

# Animal Facility Emergency and Disaster Plan

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## **1.0 Scope:**

To prepare for and respond to potential events/disasters that may impact the care or use of animals within the Animal Research Facility at Drake University.

### **1.1. Reason for this Plan:**

The goal of this document is to summarize the disaster-preparedness procedures that have been established and to address the requirements for such a plan put forth by the USDA Animal Plant Health Inspection Service (APHIS) and the 8th edition of the NRC Guide for the Care and Use of Laboratory Animals (The Guide). The Guide requires that animal facilities have a disaster plan that: "...should define the actions necessary to prevent animal pain, distress, and deaths due to loss of systems such as those that control ventilation, cooling, heating, or provision of potable water. If possible, the plan should describe how the facility will preserve animals that are necessary for critical research activities or are irreplaceable. Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized. The disaster plan should identify essential personnel who should be trained in advance of its implementation."

Drake University is committed to ensuring that vertebrate animals used in research are treated in a humane, ethical manner, with the highest standard of care according to federal, state, and institutional regulations and policies. This plan is intended to provide Drake University's Institutional Animal Care and Use Committee (IACUC), faculty, staff and students, a general plan of action in the event of an emergency or disaster with potential impact to the animals housed on campus.

The intent of this plan is to protect and manage the animals on campus in the event of an emergency. However, under no circumstances should employees put themselves at risk in attempting to implement animal protection procedures.

This plan supplements the campus-wide Drake University Emergency Plan. All personnel should follow the procedures in the Drake University Emergency Plan and use this plan as a supplement to specifically address vertebrate animal needs in the event of an emergency.

### **1.2. Plan Statement:**

All personnel must comply with the Drake Campus-Wide Emergency Plan. The sections below detail how emergencies will be handled within the animal facilities.

**Emergency Contact Information & Resources:**

	<b>Call Priority Order</b>	<b>Contact Numbers</b>	
<b>Electrical Power Outage</b>	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
	Public Safety	811	
<b>HVAC Problems</b>	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
	Public Safety	811	
<b>Water Supply Interruption</b>	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
	Drake Facilities Management	515-271-3955 (office)	
<b>Tornado or Severe Weather</b>	Public Safety	811	
	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
<b>Flood</b>	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
	Public Safety	811	
<b>Fire</b>	Des Moines Police	911	
	Public Safety	811	
	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
<b>Break-in/Bomb Threat/Active Shooter</b>	Des Moines Police Department	911	
	Public Safety	811	
	Animal Vivarian –		
	Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician –		
	Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)

<b>Chemical Spill</b>	Chris Nickell, Director, Environmental Health & Safety	515-494-3957 (cell)	515-271-3804 (office)
<b>Protest/Picketing</b>	Public Safety	811	
	Animal Vivarian – Donna Tuttle	612-226-4010 (cell)	515-271-4933 (office)
	Animal Care Technician – Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)
	Mary Wohlford, Ph.D. University Communications and Marketing	515-271-3788 (office) (515-271-2169)	
<b>Snow Storm/ Blizzard/ Ice Storm</b>	Animal Vivarian – Donna Tuttle	612-226-4010 (cell)	515-271-4933 (desk)
	Animal Care Technician – Joy Bachmann	515-991-5594 (cell)	515-271-2614 (office)

For after-hours issues with power outages, HVAC, water, etc., please call Public Safety at 271-2222 and they will contact the appropriate person or duty engineer. If evacuation is necessary or if other major consequential actions are required, Drake Public Safety will contact Vivarium Staff.

**FOR ALL OTHER ANIMAL FACILITY PROBLEMS DURING BUSINESS HOURS**

For issues such as room temperature variations, airflow abnormalities, equipment breakdown, etc., Donna Tuttle, Animal Vivarian, should be notified at 612-226-4010 (cell) or 515-271-4933 (office).

**Non-Emergency Contact Information**

- Drake Public Safety non-emergency 515-271-2222
- Des Moines police non-emergency 515-283-4811
- Animal Vivarian – Donna Tuttle, ALAT 515-271-4933 (office) 612-226-4010 (cell)
- Animal Care Technician – Joy Bachmann, ALAT 515-271-2614 (office) 515-991-5594 (cell)
- Director, Laboratory Animal Facility – Ron Torry, Ph.D. 515-271-2750 (office) 515-238-7039 (cell)
- Attending Veterinarian - Lisa Takes, DVM 515-283-1577 (office) 515-229-0405 (cell)
- Director, Sponsored Programs Administration and Research Compliance – Mary Wohlford, Ph.D. 515-271-3788 (office)
- IACUC Chair – Kim Huey, Ph.D. 515-271-4853 (office)

### 1.3. OVERVIEW OF ANIMAL CARE & SUPPORT NEEDS

#### **Animal health checks and health maintenance:**

Animals should be checked daily to confirm they are healthy. Animal Vivarium Staff or other qualified personnel may perform these observations. The Attending Veterinarian or Consulting Veterinarian will triage sick or injured animals and determine a treatment plan in consultation with Animal Vivarium Staff.

Disaster events in a research animal setting may cause the loss of room access, environmental control, or safe working conditions that limit animal care and veterinary service support. Direction in this situation is frankly stated in the following excerpt from the Guide for Laboratory Animal Care and Use (8th edition):

“Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized.”

Conditions that may necessitate euthanasia after a disaster could include:

- Availability of feed, caging, rooms, environment or other species-specific requirements.
- Animals with life threatening injuries or conditions not amenable to recovery.
- Loose or unidentified animals
- Investigator input, unless veterinarian determines suffering

Although every attempt will be made to avoid mass euthanasia during or following a disaster, euthanizing injured/distressed animals in these situations may be the only way to reduce animal pain and suffering.

Drake University does not have a back-up facility on campus prepared for the evacuations of all animals in the event of an emergency. However, evacuations may be considered based on the details of the disaster, type of animal, and feasibility of evacuation or relocation. For long-term relocation of animals, Drake University has a Memorandum of Understanding (MoU) with Des Moines University. Each site agrees to provide emergency long-term housing for the other site as specifically outlined in the Memorandum of Understanding. See Appendix A for Memorandum of Understanding with Des Moines University.

The following priority list attempts to preserve animals necessary for critical teaching, research activities, or are genetically distinct or irreplaceable. The order of animals to preserve include:

- a. All animals used in teaching (if disaster occurs when classes are in session)
- b. Specially bred or genetically distinct animal lines that are irreplaceable. Three to four breeding pairs, or breeder individuals per line, will be preserved.
- c. Investigators working on extramural grants with guidelines for preserving equipment and data.
- d. Breeding pairs for other animal lines
- e. All other animals used in teaching or research

Animals not in a managed holding room at the time of an incident (e.g., animals removed from the vivarium for short-term procedures) are the responsibility of the PI who removed the animals and his/her staff. The PI will be notified by Vivarium Staff in the case of an emergency and the PI must make critical decisions regarding the decision to relocate or euthanize animals in the event of an emergency.

Any animals that cannot be relocated, protected, or adequately maintained from the consequences of the disaster must be humanely euthanized. When appropriate, animals will be euthanized at the discretion of the Attending Veterinarian or designee in consultation with Animal Vivarium Staff using current American Veterinary Medical Association (AVMA) approved methods of euthanasia.

### **Food and water supplies:**

Food and water are critical to maintaining animal health. Having the appropriate food in adequate quantities for the species and research needs 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 (e.g., new born rats or mice) and should be given special attention.

If food and water cannot be adequately maintained, animals will be euthanized at the discretion of the Attending Veterinarian in consultation with Animal Vivarium Staff and current American Veterinary Medical Association (AVMA) approved methods of euthanasia will be used.

### **Sanitation:**

For purposes of animal health, animal welfare and support of research, adequate sanitation must be provided. Cages 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 cage change intervals, spot cleaning instead of whole-cage changes, changing bedding instead of cage changes, hand washing some equipment, or deferring activities, such as floor mopping, may be required. The Drake University Attending Veterinarian or designee and/or the Animal Vivarian will 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.

If adequate sanitation cannot be maintained, animals will be euthanized at the discretion of the Attending Veterinarian in consultation with Animal Vivarium Staff. Current American Veterinary Medical Association (AVMA) approved methods of euthanasia will be used.

**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., hoods, autoclaves, ventilated racks). Ventilation problems should be addressed by Animal Vivarium Staff in consultation with Drake University Facility Services personnel with goals of: maintaining adequate air movement in animal housing spaces, sustaining air pressure differentials in all rooms and keeping adequate temperatures as close to the acceptable range as is possible. The minimal standard is to prevent animal deaths or contamination of the environment.

Maintenance of body temperature within normal circadian variation is necessary for animal well-being. Animals should be housed within temperature and humidity ranges appropriate for the species, to which they can adapt with minimal stress and physiologic alteration. The dry-bulb temperatures listed in Table 1.1 are broad and generally reflect tolerable limits for common adult laboratory animal species, provided they are housed with adequate resources for behavioral thermoregulation; temperatures should normally be selected and maintained with minimal fluctuation near the middle of these ranges.

TABLE 11.1 Recommended Dry-Bulb Macro-environmental Temperatures for Common Laboratory Animals (The Guide for the Care and Use of Laboratory Animals: Eighth Edition, Page 41)

Animal	Dry-bulb Temperature	
	C°	F°
Mouse, rat	20-26	68-79
Finch, Pigeon	16-27	61-81

Relative humidity should also be controlled, but not nearly as narrowly as temperature for many mammals; the acceptable range of relative humidity is considered to be 30% to 70% for most mammalian species. Ideally relative humidity should be maintained within a 40-60% range. Dehumidifiers will be setup in rooms by Vivarium Staff when humidity levels in the animal room are above 75% for an extended period of time. Moderate fluctuations in temperature and relative humidity outside suggested ranges are generally well tolerated by most species commonly used in research as long as they are brief and infrequent. If environmental conditions cannot be adequately maintained animals will be euthanized at the discretion of

the Attending Veterinarian in consultation with Animal Vivarium Staff. Current American Veterinary Medical Association (AVMA) approved methods of euthanasia will be used.

### **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 Facility Vivarian or designee will deploy available personnel to maintain animal health and well-being under the direction of the Attending Veterinarian or designee. Personnel may be asked to perform duties outside the scope of their normal responsibilities in order to protect animal health or well-being. The Attending Veterinarian and Animal Vivarium Staff, with consultation as needed from Sponsored Programs Administration (SPA) and Animal Facility Director will make this decision. As soon as possible after a disaster or prior to the incident, when possible, a list of current/essential personnel that may need to access campus and the animal facilities will be provided to Drake Public Safety so they may further distribute it to local, state or federal authorities that may control access, including road closures as well as complying with the Drake Campus-Wide Emergency Plan ([Drake University Emergency Procedures Manual 2018](#)).

### **1.4. EVACUATION OF ANIMALS:**

Disaster preparedness can mean the difference between undue loss and suffering of animals, which can compound trauma to human victims, and successful evacuation and care for both people and animals. Safe evacuation of all people from the designated area is the priority for all responding agencies.

#### **Evacuation Space: Short-Term & Long-Term Housing**

Drake University does not have a back-up facility specifically prepared to evacuate all animals in the event of an emergency. If a particular animal room's environment cannot be adequately maintained within the NRC Guide for the Care and Use of Laboratory Animals parameters, the animals may need to be relocated within the facility. For long-term relocation of animals, Drake University has a Memorandum of Understanding with Des Moines University. Each site agrees to provide emergency, temporary housing for each other's facility (see Appendix A).

#### **Decision-Making for Evacuation**



***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 animals back in their cages.
- If you are in the middle of surgery, euthanize the animal if there is time.

NOTE: Any animal cage evacuated from the animal facility should have cage card information taped onto the cage with clear tape and/or cage card information written directly onto the cage with permanent marker as soon as possible.

Evacuation will be considered based on the details of the disaster, type of animal, feasibility of evacuation or relocation, and the amount of time available. The decision to evacuate animals will be made in consultation with the Attending Veterinarian or designee, Director of SPA, Institutional Official, and Animal Vivarium Staff. However, there may be situations where adequate time is not available to contact the Director of SPA or an Institutional Official and the decision to evacuate will be made by Animal Vivarium Staff. Scenarios where evacuation of an animal may be appropriate include:

- 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.

In the event of a catastrophic emergency, injured or affected animals will be triaged by trained animal care personnel (veterinarians, animal vivarium staff, research investigators and/or research staff). Treatment will occur on site if possible or after evacuation to a predetermined area/site. Those animals with injuries too severe to recover will be humanely euthanized.

After an evacuation of the facility Drake Public Safety, Environmental Health and Safety, Des Moines Police and/or others as needed will determine when it is safe to return to the area with the animals. Investigators will be responsible for coordinating with their individual students regarding when to resume their research.

## **1.5. 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 some events. All personnel must comply with the Drake Campus-Wide Emergency Plan. Drake University Emergency Procedures Manual 2018

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. For example, when extreme weather is predicted, such as snow or ice storm, or other severe weather which may prevent transportation or limit access to the animal facility to provide care as required by federal law, the Animal Vivarium Staff will coordinate to ensure that someone is available to care for the animals. If such a decision is made, the Animal Vivarium Staff will notify Drake Public Safety dispatch of the exact area where personnel remain; this is especially important when the University is “closed.” Investigators will need to coordinate with students working with them on their protocols. Students must follow the Drake Emergency Plan. Drake University Emergency Procedures Manual 2018

Prior to a winter storm or other predictable severe weather, when possible, cages will be topped off with food and fresh water. Animals which are usually fed once per day may be given full hoppers of food. Rodent cage hoppers may be filled to the maximum and full water bottles provided the day before the expected storm even if it is not a normal water change-out day. Fresh water may be stored in clean containers in the facility.

Generally, the amount of feed kept in-house (including food on cages, food in room feed supply bins and food in the feed storage room) is projected to be an adequate supply to allow for any potential delays in feed shipment. Investigators will be notified as needed of any changes to feed and water deprivation schedules as related to their specific research protocols.

Loss of power will be managed with the backup generator. In the event that such a situation is likely during the workday, the Animal Vivarium Staff or designee will closely monitor weather conditions. Animal Care staff will be reassigned work tasks to assure that all critical tasks are completed (feed, water, security of animals) and then nonessential personnel will be sent home (timing to be consistent with recommendations from weather bulletin sources).

In extreme or rare incidences, faculty will be responsible for animal husbandry tasks for their animals. For after-hours issues with power outages, HVAC, water, etc., please call Public Safety at 271-2222 and they will contact the appropriate person or duty engineer. If evacuation is necessary or if other major consequential actions are required, Drake Public Safety will contact Vivarium Staff.

## **1.6 NATURAL DISASTERS - FLOODS, EARTHQUAKES, TORNADOS, SNOWSTORMS, FIRE:**

Surgical procedures should not be conducted if there is advance notice of a potential disaster. In addition to the Drake University Emergency Plan, the following should be considered for animals.

Procedures & animal handling during or after a flood, earthquake, tornado, snowstorm, or fire:

- If possible, leave rooms where hazardous materials and anesthetic agents are located.
- Secure any hazardous materials.
- If possible, turn off all gas lines and gas cylinders.
- If you are working with animals near their cages and time permits, put the animals back in their cages.
- If you are in the middle of surgery and are required to evacuate, euthanize the animal if there is time.
- After the area has been deemed safe by Drake Public Safety and Environmental and Health Services, Animal Vivarium Staff will be permitted inside the building to assess the need for evacuation and relocation of animals or humane euthanasia, if necessary.

## **1.7. HVAC LOSS:**

Essential animal facility HVAC systems have backup that automatically turns on. However, any major utility failure should be reported to Animal Vivarium Staff. If a particular animal room's environment cannot be maintained within the Guide's parameters, the animals may need to be relocated within the facility.

Animal Vivarium Staff will be responsible for coordinating the move of any animals and Investigators will be notified of any re-locations within the animal facility.

### **Overheating:**

- Animals may need to be moved to other rooms within the animal facility that are not over heating or to the animal facility's hallways if they are cooler in these locations.
- If the whole animal facility is overheating, mobile cooling stations may be utilized to reduce the heat load.
- If animal rooms cannot be cooled, the Attending Veterinarian (or designee) at the discretion and coordination with Animal Vivarium Staff will make the decision to relocate within the facility or euthanize the animals if they are in distress or danger.

### **Loss of Heat:**

- Animals may be moved to rooms within the animal facility that have heat or to the animal facility's hallways if it is warmer in these locations.

- If the whole animal facility is experiencing loss of heat, mobile auxiliary heaters may be utilized in animal rooms that have no heat.
- If animal rooms cannot be warmed or there is no warm place within the animal facility, the Attending Veterinarian (or designee) at the discretion and coordination with Animal Vivarium staff will make the decision to relocate within the facility or euthanize the animals if they are in distress or danger.

## 1.8 ANIMAL RIGHTS ACTIVISTS: PROTESTS / PICKETING

In the event of protests or picketing (by animal rights groups, for example), animal facility personnel are to report to work as usual. In doing so, they are to avoid confrontations if they pass through picket lines or protest marchers. Drake University Communications and Marketing (515-271-2169) will handle the dissemination of information and address questions about research activities. Drake Public Safety and the Des Moines Police Department will handle all security related issues, and will increase security measures for all animal housing and support facilities while helping keep all facilities secure.

- **Animal health checks:** If the number of employees on site is decreased, priority is given to activities which directly affect animal health and welfare: health checks and treatments, feeding, watering, and maintaining minimal sanitation requirements.
- **Food and water supplies:** Food and water supplies on-site should not be affected. Closing the receiving dock and deferring delivery locations may be considered if the primary location is unusable. Similarly, if the normal waste pick-up procedure is disrupted, waste may be taken out through a different exit location or kept in cold-storage temporarily.
- **Sanitation:** Sanitation should proceed normally, assuming sufficient personnel are present. If staff shortages occur, sanitation will be prioritized as described in Animal Health Checks above.
- **Environmental support:** Environmental systems are not expected to be affected. If the environment is altered, as by sabotage, for example, the specific problem will be addressed as described in the section for that emergency (see: HVAC loss, Bomb Threat, Electrical Power Outage, etc.).
- **Personnel:** Drake University personnel are expected to report to work. Drake personnel may be required to perform duties outside their usual responsibilities in order to preserve animal health. The Animal Vivarian in consultation with the Attending Veterinarian or designee will adjust duties as needed. Drake faculty/staff/students are not to engage protestors. All questions from protestors, the media and others should be directed to Drake University Communications and Marketing (515-271-2169); they will handle the dissemination of information and address questions about research activities (see appendix E).

## 1.9 CORONAVIRUS PLANS

The Coronavirus/COVID-19 outbreak represents a rapidly evolving situation and communication regarding changes in facility operations will be important. Notice of operational changes will be emailed to investigators with animals in the facility; investigators are responsible for notifying their students. Investigators are encouraged to contact Donna or Joy with questions. In an effort to help minimize the spread of COVID-19, Drake University requires temperature monitoring for faculty, staff, and contractors who must be on campus, in accordance with the Iowa Department of Public Health (IDPH) and Polk County Health Department (PCHD).

- For now, all students must be approved to work/be on campus. Investigators need to complete this form to request approval. If approved, the student can then be given swipe card access into the animal facility.
- We ask that all investigators and students commit to checking their temperature and health prior to coming into the animal facility and staying home if symptomatic.
- We ask investigators to provide weekly schedules of when students will be working in the animal facility in order to separate shifts from the animal care staff responsible for animal husbandry and facility maintenance. Our objective is to keep the number of in-person interactions limited as well as maintain effective sanitizing of common areas and surfaces. Facility staff will sanitize touch points and common areas throughout the day.
- To help minimize in-person interactions, signs are in place to route personnel to their particular holding/testing rooms. The hallway containing bird rooms, cage wash room, and the clean room is restricted to animal care staff, investigators, and students who are working directly with those animals.

### PPE Guidelines

In order to ensure a safe and secure animal facility during the COVID-19 pandemic, ALL students will be required to wear a face mask and gloves while in the animal facility. No exceptions.

- Masks will be required to be worn prior to entering the animal facility and gloves will need to be worn at all times when working within the animal facility.
  - Masks: Investigators and students have the option to choose from an animal facility–provided cloth mask or a mask they already own. Contact Donna/Joy if you wish to use a facility-provided mask.

- Gloves: Investigators are asked to supply their students with gloves. Gloves can be stored in the locker room for convenience.
- A hand sanitizer dispenser is located just inside the door of the animal facility and must be used upon entry into and exit from the animal facility.

Students will NOT be required to wear their Drake issued ID card or a name tag while in the animal facility during this time to limit any additional surface to surface spread of the virus.

## **1.10 EMERGENCY SUPPLIES**

The animal facility will keep on hand enough food and water to provide proper care for animals in the event of a disaster. The animal facility will maintain an adequate feed supply to meet the needs of a temporary disaster predicted for our region.

Additional supplies kept on hand include:

- Drinking water and food for staff
- Flashlights and extra batteries
- Utility knife
- Heavy duty work gloves
- Sanitation needs (such as tissue paper, bleach, plastic bags, plastic bucket)
- Duct tape and/or barrier tape
- Large sheets of paper, blank cage cards, markers, pens and pencils
- Campus and area maps
- Personal first aid kit

A full list of rooms where animals are housed and a full list of animal facility and key personnel contact information will be maintained by the Animal Vivarian and provided to Drake Public Safety and the Director, Office of Sponsored Programs and Research Compliance (See Appendix B for map of room locations)

## **1.11 DISASTER PLAN TRAINING**

Drake University is prepared to respond to emergencies 24 hours per day, 7 days per week. If a major emergency affecting Drake University as a whole such as a tornado, hazardous materials accident, picketing, or shooting occurs, Drake Public Safety and/or the Des Moines Police will direct the University's emergency response. Specially trained response and support teams will be activated. The Office of Sponsored Programs and Research Compliance will coordinate Environmental Health and Safety training and public safety training. The frequency of University-wide training will be determined by Drake Public

Safety who is responsible for the overall emergency response program at Drake University. Emergencies specific to the Animal Facility will be coordinated with Drake Public Safety, University Administration and Animal Vivarium staff as described in this document.

All students approved to help on animal research projects will be oriented to the animal facility and are required to fully read, understand, and abide by the policies and procedures as outlined in the Animal Facility Overview for Students (see Appendix C).

### **1.12. RESPONSIBILITIES:**

Drake University's Institutional Animal Care and Use Committee (IACUC) will review the Animal Facility Disaster Plan and the plan will subsequently be approved at the University level. The Director of the Office of Sponsored Programs and Research Compliance at Drake University provides resources and guidance to the IACUC, animal research investigators, and care staff on current regulatory requirements involving the requirements for disaster planning.

### **1.13 REFERENCES:**

Federal regulations require each institution to develop Disaster Planning and Emergency Preparedness. The following show where these regulatory requirements can be found in the Eighth Edition of the Guide for the Care and Use of Laboratory Animals (Guide) and the Animal Welfare Act (9CFR) and serves as a checklist of disaster planning expectations related to Animal Care at Drake University:

1. Define the actions necessary to prevent animal pain, distress, and deaths due to loss of systems such as those that control ventilation, cooling, heating, or provision of potable water. Guide p. 35.
2. Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized. Guide p. 35.
3. Identify essential personnel who should be trained in advance in its implementation. Guide p. 35. Personnel trained in emergency procedures for special facilities or operations. Guide p. 74.
4. Access to essential personnel during or immediately after a disaster. Guide p. 35. In the event of an emergency, institutional security personnel and fire or police officials should be able to reach people responsible for the animals. Guide p. 74.

5. Prominently posting emergency procedures, names, or telephone numbers in animal facilities or by placing them in the security department or telephone center. Guide p. 74. Emergency procedures for handling special facilities or operations should be prominently posted. Guide p. 74.
6. The Animal Vivarian or attending veterinarian responsible for the animals should be a member of the appropriate safety committee at the institution, an “official responder” in the institution, and a participant in the response to a disaster. Guide p. 75.
7. Law enforcement and emergency personnel should be provided with a copy of the plan for comment and integration into broader, area wide planning. Guide p. 35.
8. While contingency plans normally address natural disasters, they should also take into account the threats that criminal activities such as personnel harassment and assault, facility trespassing, arson, and vandalism pose to laboratory animals, research personnel, equipment and facilities, and biomedical research at the institution. Preventive measures should be considered, including pre-employment screening and physical and information technology security (Miller 2007). Guide p. 23.
9. How the facility will preserve animals that are necessary for critical research activities or are irreplaceable. Priorities for triaging animal populations. Guide p. 35.
10. Research facilities must develop, document, and follow an appropriate plan to provide for the humane handling, treatment, transportation, housing, and care of their animals in the event of an emergency or disaster (one which could reasonably be anticipated and expected to be detrimental to the good health and well-being of the animals in their possession). USDA.
11. Identify situations the facility might experience that would trigger the need for the measures identified in a contingency plan to be put into action including, but not limited to, emergencies such as electrical outages, faulty HVAC systems, fires, and animal escapes, as well as natural disasters the facility is most likely to experience. USDA.
12. Outline specific tasks required to be carried out in response to the identified emergencies or disasters including, but not limited to, detailed animal evacuation instructions or shelter-in-place instructions and provisions for providing backup sources of food and water as well as sanitation, ventilation, bedding, veterinary care, etc. USDA.
13. Identify a chain of command and who (by name or by position title) will be responsible for fulfilling these tasks. USDA.
14. Address how response and recovery will be handled in terms of materials, resources, and training needed. USDA.
15. The plan must be reviewed by the research facility on at least an annual basis to ensure that it adequately addresses the following criteria: electrical outages, faulty HVAC systems, fires, and animal escapes, as well as natural disasters the facility is most likely to experience. Any changes to the plan as



a result of the annual review must be communicated to employees through training which must be conducted within 30 days of making the changes. Note: In compliance with USDA, any changes to this plan shall be communicated to employees through training which must be conducted within 30 days of making the changes. USDA.

16. Each registrant must maintain documentation of their annual reviews, including documenting any amendments or changes made to their plan since the previous year's review, such as changes made as a result of recently predicted, but historically unforeseen, circumstances (e.g., weather extremes).USDA.
17. Contingency plans, as well as all annual review documentation and training records, must be made available to APHIS and any funding Federal agency representatives upon request. USDA.
18. The facility must provide and document participation in and successful completion of training for its personnel regarding their roles and responsibilities as outlined in the plan. USDA.

## **Appendix D: Animal Facility, COVID-19 Mitigation Plans**

### **Overview, contact information and general preparations:**

Drake University's Animal Facility has an approved Animal Facility Emergency and Disaster Plan on file. The procedures listed below are in alignment with those described in that plan. All faculty, staff, students must comply with the Drake University Emergency Procedures.

The Coronavirus/COVID-19 outbreak represents a rapidly evolving situation and communication regarding changes in facility operations will be important. Notice of operational changes will be emailed to investigators with animals in the facility; investigators are responsible for notifying their students. Investigators are encouraged to contact Donna or Joy with questions.

### **Contact information**

Animal Vivarian – Donna Tuttle, ALAT 515-271-4933 (office); 612-226-4010 (cell)  
Animal Care Technician – Joy Bachmann, ALAT 515-271-2614 (office); 515-991-5594 (cell)  
Animal Facility Director – Ron Torry, Ph.D. 515-271-2750 (office); 515-238-7039 (cell)  
Director, SPA and Research Compliance – Mary Wohlford, Ph.D. 515-271-3788 (office)  
IACUC Chair – Kim Huey, Ph.D. 515-271-4853 (office)

### **General Preparations:**

While the animal facility maintains an adequate feed supply to meet the needs of any temporary disaster predicted for our region (Animal Facility Emergency and Disaster Plan), we have purchased additional feed, bedding, gloves, and cleaning supplies to cover a period of suspension of operations by the University. Enough CO2 and cage washer chemicals are on hand for an extended period of time.

All animal care staff, investigators, and students are asked to take precautionary measures of washing hands and donning gloves when entering the facility. Hands should be washed and gloves disposed of properly when leaving the facility. Additional preventative measures will include the University's custodial cleaning program using an EPA-registered disinfectant to clean touchpoints and common areas within the Animal Facility daily. Animal care staff will work with EHS on the disinfection procedures after the University resumes normal activities.

### **University limitations on campus activities**

The following changes in Animal Facility access and activities will be in place in response to the University's COVID-19 mitigation plan and may be extended beyond that time by University policy, if needed:

- Animal Facility access:
  - Access to the Facility will be restricted to Animal Facility Care Staff and faculty investigators.
  - Swipe card access for all students will be discontinued.
- Animal husbandry activities:
  - Animal care staff are considered essential employees and it will be necessary for them to come to campus to complete the animal husbandry tasks.
  - Work schedules and animal husbandry tasks will be coordinated between the Animal Vivarian and the Animal Care Technician to assure that all critical tasks (feed, water, security of animals) are completed.
  - Adjustments to basic animal husbandry activities will be made as needed:

- If one staff member is unable to work, the other staff member will concentrate on maintaining basic needs of the animals only; they will not be available to assist with research protocols. The working member will follow an abbreviated holiday and emergency operating procedures according to their physical ability to perform the tasks.
  - If both animal care staff members are physically unable to work, investigators will be notified and they will be responsible for maintaining acceptable, but minimal, animal husbandry tasks as described in Appendix A until at least one staff member can return to work.
  - In the unlikely event that no faculty or animal care staff members are able to perform husbandry duties to meet the basic needs of the animals, consideration will have be given to euthanizing those animals as described and prioritized in the Animal Facility Emergency and Disaster Plan.
- Research activity:
    - It will be at the investigator’s discretion whether they halt their research and restrict their own access into the animal facility. Students will not have access to the facility.
    - Animal husbandry activities for these animals will continue as planned.
    - Animal care staff may not be able to assist with research protocols and procedures.
    - No animals will be allowed to leave the animal facility.
  - Teaching activities:
    - No teaching labs involving live animals will take place.
    - Animal husbandry activities for these animals will continue as planned.
  - Animal Facility personnel:
    - Depending on the situation, a “Sheltering in Place” approach may be used by animal facility staff as described in the Animal Facility Emergency and Disaster Plan when they decide to remain in the facility for longer than a normal shift.
    - Such decision is made in order to ensure that someone is available to care for the animals.
    - If such a decision is made, the staff member will notify Drake Public Safety of the exact area where personnel remain; this is especially important when the University is closed.

## **Appendix E: University Communications and Marketing Statement**

### **The Use of Animals in Teaching and Research at Drake University**

Animals are needed in research and education to advance science; science that eventually helps humans and animals. Science faculty at Drake University may use animals for teaching and research purposes. Animal laboratories provide experiential opportunities for students that cannot be obtained in other settings. As with human research, faculty opting to use animals in teaching and research must ensure compliance with federal regulations.

The humane treatment of animals is the foundation for good science as well as a legal and ethical imperative. The *U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training* provides an ethical framework that underlies all U.S. laws governing the treatment of animals. The Animal Welfare Act (AWA) regulates the use of animals in research and teaching. To qualify for federal funding, institutions must follow the *Guide for the Care and Use of Laboratory Animals*. Drake University follows and is in compliance with these guides.

In compliance with federal guidelines, Drake University requires that proposals for teaching and research involving animals must be reviewed and approved in advance by its Institutional Animal Care and Use Committee (IACUC). This committee is composed of scientists, a veterinarian, and an individual from the community who is not affiliated with Drake. The committee determines whether or not the use of animals is necessary and makes certain that researchers have made appropriate plans to minimize animal distress. The IACUC must approve of a study before it can begin and the committee has the authority to halt ongoing research if they find it is no longer in compliance.

Beyond what laws and regulations dictate, faculty and students recognize that laboratory animals are living creatures that deserve to be treated with care and compassion. Drake University is committed to ensuring the well-being of animals and maximizing their comfort and welfare.

## **Appendix F: Reporting Workplace Injuries in the Facility**

Any person bitten by an animal or injured in the facility **MUST** report immediately to their investigator. The individual injured is encouraged to seek medical attention even for minor injuries by calling the **PMA Care 24 Nurse Triage Service at 1-855-574-5580**. This service is available 24 hours a day, 365 days a year. PMA Care will discuss the injury with the employee, set up the initial claim with Drake's insurance company, and direct the injured to the occupational medicine doctor that is best suited to the specifics of the incident if required.

All injuries (regardless of medical attention needs) require the completion of an internal accident report within 48 hours of the injury. More information on incident reporting and process at Drake can be found at:  
<https://www.drake.edu/hr-internal/formslibrary/forms/firstreportofinjuryform/>

A first aid kit is in the metal supply cabinet in the entry area of the Animal Facility.