U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health

NIH Intramural Research Program Animal Program Disaster Plan Overview

FINAL VERSION - 11/30/2023



Introduction

Purpose

This NIH Intramural Research Program (IRP) Animal Program Disaster Plan Overview is provided as a resource to NIH Institutes and Centers (IC) staff responsible for developing an animal program-specific component of their IC's disaster and emergency response and recovery plans.

Objectives

The primary objectives of this document are:

- Present a high-level overview of relevant NIH policies including the structure and function of the NIH Emergency Operations Plan (EOP), the Animal Resources Team (ART), and the IC Crisis Response Teams (CRT);
- Ensure IC animal program disaster plan components are focused on minimizing personnel injury, property damage, and animal loss, while preserving mission critical activities;
- Promote awareness of communication networks, links, and procedures that allow NIH Emergency Response and EOP personnel, IC representatives, and Animal Program staff to exchange information during emergencies;
- Provide general guidance and links to emergency response references/resources that are useful to staff preparing an IC-specific animal program disaster plan; and
- Supply templates that can be used to develop response plans for common emergencies and disasters found in IC animal programs.

Regulatory Requirements

Institutions that conduct research with live animals are responsible for developing emergency response and recovery plans in accordance with the U.S. Animal Welfare Act Regulations [9 CFR 2.38(I)], *PHS Policy on Humane Care and Use of Laboratory Animals*, and the *Guide for the Care and Use of Laboratory Animals (Guide)* [pages 35, 74-75]. The authority for overseeing compliance with these requirements has been delegated to USDA Animal Plant and Health Inspection Service (APHIS) Animal Care and <u>Office of Laboratory Animal Welfare (OLAW)</u>, as noted in Appendix 1.

IC Disaster Plans

NIH has 27 individual Institutes and Centers (IC). Each is responsible for developing and implementing a plan that ensures continuation of IC mission critical functions during an emergency event. The IC's response actions are managed by a Crisis Response Team (CRT) that becomes operational during emergencies that directly affect the IC. The CRT members include an IC Emergency Coordinator (EC) and representatives of the IC Leadership Team, IC Support Section, and IC Functional Section (Figure 1). The IC EC provides direct oversight and coordination for the IC's emergency response efforts, functions as a conduit between the IC Leadership Team and the IC CRT and is the IC's main point of contact to the Emergency Operations Center (EOC) for most incidents/responses, and to to the COOP/NIH Disaster Recovery Coordinator (DRC) for incidents where NIH mission critical functions are affected (i.e., much larger or more severe incidents where the DHHS secretary or NIH director has activated the Continuity of Operations Plan—COOP).

IC Animal Program Disaster Plans

There are twenty-four ICs that conduct research with animals, and each must develop an animal programspecific component as part of their IC's overall emergency response plan. The process begins with a vulnerability assessment that identifies potential hazards and threats and estimates their adverse impact on facility operations. IC's that have multiple animal housing and procedure areas may need to develop site-specific plans to address various hazards and risks relevant to each location. All components of the final plan must be provided to the IC EC.

Template plans that address common emergency situations are provided as attachments and may be used to develop IC-specific plans. ICs are responsible for developing any additional plans that are needed for IC-specific risks and/or emergency events not included as part of this template series.

Responsibility Allocation

Each IC Animal Program Director (APD) should identify staff who are responsible for developing the animal component of the IC emergency plan. These individuals should have an in-depth knowledge of the animal program, NIH EOP process, and the overall IC emergency plan, and also be formally authorized to make decisions that may impact the animal program during an emergency. Persons identified as the animal program's primary and secondary emergency contacts should be included on the SendWordNow NIH-Animal Contact list to ensure they are notified immediately of emergency events through AlertNIH [n.b., SendWordNow is the program/application and AlertNIH is what NIH names its alert notification system. Most recently, the program that supported the AlertNIH system prior to SendWordNow was a different program called AtHoc. The system messages were still referred to as AlertNIH messages].

NIH Continuity of Operations Plan (COOP)

The NIH COOP is designed to ensure continuity of the NIH mission essential functions during and following incidents that threaten NIH's ability to perform basic (I.e., mission critical) functions. ONLY THE NIH DIRECTOR OR SECRETARY OF DHHS MAY ACTIVATE THE COOP.

In most incidents up to and excluding the activation of the COOP, the NIH Emergency Operations Plan (EOP) will be in effect.

NIH Emergency Operations Plan (EOP)

The NIH Emergency Operations Plan is a scalable emergency response plan for any size incident at NIH. Any number, including only one or two, of Emergency Support Teams (ESTs) may be engaged in an incident, depending on the scale and needs of the incident. For larger scale incidents where more coordination is needed the director of DEM may activate the Emergency Operations Center (EOC) out of which the ESTs may physically or virtually operate. When the EOC is activated the director of DEM or his designee serve as the NIH Disaster Recovery Coordinator (DRC) and director of the EOC.

Figure 1 below illustrates the EOC organizational structure.

NIH has twelve EOC ESTs with distinct roles and responsibilities:

 <u>Animal Resources Team (ART)</u>: staffed by NIH OACU members and led by the OACU Associate Director for Emergency Preparedness.. The ART convenes daily at 10:00 am through conference calls (866)703-2103, Participant Passcode: 336-4863] whenever an incident or event of NIH-wide concern occurs, and/or urgent communication and coordination among IC animal programs is needed.. Its main purpose is to organize and coordinate animal program resource requests/needs, coordinate communications between animal programs, and provide IC animal program updates and status reports.

The ART is not a substitute for IC animal program emergency response personnel.

Each IC is responsible for maintaining adequate numbers of skilled and experienced animal care staff who can respond to emergency/disaster events that affect the animal program [e.g., snowstorms, power outages, heating-ventilation-air-conditioning (HVAC) failures, floods, water disruptions, etc.].

- <u>Clinical Center Team</u>: provides medical expertise, triage support, and wellness services for response personnel.
- <u>Facilities Team</u>: provides consultation, services, and technical support relevant to the NIH infrastructure (e.g., equipment, critical systems, etc.) and facilities.
- <u>Information Technology Team</u>: provides IT equipment and infrastructure (e.g., network access, wireless signals, etc.) support and services.
- <u>Logistics Team</u>: provides services and materials related to transportation, consumables [e.g., food, water, cleaning supplies, personal protective equipment (PPE), etc.], and requests for specialized tools or equipment (e.g., pumps, fans, portable lights, public address systems, etc.).
- <u>Safet Safety Team</u>: provides consultation and direct support for activities related to the safety and health of employees and visitors.
- <u>Public Information Team</u>: coordinates all announcements, information requests, and communication with groups and/or individuals inside and outside the NIH.

• <u>Public Safety Team</u>: the initial responders to exigent emergencies that present an immediate threat to life and/or property.

Contracts Team (OLAO)Procurement Team (OFM)HR Team (OHR)Extramural Team



NIH EOP and EOC Structure (Figure 1)

NIH Emergency Response and Recovery Decision Making Process

Information on NIH building closures and staff dismissals can be found at the following websites:

Delegation of Authority – Closing NIH Buildings in Emergency Situations: http://delegations.nih.gov/DOADetails.aspx?id=1629

Delegation of Authority – Emergency Closing of Workplace: <u>http://delegations.nih.gov/DOADetails.aspx?id=1791</u>

Communication During an Emergency Event

The following flowchart shows the emergency communication network, and how information flows from the start of an event through recovery and resolution. IC animal programs must maintain regular contact with the IC CRT and the ART during all phases.

The NIH DRC determines when to activate the AlertNIH notification system to alert EOPESTs, IC ECs, and/or individuals on the NIH Animal Contacts list when an event occurs. Messages are sent to phone numbers and email addresses listed in <u>NIH Enterprise Directory (NED)</u>.

<u>Animal Research Facility Emergency Points of Contact Roster</u> is a list of emergency points of contact for <u>each</u> NIH animal facility updated and maintained by the IC on a secure SharePoint site. IC animal programs are required kep contacts up to date and to respond to quarterly update requests from the Office of Animal Care and Use (OACU).



APPENDIX 1: Relevant Regulatory Requirements

The Animal Welfare Act Regulations [9 CFR 2.38(I)]

(1) 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). Such contingency plans must:

(i) 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.

(ii) 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.;

(iii) Identify a chain of command and who (by name or by position title) will be responsible for fulfilling these tasks; and

(iv) Address how response and recovery will be handled in terms of materials, resources, and training needed.

- (2) For current registrants, the contingency plan must be in place by July 5, 2022. For research facilities registered after this date, the contingency plan must be in place prior to conducting regulated activities. The plan must be reviewed by the research facility on at least an annual basis to ensure that it adequately addresses the criteria listed in paragraph (I)(1) of this section. 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). Contingency plans, as well as all annual review documentation, must be made available to APHIS and any funding Federal agency representatives upon request. The APHIS Contingency Plan form may be used to keep and maintain the information required by paragraph (I)(1) and (2) of this section.
- (3) The facility must provide training for its personnel regarding their roles and responsibilities as outlined in the plan. For current registrants, training of facility personnel must be completed within 60 days of the research facility putting their plan in place; for research facilities registered after July 5, 2022, training of facility personnel must be completed within 60 days of the facility putting its contingency plan in place. This deadline applies to employees hired before and up to 30 days after the facility puts its contingency plan in place. For employees hired more than 30 days of their start date. Any substantive 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.

NIH Office of Laboratory Animal Welfare [FAQ G.3]

[https://olaw.nih.gov/faqs/#/guidance/faqs?anchor=question50378]

Do awardee institutions need animal facility disaster plans?

The *Guide* (pages 35, 74-75) requires that institutions develop disaster plans that take into account the well-being of animals and personnel during unexpected events. Conducting a risk assessment will help to identify potential major hazards and threats, such as power outages, HVAC malfunctions, and natural disasters. Considering the geographic location of a facility "may provide guidance as to the probability of a particular type of disaster" (*Guide* page 35). Location-based risk should be accounted for in the disaster plan with mitigation strategies to address all known vulnerabilities.

The disaster plan "should define the actions necessary to prevent animal pain, distress, and deaths" (*Guide* page 35). Institutions may find consideration of the following components useful in the development of a comprehensive, effective plan:

- Backup systems for maintaining appropriate temperatures and ventilation if critical systems fail, including HVAC and alarms
- Schemes for transportation and relocation, or euthanasia of animals
- Provision of food, water, sanitation, and bedding during the disaster period
- Provision of services during significant personnel absences
- Establishment of institutional policies and procedures
- Approval of the plan as a part of the overall institutional and/or local disaster plan
- Identification of emergency responders and designation of responsibilities
- Personnel training and practice in the disaster response
- Utility needs in the event that primary and emergency power sources fail.

Institutions should periodically review and update the plan to adapt to program changes, evolving risk, and lessons learned from drills and actual disasters. Recent hurricanes and tropical storms provide lessons on the unpredictable nature and devastating effects of extreme weather events. Examples of the impact of these events include loss of animals located in basement facilities due to flooding, failure of back-up generators and loss of fuel supplies located in low-lying areas due to flooding, and loss of frozen reagents/specimens due to sustained power outages. Institutions are encouraged to continually re-assess their vulnerabilities as future climate changes are expected to cause higher sea levels and effect precipitation patterns and the severity of storms.

Disasters can happen at any time. With advance preparation, institutions may be able to lessen or eliminate the impact before a disaster occurs. Actions to consider are relocating animals from facilities located in storm surge areas or locations prone to flooding, cryopreserving valuable strains of animals, repositioning emergency power supplies, and backing up vital records in an off-site location.

OLAW provides a <u>Disaster Planning and Response Resources</u> webpage to assist institutions in planning and responding to natural and other disasters affecting animal facilities.

"Animal facilities may be subject to unexpected conditions that result in the catastrophic failure of critical systems or significant personnel absenteeism, or other unexpected events that severely compromise ongoing animal care and well-being (ILAR 2010). Facilities must therefore have a disaster plan. The plan 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. Knowledge of the geographic locale may provide guidance as to the probability of a particular type of disaster.

Disaster plans should be established in conjunction with the responsible investigator(s), **taking into consideration both the priorities for triaging animal populations and the institutional needs and resources.** 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** in its implementation. Efforts should be taken to ensure personnel safety and provide access to essential personnel during or immediately after a disaster. Such plans should be approved by the institution and be part of the overall institutional disaster response plan that is coordinated by the IO or another senior-level administrator. Law enforcement and emergency personnel should be provided with a copy of the plan for comment and integration into broader, area-wide planning (Vogelweid 1998)." [*Guide* page 35]

"Emergency, Weekend, and holiday Care Animals should be cared for by qualified personnel every day, including weekends and holidays, both to safeguard their well-being and to satisfy research requirements. Emergency veterinary care must be available after work hours, on weekends, and on holidays.

In the event of an emergency, institutional security personnel and fire or police officials should be able to reach people responsible for the animals. Notification can be enhanced by prominently posting emergency procedures, names, or telephone numbers in animal facilities or by placing them in the security department or telephone center. Emergency procedures for handling special facilities or operations should be prominently posted and personnel trained in emergency procedures for these areas. A disaster plan that takes into account both personnel and animals should be prepared as part of the overall safety plan for the animal facility. The colony manager or 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 (Vogelweid 1998)." [*Guide* pages 74-75]

APPENDIX 2: Useful Links

<u>AlertNIH</u>

Animal Research Facility Emergency Points of Contact Roster

Center for Information Technology

Continuity of Operations Plan (COOP)

Division of Emergency Management

Division of Occupational Health & Safety

Division of Personnel Security & Access Control (DPSAC)

Emergency Coordinator

Emergency Preparedness Handbook

Federal Emergency Management Agency (FEMA)

Government Emergency Telecommunications Service (GETS)

Guide for the Care & Use of Laboratory Animals (Guide)

Maryland Department of Emergency Management Agency (MDEMA)

National Terrorism Advisory System (NTAS)

NIH Enterprise Directory (NED)

NIH FOIA Office

NIH Radio Station – AM 1660

Occupational Medical Service (OMS)

Office of Animal Care & Use (OACU)

Office of Laboratory Animal Welfare (OLAW)

Office of Personnel Management (OPM)

Office of Personnel Management Operating Status

Office of Research Facilities

Office of Research Services

Wireless Priority Service (WPS)

APPENDIX 3: Acronyms

AF: Animal Facility AP: Animal Program APD: Animal Program Director **ART: Animal Resources Team** ART Conference Call Line: 866.703.2103, Participant Passcode: 336-4863 **COOP: Continuity of Operations Plan CRT: Crisis Response Team DRC: Disaster Recovery Coordinator EC: Emergency Coordinator EOC: Emergency Operations Center EOP: Emergency Operations Plan EST: Emergency Support Team** HVAC: Heating, Ventilation, Air Conditioning IC: Institute/Center **IRP: Intramural Research Program ORF: Office of Research Facilities ORS: Office of Research Services PPE: Personal Protective Equipment**

APPENDIX 4: Emergency Alert Notification Systems

NIH EMERGENCY ALERT SYSTEMS

AlertNIH - http://www.ors.od.nih.gov/ser/alert/Pages/default.aspx

- The NIH emergency alert notification system that is used to disseminate urgent information to NIH staff via cell phones, home phones, work phones, email, or pagers.
- Messages are distributed through SendWordNow using contact information from the NIH Enterprise Directory (NED).
- Employees must "opt-in" to use this system.
- AlertNIH Contact Information can be updated at: <u>http://www.ors.od.nih.gov/ser/alert/Pages/NED-Update-Instructions.aspx#personal</u>
- AlertNIH Notifications can be managed at: <u>http://www.ors.od.nih.gov/ser/alert/Pages/NED-Update-Instructions.aspx#alertNIH</u>

SendWordNow (SWN)

- SWN is a web-based systems used to disseminate information to various emergency response groups (e.g., NIH EOC ESTs, ART, key animal program staff, etc.)
- The SWN NIH Animal Contact List (NIH-AC) is used to promptly notify key IC animal program staff of emergency events. Messages are disseminated via email, text, and phone.
- Individuals must be added to a SWN list by OACU and also opt-in their personal devices through the <u>NIH Enterprise Directory (NED)</u> to receive alerts on government-furnished or personal devices.
- Membership changes to the NIH-AC list should be submitted to OACU.

LOCAL EMERGENCY ALERT SYSTEMS

Washington DC: http://hsema.dc.gov/page/alertdc

Maryland Counties & Towns:

- Maryland Department of Emergency Management (MDEM)
- Charles <u>http://www.charlescountymd.gov/CNS</u>
- Frederick <u>https://www.frederickcountymd.gov/4727/Emergency-Alerts</u>
- Gaithersburg https://www.gaithersburgmd.gov/services/police-services/alert-gaithersburg
- Montgomery <u>https://member.everbridge.net/index/1332612387832009#/login</u>
- Prince George's County MD https://member.everbridge.net/index/1332612387832015#/login
- Rockville <u>https://www.rockvillemd.gov/alertcenter.aspx</u>
- Takoma Park https://takomaparkmd.gov/services/takoma-park-alert/

Virginia Counties:

- Arlington <u>https://www.arlingtonva.us/Government/Departments/PSCEM/Emergency Preparedness/Arlington-Alert</u>
- Fairfax <u>https://www.fairfaxcounty.gov/topics/alerts</u>

- Fauquier <u>https://www.fauquiercounty.gov/government/departments-a-g/emergency-services/emergency-management?locale=en#:~:text=From%20here%20you%20can%20select,call%20as%20soon%20as%20possible</u>
- Loudon https://www.loudoun.gov/alert
- Prince William <u>https://www.pwcva.gov/department/office-emergency-management/emergency-alert-system</u>

NATIONAL EMERGENCY ALERT SYSTEMS

- Office of Personnel Management (OPM) Operating Status & Schedules
 https://www.opm.gov/policy-data-oversight/snow-dismissal-procedures/current-status/
- Department of Homeland Security National Terrorism Advisory System (NTAS) potential threats of terrorism <u>https://www.dhs.gov/national-terrorism-advisory-system</u>

EMERGENCY RADIO STATIONS

- <u>NIH Radio Station AM 1660</u>: broadcasts emergency and traffic-related information to the NIH community.
- <u>WTOP 103.5 FM</u> broadcasts emergency and traffic-related information to the public in the Washington DC metropolitan area.

APPENDIX 5: Communication with External Entities

If communication with external entities is necessary, the ART-C is the point of contact for the NIH IRP Animal Program.

Maryland Department of Agriculture, Maryland State Veterinarian

50 Harry S. Truman Parkway Annapolis, MD 21401 Phone: 410-841-5810 Fax: 410-841-5999 AnimalHealth@mda.state.md.us

Maryland Department of Emergency Management (MDEM)

https://mdem.maryland.gov/Pages/default.aspx 5401 Rue Saint Lo Drive Reisterstown, MD 21136 1-877-636-2872

United States Department of Agriculture

AC Eastern Region Emergency Program Manager 920 Main Campus Drive, Suite 200 Raleigh, NC 27606 Phone: 919-855-7100 Email: <u>animalcare@usda.gov</u>

USDA Emergency Support Function #11 Deputy National Coordinator for FEMA Region III

<u>Timothy "Tim" Mobley</u> USDA APHIS Phone: (202) 368-3086 Email: <u>Timothy.Mobley@usda.gov</u>

United States Department of Health and Human Services

National Veterinary Response Team 200 Independence Avenue, SW Washington, DC 20201 https://aspr.hhs.gov/NDMS/Pages/nvrt.aspx