Importance of Business Continuity & Emergency Planning for Research

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The National Preparedness System outlines an organized process for everyone in the whole community to move forward with their preparedness activities and achieve the National Preparedness Goal.

National Prevention Framework

Goal – The National is optimally prepared to prevent an imminent terrorist attack.

- Engaged partnerships across the whole community
- Scalable, flexible and adaptable
- Readiness to act in a time constrained environment

National Protection Framework

Goal: Safeguard against acts of terrorism and manmade or natural disasters for a safer, more secure and resilient Nation.

- Deter treats, reduce vulnerabilities and minimize the consequences with an incident.
- Develop and improve the following core capacities

- Border Security
- Critical Infrastructure Protection
- Cybersecurity
- Defense against Weapons of Mass Destruction (WMD) threats
- Defense of Agriculture and Food
- Health Security
- Immigration Security
- Maritime Security
- Protection of Key Leadership and Special Events
- Transportation Security

Core Capabilities By Mission Area

Prevention	Protection	Mitigation	Response	Recovery
Planning				
Public Information and Warning				
Operational Coordination				
Intelligence and Information Sharing		Community Resilience	Infrastructure Systems	
Interdiction and Disruption		Long-term Vulnerability Reduction	Critical Transportation	Economic Recovery
Screening, Search, and Detection		Risk and Disaster Resilience Assessment	Environmental Response/Health and Safety	Health and Social Services
Forensics and Attribution	Access Control and Identity Verification	Threats and Hazards Identification	Fatality Management Services	Housing
	Cybersecurity		Fire Management and Suppression	Natural and Cultural Resources
	Physical Protective Measures		Logistics and Supply Chain Management	
	Risk Management for Protection Programs and Activities		Mass Care Services	
	Supply Chain Integrity and Security		Mass Search and Rescue Operations	
			On-scene Security, Protection, and Law Enforcement	
			Operational Communications	
			Public Health, Healthcare, and Emergency Medical Services	
			Situational Assessment	

www.fema.gov/National-preparedness-goal

National Mitigation Framework

Goal: Managing risks to reduce the lose of life and property by lessening the impacts of disasters and creating a resilient community.

Proactive culture of preparedness (systematic approach) which protects itself against hazards.

Creating a risk-conscious culture which understands the process of decision making pertaining to accepting, avoiding, reducing, and transferring risks.

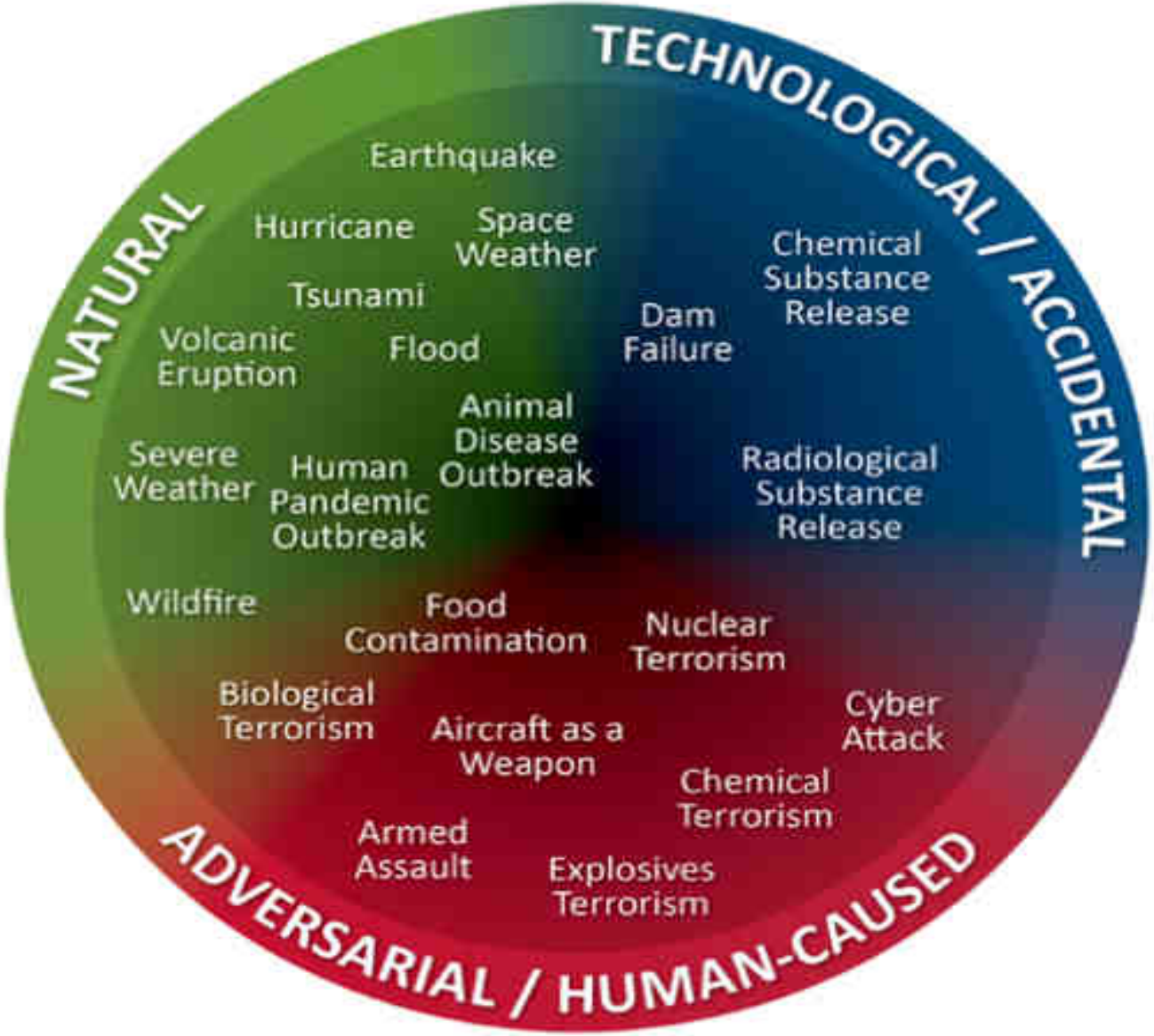
Starts with each individual inclusive of the whole community.

Core Capabilities of Mitigation

- Threats & Hazard Identification
- Risk and Disaster Resilience Assessment
- Planning
- Community Resilience
- Public Information and Warning
- Long-tern Vulnerability Reduction
- Operational Coordination

Minimize risks

- Natural Hazards
- Pandemic influenza
- Technological and accidental hazards
- Weapons of mass destruction
- Cyber-attacks



Treats and Hazards

Risks to a Research Organization

Utility outage

- Power
- Water
- Chilled water

Hazardous Material Spill/Explosion

Laboratory accident

Regulatory incident

February 2017

LOCAL NEWS

Carrboro water main break cancels classes, disrupts UNC hospitals

Tags: water main, boil water advisory

Posted November 5, 2018

November 2018

Developing Story: Businesses Closed, Water Not Safe

NEWS RELEASE **February 3, 2017 at 11:20 AM**

EMERGENCY-DO NOT USE OWASA WATER

Water supply is running out, OWASA directs customers not to use water until further notice

OWASA directs its customers to not use water until further notice.

Due to a shutdown of the Jones Ferry Road Water Treatment Plant and a major water main break Friday morning on the northeast side of Chapel Hill near Dobbins Drive, the water supply in the OWASA system has reached very low levels. Using water could result in contamination of the OWASA system.

Customers are encouraged to use bottled water for drinking, cooking and personal hygiene.

Hurricane and Tornado Preparedness for UNC Laboratories

Hurricanes, tornadoes, high winds, flooding and other natural disasters can threaten the safety of laboratory personnel and detrimentally effect research operations in campus laboratories. Laboratory preparedness plans should be developed prior to these disaster events to ensure the preservation of life and property. The information outlined below is specific to campus laboratories. For general emergency preparedness information please see Alert Carolina.

✔ Lab Emergency Preparedness Checklist

Hurricanes | **Tornadoes**

Although Chapel Hill is not directly adjacent to the coast, hurricanes have caused devastation in our area previously due to high winds and flooding. In order to properly plan a course of action in research laboratories, it is important to understand the difference between a hurricane watch and hurricane warning. Both will be announced with plenty of time to implement laboratory preparedness procedures before leaving the lab.

Hurricane Watch

A hurricane watch is issued when hurricane conditions (sustained winds of 74 mph or higher) are possible within specified area (48 hours in advance of the anticipated on-set of tropical storm force winds).

Once a Hurricane Watch is issued:

- Complete all running experiments and do not start any new experiments
- Listen to radio and television alerts and check Alert Carolina for updates

Hurricane Warning

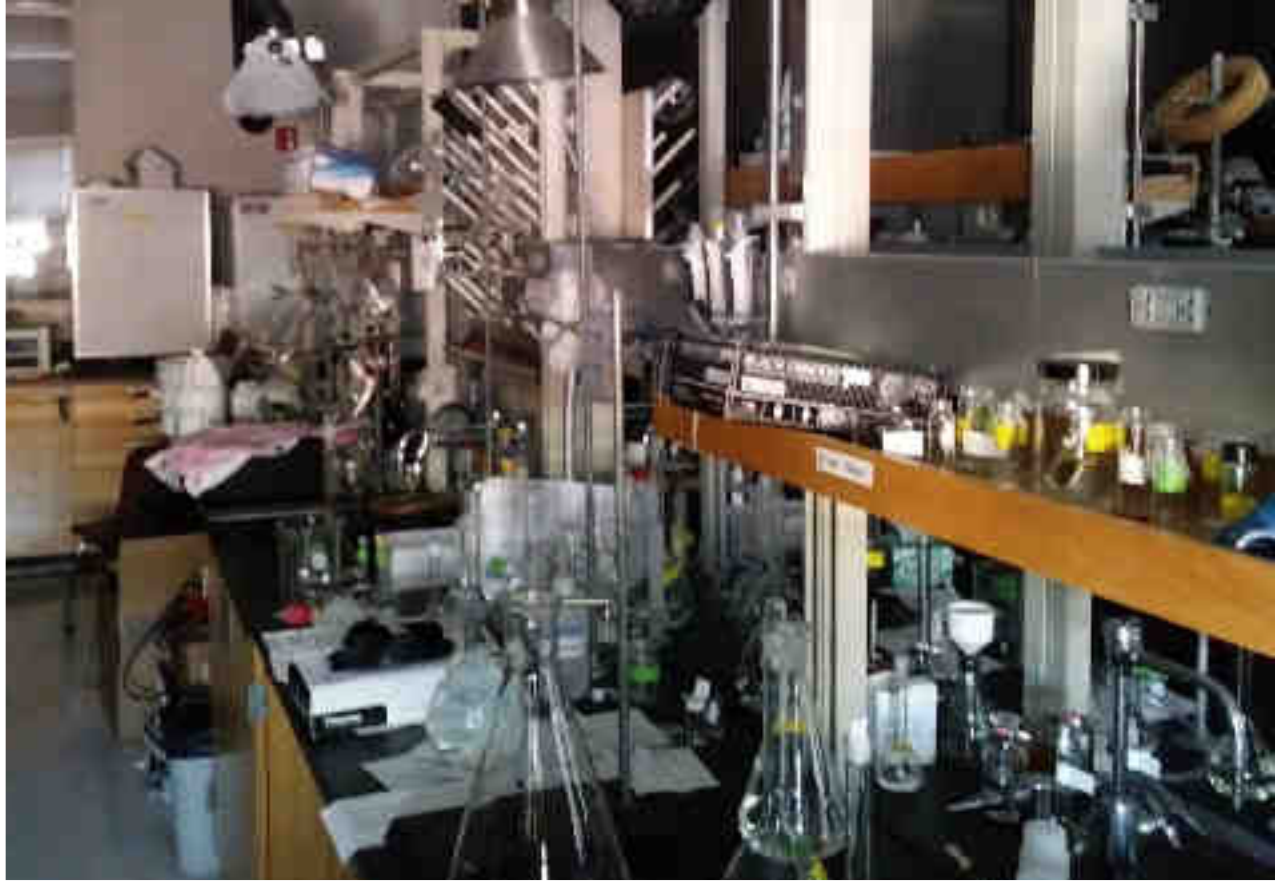
A hurricane warning is issued when hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area (36 hours in advance of the anticipated tropical storm force winds).

Once a Hurricane Warning is issued:

	BEFORE THE EMERGENCY
	Ensure you are signed up to receive Alert Carolina alerts. Register here: https://alertcarolina.unc.edu/register/
	Assess utility dependencies (domestic water, chilled water, steam, HVAC and emergency power) for each piece of equipment in the lab. Consider what you would need to do if utilities were lost during an emergency.
	Ensure that lab entrance signs are up to date and posted on outside of lab doors.
	Inventory freezers, refrigerators, incubators and other equipment, noting those plugged into emergency outlets. Unplug all non-essential equipment. Use surge protectors to protect sensitive equipment in the event of a power surge.
	Determine criticality of research materials and supplies stored in equipment dependent on utilities. Ensure critical materials are kept in freezers and refrigerators on emergency power red outlets.
	Turn refrigerators and freezers to coldest settings.
	Keep a list of equipment that must be reset, restarted, reprogrammed, or recalibrated once utilities return.
	Move all chemicals to appropriate storage locations (cabinets and shelves away from windows).
	Ensure gas cylinders are capped and secured.
	Close fume hood sashes completely.
	No hazardous materials, waste or equipment should be left on the lab floor.
	Take copies of lab notebooks.
	Close and lock all laboratory doors before you leave.

	DURING THE EMERGENCY
	Follow Alert Carolina announcements for University operating conditions. Do not continue to work if operating conditions require work to stop.
	If emergency happens during business hours, work in the lab is prohibited if hazardous conditions exist or utilities are compromised.
	Personal safety is the number one priority; follow all evacuation commands!

	AFTER THE EMERGENCY
	Do not enter the building or lab space until it has been cleared by emergency response personnel.
	Once cleared to enter, check equipment. Reset, restart, reprogram, or recalibrate as appropriate.
	Check chemical fume hoods and biosafety cabinets for air flow.
	Report any hazardous conditions that are found by contacting EHS 919-962-5507 or 911.



The Importance of pre-event activities

The Importance of pre-event activities

National Response Framework (NRF)

Goal: Responding to all types of disasters and emergencies including actions necessary to save lives, protect properties and the environment, stabilize communities and meet basic human needs following an incident.

- Execution of emergency plans and actions to support short-term recovery.
- Built on concepts identified in the National Incident Management System (NIMS) to align roles and responsibilities.
- **The NRF is always in effect and elements can be implemented at any time.**

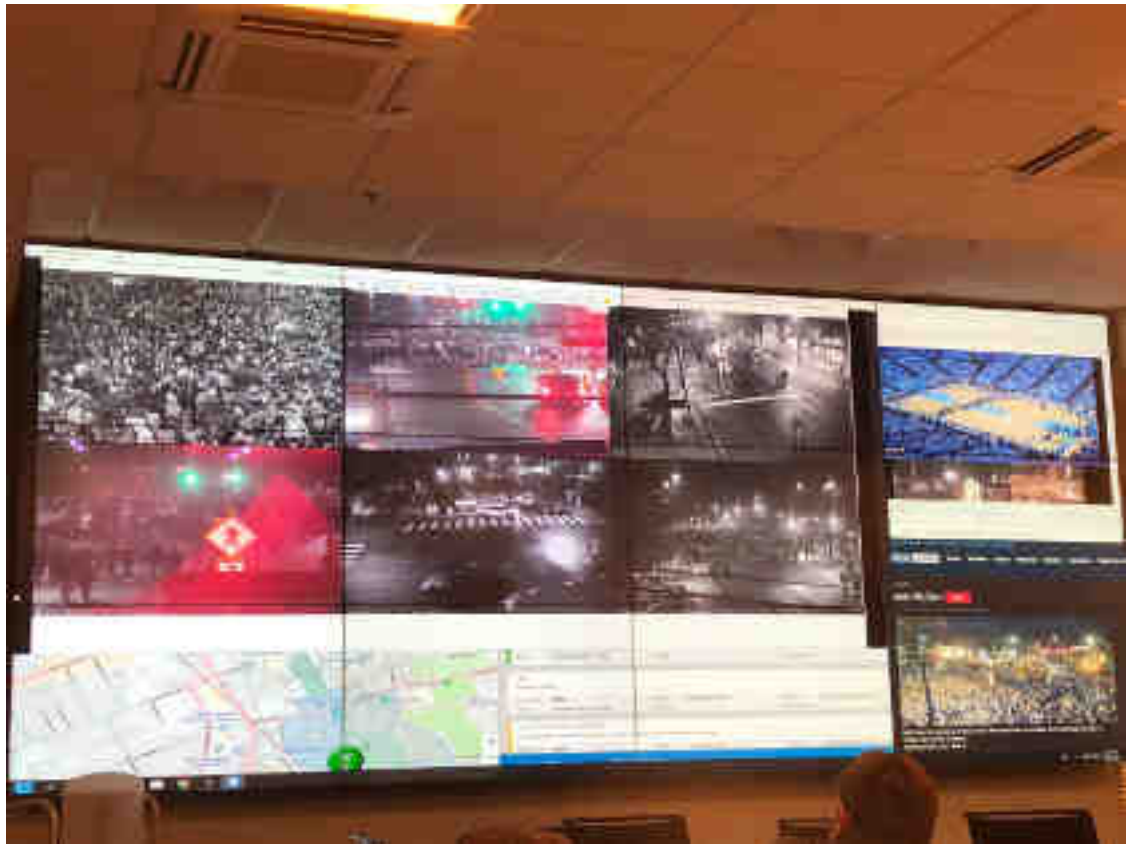
NFR Core Capabilities

- Planning
- Public information and warning
- Operational coordination
- Critical transportation
- Environmental response/health and safety
- Fatality management services
- Fire management and suppression
- Situational Assessment
- Infrastructure systems
- Logistics and supply chain management
- Mass care services
- Mass search and rescue operations
- On-scene security, protection and law enforcement
- Operational communications
- Public health, Healthcare and Emergency Medical services

Response Examples

Portion of I-95 remains closed, along with scores of other roads in SC

Local Response to Basketball Rivalry

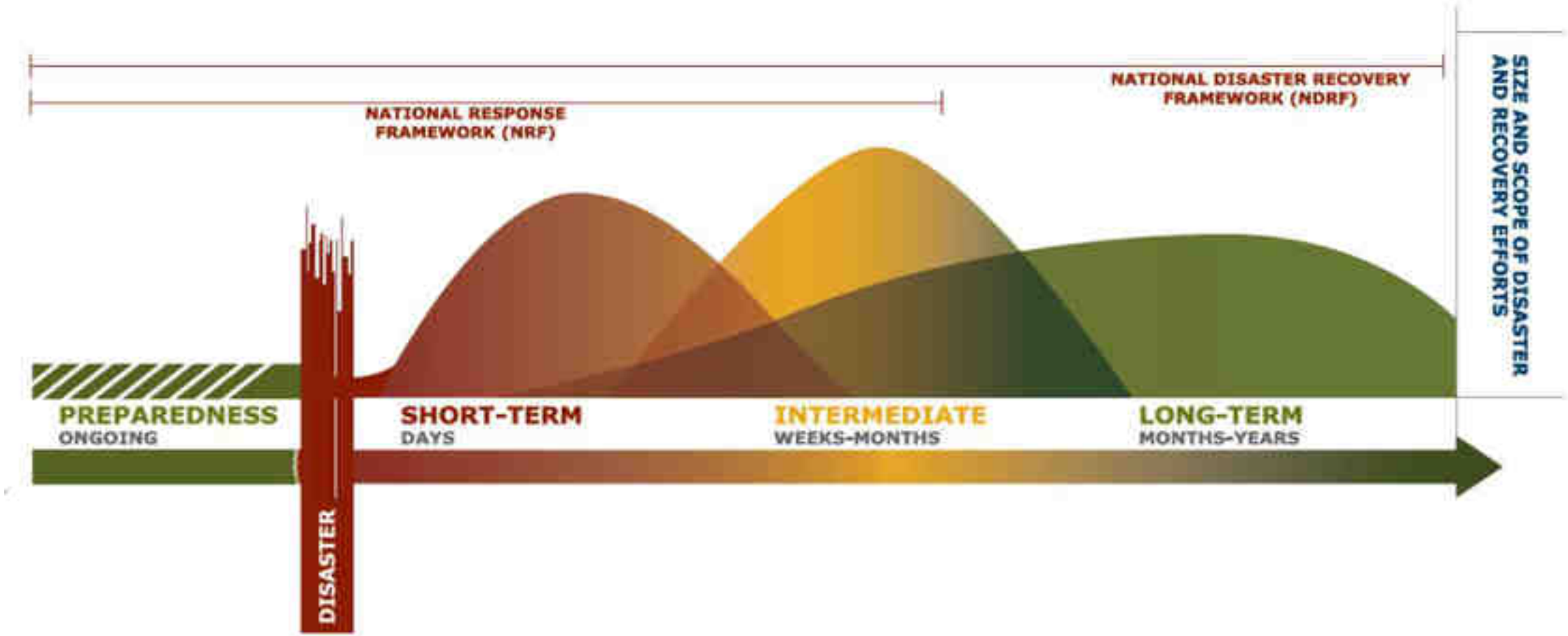


National Disaster Recovery Framework (NRF) 2nd Ed. June 2016

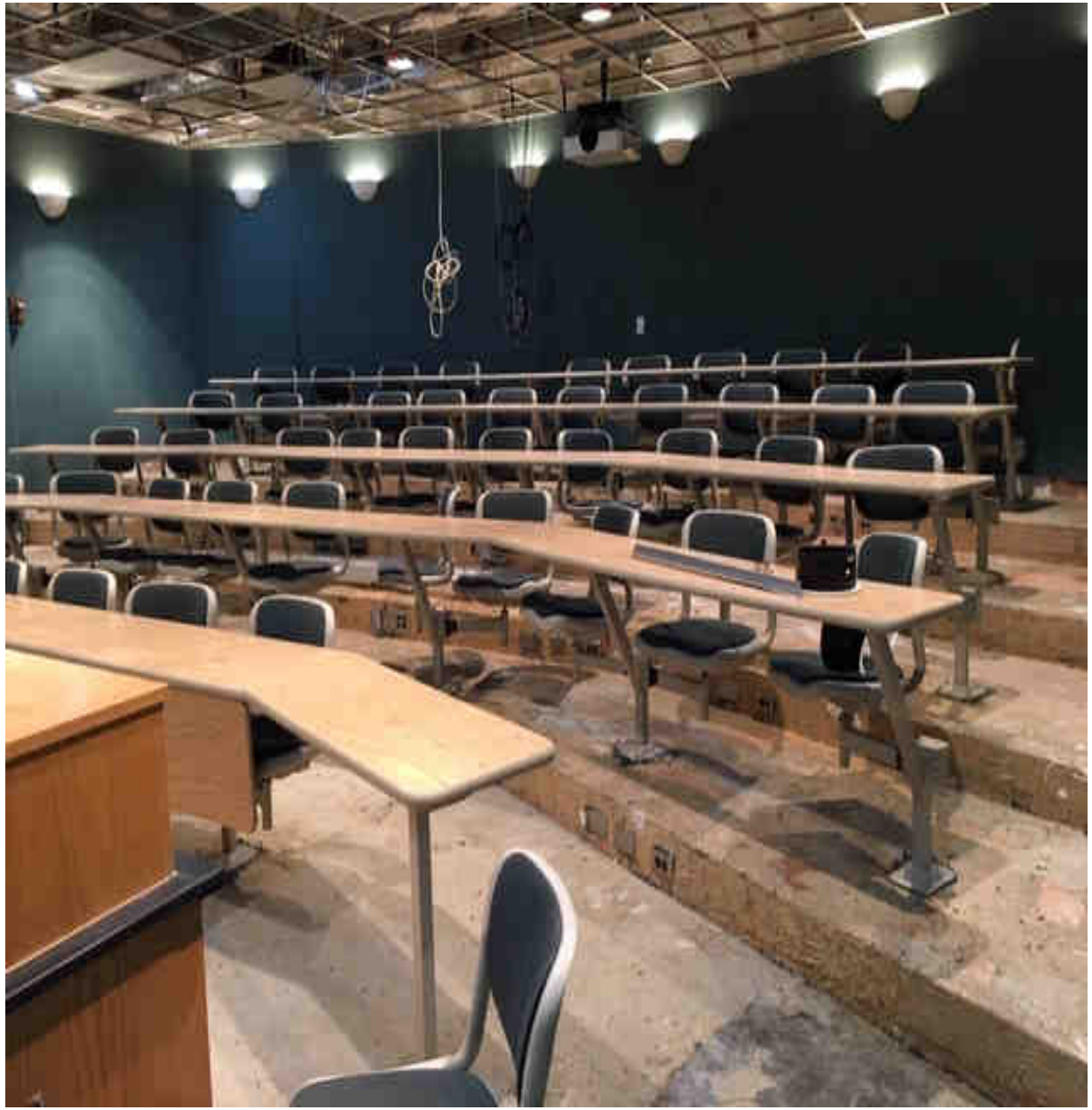
Goal: Effective recovery from an incident for an entire community. Restoration of services critical to support the physical, emotional and financial well-being of impacted community members.

- Identification of guiding principles for successful recovery.
- Clear definition of pre and post roles and responsibilities of recovering stakeholders.
- Promoting inclusive and equitable coordination, planning and information sharing processes.
- Ensure recovery resources are sourced from a wide range of community partners including public, private and non-profit.

Recovery Continuum

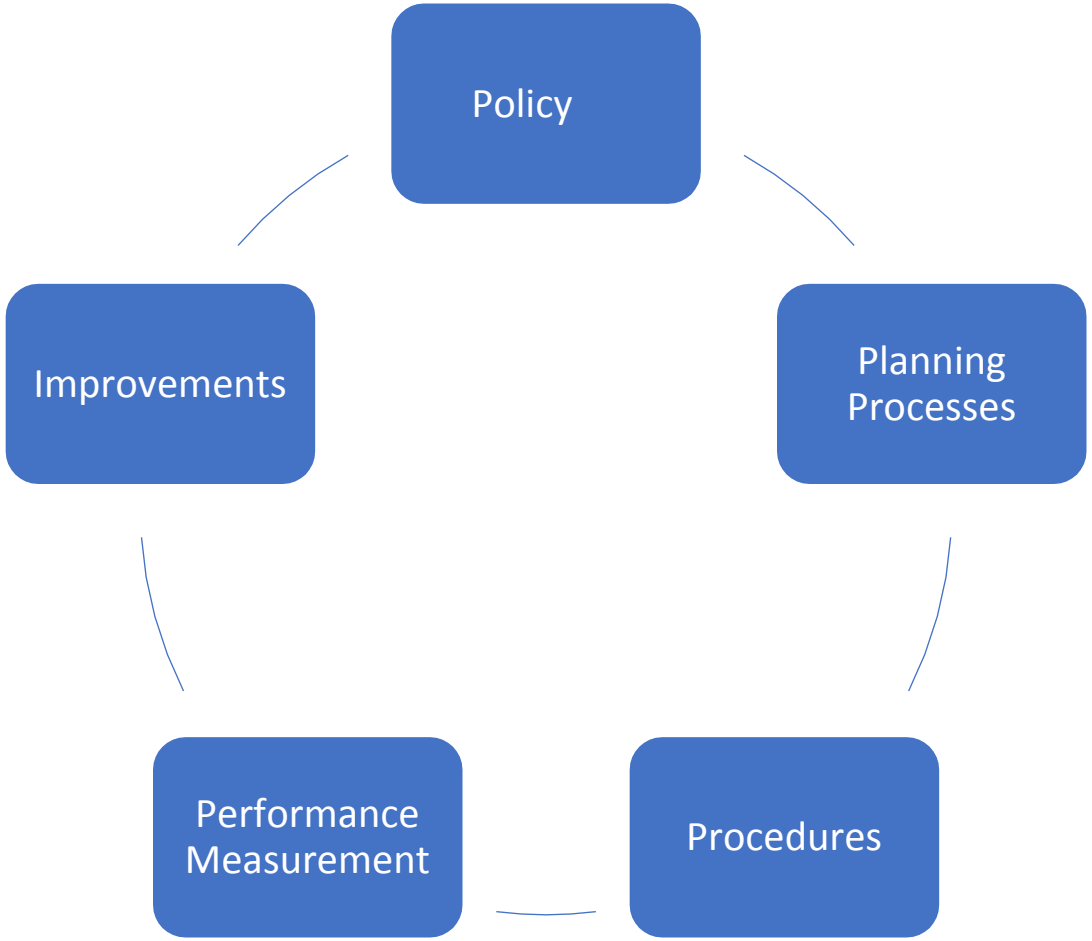


Damage Assessment Teams



Are you Ready!

Emergency Preparedness is creation of a management system which unifies departments in response to preparedness.



https://campussafety.unc.edu/risk-management/tar-heel-mission-ready/

Risk Management Services and Mission Continuity

- About
- **Tar Heel Mission Ready**
  - User Registration Form
  - User Guide
- Staff Directory
- Services

Tar Heel Mission Ready

What is Continuity of Operations?

Continuity of operations, or mission continuity, is the practice of planning for interruptions in order to provide maximum possible service levels. The purpose of mission continuity planning is to maintain and subsequently recover to an operational state within a reasonably short period of time, both during and after an interruption. A mission continuity plan is a snapshot of the normal operations and resources as well as planning for the resources which may be needed in time of disaster.

Tools and Resources

- Tar Heel Mission Ready Access
- User Registration Form
- User Guide
- Procedure on Preparing Mission Ready Continuity Plans
- Policy on Continuity Planning/Tar Heel Mission Ready Planning
- Call Tree Template
- Example of Call Tree

Why Should I Create a Plan?

Eliminate or reduce the impact of a disaster before a disaster occurs in order to provide a safe and healthy learning environment. The mission continuity planning process also generates interdepartmental communication which brings to attention strengths and weaknesses along with strategies to improve departmental and University-wide operations.

Who is Required to Create a Plan?

Make a Plan!

Step 1: Put together a plan by discussing these 4 questions with your family, friends, or household to start your emergency plan.

1.How will I receive **emergency alerts and warnings**?
2.What is my **shelter** plan?
3.What is my **evacuation** route?
4.What is my **family/household communication plan**?

Step 2: Consider specific needs in your household.

Step 3: Fill out a Family Emergency Plan

Download and fill out a family emergency plan or use them as a guide to create your own.

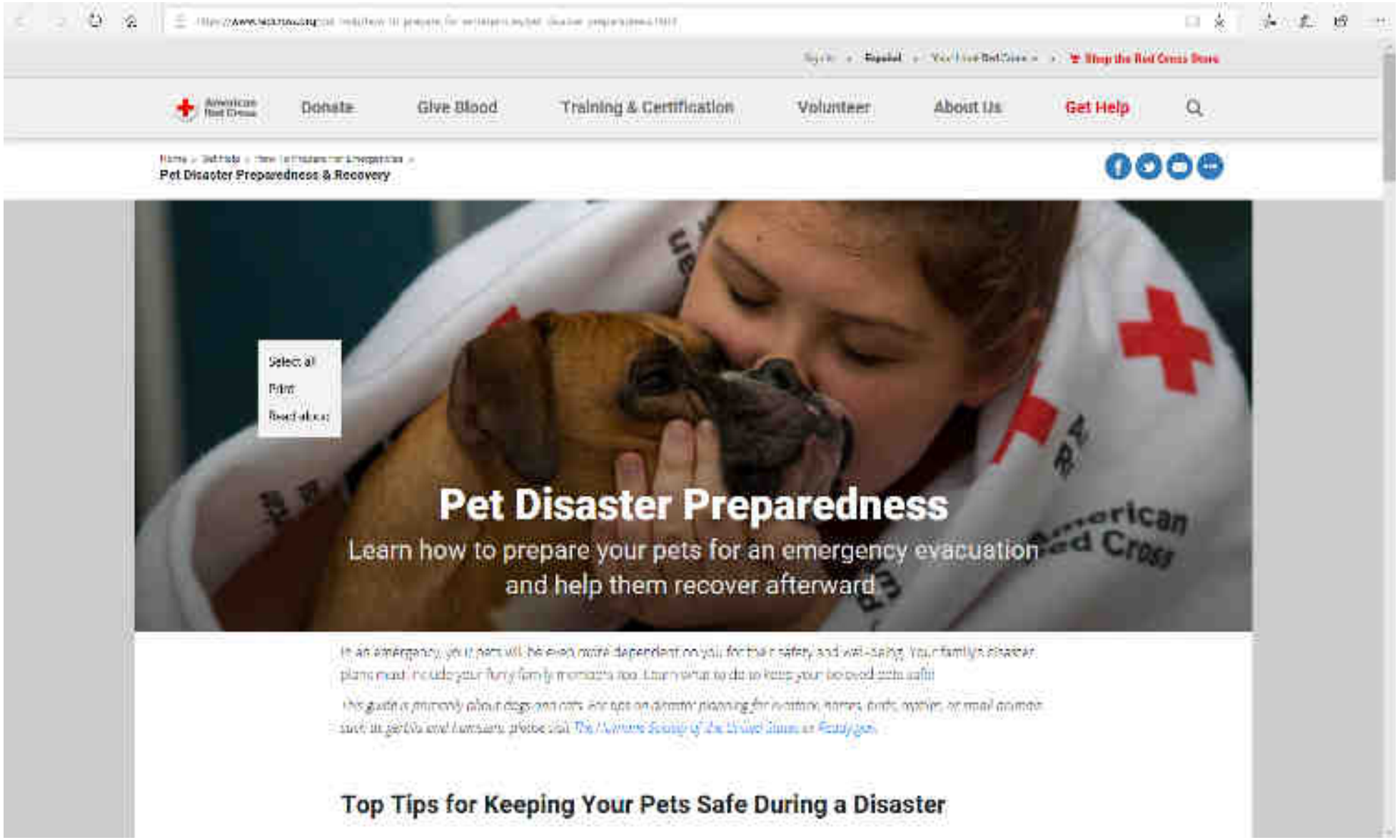
•**Emergency Plan for Parents** (PDF)

Step 4: Practice your plan with your family/household

Community Emergency Response Team (CERT) Program

The program educates volunteers about disaster preparedness for the hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

CERT offers a consistent, nationwide approach to volunteer training and organization that professional responders can rely on during disaster situations, which allows them to focus on more complex tasks. Through CERT, the capabilities to prepare for, respond to and recover from disasters is built and enhanced.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Pet Disaster Preparedness
Learn how to prepare your pets for an emergency evacuation and help them recover afterward
Top Tips for Keeping Your Pets Safe During a Disaster

References

- NFPA 1600 Standard on Continuity, Emergency and Crisis Management 2019
- Federal Emergency Management Agency –www.ready.gov
- Leaders in Business Community Resilience http://www.ready.gov/business-leaders
- Community Emergency Response Team (CERT) https://www.ready.gov/community-emergency-response-team
- Pet Disaster Preparedness – American Red Cross

https://www.redcross.org/get-help/how-to-prepare-for-emergencies/pet-disaster-preparedness.html

- Are you Ready – FEMA https://www.fema.gov/pdf/areyouready/areyouready_full.pdf