EMERGENCY RESPONSE POLICY & PROCEDURES

Environmental
Health & Safety

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Microbiology Emergency Preparedness Committee Members (2019):

Alistair Ramsay	Olga Nichols
Ashok Aiyar	Jasmine Richard
Jonna Ellis	Joy Sturtevant
Timothy Foster	Robert Wilson
Doug Johnston	Arnold Zea

GENERAL INFORMATION

Emergency Preparedness is not confined to hurricane situations; it also pertains to fire safety, chemical safety and biohazard safety. This policy is to inform the faculty, staff and students of the Department of Microbiology, Immunology and Parasitology (MIP) policy and procedures. It is intended to be a reference tool in case of emergencies.

- Please read and become familiar with the institutional policy regarding Hurricane Response: CM-51 (http://www.lsuhsc.edu/administration/cm/cm-51.pdf) *Attached as an appendix to the policy.*

- The Emergency Alert radio stations for the New Orleans area are:
  - **AM 870/WWL** and **FM 101.9/WLMG**

- The local TV stations are:
  - **WWL TV**- ch 4 **WDSU TV**- ch 6 **WVUE TV**- ch 8 **WYES TV**- ch 12

- **Lock-Down Team** (Red "E" indicator) – The Lock-Down Team is responsible to ensure that all systems and facilities are properly secured prior to landfall of a hurricane. Team members with a red "E" sticker will be allowed to remain on campus until final lock-down, 24 hours prior to the anticipated landfall of severe weather. Members include:

Aiyar, Ashok	Luo, Meng	Taylor, Christopher
Amedee, Angela	Marrero, Luis	Wang, Guoshun
Ellis, Jonna	Nichols, Olga	Wang, Ping
Foster, Timothy P.	Quayle, Alison	Wilson, Robert
Hobden, Jeffery	Ramsay, Alistair	Xin, Hong
Johnston, Doug	Richard, Jasmine	Zea, Arnold
Kelly, Ben	Shen, Li	
Kozlowski, Pamela	Sturtevant, Joy	

- **Go-Team** (Green "E" Indicator) – The Go-Team is responsible for the evaluation and restoration of the campus following a weather emergency. Team members with green "E" stickers will be requested by the Chancellor to return to campus at the appropriate time. This team is limited to 1-3 members per department and is expected to rally at a point to be designated with the intent of returning at the earliest possible time to the campus to assess the status of their research units and to affect evacuation of essential materials if warranted. These members should be physically fit and without medical restrictions and be able to return to the campus 12-24 hours after landfall under State Trooper/National Guard escort. Members include:

MEB
1) Timothy Foster
2) Joy Sturtevant
3) Ashok Aiyar

CSRB
1) Alistair Ramsay
2) Douglas Johnston
3) Robert Wilson
4) Arnold Zea (BSL-3)

- **MIP Emergency Website** - We have created a website that will contain emergency information for the department in the event of a natural disaster or mandatory evacuation. The page contains the emergency call tree and contact list for everyone in the department. A password is required in order to view downloaded PDF files for the call tree and emergency contact information. The website is: http://sites.google.com/site/lsuhscmip/ and the password is "mip" -- case sensitive all in lower case!

  We have created Google Discussion Group that contains emergency information for the department in the event of a natural disaster and mandatory evacuation. We have added your alternate non LSU e-mail address to the discussion group as a member. If you are not a member, you will not be able to post anything on the discussion group page. The instructions to setup Google Groups access is also included (password not required).

  This website will be used to post notices, provide your evacuation contact information, and other important information. It is imperative that each person become familiar with the website and become a member.

- **Ultra Low Freezer for Evacuation/Backup** – A -80 freezer has been placed at LSU Vet School in Baton Rouge for storage of small amounts of back up material and for evacuation of essential materials. Space is limited to a few essential freezer boxes. **DO NOT ATTEMPT TO TRANSFER YOUR ENTIRE FREEZER CONTENTS.** See additional details regarding freezer contents on page 5 of this policy.

It is the responsibility of each employee:

- **to update his/her contact information with department;**
- **to bring the MIP Emergency Policy with him/her when evacuating;**
- **to logon to the LSUHSC website to check for updates and update personal contact information on the LSUHSC-NO registry to be available online in an evacuation situation.** (Faculty, staff and students failing to update their contact information on the registry will be subjected to disciplinary action up to and including being charged with an unauthorized absence.)

  (www.lsuhsc.edu);
- **to logon to the Google MIP Emergency website at http://sites.google.com/site/lsuhscmip/ to participate in group discussions and update your contact information;**
- **to return to work on the date and time specified and to work with your immediate supervisor to conduct work related activities in temporary locations (if necessary);**
- **sign-up for LSUHSC-NO Text Messaging Alert System http://www.lsuhsc.edu/alerts/**

ACTION STEPS IN AN EMERGENCY

ALERT/WATCH (72-48 hours)

REMEMBER THAT NORMAL OPERATIONS WILL CONTINUE UNTIL THE CHANCELLOR ANNOUNCES THE CLOSURE OF THE CAMPUS.

- Business Manager or designee will email all employees to reiterate the policy/procedures and to ensure that contact information is up-to-date.

- **Go Team Actions**
  - Meet up with PI and lab managers to identify essential items and their locations.
  - Organize Go Team and Business Manager to meet and review policies and develop new action items as needed.

- **Individual Laboratory Actions:**
  - Back-up all data on a hard drive to be taken in the event of an evacuation.
  - Ensure that essential equipment, and -80 and/or -20 freezers are plugged into emergency power outlets (red outlets).
  - If you have freezer material that you would like to store at an alternative location PRIOR TO ANY EVACUATION, you should coordinate removal of this material to our ultralow freezer in Baton Rouge with Dr. Timothy Foster.
  - If you have essential freezer material that will remain in your lab after any evacuation, you should establish/update a list of such (which must be stored in plastic freezer boxes) and place a copy of the list on the outside of each lab door prior to evacuating. Each essential freezer box MUST BE CLEARLY TAGGED WITH RED STICKER (the stickers will be provided if needed). EACH LAB WILL BE LIMITED TO A MAXIMUM OF SIX TAGGED BOXES OF ESSENTIAL FREEZER ITEMS. (NOTE: In the event of an extended evacuation, GO Team Members will be escorted back onto the campus to retrieve this material for safe storage elsewhere. It is necessary for the Go Team to be able to identify the needs of each lab and ensure that all essential items are handled properly.) Information appearing on the list should therefore include:
    - All items that **cannot be** commercially replaced.
    - List equipment that must be shut down properly.
    - Identify responsible individual(s) for shutting down equipment within your laboratory.
  - **Place essential items in PLASTIC boxes not cardboard or paper boxes** (preferably prior to hurricane season). No cardboard/paper boxes will be removed/transported from the campus by Go Team members.

- Dr. Jeffrey Hobden will turn off the autoclaves, dishwasher and imaging system in the Medical Education Building.
- Olga Nichols will turn off the autoclaves, dishwasher and other GT shared use equipment in the Clinical Science Research Building.

- Dr. Ashok Aiyar will ensure all dewars in the Medical Education Building are topped off.
- Olga Nichols will ensure all dewars are the Clinical Science Research Building is topped off.

- **Administrative Office Actions:**
    - Back-up all data on a flash drive to be taken in the event of an evacuation.
    - Prepare reference materials and other essential items to be taken in the event of an evacuation.
    - Administrative personnel will meet to discuss pending items that might be affected (i.e. forms in route, etc.)
    - Update the emergency contact list and distribute to all.
    - Provide members of the Call Tree with a form to use in collecting evacuation contact data.
    - Each administrative personnel must take a laptop with him/her.
    - Make sure all papers are placed in file drawers.

WARNING (48 hours)

- Activate call tree once school is declared closed. Each employee will indicate possible evacuation route / location, all contact information (e-mail address, landline and cell phone numbers)
- Top off dewars with liquid nitrogen and transport dewars with essential items to 2nd floor of the appropriate building (limit 5 boxes per lab in the departmental dewars to faculty who does NOT have their own dewars). More specific instructions concerning the relocation of dewars to the centralized storage point will be disseminated by way of institutional email correspondence. Those faculty members having their own dewar are asked to share space with other departmental faculty members who do not have one, if additional capacity is available.
  (Remember, dewars cannot be transported out of the building unless scheduled with an authorized vendor. It is extremely dangerous to put these containers in your vehicle for transportation.)
- Power down all computers before leaving and any other non-essential electrical equipment.
- Pack Emergency Policy folder with items to be evacuated.
- Employees may not leave their work site until released by their supervisors

AFTER EMERGENCY

- Call tree used to inform all faculty and staff of updates.
- Log-on to the internet and register at the LSU website for location and updates. (www.lsuhsc.edu)
- Logon to the Google MIP Emergency website at http://sites.google.com/site/lsuhscmip/ To receive updates and directions from Department Head;
- Employees must return to work on the date and time that is provided, after the emergency condition has ended. It is the responsibility of all employees to monitor radio, television, telephone hot lines, or LSUHSC-NO Emergency Web site to receive instructions regarding the state of the emergency and return to work notice. *(NOTE: If an employee does not return to work on the date and time provided, employee may be looking at disciplinary action and/or leave deduction.)*
- Go Team will be contacted and brought to the New Orleans campus to evaluate and restore the campus.
- When the school opens, employees are expected to return at that time.
- **It is the responsibility of each employee to notify your immediate supervisor and/or administrative personnel of your contact information once evacuated.**

WHAT TO TAKE WITH YOU

When evacuating, below is a list of recommended items to take with you.

- LSUHSC-NO ID Badge
- Printed copy of departments Emergency Response Policy & Procedures and Contact List
- Consult with supervisor for additional items that may need to be taken (i.e. files)
- Blackberry (LSUHSC issued)
- Printed copy of Blackberry user list https://intranet.lsuhsc.edu/cs/email/bb/userlist/default.aspx
- Laptop
- Power Supply for Laptop
- Cell Phone
- Charger for cell phone
- Any needed cables (e.g. network cables)

Recommended items to take from home (according to Hurricane Preparation Tips):

- Important Papers (birth certificates, passports, insurance policies, deeds, titles, etc.)
- Enough clothes for a week.
- Medications for at least a week.
- Additional items needed for infants, elderly, pets, or other special needs
- Food and drinks for at least two days
- Determine your contra flow route that works best for your destination. (NOTE: once you have entered the contra flow lane, your direction is set until you reach the terminus of the contra flow.)
- You can monitor traffic flow on the DOTD webcams at the following link: http://hb.511la.org/main.jsf?minLat=29.759609&minLon=-90.304871&maxLat=30.118997&maxLon=-89.89151
- The Lake Pontchartrain Causeway has a webcam that shows traffic in the Northbound and Southbound lanes: http://www.thecauseway.us/traffic-cams/

ACTION STEPS IN THE EVENT OF A FIRE

Floor Leaders:

MEB: Jasmine Richard, Jeffery Hobden, Alison Quayle and Li Shen
CSRB: Olga Nichols, Doug Johnston and Robert Wilson

WHAT SHOULD I DO IF I SEE, SMELL, OR FEEL SMOKE OR FIRE?

1. If a fire or smoke is seen immediately PULL the closest fire alarm pull station
   - Fire alarm pull stations are located by each stairwell and/or exit
   - If possible, close all doors to prevent the spread of smoke and fire to other non-impacted areas
2. ALERT others of the pending emergency and begin a calm and immediate evacuation of the building. Close the door(s) to your office or classroom to confine the fire
3. CALL the University Police at 568-8999 or 911 and give specific information, such as,
   - Your name and the telephone number
   - The exact location of fire or smoke (building, floor, and/or room number)
   - The type of fire (electrical, flammable liquid, trash, etc)
   - The extent of the fire (severity of the fire and/or amount of smoke)
4. Immediately begin following the Emergency Evacuation Procedures as written below.

WHAT SHOULD BUILDING OCCUPANTS DO WHEN AN ALARM SOUNDS?

1. Evacuate your office or visiting area while leaving the door open.
2. Walk to the nearest stairwell exit. Do not use the elevators.
3. Carefully walk down the stairs. Stay to the right side and allow for traffic to enter.
4. Offer assistance to those who can move down the stairs but may still require some help. Do not lift or carry anyone up or down the stairs.
5. Upon exiting the building, go to your assigned Emergency Evacuation Area (formerly referred to as "Area of Refuge") and report to your floor leader.
6. Remain in your Emergency Evacuation Area until an "all clear" is given by the University Police.

WHAT SHOULD A MOBILITY IMPAIRED PERSON DO WHEN AN ALARM SOUNDS?

1. Evacuate your office while leaving the door open.
2. With the assistance of a floor leader or co-worker, exit to the nearest stairwell. Enclosed stairwells are safe refuge areas for people who cannot evacuate because stairwells have higher fire resistant construction than the surrounding building and a separate ventilation system. Do not use the elevators. Your location will be provided to the emergency responders.
3. Remain inside the stairwell until assisted by Fire Department personnel or the University Police gives you an "all clear" to return to your office.

Note: Escorts should assist visiting mobility impaired personnel's movement to the stairwells. If the visitor has no escort, any building occupant can assist. The escort (upon arrival at the Emergency Evacuation Area) shall report the location of the mobility impaired person to the Floor Leader.

WHAT HAPPENS TO THE ELEVATORS IN THE EVENT OF AN ALARM?

The speakers in the elevators will sound. The elevators may or may not be recalled to the first or second floor of the building. If they are recalled, they will remain on the first or second floor (depending on the building and the floor in alarm) with doors open and speakers that announce there is a fire alarm. The elevators will not return to normal operation until the life safety system is taken out of alarm and the elevators are reset.

In the event of an alarm, do not use the elevators. If you are on an elevator during an alarm, when the doors open, immediately get off and go to your outside Emergency Evacuation Area using the closest exit door.

WHAT SHOULD I DO IF I AM TRAPPED IN A BUILDING FIRE?

1. Stay where you are and do not panic.
2. Feel the door handle and then the entire door.
3. If the door handle or the door is hot, DO NOT OPEN THE DOOR.
4. If there is pressure on the door and "puffs" of smoke coming around the door, DO NOT OPEN THE DOOR.
5. Close all doors, windows, and any other openings that lead to the impacted area.
6. As a last resort, if there is a window(s) that can supply fresh air open or break it.
7. Use extreme caution while breaking the window. Protect yourself from broken glass.
8. Exercise extreme caution as the large increase of air from the broken window may cause the fire to intensify. Additionally, the breaking glass may cause injury to you or bystanders on the ground.
9. If possible, use a wet towel or blanket to cover yourself
10. Call the University Police at 568-8999 or 911 and give specific information, including:
    a. Your name
    b. Your exact location (building, floor, and/or room number)
    c. Your pending circumstance and your condition

HOW DOES THE ALARM SYSTEM WORK IN MY BUILDING?

Each building is equipped with fire detection system that detects smoke or fire and notifies occupants in less than three seconds. There are two types of alarm systems at LSUHSC facilities.

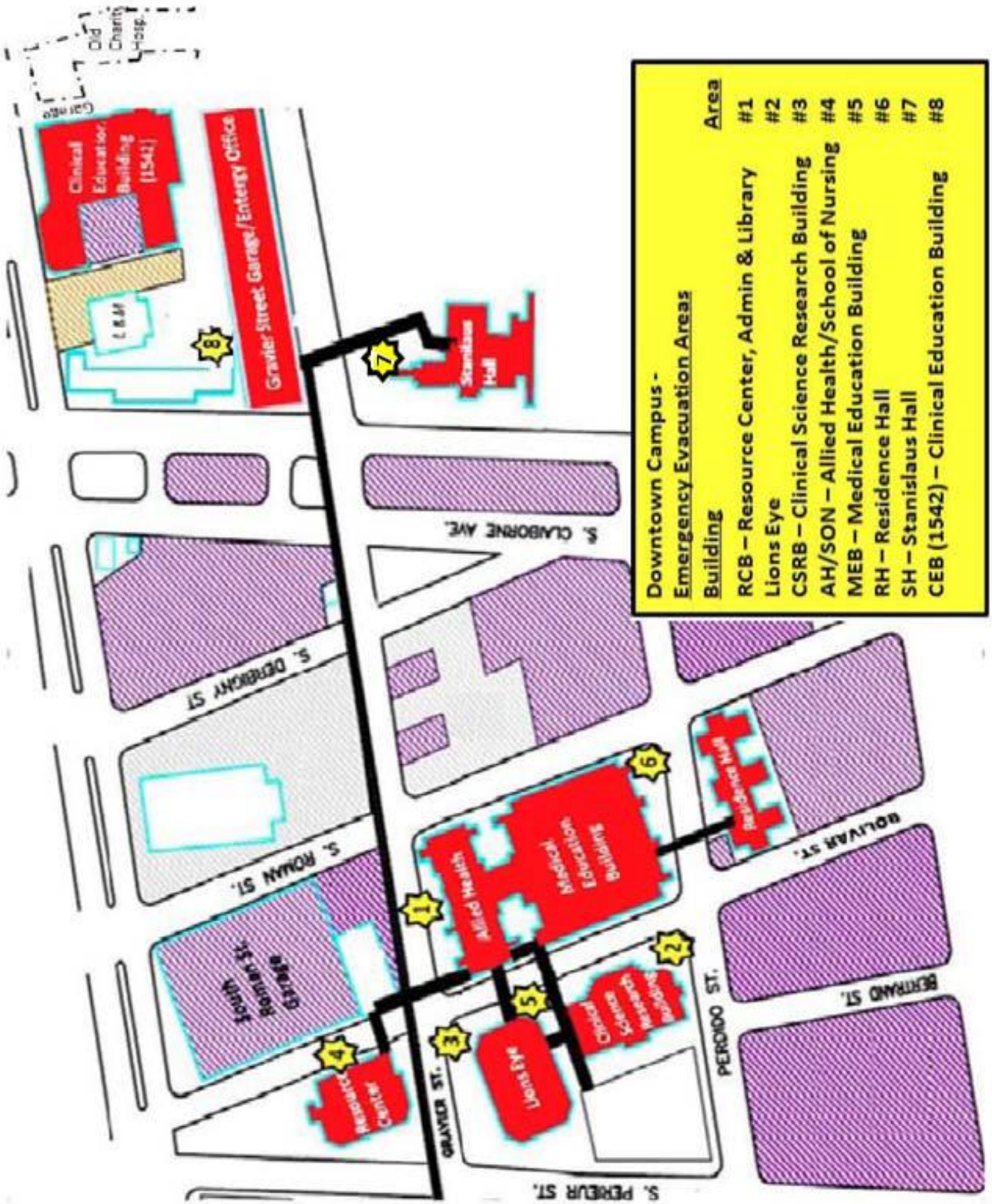
The Resource Center, Lion's Eye, CSRB and School of Allied Health and Nursing are designed to high rise code and will ONLY sound on the impacted floor and on the floor above and below. Once the Fire Department arrives, they will decide whether or not to sound the alarm in additional floors. If the alarm is not going off on your floor, you should not evacuate. For example, a pull station is activated or a smoke detector goes off on the fourth floor. The alarm will only sound on the third, fourth and fifth floors. Upon arrival, the Fire Department will decide whether or not to alarm additional floors.

The MEB, Residence Hall, Stanislaus Hall, Clinical Education Building (1542), all School of Dentistry facilities (Clinic, Administration, and Powerhouse), Roman Garage, and the Uptown Campus Main Building are general alarms. This means that if the life safety system detects a problem then the entire building goes into alarm an all building occupants will evacuate immediately.

WHERE SHOULD I EVACUATE TO IN THE EVENT OF AN ALARM?

Evacuate to the outside "Emergency Evacuation Area" for your building per the following table. These locations are shown graphically below.

Building	**Area of Refuge**	**Map Location**
Library, Administration and Resource Center	School of Allied Health and Nursing Building on Gravier Street.	1
Lions Eye	CSRB at corner of Bolivar and Perdido Streets.	2
Clinical Science Research Building	Lions Eye at corner of Gravier and Bolivar Streets.	3
School of Allied Health and Nursing	Library, Administration and Resource Center on Bolivar Street.	4
South Roman Street Garage	Library, Administration and Resource Center on Bolivar Street.	4
Medical Education Building	Between CSRB and Lions Eye on Bolivar Street.	5
Residence Hall	MEB on the corner of Perdido and S. Roman Streets.	6
Stanislaus Hall	Stanislaus Parking lot along Gravier Street	7
Gravier Street Garage/Entergy	Stanislaus Parking lot along Gravier Street	7
Clinical Education Building (1542)	End of rear walkway near west end of Gravier Garage	8
Dental School Admin, Clinic and Powerhouse	Green space south of courtyard	9
Uptown Campus – Main Campus	South side parking across from the main entrance.	10
Uptown Campus – Central Plant/Maint.	Green spaces across the street.	11


Downtown Campus -
Emergency Evacuation Areas
Building Area
RCB – Resource Center, Admin & Library #1
Lions Eye #2
CSRB – Clinical Science Research Building #3
AH/SON – Allied Health/School of Nursing #4
MEB – Medical Education Building #5
RH – Residence Hall #6
SH – Stanislaus Hall #7
CEB (1542) – Clinical Education Building #8
Clinical Education Building (1542)
Gravier Street Garage / Entenry Office
Stanislaus Hall
Allied Health
Medical Education Buildings
Residence Hall
Lions Eye
Clinical Science Research Building
Resource Center
South Roman St. Garage
S. CLAIBORNE AVE.
S. DERBIGNY ST.
S. ROMAN ST.
GRAVIER ST.
PERDIDO ST.
BOLIVAR ST.
BERTRAND ST.
S. PERIEUR ST.

TORNADO PROCEDURE

http://www.is.lsuhsc.edu/safety/emergency/tornado.pdf

If a tornado warning has been issued you should:

- Go to the lowest floor of the building
- Stay away from exterior walls, doors, and windows
- Move to interior hallways and small interior rooms (e.g., bathroom, closet, etc.) Get under a piece of furniture if possible (e.g. sturdy table, desk)
- Call 911 (9-911 from a campus phone) if emergency help is needed

Once the storm has passed you should:

- Check yourself and those around you for injuries
- If you smell gas or hear a hissing sound indoors—open windows and leave the building.
- Monitor your portable or weather radio for instructions or an official "all clear" notice. Radio stations will broadcast what to do, the location of emergency shelters, medical aid stations, and the extent of damage
- Evacuate damaged buildings. Do not re-enter until declared safe by authorities
- Call 911 (9-911 from a campus phone) only to report a life threatening emergency

ACTIVE SHOOTER PROCEDURE

http://www.lsuhsc.edu/emergencypreparedness/shooter.aspx

Background

An active shooter is a person who is using a firearm or other weapon with the intent to injure or kill others. An active shooter incident can occur under a variety of circumstances, so no one set of guidelines is able to cover specific actions to take in every situation. An individual must use his/her own discretion during an Active Shooter event as to whether he/she chooses to move to safety or remain in place; however, best practices for surviving an active shooter are presented below.

If an Active Shooter is outside your building or inside the building you are in:

- Move to a room that can be locked or barricaded; lock and barricade all doors and windows.
- Turn off lights, close blinds, and turn off radios and silence cell phones.
- Stay out of sight and away from windows; take adequate cover (e.g., desks, filing cabinets).
- If feasible, call 911 and report:
    - Your location, including building name, floor and room number
    - What is happening? If you were able to see the offender(s), give description of the person(s) sex, race, clothing, type of weapon(s), location last observed, direction of travel, and identity – if known
    - Number of people at your specific location
    - Injuries, if any, including the number of injured and types of injuries
    - Your name and other information as requested
- Wait until a uniformed police officer or a University official identifies themselves by name or position and provides an "all clear" or notice of "all clear" comes via the Text Alert System.
- Unfamiliar voices may be an active shooter trying to lure you from safety; do not respond to voice commands until you can verify with certainty that they are being issued by a police officer or university official.
- Depending on the circumstances, consideration may also be given to exiting via ground floors or walkways as safely and quietly as possible. If so, do not carry anything in your hands, keep your hands visible and follow instructions given by any police officer you may encounter.

If an Active Shooter enters your office or classroom:

- Try not to do anything that will provoke the offender.
- If there is no possibility of escape or hiding, only as a last resort when it is imminent that your life is in danger should you make a personal choice to attempt to negotiate with or overpower the assailant (s).
- Call 911 if possible, and provide the information listed above.
- If the assailant(s) leaves the area, barricade the room or proceed to a safer location.

If you encounter an Active Shooter outside:

- Move away from the shooter or sounds of gunshots/explosions
- Look for appropriate locations for protection (e. g., walls, trees, and parked vehicles)
- Try to warn others to take immediate shelter
- Call 911 if possible, and provide the information listed above

First Responder Actions

- Law enforcement will deploy to the location of the active shooter with the primary goal of stopping the shooter. Police officers responding to an active shooter are trained to proceed immediately to the area in which shots were last heard; their purpose is to stop the shooting as quickly as possible.
- The first responding officers will likely be from LSUHSC-NO Police and/or New Orleans Police Department, and will normally be in teams of two or four; they may be dressed in regular patrol uniforms, or they may be wearing external bulletproof vests, Kevlar helmets, and other tactical equipment.
- The first officers to arrive will not stop to aid injured people; rescue teams composed of other officers and emergency medical personnel will follow the first officers into secured areas to treat and remove injured persons.
- Responding officers may be armed with rifles, shotguns, or handguns, and might be using pepper spray or tear gas to control the situation. Regardless of how they appear, remain calm, and do as the officers tell you. Put down any bags or packages you may be carrying and keep your hands visible at all times.
- Responding officers may point firearms at you while seeking the threat. This is a normal part of their training and response. Avoid any sudden movement and obey all officer commands. Keep your hands visible to officers at all times

OTHER EMERGENCY RESPONSE ACTIONS

http://www.lsuhsc.edu/emergencypreparedness/default.aspx

In the event of an emergency that impacts LSUHSC, it is important that faculty, staff and students have an understanding of how they should react and how information regarding the emergency is communicated. Click on the menu on the left side of the page to access the Emergency Response Plan, and to access guidance on how you should respond to emergencies.

A successful response relies heavily upon communication. LSUHSC transmits information via the University web site, phone trees, email, text messaging and digital signage. During an emergency, the Text Alert System (a key element of the Emergency Alert System) is used to send text alert messages directly to your phone. To receive these alerts, you must opt-in to the system by providing your cell phone or personal email information during registration. See Text Alert System for more information regarding registration.

In the event of an emergency affecting the entire University, the LSUHSC Emergency Response Group (ERG) may be activated. The ERG will work closely with the School Operations Centers (SOCs) in responding to and recovering from a major emergency. The SOCs will then communicate with the departments under their control.

In a major emergency, the 911 lines may be overwhelmed. If you need immediate assistance persist in your efforts to reach a 911 operator. University Police can be contacted at 568-8999.

ENVIRONMENTAL HEALTH & SAFETY

Response to emergency situations must be conducted in an effective, timely manner to preserve life and property. EH&S provides procedure summary information that can be used to handle emergencies and minimize adverse effects. More information can be found at:

https://www.lsuhsc.edu/admin/pfm/ehs/

As of 2016

Title	Name	Work	Cell	E-mail address
Executive Director	Robert Fahey	568-2851	905-6316	rfahey@lsuhsc.edu
Industrial Hygienist	Darren Burkett	568-2324	402-9085	dburk2@lsuhsc.edu
Radiation/Fire Safety Officer	James Davis III	568-6549	314-5989	jdavis3@lsuhsc.edu
Biological/Chemical Safety Officer	Taylor Kriete	568-6586	952-1337	tkriet@lsuhsc.edu
Driver Safety Coordinator	Raycehlle Williams	568-4500	247-3728	rwil32@lsuhsc.edu

Location Information
Stanislaus Hall, 2nd Floor Rm# 212 **450-A South Claiborne Avenue** **New Orleans, La 70112** **Phone: (504) 568-6585** **Fax: (504) 568-5185** **Email:safety@lsuhsc.edu**

BIOLOGICAL SPILL RESPONSE PROCEDURES

https://www.lsuhsc.edu/admin/pfm/ehs/bio.aspx

The response to a biohazardous material spill varies based on several factors, including the actual agent and the associated risks, the agent's biosafety level, the amount of material spilled, type of spill and the location of the spill. These biological spill procedures are general guidance for a rapid, appropriate, and safe response to a biohazardous spill. Each lab working with biohazardous material must develop area-specific spill response procedures.

Minimizing personnel exposure shall take priority over clean-up. If any person is exposed to biohazardous materials, they should immediately remove contaminated clothing or PPE and wash the affected areas with soap and water. If medical assistance is needed, immediately contact University Police at 568-8999. Note that if the spill involves large amounts (greater than 50mL) of BSL 1 or 2 material, or any amount of BSL 3 or rDNA material, immediately call the Biosafety Officer.

Procedures for Spills inside the Laboratory

- Notify other employees and clear area immediately, closing the lab door upon exiting. Wait at least 30 minutes for aerosol to settle before entering spill area.
- Remove all contaminated clothing and place in biohazard bag. Run the bag through an autoclave at a later time.
- Put on necessary PPE including disposable gown, safety glasses and gloves.
- Place dry paper towels on the spill then layer a second set of disinfectant soaked paper towels over the spill.
- Encircle the spill with additional disinfectant being careful to minimize aerosolization while assuring adequate contact. Allow a minimum of 20 minutes contact time to ensure germicidal action of disinfectant.
- Wipe up spill, working from the edges to the center. Clean spill areas with fresh paper towels soaked in disinfectant.
- Decontaminate all items within the spill area.
- Disinfect all mops and cleaning tools.
- Discard contaminated disposable materials using appropriate biohazardous waste disposal procedures.
- Wash hands thoroughly with soap and water immediately after the clean-up is complete.

Procedures for Biosafety Level 3 Spills

NOTE: Do Not Leave The Facility Until The Spill Has Been Properly Decontaminated And Cleaned. If necessary, phone for outside help to assist in containing the spill.

a. The BL3 lab manager should be contacted first for assistance as soon as possible after containment of the spill.
b. Entry into the facility will be restricted by the BL3 lab manager.

Spill Inside a class II Biosafety Cabinet

1. Obtain the biological spill kit which is located above the sink in the hallway.
2. If the spill is on the padding inside of the cabinet then pour T.B.Q. directly on the pad.
3. If the spill is not on the padding then place absorbent material on top of the spill and then pour T.B.Q. into the center of the spill.
4. Spray the sides of the cabinet with T.B.Q.
5. Leave the spill covered with T.B.Q. for at least an hour before removing all of the absorbent material for bagging and autoclaving.
6. Change gloves and gown (if necessary).
7. Repeat the cleaning process.
8. Clean the affected area thoroughly and wipe all sides down with T.B.Q.
9. Autoclave all waste.
10. Leave the hood on for an additional half an hour before shutting off.
11. Fill out an incident report.

Spill Outside a class II Biosafety Cabinet

1. Obtain the biological spill kit which is located above the sink in the hallway.
2. The large container of T.B.Q. from the cabinet below the sink in the hallway is for large spills. The small bottle of T.B.Q. that is inside the kit is for small spills.
3. Surround the spill with the absorbent boom and place absorbent material (pads, pillow, or paper towels) on top of spill.
4. Flood the spill with T.B.Q. by carefully pouring the disinfectant on top of the absorbent material.
5. Leave the spill covered with T.B.Q. for at least an hour before removing all of the absorbent material, including the boom, for bagging and autoclaving.
6. Change gloves, gown and shoe covers. Remove and autoclave scrubs if splattering of contaminated material occurred.
7. Place a new absorbent boom and repeat steps 3 – 5.
8. Clean the affected area thoroughly and autoclave all waste.
9. Fill out an incident report.

NOTE: Re-entry is not allowed until 4 hours after the spill has been cleaned.

Procedures for Spills inside the Biological Safety Cabinet

- Wear laboratory coat, eye protection and gloves during clean-up.
  Allow cabinet to continue running during clean-up.
- Apply approved disinfectant (one part bleach to nine parts water is acceptable for most small spills; apply concentrated disinfectant for large spills) and allow a minimum of 15 minutes contact time.
- Wipe up spillage with disposable disinfectant-soaked cloth or tissue.
- Wipe the walls, work surface and any equipment in the cabinet with a disinfectant-soaked cloth.
- Discard contaminated disposable materials in appropriate hazardous biological waste container(s) and autoclave before discarding as waste.

- Place contaminated reusable items in biohazard bags or in autoclavable pans with lids before autoclaving and cleanup.
- Expose non-autoclavable materials to disinfectant and allow 15 minutes contact time before removing from the biological safety cabinet.
- Remove protective clothing used during cleanup and place in a biohazard bag for autoclaving if necessary.
- Wash your hands thoroughly with soap and water immediately after the clean-up is complete. Run cabinet at least 15 minutes after cleanup before resuming work or turning cabinet off.

Procedures for Spills inside the Centrifuge

- Ensure centrifuge is closed.
- Notify other employees and clear area immediately, closing the lab door upon exiting.
- Wait at least 30 minutes for aerosol to settle before entering spill area. Put on necessary PPE including a laboratory coat, eye protection and gloves during cleanup.
- Remove rotors and buckets to nearest biological safety cabinet for clean-up.
- Thoroughly disinfect inside of centrifuge, rotors, and buckets by applying an approved disinfectant (one part bleach to nine parts water is acceptable for small spills; apply concentrated disinfectant for large spills) and allow a minimum of 15 minutes contact time.
- After thorough disinfection of rotor or rotor cups, remove contaminated debris and place in appropriate hazardous biological waste container(s) and autoclave before disposing as infectious waste.

Procedures for Spills outside the Laboratory, in Transit

- Prior to transporting biohazardous materials, secure materials in an unbreakable, well-sealed primary container placed inside of a second unbreakable, lidded container (cooler, plastic pan or pail). Label the outer container with the biohazard symbol if material is BSL or Risk Group 2 or higher.
- Should a spill occur in a public area, do not attempt to clean it up without appropriate PPE.
- Contact University Police immediately, and notify EH&S to assist in the clean-up.
- Secure the area, keeping all personnel clear of the spill.
- As an interim measure, wear gloves and place paper towels, preferably soaked in disinfectant, directly on spilled materials to prevent spread of contamination. To assure adequate contact, surround the spill with disinfectant, if available, taking care to minimize aerosols.
- Wash your hands thoroughly with soap and water immediately after the clean-up is complete. Stand by during spill response and cleanup activity to provide information and assistance.

Procedures for Biological Spills involving Radioactive Materials

When a biohazardous spill also involves radioactive materials, cleanup procedures may have to be modified. The extent of the modification will depend on the level of radiation and the nature of the isotope involved. The Radiation Safety Officer should be called immediately at 504-314-5989.

CHEMICAL SPILL RESPONSE PROCEDURE

http://www.lsuhsc.edu/admin/pfm/ehs/chem.aspx

In many cases, chemical spills involve small quantities of materials and, if precautions are taken, present minimal hazards. The responsible party is usually the most appropriate to clean up their spills because they are more likely than others to be familiar with the spilled material's hazardous characteristics, can respond rapidly, are aware of other potential hazards or complicating factors in their work area, and should be familiar with the proper cleanup techniques for a particular spill. However, some spills will require contacting the EH&S Department, and potentially the use of outside assistance, because of the spill's size or hazards. This procedure provides guidance on determining the hazard severity of a spill and the procedures to implement based on the determined hazard severity. EHS-200.02, Chemical Spill Response Policy and Procedures, should be consulted for full requirement details.

Spill Hazard Severity

Three factors primarily determine if a hazardous materials spill is minor or major. If any of the following apply, the spill is considered major.

1) Size– more than 100 ml/10 grams of carcinogen or high hazard chemical or 1 liter/100 grams of a volatile or flammable solvent, reactive or corrosive (acid or base) liquid/solid.
2) Hazards - below the above identified thresholds, but, presents an immediate danger to health, safety or the environment, is unknown, or is an immediate fire hazard. All mercury spills are considered major and require the implementation of the major spill response procedures.
3) Location- outside of the laboratory or outside of the area where the material is normally used, and/or there is no trained person available to clean up the spill.

Minor Spill Response Procedures

- Immediately isolate and control access to the spill area.
- If the spill involves flammable materials, remove ignition sources and unplug nearby electrical equipment.
- Establish exhaust ventilation, if possible, by turning on fume hoods.
- Locate the chemical spill kit.
- Choose and use appropriate personal protective clothing/equipment (goggles, face shield, impervious gloves, lab coat, apron, etc.). It is recommended that two sets of gloves be worn. Chemical splash goggles shall be used for clean-up of chemicals that are caustic or whose gases/vapors are hazardous to the eyes.
- If the spill is a liquid, confine and contain the spill by placing the container upright and covering or surrounding the spill with appropriate absorbent material.
  - Acids/bases and some highly hazardous chemicals will need to be appropriately neutralized prior to clean-up.
  - Caution should be used as the neutralization process is often vigorous, causing splashes and yielding large amounts of heat.
- Collect used spill pads and place in double layers of plastic disposal bags.
- If the spill involves a solid granular or powdered material, place the container upright and sweep spilled material into a plastic dust pan. Transfer the collected material into a plastic disposal bag. Take caution to not create dust during the clean-up process. As possible, dust may be controlled by misting with water or other appropriate liquid.

- Once the majority of the chemical has been collected, wet wipe the spill area.
- Appropriately decontaminate the spill area and all non-disposable equipment.
- Put all single use contaminated items into a plastic disposal bag.
- Double layer and seal all disposal bags (twist the open top and wrap with duct tape) and, as possible, contain in the original spill kit container (5-gallon white bucket).
- Label the container with the name of the spilled material, date, and the words "hazardous waste."
- When the cleanup is completed, wash hands and other potentially affected skin surfaces with soap and water.

Major Spill Response Procedures

- Immediately isolate and control access to the spill area.
- Notify University Police at (504) 568-8999, who will contact EH&S to respond.
    - **In case of a fire,** first pull the nearest fire alarm pull station and then call the
    - University Police when you are in a safe location away from the area.
    - Provide the following information:
        - Name and telephone number of caller
        - Building and room number where the incident occurred
        - Name and type of material
        - Known hazard of the materials
        - Amount of material spilled
        - Explanation of what happened
        - Condition of any injured personnel
        - Status of area
- Communicate the condition to and assist with evacuating, as necessary, all potentially impacted personnel. If it is believed that spill could affect the safety and health of the occupants of the entire floor or building, **pull the nearest fire alarm pull station.**
- Remain at the evacuation point/area of refuge until contacted and released by University Police or EH&S.
- EH&S will make the determination as to when response is complete and will notify University Police when the area is determined to be safe for occupancy.

Spills Involving Personnel Injury or Chemical Exposure

If the accident involves personal injury or chemical contamination, follow the above procedures for a minor/major spill response, and at the same time:

- Move the victim from the immediate area of fire, explosion, or spill (if this can be done without further injury to the victim or you).
- Locate the nearest emergency eyewash or safety shower.
- Remove any contaminated clothing from the victim and flush all areas of the body contacted by chemicals with copious amounts of water for 15 minutes (unless chemical is water reactive or if directed otherwise by MSDS).
- Seek medical attention.

NATURAL GAS LEAK

http://www.lsuhsc.edu/emergencypreparedness/natural.aspx

When a gas line has been broken or a gas leak is suspected, follow these procedures.

1. Cease all operations immediately and **DO NOT** operate any electrical devices (phones, electrical switches, electrical machines, etc.).

2. If gas smell is on the inside and windows can be easily opened, open to ventilate the area.

3. Evacuate the immediate area and contact Facility Services (FS) at 568-7716. Provide your name, contact information, location and the exact location of the suspected leak. Due to the potential urgency, the work request system should not be used to report a suspect natural gas/odor concern.

   DO NOT CALL FROM AFFECTED AREA, OR TURN ELECTRIC SWITCHES ON OR OFF *(lights, phones or any other electrical equipment can create a source of ignition).*

4. If after hours, or if a FS representative can't be reached, contact University Police at 589-8999. Provide your name, contact information, location and the exact location of the suspected leak.

5. If the fire alarm system is activated, evacuat**e** the building by the nearest exit (Do not use elevators). Notify other building occupants in the affected area to do so as well. If any person for whatever reason cannot safely evacuate the building, assist them to an area away from the emergency area. Alert security and/or emergency response personnel of their location.

6. Once outside, move to the facility's designated area of refuge.

7. Once the initial response is complete and the hazard is determined to have been eliminated/ adequately controlled, FS and EH&S will coordinate with University Police to authorize re-entry into the building or area.

   DO NOT RETURN TO AN EVACUATED BUILDING unless authorized to do so by University police.

RADIATION SPILL RESPONSE PROCEDURE

https://www.lsuhsc.edu/admin/pfm/ehs/rad.aspx

Minor Spill Classification and Response

Incidents which involve the release or spillage of less than 100 microcuries (uCi) of a radionuclide in a nonvolatile form can generally be regarded as a **minor spill.**

Actions to take by lab personnel:

- Alert personnel in the immediate area of the 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 or decontaminant cleaner over spills of solid materials.
- Using forceps or gloved hand, placed towels in plastic bag. Dispose in a radiation waste container.
- Monitor area, hands, and shoes for contamination with an appropriate survey meter. Repeat cleanup until contamination is no longer detected.
- If assistance needed, call the Radiation Safety Officer at 314-5989.
- Fill out Radiation Contamination Survey form. Draw lab schematic areas and label numerically. Record initial wipe test results and then final wipe test results after decontamination. Make sure all survey reading are less than 200 DPM /100 square centimeters.
- File this record in your laboratory and forward a copy to the Environmental Health and Safety Department.

Major Spill Classification and Response

Incidents that involve the release or spillage of more than 100 microcuries (uCi) of a radionuclide in a nonvolatile form are **major spills.**

Actions to take by lab personnel:

- Attend to injured or contaminated persons and remove them from exposure.
  Direct personnel in the laboratory to evacuate.
- Have potentially contaminated personnel stay in one area until they have been monitored and are shown to be free of contamination.
- Call the Campus police at 568-8999, who will notify EH&S.
  Close the doors and prevent entrance into affected area.
- Document names of potentially contaminated personnel and have them stay in one area, away from the spill, until they have been monitored and shown free of contamination. Remove contaminated clothing and wash contaminated skin with warm, soapy water, being careful to not damage the skin.

Upon arrival at the scene, EH&S shall:

- Assist with perform decontamination of any personnel exposed to radioactive contaminates.
- Perform decontamination of lab areas and equipment.
- Fill out Radiation Contamination Survey form. Draw lab schematic areas and label numerically. Record initial wipe test results and then final wipe test results after decontamination. Make sure all survey reading are less than 200 DPM /100 square centimeters.
- Provide a written report within three working days to the LSU Radiation Safety Systems Officer detailing the of the incident and decontamination actions taken.

LIQUID NITROGEN (LIN) SUPPLY & SAFETY PLAN

https://www.lsuhsc.edu/admin/pfm/ehs/docs/lin.pdf

CM-51 Key Points

- Securing of elevators begins 36 hours prior to the announced closing time. The last elevator in each building will be secured as close as possible to the 24th hour.
- Six (6) hours prior to announced closing, all personnel must vacate campus (other than shutdown team)
- When emergency is declared, all dewars should be loaded, filled with existing LIN stock and moved to assigned rally areas.
- Portable dewars present several safety hazards:
  - Do not ride in elevators while transporting dewars
  - Do not transport dewars in personal vehicles as an evacuation strategy

LIN/Dewar Rally Areas

- MEB – Hallway near room 2203 (2nd floor)
- CSRB – Hallway near room 265 (2L4) (2nd Floor)
- Lion's Eye – Hallway near rooms 205-209
- Dental Campus – 2nd floor passageway between Clinic and Administration Building

Dewar Preparation

- Fill dewars using EXISTING LIN stock
- Clearly label dewars and include:
  - Researcher's Name and Department
  - Building and Lab Room #
  - General Content (Biohazard label)
  - Contact Phone Number(s)
- Number of LIN Vessels per building
  - MEB = 15
  - CSRB = 15
  - Lion's = 5
  - Dental = 5

72 hours Prior to Campus Closure

- LIN emergency supply plan triggered when a named storm enters the gulf and New Orleans is located with the "Storm Warning" area
- Lab staff should prepare dewars using existing LIN supplies
- Clearly label dewars as indicated above
- LSUHSC-NO Purchasing will contact gas supplier to begin LIN delivery

36 hours Prior to Campus Closure

- Dewar preparation and transport should be completed at the 36 hour point to take advantage of elevators (elevator shut down commences at the 36 hour point and will be complete no later than the 24 hour point)
- Dewars shall remain in the LIN rally areas until the emergency has passed and normal operations resume.

LIN Elevator Transport Procedures

- Nitrogen is oxygen-displaced and can present a considerable asphyxiation risk if released within a poorly ventilated confined space such as an elevator.
- Elevator transport of nitrogen containing equipment/vessels shall be accomplished WITHOUT human accompaniment - - equipment ONLY!
- Use freight elevators to transport dewars
- Use the "Buddy" system to safely transport nitrogen via a service elevator WITHOUT human accompaniment
- Load car with dewars and send to the destination floor. Activate the "Emergency Stop" to hold the elevator car at bay during loading/unloading (step out before door closes)
- To prevent personnel from entering the car carrying dewars, contact Facility Services and request the elevator be put in "independence service" (ensures elevator will not stop at an interim floor once the destination button is pushed). An alternative is to station coworkers at each elevator floor (prior to moving the elevator) to prevent personnel from pushing a button and entering the elevator.

Post Emergency

- Normal ordering protocol will resume as soon as practical.
- Remaining (on-campus) emergency LIN stock will be used to fill LIN orders post emergency
- Normal delivery schedule will resume