

University of Louisiana at Monroe
School of Pharmacy Animal Vivarium
Disaster Plan

****Approved by ULM IACUC, December 10, 2012

Purpose: The ILAR *Guide for the Care and Use of Laboratory Animals* states the facilities must have disaster plans that define the actions necessary to prevent animal pain, distress, and deaths due to loss of systems such as those that control ventilation, cooling, heating, or provision of potable water. This plan is intended to establish procedures that provide for the health and safety of the School of Pharmacy Animal Vivarium personnel and experimental animals in the event of unexpected, adverse conditions.

Scope: This document covers all personnel and animals in the School of Pharmacy Animal Vivarium at ULM to guide personnel during emergencies, inform you of potential situations, and help you to avoid and anticipate dangerous situations addressing the following emergency situations:

Loss of power

Fire

Snow or ice storms

Tornadoes or Severe Thunderstorms

Intrusion of Unauthorized Personnel

Bomb Threat

Hazardous Chemical Spill

Biological Exposure

Medical Emergency

Readiness: Steps COP personnel can take to prepare for emergencies:

Know the location of the following:

- Emergency information (manuals)
- Telephones (Rooms 109,111, 209,211 – which are campus only numbers; Rooms 202,203 – can call off campus)
- Emergency exits (Rooms 200 [pedway], 104,119, 100)
- Fire alarms and extinguishers (Fire alarms: Rooms 104, 119; Extinguishers: Rooms 103 beside lockers, 108, 201, 208)
- First aid kits
- Eye wash stations/shower (109,111, 114 [shower],209,211)

Read this disaster plan twice a year

Be familiar with the Vivarium floor plan and exits

Participate in practice fire drills and training programs

Prepare yourself so you know what to do, where to go, and how to cope until you are able to leave disaster condition

Equipment and Materials:

Emergency contact list:

In the event of an emergency, the following emergency and COP Vivarium personnel may be called:

EMERGENCY TELEPHONE NUMBERS

Type of Emergency	Contact	Phone Number
Fire	Campus Police	342-5350
Medical Agency	Campus Police	342-5350
Intrusion/Break-in	Campus Police	342-5350
Animal Bites/scratches/Minor Injury	Coty Lee	342-1701
Hazardous Material Spills	Jason Roubique	342-5171
	If no answer: Campus Police	342-5350
Theft/Assault/Bomb Threat	Campus Police	342-5350
Equipment failure	Coty Lee	342-1701
Odors - Gas	Campus Police	342-5350
Odors - Non-gas	Campus Police	342-5350
Radiation Materials Spill	Jason Roubique	342-5171
	If no answer: Campus Police	342-5350
Biohazardous Material Spills/Incidents	Jason Roubique	342-5171
	If no answer: Campus Police	342-5350
Security Problems	Campus Police	342-5350

SCHOOL OF PHARMACY VIVARIUM EMERGENCY CONTACT INFORMATION

Personnel	Office Number	Office Number
Coty Lee, Asst. Director	Bienville V203	342-1701
Earl Neemar, Lab Animal Tech.	Bienville V202	342-1683
Mike Moncrief - Facilities Manager	Bienville 165	342-1723
Dr. Benny Blaylock	Bienville 102C	342-1603
After hours: Contact Police Dept.		342-5350

Lights and HVAC:

The entire Vivarium electrical system including HVAC and lighting systems are automatically transferred to a backup generator after the commercial grid is offline for more than 20 seconds. If you are in Vivarium when power is lost, please remain where you are till the backup generator powers the lights back on. Even if generator fails to crank, lights will still come on to help with exit from building.

Material and Supplies:

A two week supply of potable water and animal feed will be stored in the facility for animal use in the event of an emergency/disaster. Also, compressed carbon dioxide supply will be maintained in the event euthanasia of animals is necessary.

Procedures:

Loss of Power:

Failure, or interruption, of building power is no cause for alarm. The Vivarium has a backup generator to supply all facility needs. During these times when the generator is providing power to facility, all non-essential electrical equipment will be turned off to ensure adequate capacity for essential functions such as HVAC systems, freezers, and computers.

If emergency backup power is not available and ambient temperatures are expected to rise or fall outside 60-80F for more than two hours, animals will be euthanized.

Fire:

Smoke, heat, and toxic gases from a fire are the most common causes of fire related deaths and injuries. The elements collect at the ceiling, while fresher air concentrates near the floor. In case of fire, the following procedures should be followed.

Readiness:

- Be aware of location of fire alarms, fire extinguishers and emergency exits.

Action:

- Call extension 5350 and alert Campus Police
- Activate the alarm system – fire alarm boxes are located in both stairwells (Rooms 104 and 119)
- Stay away from surgery rooms and procedure rooms that contain oxygen. If possible, make sure oxygen bottles are turned off on your way out of the building. NEVER cross through smoke or fire to ensure bottles are closed. Oxygen bottles are located with the isoflurane anesthesia systems.
- If possible, close doors behind you to help prevent spread of fire.
- Small fires may be extinguished using fire extinguishers. Any fire that produces sufficient smoke or heat to pose a risk to the safety of personnel should be left alone and all personnel evacuated.
- If possible, make sure everyone has evacuated the facility.
- Because of the potential risk to human life, no attempt will be made to evacuate the animals. Animals with minor injuries will be treated accordingly. Animals with serious smoke or thermal injuries will be euthanized.

Snow or Ice Storms:

Animals must receive essential care including food, water, medical care and environmental support even during such storms. The most likely storm related problems will be loss of power and HVAC failure that will be managed as stated in the section covering loss of power.

Readiness:

- Check facility frequently for adequate caging, feed, and other supplies
- During inclement weather, check for developing weather in the area of facility.

Actions:

- Animal care operations must continue for all animals in the vivarium
- Throughout the work day, check for developing weather conditions.
- In case of inclement weather, verify that animals have been cared for and have full water and feed to last 48 hours where possible (in case of extended care delays)
- If storms hit during the night, the emergency call list will be called to identify an individual who is able to reach the facility and who will assume responsibility for animal care. It may be necessary for an individual to remain at the facility for up to 24 hours to ensure animal well-being. It will be the responsibility of that individual to assure the Director of the COP Animal Vivarium that the animals have received necessary care.

- Sufficient drinking water will be stored in the facility to provide for the animals for at least one week and sufficient feed will be stored in the facility to provide for the animals for at least two weeks. In the event of unexpected storm damage, a high quality commercial dry dog food will be provided until normal feed supplies can be restored.
- If there is a shortage in the water supply, priority will be given to drinking water. Cleaning will be suspended until water is restored.
- If restoration of normal care procedures and support systems is not possible within a reasonable amount of time and animals become stressed, all animals will be euthanized.

Tornadoes and Severe Thunderstorms

Monitor weather conditions during tornado season (spring and summer). Personnel should stay away from the doors and windows and move to interior rooms until an all clear has been issued.

Readiness:

- Be aware of weather conditions during the spring and summer time of the year.
- Check your work area(s) for heavy objects stored overhead that could fall during a tornado. Move away from rooms that contain tall cabinets, shelves, freezers, etc. that could overturn and injure personnel or prevent you from exiting.
- The main corridors on the first and second floor are identified as safe areas in the facility that will provide protection in case of tornado or strong thunderstorms.

Actions:

- If a tornado watch is issued for the area, on-going animal procedures may be completed but new procedures will not be initiated. If a tornado warning is issued and impact from a tornado is imminent, on-going animal procedures will be discontinued and the animals returned to their housing. Personnel will seek shelter and updates will be sent via ULM's Emergency Notification System.
- If a tornado strikes the facility, the animal area will be inspected as soon as it is safe. Animals with minor injuries will be treated appropriately and animals with severe injuries will be euthanized.
- Facility manager/supervisor(s) will make sure all personnel are accounted for.
- If the facility sustains damage sufficient to preclude animal housing and care, the animals will be euthanized.

Intrusions:

Be alert to unauthorized persons attempting to gain access to the animal facility. Individuals sometimes claim to "have a delivery", an "appointment", left their access card or may pretend to have authority to gain access. Only those persons authorized for access by the Director of COP Animal Vivarium are allowed to enter the animal facility. If a break-in or other illegal act is in progress, call extension 5350.

Action:

- If a break-in or other illegal act is in progress, call the campus police at extension 5350.
- Be ready to provide information to the ULM campus police:
 - Nature of situation
 - Department name
 - Number of people involved
 - Possible threat to personnel safety
- Safety precautions:
 - Remain calm
 - Be courteous
 - Avoid an incident
 - If you arrive during a disturbance, leave the area at once
- Request an escort if needed, to leave the building

Bomb Threat:

Bomb threats are usually received by telephone or sometimes by note, letter or email. Most bomb threats are made by callers who want to create an atmosphere of anxiety and panic, but all such calls must be taken seriously and handled as though an explosive is in the building.

Action:

- Any person receiving a phone call in which the caller states that a bomb has been placed in the facility should make every effort to obtain as much information as possible. The following questions should be asked:
 - a) Where is the bomb located?
 - b) When is it set to explode?
 - c) Is the bomb contained in a box, briefcase, etc.?
 - d) Why did the caller place the bomb at that location?
 - e) Would the caller like to speak to someone about correcting a "wrong" done to them?
- Call the campus police at extension 5350 and give them any information you were able to obtain.
- Notify your immediate supervisor of the threat.
- The campus police officer in charge of the scene may request an employee of the affected area to assist in searching for the bomb. Those employees who work in the area would be most likely to recognize a suspicious package or device that does not belong in that area.
- Under NO circumstances will any vivarium employee attempt to move, disarm, or otherwise neutralize a suspected explosive device.

Hazardous Chemical Exposure/Spill

Chemicals used in the Vivarium include volatile anesthetics, acidic compounds, and caustic compounds (cage wash detergents). Careful handling procedures reduce the potential for injury.

Response Actions: First Aid

- If face and/or eyes are affected, immediately go to an **EMERGENCY EYEWASH STATION** (located in rooms 109,111, 114, 209, and 211) and irrigate eyes continuously for 15 minutes. Seek **MEDICAL ATTENTION**.
- If skin/body is affected **REMOVE** clothing and flush skin with large amounts of water for 15 minutes in shower located in room 114. Seek **MEDICAL ATTENTION**.
- **INHALATION:** Remove individual to fresh air. Seek **MEDICAL ATTENTION**.
- **INGESTION:** Encourage the victim to drink large amounts of water. **DO NOT** force fluids on an unconscious individual. **DO NOT** induce vomiting except on the advice of a physician.
- **IN ALL CASES:** If injury is severe or the person is unconscious, treat as a Medical Emergency. Call the EMERGENCY NUMBER, extension 5350 and give the following information"
 - a) Location of accident/incident – building and room number
 - b) Type of material involved – liquid or solid (wet or dry)
 - c) Name of material if known
 - d) Quantity involved
 - e) Severity of injury
 - f) Is an ambulance and/or physician required?
- Proceed with the necessary spill containment and clean-up procedures after rendering first aid.

Clean-up of Chemical Spills

Minor Spills

- Confine liquids with paper towels
- Notify other workers of spills

- Clean up spills as soon as possible
- Use the appropriate personal protections apparel and equipment
- Avoid producing dust or aerosols
- Contact the Environmental Health and Safety officer at extension 5171 for assistance if necessary
- Properly dispose of contaminated materials. Contact Environmental Health and Safety officer, extension 5171, for assistance
- Report **ALL** spills of unusually hazardous materials to your supervisor.

Large Spills – No immediate Life/Health Threat

- Use paper towels or other absorbent to confine the chemical to the smallest possible area
- Phone the EMERGENCY NUMBER, extension 5350.
- Give the following information:
 - a) Location of accident/incident – building and room number
 - b) Type of material involved – liquid or powder/crystalline (wet or dry)
 - c) Name of material if known
 - d) Quantity involved
- Notify immediate supervisor
- The safety office or campus police will decide if the building is to be evacuated.
- Use the appropriate personal protections apparel and equipment
- Avoid producing dust or aerosols
- Contact the Environmental Health and Safety officer at extension 5171 for assistance if necessary
- Properly dispose of contaminated materials. Environmental Health and Safety officer, extension 5171, for assistance

Possible Life/Health Threat

- Phone the EMERGENCY NUMBER, extension 5350
- Give the following information:
 - a) Location of accident/incident – building and room number
 - b) Type of material involved – liquid or solid (wet or dry)
 - c) Name of material if known
 - d) Quantity involved
 - e) Your name and number where you are now
 - f) Whether clean-up assistance is required
- The safety office or campus police will decide if the building is to be evacuated.
- Alert other workers in the immediate area
- Contact supervisor to assess the animals' health will be compromised and if animal evacuation is necessary
- Prevent other people from entering area until the campus police arrive
- Contain the spill if possible using paper towels or other absorbents
 - a) Follow clean-up procedures outlined above
 - b) Use the necessary personal protection apparel and equipment
 - c) Avoid producing dust or aerosols
- Contact the Environmental Health and Safety officer at extension 5171 for assistance if necessary
- Properly dispose of contaminated materials. Contact Environmental Health and Safety officer, extension 5171, for assistance

Radioactive Spill (No bodily contact)

- Phone the EMERGENCY NUMBER, extension 5350
- Give the following information:
 - a) Location of accident/incident – building and room number
 - b) Type of material involved – liquid or solid (wet or dry)

- c) Name of material if known
- d) Quantity involved
- e) Wait for arrival of ULM's Radiation Safety Officer
- Isolate the contaminated area

Radioactive Exposure (Direct Bodily Contact)

- Immediately remove all contaminated clothing
- Wash affected skin area with great amounts of water
- Phone the EMERGENCY NUMBER at extension 5350
- Give the following information:
 - a) Location of accident/incident – building and room number
 - b) Type of material involved – liquid or solid (wet or dry)
 - c) Name of material if known
 - d) Quantity involved
 - e) Number of people/animals exposed
- Contact supervisor
- Wait for arrival of ULM's Radiation Safety Officer

Biological Exposure

Biohazards include body fluids, blood, infectious waste, or other potentially infectious material. Any body fluid contains microorganisms capable of causing disease. Therefore, appropriate protective attire must be worn when having direct contact with any body fluid or tissue. Gloves must be changed and hands washed after handling laboratory specimens containing body fluids. All procedures involving blood or other potentially infectious materials must be performed in a manner that minimizes splashing, spraying, and aerosol formation of these substances.

Eyes/Mouth splashed with blood or body fluid:

- Flush with water at least 5 minutes in an eyewash
- Immediately contact supervisor

Needle stick

- Milk wound to induce bleeding
- Wash with soap and water for 5 minutes
- Immediately contact supervisor

Other Injuries

- Remove contaminated clothing, wash skin, replace with clean clothing
- Immediately contact supervisor

Medical Emergency

- If person is CONSCIOUS
 - a) Begin first aid procedures
 - b) If applicable, stop bleeding
 - Help victim lie down
 - Press directly on wound with sterile gauze, paper towel, clean handkerchief, or gloved hand. Maintain steady pressure for 5 to 15 minutes.
 - If bleeding from arm or leg, elevate that arm or leg
 - c) If applicable, treat for shock
 - Keep victim warm

- Keep victim flat or with legs slightly elevated
- d) If person is choking
 - If person can speak, encourage coughing
 - If not, use Heimlich Maneuver for conscious person. For unconscious, call for help and give resuscitation.
If obstruction is obvious, try to clear
- If person is UNCONSCIOUS and is NOT BREATHING:
 - a) BEGIN CPR if you know how and continue till assistance arrives and you are relieved
 - b) Call the EMERGENCY NUMBER at extension 5350
 - c) Give the following info:
 - 1) Nature of the medical emergency
 - 2) Location – building and room number
 - 3) Your name and number
- If person is UNCONSCIOUS and is BREATHING
 - a) Call the EMERGENCY NUMBER at extension 5350
 - b) Give the following info:
 - 1) Nature of the medical emergency
 - 2) Location – building and room number
 - 3) Your name and number
 - c) Begin basic first aid procedures
 - d) Monitor breathing
 - e) If applicable, stop bleeding
 - 1) Help victim lie down
 - 2) Press directly on wound with sterile gauze, paper towel, clean handkerchief, or gloved hand. Maintain steady pressure for 5 to 15 minutes.
 - 3) If bleeding from arm or leg, elevate that arm or leg