies to the laboratory for benchwork

- ☐ Lab coat
- ☐ Safety glasses
- ☐ Gloves (type: [_____])
- ☐ Closed-toe shoes
- ☐ Long pants
- ☐ Face shield
- ☐ Other (e.g. Cryo gloves for work with LN2 or dry ice: [_____])

5.2 Engineering Controls Available in the Lab (Checkboxes)

- ☐ Fume hood
- ☐ Biosafety cabinet
- ☐ Glovebox
- ☐ Flammable storage cabinet
- ☐ Acid storage cabinet
- ☐ Other (Machine guarding): [_____]

6.0 Laboratory Policies and Procedures

Housekeeping Guidelines (decluttering and decontamination routines)

Location of SDS Storage

- ☐ [Chemwatch](https://www.uab.edu/ehs/sds) (<https://www.uab.edu/ehs/sds>)
 - ☐ Hard copies of SDS are stored at:
-

Lab Policies for working alone or after hours:

Procedures/Experiments requiring approval from PI or EH&S(e.g., making novel genetic modifications to human pathogens)

7. Emergency Response Plan

7.1 Medical Emergencies

UAB Police: 205-934-3535 (911 from campus phone)

7.2 Chemical/Biological Spills

***Note: Spills or releases that laboratory personnel can safely contain and clean using available training, PPE, and spill response materials shall be managed as non-emergencies, while any spill or release that poses a significant risk to health, safety, property, or the environment, shall be treated as an emergency and reported immediately. (see section 7.1 for reporting)**

Small Chemical Spill (<500 ml)

1. Alert ALL personnel in the area and restrict access.
2. Secure the area. Do not attempt to clean unless you are properly trained, equipped and understand the characteristics of the spilled material.
3. Locate the spill kit.
4. Don the appropriate PPE (consult SDS if necessary).
 - a. Lab coat
 - b. Chemical resistant gloves
 - c. Safety goggles or face shield
5. Spread absorbent material from the outside to the center of the spill until covered.
6. Collect the absorbent material in a bag. Clean area with compatible disinfectant and disposable

spill pads/towels. Add spill pads to bag and seal. Place bag in a box and label with a hazardous waste label.

7. Dispose of as hazardous waste.
8. Report spill to EH&S via their non-emergency number: 205-934-2487

Large Chemical Spill (>500 ml)

*** Exceeds the laboratory's response capabilities or comfort level.**

1. Alert ALL personnel in the area.
2. Secure the area.
3. Evacuate the area, if necessary.
4. Call UAB EH&S at 205-917-4766.
5. Provide as much information as possible (location, chemical name, volume, your name, and phone number).
6. For a chemical exposure, locate the nearest emergency eyewash/safety shower, remove contaminated clothing and flush for 15 minutes.
7. Any spill or release that poses a significant risk to health, safety, property, or the environment, UAB Police: 205-934-3535 (911 from campus phone)

Biological Spill Response – Outside Biosafety Cabinet (Small Spill <10 mL)

1. Alert personnel in the area.
2. Check for contamination and remove/decontaminate affected clothing and PPE.
3. Evacuate and secure the room; close the door and allow ~20 minutes for air exchange to clear aerosols. Notify the PI.
4. Don clean PPE: lab coat/gown, gloves, mask, and eye protection.
5. Contain the spill with absorbent material (e.g., paper towels).
6. Apply disinfectant from the perimeter inward and allow ≥20 minutes contact time.
7. Clean up materials:
 - a. Dispose of absorbents as biohazard waste
 - b. Handle sharps with tongs and place them in sharps container
8. Decontaminate the area with disinfectant after cleanup.
9. Wash hands thoroughly.

Note: For large spills, follow these steps and notify EH&S (205) 934-2487 once the room is secured (step 3).

7.3 Evacuation Routes & Assembly Area

7.4 Severe Weather Shelter Location

7.5 Emergency Equipment Locations

Equipment	General Location
Eyewash	
Safety shower	
Fire extinguisher	
Spill kit	
First aid kit	

8.0 Emergency Shutdown Procedures

8.1 Lab Shutdown Procedures and Considerations During an Emergency

☐ Stop experiments
☐ Shut off gases
☐ Secure freezers
☐ Ensure personnel exit
☐ Head count
☐ Secure doors
☐ Securing or removing personnel items
☐ Securing laboratory materials

8.2 Loss of Utilities Shutdown List – (For planned events such as planned maintenance or if power goes out unexpectedly but equipment should not power on/reboot automatically. In emergencies such as fire or chemical spill, evacuate immediately).

Equipment	Location
Example: HPLC	Example: Kaul 447

- ☐ Lab Safety Chemical Hygiene Plan ☐ Biosafety Plan ☐ Exposure Control Plan
- ☐ Lentivirus Exposure Response Plan ☐ Exempt Toxin Checklist ☐ BSL2+ Biosafety Manual
- ☐ Agent Specific Safety and Data Plan: (list agents) _____
-
- ☐ Other: _____

By signing below, I verify that I have reviewed and understand all of the information in the aforementioned plans.

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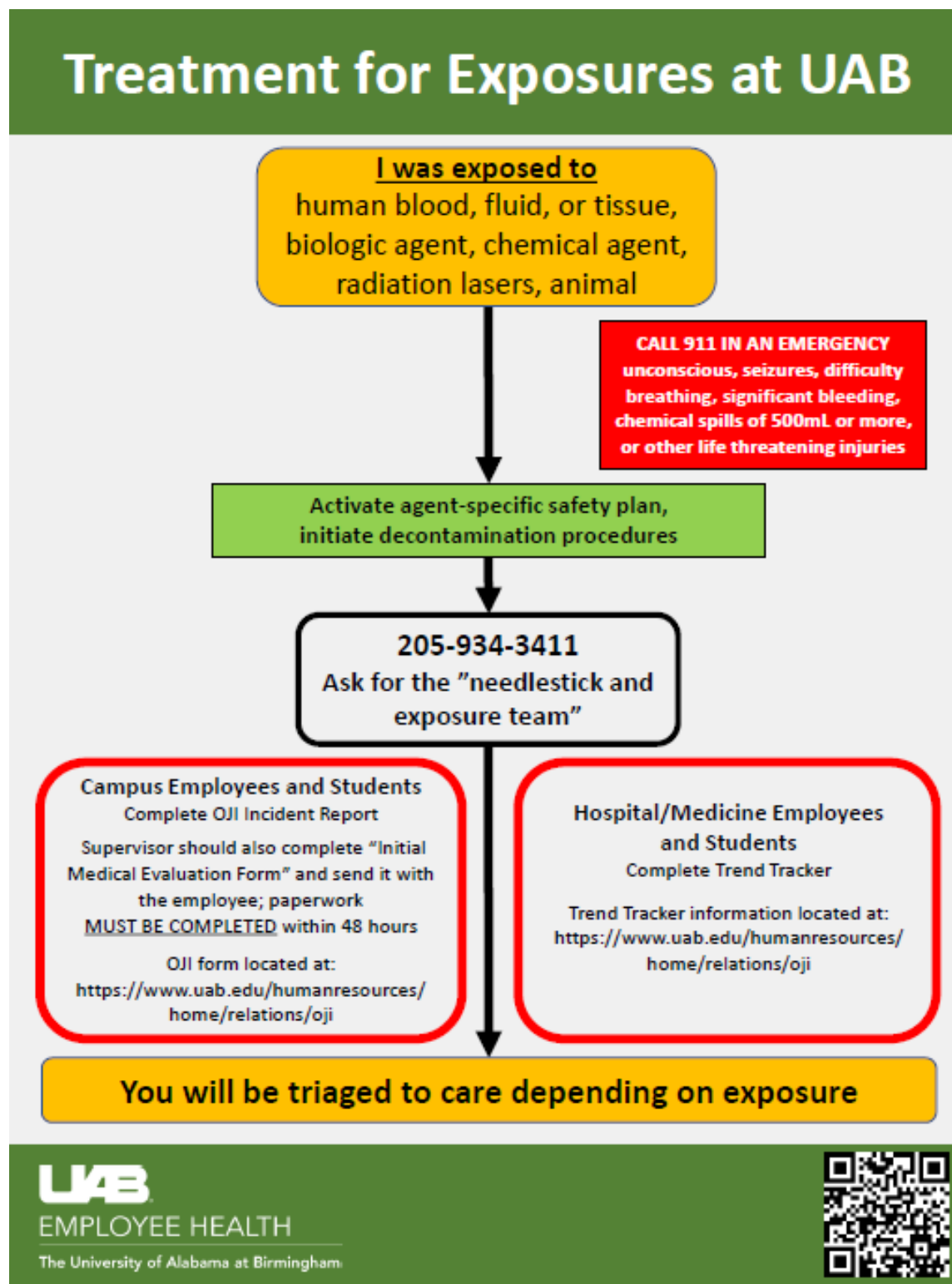
9.0 Emergency Contact Sheet

(Print and post in laboratory)

Name/Office	Contact
UAB Police and Emergency Response	205-934-3535 (911 from campus phone)
Needle Stick and Exposure Team	205-934-3411
UAB Environmental Health & Safety	205-934-2487
UAB EH&S after hours Non-Emergency	205-917-4766
Workplace Clinic	205-933-5300
UAB Support Facility	205-934-3797
Poison Control	(800) 222-1222
Additional Emergency Contacts	
Building Administrator	
Principal Investigator	
Lab Safety Delegate/Manager/CHO	
Lab Members	

Exposure Treatment

(Print and post in laboratory).



On-the-job Injury at UAB

