

DePaul University
Animal Care and Use Program
Emergency and Disaster Preparedness Plan

Version 10/16/2014

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1. Introduction

When conducting research, particularly research involving the use of animals, there is the potential for unexpected conditions to occur. These unexpected conditions could severely impact the ability to provide daily care to the animals and may also impact their well-being. Public Health Service *Policy on Humane Care and Use of Laboratory Animals* (PHS Policy) and the *Guide for the Care and Use of Laboratory Animals* (the *Guide*) require that animal research facilities have a disaster plan. The plan defines the actions necessary to prevent animal pain, distress, and death in the event of an unexpected problem or condition that could lead to a loss of electrical power, or systems such as those that control ventilation, cooling, heating, or provision of potable water. The plan also describes how the facility will preserve animals that are necessary for critical research activities or are irreplaceable. If a disaster effects the animal facility location, the primary concern is always to save human and animal lives.

2. Purpose

The purpose of this document is to outline emergency response plans for the most likely disasters that could result in an inability to maintain normal conditions in DePaul's Research Support Facility (RSF) or an inability of personnel to reach the RSF. Such events could ultimately affect the health and well-being of the humans and animals that are part of the animal care and use program at DePaul. This document offers guidelines for personnel on how to respond to likely emergencies and disasters with the goal of protecting and minimizing the effects of emergencies or disasters on the health and well-being of the humans and animals that are part of the animal care and use program at DePaul.

This document is designed to:

- Prepare animal users and the staff of the Research Support Facility (RSF) for potential emergencies
- Provide guidelines for animal users and RSF staff for responding to potential emergencies or disasters
- Assist animal users and RSF staff in avoiding and anticipating dangerous situations
- Describe responsibilities of key personnel in responding to emergencies and disasters
- Identify personnel who should be trained in order to effectively implement this plan.

All personnel working with or caring for animals in the RSF and all persons with duties and responsibilities for responding to the disasters and emergencies, as outlined in the document, are required to read and be familiar with the plan and, in particular, their specific responsibilities under it.

All animal housing areas under the jurisdiction of the DePaul animal care and use program are covered by this plan.

3. Emergency Phone Contacts

First Contact when the Emergency involves building issues, security issues, or repair issues. Public Safety will contact Facility Operations.:

DePaul Public Safety:

Lincoln Park Campus Public Safety (773) 325-7777 (x5-7777)

First to be contacted, simultaneously, by Facility Operations (FO) in the event of an Emergency that may impact the RSF has been communicated to FO by Public Safety.

For animal care technicians, investigators, and research staff -First contact when the Emergency involves the RSF and can be handled directly by the Director and staff without assistance from Public Safety or Facility Operations, second call after calling Public Safety to start the response process for all other types of emergencies.:

Research Support Facility Director:

Jing Jing Kipp W (773) 325-4646

Biology Department, Chair:

John Dean W (773) 325-2188

To be contacted by Facility Operations in the Event that the Research Support Facility Director cannot be contacted:

Research Support Facility Assistant Director:

Eric Norstrom W (773) 325-2091

To be contacted by the Director or Assistant Director of the RSF or the RSF staff immediately if animals are injured or there is a health or welfare concern:

Institutional Veterinarian:

Kelly Garcia, DVM, PhD. W (312) 996-8619

To be contacted only in the event the primary institutional veterinarian cannot be reached:

Back-up Veterinarian:

Lisa Forman, DVM, MS

To be contacted, simultaneously, if the Emergency directly impacts the health and welfare of the animals, especially if it results in unexpected animal death or injury, noncompliance, or an event that must be reported to OLAW:

IACUC office staff:

Director of Research Compliance in the Office of Research Services

Susan Loess-Perez W (312) 362-7593

Research Protections Coordinator

Diana Alfaro W (312) 362-7592

IACUC Chair:

Kevin Thompson W (773) 325-4866

To be contacted by the IACUC Chair or staff if the Emergency results in unexpected animal death or injury, noncompliance, or an event that must be reported to OLAW:

AVP for Research:

Joanne Romagni W (312) 362-5460

To be contacted if there is a need for assistance from the College to respond to the Emergency:

Dean, College of Science and Health

Gerald Koocher W (773) 325-8475

City of Chicago Police/Fire Emergency 911

To be contacted in the Event of a chemical spill or biohazardous agent spill or exposure:

Environmental Health and Safety:

Jenny Graham, Manager W (773) 325-4201

Gus Chagares, EHS Specialist W (773) 325-4170

4. Types of Emergency or Disaster: Categories and Levels

The Federal Emergency Management Agency (FEMA) describes 3 categories of emergencies:

- Natural disasters & emergencies: Earthquake, Winter Storms, Flooding
- Technical emergencies: Facility malfunctions such as HVAC, power failures, hazardous material spills
- Civil emergencies: Bomb Threats, Animal Rights Demonstrations

Emergencies may also be ranked by the level of impact, ranging from limited equipment failure to catastrophic building damage. The operational organization

necessary for responding to each level of emergency depends upon the size and complexity of the emergency and the facility impacted by the emergency.

The DePaul University Emergency Operations Plan

(<http://emergencyplan.depaul.edu/Documents/University%20Emergency%20Response%20Plan.pdf>) categorized disasters into 4 levels. The following details how the four levels may apply to the RSF and the RSF staff.

- **Level 1: A minor departmental or building problem that can be resolved using internal resources.** Typically, Level 1 emergencies that affect the RSF can be handled by the RSF staff with little or no assistance. The Director of the RSF and the Institutional Veterinarian will be notified of emergencies related to or that affect animal health and safety. Examples: Broken water pipes, Faulty locks.
- **Level 2: A facilities-focused emergency having little impact on members of the campus community, other than those using the specific area where it occurred. Such emergencies can typically be resolved with internal resources or with limited assistance from outside agencies.** Typically, Level 2 emergencies that affect the RSF can be handled by the RSF staff with the assistance of other DePaul Departments, Offices, or staff, when needed. The Director of the RSF and the Institutional Veterinarian will be notified of emergencies related to or that affect animal health and safety. Examples: Minor chemical spills, loss of heat or electricity, a minor fire confined to one room.
- **Level 3: An emergency situation focused on a person or persons (as opposed to only University facilities) that can be resolved with internal resources or with limited assistance from local authorities.** Level 3 emergencies may require outside assistance from other departments and/or city emergency response personnel. For example, a bomb threat may involve University security personnel, local emergency medical services, and Chicago law enforcement personnel. A damage assessment should be conducted by the Director of the RSF or, in the absence of the Director, the RSF staff member on site at the time. The damage assessment should be reported to the Institutional Official, the IACUC Chair, and the Director of Research Compliance in the Office of Research Services. Examples: Assaults or other criminal activities directed towards a person, group of persons, hate crimes, bomb threats.
- **Level 4: Major, potentially catastrophic emergency or imminent threat if such an emergency impacting a sizable portion of a campus and/or its surrounding community, which requires a response involving significant assistance from external emergency response agencies.** Level 4 emergencies are likely to exceed the capacity of local emergency response teams in the RSF, Department of Biology and the College of Science and Health. The RSF staff

may need to respond to the crisis for several hours or longer without outside assistance. Emergencies of this level are under the direction of the President of the University or his designee, as outlined in the DePaul University Emergency Operations Plan. All animal facility personnel and animal users will follow all directives and instructions issued by these authorities. Examples: Earthquakes, tornadoes, significant acts of violence, terrorism, flood, major fire, extended power outages, or a contagious disease outbreak.

5. General Animal Care Principles for All Emergencies

In all emergencies, human life and safety will take precedence over animal life. The RSF staff or animal users must not put themselves or their colleagues in danger in order to evacuate animals or to salvage the facilities or equipment.

5.1 Critical Functions

As far as possible, critical animal facility functions and systems should be maintained.

- Air temperature surrounding the animals should be maintained within the normal room range designated in the written standard operating procedures (SOPs) for the animal/room. SOPs are located as Appendices to the RSF Policy and Procedures Manual. Copies of the current RSF Policy and Procedure Manual are available in the RSF Library. Investigators should also keep copies of current SOPs in the animal rooms to ensure the SOPs are readily available to animal care staff.
- The air surrounding the animals should be free of harmful contaminants.
- All animals should be observed periodically, with the interval depending on the conditions, but at a minimum of at least every 24 hours, to the extent possible to confirm they are healthy. If necessary, the Institutional Veterinarian will triage sick or injured animals to determine a treatment plan. Animals suffering ill effects may be euthanized at the discretion of the veterinarian using American Veterinarian Medical Association (AVMA) approved methods of euthanasia.
- Animal identification should be retained; loose animals should be captured and an attempt made to identify them or mark them as unidentified.

If an emergency lasts 6 hours or more, the following functions should be maintained:

- Air ventilation and/or accessory heating/cooling should be provided, if needed.
- All animals should have access to potable water, which ideally is delivered in the same form as normal. Some animals can survive several days with little food, but may succumb within 1-2 days without water. Some species (e.g. new born rats or mice) are especially sensitive to food and water deprivation and special attention should be given to these animals.
- For aquatic species, there should be an ample supply of clean water and a method of supplying power to the filter and aeration systems.

- All animals should have access to uncontaminated food. The appropriate food for the species and research needs should be provided in adequate quantities and in uncontaminated form. If the usual food is not available, professional judgment should be used to identify acceptable substitutes.

If an emergency lasts 24 hours or more, the following additional functions should be maintained:

- Animal cages or other containment vessels should be cleaned as needed. The goal should be to provide approximate normal sanitation schedules, depending upon the available resources.
- Perishable food should be kept at 4 degrees C or lower.
- Veterinary care should be provided, including care for post-surgical animals.
- Accessory power should be supplied to the freezer with animal carcasses.

5.2 Preparations for Emergencies

- Flashlights and extra batteries are located in several places within the RSF. All staff and animal users who work in the RSF should know where these are located.
- Large containers of potable water should be kept in the animal facility to ensure rodents and other animals that need daily water supplies can be provided with fresh potable water as needed. The quantity kept reserved should be sufficient to provide drinking water to all animals housed in the facility for at least three days.
- For aquatic species, large containers of water should be kept in the animal facility to ensure an adequate water supply for maintaining tank water levels and quality.
- Extra food should be available.
- Large fans should be available to the animal facility staff to provide air circulation if ventilation is lost.
- Any important files kept on the RSF computer should be backed up regularly, and the back-up discs should be kept outside of the RSF.
- It may be necessary to evacuate animals to new a location(s) (e.g. individual investigator labs) under emergency conditions. In the event of a large-scale disaster, euthanasia of animals may be necessary. Euthanasia will be a last resort and will be conducted under the directions of the Institutional Veterinarian.
- Emergency Contact Information is posted near all entrances to the animal facility and in several locations within the facility.
- Fire alarms are located in the RSF South Hall by the Animal Recovery room, Northwest Lobby Entrance, Loading Dock Entrance, North Lobby Exit, South Lobby Exit, Southwest Exit, and 1st Floor teaching Lab #2, Room #149.
- Fire extinguishers are located in the RSF in room 154 and next to the RSF in room 152, as well as multiple locations in the hallway of the first floor.
- First aid kits are located within the RSF office area.

- Eye wash stations and emergency showers are located outside the door of the RSF on the North wall of the hallway.
- Biosafety and Chemical Spill emergency kits are located within the RSF office area.

5.3 Communications

In the event of an emergency or disaster, the individual who discovers or is advised of the situation should immediately report the problem to the DePaul Office of Public Safety. If the emergency or disaster could have a direct impact on the RSF or the health, welfare and safety of the animals within the RSF, the RSF Director should be contacted immediately. If the Director cannot be reached, the report should be made to the Assistant director of the RSF. As necessary additional reports should be made to the Principal Investigator (PI) for the specific animal(s) affected, as well as the IACUC Chair, the AVP for Research, and the Director of Research Compliance in the Office of Research Services. If the emergency directly impacts the health and well-being of the animals in the facility, the Institutional Veterinarian should be contacted. If the Institutional Veterinarian cannot be reached, the back-up Veterinarian should be contacted.

Individuals encountering life-threatening conditions for humans where time is critical, such as fire or a hazardous materials spills, must notify the unit responsible for handling the type of emergency following DePaul's Emergency Operations Plan, then, if applicable, notify their supervisor.

In a serious emergency or disaster (e.g. one that endangers the lives of personnel or animals), all identified emergency response personnel and research investigators with animals in the facility should be notified. They should be informed of the problem, the plan for dealing with the problem, and their role, if any, in responding to the problem. If the emergency happens after hours DePaul Public Safety should be notified first, then the RSF Director. The RSF Director will determine if the veterinarian, individual researchers, or other personnel should be notified. The decision phone tree should be used to contact the emergency first responders.

In the event of an emergency, the University's Public Relations and Communications Department will coordinate with the Executive Emergency Response Team, Crisis Management Team, Campus Emergency Operations Center and external media outlets to ensure accurate and timely dissemination of information. As necessary, the Campus Emergency Operations Center will coordinate with local authorities, federal agencies, and technical specialists, e.g., the National Weather Service, to provide information imperative to resolving a campus emergencies.

5.4 Security

Under normal conditions, the RSF has a swipe card access security system. All RSF staff and investigators with animals in the facility have key access in the event of a power failure. The Dean of the College of Health and Science also has a key for emergency access, if needed.

Public Safety and Facility Operations also have key access to the facility. In the case of an emergency, it is possible that the normal security measures in place may be altered, which may require placing guards or monitors near the entrance temporarily. If altered security measures are put in place, investigators with animals housed in the facility and the animal care staff will be informed.

5.5 Emergency Evacuation

In the event of an evacuation of the RSF during working hours (for example due to a fire, hazardous material spill, or other emergency) the following rules will apply:

- Persons are not to endanger themselves or others by delaying an ordered evacuation.
- Personnel should do their best to alert others as they evacuate the premises.
- On-site personnel should employ their professional judgment for handling animals which are anesthetized, or undergoing surgery or nonsurvival procedures from which they might awaken if left unattended. Small animals undergoing surgical procedures can be evacuated along with the personnel, or they can be euthanized, or they can be left on anesthesia machines; however, every reasonable effort should be made to ensure animals will not awaken in severe pain and that personnel are not delayed from evacuating the premises promptly.
- Personnel should follow the general building evacuation procedures and meet in the quad, so that it can be easily determined that all personnel have cleared the facility.
- The Office of Public Safety is aware that animals are located in the building and will alert emergency responders, when necessary.

6. Risk Assessment Checklist

In the case of an emergency or disaster, some basic questions must be asked in order to determine the risk level and the next steps to be taken. After the problem is identified or reported to the Director of the RSF, s/he should assess the risk level for the animals and to the security of the facility

- Can animal care staff get to the facility? There are several weather conditions that can create hazardous conditions, limiting the ability of animal care staff to travel to the facility. Alternative animal care personnel (e.g. faculty researchers who live nearby) who may be able to access the facility on foot should be identified for emergency situations.
- Are buildings safe for staff to enter? The Director of the RSF should be prepared to contact or communicate with police and fire departments and public safety to determine whether the building is safe for personnel. If the building is not safe, it may delay efforts to reach and assess the animals. However, the health and safety of personnel takes precedence over the health and safety of the animals in the facility. The Director should arrange to be contacted once the building is safe to enter and should communicate that information to the animal care staff and investigators.

- Is there power in the animal facility? If there is a loss of power, there may be the need to begin the preparations outlined in this plan for power failures, depending upon the expected length of time for the power loss.
- Are food and water available? The Director of the RSF should ensure that the extra water and supplies outlined in this plan are maintained and ready for an emergency. In the event that stored water supplies become contaminated, there should be a plan to obtain water from other sources, if possible, or make arrangements to boil water, as necessary.
- For aquatic species, extra de-chlorinating chemicals should be stored with the emergency supplies to ensure that they are available in the event of an emergency affecting the water supply.
- How long can animals be maintained? This question must be assessed based upon the type of emergency and how long the crisis is anticipated to last. Euthanasia of animals may become necessary and there should be euthanasia supplies available to the facility in the event of the worst case scenario.

7. Utility Failures

The most common emergency or disaster that impact the laboratory animals are utility failures such as malfunction of the heating, ventilation, and air condition (HVAC) system and power outages. The loss of power may create problems such as loss of lighting, loss of electrical equipment, such as cagewashers, sterilizers, surgery equipment, sump pumps, aeration, and filter systems for aquatic species.

7.1 Electrical Power Outage Power-Loss of HVAC

General Readiness

- Animal care staff and users of the facility should know the location of flashlights and back-up batteries.
- The species specific SOPs should document the normal range temperatures, humidity, and general needs for the animal so that these variables can be easily monitored by the animal care staff on hand in the case of an emergency.

General plans of action

- Reporting: Monday through Friday during working hours: Call DePaul Public Safety to notify them of the emergency. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.
 - Describe the problem, location of the problem using building addresses and names, specific room numbers, and what specific services are required.
- Room conditions: Animal care staff should check room temperature and humidity readings and report values that are out of range to the Director of the RSF and the investigator.
- Animal health checks: Animals should be monitored for the need to take action in order to maintain the health and well-being of the animals. Any equipment that requires power

should be checked and verified that emergency back-up power sources are properly connected and working.

- Food and water supplies: For short term power failures, food and water supplies should be unaffected. If power remains out for an extended period of time that creates shortages of sanitized food receptacles, water bottles, food, or potable water, it may be necessary to make additional arrangements in order to meet the needs of the animals.
- Sanitation: Loss of power could affect the level of sanitation by allowing bacteria and viruses to accumulate on the equipment. Alternate strategies, such as hand washing equipment may have to be used. Also, cage changing intervals may need to be extended, or spot cleaning may need to be employed instead of cage changes. The Director of the RSF, in consultation with the individual investigators, will need to determine how to provide the optimum sanitation procedures under the prevailing conditions. When the power returns, animal care staff need to ensure that all equipment that requires it is RESET.

Specific Response Actions for Planned Power/HVAC Loss

Many events may cause a loss of power or HVAC, but not all of these events are emergencies. There may be planned power outages for short periods of time in order for Facility Operations to conduct necessary building maintenance. In these instances, the Director of the RSF should be contacted prior to the planned maintenance so that s/he is aware of the time frame for the expected power/HVAC outage and s/he can put in place procedures to monitor the facility and animals for any need to take action to prevent any health or safety concerns for the animals. The RSF Director should notify all investigators and animal care staff about the planned power loss. In the event of short power outages there may be no need to take any action.

Specific Response Actions for Power/HVAC Loss Caused by an Emergency or Disaster

In the event of a power failure or HVAC loss that affects the building where the RSF is housed, or the RFS itself, the person discovering the power/HVAC loss should contact DePaul Public Safety. Public Safety will contact Facility Operations, which will assess the cause of the power/HVAC failure, the estimated time period for the power/HVAC failure, and what, if any, actions need to occur to fix the problem. Next, the Director of the RSF should be notified. In some cases, the power/HVAC loss will be short-term and there may be no need to take action other than monitoring the RSF and the animals housed inside for any problems.

For short-term power losses, investigators housing aquatic species should have a system of battery powered back-up power for their pump and filter systems. The battery back-up should be sufficient to supply approx. 4 hours of emergency power to aquatic species.

In the event the power/HVAC loss is estimated to last longer than 4 hours, but less than 8 hours, Facility Operations, in cooperation with the Director of the RSF, will arrange for the transport of

local gas powered generators to the McGowan North loading dock. The generators will be used to power the aquatic filter and aeration systems through the use of extension cords run from the loading dock to the RFS and connected to the specific systems needing extended emergency power. Facility Operations will monitor the generators and refill fuel as needed.

In the event the power/HVAC loss is estimated to last for an extended period of time that cannot be supported by the gas powered generators, Facility Operations will arrange for a larger external generator to be transported to DePaul and plugged into an external port on McGowan North. The external generator is capable of supplying power and HVAC support for an extended period of time. The generators will supply power to the entire RSF including the red and regular electrical outlets. Facility Operations will monitor this generator and refill the fuel as needed.

In the event that the animal facility is expanded outside of the current RSF boundaries, additional measures will need to be created in order to provide similar power/HVAC back-up capabilities to these areas.

7.2 Plumbing or water supply

It is possible that plumbing or water supply lines may burst or leak. Additionally, it is possible that the water supply to a building may be affected by external city water line repairs, or internal building repairs. In the event of a planned shut off of the water to the McGowan North building or the RSF, Facility Operations should communicate the necessary information regarding date and time to the Director of the RSF so that arrangements can be made to ensure adequate water supplies. The RSF Director will notify individual PIs. Depending upon the cause of the loss of the water supply, it is possible to obtain water from nearby building. In addition, DePaul has contractors available to deliver large quantities of water, if needed.

In the event of an unplanned emergency or disaster involving the plumbing or water supply, the following actions should occur.

General plans of action

- Reporting: Monday through Friday during working hours: Call DePaul Public Safety. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.
 - Describe the problem, location of the problem using specific room numbers, and what specific services are required.
- Room conditions: Animal care staff should check the rooms for any damage or concerns related to the problem and report the problem to the Director, RSF and the investigator.
- Animal health checks: Animals should be monitored for the need to take action in order to maintain the health and well-being of the animals. Animals that may be directly in the

path of leaking pipes, etc. or in danger of being affected by the problem should be moved or relocated temporarily inside the same animal room, if possible, until the problem is fixed. If the animals need to be relocated to another room until the repair is completed, then the IACUC should be contacted and the investigator and animal care staff will need to ensure appropriate conditions (light, humidity, and temperature controls) can be obtained in the new location.

- Food and water supplies: Food supplies should be checked to ensure that they will remain dry. Water supplies should also be inspected to ensure they do not become contaminated by leaks, or in the event of the loss of the water supply that emergency stores of water are adequate.
- Sanitation: The ability to wash and sanitize cages, etc. may be hindered temporarily by the loss of water supply. Alternative mechanisms or ways of sanitizing equipment may need to be arranged.

8. Major Winter Storms (Snow Storm, Blizzard, Ice Storm)

Severe or major winter storms can cause significant snowfall or icy conditions, which may prevent animal care staff from arriving to work on time or at all. Employees should not risk their personal safety to take care of the animals in these situations. However, arrangements may be made for employees (investigators, protocol personnel, or RSF staff) who live near to the University to aid in ensuring the animals receive daily care and that the weather conditions have not caused any unforeseen problems for the animals. Major winter storms may also be the cause of some of the other problems outlined in this document, such as burst water pipes or power failures.

General Readiness

- It is a good idea for personnel to have winter safety equipment in personal vehicles, including sand, a shovel, snow boots, warm clothing, potable water, and food.
- Personnel should keep important family contact information readily available in case they are snowed in at work and cannot get home, for example having cell phones programmed with key contacts. Additionally, animal care staff should have contact numbers at home for the RSF Director and Assistant Director, in case they are scheduled to work and are snowed in at home.

General plans of action

- Reporting: If the storm causes problems with obtaining entry to the facility DePaul Public Safety. Monday through Friday during working hours: Call DePaul Public Safety. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.

- Describe the problem, location of the problem using specific room numbers, and what specific services are required.
- Animal health checks: Animals must be checked daily by animal care staff. If due to the weather conditions a staff member is unable to fulfill their duty, other individuals may be asked to complete the necessary tasks on an emergency basis.
- Food and water supplies: The food and water supply should be checked to ensure that supplies are adequate for the time period of the emergency. Efforts should be made to keep animals on species-specific diets when possible, but if necessary due to an emergency food may be purchased from other sources (e.g. grocery store, pet store).
- Sanitation: Sanitation may be compromised by a lack of personnel. The RSF director or designee should attempt to maintain normal sanitation schedules with the available resources and staff. Increasing cage change intervals, spot cleaning instead of whole-cage changes, changing bedding instead of cages, hand washing equipments, or deferring activities such as floor mopping may be required. The RSF Director or Designee must make the determination to perform sanitation activities which benefit the animals most if all activities are not possible due to the weather conditions.
- Personnel: Animal care personnel are expected to make significant efforts to report to work. If staff shortages occur due to transportation problems or street blockage, other persons may be requested to perform animal care related duties.

9. Tornadoes or Other Severe Storms

Tornadoes and other severe storms, such as severe thunder storms, may cause some of the emergencies outlined in other areas of this document, such as flooding and utility failures. Additionally, tornadoes and storms may affect the ability of the animal care staff to reach the facility to provide care to the animals.

General Readiness

- Personnel should be familiar with the plans for severe storms outlined in the DePaul Emergency Operations Plan.
 - Move away from the outside perimeter of the building and toward a safe area on your floor, such as an interior washroom, stairwell, basement or any other interior room - avoiding first floor lobby areas and any other areas with large, glass windows;
 - Do not attempt to leave the building;
 - Do not get on an elevator;
 - Remain calm and follow the directions of Public Safety personnel.
- Personnel should keep important family contact information readily available in case they are at work and cannot get home at their planned time. Additionally, animal care staff

should have contact numbers at home for the RSF Director and Assistant Director, in case they are scheduled to work and are not able to reach the facility.

General Plans of Action

- Reporting: If the tornado causes problems with the building or building access call DePaul Public Safety. Monday through Friday during working hours: Call DePaul Public Safety. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.
 - Describe the problem, location of the problem using specific room numbers, and what specific services are required.
- Animal health checks: The animals should be checked as soon as possible. If there is tornado damage to the facility, animals may need to be relocated. Any animals suffering from an injury should be examined as quickly as possible and assessed for treatment or euthanasia at the discretion of the Institutional Veterinarian using AVMA approved methods of euthanasia
- Food and water supplies: If a tornado or other storm and the subsequent damage destroys any or all of the food supply, contaminated food should be discarded and replacement food purchased as soon as possible. If the storm disrupts the water supply, additional sources of water, such as bottled water, should be used.
- Sanitation: Normal sanitation procedures should continue or be resumed as soon as possible, after the tornado has passed. If the facility is intact, but the utilities are affected, personnel should follow the plans outlined in the utility failure section of this document.
- Personnel: If a tornado occurs during normal working hours, personnel should follow the procedures outlined in the DePaul Emergency Operations Plan. The RSF Director and the veterinarian should be notified as soon as possible regarding any storm-related damage to the building or the animal facility. Personnel will be contacted to report to work as needed and may be requested to perform duties outside their normal job descriptions in order to provide essential care to the animals. The RSF Director will make this decision.

10. Biohazardous or Chemical Spills

Contamination of the environment within the animal facility could occur in multiple ways. In the event of a spill human safety takes precedence over animal health and safety. The RSF Director and Public Safety are responsible for communicating specific instructions to personnel. Special clean-up procedures may need to be initiated to address the spill.

General Readiness

- All personnel should be familiar with the procedures for handling biohazardous agents or chemical spills.

- All personnel should know where Biosafety and Chemical Spill emergency kits are located. There are two kits located within the RSF office area and additional kits located in Room 152, which is next door to the RSF.

General Plans of Action

- Reporting: In the event of a chemical spill or any other accident or emergency involving hazardous materials, individuals should be advised to:
 - Call Public Safety and/or 9-1-1 from the nearest telephone;
 - Evacuate the area immediately;
 - Do not attempt to mop up or contain the spill; and
 - Do not re-enter the contaminated area until given the all clear by Public Safety personnel.
- If possible, personnel should be prepared to provide the following information when coordinating with emergency personnel:
 - Name and quantity of the chemical/material spilled;
 - Location of the spill (building name and room number);
 - Information regarding anyone injured or otherwise contacted by the material; and
 - A description of any fire or explosion caused by or occurring nearby the spill.
- In addition to Public Safety, the Environmental Health & Safety should be promptly notified of all chemical and other toxic substance incidents, even if no injury or damage of facilities has occurred or is apparent at the time.
- Animal health checks: Animals should be checked as soon as it is safe to enter the facility. Animals that may have been exposed to any hazardous agents should be evaluated for health concerns and treated or euthanized at the discretion of the veterinarian using AVMA approved methods of euthanasia. If it is necessary to change or alter air flow or air filtering processes to protect the animals from fumes or exposure to the hazard, this should be done as soon as possible.
- Food and water supplies: Food and water supplies which have been exposed to hazardous agents should be discarded according to federal and state regulations for disposal of hazardous agents. Replacement food and water should be obtained as soon as possible from regular vendors or sources.
- Sanitation: Normal sanitation procedures should be resumed as soon as possible after the emergency. Equipment and supplies that have been exposed to hazardous agents may require special handling. Personnel should consult with the Environmental Health & Safety regarding discarding any contaminated materials.
- Personnel: Personnel should follow the procedures outlined above for responding to a chemical or biohazardous spill. Personnel should only return to the affected area once they have received permission to do so from the Environmental Health & Safety. Available staff may be requested to perform duties outside of their normal job

description in order to provide for essential animal care needs. The RSF Director in consultation with the Institutional Veterinarian will make this decision.

11. Fire

Smoke, heat, and toxic gases from a fire are the most common causes of fire-related deaths and injuries, not flames. Personnel should be aware that these deadly fire elements rise and collect at ceiling levels, pushing cooler, cleaner air toward the floor. Toxic gases and heat are often invisible killers, while rising smoke may cover and hide exit signs above doorways. In order to get out of the building safely, personnel must be able to find the exit signs even if the signs are covered by smoke.

General Readiness

- Personnel should receive orientation or training regarding the location of building exits, fire extinguishers, and fire alarms in and around the RSF.
- Personnel should identify at least 2 evacuation routes that will lead them safely outside the building. At personnel orientation about the facility, the floor plan maps demonstrating the exits for the facility should be reviewed. Maps should be clearly posted in the corridors or near the entrances of the building.
- Anyone with a disability that may limit or impede their ability to evacuate the building should notify the Director of RSF and make arrangements for assistance in getting to a safe location.
- Flammable items should be kept in appropriate cabinets.
- Hallways should be kept clear so that exiting in an emergency is not impeded.

General Plans of Action

- Call 911 immediately, then pull the fire alarm and begin exiting the building.
- Fire suppression: Some small, well-contained fires, such as trash can fires, may be dealt with using a fire extinguisher. All staff working in the RSF should know the locations of fire extinguishers.
- Evacuation procedures: Personnel should leave the building by following the posted fire exit routes for the facility and the building. Personnel should not use the elevators. To avoid smoke-filled air, remember the phrase, "Get Low and Go." If clothing catches fire, "Stop, Drop, and Roll." Supervisors should arrange a designated meeting area for animal care staff, ensure that all personnel are aware of the designated meeting area, and in the event of a fire, supervisors should account for all personnel at the designated assembly area.
- Animal health checks: All animals should be checked as soon as access to the building is permitted by fire safety personnel. Any animal cages located on top shelves of racks may need to be relocated to a lower location to distance them from smoke or other fumes near

the ceiling. Any dead animals should be removed from cages and placed in the appropriate freezer location. If animals need to be relocated due to fire damage, arrangement may need to be made for temporary relocation. Animals suffering ill effects may be treated or euthanized at the direction of the Institutional Veterinarian using AVMA approved methods of euthanasia.

- Food and water supplies: Any food or water which might have been damaged or contaminated should be discarded. If fire and water damage destroyed food supplies, arrangements must be made to obtain replacement food supplies. Spoiled or contaminated food will be immediately discarded.
- Sanitation: Normal sanitation procedures should be resumed as soon as possible after the emergency. The facility and equipment should be inspected for any damage related to fire, smoke, fumes, or water and Environmental Health and Safety may need to be contacted about whether any special handling requirements. Special equipment may be needed to remove or address odors or smoke damage. Facility Operations may need to be contacted regarding clean-up procedures. If cage washing equipment has been damaged, other mechanisms of cage washing, such as hand washing, may have to be utilized.
- Environmental support: The environmental support systems should be evaluated for damage and the need to take action, such as cleaning or repair. If outages or defects are noted, Facility Operations should be notified and a repair order should be generated. If the environmental problems are severe, animals may need to be evacuated and relocated, or euthanized. This decision must be made by the RSF Director in consultation with the Institutional Veterinarian.
- Personnel: If a fire occurs during normal working hours personnel should leave the RSF and meet other personnel at the designated assembly area. If the fire occurs after regular working hours (e.g. evenings, weekends, holidays) personnel should follow the fire emergency steps in this plan. Key personnel such as the RSF Director, the veterinarian, and Office of Research Services staff should be notified. The RSF Director should notify each investigator with animals currently housed in the facility. It is possible animal care staff may be called to work to respond to an off-hours emergency. Available staff may be requested to perform duties outside of their normal job description in order to provide for essential animal care needs. The RSF Director in consultation with the Institutional Veterinarian will make this decision.

12. Earthquakes

Earthquakes may cause shaking, beginning with a sharp jolt or slowly building with a side-to-side motion. Earthquakes can be noisy and cause creaking of buildings, objects falling and breaking, and a rumbling noise from the earthquake itself. Personnel should listen for instructions from emergency personnel or delivered through the DePaul Emergency Communications Systems, since it may not be safe to leave the building during an earthquake.

General Readiness

- Check your work area(s) for heavy objects or equipment that could fall on top of personnel during an earthquake or that could block corridors, escape routes, and exits. Rearrange work areas, if possible, to prevent these problems.
- Personnel should be aware they may not be able to get home after an earthquake due to blocked or damaged roads and/or bridges. Personnel should keep emergency supplies such as family contact numbers, flashlights and batteries, battery operated radios, and first aid kits readily available.
- Personnel should identify safe areas in the work area that will provide them with protection from falling objects, such as sturdy tables or desks. If these items are not nearby or available, personnel should stand near an inside wall or in a hallway, keeping in mind that doors may swing uncontrollably back and forth during an earthquake.

General Plans of Action

- During earthquake shaking: Personnel located inside the building should go to the nearest safe area, keeping their faces turned towards their knees or the floor.
 - Shaking often lasts less than 10-30 seconds. Aftershocks can begin seconds, minutes, or hours after the initial earthquake. Personnel should be prepared to take cover or go to a safe location multiple times.
 - Personnel who are outside of the building when the earthquake starts should move away from buildings, power lines, and utility poles.
- After the earthquake shaking stops: Personnel should be prepared to take cover again or go to a safe location if the shaking starts again.
 - Personnel should check to see if co-workers are safe and uninjured. Personnel should not attempt to move an injured person.
 - Personnel should not use candles, matches, or flames and should not turn electrical equipment on or off. Flames and electrical sparks can cause leaking gas to ignite or explode.
 - Check the animal facility and building for safety issues. Personnel should evacuate the animal facility or building if there is a fire, broken gas pipes, or severe structural damage to the building. Fallen light fixtures, ceiling tiles and paint cracks may not be good indicators of damage to the building structure.
 - Personnel should use caution when trying to go home, as roads and bridges may be damaged or unsafe.
- Earthquake evacuations: After the safety of evacuation routes has been verified, personnel should exit the building according to established fire evacuation plans.
 - In general use the stairs and not the elevator.
 - Do not attempt to remove the animals from the building

- Call for emergency assistance only if someone is injured or has a medical emergency.
- Animal health checks: All animals should be checked as soon as possible to determine if there are any animal health and safety issues.
- Food and water supplies: Any food or water which might have been damaged or contaminated should be discarded.
- Sanitation: Normal sanitation procedures should be resumed as soon as possible after the emergency. Facility Operations may need to be contacted regarding clean-up procedures. If cage washing equipment has been damaged, other mechanisms of cage washing, such as hand washing, may have to be utilized.
- Environmental support: The environmental support systems should be evaluated for damage and the need to take action, such as cleaning or repair. If outages or defects are noted, Facility Operations should be notified and a repair order should be generated. If the environmental problems are severe, animals may need to be evacuated and relocated, or euthanized. This decision must be made by the RSF Director in consultation with the Institutional Veterinarian.
- Personnel: Personnel should follow the outlined plans to ensure their safety.

13. Flood

Flooding can occur due to multiple causes, such as extreme amounts of rain, burst water pipes, plumbing or sewer back-ups, aquatic tank breakage or leakage. Personnel should take preventive measures, as much as possible, to prevent flooding conditions. If the flooding affects the surrounding area (neighborhood), but not the building itself, personnel should use the actions outlined in the response action plan for major winter storms.

General Readiness

- Personnel should not walk into standing water unless they are certain that there is no risk of receiving an electrical shock from outlets or other electrical equipment under the water. Personnel should not touch or operate electrical equipment in standing water. Areas where equipment is in use should be avoided or breaker switches pulled or equipment unplugged, if this can be done safely. After the flood, all equipment which was affected by the flood should be checked and serviced, calibrated, or replaced as necessary.
- DePaul Public Safety should be contacted immediately, as well as the Director of the RSF. After working hours, personnel should contact the Public Safety Dispatcher who will send personnel to assess the need to contact Facility Operations via their call tree. The response to flooding will follow the plans outlined in the DePaul Emergency Operations Plan.

General Action Plans

- Reporting: If a flood affects the animal facility and an immediate response is needed to ensure the health and welfare of the animals, call DePaul Public Safety. Monday through Friday during working hours: Call DePaul Public Safety. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.
 - Describe the problem, location of the problem using specific room numbers, and what specific services are required.
- Animal health checks: If flooding occurs in the animal facility or part of the animal facility, animals should be checked more frequently under the direction of the RSF Director or designee. Animals in lower cages may need to be relocated to higher locations within the room or in other rooms. All animals should be examined to ensure their health and safety status. Any animals suffering ill effects may be treated or euthanized at the discretion of the Institutional Veterinarian using AVMA approved methods of euthanasia.
 - If the flood water levels are high, the door to the facility and the doors to rooms housing aquatic species should not be open at the same time. The aquatic species housed in the RSF are non-native species and care must be taken to prevent the fish from escaping from the tanks and being released into the environment.
- Food and water supplies: Food and water supplies should be kept safe from contamination, as much as possible. Contaminated (wet) food should be discarded and replaced as soon as possible with fresh food ordered from the appropriate vendor. If the water supply is compromised, it may become necessary to use other sources of water, such as bottled water.
- Sanitation: During a flood, normal sanitation procedures should continue in unaffected areas if possible. If cage washing or other sanitation equipment is affected, it may be necessary to alter cage washing procedures, such as using spot cleaning or manual washing. After a flood subsides, all rooms and areas affected by the flooding should be thoroughly decontaminated using cleaning/disinfection materials.
- Personnel: Personnel must exercise caution when working in areas with standing water. The DePaul Emergency Operations Plan should be followed and the appropriate DePaul personnel should be contacted. It is possible the building or the facility may be unsafe and it may be necessary for there to be an assessment regarding when personnel may enter or re-enter the building. Additional personnel may be needed to respond to the emergency and on-site personnel may be asked to perform duties outside of their normal responsibilities in order to ensure the health and welfare of the animals. The RSF Director will make this decision.

14. Animal Activist Demonstrations, Protests, or Picketing

When an institution conducts animal research, there is always the potential for animal rights activists to cause trouble or concerns for the facility and staff. Personnel need to be aware of their surroundings at all times and should be on the look-out for any unauthorized or suspicious persons in the vicinity of the RSF who may be attempting to gain access to the facility. Activists may pretend to have authority to gain access or may claim to be making a delivery, that they have an appointment, or that they left their access card or keys elsewhere. Personnel should not provide access to the RSF to anyone they do not know or recognize or that does not have authority to enter the facility. A student or colleague may want to tour the facility. However, this should not be done without explicit approval from the RSF director.

General Readiness

- In the event of protests or picketing by animal rights groups, etc., animal care staff should report to work as usual. Personnel should avoid confrontations if they have to pass through a picket line or go near protest marchers. Personnel should not attempt to answer any questions related to animal research at DePaul, but should refer protesters to the Office of Public Relations and Communications at DePaul.
- If possible, personnel should attempt to enter and exit the building using alternate routes to avoid the protestors.
- If necessary, personnel may need to remain in the building until the protestors leave. If personnel need to leave the building, they may request an escort from Public Safety.
- If personnel learn about non-DePaul affiliated animal activists targeting DePaul, they should inform the RSF Director and make a report to DePaul Public Safety. If the protest is being conducted by DePaul students, the Office of Student Affairs should be contacted.

General Action Plans

- Reporting: Monday through Friday during working hours: Call DePaul Public Safety. After hours and weekends or holidays, call DePaul Public Safety to notify them of the emergency.
 - Describe the problem, location of the problem using specific room numbers, and what specific services are required.
- Animal health checks: Normal care for the animals should occur unless not possible. If for any reason the animal activist activities cause an animal care staffing issue, priority should be given to completing the tasks that directly affect the health and welfare of the animals, such as health checks, necessary treatments, feeding, watering, and maintaining sanitation requirements.
- Food and water supplies: Food and water supplies should not be affected by these activities. However, it might be necessary to ensure that no deliveries are scheduled for days on which activists are present.

- Sanitation: Sanitation procedures should proceed normally, assuming that sufficient personnel are present to complete the tasks. If for any reason the animal activist activities cause an animal care staffing issue, priority should be given to completing necessary sanitation procedures.
- Personnel: Personnel are expected to report to work as scheduled. When it is known animal activists may be present or it becomes known they are present, personnel should have a heightened awareness of people in the vicinity of the facility and potential threats to the animals housed in the facility.

15. Bomb threat, bomb or suspicious item found

Bomb threats are usually received by telephone, but can also come by note or letter. Most bomb threats are made by people who want to create an atmosphere of general anxiety or panic. Any bomb threat should be taken seriously and should be reported immediately.

General Readiness

- Keep aware of your surroundings and any unusual packages, boxes, backpacks or other items that do not belong in the area. Report any suspicious items to DePaul Public Safety.
- After a bomb threat has been received, check mail and packages for anything that appears out of place, such as unusual packaging, no return address, or signs of stains or leakage on the package. Make an effort to survey the surroundings for any package, foreign object, or odd device left or located in an unusual place. If a suspicious package or object is found, do not attempt to open or move it. Call Public Safety for assistance and instructions.
- Building evacuation may be necessary after a bomb threat or if personnel find a suspicious package or item. Evacuation should proceed according to normal evacuation procedures.

General Action Plan

- All bomb threats are to be reported to the Public Safety Office from the Lincoln Park Campus (773-325-7777). Upon receipt of a bomb threat, the Public Safety dispatcher will notify their officers immediately after calling 9-1-1. Public Safety will direct the response to the threat.
- All personnel working in the facility or building will be notified of the potential threat and will be provided with instructions.
- Animal health checks: Animals should be checked as soon as access to the facility is permitted by the Office of Public Safety.
- Food and water supplies: Food and water are not anticipated to be a problem for the short period while a threat is being evaluated and handled.

- Sanitation: Sanitation procedures are not anticipated to be affected by a bomb threat. However, in the event that normal sanitation procedures are interrupted, they should resume as soon as feasibly possible.
- Personnel: Personnel should follow the instructions provided by Public Safety, and if necessary evacuate the building. The RSF Director or his/her designee is responsible for ensuring all animal care staff and users of the facility are notified of the potential threat.

16. Other Emergencies and Disasters

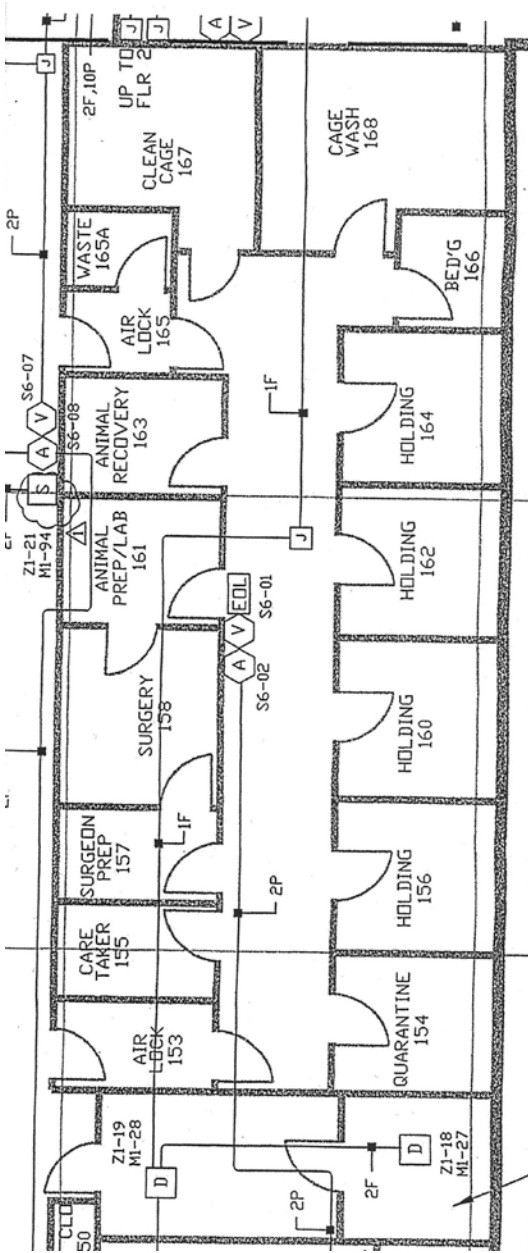
Other emergencies and disasters that are not specifically discussed in this document should be handled by the animal care staff, investigators, the RSF Director, and the Institutional Veterinarian using professional judgment and focusing on animal and human health and safety.

17. Personnel Training

All animal care staff and faculty or students conducting activities in the RSF should receive orientation and training regarding the Emergency and Disaster Plan. Investigator and RSF records should document that each person has received the appropriate orientation and training. Personnel should be aware of the content of this document. Additionally, all personnel should know where to locate a copy of the plan, as well as how to access the plan online. When possible, the RSF Director should conduct emergency drills to ensure the plans are realistic and to test the emergency plans for deficiencies or vulnerabilities.

Personnel should periodically check and test emergency supply equipment to ensure it is located where it should be and that it is in working order. For example, flashlights should be checked to ensure they work or that back up batteries are not out of date and are still charged.

18. Map of Facility



19. Reporting Requirements to Regulating Agencies

PHS Policy and USDA regulations describe circumstances that require a prompt report to OLAW: “The IACUC, through the Institutional Official, shall promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to: a) any serious or continuing noncompliance with this Policy; b) any serious deviation from the provisions of the Guide; or c) any suspension of an activity by the IACUC.” A significant deficiency as defined by the PHS Policy and the USDA regulations includes any facility or program deficiency that is or may be a threat to the health or safety of animals. These kinds of deficiencies include accidents and natural disasters, which may cause injury, death, or severe distress to the animals. In the event of emergencies or disasters resulting in problems or concerns that meet the reporting requirements, DePaul through the Institutional Official must report the events following the reporting requirements outlined in policy and regulations and following the policy and procedures outlined in the Animal Care and Use Program Policy Manual.

If a disaster results in loss of equipment and materials bought with federal funds obtained from federal grants (e.g. NIH), DePaul may also have to make a report to the NIH Office of Policy for Extramural Research Administration (OPERA). OMB Circular A-110 and Department of Health and Human Services (HHS) regulations at 45 CFR 74 require recipients of NIH grants and cooperative agreements to, at a minimum, provide insurance coverage for equipment acquired with federal funds equivalent to that provided for equipment owned by the recipient. DePaul carries insurance coverage for all the equipment and supplies located in the RSF. A detailed list of these materials is maintained in the RSF Policy and Procedure Manual. In the event of a loss due to a disaster, the RSF Director should coordinate the submission of an insurance claim through the Office of Risk Management at DePaul. Additionally, any required report to OPERA should be made through the IO with the assistance of the Director RSF.

References

Office of Laboratory Animal Welfare ARENA/OLAW Institutional Care & Use Committee Guidebook, 2nd edition, 2002

Office of Laboratory Animal Welfare (OLAW) website: Disaster Planning and Response Resources

The Guide for the Care and Use of Laboratory Animals, 8th Edition, 2011

Revision History

Description	Location	Version	Date