# The University of Mississippi Animal Program Disaster and Contingency Plans

**Summary/Purpose:** Provide guidance for emergency management preparedness, response, and recovery of the animal care and use program.

#### A. BACKGROUND

Under the United States Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy), and the Animal Welfare Act Regulations (AWAR), the Institutional Animal Care and Use Program has the responsibility to ensure humane care and use of animals used in research, teaching, demonstration and testing<sup>1-2</sup>. As such, facilities with animal care and use programs must have a disaster plan. The United States Department of Agriculture (USDA), 9 CFR parts 2 and 3, and USDA Final Rule (December 31, 2012) further amend the Animal Welfare Act regulations to require research institutions to have a contingency plan and training of personnel in place.

The goals of this disaster/contingency plan include:

- Mitigate the impact of the emergency/disaster on the animal care and use program.
  - o Animals- Minimize the loss of animals and the extent of pain and distress
  - Personnel- Safeguard animal care staff, animal researchers, and emergency response personnel
  - Research- Establish priorities to diminish disruption of PHS sponsored research and other mission critical activities at UM.
- Promote preparedness.
  - o Outline training and communication expectations for all responsible parties
  - Identify potential limitations during response and recovery
- Support the ability of animal care program to sustain, recover, and restore its operations during anemergency/disaster.

Although it is impossible to thoroughly address every conceivable emergency situation, this plan discusses several types of emergencies/disasters that could occur at UM (see **Appendix** for specific situations). This disaster plan supplements the campus-wide UM Campus Emergency Management Plan (CEMP). All personnel should follow the procedures in the UM CEMP and use this plan as a supplement to specifically address animal program needs in the event of an emergency. There is a chance that animals could escape from their housing facility during a major catastrophe, compounding an already difficult situation. With this in mind, it is critical to denote that **under no circumstances should employees put themselves at risk at any time in attempting to implement animal protection procedures**. Nothing in this plan, or any element thereof, should be construed as limiting the use of good judgement and common sense in matters not foreseen or addressed by the plan or its appendices.

## **B. RESPONSIBILITIES AND TRAINING**

Personnel must comply with the UM CEMP and direction from the associated Crisis Action Team (CAT) and Incident Response Team (IRT). Effective responses to emergencies and disasters that impact the animal program are a shared responsibility that requires cooperation, collaboration, and trust among the investigators, Animal Resource staff, the IACUC, the Institutional Official and Office of Research Integrity and Compliance, and the institutional emergency operation teams:

• Investigators and Animal Resource staff should ensure that animal facility spaces and animal cages/tanks are equipped with proper signage for any information pertinent to the safety of the

- emergency response personnel as well as straightforward identification of animals during response and recovery.
- UM Animal Care and Use Program will have/designate a Primary and Alternate representative
  on the UM IRT (Emergency Support Function (ESF) #11 in the Campus Emergency Management
  Plan), to ensure that campus emergency response teams have sufficient resources and
  information to make informed decisions regarding the animal program during an emergency.
  Within this plan, the representatives are referred to as "Animal Emergency Coordinators"
- Within our Animal Care Program, each housing facility (vivarium, satellite facilities) should have at least one "Emergency Animal Responder" identified and trained to be point of contact for our Animal Emergency Coordinator during emergencies. \*Note: All Animal Care staff are also considered Emergency Animal Responders
- UM IACUC should ensure this disaster and contingency plan is up-to-date and incorporates into the overall University emergency plans.
- UM Institutional Official (Vice Chancellor of Research) and the Office of Research Integrity and Compliance should provide resources and guidance to the IACUC, animal research investigators, animal care staff, and the UM IRT on current regulatory requirements involving the requirements for disaster planning, training, response, recovery, and reporting.

Training is an integral part of preparedness as it provides personnel with the knowledge, skills, and abilities to respond appropriately and to effectively manage a disaster event.

- All personnel approved to work with animals will be provided this disaster and contingency plan
  during animal program onboarding. All personnel should be familiarized to emergency exit plans,
  nearby emergency phone lines, and the safety signage displayed throughout the facility.
- Investigators should train their research team on marking cages for biohazards and evacuation prioritization (see **Section D**. **Evacuation of Animals**).
- Animal Resource staff, additional appointed Emergency Animal Responders, and Emergency Animal Coordinators should be trained on the implementation of this plan via a table top exercise every 3 years. Updates to this plan and/or the key contact details within it will be reviewed during the IACUC semi-annual inspection (every six months) and shared directly with the IRT representative and Animal Resource staff.
- All Animal Resource staff and Investigators should follow instructions given by emergency response personnel.

## C. EMERGENCY RESPONSE COMMUNICATION

Emergencies will occur unexpectedly both during and outside of normal work hours. Clear lines of communication are critical for a coordinated response to such emergencies. The following describes communications pathways, and guidelines during an emergency involving animal facilities.

## **Campus Emergency Response Organization**

As delineated in the Campus Emergency Management Plan, the Emergency Operations Center (EOC) Manager is the overarching commander for campus-level coordination efforts. The EOC Manager is supported by members appointed to the UM Crisis Action Team (CAT) and/or the Incident Response Team (IRT). Together, these teams represent and direct 16 Emergency Support Functions (blue circles in figure on right). ESF #11



denotes Animals and Natural Resources. Our Animal Program has a representative (termed Animal Emergency Coordinator) within this framework tasked with providing guidance and assistance to other members of the IRT/CAT, as well as leadership for our animal program unit during an emergency. Importantly, this representative serves as a point of communication for our Emergency Animal Responders in the event of an emergency. As of March 2022, Dr. Harry Fyke is the primary Animal Emergency Coordinator on IRT, with Jeff Casey as alternate.

## Notification of an Emergency or Problem Involving Animals or Animal Facilities

UM Facilities or Campus Emergency Management personnel will typically contact the Animal Emergency Coordinator or Animal Resource Supervisor should there be an emergency involving animals or any animal facility (central vivarium or satellite facility). If/when time permits, the Emergency Animal Response team will call the Principal Investigator's (PI) 24-hour contact number to update the researchers of the emergency situation. This number should be on record in the IACUC office and must be clearly posted in an obvious location upon entering the housing room.

In instances where a research team member, satellite facility care team, or animal handler discovers a potential emergency he/she should **immediately contact emergency management** (662-915-**4911**) **when out of harm's way**. If the emergency endangers the live of animals or significantly compromises animal care, the Animal Emergency Coordinator should be contacted at the numbers provided below. Additional contacts include:

## **Contacts for Emergencies and Disasters Involving Animals**

UM Police and Emergency Management	911 (662-915- <b>4911</b> )
Fire	911 (662-915- <b>4911</b> )
Ambulance	911 (662-915- <b>4911</b> )
Hazardous Materials Response Team	662-915-5433
ANIMAL EMERGENCY COORDINATOR	
Primary – Dr. Harry Fyke	662-801-4327 (cell)
Alternate – Jeff Casey	662-816-1385 (cell)
Attending Veterinarian (AV)	662-801-4327 (cell)
	662-234-2928 (clinic)
Animal Resources Supervisor – Penni Bolton	662-915-5324 (work)
	662-481-2801 (text only)
	662-238-2616 (landline)
Animal Resources Emergency Response Team Members	
Jeff Casey	662-816-1385 (cell)
Brittney Casey	601-502-4410 (cell)
IACUC Office	662-915-5006
IACUC Chair: Dr. Bill Gurley	501-580-8074 (cell)
Office of Research Integrity and Compliance	662-915-7482

<u>Contacts for Non-Emergency Animal Facility Problems</u> (room temperature variations, airflow abnormalities, equipment breakdown, etc.)

Animal Resources should be notified (662-915-5324) as well as the following units:

Physical Plant	662-915-7051
-After Hours	662-915-7087
Assistant Superintendent of Mechanical Services	662-915-5909
HVAC Shop Supervisor	662-915-5909

#### **D. EMERGENCY RESPONSE**

The response phase includes the actions that are taken immediately following the emergency or disaster event. <u>Human health and safety must always take precedence.</u> As delineated in the **Specific Event Appendix**, campus police dispatch should be notified immediately to mitigate the event impact and coordinate with the appropriate response teams. First Responders may direct personnel to either shelter in place or evacuate, depending on the situation at hand. After ensuring human safety, the Campus Emergency Response Teams (including the Animal Emergency Coordinator), will decide whether to evacuate animals or keep them sheltered in place.

#### **SHELTERING-IN PLACE**

The term "shelter-in-place" means to seek immediate shelter and remain there during an imminent event instead of evacuating. There are occasions when the option to evacuate the area cannot be considered. Unless otherwise instructed to evacuate, sheltering in a pre-determined safe location is the preferred method of safely waiting out events. Personnel should proceed calmly to the location designated for the building and shelter-in-place until given the all-clear from emergency response personnel. Windows, doors and HVAC systems in the designated area should be closed.

A second definition of "Sheltering in Place" may be used to describe when animal care personnel decide ahead of time to come to or remain in the facility for longer than a normal shift to allow for the animals to be effectively cared for while sheltering in place. For example, when extreme weather is predicted, such as snow, ice, or tropical storm which may prevent transportation or limit access to the animal facility to provide care as required by federal law, the Animal Facility Supervisor and AV, or Emergency Animal Responder designee, will coordinate to ensure that someone is available to care for the animals (See **Appendix**). Since events like this allow time for planning, the Animal Facility Supervisor and AV, or designee will ensure that personnel support supplies such as food (MRE), water, and bedding are available for the individual(s) remaining at the facility. If such a decision is made, the Animal Facility Supervisor or AV will notify the campus emergency response coordinator of the exact area where personnel remain; this is especially important when the University is "closed." Emergency Animal Responders are encouraged to complete an animal inventory in the preparation stage of sheltering-in-place, and rabbits (or other USDA-covered species) should receive identification collars and/or non-toxic fur markings in the event of escape.

#### **EVACUATION OF HUMANS:**

Safe evacuation of all people from the designated area is the common goal for all responding agencies. If there is an immediate threat to human health or safety – **PERSONNEL MUST NOT ATTEMPT TO** 

**EVACUATE THE ANIMALS!** Concern for animals is secondary to human life. Personnel should not place themselves in danger to remove animals from a building.

- If you are working with animals near their cages and time permits, put the animal(s) back in their cage(s) and turn off any compressed tank ventilator systems in use.
- If you are in the middle of surgery and an emergency is confirmed, close all gas cylinders and vaporizers and euthanize the animal if time permits.

After an evacuation of personnel, ensure that the emergency is reported to campus dispatch (662-915-4911) and the Animal Resources team (contact info above).

## **EVACUATION OF ANIMALS:**

Evacuation of animals will be considered based on the details of the disaster, type of animal, and feasibility of evacuation or relocation. The decision to relocate animals will be made by the programs incident response team representative following consultation with the other units of the campus emergency coordination teams. Scenarios where evacuation of an animal may be appropriate include:

- Temporary relocation of animals while a localized facility issue is addressed.
- Evacuation following an emergency that resulted in damage to the animal facility rendering it unsuitable for continued housing of animals.
- Pre-evacuation in the event of an impending disaster.

If evacuation of the animals from the facility is recommended by the emergency response teams, Emergency Animal Responders should follow all evacuation procedures and routes posted in the facility.

Animal Evacuation Preparedness- Prioritization Decisions: Events that create a situation in which all animals cannot be evacuated safely necessitate making decisions regarding the prioritization of which animals to preserve. Investigators with irreplaceable animals or animals necessary for critical research should determine prioritization prior to an emergency. The following are recommendations for prioritization:

- Unique transgenic lines that are not cryopreserved and/or mutants not available elsewhere. Generally, 3-4 breeder cages/tanks (individuals or pairs) per line. Note: All researchers are advised to cryopreserve sensitive lines off campus prior to an emergency.
- Animals enrolled in "long term" or "critical" projects that would be very difficult/time consuming/expensive to duplicate
- USDA covered species
- Animals to save if there were time to evacuate 2-3 cages per housing room.

Note: Animals requiring biohazard housing may not be removed from the animal facility without direct approval from ORSP, Department of Health & Safety, and/or the AV or designee.

**Identifying Animals Prioritized for Evacuation:** A uniform method for identifying cages/tanks of animals to be evacuated first in an emergency allows for rapid coordination of actions during the emergency response.

- Investigators should complete the Emergency Animal Response form for each IACUC approved protocol.
- Rooms with animals prioritized for evacuation should have a "SAVE IN EMERGENCY" sticker prominently displayed on the door for emergency response personnel to identify.
- Cages/tanks prioritized for evacuation inside the room should be labelled with the

- same "SAVE IN EMERGENCY" sticker for emergency personnel to identify.
- All cages/tanks prioritized for evacuation must have a completed cage card that
  includes identifying information on the animals housed inside. The information cage
  card should be taped to the cage, and in the event of an emergency, it can be
  written on the cages with permanent marker during the relocation process.
- It is recommended that investigators also include emergency contact information on the back side of the cage/tank cards for the animals prioritized for evacuation.
- If possible, researchers should group the "SAVE IN EMERGENCY" cages on the rack for ease in identification.

Access to Facilities for Evacuating Animals: UPD, the Animal Resource Supervisor, AV, the Animal Emergency Coordinator, and the IACUC office have ID card access and key/key access for all animal housing facilities. Individuals identified and trained as Emergency Animal Responders will have access to the facilities they represent as well.

Relocation Evacuation Space: In the event of temporary relocation of animals, the location selected for short-term housing will depend on the type of event and the severity of the damage. In localized incidents (minor water pipe leak, limited power outage, etc), animals are likely to be transported to alternate spaces nearby, such as hallways or testing rooms. These efforts are likely to be coordinated by the Animal Emergency Coordinator, and if the situation arises after hours, personnel who discovered the localized concern should contact the Animal Emergency Coordinator and/or Animal Resource team for guidance (see contact table).

In the event of a catastrophic incident, animals may be transported to a designated triage/relocation area for further evaluation and short-term housing. Priority is given to evacuating animals in housing units labeled with the "SAVE IN EMERGENCY" stickers, with additional animals being evacuated as time allows. If the campus emergency response teams (CAT/IRT) deem triage/relocation necessary and appropriate, the following decision tree will be utilized for short-term relocations:

#### Animal Relocation Decision Tree Relocation of Satellite Facilities in Shoemaker, Faser, and Field Station **Relocation of Central Vivarium** Are the alternative satellite facilities safe? Is South Oxford Campus safe? Yes Yes No Relocate to Alternative Relocate to SOC Relocate to Relocate to UM **SOC B650** Field Station Satellite Facility B650

Because coordination is critical to emergency responses, the ultimate decision to relocate animals to the areas listed above in the event of a catastrophe will be made by the Campus Emergency Response Teams (CAT/IRT). Our program's Emergency Animal Response team will work to ensure save transport of animals in climate-controlled vehicles. There are UM vehicles that are routinely inspected by the IACUC to ensure cleanliness, security, and functional climate-control features. However, if those are unavailable, the Emergency Animal Responders should utilize a vehicle that fulfills these expectations and should transfer rations of food and water for the animals in case of unexpected delays during transport (~2-3 days of rations should be taken during initial transport). The AV or designee will provide care for animals during transport, and humans should follow all safety precautions when in a transportation vehicle.

Note on Rabbits (or similar): Transport boxes and/or pet carriers are available for transferring rabbits or other animals whose housing units may be difficult to remove quickly in the event of an emergency. Identification collars should be placed on rabbits (or non-toxic fur markers) to allow for identification in case of escape.

Note on fish: Reverse osmosis water storage and transport is preferred for evacuated zebrafish.

For long-term relocation of animals, UM has a Memorandum of Understanding with the AVs at 1) the University of Mississippi Medical Center and 2) the School of Veterinary Medicine at Mississippi State University. Each site agrees to provide emergency, long-term housing for the other sites. A decision for long-term relocation will be made by oversight teams after triage and/or short-term relocation at the designated areas has occurred.

## **VETERINARY CARE DURING EMERGENCY ANIMAL EVACUATION RESPONSE**

Animals evacuated will be triaged by the AV or designated and trained animal care personnel (emergency animal responders, and/or research staff) to assess for injury or other consequences of the evacuation. The AV will develop a treatment plan which may occur on site or after evacuation to a predetermined area/site. Those animals with injuries too severe to recover will be humanely euthanized using methods deemed acceptable or conditionally accepted, with conditions met, by the AVMA Guidelines on Euthanasia.

#### D. EMERGENCY RECOVERY

The recovery phase begins after the initial response to an emergency or disaster event has concluded. Assessment of the impact to the Animal Program is one of the first steps. The animal facilities as well as the animals themselves must be assessed. The **Appendix** describes plans for specific situations and include recommendations for recovery assessment. In general, the following items should be evaluated during recover:

## FACILITY

- o Macroenvironment issues: Damage to rooms, HVAC, water, power, storage
- o Microenvironment issues: Damage to animal housing systems, equipment
- Supply concerns: Damage to feed, bedding
- Animal security concerns: In the event of a catastrophic emergency, it may not be
  possible to relocate or protect all animals. Thus, the facility must be assessed for
  animals loose within the rooms, lost identifying information, and potential biohazard
  exposure.

## ANIMAL WELFARE

- All animals should be checked to confirm health by the AV or Animal Resource personnel
- Injured animals should be triaged and evaluated by the AV, utilizing the emergency animal response form completed by investigators indicating their research prioritization needs. Investigators will be contacted to discuss treatment options and euthanasia criteria if time permits.
- All animals that were loose should be recaptured and their cages marked for quarantine and animal health program monitoring.

After evaluating the facility, the Animal Emergency Coordinator representing the animal program on the campus IRT (ESF #11) will share their findings with the Emergency Animal Responders and the

IACUC office. The investigators will then be updated from the Responders/IACUC regarding any changes to animal care plans. As denoted above, the decision to evacuate and transport animals to an alternate location may be made by the campus emergency response teams.

Once program and facility operations have returned to normal, a critical evaluation of the event cause, program response and recovery process should be performed. It is important to identify program elements that may have contributed to the event or impeded the response, and implement procedures to prevent or mitigate the effects of a similar event in the future.

#### E. SUSTAINING ANIMAL CARE AND SUPPORT DURING RECOVERY AND RESTORATION

**Animal health checks and health maintenance**: Animals should be checked daily to confirm they are healthy. These observations may be performed by Animal Resources personnel or other qualified personnel identified by the AV.

**Food and water supplies**: Food and water are critical to maintaining animal health. Having the appropriate food for the species and research needs, in adequate quantities, in unadulterated form, is one goal of this plan. If the usual food is not available, professional judgment must be applied to identify acceptable substitutes which are available. Potable water is especially important, as many animals can survive for several days with little food, but may succumb within 1-2 days without water. Some species are especially sensitive to food or water deprivation and should be given special attention. The Emergency Animal Responders (including the Animal Resource Supervisor and Animal Care staff) are tasked with providing food and water throughout recovery processes.

Sanitation: For purposes of animal health, animal welfare and support of research, adequate sanitation must be provided. Housing microenvironments (cages/tanks) of some species must be changed often while others may go several days without inducing health or environmental problems. The goal of this plan is to approximate normal sanitation schedules with available resources. Increasing sanitation intervals, spot cleaning instead of whole microenvironment changes, changing bedding/enrichment instead of cage changes, hand washing some equipment, or deferring activities, such as floor mopping, may be required. The IACUC will work with the AV and/or Animal Resource Supervisor to decide which sanitation activities are performed in order to provide the greatest benefit to the animals if it is not possible to perform all normal activities due to disaster/emergency conditions.

Environmental support (ventilation, temperature control, utilities): Maintenance of an appropriate environment is essential to the well-being of animals and for many research projects. Ventilation problems may include loss of or diminished air supply or exhaust, loss of pressure differentials in critical areas, unacceptable temperature variations, contamination with agents such as chemicals or smoke, or loss of utilities such as electricity needed for lights or powered equipment (e.g., fish water control system, ventilated racks). Ventilation problems should be addressed by the UM AV. the Animal Facilities Supervisor, or Physical Plant personnel with goals of: maintaining at least some air movement in animal housing spaces, sustaining air pressure differentials in all rooms including rooms within the biohazard suite, and keeping temperatures as close to the acceptable range as is possible. The minimal standard is to prevent animal deaths or contamination of the environment. Flashlights are available throughout the animal facilities, and supplemental heating and cooling devices are available if needed.

**Personnel to provide animal care:** Personnel with adequate training are essential to maintaining animal colonies. They may be unable to work in facilities due to damage or dangerous conditions, physical obstructions (snow storm or chemical spill nearby), or interruption of work (bomb threat, picketing,

etc.). The Animal Emergency Coordinator and/or the Animal Resources Supervisor will deploy available personnel to maintain animal health and well-being under the direction of the AV or designee. The personnel are likely to be already trained as Emergency Animal Responders. Personnel may be asked to perform duties outside the scope of their normal responsibilities in order to protect animal health or well-being. The AV or designee, with consultation as needed from Office of Research Integrity and Compliance and Animal Resource Supervisor, make this decision. A list of current/essential personnel that may need to access campus and the animal facilities should be provided to UPD and the campus emergency response teams so they may further distribute it to local, state or federal authorities that may control access, including road closures. This list should be updated annually.

#### F. REFERENCES

- 1. PHS Policy IV.B.4
- 2. 9 CFR § 2.31(c)
- 3. PHS Policy IV.F.3
- 4. NIH NOT-OD-05-034

Acknowledgement is given to the UTHSC, UGA, and NIH Animal Care and Use Programs, as this document was generated using their plans and templates available on-line.

## **APPENDIX A. Examples of Specific Emergency Plans**

Animal Activism

Bomb Threat

Civil Disturbance

Chemical Spill

Fire

Flood/High Water

Pandemic

Wind Storm- Tornado or Hurricane

Winter Storm

Structural Damage

Utility Disruptions- HVAC or Power

Utility Disruptions- Water or Sewer

## **Animal Activism Event**

## **Preparedness:**

- o Do not place yourself or others at risk. Contact UPD if a situation appears to be escalating.
- Prevent crimes by securing offices, facilities, and property.
- Secure all movable/portable equipment.
- Wear and show campus identification.
- o Campus police dispatch will provide safety escorts on campus upon request.

#### Response:

- Do NOT confront the individual(s).
- Check to see if anyone was injured and seek medical care, if needed.
- Immediately notify campus police dispatch 662-915-4911.
- Use the following list to assist in gathering specific details for the Police:
  - o Identify yourself as a person working at an animal research facility
  - o Location of the activity including building, floor, room number(s), etc.
  - Number of people involved
  - o Characteristics of the people i.e. gender, type of clothing, distinctive features, etc.
  - o Type of activities being conducted, i.e. picketing, yelling, vandalism, releasing animals, etc
  - Type and number of weapons visible
  - Type and number of other tools and equipment, i.e. bullhorns, rope, spray paint cans, electrical wiring, backpacks, gym bags, signs, etc.
- Remain at your general location until UPD arrives. If necessary, relocate for safety.
- Take photographs of the activists and their activities, but only if this can be done safely.
- Observe the route and means the activists use to leave the area, but only if this can be done safely.
- Note the exit path and vehicle information, including license plate numbers.
- Note any items or places physically touched by activists and protect those items/areas. If activists were not wearing gloves, law enforcement may attempt to get the activists fingerprints.
- Carefully examine the entire work area for damage, missing items, and any items left behind by activist. Do not touch any items left behind or anything suspicious. Point these items out to law enforcement officials. Items to look for include:
  - Noise makers: devices designed to make painfully loud noise, either immediately or later when activated by a timer
  - Stink bombs: devices may be ignited by a flame immediately or later from a timer
  - Stinky fruit: activists may leave frozen pieces of type of fruit that smells of rotting flesh. Once thawed it can make a facility uninhabitable for some time.
  - Flyers or other printed information
  - Packages, boxes, backpacks, or other containers that could contain dangerous items
- Notify supervisor as soon as possible.

#### Recovery:

Re-enter the area only upon clearance by Emergency Responder or Supervisory personnel.

Report the animal program status to your supervisor and the IACUC office.

Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

#### **Bomb Threat**

## **Preparedness:**

- o Do not place yourself or others at risk. Contact UPD if a situation appears to be escalating
- o Prevent crimes by securing offices, facilities, and property.
- Wear and show campus identification.

#### Response:

## o Suspicious Letter or Package:

Never touch a suspected bomb/explosive device.

Evacuate everyone in the vicinity to a safe distance.

Turn off all radios, cell phones, and transceiver equipment near the suspected area.

Notify campus police dispatch 662-915-4911.

Examine suspicious mail gently - Touching Triggers Tragedy!

- o Place of Origin Note the delivery postmark.
- Writing Caution if unusual type of writing not normally received on the address.
- o Balance Has loose contents, or is heavier on one side than the other.
- Weight Excessively heavy for its volume.
- o Feel Springiness at the top, bottom, or sides, but it does not bend or flex.
- o Protruding Wires, holes, grease marks, smell, etc.
- o Letter Stiffness. Presence of stiff cardboard, metal, or plastic.
- Inner Sealed Enclosures.

## Threatening Call:

Do not hang up. Remain calm. Take the caller seriously. Assume the threat is real. If possible, have someone listen in on the call. Engage caller in conversation and obtain as much information as possible from the caller:

- Type of device, what it looks like, where it's located, what time it will go off, etc. If possible, have someone listen in on the call.
- Take notes of the conversation. Jot down exact words as soon as possible.
- Use Bomb Threat Checklist to gather information about the caller and the threat.

Have a coworker call campus police dispatch 662-915-4911 on another line.

- O Do not use cell phone, two-way radio, or any wireless communication device, as it can act as a trigger for an explosive device.
- If you are alone, after the call is disconnected by the caller, do not hang up the phone.
   Press \*57 first and then hang up the phone. This procedure will "capture" the phone line so that the phone company can trace it.

If the threat is left on voicemail, do not delete it. Call UPD to report the threat. Notify supervisor. Do not discuss the situation with news media or other outsiders. Inquiries should be courteously and tactfully directed to the UM Emergency Response Teams.

## **Recovery:**

Re-enter the area only upon clearance by emergency responders or Supervisory personnel.

Assess program elements contributing to the occurrence of the event and program areas impacted.

Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

Debrief with staff after the event.

	BOMB THREAT CHECKLIST			
Date of Ca	ate of Call: Number at which call was received:		which call was	
Length of	Call:	Time of Ca	II:	
Callers Voice				
Calm	Cr	ying	Deep	
Angry		rmal	Ragged	
Excited	Dis	tinct	Clearing Throat	
Slow	Slurred		Deep Breathing	
Rapid	Nasal		Crackling Voice	
Soft	Stutter		Disguised	
Loud	(0770)	isp	Foreign	
Laughing	25. 47	ıspy	Familiar	
Laugilling			es aretracianaciones	
Street (ca		ground So	nimal Noises	
Airpl	1000	A	Clear	
Voi			Static	
PA S	/stem		Local Call	
Mυ	sic	Lon	g Distance Call	
House		F	Phone Booth	
(dishes,		Гос	ston ( Machinan (	
Motor (f	an, a/c)		etory Machinery	
Office Machinery Other (specify):				
		Language		
Well S		Irrational	Taped message	
(educ			Message read by	
Fo		Incoherent	threat maker	
Exact wording/remarks  When is bomb going to explode?				
Where is it	right now2			
What does	it look like?	<b>).</b>		
What kind of bomb is it?				
Where are you?				
What is callers name?				
Person taking call: Phone number:				
Adapted from NIH PM 1430 (3/1/10)				

INSTRUCTIONS WHEN RECEIVING BOMB THREAT MESSAGE
Listen carefully to what the caller is saying, while trying to get as much information, using the checklist.
Motion to a co-worker, if possible, and have them call 911 to let the dispatcher know that there is a possible bomb threat.
After the call is disconnected by the caller, do not hang up the phone. Press *57 first and then hang up the phone. (This procedure will "capture" the phone line so that the phone company can trace it).
DO NOT activate the fire alarm, as this may trigger the bomb to explode.
Take the Bomb Threat Checklist with you when you leave the building and give it to the police representative/incident commander. They may have more questions for you later, so print your name and phone number on the bottom of the form.
Additional Notes:

#### **Chemical Hazard Spill or Exposure**

## **Preparedness:**

- o Ensure proper signage is clearly posted in chemical hazard areas, including required PPE, handling, containment, and emergency instructions.
- o Verify staff training on working with and around the chemical hazards on the risks of the particular hazard in accordance with Lab Services Safety guidance.
- o Verify staff training on pertinent emergency response and first aid procedures.
- o Maintain copy of Safety Data Sheets (SDS) for all chemical materials present in facility.

#### Response:

- o Large Spill (>200ml)
  - Turn off gas burners/valves.
  - o Evacuate personnel in the room/area of the spill, & close doors upon exit.
  - Notify campus police dispatch (662-915-4911) and Hazard Response Team 662-915-5433
  - Exposed personnel should report to and remain in one safe location until emergency personnel arrival.
  - Administer first aid if needed as per instructions below.
  - Do not re-enter the room/area until the appropriate safety officials have cleared the area for re-entry.
- o Small Spill (<200 ml):
  - Turn off gas burners/valves.
  - o Put on appropriate protective clothing (gloves, safety goggles or glasses, and lab coat).
  - Administer first aid if needed as per instructions below.
  - o Employ a chemical spill kit, working from outside toward the center.
  - When spill is covered from spill kit, wipe down all equipment and surfaces potentially contaminated.
  - Dispose of contaminated material as biohazardous waste.
  - Wash hands with soap and warm water.
  - Notify the Hazard Response Team: 662-915-5433.
- o <u>First Aid:</u> Personal safety is the first consideration. Avoid contact with blood or body fluids.
  - o Immediately begin first aid to contaminated area: Person assisting should wear gloves.
  - Eye exposure: Flush exposed eyes or face immediately. Remove contacts. Hold eyelids open with thumb & fingers. Flush continuously with eyewash for 15 minutes. Roll eyes to thoroughly rinse.
  - o **Mouth exposure**: Rinse mouth with plain water for at least 15 minutes.
  - Skin exposure: Remove contaminated clothing. Flush exposed skin with large amounts of water for 15 minutes.
  - Seek medical attention
  - o Following the application of first aid, complete worker's protection report.

#### **Recovery:**

Re-enter the work area upon clearance by Lab Services, Facility Management, or Supervisory personnel. Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

#### **Civil Disturbance**

(Disgruntled Employee, Intruder/Trespasser)

## **Preparedness:**

- Do not place yourself or others at risk. Contact UPD if a situation appears to be escalating.
- o Prevent crimes by securing offices, facilities, and property.
- Secure all movable/portable equipment.
- Wear and show campus identification.
- UPD will provide safety escorts on campus upon request.

#### Response:

- o <u>Disgruntled Employee</u>: Be sympathetic and make an effort to understand their concerns. Remain calm and do not become confrontational. If unable to interact in positive manner, attempt to establish the magnitude of the problem and manage the complaint in a progressive fashion through referral of the employee to one of the following individuals:
  - UM Ombuds Office, Counseling Center
  - o Institutional Official (Vice Chancellor for Research), IACUC Office, or Chair of IACUC

If necessary, notify campus police dispatch 662-915-4911.

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- Intruder/Trespasser: Suspicious persons and/or behavior should be reported to the Animal Resource Supervisor and the IACUC office.
  - Use caution when approaching an individual that appears to be trespassing. Do not put yourself or others at risk. Inquire in a non-confrontational manner if the person needs assistance. If the Police need to be called, try to detain the person until they arrive. If they cannot be detained, write down any characteristics that you can recall hair color, height, clothing, accent, items being carried, etc.
- Report any of the following to UPD:
  - Personal injury/property damage
  - Theft of property
  - Threats (to person and/or personal property
  - Unauthorized entrance into an animal facility
  - o Criminal act
  - Suspicious persons and/or behavior, and other security-related incident

## **Recovery:**

Re-enter the area only upon clearance by emergency responders or Supervisory personnel. Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event. Debrief with staff after the event.

#### **Preparedness:**

Smoke, heat, and toxic gases from a fire are the most common cause of fire related deaths & injuries. Smoke, heat, and gases rise and collect at ceiling levels, pushing cooler, cleaner air toward the floor.

- Ensure personnel are familiarized with building exits even if directional signs are obscured by smoke or power outage.
- o Identify at least two building evacuation routes on animal facility floor plans.
- Animal facility orientation procedures should include review of facility emergency equipment (type and location) and building exit routes.
- o Keep all egress routes and hallways clear. Keep flammables in appropriate storage cabinets.

#### Response:

- o **Immediately notify campus police dispatch** 662-915-4911. Pull/Activate the nearest fire alarm. If a telephone is closer than alarm, call then pull fire alarm to evacuate others.
- **Evacuate personnel.** Walk to the nearest stairwell/exit & follow designated fire exit route to evacuate building. Do not use elevators.

If clothing catches fire - "Stop, Drop, and Roll".

Avoid smoke-filled air - "Get Low and Go"

- Complete safety actions <u>as time permits</u>.
  - Turn off any gas being used.
  - Return flammables to safety cabinet.
  - Close all doors.

## **Recovery:**

Do not re-enter the building until it is determined safe for occupancy by the Fire Department or Building Fire Marshal.

Report the animal program status to Animal Emergency Coordinator and/or Animal Resource Supervisor.

- The Animal Emergency Coordinator should perform triage of animals to determine most appropriate course of action for animal welfare
- The Incident Response Team and affiliated Animal Emergency Coordinator will determine the need for short-term or long-term relocation of animals.

Re-establish pertinent biohazard control procedures.

Re-establish all animal care programs and services.

Assess program elements contributing to the occurrence of the event and program areas impacted.

Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

## Flood/High Water

## **Preparedness:**

- Locate and identify low-lying areas that could be impacted by flood waters and leaks.
- Keep all floor drains unobstructed.
- Do not enter areas that have flood water present, to reduce electrical hazard concerns.
- o Identify and train at least one Emergency Animal Responder for each facility.
- o Identify at least two building evacuation routes.
- o Highlight master water valve control points on building floor plans or denote external location.
- Staff orientation procedures should include review of facility emergency equipment (type and location) and building exit routes.
- Keep all egress routes and hallways clear. Keep flammables in appropriate storage cabinets.
- Each animal facility should maintain a list of items that may help in emergency response, such as extension cords, wet-dry vacuums, flashlights, light trees, batteries, generators, walkie-talkies, portable space chillers/heaters, and fans.

## **Response:**

- o <u>Large water leak or flood</u>:
  - o Immediately notify campus police dispatch 662-915-4911.
  - Evacuate personnel Pull fire alarms to notify personnel to evacuate immediately. Do not use elevators. Use stairs & follow designated exit route. Walk to the nearest stairwell/exit and evacuate the building.
  - Complete safety actions as time permits Turn off all electrical equipment, disconnect power, and close all doors.
  - If coming from burst pipe, turn off supply water valve- see floor plans in Appendix B
- Small/contained water leak:
  - o **Notify UM Facilities** (662-915-7081: 24 hours/7 days a week). Provide building(s), room number(s), and degree of water damage (volume, size of area, source of water).
  - o Evacuate personnel from compromised areas.
  - Notify personnel to evacuate from impacted area immediately. Do not use elevators. Use stairs & follow designated exit route.
  - Notify 24-hr emergency contact associated with the affected animal housing room.
  - Complete safety actions <u>as time permits</u> Turn off main water valves & close all doors.

#### **Recovery:**

Do not re-enter the building until it is determined safe for occupancy by the Fire Department or Building Fire Marshal.

Report the animal program status to Animal Emergency Coordinator and/or Animal Resource Supervisor.

- The Animal Emergency Coordinator should perform triage of animals to determine most appropriate course of action for animal welfare
- The Incident Response Team and affiliated Animal Emergency Coordinator will determine the need for short-term or long-term relocation of animals.

Re-establish pertinent biohazard control procedures.

Re-establish all animal care programs and services.

Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

#### **Pandemics and Endemics**

#### **Preparedness:**

Pandemics and endemics can spread quickly, causing health consequences for individuals and disruptions to the workforce and supply chain.

**Essential Personnel:** Each animal facility unit should designate at least one qualified individual as an "Emergency Animal Responder" and assign them the responsibility to provide required animal care services during a period of potential short-staffing during a pandemic. Animal care staff are also considered Emergency Animal Responders and are encouraged to communicate with the other available Emergency Animal Responders to ensure animal care is provided. The Animal Emergency Coordinator and Office of Research Integrity and Compliance should periodically review the responsibilities and expectations of essential Emergency Animal Responders with all individuals, and establish SOPs for relieving and rotating essential personnel during prolonged pandemics.

**Overnight Personnel Housing and Food:** While not anticipated, it is possible that a fast-moving pandemic/endemic could require Emergency Animal Responders to shelter in place to provide care for animals. Adequate food and water supplies should be stocked for at least one essential personnel to eat for least three days. Stocks of PPE should be established to protect the essential personnel while caring for the animals.

**Communications:** Emergency Animal Responders should have access to at least one type of alternative communication capability, such as walkie-talkies and/or cellular device in the event of a lockdown. Distribute home and work phone numbers for key animal care program personnel.

## Response:

- Follow CDC Recommendations: All personnel, including the identified Emergency Animal Responders, should monitor and follow the guidance from the CDC and other governmental sources like OLAW and the USDA for appropriate actions, as well as the UM emergency response units.
- Emergency Animal Responders: Should confirm adequate PPE, food, water, emergency, and lodging arrangements are in place at the start of the pandemic. Survey emergency personnel supplies: flashlights, walkie-talkies, batteries, contact lists, cell phones, etc. Coordinate with the Animal Resource team to maximize use of key and essential personnel. PPE recommended by the CDC should be worn at all times during a pandemic. In the event of a lockdown, provide essential animal husbandry services as directed by the Animal Resource Supervisor or AV, and should report any signs of illness within the animal colonies to the AV immediately. Report building structure and service problems to UM Facilities (661-915-7081: 24 hours/7 days a week) and the Animal Emergency Responder.
- Animal Husbandry: Ensure adequate amounts of food and water are available to support the animal colony for at least two weeks. Pre-stage husbandry supplies. PPE recommended by the CDC should be worn at all times during a pandemic.
- Research teams: Reduce acquisition of new animals and breeding colony activity. Contact Animal Resources to coordinate modifications of support. PPE recommended by the CDC should be worn at all times during a pandemic.

#### Recovery:

Restock supplies.

Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

#### Wind Storms-Tornado or Hurricane

#### **Preparedness:**

**Thunderstorms and hurricanes:** Thunderstorms and hurricanes often generate severe winds, rain, hail lightning, and even tornadoes. Power fluctuations or outages, and flash floods are common. Stay indoors and monitor local weather forecasts for thunderstorm, tornado, and other severe weather warnings. Keep an emergency weather radio for listening to weather reports.

Personnel Sheltering or Evacuation: Safety while personnel shelter in place or evacuate prior to a storm is a top priority. Personnel should identify at least two building evacuation routes. Staff orientation procedures should include review of facility emergency equipment (type and location) and building exit routes. All egress routes and hallways should be kept clear and flammables should be stored in appropriate storage cabinets. Each animal facility unit should designate qualified individuals as "Emergency Animal Responders" and assign them the responsibility to provide required animal care services during a severe thunderstorm or hurricane. The Animal Resource team and Office of Research Integrity and Compliance should periodically review the responsibilities and expectations of essential personnel with all individuals, and establish SOPs for relieving and rotating essential personnel during prolonged storms.

**Overnight Personnel Housing and Food:** If a multi-day storm system is expected, the Emergency Animal Responders may have to shelter in place. Adequate food and water supplies should be stocked for at least one essential personnel to eat for least three days

**Emergency Response Items:** Each facility should maintain a list of items that may help in emergency response, such as extension cords, wet-dry vacuums, flashlights, light trees, batteries, generators, walkietalkies, portable space chillers/heaters, and fans. The AV should keep daily supplies of drugs and drug administration items on hand. A crash cart should be stocked with 24-hour supply of euthanasia solution and necessary analgesics in preparation for forecasted adverse weather events.

**Communications:** Emergency Animal Responders should have access to at least one type of alternative communication capability, such as walkie-talkies and/or cellular device while sheltering in place. Distribute home and work phone numbers for key animal care program personnel.

### Response:

- o Before the storm:
  - Monitor Local Weather: All personnel should monitor local weather developments throughout the storm period- www.weather.gov/meg/.
  - Emergency Animal Responders: Should report to the facility prior to the storm. Confirm adequate food, water, emergency, and lodging arrangements are in place. Survey emergency personnel supplies: flashlights, walkie-talkies, batteries, contact lists, cell phones, etc. Coordinate with the Animal Resource team to maximize use of key and essential personnel.
  - Animal Resource Teams: If possible, move outside animals to indoor or sheltered housing. Expect shattered glass/debris and electrical outages. Protect cages as possible from potentially shattering glass. Ensure adequate amounts of food and water are available to support the animal colony for the duration of the storm. Pre-stage husbandry supplies and the crash cart. If time allows, evacuate before the storm hits, or shelter-in-place until it passes.

 Research teams: Contact Animal Resources to coordinate potential support modifications predicated by the storm. If available, assist with cage protection and facility safeguard, as requested by the Animal Resource Team.

### o During the storm:

- Seek shelter. Personnel should remain inside and move to a lower level location until the storm has passed. Do not use elevators, use only stairs.
- Account for personnel and identify missing or injured staff. Perform first aid as necessary, and as the situation allows. If necessary, call campus dispatch for assistance.
- The Emergency Animal Responders should walk the animal facility and report any storm-related facility damage to the Animal Resource Supervisor.
- Provide essential animal husbandry services as directed by the Animal Resource Supervisor or AV.
- Report building structure and service problems to UM Facilities (661-915-7081: 24 hours/7 days a week) and the Animal Resource Supervisor.
- Prepare to relocate or evacuate animals or animal colony rooms facing life-threatening environmental conditions consequent to the storm (flood, HVAC failure, electricity failure, structural damage, etc.)

## Recovery

Do not re-enter the building until it is determined safe for occupancy by the Fire Department or Building Fire Marshal.

Report the animal program status to Animal Emergency Coordinator and/or Animal Resource Supervisor.

- The Animal Resource personnel should perform inventory animal population and account for any potentially escaped animals.
- o The Animal Emergency Coordinator should perform triage of animals to determine most appropriate course of action for animal welfare
- The Incident Response Team and affiliated Animal Emergency Coordinator will determine the need for short-term or long-term relocation of animals.
  - Consider evacuation of animals if adverse weather is forecasted and subsequent structural damage of the building may threaten animal colonies.
  - See evacuation relocation decision tree

Re-establish pertinent biohazard control procedures.

Re-establish all animal care programs and services.

Assess program elements contributing to the occurrence of the event and program areas impacted.

Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

## Winter/Ice Storms

## **Preparedness:**

Most winter storms are predictable. Severe storms can produce "white out" conditions where visibility is near zero. Do not travel in "white out" conditions.

**Essential Personnel:** Each animal facility unit should designate at least one qualified individual as an "Emergency Animal Responder" and assign them the responsibility to provide required animal care services during a period of potential short-staffing during a severe winter storm. Animal care staff are also considered Emergency Animal Responders and are encouraged to communicate with the other available Emergency Animal Responders to ensure animal care is provided.

**Overnight Personnel Housing and Food:** In most cases, emergency animal response to a winter storm will be to shelter in place, for both animals and the identified Emergency Animal Responders. Lodging and food are available for the Emergency Animal Responders at the on-campus Inn at Ole Miss. Please contact the IACUC office for additional information. Within the facility, adequate food and water supplies should be stocked for at least one essential personnel to eat for least three days.

**Communications:** Emergency Animal Responders should have access to at least one type of alternative communication capability, such as line-powered landline phones, walkie-talkies and/or cellular device while sheltering in place. Distribute home and work phone numbers for key animal care program personnel.

## Response:

#### Before the storm:

- Monitor Local Weather: All Emergency Animal Responders should monitor local weather developments throughout the storm period. <a href="https://www.weather.gov/meg/">www.weather.gov/meg/</a>.
- Emergency Animal Responders: Should report to the facility prior to the storm. Confirm adequate food, water, emergency, and lodging arrangements are in place. Survey emergency personnel supplies: flashlights, walkie-talkies, batteries, contact lists, cell phones, etc. Coordinate with the Animal Resource team to maximize use of key and essential personnel.
- Animal Husbandry: If possible, move outside animals to indoor or sheltered housing.
   Ensure adequate amounts of food and water are available to support the animal colony for the duration of the storm. Pre-stage husbandry supplies.
- Research teams: Contact Animal Resources to coordinate modifications of support.

#### Ouring the storm:

- Monitor animal room environmental parameters on a periodic basis. Walk the animal facility and report any storm-related facility damage to the Animal Resource Supervisor.
- Provide essential animal husbandry services as directed by the Animal Resource Supervisor or AV.
- Report building structure and service problems to UM Facilities (661-915-7081: 24 hours/7 days a week) and the Animal Resource Supervisor.
- Prepare to relocate or evacuate animals or animal colony rooms facing life-threatening environmental conditions consequent to the storm (flood, utility/structural failure, etc.)

#### **Recovery:**

Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

#### **Structural Damage**

## **Preparedness:**

- Inspect work and animal areas for heavy objects stored overhead that could fall due to inadvertent movement of the supporting structure. Secure these items to a floor, wall, or ceiling if possible.
- Relocate tall cabinets and bookshelves away from doorways and out of hallways to prevent them from blocking exits.
- o Identify "Safety Spots" (inside hallways free of unsecured objects, under desks, etc) in your work areas that will provide protection from falling objects.
- Keep a flashlight, contact numbers, family emergency contact telephone numbers, first aid kit, battery operated radio and other emergency supplies in a readily accessible area.
- Have at least one person aware of where the building(s) master water control is located, and have access to a cut-off tool

#### Response:

- Seek shelter from collapsing, damaged, or shaking building- Protect yourself from falling objects
  or loose debris. Move to a safe location such as near a sturdy table or desk in your work areas
  that will provide protection from falling objects. If no furniture is available: move to an inside
  wall, securely anchored piece of furniture or equipment (higher than your head) or hallway.
- Notify campus police dispatch immediately- 662-915-4911, then pull fire alarm to evacuate personnel.
- Evacuate personnel Notify personnel to evacuate immediately. Do not use elevators. Use stairs
   & follow designated exit route. Walk to the nearest stairwell/exit and evacuate the building.
- Notify emergency personnel of known trapped or injured individuals that remain in the building

## **Recovery:**

Do not re-enter the building until it is determined safe for occupancy by the Fire Department or Building Fire Marshal.

Report the animal program status to Animal Emergency Coordinator and/or Animal Resource Supervisor.

- The Animal Resource personnel should perform inventory animal population and account for any potentially escaped animals.
- The Animal Emergency Coordinator should perform triage of animals to determine most appropriate course of action for animal welfare
- The Incident Response Team and affiliated Animal Emergency Coordinator will determine the need for short-term or long-term relocation of animals.
  - o Consider evacuation of animals if adverse weather is forecasted and subsequent structural damage of the building may threaten animal colonies.
  - See evacuation relocation decision tree

Re-establish pertinent biohazard control procedures.

Re-establish all animal care programs and services.

Assess program elements contributing to the occurrence of the event and program areas impacted. Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

## **Utility Failure – Electric Power, HVAC**

## **Preparedness:**

- Verify all animal care staff training on acceptable temperature ranges, reporting environmental fluctuations, and appropriate response procedures.
- Maintain list or location map of breakers, emergency power outlet locations, and equipment and animal housing that may be impacted by power loss.
- o Determine number of portable chillers and heaters required to maintain animal room temperatures during an HVAC emergency event.
- Identify critical rooms and ensure that they remain locked or unlocked (as appropriate) in the
  event the keycard access networks or other security systems fail. Ensure that facility staff has
  keys or other methods to access locked doors in the event of card key system failure.
- Maintain equipment list of items such as extension cords, flashlights, light trees, batteries, generators, walkie-talkies, portable space chillers, heaters, and fans. Verify animal care staff training on location and use of equipment.

#### Response:

## Temperature Fluctuations

- Manually assess room temperature and humidity and compare results to the safe environmental parameters posted in the housing room.
- o Report service problems to UM Facilities (661-915-7081: 24 hours/7 days a week) and the Animal Resource Supervisor.
  - Check to see if the failure/fluctuation may be due to a scheduled utility shutdown.
- If animal room temperature is elevated to a critical temperature (animal welfare at risk), use portable fans, use portable chillers, open doors, or relocate animals to a room that is not overheated.
  - If biohazard agents are used in a room, contact Lab Services (662-915-5433) before using portable fans or leaving animal room doors open.
- o If animal room temperature falls to a critical temperature (animal welfare at risk), place portable space heaters in the room or relocate animals to a room that is not underheated.

## o <u>Power Failures</u>

- In the event of power failure and failed emergency generator back-up activation:
  - Shut off the main breaker switches to equipment that may be damaged during a surge, such as cage washer, autoclave, ventilated racks, etc.
  - Close sash on all hoods.
- Once normal power is restored or emergency generators are functioning:
  - Turn on light switches and ventilated racks first, then other equipment as needed.
  - Check each animal room temperature and humidity.
  - Check safety cabinets and alarm panels for any alarms and repair needed.
- o Report facility environmental status to Animal Resource Supervisor.

## Recovery:

Report the animal program status to Animal Resource Supervisor and the IACUC office.

Re-establish pertinent biohazard control procedures and all animal care programs and services.

Assess program elements contributing to the occurrence of the event and program areas impacted.

Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

## Utility Failure - Sewer, Water

## **Preparedness:**

- Ensure contingency plans are in place to ensure animals receive adequate care in the event of water loss or sewer failure. This may include relocating animals/cages, moving them to another room, moving them to another facility, etc.
- o Ensure adequate emergency water supplies are readily available.
- Maintain list or location map of main water valves.
- Label all water valves, and verify staff training on location and operation of the valves, including valves on cage wash equipment.
- Verify animal care staff training on respond to water failure or sewer stoppage and associated problems.
- Establish an SOP that explains how to conserve water. Include procedures for hand cleaning cages by dumping and replacing bedding over short periods of time.

## **Response:**

- Failures leading to flooding
  - Restrict access to flooded areas. Even areas with small amounts of standing water should be avoided if at all possible due to the risk of electrical shock.
  - Turn off water valves.
  - Report service problems to UM Facilities (661-915-7081: 24 hours/7 days a week) and the Animal Resource Supervisor.
  - Observe animal rooms for flooding or for potential of flooding. Take appropriate action to ensure cages/animals will not be exposed to contaminated and/or rising water.
  - O Stop all use of water. Do not flush toilets. Do not dump any fluids down the drains.
- Failures leading to reduced water supply or boil notices
  - All personnel should follow the campus-wide water conservation plan
  - The AV and Animal Resource Supervisor should calculate minimum water requirements for each facility.
  - o Bring in potable safe water from off-campus. Treated water may be held in clean containers in the facility. Note: Reverse osmosis water is preferred for the fish colonies.

#### **Recovery:**

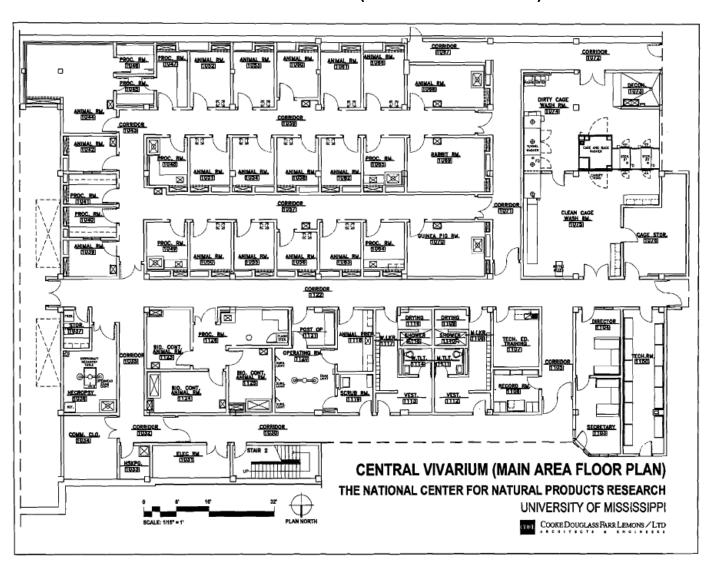
Re-enter the area only upon clearance by Emergency Responder or Supervisory personnel.

Assess program elements contributing to the occurrence of the event and program areas impacted.

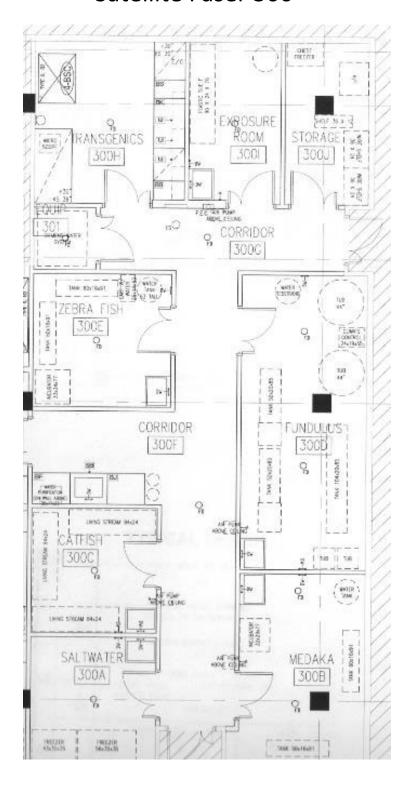
Consider implementing barriers or procedures to prevent or lessen the effects of a future similar event.

## **APPENDIX B. Animal Facility Floor Plans**

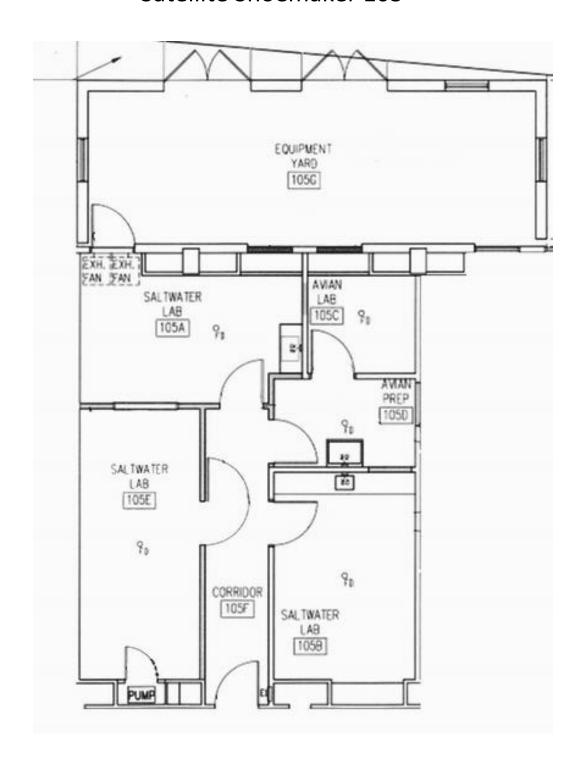
## Central Vivarium (TCRC Basement)



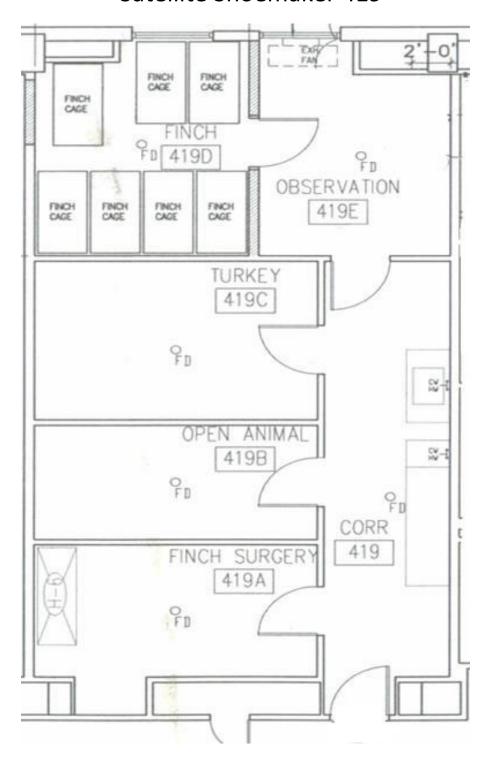
## Satellite Faser 300

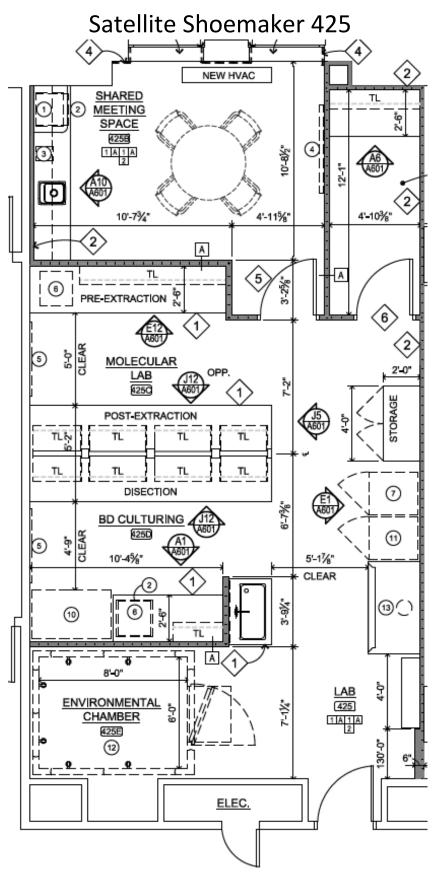


## Satellite Shoemaker 105



## Satellite Shoemaker 419





## Satellite UM Field Station