Animal Program Emergency Operations Plan

Version 2.2

R&D Approved 5/22/2018
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VAPHS ARF Emergency Operations Plan R&DC Approved 05/22/18
I. INTRODUCTION

This manual serves as a basic plan in case of emergency situations and as an adjunct to the established VA Pittsburgh Healthcare System (VAPHS) Hospital Emergency Operations Plan (HEOP). The Administrative Offices of the VAPHS review and revise the Hospital Emergency Operations Plan annually through the facilities Emergency Management Committee of which Research is a standing member. The document is integral and supplementary to the VAPHS Animal Research Facility (ARF) Emergency Operations Plan (EOP). The Institutional Animal Care and Use Committee (IACUC) and Institutional Biosafety Committee (IBC) review the ARF EOP annually and revise appropriately.

The IACUC and the Research and Development (R&D) Office oversee the ARF of the VAPHS. The ARF provides support to and is an excellent environment for VAPHS investigators so that they may conduct the highest quality of animal research aimed at improving the health benefits for veterans. The ARF, IACUC and the R&D Office are aware that the highest level of standards must be maintained for the safety of the personnel providing animal care as well as for the animals in the event of emergency. Our first priority in any emergency situation is the prevention of injury and attention to the personal needs of our faculty, staff, and researchers. Our second priority is to provide for the daily needs of the animals covered under the VAPHS Animal Programs.

Scope:

This ARF EOP provides the VAPHS R & D Department with an organized process to initiate, manage, and recover from a variety of emergencies, both external and internal, which could confront the animal research program located at University Drive Building 6. This EOP describes a comprehensive all hazards command structure for coordinating seven crucial animal care and support responsibilities:

1. Animal identification, observation, health maintenance and veterinary care
2. Food, water and bedding
3. Personnel to care for animals
4. Transportation and communication
5. Environmental support and contamination control
6. Security and research support
7. Notification of critical components including administration, IACUC, research groups, and VAPHS Public Relations groups as warranted.

Incorporated in this EOP are elements derived from the VHA Handbook 1200.07, the Health Research Extension Act, the Public Health Services Policy on Humane Care and Use of Laboratory Animals (includes the 8th edition of the Guide for the Care and Use of Laboratory Animals [referred to as “the Guide”] and the Report of the American Veterinary Medical Association [AVMA] Guidelines for the Euthanasia of Animals), the Animal Welfare Act (7 U.S.C. Sections 2131-2159), and the United States Department of Agriculture (USDA) Animal Welfare Act Regulations and Standards (AWAR-Title 9 CFR Parts 1-4).
II. GENERAL INFORMATION ABOUT THE ANIMAL PROGRAM

A. Animal Observation and Health Maintenance

The majority of the animals housed in the ARF are specifically bred for laboratory research. The health and welfare of these animals are the primary goal of the department. The VAPHS ARF has established an identification system using a bright pink card to identify the animals with the highest priority for rescue. Researchers are to clearly mark cages of rodents that are very valuable due to their genotype (transgenic and knockout breeders).

All other elements listed are necessary for adequate maintenance of the animals. The ARF Staff observe the animals under their care on a daily basis and report any abnormalities to the veterinary service staff. Failure to observe the animals may result in conditions being left untreated.

B. Food and Bedding

Research animals must be ensured a continuous supply of healthful food, which contains a nutritional formula as well as clean bedding.

C. Water

A potable water supply is required as drinking water for animals and for sanitation purposes within the animal facility.

D. Personnel to Care for Animals

The ARF Staff includes an ARF Supervisor and Animal Technicians whose primary responsibilities include surgical research support, cage washing, animal care, and administrative duties. The ARF Staff and the Veterinarians are considered essential positions within the ARF. In the event of a regional natural catastrophe, the ability of personnel to arrive at work areas may be impaired. Communication and arrangement with VAPHS response mechanisms are employed in the event of such emergency. Please refer to the VAPHS HEOP for further guidance.

III. OVERVIEW--EMERGENCY PLANNING FOR LABORATORY ANIMAL FACILITIES

The purpose of this ARF EOP, which is part of the VAPHS Hospital Emergency Operations Plan, is the following:

- To minimize losses of animals during an emergency
- To provide appropriate veterinary care/euthanasia at all times
- To allow the facility to sustain or restore normal operations after an emergency
- To enable the facility to recruit outside assistance for animals

A. Authority

Those individuals with authority to commit the ARF’s resources during an emergency have reviewed and signed this ARF EOP.
B. Direction and Control

The ARF EOP is designed to protect animals in the event of fire, flood, severe winter storms, hurricanes, prolonged electrical power outages, or terrorism from animal rights groups. However, in any emergency, the lives of humans take first priority, followed by the lives of research animals.

The Research and Development Department will follow the HEOP and augment specific responses as per Annex I, Command/National Incident Management System (NIMS) Hospital Incident Command System (HICS). Please refer to the HEOP Functional Annex I: Command/Incident Management that describes the situational leadership necessary to manager a disaster, emergency or incident.

The designated Incident Commander is the Associate Chief of Staff (ACOS) for Research. If the ACOS cannot be reached, then the Deputy ACOS should be contacted, and in the event that the Deputy ACOS cannot be reached, the Administrative Officer (AO/R&D) will be the Incident Commander. The ARF Supervisor and/or the ARF Staff serve as the official, initial ARF emergency responder(s).

C. Notification Procedures

Functions of the ARF Supervisor and/or Veterinarian who report to the Incident Commander:

- Provide information about animals and the status of the ARF
- Help set priorities, order evacuation of animals
- Call trained animal facility personnel to assist; record the names of persons cleared to work in the facility
- Describe critical resource needs for the animals

D. Communications

The EOP calls for the ARF Supervisor to report the nature of the event to the Incident Commander during the onset of the crisis. Communication would be by cell phone. ARF Staff must assemble on Brackenridge Street so they can be easily located and recruited. All persons entering the ARF must be cleared by the ARF Supervisor or ARF Staff to enter the facility. ID badges should be worn by those authorized to enter the animal facility.

E. Life Safety for Personnel and Animals

In the event of fire, all personnel are instructed to evacuate the building immediately to the designated emergency assembly point (Brackenridge Street across from the loading dock of Building 6; alternate is the loading dock area near the back corner of Building 30) and report to the ARF Supervisor for roll call. Refer to the R & D Department Emergency Response Plan (DERP) for additional information.

F. Emergency Recognition and Prevention

In an effort to maintain effective emergency recognition and prevention, the VAPHS conducts an assessment on an annual basis to identify vulnerable or high-risk areas, sensitive materials and physical security needs.
Initial and annual vulnerability assessments of all facility research laboratories by a multidisciplinary team consisting of local research personnel (Biosafety Officer for Research), a representative from VA Police Service Physical Security Specialist, the facility Safety Officer, Safety Manager or designee, Radiation Safety Officer, and/or Industrial Hygienist. Additionally, vulnerability assessments are also conducted after any incident. The results of the assessments are provided to the IBC and the Research and Development Committee (R&DC). All vulnerabilities identified during the assessment are eliminated and steps taken to eliminate vulnerabilities are documented.

G. Evacuation of Animals from Facilities

**Evacuation is a "last resort" strategy.** The animals, in most instances, will fare better if additional resources and critical supplies can be brought to the facility. For this reason, the facility will maintain a one-week supply of food and bedding for all species. In the event of a disaster, the ACOS or authorized designee would contact the Department of Laboratory Animal Research (DLAR) from the University of Pittsburgh and initiate transporting animals to their designated site (quarantine in one of the animal facilities available). The ACOS will make every effort to provide at least 24 hours notice before the start of transport, and the estimated duration of use of the off-site facilities. The ACOS and/or designee will be responsible for arranging the transportation of the animals. The Principal Investigators and laboratory staff will be responsible for ongoing experimental procedures and maintenance of breeding colonies. In the event of damage to the ARF alone, animals will be moved to non-patient areas of Building 1. Animals will be moved to research laboratory space in Building 1 on either 1 West, 2 West, or 2 East until they can be returned to the ARF. The mice and rats will be moved in their own cages. The cages will be placed on carts, covered with a drape and transported to Building 1 by way of Brackenridge Street and into the receiving dock. The rabbits in respective cages will be covered with a drape and then wheeled out of the facility to Building 1 by way of Brackenridge Street and into the receiving dock. If the disaster affects Building 1, rodents and rabbits will be moved to an available animal facility at the University of Pittsburgh. Currently, there is a contract in place for VA animals to enter the University quarantine facilities. For transport to the University of Pittsburgh to occur, the ACOS would contact the Director of the DLAR for the availability of space in quarantine. As soon as possible after arriving in Building 1 or other area, the animals will be provided food and water, and will be assessed by ARF Staff and veterinarians. In all cases, removed animals will be returned to the ARF in Building 6 as soon as it is operational following the disaster. Euthanasia of animals will be determined by the Veterinarian in charge or the ARF Supervisor, if animals cannot be relocated or protected.

1. **Considerations for Setting Evacuation Priorities for Animals**

   If it is determined that research animals must be moved, the ARF Supervisor, in conjunction with the Veterinarian, must have identified a new temporary housing location before the move. Considerations should include decentralized facilities, other affiliates of the institution, or other local AAALAC accredited institutions. The ultimate goal is to save every animal, and its cage, along with its food and water supply.

2. **Important Considerations**

   - Can the animals be easily replaced (transgenic vs. commercially available mice)?
   - The economic impact on the institution if specific projects are lost.
   - Anticipated public relations consequences of leaving animals behind.
   - The likelihood that the animals chosen for evacuation will be able to survive under the conditions they will experience immediately following the evacuation (i.e., immuno-deficient animals).
   - Assurance that emergency responders will be protected from exposure to unknown hazards.
3. Evacuation Priority
High priority animals will be evacuated first. The number of high priority animals is posted on the entrance to every housing room. A bright pink card located in the cardholder affixed to the cage will identify cages within the housing room that are considered high priority animals. The pink card will be visible at all times. Thereafter as conditions and time permits, the remaining animals will be evacuated with the exception of animals labeled as hazardous. A biohazard or chemical hazard sticker affixed to the identification card in the cage cardholder will identify cages that house hazardous animals.

If the decision is made to move animals out of the building to a pre-approved designated location:
- Animals must be protected from extreme temperatures and harsh weather at all times.
- Cages and racks must be secured so that animals cannot be injured or escape during transport.
- Water bottles must be inverted to prevent spillage when cages are moved.

4. Recovery and Restoration
A recovery team consisting of the ARF Supervisor, the Veterinarians, AO/R&D, and the ACOS will be established to:
(a) Document and record all damage.
(b) Notify appropriate regulatory agencies in a timely manner.
(c) Restore essential functions to the ARF, such as husbandry, veterinary care, euthanasia if required, and waste disposal.

Euthanasia of animals will occur in a humane fashion.

H. Communications
The EOP calls for the ARF Supervisor to report to the Incident Commander (ACOS) at the onset of the crisis. Communication is by cell phone or by landline. ARF Staff must assemble at the designated locations so they can be easily located and recruited. All persons entering the ARF must be cleared to do so by the ARF Supervisor and/or ARF Staff. ID badges should be worn by those authorized to enter the animal facility.

I. Environmental Support
Environmental support is dependent upon continuous electrical power and HVAC systems that function correctly. For emergency power outages, there are back-up generators for the ARF HVAC systems. Generators are capable of maintaining heat, limited lighting and ventilation for as long as fuel is supplied. Chilled water to maintain air-cooling is provided by redundant or back-up systems but may be lost during major area wide power or water outages.

It is extremely important to maintain the temperature and humidity of the animal rooms within targeted ranges as determined by the Guide. This is the environment at which the animals are best adapted physiologically, causing the least effect on the animal metabolism and behavior. Currently, the animal rooms are maintained at temperatures that range from 72°F +/- 4°F and a humidity level between 30 and 70 percent. Complete air exchanges range between 10 and 15 changes per hour. Light cycles are run 12 hours light – 12 hours dark.

Failure in any one component of the environmental support can have an adverse impact ranging from minor annoyance and altered research results, to death of the animals. Extreme
fluctuations/alterations in temperature and humidity will alter the physiologic parameters of the animal, which can result in death. The fluctuations/alterations in temperature are monitored by the Checkpoint system. In addition, if the temperature departs the predetermined range after hours, a separate system sends an alarm to the Boiler Plant, which will then contact the ARF Supervisor and staff when triggered. Alterations in light cycles may result in loss of or invalidation of important research data. HVAC system disruption may cause health problems (respiratory disease) in animals and employees as well as accumulation of annoying odors and/or harmful fumes.

J. Contamination Control

In an emergency, adherence to contamination control procedures will be attempted. Control of contamination is maintained by established sanitation procedures and the supply of 100% fresh air exchange. Equally important is proper storage of food, refrigeration of carcasses, and adequate clean water supply and sewer support.

Failure of contamination control could result in significant health problems to the animals and the employees. Control is dependent upon personnel following the established sanitation procedures. Power and water is needed to operate sanitizing equipment.

K. Security

Limited access to the ARF is in place to protect facilities and to limit traffic through these areas. The VAPHS Police Department has unlimited access for emergency situations.

A VA-issued ID badge is needed to enter Building 6 on the first floor and then again to enter the ARF from inside the building. A VA-issued ID badge is also needed for the entry into the Building 6 loading dock. During an interruption of power, including a changeover from loss of power to the emergency power, if the ID badge system is not functional, a key is used to access the ground floor entrance (loading dock).

During an emergency, high level hazard animal research housing and use areas are restricted to researchers and entry can only be gained with consult of the ARF Veterinary staff or the ARF Supervisor.

L. Research Support

ARF Staff will maintain Principal Investigator (PI) contact information on file to minimize potential loss of research data or animal lives. In the event of an emergency situation, PI’s are contacted as soon as possible when a problem occurs and the animal health status and facility conditions are reported. The contact information of the PI and at least one laboratory personnel is in the IACUC application, a copy of which is maintained in the ARF. This information is listed on a sheet of paper that is kept in the break room on the desk by the computer.

IV. DEFINITIONS & CONCEPT OF EMERGENCY OPERATIONS

The VAPHS uses the Hospital Incident Command System as well as a hierarchical system comprised of progressive levels to define emergencies and the subsequent response to the emergency. There are three levels- Level 1, Level 2, and Level 3, progressively. Each level and subsequent response has been established based upon increasing potential for personnel injury,
facility damage or animal casualties, as well as the duration and impact of the hazard or emergency. These level assignments are guidance only and at any time the VAPHS R&D Office, IBC or IACUC may prescribe a higher level of response.

Incident Commander (IC) – The IC is the ACOS of Research. If the ACOS is not available, the Deputy ACOS is the IC and if the Deputy ACOS is not available, then the responsibility falls on the AO/R&D.

Command Center – The Command Center is defined as a central place for carrying out orders and for supervising tasks. The VAPHS Command Center site priority list is the following:

- **Primary**- Building 30 Research Office Building ground floor conference room (GA116).
- **Secondary**- Building 29, ground floor Safety conference room GM114.

A. **Level 1 Emergency – Limited – ARF Staff Will Respond**

**Nature:** A Level 1 Emergency is any situation in which there is immediate, but isolated or limited impact to a segment of the program or facility. Typically, the Level 1 Emergency will be localized to a single room, individual research group or a small-defined area or group of investigators. When reported, the situation will be recognized for its relatively minor potential for casualty or adverse research impacts and anticipated quick resolution. More than 95% of all emergencies are expected to be categorized as being Level 1.

**Response:** The Level 1 emergency will be resolved within the framework of regular business routine. During regular working hours, the efforts of the ARF Staff, IACUC and other VAPHS offices will be directed to the emergency at hand. The ARF Supervisor or designee will assure proper response and that reporting is completed. In Level 1 emergencies, ARF Staff can successfully respond to the emergency affecting the ARF using available resources with little or no assistance from VA Police or the City of Pittsburgh fire and rescue departments, when animal health is unaffected or the animals can be relocated away from the hazard. Some examples of Level 1 emergencies include, but are not limited to:

- Minor injury to animals
- Minor chemical spills---Safety Office will be notified
- Equipment alarm/power failure
- Peaceful demonstration---VA Police will be notified
- Bomb threat/suspicious item---VA Police will be notified
- Failure of scheduled animal, bedding or feed deliveries
- Loss of utilities affecting only a portion of a single facility or unit
- Animal rights threat to a single investigator

B. **Level 2 Emergency – Major**

**Nature:** A Level 2 Emergency differs from a Level 1 with respect to its range and impact and/or expected duration. Typically, a Level 2 Emergency will involve an entire facility, one or more interruptions of utility systems, and will have departmental public relations implications. Resolution of a Level 2 Emergency will require performance of a fairly well established, but potentially prolonged response to affect a corrective action. Careful evaluation and monitoring may be required to
minimize personnel injury, facility damage, or irreparable loss of animals and research efforts. Less than 5% of all emergencies are expected to be classified as Level 2.

**Response:** Resolution of Level 2 Emergency follows all response parameters of Level 1 Emergency with two exceptions. First, the resolution will not occur within the context of the regular working day. Second, a limited Command Center and team are to be established to assure proper resolution. Members of the ARF Staff will convene on Brackenridge Street. If this area is unsafe, the team will convene in the ground floor Conference Room in Building 30 (Research Office Building GA116). Additional interaction with other departments and agencies is primarily limited to the VAPHS. In Level 2 emergencies, outside assistance from VA Police, Safety Office, Engineering, or City of Pittsburgh fire and rescue will likely be required. Animal health status may be compromised. Local containment may not be possible. There may be utility disruption with/without adequate backup. Several floors may be involved or a major portion of the building may be uninhabitable. Police may be unable to provide adequate security. ARF Staff will be required to provide expertise to emergency responders. Some examples of Level 2 emergencies include, but are not limited to:

- Large localized spills or exposure (chemical, biohazard, or radiation)
- Fire or technical hazard
- Localized flooding
- Criminal activities
- Total loss of power in the ARF

**C. Level 3 Emergency – Extreme**

**Nature:** The Level 3 Emergency is the rare event or situation that carries the potential for widespread and extreme personnel, animal, facilities, research or public casualties. The event and its aftermath will disrupt the ARF facility, utilities, research program, and/or the function of the VAPHS for several days, or in the most extreme situations, even more protracted periods. An emergency may immediately evoke a Level 3 designation or it may evolve out of a lower level emergency. In Level 3 emergencies, significant disruption and damage will have occurred. Animal holding areas may be limited or nonexistent. Animals are likely to have been injured or accidentally released. There may be suspicion of a major chemical contamination or biohazard that cannot be readily contained or controlled without outside assistance. Multiple buildings are severely damaged with partial or complete utility failure. Local agencies may not be able to provide immediate emergency response and assistance from outside the local area may be required.

**Response:** Level 3 Emergency requires integration of the ARF EOP with the VAPHS HEOP and immediate notification of the Medical Center Director (MCD). Personnel in the ARF will notify the IC as well as the VAPHS Police immediately. The ARF Supervisor and/or ARF Staff will convene outside of Building 6 on Brackenridge Street or in the ground floor Conference Room of Building 30 (Research Office Building GA116). The MCD (or Acting Director), Chief of Staff (COS), ACOS/R&D and Deputy ACOS of R&D will be informed and attend the emergency meeting, if possible. The ARF Staff will obtain immediate assistance from VAPHS Police and local, or regional emergency response providers. Examples of Level 3 emergences include:

- A major natural disaster event disrupting the animal programs’ ability to function
- Fire or explosion involving the ARF
- Major or prolonged utility interruptions
- Theft of research animals
- Major animal rights demonstration
V. EMERGENCY ALERTING AND RESPONSE PROCEDURES

A. Activation of the VAPHS HEOP

VAPHS will follow the HEOP and augment specific responses as per Annex I, Command/NIMS HICS.

B. Planning & Coordination with Outside Parties (i.e., First Responders)

When the VAPHS HEOP depends on the assistance of outside agencies, the response procedure will be coordinated with those agencies. Examples include the City of Pittsburgh for fire, hazmat response or full facility evacuation and other hospitals in VISN 4 for full facility evacuations and VA/DoD plan implementation.

C. Establishment of the ARF Emergency Operations Command Center

When faced with either Level 2 or Level 3 Emergencies or disaster situations, one of the most critical components to facilitate an adequate response is being able to communicate effectively with internal ARF Staff, VAPHS Central Office, and local and regional response teams. The first step when faced with an emergency or disaster affecting the ARF requires establishment of a command infrastructure. The goals of the command center include:

1. Assure personnel safety
2. Assure all personnel are accounted for
3. Assess level of disaster/emergency
4. Coordinate response plans
5. Communicate effectively to ARF Staff
6. Communicate effectively to VAPHS Central Office and local response components
7. Review and maintain effectiveness of response plans

D. Laboratories in Off-site or Leased Locations

Any laboratory in an approved off-site location or in leased space must have an Emergency Operations Plan/Disaster Plan for location of the laboratory. The VAPHS R&D Office maintains a copy of the University of Pittsburgh Emergency/Disaster Plan. The University of Pittsburgh’s Animal Care and Use Program Emergency/Disaster Management Plan describes the site security and control, including security of all hazardous agents.

Investigators located in approved off-site laboratories are required to immediately notify the VAPHS R&D Office (412-360-2386) of any/all emergency incidents involving their laboratories.
VI. EMERGENCY CONTACT INFORMATION

Note: All personnel listed as emergency contacts are available both during and after normal business hours.

A. VAPHS Emergency Response

- Emergency Calls: 911 (from VA phone)
- VAPHS Police: 412-360-6911
- Fire: 911 (from VA phone)
- Facilities Management Office: 412-360-6138, Susan McCaffrey
- Chemical Spill: 412-360-3705, Christian Lewis
- Radiation Spill: 412-360-3221, Mitch Belanger
- Biological Spill: 412-360-2842, Dana Roolf

B. VAPHS Research Emergency Contacts

ACOS/R&D, Steven Graham: 412-360-2914, After hours: 412-999-2578
Deputy ACOS, Franca Cambi: 412-360-2367, After hours: 267-242-8068
Business Manager/R&D, Janelle Altman: 412-360-2387, After hours: 412-965-3481
Administrative Officer/R&D, Kathy Parks: 412-360-2396, After hours: 412-852-3440

Animal Research Facility Personnel

1. Dr. Roger Sembrat, VAPHS VMO: Cell: 412-973-1755
5. McKinley Blair: Cell: 412-377-2441

C. VAPHS Safety Office

2. Christian Lewis, Industrial Hygienist: 412-360-3705, cell 412-216-2342

VII. SECURITY HAZARDS

A. Bomb Threat/Bombing

If a bomb threat is received, the call should immediately be reported to the VAPHS Police (412-360-6911). The VAPHS Police will determine what action should be taken in the event of a bomb threat (evacuation of the building, etc.). Please refer to the VAPHS HEOP for further guidance and instruction.
If a Bombing Occurs:

- Call the VAPHS Police at 412-360-6911
- Exit building to Brackenridge Street emergency assembly point
- Perform a head count to ensure that all staff have left the building
- Contact VA Police to update (if cannot locate staff)
- Contact IC (ACOS)

1. Animal Observations and Health Maintenance

All animals will be checked as soon as fire and police safety personnel permit access to the facility. Animals suffering from injuries or smoke inhalation will be examined as quickly as possible and treated or euthanized as necessary. Dead animals will be removed from cages and placed in the freezer. If the bomb damages the freezer, the carcasses will be taken to a cold room on the first floor (room 1A101). If that cold room is damaged, the carcasses can be transported to the cold room located in Building 1 room 2W121 (within room 2W147) and stored until arrangements for disposal can be made.

If a bomb (or subsequent fire) has affected functionality of the ARF, animals will be transported to research laboratory space in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF. If the disaster has similar effects on Building 1, animals will be moved to one of the University of Pittsburgh’s animal facilities. Undamaged equipment and supplies will be moved to appropriate storage areas.

2. Food & Bedding

Should a bomb, subsequent fire or water damage destroy any or all of the feed supply, local vendors will be contacted for immediate replacements.

Any food and bedding that cannot be obtained from the local vendor will be ordered for overnight delivery from the distributor. Spoiled or contaminated feed will be discarded.

3. Water

In a case where a bomb destroys the water supply or equipment in the ARF, water will be brought in from other locations at the VAPHS. Emergency potable water will be obtained from the wet laboratories until repairs are made.

4. Personnel to Care for Animals

If a bombing or a bomb threat occurs during normal working hours, all employees must evacuate the ARF immediately, report to the Brackenridge Street emergency assembly point and await further instructions. If a bombing occurs after regular operating hours, an attempt will be made to notify all ARF Staff to report to work. The ARF Supervisor and veterinarian on call will be notified of the event and report to assess damage.

5. Environmental Support

Building 6 is on emergency power. Facilities Management will be contacted in the event of loss of power. Should the power be lost for an extended period of time, the animals will be moved to an available animal facility at the University of Pittsburgh.
6. Contamination Control

Contamination will be minimized by removal of debris, smoke, and/or water damaged materials in coordination with Environmental Management Services (EMS). All animal carcasses will be placed in the freezer or in the cold room (room 1A101). If that cold room is damaged, the carcasses can be transported to the cold room located in Building 1 room 2W121 (within room 2W147) and stored until arrangements for disposal can be made. If the air handling system is functioning, all air filters in the affected areas will be changed.

7. Research Support

PI’s will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The VAPHS Office of Public Affairs (412-360-3065 or 412-822-3578) is also notified to deal with the media, if necessary. Outside of administrative hours, calls should be referred to the telephone operator (911 from VA phone) or VA Police (412-360-6911) who will contact the Public Affairs Officer.

B. Break-Ins/Burglary/Property Destruction

Break-ins and property destruction include theft of animals, destruction of computers and other equipment, defacement of property, and arson. The crisis response outlined on the following pages is also appropriate for other situations involving destruction of property and burglary.

Procedures:

Contact VAPHS Police at **412-360-6911** prior to taking action. Suspicious activities must be reported to VAPHS police.

Break-Ins/Security Breach:

1. Notify VAPHS Police immediately and provide all pertinent information.
2. Isolate break-in site from employees to preserve the scene.
3. Obtain current lists of employees with access to facility.
4. Immediately institute procedures to minimize disruption (i.e., secure loose animals, if necessary).

**Note:** For the full description of the facility response to an intrusion alert, including provisions for non-standard duty hours, nights and holidays, please refer to the Medical Center Memorandum (MCM) EC-080 Reporting and Referrals Regarding Criminal Violations.

1. Animal Observation and Health Maintenance

Any animals that may be loose in the facility will be captured, identified, and returned to cages or euthanized depending on their condition. Any animals killed as a result of vandalism will be disposed of properly.

2. Food and Bedding

If food and bedding are destroyed or contaminated by an act of vandalism, a replacement order will be placed immediately with a local vendor. Overnight delivery may be used if needed.
3. Water

Emergency potable water will be obtained from the wet laboratories until repairs are made.

4. Environmental Support

Building 6 is on emergency power. If ventilation or heating/cooling systems are disrupted, Facilities Management Services (FMS) will be contacted for repair or emergency power use.

5. Contamination Control

EMS will be notified of contamination (e.g., damage to the facility). The IC will notify the appropriate department if assistance is needed to ensure that the facility is not contaminated. If there is a chemical spill, the Industrial Hygienist (412-360-3705; cell 412-216-2342) will be notified. Chemical spills will be cleaned up per the Industrial Hygienist’s instructions or instructions provided on the Safety Data Sheet (SDS) for the chemical. Contamination such as standing water or spoiled food will be cleaned up and disposed of properly. Contamination resulting from property destruction will be handled through EMS.

6. Research Support

Attempts will be made to contact all PI’s to inform them of the status of their animals as soon as possible. VAPHS Office of Public Affairs (412-360-3065 or 412-822-3578) will also be notified to deal with the media if necessary. Outside of administrative hours, calls should be referred to the telephone operator (911 from VA telephone) or VA Police (412-360-6911) who will contact the Public Affairs Officer.

7. Controlled Substances

If there is suspected theft, diversion or suspicious loss of controlled substances, it must be immediately reported to the VA Police, the Research Pharmacist (412-360-3260), and the ARF Supervisor. Additional information on loss of controlled substances is listed in MCM TX-039 Controlled Substances and TX-084 Inspection of Controlled Substances.

C. Protests against Animal Research/Animal Activist Threats

If an unscheduled protest, notice of an unscheduled protest, or animal activist threat occurs, the VAPHS Police should be notified immediately by calling 412-360-6911. The VAPHS Police will determine what action should be taken in the event of a protest/animal activist threat and whether a response should be initiated to the protests/threats.

ARF Staff should avoid coming in contact with the protesters. If approached, they should not engage in any dialog. In addition, ARF Staff must evacuate the building in the event of potential physical harm due to a protest.

D. Procedures for Ensuring Protection of Sensitive Materials and Equipment during an Illegal Intrusion or Activity

Research personnel who become aware of illegal intrusion or activities during normal business hours and after-hours including holidays are to immediately contact the VAPHS Police at 412-360-6911.
VAPHS Police will respond according to the MCM EC-080 Reporting and Referrals Regarding Criminal Violations.

**VIII. NATURAL DISASTERS**

**A. Blizzard, Flood, Tornado & Earthquake**

1. **Animal Observation and Health Maintenance**

If a natural disaster occurs, the IC will authorize and effect relocation of animals to research laboratory space in Building 1 on 1 West, 2 West, and 2 East, if possible. If the disaster has similar effects on Building 1, animals will be moved to an available animal facility at the University of Pittsburgh. All animals will be examined as soon as possible after relocation. Any sick or injured animals will be treated as soon as possible or euthanized. Dead animals will be removed from cages and placed in the freezer or a cold room. If no cold room in Building 6 is available due to the natural disaster, the carcasses will be taken to the cold room located in Building 1 room 2W121 (within room 2W147) and stored until disposal.

2. **Food and Bedding**

Food and bedding will be examined for damage or contamination. If necessary, food and bedding will be discarded and, a local vendor will be contacted for delivery of replacement supplies.

3. **Water**

If the water supply has been affected and water quality testing is necessary, ClearH₂O Hydrogel® packs will be used until bottled water can be purchased. Cases of bottled water will then be ordered until the Pittsburgh Water and Sewer Authority has tested and proven that the water is once again safe for consumption.

4. **Transportation**

If a natural disaster has destroyed housing within the ARF, animals will be moved to research laboratory space in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF. The mice and rats will be moved in their own cages. The cages will be placed on carts, covered with a drape and transported to Building 1 by way of Brackenridge Street and into the receiving dock. The rabbits in respective cages will be covered with a drape and then wheeled out of the facility to Building 1 by way of Brackenridge Street and into the receiving dock. If the disaster renders Building 1 unusable, rodents and rabbits will be moved to one of the animal facilities located at the University of Pittsburgh. After moving, animals will be provided with food and water, and will be assessed by ARF Staff and veterinarians as soon as possible. In all cases, removed animals will be returned to the ARF in Building 6 as soon as it is operational following the disaster.

5. **Environmental Support**

Building 6 is on emergency power. FMS is responsible for the operation of the ventilation systems and electrical power. Should the power be lost for an extended period of time, emergency generators will be activated or the animals moved to one of the animal facilities at the University of Pittsburgh.
6. Contamination Control

EMS will be notified of contamination (e.g., damage to the facility). The IC will notify the appropriate department if assistance is needed in regards to ensure that the facility is not contaminated. If there is a chemical spill, the Industrial Hygienist (412-360-3705; cell 412-216-2342) will be notified of any chemical spills. Chemical spills will be cleaned up per the Industrial Hygienist’s instructions or instructions provided on the Safety Data Sheet (SDS) for the chemical. Contamination such as standing water or spoiled food will be cleaned up and disposed of properly. Contamination resulting from property destruction will be handled through EMS.

7. Security

VAPHS Police will coordinate facility entry restrictions and be asked to provide a secure perimeter in the event that normal security measures are inoperable.

8. Research Support

PI’s will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The VAPHS Office of Public Affairs (412-360-3065 or 412-822-3578) is also notified to deal with the media, if necessary. Outside of administrative hours, calls should be referred to the telephone operator (911 from VA phone) or VA Police (412-360-6911) who will contact the Public Affairs Officer.

9. Personnel to Care for Animals

If a natural disaster occurs during working hours all employees must evacuate to the Brackenridge Street emergency assembly point immediately. If a natural disaster occurs after regular working hours an attempt will be made to notify all ARF Staff. The ARF Supervisor and veterinarian on call will be notified of any natural disaster and report to assess any resulting damage.

All ARF and Veterinary Staff are considered essential personnel and are to report to work as soon as possible. The decision not to report must be made by direct communication between the employee and their supervisor.

10. Environmental Support

Building 6 is on emergency power. FMS is responsible for the operation of the ventilation systems and electrical power. Should the power be lost for an extended period of time, emergency generators will be activated or the animals will be moved to one of the animal facilities at the University of Pittsburgh.

IX. UTILITY FAILURES

Depending on the nature of the utility failure and estimated time of repair, animals may be relocated to a more suitable area. The IC gives authorization for the relocation of animals if warranted. Animals, which cannot be readily relocated (e.g., in testing chambers), will be monitored frequently.
The ARF maintains an emergency contact list with all applicable FMS Departments. The list is updated annually (it is part of the Chemical Hygiene Plan) and is posted by every phone within the ARF.

A. Failure of Air Handling System

1. Animal Observation and Health Maintenance

   Monitoring should be of sufficient frequency to assure maintenance of health and well-being of the animals. Maintenance of applicable environmental ranges for temperature and humidity is required. If the appropriate temperature and humidity cannot be met, the animals should be moved to areas in Building 1 that can maintain appropriate environmental ranges. This includes research areas in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF.

2. Food

   A breakdown of the air handling system for extended periods of time may result in higher or lower levels of humidity and temperature. Feed manufacturers will be contacted to determine shelf life under these conditions. Spoiled and contaminated food or feed deemed unsuitable for animal consumption by the manufacturer or ARF Staff will be discarded and replaced immediately.

3. Water

   Not anticipated to be a problem.

4. Personnel to Care for Animals

   ARF Staff will be notified by the ARF Supervisor or designee and will assess any possible problems.

5. Transportation

   Not anticipated to be a problem.

6. Environmental Support

   Building 6 is on emergency power. FMS is responsible for the operation of the ventilation systems and electrical power. Should the power be lost for an extended period of time, emergency generators will be activated or the animals will be moved to one of the animal facilities at the University of Pittsburgh.

7. Research Support

   PI's will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The ARF Supervisor will also provide information on the situation to the IACUC Chair and report the issue at the next fully convened meeting of the Institutional Animal Care and Use Committee (IACUC).
B. Interruption of Chilled Water Supply

1. Animal Observation and Health Maintenance

Depending upon the estimated time for repair and time of year, portable-cooling units may be provided by FMS. Animals will be monitored frequently to ensure maintenance of their comfort and federal guidelines.

2. Personnel to Care for Animals

ARF Staff will be notified by FMS when an unplanned chilled water interruption occurs.

3. Environmental Support

The main reason for a chilled water outage may be a major power failure. If the chilled water is totally shut down, a request will be made for portable cooling units. Should maintenance not have the quantity needed, an outside vendor will be contacted for additional units.

4. Contamination Control

The cold room will not be affected by an interruption of chilled water supply.

5. Research Support

PI's will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The ARF Supervisor will also provide information on the situation to the IACUC Chair and report the issue at the next fully convened meeting of the IACUC.

If the appropriate temperature in the housing rooms cannot be met, the animals should be moved to areas in Building 1 that can maintain appropriate environmental ranges. This includes research areas in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF.

C. Interruption of Steam Supply

1. Environmental Support

If there is an interruption of the steam supply during the warmer months, it will not create a problem. If a steam outage occurs during the cooler months, portable space heaters will be requested from FMS. Resumption of the steam supply is needed for cage washing and temperature control.

2. Research Support

PI's will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The ARF Supervisor will also provide information on the situation to the IACUC Chair and report the issue at the next fully convened meeting of the IACUC.
If the appropriate temperature in the housing rooms cannot be met, the animals should be moved to areas in Building 1 that can maintain appropriate environmental ranges. This includes research areas in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF.

D. Power Outage

1. Animal Observations and Health Maintenance

Air handlers and fans for animal rooms in Building 6 are connected to emergency generators; therefore, air supply and ventilation will continue to be provided. Should a power outage affect the chilled water supply, the animal room temperatures will be monitored and requests for fans or cooling units will be made. If needed, rechargeable flashlights are available next to rooms GA110, GA111, GA150 and GA101 (loading dock doors to Brackenridge Street).

2. Environmental Support

Emergency generators will supply power to the air handlers and fans that supply air to animal rooms. FMS is responsible for the operation of the electrical power. Should the power be lost for an extended period of time, emergency generators will be activated or the animals will be moved to one of the animal facilities at the University of Pittsburgh.

3. Contamination Control

The cold room for animal carcasses is connected to the emergency generator and should not be affected.

EMS will be notified of contamination (e.g., damage to the facility). The IC will notify the appropriate department if assistance is needed in regards to ensure that the facility is not contaminated. If there is a chemical spill, the Industrial Hygienist (412-360-3705; cell 412-216-2342) will be notified of any chemical spills. Chemical spills will be cleaned up per the Industrial Hygienist’s instructions or instructions provided on the SDSs for the chemical. Contamination resulting from property destruction will be handled through EMS.

4. Security

VAPHS Police will coordinate facility entry restrictions and be asked to provide a secure perimeter in the event that normal security measures are inoperable.

5. Research Support

PI’s will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The ARF Supervisor will also provide information on the situation to the IACUC Chair and report the issue at the next fully convened meeting of the IACUC.

If the appropriate temperature in the housing rooms cannot be met, the animals should be moved to areas in Building 1 that can maintain appropriate environmental ranges. This includes research areas in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF.
X. OPERATIONAL HAZARDS

A. ARF Deliveries (i.e. animals, food and bedding)

General Emergency Response Actions –Scheduled Deliveries

Timely processing of animal deliveries is necessary to avoid loss of life or injury to animals. This is a routine function that becomes critical in a disaster situation.

The ARF Supervisor or designee should contact animal suppliers and inform them of the emergency and identify where to redirect animal shipments if they cannot reach routine ARF Staff or delivery areas.

The ARF Supervisor or designee should also instruct suppliers to call and verify if personnel are available to receive shipments upon learning of a major natural disaster or severe weather affecting the VAPHS University Drive campus.

B. Phone or Telecommunication/Information Outages

During an emergency situation both phone and telecommunication devices may become inoperable or too congested to effectively manage the crisis.

Since information gathering is critical for proper response planning, communication to staff about events in an emergency may lead to widespread disruption of local means to obtain information such as television or computer function loss. The ARF Staff, however, will use walkie-talkies to communicate during an emergency.

C. Evacuation Routes and Procedures

The ARF has identified facility specific fire pull stations, fire extinguisher locations, escape routes and the identified assembly areas (Brackenridge Street and Building 30 room GA116 Conference Room) which are considered to be a safe distance and a place of refuge. This emergency information is posted throughout the ARF.

Note: Emergency evacuation plans for all facilities have been designed in consideration of the impact on the evacuation route of agents and materials used in VA Research laboratories.

D. Procedures during a Fire

Always follow the R.A.C.E. procedure:

RESCUE – Rescue anyone in immediate danger from smoke or flame.

ALARM – Alarm will sound when you pull the nearest manual pull station then contact 911 (from a VA phone) or dial 412-360-6911 from any other phone after evacuation.

CONTAIN – Contain the spread of smoke and flame by closing doors

EXTINGUISH – Extinguish fire using proper extinguisher
1. **Animal Observation and Health Maintenance**

All animals will be checked as soon as the fire and safety personnel permit access to the facility. Animals suffering from smoke inhalation or burns will be examined as quickly as possible, triaged and treated, or euthanized as necessary. Dead animals will be removed from cages and put in the dead animal freezer or cold room 1A101. If the fire damages the dead animal freezer or the cold room, animal carcasses will be taken to another cold room located in Building 1 room 2W121 (within room 2W147) and stored until arrangements can be made for proper disposal.

Animals that need to be relocated due to fire damage will be removed as soon as possible to research areas in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF. If Building 1 is affected, the animals would be sent to one of the animal facilities at the University of Pittsburgh.

2. **Food and Bedding**

Should a fire or subsequent water damage destroy any or all of the food and bedding supply, the local vendor will be contacted immediately and deliver the required supplies. Supplies may need to be overnight shipped to replace some of the damaged supply.

3. **Water**

In the case where a fire disrupts the regular tap water supply, ClearH2O Hydrogel® packs will be used until bottled water can be purchased. Cases of bottled water will then be ordered until the Pittsburgh Water and Sewer Authority has tested and proven that the water is once again safe for consumption.

4. **Personnel to Care for Animals**

If a fire occurs during working hours, all employees must vacate the facilities immediately and report to the designated Emergency Assembly Point (EAP) and wait for further instructions. If a fire occurs after regular operating hours an attempt will be made to notify ARF Staff to report to work. The ARF Supervisor and veterinarian on call will be notified of any fire and will report to assess any resulting damage.

5. **Transportation**

If a fire destroys housing within the ARF, the remaining animals will be transported to non-patient areas of Building 1. Animals will be moved to research laboratory space in Building 1 on 1 West, 2 West, and 2 East. The mice and rats will be moved in their own cages. The cages will be placed on carts, covered with a drape and transported to Building 1 by way of Brackenridge Street and into the receiving dock. The rabbits in respective cages will be covered with a drape and then wheeled out of the facility to Building 1 by way of Brackenridge Street and into the receiving dock.

If the disaster renders Building 1 unusable, rodents and rabbits will be moved to one of the animal facilities located at the University of Pittsburgh. After moving, animals will be provided with food and water, and will be assessed by ARF Staff and veterinarians as soon as possible. In all cases, removed animals will be returned to the ARF in Building 6 as soon as it is operational following the disaster.
Undamaged equipment and supplies will also be relocated to the research laboratory space or Building 30 basement for storage.

6. Environmental Support

FMS is responsible for the operation of the ventilation and heating/cooling systems. If fire disrupts any of these services, the Boiler Plant will be contacted (412-360-6139) and they will take the necessary action to restore services.

7. Contamination Control

When possible, contamination control for the ARF Staff will be handled by cleaning up any smoke and/or water damage and putting any dead animals in the freezer or cold room 1A101. If the fire damages the dead animal freezer or the cold room, animal carcasses will be taken to another cold room located in Building 1 room 2W121 (within room 2W147) and stored until arrangements can be made for proper disposal. All air filters in the affected rooms will be changed.

EMS will be notified of contamination (e.g. damage to the facility). The IC will notify the appropriate department if assistance is needed in regards to ensure that the facility is not contaminated. Contamination resulting from property destruction will be handled through EMS.

8. Security

VAPHS Police will coordinate facility entry restrictions and be asked to provide a secure perimeter in the event that normal security measures are inoperable.

9. Research Support

PI’s will be notified of the status of their animals as soon as possible and any alterations in routine plans of proper care for them (room or building relocation, etc.). The ARF Supervisor will also provide information on the situation to the IACUC Chair and report the issue at the next fully convened meeting of the IACUC.

XI. EXPOSURES to HAZARDS

A. Exposure to hazardous agents

Research employees that work with biohazardous agents and hazardous chemical agents have the possibility to be exposed to those agents while working with them in the ARF.

For exposures to Biosafety level 2 (BSL-2) agents, please refer to the Laboratory and Clinical Research Safety/Biosafety Manual and Chemical Hygiene Plan under the section titled "Biohazard Spill". The use of BSL-2 agents in the ARF is limited to small amounts; large amounts (greater than 1 Liter) of biohazardous agents will not be used within the ARF.

For exposures to chemical agents, please refer to the Laboratory and Clinical Research Safety/Biosafety Manual and Chemical Hygiene Plan.
B. Hazmat releases

For releases of large amounts of hazardous chemicals to the environment, contact the Spill Team Coordinator/Industrial Hygienist (412-360-3705; cell 412-216-2342) immediately. The area should be secured so that no one can enter.

Only a few chemicals are stored in large amounts within the ARF. These chemicals include cleaning and descaling agents that are used with the cage washer. The drums of these chemicals are stored on secondary containment to assist in preventing a release to the environment.

C. Decontamination

The ARF staff would follow the VAPHS HEOP in the event of an exposure that involves decontamination of ARF Staff and Research personnel.

XII. TECHNOLOGICAL HAZARDS

Please refer to the VAPHS Laboratory and Clinical Research Safety/Biosafety Manual and Chemical Hygiene Plan for further guidance on the following:

- Biohazard exposure/spill
- Radiation exposure/spill
- Chemical exposure/spill
- Hazards associated with response actions that could lead to a spread of the hazardous agent

XIII. EMERGENCY MEDICAL TREATMENT & FIRST AID

Accident Treatment and Reporting

It is important that employees understand the actions to be taken following an incident so that the appropriate medical treatment, prophylaxis and/or post-exposure evaluations are utilized to prevent infection.

General Medical Emergency Info - Immediate Procedures

- Remain Calm
- Send someone to call for emergency response-dial 911 from VA phone or 412-360-6911 for any other phone.
- Initiate lifesaving measures, if required.
- Provide immediate first-aid ONLY IF TRAINED TO DO SO. Stop the bleeding of wounds and wash the affected areas with disinfectant/soap.
- Report the incident to the ARF Supervisor or designee.
- Report to Occupational Health (412-360-3556; Building 1 room 1A246) for treatment.

*Note: Please refer to the VAPHS Laboratory and Clinical Research Safety/Biosafety Manual and Chemical Hygiene Plan for incident specific guidance.
Appendix A: Animal Research Facility (ARF) Floor Plan:
Appendix B: Procedures to Follow in Response to Specific Incidents

HVAC FAILURE

**RISKS:** Risks associated with HVAC failure are primarily to animal health. Animals cannot tolerate extreme temperatures, and can die from excessive heat. All HVAC failures are considered emergencies, and must be repaired immediately.

The HVAC system for the ARF is served by emergency power via a generator located in Building 10. The generator can supply emergency power for approximately 5 days.

The ARF HVAC reheat unit is designed to fail in the "off" position so that loss of power or air pressure does not result in maximal heating of the animal rooms. This design is to prevent the loss of animals due to excessive temperature. A thermostat is located in each housing room to control the temperature. The Checkpoint system measures temperature and humidity and is also located in each housing room. The system alerts the ARF Supervisor through an alarm on the computer when the room is above or below the required range for temperature and/or humidity. In addition, each housing room also has an HVAC monitor. If the temperature is not within the range designated on the monitor, an alarm is sent to the Boiler Plant and a flashing light located near GA117 alerts the ARF Staff. The Boiler Plant then calls the ARF to inform them of the change within the housing room(s), ensuring that they are aware of the issue.

The Guide recommends housing rodents at temperatures ranging from 68°F-79°F and housing rabbits at temperatures ranging from 61°F-72°F. Brief, infrequent, moderate fluctuations in air temperature can be tolerated by most species.

Generally, exposure of animals not adapted to temperatures above 85°F or below 40°F might produce clinical effects that could be life threatening.

**ACTION:**

**TOO HOT** (loss of air conditioning)
1. This is **VERY SERIOUS!** Provide immediate care to animals.
2. Turn on backup wall units in all rooms and set to "low cool".
3. Check all animals for any problems and make sure they have plenty of water.
4. Call Emergency Work Order Hotline at 412-360-1123 and report the type and location of problem.
5. If problem occurs at night, or on the weekend or holidays, call the Boiler Plant (412-360-6139).

**TOO COLD** (loss of heating)
1. Provide immediate care to animals.
2. Turn on backup wall units in all rooms and set to "low heat".
3. Check all animals for any problems.
4. Check carefully to make sure animals are not sitting on wet bedding due to a water leak. Animals can die if exposed to cold wet bedding for any length of time.

**This is considered an emergency and HVAC System must be repaired immediately.**
Pay particular attention to mice with litters. Litters on wet bedding can die very quickly.

5. During normal work hours, call the Emergency Work Order Hotline at 412-360-1123 and report the type and location of problem.

6. If problem occurs at night or on the weekend or holidays, call the Boiler Plant (412-360-6139).

**UTILITY FAILURE**

**RISKS:** Any type of utility failure has the potential to interfere with the proper care of laboratory animals. The ARF is supplied with emergency power in the event of power loss. However, close monitoring of the animals and the HVAC system would still be required. Water failure would have a serious impact on the facility, preventing cage washing and the ability to supply drinking water. Steam failure would also have a serious impact, affecting the heat supply, humidity levels, and sterilizing equipment such as cage washers and autoclaves.

The HVAC system for the ARF is served by emergency power via a generator located in Building 10. The generator can supply emergency power for approximately 5 days. The hospital has a central water supply available.

**PHONE**

If a problem occurs during normal work hours, notify the Emergency Work Order Hotline at 412-360-1123. Call the Boiler Plant during non-work hours, on weekends, and holidays at 412-360-6139.

**ACTION:**

**ELECTRICAL FAILURE**

1. Make sure emergency power has come on.
2. Make sure HVAC system is running.
3. Check animals.
4. Not necessary to contact FMS unless power is not restored in a reasonable amount of time.

**STEAM FAILURE (cold rooms, sterilizing equipment cold)**

1. FMS periodically will temporarily shut down the steam supply to various buildings for routine maintenance. Contact FMS to see if the building is scheduled for such a shutdown. If it is not, proceed to #2.
2. Call the Emergency Work Order Hotline at 412-360-1123 and indicate location and type of problem. If the steam failure occurs after hours, on weekends or holidays, contact the Boiler Plant at 412-360-6139.
3. If animal rooms are affected, turn on wall units and set on "low heat".
4. Lack of heat in the animal rooms is an emergency and must be repaired immediately. Equipment requiring steam will need to be checked as well.

**SEWER/DRAIN STOPPAGE (clogged or overflowing)**

1. Call the Emergency Work Order Hotline at 412-360-1123 and indicate location and type of problem. If drain stoppage occurs after hours, on weekends or holidays, contact the Boiler Plant at 412-360-6139.
2. Control flooding or redirect water flow if possible.
3. Prevent contaminated water from spreading to animal housing rooms.

**WATER FAILURE (washing equipment, sinks, toilets not working)**
1. Call the Emergency Work Order Hotline at 412-360-1123 and indicate location and type of problem. If water failure occurs after hours, on weekends and holidays, contact the Boiler Plant at 412-360-6139.
2. Locate an alternate source of water (Building 1 or Building 30) in the event of prolonged failure.
3. Have storage containers on hand and fill if necessary.

**UTILITY FAILURE--EQUIPMENT CHECKLIST**

Depending on the type and scope of a utility failure, some or all of the following items will need to be checked:

- Emergency power/generators
- Breaker panels
- HVAC system
- Cage washer, bottle washer, autoclaves
- Water shut off valves
- Alternate water supply
- Flashlights and batteries
- Portable radio (emergency broadcast system)
- Critical freezers or refrigerators

**FIRE**

**RISKS:** Smoke inhalation, heat, and toxic gases are all issues resulting from a fire. The lives and safety of humans within this institution is the highest priority. Know the location of fire extinguishers, alarm pull stations and building exits. In any emergency, the lives of humans take first priority, followed by the lives of research animals. Evacuation of animals is a "last resort" strategy.

**ACTION:** Rescue victims. Alert others - call out "Code Orange". Pull the fire alarm.

Alarm. Call Emergency **911 (from a VA phone) or call 412-360-6911 from any other phone.** Give your name, extension, location of fire and type.

Contain--Close all doors.
Extinguish/Evacuate--Only if it's safe to do so, and alert other staff.

Relocate the animals, only if it becomes necessary and if safe to do so, to an area on the same floor, preferably one with an exit in the event the animals must be moved out of the building.

**WATER FAILURE--MINIMUM WATER REQUIREMENTS OF ANIMALS**

**RISKS:** On rare occasions, the building water supply may need to be temporarily shut-off for repairs to the system. FMS will give sufficient notice prior to any shut-off. Temporary interruption in supply should pose no threat to the ARF. The hospital has a central water supply available.

**Water requirements are as follows:**
- **Mice:** 4-7 milliliters (ml) daily or 1.5 ml per 10 grams body weight daily
- **Rats:** 24-60 ml daily or 10-12 ml per 100 grams body weight daily
- **Rabbits:** 100-600 ml daily, or 50-100 ml per 1 kilogram (kg) body weight daily

The ARF currently houses only mice, rats, and rabbits.

**ACTION:**
**CONTAINERS**
1. Have a supply of large containers on hand for bulk water storage (can use trash cans with fresh liners if necessary).
2. Have a supply of spare water bottles for animal cages.
3. Fill all available containers with water and top off all water bottles.
4. Use 250 ml bottles for mouse cages containing 2-5 mice.
5. Use 250 ml bottles for pregnant mice.
6. For singly housed mice (males or non-pregnant females), use 125 ml bottles.
7. For rat cages, use 1000 ml bottles.

**WATER SOURCES**
1. Bulk storage is on hand in the ARF or hospital water storage tank.
2. If no water available from bulk storage, purchase water from local vendors.

**CAGES**
1. Have an extra supply of clean or disposable cages on hand for cage changing.
2. As a last resort it may be necessary to hand clean cages by dumping dirty bedding and refilling cages without washing them.
BOMB THREATS (TELEPHONE)

Refer to the VAPHS HEOP for further guidance and instruction.

SUSPICIOUS PACKAGES

RISKS: Due to well-known past events targeting Federal buildings, any Federal building is a potential target. Buildings in which investigators perform animal research or the locations of the research offices are potential targets as well. Be alert for any suspicious packages or foreign objects. Do not touch them. Report them to the VA Police immediately.

WARNING SIGNS: IS THE PACKAGE SUSPICIOUS?
- Origin: note the postmark
- Handwriting: be careful if it is unusual or inconsistent with the address
- Protruding wires
- Holes in the envelope or wrapping
- Grease marks
- Smell: a smell suggestive of almonds or marzipan, or any other strange smell
- Unexpected delivery
- Suspicious packaging
- Letter stiffness: presence of stiff cardboard, metal, or plastic
- Inner sealed enclosures

ACTION: SUSPICIOUS PACKAGE, ENVELOPE, OR OBJECT
1. Do not try to open or touch item.
2. Isolate the item and evacuate everyone in the vicinity to a safe distance.
3. Notify VA Police at 911 (from a VA phone) or dial 412-360-3911 from any other phone.

FLOOD AND HIGH WATER

Refer to the VAPHS HEOP for further guidance and instruction.

STORMS: WINTER/SUMMER STORMS and TORNADOES

Refer to the VAPHS HEOP for further guidance and instruction.
**EARTHQUAKES**

**RISKS:** Earthquakes can strike with no warning. Damage can range from minor to severe. Identify safe areas that will provide protection from falling objects or shattering glass (interior rooms, doorways, corner of the room, etc.). Move large items (file cabinets, bookcases, etc.) that could overturn and block exits. Check for large items overhead that could fall on you during the shaking. Keep emergency supplies on hand including flashlights, batteries, radio, food, and water.

**ACTION: DURING EARTHQUAKE**
1. Drop down, cover yourself, and hold on in the nearest available protected place.
2. Hold on as tight as possible as the shaking could move object out of your grasp.
3. Shaking may only last 10-30 seconds.
4. Doors may swing uncontrollably back and forth.
5. Glass may shatter, so turn your face to your knees or the floor to protect yourself.
6. Be prepared for aftershocks. Shaking may return in seconds, minutes, or hours.
7. If outside, keep a safe distance from buildings, power lines, and trees.

**AFTER SHAKING STOPS**
1. Be prepared for aftershocks.
2. Check for missing or injured personnel and request immediate medical help.
3. If qualified, provide first aid. Do not move seriously injured personnel.
4. Do not use candles, matches, or other flames and do not turn electrical equipment on or off. Flames or electrical sparks can cause any leaking gas to ignite or explode.
5. Check for building safety. If fire, broken gas pipes, chemical or radiation spill, or severe structural damage are occurring, evacuate immediately and verify that all personnel have vacated the building and notify emergency personnel.
6. If possible, check animals for injuries and provide medical care but do not delay evacuation.
7. Humanely euthanize any animals in severe pain or distress as determined by the Veterinarian or ARF Supervisor.
8. Prepare for evacuation of animals to alternate site. If damage in the area is widespread, alternate sites may not be available and care will have to be provided on-site.
9. Prepare to remain at the site for prolonged periods without water, power, or phones. Blocked roads or damaged bridges may prevent a return home.

**QUARANTINED ANIMALS EVACUATION PROCEDURES**

**RISKS:** Animals housed in quarantine facilities require special handling. If evacuation is necessary, imported animals must be kept separate from the rest of the animal colony. If a natural disaster has destroyed housing within the ARF, animals will be moved to research laboratory space in Building 1 on 1 West, 2 West, and 2 East until they can be returned to the ARF. The mice and rats will be moved in their own cages. The cages will be placed on carts, covered with a drape and transported to Building 1 by way of Brackenridge Street and into the receiving dock. If...
the disaster renders Building 1 unusable, rodents will be moved to one of the animal facilities located at the University of Pittsburgh. After moving, animals will be provided with food and water, and will be assessed by ARF Staff and veterinarians as soon as possible. In all cases, removed animals will be returned to the ARF in Building 6 as soon as it is operational following the disaster.

**ACTION:** QUARANTINED ANIMALS

1. Mark cage tags according to evacuation priority method (bright pink card).
2. Identify location for temporary housing of animals away from rest of colony (i.e., separate room from other rodents).
3. Have extra cages, lids, microisolator tops and bottles on hand.
4. Follow evacuation procedures based on type of emergency.

**WORKPLACE VIOLENCE**

**RISKS:** Due to well-known past events targeting Federal buildings, any Federal building is a potential target. Buildings in which investigators perform animal research or the location of the research offices are potential targets as well. Keep up to date on violence prevention training and the warning signs that may indicate a disgruntled employee. Be alert for any suspicious packages or foreign objects. Do not touch them. Report them to the VA Police immediately. Prepare for evacuation.

**ACTION:** DISGRUNTLED EMPLOYEES

1. If person is armed, warn others in the area to evacuate immediately. This is considered an "Active Threat".
2. If unable to evacuate, hide behind furniture, closets, or out of the way areas.
3. Call Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone.
4. Do not re-enter area until Emergency personnel indicate it is safe to do so.
5. Do not interact with person. **Call Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone to report the incident.**

**ACTION:** SUSPECTED TERRORIST ACTIVITY

1. Be alert for suspicious persons or activities.
2. Be alert for suspicious packages or objects.
3. Be especially vigilant on the anniversaries of notable terrorist events, such as September 11th, the Oklahoma City bombing, the Waco fire, or animal rights events.
4. Report any suspected terrorist activity immediately to the **VA Police** or **Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone.**
ANIMAL RIGHTS DEMONSTRATIONS

RISKS: Employees need to be alert to unauthorized persons in or near the ARF. Approach unfamiliar persons and ask if they need directions or assistance. Only those persons authorized by the R&D Department are allowed entry to the ARF. If the person does not have a VA-issued I.D. badge or is unfamiliar to you, do not allow entry. Contact the VA Police if there is any question to the person’s identity.

Animal activists sometimes try to gain entry under false pretenses, such as claiming to have an appointment or a delivery. A peaceful demonstration by animal rights activists is unlikely to pose a threat to the ARF. However, due to heightened emotions, the potential for problems exists.

ACTION: PEACEFUL DEMONSTRATION
1. Notify VA Police or Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone.
2. If on public property, (streets or sidewalks outside VA jurisdiction), avoid confrontation by walking around demonstrators.
3. If on VA grounds, follow directions of VA Police.
4. If activists have gained entry to the building, avoid the area and remain in your office or work area until otherwise directed by VA Police.

ACTS OF VIOLENCE
1. Call Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone.
2. Leave the area immediately.
3. Do not return to the area until the VA Police have determined it is safe to do so.
4. After returning, assess the damage to the ARF (if any) and make sure that animals are not hurt and that none have been released.
5. Call the Emergency Work Order Hotline immediately at 412-360-1123 if any repairs are required. For after hours, weekends, and holidays, contact the Boiler Plant at 412-360-6139.

SECURITY BREACH / BREAK-INS

RISKS: Security at the VAPHS University Drive is of the utmost importance. Employees in the R & D Department must be aware of security concerns specific to the building activities. Buildings in which animal research is performed, or in which investigators' offices are housed, are potential targets of animal rights activists. Animal activists sometimes try to gain entry under false pretenses, such as claiming to have an appointment or a delivery. Awareness and following security guidelines are the best defense.

The VA Police are available 24 hours a day, 7 days a week. Call to request an escort or report unusual/suspicious activity. If an emergency exists, call 911 (from a VA phone) or dial 412-360-6911 from any other phone.
The Research Building 6 exterior doors are to remain locked.

A keycard system is in place as well, and a keycard is required for access to the building, as well as the ARF. The facility is to be locked at all times.

**ACTION:** SAFETY PRECAUTIONS

1. Lock offices and laboratories and secure valuable property.
2. Be alert for suspicious persons and report any unusual/suspicious activity to VA Police immediately.
3. A keycard and VA issued ID badge is required for entry into the animal facility.
4. Make sure all persons are wearing a VA issued ID badge.
5. Do not give out alarm codes to anyone not authorized to use the facility.
6. Change alarm codes frequently.

**ACTION:** SECURITY BREACH / BREAK-IN

1. Crime in progress—call Emergency at 911 (from a VA phone) or dial 412-360-6911 from any other phone then leave area immediately.
2. Theft of property—report incident to VA Police.
3. Suspicious persons, objects, or incidents—call VA Police at 911 (from a VA phone) or dial 412-360-6911 from any other phone.

**MEDIA REPORTS/FOIA INQUIRY/ACTS OF DESTRUCTION**

**RISKS:**

Due to well-known past events targeting Federal buildings, any Federal building is a potential target of terrorists. Buildings in which investigators perform animal research or the location of the research offices are potential targets of animal rights activists as well. Be alert for any suspicious packages or foreign objects. Do not touch them. Report suspicious persons or packages to the VA Police immediately, dial 911 from a VA phone or dial 412-360-6911 from any other phone.

In addition to the risks listed above, inquiries from the media or the public using the Freedom of Information Act (FOIA) may also occur. All inquiries must go through the VAPHs FOIA Officer.

**ACTION:** MEDIA REPORTS/FOIA INQUIRY

1. Phone calls directed to individuals within the facility about any employee or scientific project should be referred to the ARF Supervisor or Veterinarian.
2. The ARF Supervisor and Veterinarians should not immediately answer any questions which are inflammatory in nature.
3. Refer such questions to the VA Public Affairs Staff (412-360-3065).
   *If the nature of the inquiry indicates a possible emergency, call 911 (from a VA phone) or dial 412-360-6911 from any other phone.*
5. In all situations, do not be rushed or provoked into making an inaccurate statement. Use caution and refer inquiries to the VA Public Affairs Staff.
6. Notify Chief Veterinary Medical Officer (CVMO) office (404-728-7644).
7. Keep a record of all contacts during any event.
ACTS OF DESTRUCTION
1. Report any acts of destruction immediately to the VA Police immediately at 911 (from any VA phone) or dial 412-360-6911 from any other phone.
2. If it is safe to do so, assess the damage.
3. Check the ARF for any possible damage.
4. If damage has occurred, follow emergency procedures based on the type of emergency.
I have reviewed the ARF Emergency Operations Plan, understand the contents, and have been made aware of all the scenarios and required responses for emergency situations that may arise in the VAPHS ARF.

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