

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

**NIH Intramural Research Program
Animal Program Disaster Plan
Overview**

FINAL VERSION – 11/17/2022



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Introduction

Purpose

All federal agencies are required to have a Continuity of Operations Plan (COOP) to ensure maintenance of mission critical activities during emergency events.

This NIH Intramural Research Program (IRP) Animal Program Disaster Plan 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 plan.

Objectives

The primary objectives are:

- Present a high-level overview of relevant NIH policies including the structure and function of the NIH COOP, 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 COOP 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(l)], *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 to ensure compliance with these requirements has been delegated to USDA Animal Plant and Health Inspection Service (APHIS) Animal Care and [Office of Laboratory Animal Welfare \(OLAW\)](#), as noted in Appendix 1.

IC Disaster Plans

NIH has 30 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 for the COOP/NIH Disaster Recovery Coordinator (DRC). The DRC manages COOP activities across all ICs.

IC Animal Program Disaster Plans

There are twenty-four ICs that conduct research with animals, and each must develop an animal program-

specific 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 at various locations. 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 COOP process, and the overall IC emergency plan and the authority 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.

Emergency Animal Care Resources

A centralized list of emergency equipment and resources is posted on the NIH Office of Animal Care and Use (OACU) SharePoint site (<http://www.od.nih.gov/OACU/ACR>). This list helps the ART Coordinator (ART-C) quickly determine the location and availability of these items during an emergency. ICs are responsible for entering and maintaining the information for their program. The list should be updated and reviewed at least annually for accuracy. Examples of items that should be listed include:

- Climate Control Equipment – Chillers, Heaters, Dehumidifiers, Fans
- Communication – 2-way radios, CB radio
- Extension Cords, Batteries, Portable Generators/Generator Fuel
- Light Sources – Flashlights, Headlamps, Light Trees
- Transportation – Vehicles, Electric Mules
- Euthanasia – Equipment, CO2, Drugs, Carcass Bags
- Capture – Nets, Tranquilizer Darts/Guns
- Personal Protective Equipment – Tyvek, Masks, Gloves, Shoe Covers, Goggles
- Animal Food, Bedding, & Water Supplies
- Shelter-in-Place Supplies – Food, Cots, Blankets, Personal Hygiene Supplies

- To filter click on the down arrow in the cell and select the box to check the items you would like to view (or uncheck the items you would like to filter out and not show)

 - Filtered columns will be shown with this icon

If the row numbers on the left side of the screen are black there are no filters on, if the numbers are blue look for the column with the filter and remove the filter to show all rows.

- To add a row to the table go to the last cell in the last row & column and hit the tab key.

IC	Building / Location	Item	Manufacturer	Model	# available	POC	Comments
DVR	10B2 CW	Chiller, Portable			6	Andy Limerick	in storeroom
NIAAA	5625	2-way radios	Midland	GXT760	20	Heidi Graninger	short range 2 way radios with chargers
NIAAA	5625	Euthanasia Station	Euthanex	Flow meter and lids	2	Heidi Graninger	mobile CO2 cylinder with flow meter and euthanex lid
DVR	14A	Cots			32	David Williams	Stored in disaster prep room
DVR	103	Cots			5	Alphie Cisar	in storeroom
DVR	102	Cots			13	Kris Eckard	in storeroom
DVR	14A	Blankets			50	David Williams	Stored in disaster prep room
DVR	14A	MRE's, cases			60	David Williams	Stored in disaster prep room
DVR	14A	Flashlights			100	David Williams	Stored in disaster prep room
DVR	NIHAC	Masks, cases	3M	N95	200	David Williams	Club Hollow storage
DVR	14D	Extension Cords, 100'			8	Kelly Prevost	Storage Building
DVR	14D	Light Trees			12	Kelly Prevost	Storage Building
DVR	14D	Headlamps, personnel			6	Kelly Prevost	Room 103
DVR	28	Headlamps, personnel			6	Mike Furlow	Front office
DVR	14D	D size batteries, cases			2	Kelly Prevost	Room 103
DVR	14D	C size batteries, cases			2	Kelly Prevost	Room 103
DVR	14B North	Heaters			6	Kelly Prevost	Room 119
DVR	14D	Heaters			6	Kelly Prevost	Storage Building
DVR	14A	5-shelf racks, S/S			20	David Williams	Used for emergency relocation of rodents / supplies
DVR	14A	Truck, C-1441	Chevrolet	C3500	1	Peggy Novicky	14A Loading Dock - Animal relocation
DVR	NIHAC	Truck, C-1596	International	4900	1	Peggy Novicky	Animal relocation
DVR	14A	Van, C-1886	Ford	E350	1	Peggy Novicky	14A Loading Dock - Animal relocation
DVR	NIHAC	Van, C-2221	Ford	E350	1	Peggy Novicky	Animal relocation

NIH Continuity of Operations Plan (COOP) Overview

Overview

The NIH COOP is designed to ensure continuity of the NIH mission essential functions, following an all hazards approach that prioritizes the health and safety of the NIH employees, patients, and the visitor community. It is an overarching strategy aimed at managing and recovering from situations or events that have a direct adverse impact on the operations of NIH.

Figure 1 below illustrates the COOP organizational structure. The NIH Division of Emergency Preparedness and Coordination (DEPC) develops and implements the NIH COOP, and the NIH Director determines when the COOP is activated. The DRC oversees COOP operations and determines specific actions taken while in effect, including coordination of COOP Emergency Support Team (EST) response and initiation of AlertNIH SendWordNow notices.

NIH has nine COOP ESTs with distinct roles and responsibilities:

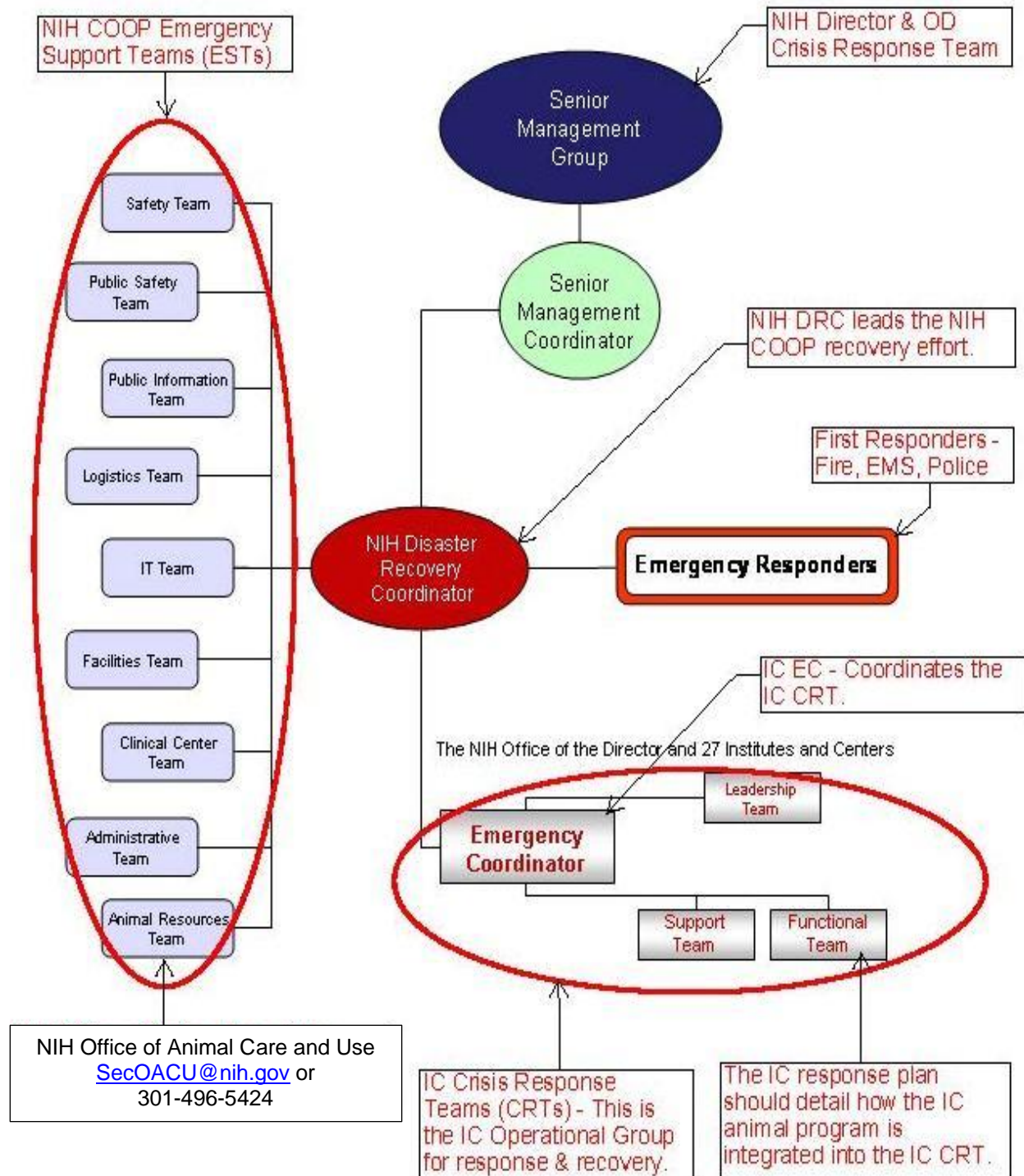
- Animal Resources Team (ART): members include NIH OACU staff and experienced NIH animal program managers and veterinarians. The ART convenes daily at 10:00 am through conference calls [(866)703-2103, Participant Passcode: 336-4863] whenever mission essential functions are disrupted. It's main purpose 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.].

- Administrative Support Team: provides administrative support, information processing, and financial support operations.
- Clinical Center Team: provides medical expertise, triage support, and wellness services for response personnel.
- Facilities Team: provides consultation, services, and technical support relevant to the NIH infrastructure and facilities.
- Information Technology Team: provides IT equipment and infrastructure support and services.
- Logistics Team: 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.).
- Public Information Team: coordinates all announcements, information requests, and communication with groups and/or individuals inside and outside the NIH.
- Public Safety Team: the initial responders to emergencies that present an immediate threat to life and/or property.
- Safety Team: provides consultation and direct support for activities related to the safety and health of employees and visitors.

NIH IC COOP and Crisis Response Team Structure (Figure 1)



NIH Emergency Response and Recovery Decision Making Process

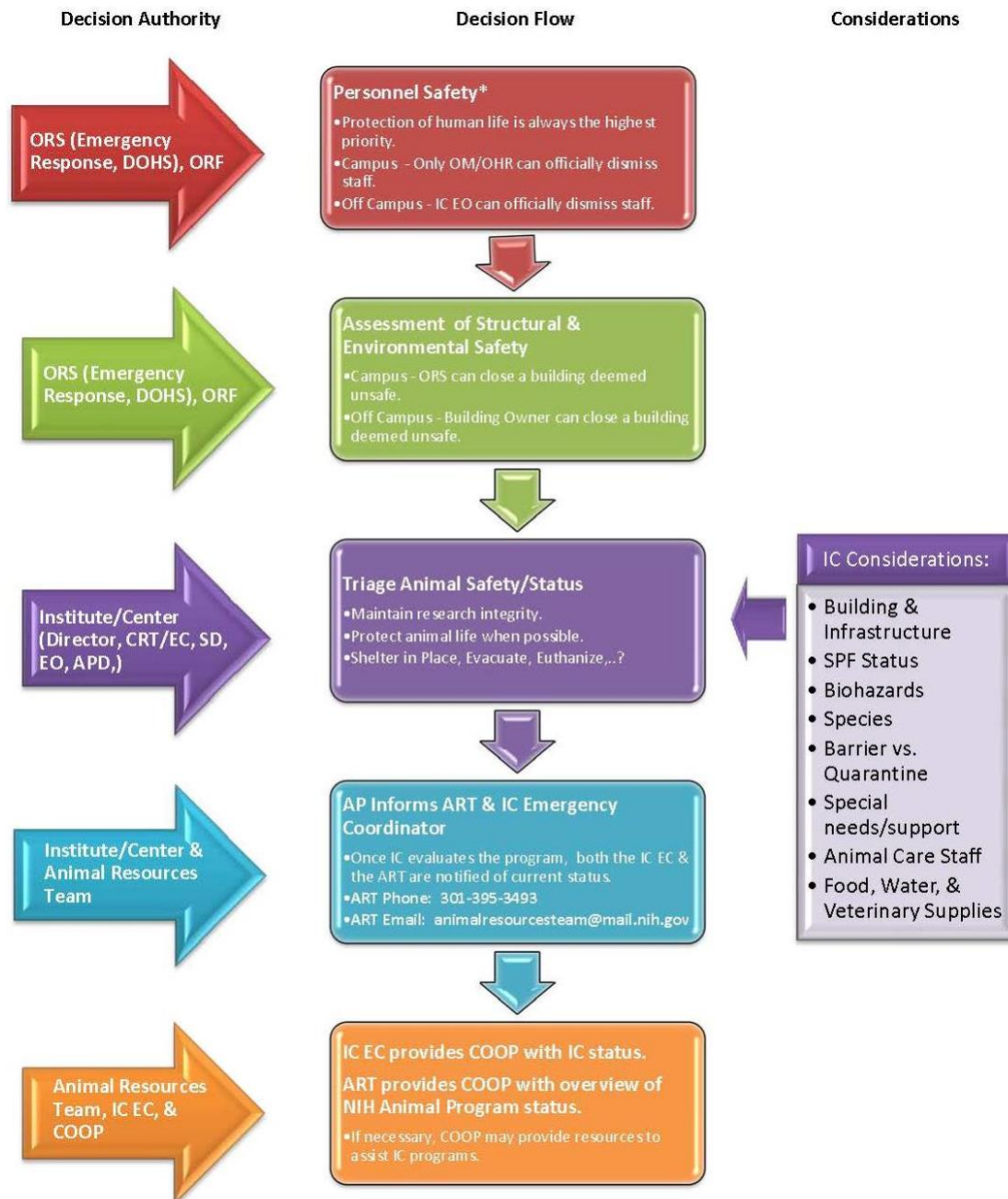
The following flowchart illustrates the decision making authority and process during an emergency event. Information on NIH building closures and staff dismissals can be found at the following websites:

Delegation of Authority – Closing NIH Buildings in Emergency Situations:

<http://delegations.nih.gov/DOADetails.aspx?id=1629>

Delegation of Authority – Emergency Closing of Workplace:

<http://delegations.nih.gov/DOADetails.aspx?id=1791>

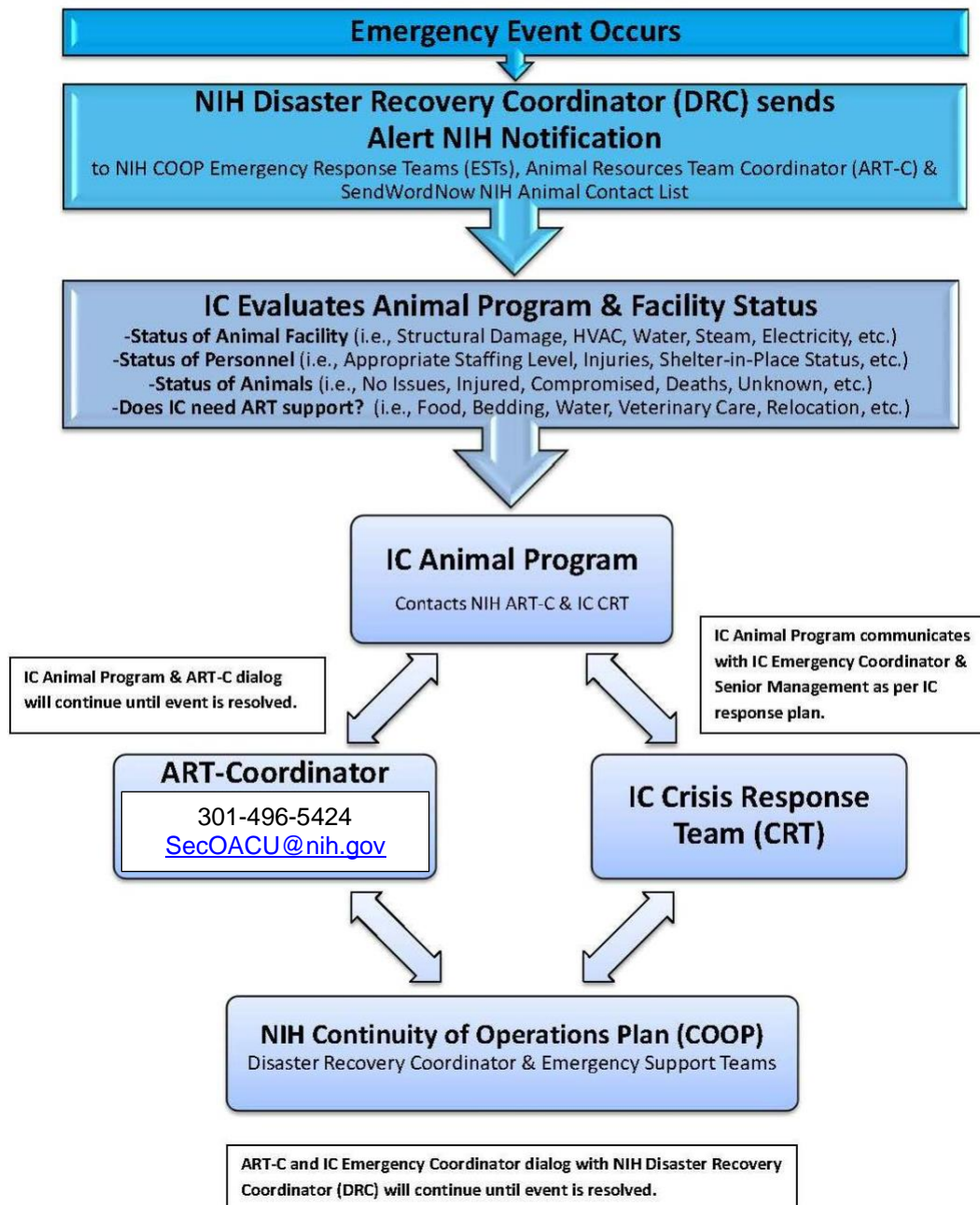


Communication during an Emergency Event

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 SendWordNow notification system to alert COOP ESTs, 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 [NIH Enterprise Directory \(NED\)](#).

[Animal Research Facility Emergency Points of Contact Roster](#) is a list of emergency points of contact for each NIH animal facility updated and maintained by the IC on a secure SharePoint site.



APPENDIX 1 Relevant Regulatory Requirements

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

- (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 \(l\)\(1\)](#) 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 (l)(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 after the facility puts its contingency plan in place, training must be conducted within 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 [Disaster Planning and Response Resources](#) 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).”
[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).”
[pages 74-75]

APPENDIX 2 Useful Links

[AlertNIH](#)

[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](#)

[Pandemic Flu Resources](#)

[Red Emergency Phone System](#)

[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

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: <http://www.ors.od.nih.gov/ser/alert/Pages/NED-Update-Instructions.aspx#personal>
- AlertNIH Notifications can be managed at: <http://www.ors.od.nih.gov/ser/alert/Pages/NED-Update-Instructions.aspx#alertNIH>

SendWordNow (SWN)

- SWN is a web-based systems used to disseminate information to various emergency response groups (e.g., NIH COOP 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 [NIH Enterprise Directory \(NED\)](#) 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 - <http://www.charlescountymd.gov/CNS>
- Frederick - <https://www.frederickcountymd.gov/4727/Emergency-Alerts>
- Gaithersburg - <https://www.gaithersburgmd.gov/services/police-services/alert-gaithersburg>
- Montgomery - <https://member.everbridge.net/index/1332612387832009#/login>
- Prince George's County MD - <https://member.everbridge.net/index/1332612387832015#/login>
- Rockville - <https://www.rockvillemd.gov/alertcenter.aspx>
- Takoma Park - <https://takomaparkmd.gov/services/takoma-park-alert/>

Virginia Counties:

- Arlington - <https://www.arlingtonva.us/Government/Programs/Emergency/Arlington-Alert>
- Fairfax - <https://www.fairfaxcounty.gov/topics/alerts>

- Fauquier - <https://member.everbridge.net/index/453003085611352#/login>
- Loudon - <https://www.loudoun.gov/alert>
- Prince William - <https://www.pwcva.gov/department/office-emergency-management/emergency-alert-system>

NATIONAL EMERGENCY ALERT SYSTEMS

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

EMERGENCY RADIO STATIONS

- **[NIH Radio Station – AM 1660](#)**: broadcasts emergency and traffic-related information to the NIH community.
- **[WTOP 103.5 FM](#)** - 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: 919-855-7097
Fax: 919-855-7125
Cell: 919-523-0332
Phone: 919-855-7100
Email: animalcare@usda.gov

USDA Emergency Support Function #11 Coordinator for FEMA Region III

USDA APHIS
320 Corporate Blvd.
Robbinsville, NJ 08691
Phone: 609-259-5269
Cell: 267-340-0755
Fax: 609-259-2477

United States Department of Health and Human Services

National Veterinary Response Team
200 Independence Avenue, SW
Washington, DC 20201
FEMA Phone: 800-621-3362
DisasterAssistance.gov