Georgia Archives Emergency Planning and Response for Essential Records

Session 1

Participant Guide

2024

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Course Introduction

Welcome to the *Emergency Planning and Response for Essential Records Course.*

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Emergency Planning and Response
for Essential Records Course
Session 1
Georgia Archives
November 14, 2024

Required materials for Session 1:

- Session 1 Participant Guide
- Session 1 Handout:
  - **Handout 1.1**—Develop Your REAP—First Steps Activity
- Course References:
  - **Reference 01**—Resource Center, References, Reading List
  - **Reference 02**—Key Terms for the IPER Courses

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INTERGOVERNMENTAL PREPAREDNESS FOR ESSENTIAL RECORDS (IPER)

Program developed by the

COUNCIL OF STATE ARCHIVISTS (CoSA)

In cooperation with the

NATIONAL ARCHIVES & RECORDS ADMINISTRATION (NARA)

And sponsored by the

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

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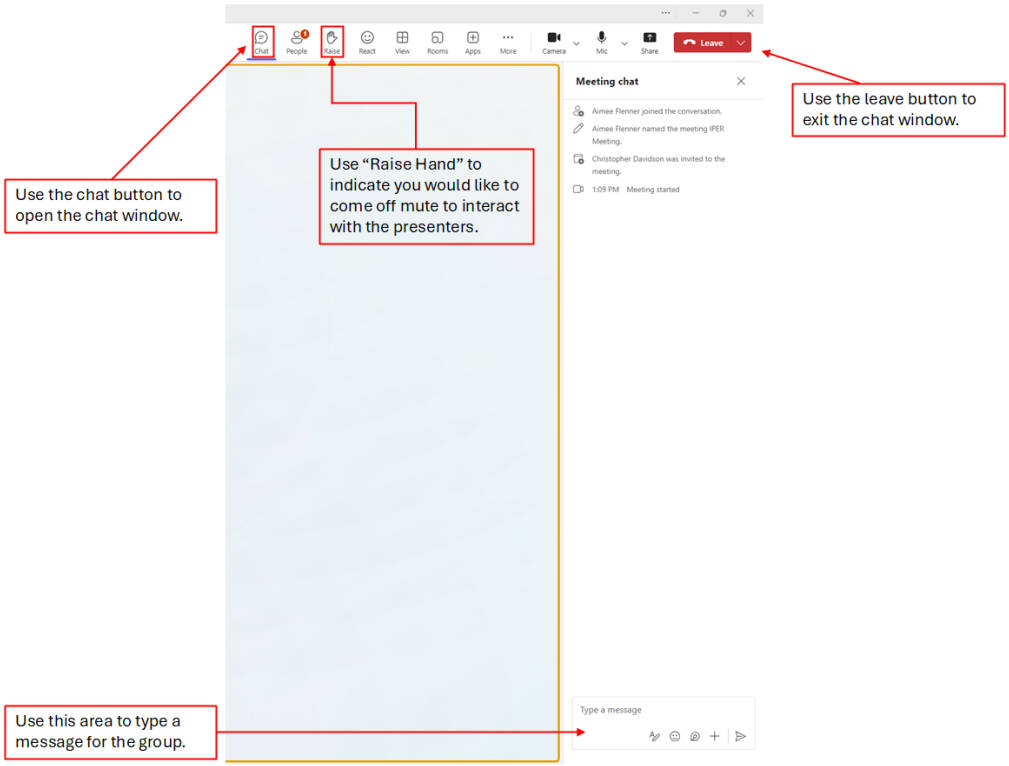

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This course supports a fundamental component of Continuity of Operations (COOP):

- Ensuring that state and local governments can access and use records needed to restore essential services

Courtesy of NARA—Hurricane Katrina—Orleans Parish—2005

The *Emergency Planning and Response for Essential Records* Course is developed from one of two web-based courses created for the Intergovernmental Preparedness for Essential Records (IPER) Project. The IPER Project, led by the Council of State Archivists (CoSA) and funded by the Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA), was designed to deliver training to state, territorial, tribal, and local governments nationwide, providing them with the knowledge and skills needed to secure their most essential records and recover those damaged by natural or human-caused disasters.

The project was created in response to the widespread destruction of records caused by Hurricane Katrina in 2005; it was a grant-funded project partially-based in the Georgia Archives facility, and was active from 2007 to 2012.

This course supports Continuity of Operations planning, which helps ensure that state and local government agencies can access and use records needed to restore essential services in the event of an emergency.

IPER's training curriculum consists of two primary courses that have complementary content and are designed to be taken sequentially.

In the *Essential Records* course, participants will learn to:

- Define an essential record
- Identify an organization's critical business needs and functions and the records that are essential to support those functions
- Evaluate the hazards and risks that most threaten your agency's essential records
- Develop appropriate protection strategies against these threats
- Specify time frames in which access will be needed to specific records
- Develop procedures to ensure that essential records remain both accessible and secure
- Develop an essential records template that can be incorporated into a broader Continuity Plan and/or disaster plan
- Understand applicable federal, state, and local Continuity regulations and procedures

In the *Emergency Planning and Response for Essential Records* course, participants will learn to:

- Understand the benefits of records emergency planning
- Relate records emergency planning to Continuity Plans and procedures
- Develop, analyze, and test a Records Emergency Action Plan (REAP)
- Assess the damage to records after an emergency and implement a response
- Identify federal, state, and local resources that are available to assist when an emergency occurs

Also part of the Georgia Archives curriculum is a third course, *Introduction to Records and Information Management for State and Local Governments*. This course provides a basic understanding of records management and prepares those with little or no records management experience for the two primary courses.

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- **Target audience:**
  - Any government employee involved in creating, maintaining, and protecting records, or in preparing for emergencies
- **Training focuses on three functional areas:**
  - Emergency management
  - Records management
  - Information technology

This course is designed for any state or local government official who has significant record-keeping responsibilities with three specific functional areas in mind: **EMERGENCY MANAGEMENT, RECORDS MANAGEMENT, AND INFORMATION TECHNOLOGY**.

If you would like to learn more about essential records and emergency planning, please visit the CoSA website at: https://www.statearchivists.org/research-resources/emergency-preparedness.

Notice: The statements made in this document, on the slides, and by presenters are for the purpose of helping to plan and respond to an emergency involving essential records. *Always follow the policies, procedures, and laws governing your organization and its actions.*

Review of the *Essential Records* Course

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In the *Essential Records* course, we focused on a specific and critical type of agency record: essential records.

Essential records are those records that:

- Are necessary for emergency response
- Are necessary to resume or continue operations
- Protect the health, safety, property, and rights of residents
- Would require massive resources to reconstruct
- Document the history of communities and families

For most agencies, only a small percentage of records—typically less than five percent—are essential.

In the *Essential Records* course, we learned how to identify records that need to be designated as essential records and how to protect those records. Essential records require special protection strategies, such as backup of systems, or copying and dispersing off-site. These strategies ensure that essential records not only are protected from the effects of an emergency but also are accessible during and after an emergency.

Review of the *Essential Records* Course (cont)

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Review of the *Essential Records* Course (cont'd.)

The Essential Records Template

Handout 4.4—Essential Records Template

Table 1: Essential Records Template

Essential Record*	Format(s) of Record	Access Priority Level (See key)	Access Timeframe	Location of Original (include computer name & path for electronic records)	Accessible at Alternative Facility?	Backed Up at Third Location	Maintenance Frequency	Prevention/ Mitigation Strategies
Example:								
Delegation of Authority	*Hardcopy and PDF file*	*Priority 1*	*Immediately, within 0–12 hours of the event*	*Deputy Administrator's Office, Washington Grove facility. GBaxter on 'gandalf\userdirs$\My_Documents\Disaster\DofA'*	*Records storage facility*	*Office of the Administrator, Springfield Facility, 2nd floor, Office 213b, top drawer of file cabinet next to secretary's desk*	*Bi-weekly*	*Backup tapes of Gandalf server*

Because essential records are critical for responding to an emergency and for continuing operations, they should be part of an agency's Continuity Plan. Your agency or locality may require essential records to be part of your Continuity Plan. Therefore, the Essential Records course also provided the Essential Records Template (**Essential Records Handout 4.4**) as a way to incorporate essential records into your agency's Continuity Plan.

Why Are We Here

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Why Are We Here?

- Agencies must plan for protecting and recovering their records should an emergency occur.

Photo courtesy of FEMA/George Armstrong—Biloxi, Mississippi

An underlying concept for records emergency planning and response is the awareness of the importance of records to your agency.

While essential records must be included in your agency's Continuity Plan, your agency must also plan for protecting and recovering its important or useful records should an emergency occur.

In this course, *Emergency Planning and Response for Essential Records*, we will broaden our focus from essential records to all agency records, and examine the **Records Emergency Action Plan (REAP)**, which is the plan created *before* an emergency happens that details how your agency will handle records during an emergency. Assessing the damage to records after an emergency and implementing a response will be covered in this course, as well.

In the case of emergency preparedness, it could be said that "the best offense is a good defense." Although you cannot prevent all emergencies affecting records, with a REAP in place, you can defend yourself against loss and increase the odds of protecting and/or recovering your records.

NOTE: Much of the discussion of records and information management disaster plans throughout this curriculum, including definitions, is taken from the Association of Records Managers and Administrators (ARMA) publication, *Emergency Management for Records and Information Management Programs* by Virginia A. Jones, CRM and Kris E. Keyes, 2001.

Course Organization

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Session 1 (1:15)

- Course Introduction
- Lesson 1—Preparing a Records Emergency Action Plan

Session 2 (1:30)

- Lesson 1—Preparing a Records Emergency Action Plan (cont'd.)

Session 3 (0:45)

- Lesson 2—Records Emergency Response and Recovery

Session 4 (0:45)

- Lesson 2—Records Emergency Response and Recovery (cont'd.)
- Course Summary

Session 1—
Preparing a
Records Emergency Action Plan

Session 1 Objectives

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At the completion of this session, you will be able to:

- **Define key terms related to emergency management**
- **Identify federal and state emergency management initiatives, guidance, and systems relevant to protecting state and local government records**
- **Explain what a REAP is**
- **Explain the benefits of developing a REAP**
- **Identify members and assign responsibilities for the teams described in a REAP**

After session 2, you will be able to:

- Write a REAP
- Analyze and test a REAP

Emergency Management Terms

Incident

An incident is an occurrence caused by human or natural phenomena that requires action(s) in response to prevent or minimize loss of life or damage to property and/or the environment.

Examples of incidents include:

- Fire, both structural and wildland
- Natural disasters, such as tornadoes, floods, ice storms, and earthquakes
- Human and animal disease outbreaks
- Hazardous materials incidents
- Criminal acts and crime-scene investigations, such as arson

Emergency

An emergency is the more common type of incident. It is limited in scope, but still requires you to secure your operations and protect assets. Emergencies require immediate response, but usually losses are limited compared to those from a disaster.

Examples of emergencies include:

- Broken pipes
- System crashes
- Bomb threats
- Severe storms

Disaster

A disaster is an incident that is less common and results in more significant financial loss or operational disruption to an agency than an emergency. Disasters have the potential for serious injury or loss of life. The escalation of "emergency" incidents to the level of "disaster" can be due to a lack of readiness and preparation, which this course will help you try to avoid with a REAP.

Examples of disasters include:

- Fire
- Flood
- Tornado
- Terrorist bombing

Response

Response is the action taken to save lives, prevent injuries, and prevent or limit property damage when an emergency occurs. During response, the impact of the emergency is assessed, and the level of containment and control activity is determined. In regard to records management, the primary response activity is to activate the REAP.

Recovery

Recovery involves the procedures and activities necessary to restore resources or resume operations following an emergency or other atypical disruption of routine activities. During recovery, efforts are made to reconstruct damaged agency records in order to restore normal operations.

Phases of Emergency Management

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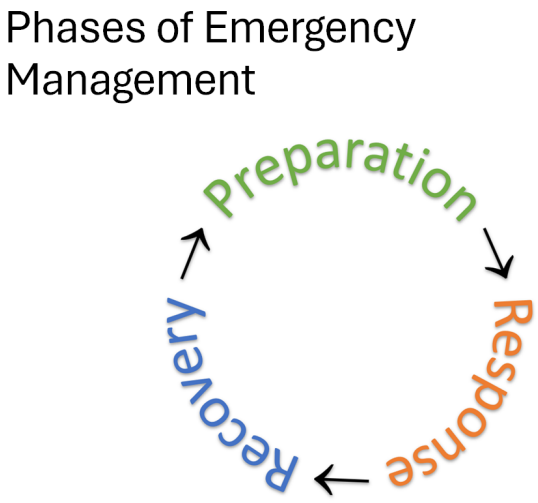

There are three phases to emergency management:

- Preparedness
- Response
- Recovery

The REAP encompasses these phases, so it's important that you take them into account when creating your REAP.

Preparedness

The Preparedness phase requires that an agency be positioned effectively to respond if an emergency does occur. It includes the activities that assist in responding to an emergency, including:

- Developing, testing, and updating your disaster plan, Continuity Plan, and REAP
- Developing an essential records program
- Testing emergency systems

- Training personnel
- Stocking emergency supplies
- Developing agreements with vendors and others who can render assistance or mutual aid

Risk Analysis

The first step to preparing your REAP is to perform a risk analysis of your records, because it allows you to determine and prioritize your response and recovery actions. It is critical to perform the risk analysis *before* you write your REAP. However, you may want to select your REAP team members before doing the risk analysis.

The process of identifying your agency's risks will take place in conjunction with the overall emergency planning process; however, because a REAP is part of the overall disaster plan, it is important for you to participate in the risk analysis from the perspective of risks to records.

As discussed in the *Essential Records* course, the steps of a risk analysis are as follows:

1. Identify potential risks to records.
2. Analyze the probability and impact of those potential risks.
3. Evaluate your findings and determine appropriate mitigation and preparedness strategies.

Insurance

During the Preparedness phase, you should talk to your administrative agency to determine how your agency or locality is insured and how that may affect your ability to get reimbursed for recovery costs.

Governments can be covered by commercial insurance, self-insurance, or some combination of the two.

- With commercial insurance, you pay a premium to an independent firm that will reimburse the agency after a loss.
- Self-insurance means that the institution (or parent agency) sets aside a certain sum of money in reserve to use for recovery or replacement costs in the case of an emergency. Sometimes this reserve is unfunded, in which case the self-insurance basically means no insurance.

You may need insurance to cover salvage of damaged records and also for the building and its contents (computers, furniture, machinery, etc.).

There are a range of complex issues to consider when planning for insurance, many of which are too involved to cover in this class. It's very important that you discuss insurance with your risk manager or insurance agent *before* an emergency strikes to determine what coverage is right for your agency.

Response

The Response phase includes the immediate and short-term steps an agency takes to react to an emergency. Examples of response actions include:

- Calling the fire department
- Contacting recovery vendors
- Setting your disaster plans in motion

Time is of the essence when it comes to recovering damaged records, so it is very important that your team be prepared to respond in accordance with your REAP. This includes preliminary damage assessment and the stabilization of the environment as soon as the emergency response officials send out the "all clear" sign.

Recovery

The Recovery phase involves the actions necessary to bring things back to normal to the extent possible, including full damage assessment, insurance claims, salvage and stabilization of records, and the resumption of business operations. Examples of recovery actions include:

- Resuming critical operations at a pre-established location
- Moving wet records into a freezer as soon as possible
- Ensuring that your building is repaired, the carpets and furniture replaced, and so on
- Returning the dried records to cabinets and records storage vaults or areas

Federal Guidance on Emergency Preparedness and Response

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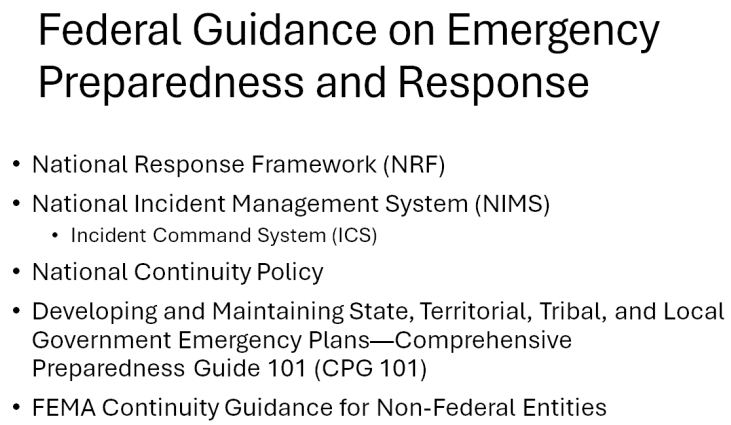

Complex 21st-century threats, exemplified by the horrific events of September 11, 2001 and Hurricane Katrina, demand that all levels of government, the private sector, and nongovernmental agencies be prepared to prevent, protect against, respond to, and recover from major events whose impact exceeds the capacity of any single entity.

To achieve a unified and coordinated national approach to these events, the Department of Homeland Security and other government agencies provide the following guidance to assist with planning and domestic incident management:

- National Response Framework (NRF)
- National Incident Management System (NIMS)
  - Incident Command System (ICS)
- National Continuity Policy
- Developing and Maintaining State, Territorial, Tribal, and Local Government Emergency Plans—Comprehensive Preparedness Guide 101 (CPG 101)
- FEMA Continuity Guidance for Non-Federal Entities
  - Continuity Guidance Circular (CGC)
  - Continuity Assistance Tool

National Response Framework (NRF)

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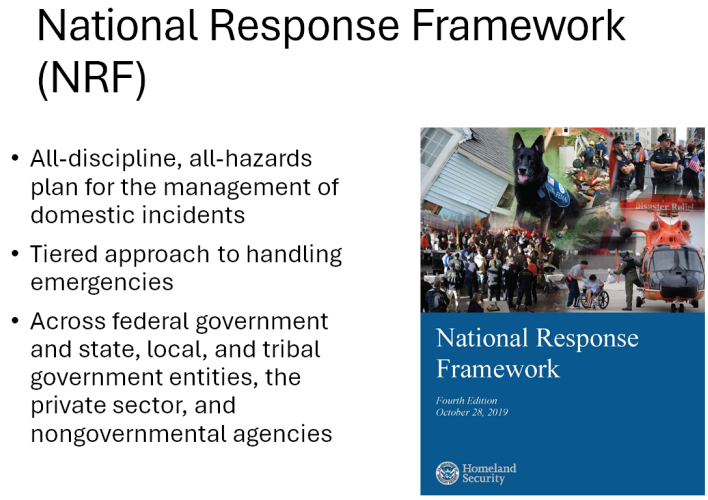

The NRF is an all-discipline, all-hazards plan for the management of domestic incidents across all levels of government (federal, state, local, territorial, and tribal), the private sector, and nongovernmental agencies. Through a tiered approach, the NRF provides the structure and mechanisms to coordinate and integrate incident management activities and emergency support functions.

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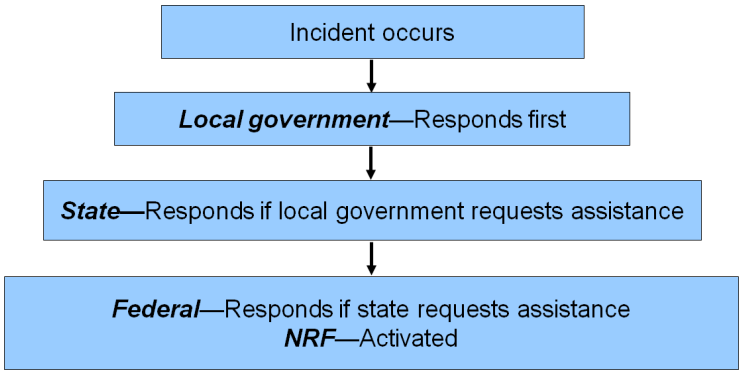
National Response Framework (NRF) (cont'd.)



From an emergency management perspective, it is important to understand the tiered response process.

The local government acts as first responder. If it cannot contain the incident and finds its resources overwhelmed, it will request assistance from the state. The state will provide assistance in the form of emergency management resources and personnel. If the incident cannot be contained and state resources are overwhelmed, the state will request federal assistance, and the NRF may be activated. Note that federal reimbursement is a key focus for federal emergency requests.

You should also know that National Response Framework operates through 15 Emergency Support Functions (ESFs) that include "Search and Rescue" and "Public Health and Medical Services." Records fall within ESF-11, "Agriculture and Natural Resources," because records are classified as cultural resources, which are grouped with natural resources. Every state plan is modeled on the national response framework and includes the 15 ESFs.

Information about the NRF is available at the NRF Resource Center on FEMA's website at: *http://www.fema.gov/emergency/nrf*

National Incident Management System (NIMS)

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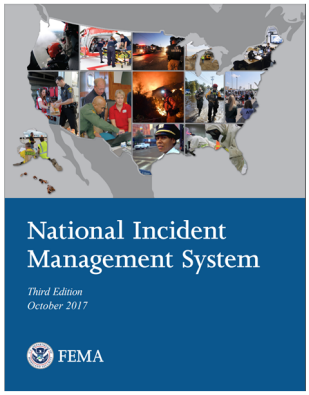
National Incident Management System (NIMS)



- Provides a consistent framework for incident management at all jurisdictional levels, regardless of the cause, size, or complexity of the incident

NIMS provides a consistent framework for incident management at all levels of government, regardless of the cause, size, or complexity of the incident. Building upon the Incident Command System (ICS), NIMS provides the nation's first responders, hospitals, governments, and others with the same foundation for incident management for terrorist attacks, natural disasters, and other emergencies.

There are three major components in the NIMS system:

- Resource Management
- Command and Coordination
- Communication and Information Management

NIMS compliance is a requirement for all entities receiving federal homeland security funding.

Information about NIMS can be found at the NIMS Resource Center on FEMA's website at: *http://www.fema.gov/emergency/nims*

On this page, the link to the "NIMS Document" accesses a comprehensive publication about NIMS. It provides context for understanding how the specific goals and strategies of records preparedness being taught in this course fit within the larger emergency preparedness framework used by all governments at the federal, state, and local levels.

Note that "Implementing a vital [essential] records program at all levels of government to prevent loss of crucial documents and records" was one of the specific mitigation strategies cited on page 21 of the 2008 edition of the NIMS document.

Incident Command System (ICS)

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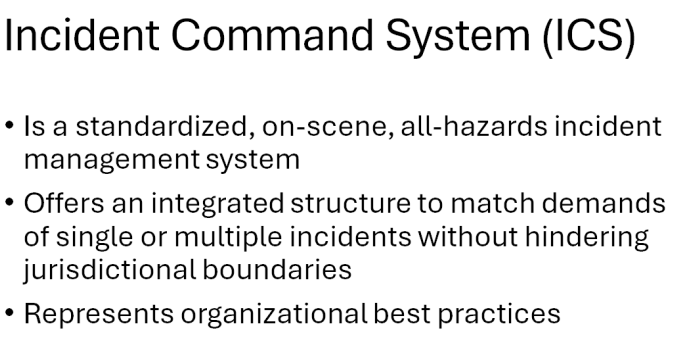

ICS is a standardized, on-scene, all-hazards incident management system for meeting the demands of all situations. As a key feature of NIMS, the ICS allows its users to adopt an integrated structure to match the demands of single or multiple incidents, unhindered by jurisdictional boundaries.

The Incident Command System represents organizational best practices. It is a proven system used widely by firefighters, rescuers, emergency medical teams, and hazardous materials teams.

ICS helps to ensure:

- The safety of responders and others
- The achievement of tactical objectives
- The efficient use of resources
- The use of common nomenclature to enhance communications

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Incident Command System (ICS) (cont'd.)

- Goals:
  - Meet the needs of incidents of any kind or size
  - Allow personnel from a variety of agencies to meld rapidly into a common management structure
  - Provide logistical and administrative support to operational staff
  - Be cost-effective by preventing duplication of effort

The ICS is designed to:

- Meet the needs of incidents of any kind or size
- Allow personnel from a variety of agencies to meld rapidly into a common management structure
- Provide logistical and administrative support to operational staff
- Be cost-effective by preventing duplication of effort

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Incident Command System (ICS) (cont'd.)

- ICS provides the flexibility and organizational structure for various levels of government to work together in a coordinated effort.
- ICS helps all responders communicate, and get what they need when they need it.

The ICS provides the flexibility and organizational structure for various levels of government to work together in a smooth, coordinated effort.

ICS helps all responders communicate efficiently and get *what* they need *when* they need it by eliminating duplication of efforts, resources, supplies, and space.

The Planning Section of the ICS Command and Management component incorporates two different records-related functions.

- The Documentation Unit is "responsible for collecting, recording, and safeguarding all documents relevant to the incident itself."
- Technical Specialists may be assigned anywhere they are needed within the ICS structure to bring necessary skills or expertise during emergency response. The ICS provides examples of specialists who may be activated during an incident, specifically citing records management, cultural resources, and data management specialists (Appendix B of the NIMS document, page 105).

More information about ICS can be found at the ICS Resource Center on FEMA's website: *http://training.fema.gov/EMIWeb/IS/ICSResource/index.htm*

FEMA provides an independent study course on ICS, namely, *ICS 100.C: Introduction to the Incident Command System, ICS 100,* at: *https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c&lang=en*

National Continuity Policy

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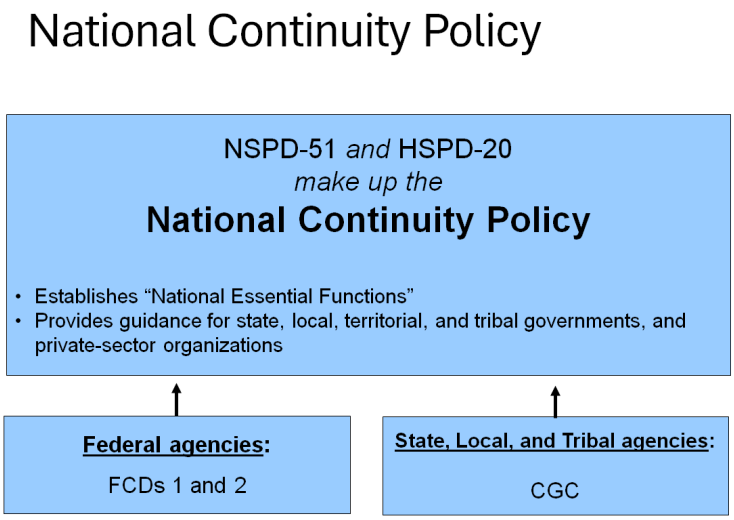

National Security Presidential Directive-51 (NSPD-51) and Homeland Security Presidential Directive-20 (HSPD-20) are the directives that make up the National Continuity Policy.

The purpose of this policy is to strengthen continuity of operations capabilities and to promote interoperability among federal, state, local, territorial, and tribal governments and the private sector. The policy achieves these goals by doing the following:

- Establishing eight "National Essential Functions"
- Prescribing continuity requirements for all Executive departments and agencies
- Providing guidance for state, local, territorial, and tribal governments and private-sector organizations

For federal government agencies, the Federal Continuity Directives (FCDs) 1 and 2 provide operational guidance for implementing the National Continuity Policy.

The equivalent for state, local, tribal, and other non-federal entities is found in the Continuity Guidance Circular (CGC).

For more information about the National Continuity Policy, visit the National Continuity Programs Directorate on FEMA's website at: *https://www.fema.gov/emergency-managers/national-preparedness/continuity/documents*

Comprehensive Preparedness Guide 101 (CPG 101)

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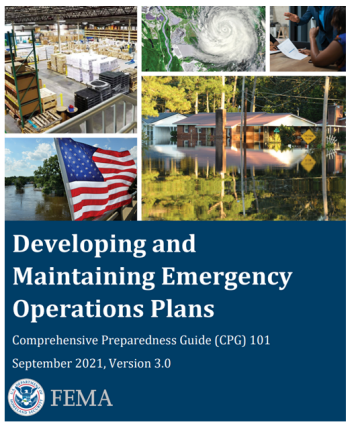
CPG 101

- Designed to help state, territorial, tribal, and local governments develop emergency operations plans



The Comprehensive Preparedness Guide (CPG) 101 is designed to help state, territorial, tribal, and local governments develop emergency operations plans (EOPs). The EOPs encompass both **deliberative planning**—based on facts or assumptions about what could happen in an emergency—and **incident action planning,** during which existing deliberative plans are activated in response to or in anticipation of an event.

CPG 101 emphasizes the need to "achieve unity of purpose through horizontal coordination and vertical integration of plans among all levels and sectors." This reflects one of the foundational principles of emergency management: "emergency management and homeland security operations start locally and expand to include other resources as the affected jurisdiction requires additional support." (CPG, page 1).

Many state emergency operations plans mirror the structure of the federal National Response Framework, including the identification of agencies responsible for specific emergency support functions (ESFs)—areas of particular expertise like communications and transportation that are needed to support response and recovery. At the federal level, ESF #11 (Agriculture and Natural Resources) encompasses the protection of natural and cultural resources and historic properties, and has been expanded to include government records. The emergency operations plan in Georgia may also have similar provisions, either in its own ESF #11 or another support annex.

The federal ESF #11 assigns the direction and coordination of NCH resources protection to the U.S. Department of the Interior (DOI), which may then call upon other agencies and organizations during ongoing actions. Specifically, ESF #11 includes the following provision pertinent to the concerns of IPER participants:

> "[The DOI] utilizes the national network of resources represented by the National Archives and Records Administration's partnership with the Council of State Archivists on issues relating to government records and historical documents."

For more information about CPG 101, visit the *Comprehensive Preparedness Guides (CPG)* section on FEMA's website at: *https://www.fema.gov/emergency-managers/national-preparedness/plan#cpg*

FEMA Continuity Guidance for Non-Federal Entities

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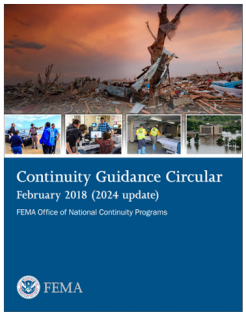
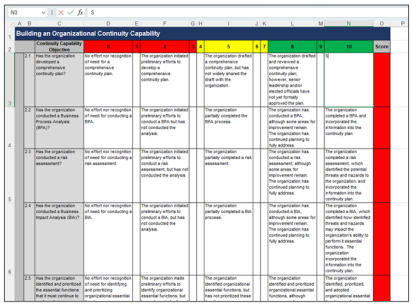
FEMA Continuity Guidance for Non-Federal Entities

- Continuity Guidance Circular
- Continuity Assistance Tool (CAT)





Continuity Guidance Circular

FEMA's Continuity Guidance Circular (CGC) provides direction for developing continuity plans and programs for non-federal entities and the private sector. Effective continuity planning and programs facilitate the performance of essential functions during situations that disrupt normal operations.

This document identifies the elements critical to establishing and maintaining an effective continuity capability. It covers 10 elements of continuity capabilities:

1. Essential functions
2. Orders of succession
3. Delegations of authority
4. Continuity facilities
5. Continuity communications
6. Vital records management
7. Human capital
8. Test, training, and exercise program
9. Devolution of control and direction
10. Reconstitution operations

For more information about Continuity Guidance Circular, visit FEMA's website at: *https://www.fema.gov/emergency-managers/national-preparedness/continuity/circular*

Continuity Assistance Tool

The Continuity Assistance Tool (CAT) works with Continuity Guidance Circular 1. It contains a series of scoring systems that agencies can use to measure how well they are achieving the capabilities outlined in the Circular. The "Building" section covers continuity capabilities and essential records. This section asks questions such as: "Has the organization identified and prioritized the essential functions that it must continue to perform during a continuity event?" and "Has the organization established and documented orders of succession to ensure an orderly and predefined transition of leadership?"

CAT is useful regardless of location, size, and status of existing continuity programs or plans. If an agency does not have a program, CAT can be used as a checklist to create an initial continuity plan and program. CAT:

- Allows for comprehensive continuity program review
- Provides a continuity program baseline for strategic planning
- Provides program orientation for new staff and leaders
- Creates a framework for budget, staff, and resource justification
- Enables the development of plans to rectify deficiencies

CAT is available on FEMA's website at: *https://www.fema.gov/emergency-managers/national-preparedness/continuity/outreach*

Emergency Response—How it Works at the State and Local Levels

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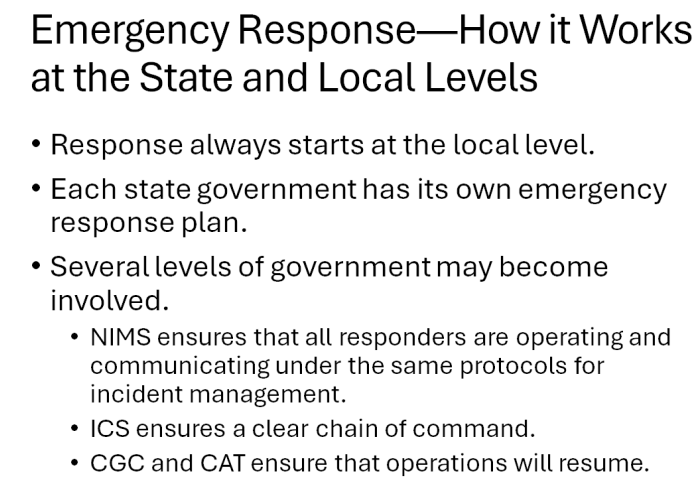


Initial Response

Response always starts at the local level. Local officials may call on the state for assistance if the magnitude of the incident is beyond their capacity to respond. Similarly, very large events often precipitate a request from the Governor to the federal government for assistance. Each state government has its own emergency response plan that provides the framework for response within its borders.

As a practical matter, emergency first responders automatically swing into action at the first sign of an emergency or other threatening event. They follow time-tested protocols, local knowledge, and their own experience.

These protocols focus on saving human life, reducing threats to life and injury, and protection of property. However, first responders usually do not consider records to be property. Protection and recovery of records are not high in their priorities when life and property are threatened. They need to be educated that records are crucial assets to be protected like other valuable property.

Even modest incidents can become confusing as fire, rescue, police, utility, and telephone crews, among others, scramble to assess and repair damage and to communicate with each other. Hospitals, shelters, the Red Cross, hazardous materials experts, and other community resources may be mobilized.

Continuing Demands

After the initial response, government officials, the public, private companies, and news agencies press the responders for information, sometimes inhibiting critical ongoing activities.

Depending on the magnitude of the incident, several levels of government may become involved along with interstate entities such as power grids, water control authorities, and port authorities.

The Payoff of Planning and Training

This is where advanced planning and training become crucial. With proper training, first responders will be familiar with NIMS and will work within its framework for incident management at all jurisdictional levels. That will ensure that they and their counterparts in other agencies are operating and communicating under the same protocols for incident management.

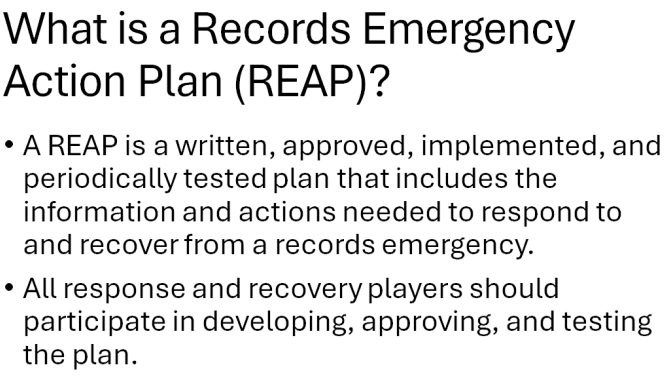
First responders will be familiar with the ICS and its mission to ensure a clear chain of command for operational decision-making. Governmental agencies will be able to resume some operations as they follow plans developed using the guidance in Continuity Guidance Circular 1 and the Continuity Assistance Tool.

Having worked with your emergency management director (EMD), you will have a greater chance of gaining access to your records sooner rather than later, Furthermore, the EMDs will recognize the value of the records and protect them according to your agency's disaster plans.

And, with your work on the importance of essential records, first responders will have the information they need to locate critical facilities and utilities. They will recognize the value of records and mitigate damage to them until full recovery can be undertaken.

What is a Records Emergency Action Plan (REAP)?

Slide 1-34



The Records Emergency Action Plan (REAP) is a written, approved, implemented, and periodically tested plan that includes the information and actions needed to respond to and recover from a records emergency. It addresses probable and existing vulnerabilities identified in your risk analysis, and the resulting corrective or protection actions.

The purpose of the REAP is to prevent the following after an emergency:

- Loss of records and information
- Costly salvage of records and information
- Delay in restoring critical business functions

A good REAP helps to minimize the time, effort, and cost of recovery. Even if you have an excellent, trained staff that has knowledge of emergency response and recovery techniques, it is still important to have a written Records Emergency Action Plan, which will serve as a vital organizational tool in the event of an emergency. The chaos associated with emergency situations can make the most efficient person forget important established response priorities, such as:

- Where keys are located
- Where the water shutoff valve is located
- How to find an employee's phone number
- What to do if an important emergency team member is away on vacation, i.e., chain of Command

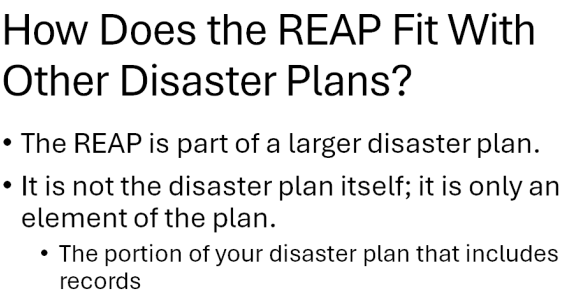
Without written instructions, plans, and checklists, others are left behind to guess what to do, and the middle of an emergency is not the time to guess. Additionally, in a major emergency your staff may be geographically scattered or preoccupied with recovery of their own personal property, making it impossible for them to respond to an emergency at work. The people left to implement your REAP may be unfamiliar with the records and your facility.

Ideally, persons responsible for recovery from emergencies should participate in developing, approving, and testing the plan.

It should be pointed out that "REAP" is a term used in this training; however, states and other entities may have different names for REAP-type plans.

How Does the REAP Fit With Other Disaster Plans?

Slide 1-35



The REAP should complement existing general disaster plans or be part of a larger emergency plan. It is not the disaster plan itself and should not duplicate or conflict with provisions of the general disaster plan.

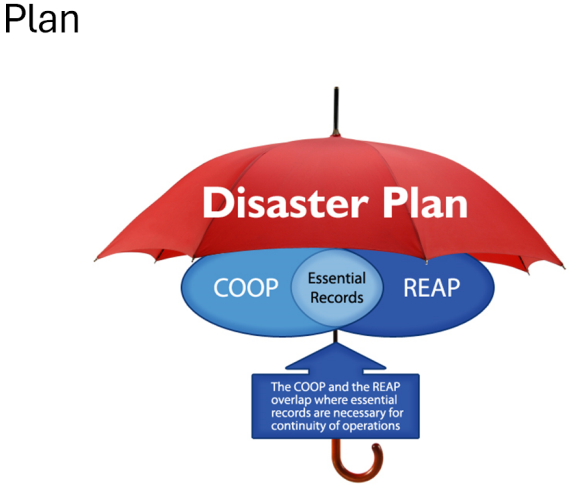
It should be the portion that defines details needed to protect, assess, and recover records after a disaster.

It is possible to embed the REAP in the general plan, but it will probably be too large to be accepted. A good way to relate the two plans is to have the general plan refer to the REAP by reference and policy.

Keep one or more printed copies on-site and off-site in case electronic copies of your REAP are inaccessible.

Disaster Plan vs. REAP vs. COOP Plan

Slide 1-36



To help clarify the role of the REAP with regard to the role of other disaster plans, let's take a look at the various disaster plans used in government agencies.

Disaster Plan

A **disaster plan** encompasses the full range of challenges presented by an incident: protection of life and property; transportation and communication systems; command and coordination of specific plans, such as evacuation, public health, REAP, and Continuity Plans.

Continuity Plan

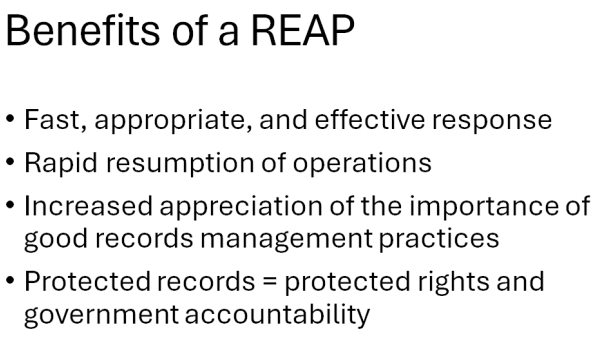
A **Continuity Plan,** sometimes called a **COOP Plan**, addresses all aspects of how to protect employees and resume time-critical operations in the event of an emergency. It focuses on getting the agency back in business as quickly as possible. The Plan may (and should) address records, but the Continuity Plan will address only those records that are essential to continuity of operations.

REAP

A **REAP** addresses all of an agency's records, including all essential records. Some essential records are necessary for continuity of operations (the REAP overlaps the Continuity Plan at that point); other essential records are not. The REAP provides much more detailed guidance on responding to and recovering from an emergency that affects records.

Benefits of a REAP

Slide 1-37



Whether it is the ability to act quickly in the event of a water-pipe break in your facility, or the opportunity to prepare your facility in advance for the onslaught of a major hurricane, the benefits provided by a comprehensive REAP can save you time and expense.

Implementation of a REAP should prevent the widespread loss of records and information and significantly reduce recovery costs.

The benefits of a REAP include:

- Fast, appropriate, and effective response
- Rapid resumption of operations
- Increased appreciation of the importance of good records management practices
- Protected records, which results in protected rights and government accountability

Fast, Appropriate, and Effective Response

When emergencies do occur, whether small-scale or catastrophic, they can be overwhelming. During the emergency and immediately thereafter, you will not have time to develop a comprehensive REAP.

Having a plan with the response and recovery actions already in place allows for fast action and correct decisions.

Rapid Resumption of Operations

Although we have no control over Mother Nature (or over some human-caused events), planning for an emergency that may affect your agency's records could mitigate the damage the emergency leaves behind. Continuity Plans are designed to do just that. Every Continuity Plan must include provisions to identify, protect, and access records critical to resumption of operations, which are also elements of a REAP.

Agencies with a tested REAP in place are likely to experience less impact during or following an emergency, because essential records were protected, allowing for a more rapid resumption of operations. If these principles are also incorporated in the agency's overall Continuity Plan, then managers and emergency responders will be more likely to recognize the key role that essential records play in resuming operations.

Increased Appreciation of the Importance of Good Records Management Practices

Another benefit to developing a REAP is that when you involve other agency personnel who are not knowledgeable about records, they gain an appreciation of good records management practices. They will learn the importance of identifying, protecting, and maintaining business information.

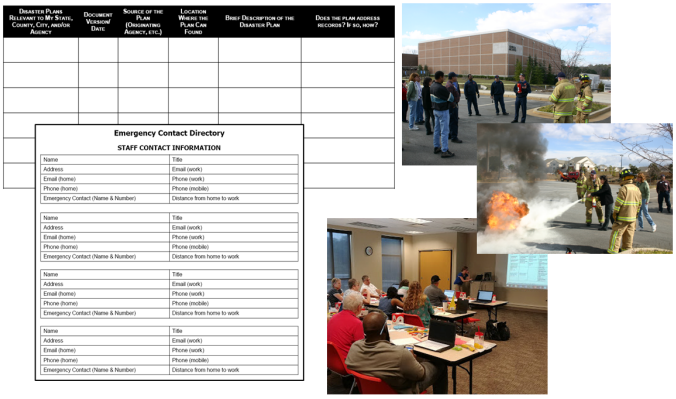
Protected Records Equal Protected Rights and Government Accountability

Records protect the rights of the public and maintain government accountability, and, therefore, the records too must be protected. Having a REAP in place is the best way to mitigate damage to records resulting from emergencies and to guarantee that the records will be there to protect rights and maintain accountability. Having a REAP also demonstrates due diligence on the part of the government. If you are unprepared for an emergency, it's bad news for the government AND for the records.

Lesson 2: Planning for the REAP

Slide 1-38

Lesson 2: Planning for the REAP



Identify the Disaster Plans and People Relevant to Your State, Locality, and Agency

Slide 1-39

Identify the Disaster Plans and People Relevant to Your State, Locality, and Agency

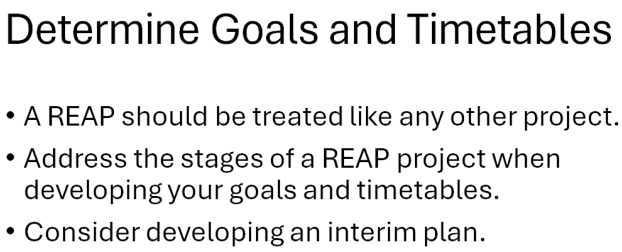
- Identify the disaster plans in place so your REAP can:
  - Tie into those plans most effectively
  - Address any records-specific shortcomings they may have
- Identify and meet your emergency planning personnel to inform them about your REAP planning project.

Earlier, you saw how the REAP related to other disaster plans, such as emergency plans and Continuity Plans. When creating your REAP, it's important that you identify the disaster plans in place for your agency, locality, and state, so your REAP can tie most effectively into those plans and address any records-specific shortcomings they may have.

Similarly, your agency, locality, and state will have teams of people or an individual charged with emergency planning. These are people you'll want to identify and meet to inform them about your REAP planning project.

Determine Goals and Timetables

Slide 1-40



Although for most of us, creating a REAP is not a routine assignment, it should still be treated like any other project and given goals and timetables for completion, and be provided with the necessary time and resources. However, unlike other projects that have definite end points, emergency planning is dynamic and requires routine review and updating on an established cycle.

Keep in mind that a good REAP will take several months to complete, so be flexible and reasonable when developing your timetable. Although a deadline is important, you can modify the timeline as you are able to define the priorities more clearly.

Stages of a REAP Project

Also, like any other project, a REAP project passes through various stages of completion. Be sure to address each of these stages when developing your goals and timetables.

The stages of a REAP project are:

- Forming the Action Team—Create the team that will develop the REAP and coordinate efforts during an emergency.
- Identifying needs—Examine existing emergency guidance: Does your agency have a Continuity Plan or other disaster plan? Identify deficiencies in protecting essential records. Analyze facilities for potential hazards to records. Perform a risk analysis.

- Determining the scope of the REAP—Which agency(ies), department(s), or other functional units will it cover?
- Establishing goals—State the goals in writing and record the tasks necessary to accomplish each goal.
- Direct each team to work on writing its component of the REAP.
- Finish the tasks and produce the plan.

Throughout all the stages, it's important to control and evaluate the process. Monitor the work with project management software or other techniques.

Consider Developing an Interim Plan

You may want to develop an interim plan which can be accomplished quickly, in case an incident occurs before your REAP is ready. For example, you can make a good start, and provide a solid foundation for future work, by:

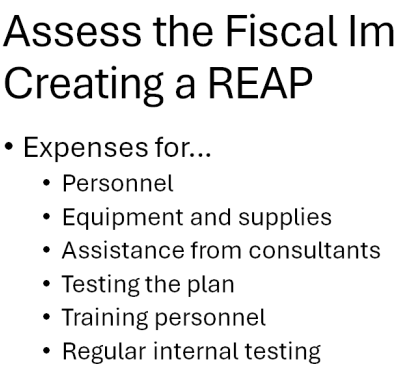
- Developing a phone tree for key agency personnel
- Gathering contact information for emergency responders and vendors who provide support for utilities, computer systems, security, and emergency response
- Defining the actions that agency staff will need to take in the first 24–72 hours after the emergency occurs and assign responsibility for follow-through
- Assembling a cache of critical supplies

All of these actions can be documented in a Pocket Response Plan (PReP), which is discussed in more detail during Session 2.

Throughout the rest of this course, we will be discussing ways to expand the interim plan into a fully developed REAP.

Assess the Fiscal Implications of Creating a REAP

Slide 1-41



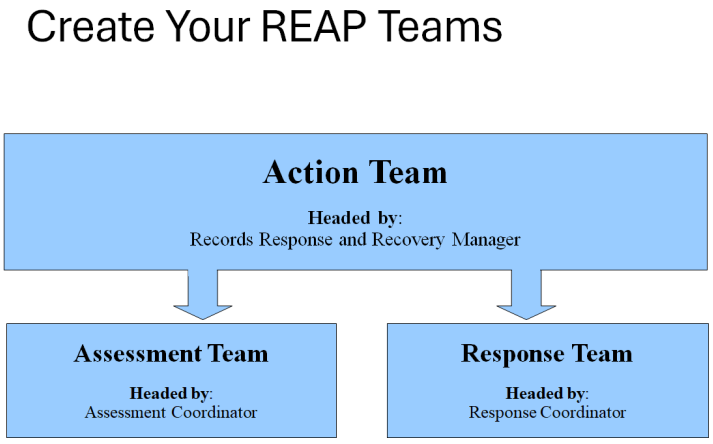
Creating and maintaining a REAP costs money; the time and resources involved are not free. However, the cost of doing nothing is often greater than the money you put into planning at the front end. By analyzing the potential costs, you can sell emergency planning to management more effectively.

Here are some of the costs you may encounter:

- Personnel costs
- Equipment and supplies you may get to help with rapid response to an incident
- Assistance from consultants
- Expenses for testing the plan and training personnel
- Regular internal testing, which requires money for the personnel who run the computers, for the computer downtime involved, and for all the staff who participate

Create Your REAP Teams

Slide 1-42



Three teams are involved in creating and implementing a REAP, but in smaller governmental units the three teams may, in fact, be one group of people addressing all three activities. For purposes of clarity, they are presented here as three separate teams:

- **Action Team**—Creates the REAP and acts as the overall coordinator of the assessment, planning, response, and recovery. The Action Team is headed by the Records Response and Recovery Manager.
  - **Assessment Team**—A sub-team of the Action Team, activated in the event of an incident to assess the damage and communicate its findings to the Response Team. The Assessment Team is headed by the Assessment Coordinator.
  - **Response Team**—A sub-team of the Action Team, responsible for creating the response plan for a specific incident and carrying out the response and recovery actions. The Response Team is headed by the Response Coordinator.

Many of these team members will be drawn from your agency or office, including IT personnel, but some such as police, fire, contractors, safety managers, emergency managers, and facility managers, may come from the outside.

As mentioned above, based on the size of your agency, individuals may serve on more than one team and in more than one role. In many cases, especially in smaller communities or small-scale incidents, there will be no difference in the membership of the Assessment and Response Teams.

Forming the Action Team

Slide 1-43

Forming the Action Team

- Identify the members:
  - Select staff who are flexible and capable of performing well under pressure.
  - Select employees at all levels.
  - Select employees who represent all functions.
- Assign responsibility.
- Select team leadership.

Identify the Members

Forming an Action Team can be one of the most important and challenging aspects of developing the REAP. It is essential to have upper management support, which should be secured as a first step in the planning process. Once you've accomplished that, you'll be on your way.

When selecting the team, it is important to select staff members who are flexible and capable of performing well under pressure. The team should consist of employees at all levels who represent important functions of the agency. A cross-functional Action Team may include the following people:

- Records and information manager
- Emergency managers
- Computer analyst
- Safety director
- Administrative assistant
- Staff with purchasing authority and contracts management responsibilities
- Facility manager

Have team participants appointed in writing by their supervisor or upper management. Also, arrange to have the team as a whole formally designated by a directive or written formal approval.

Assign Responsibility

Once you have identified the team members, you need to decide who will be responsible for major activities:

- Who will be the senior decision-maker, which includes activating the phone tree?
- Who will interact with the police, fire department, and facility management?
- Who will handle requests from the news media for information?
- Who will serve as backups in the event that designated individuals cannot make it to your facility?

Major ongoing responsibilities within the Preparedness and Response phases also need to be assigned, including:

- Selecting, maintaining, and controlling the supplies on hand
- Establishing contact with vendors and contractors and acting as liaison
- Retrieving essential records

Be sure to assign at least one backup for each responsibility and the chain of command. Two or three are even better. Ensure that absences due to vacation, illnesses, travel, or temporary disabilities will not affect the response effort.

Be sure to write emergency-related responsibilities clearly into each position description or contract and make sure that staff members who are going to be part of your Response Team receive regular and appropriate training.

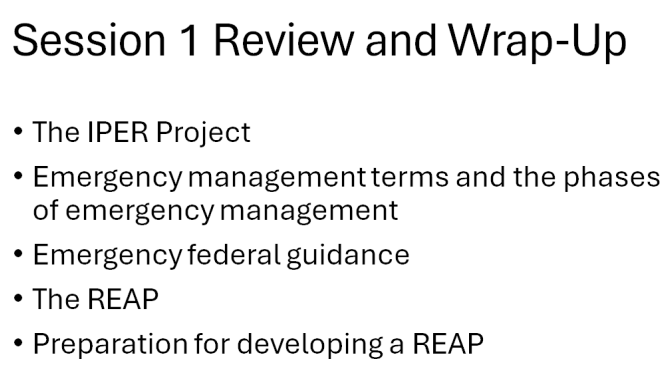
Select Team Leadership

During the Preparedness phase, everyone needs to have someone to whom they report—a team or project leader. This person should be someone who has already demonstrated leadership qualities and can take care of questions and concerns and monitor and coordinate the various teams and committees working on the plan. After the plan is completed, these same people are good candidates to be leaders of the Assessment and Response Teams in the event of an incident.

Session 1 Review and Wrap-Up

Session Review

Slide 1-44



In Session 1, you learned:

- About the IPER Project
- A number of emergency management terms and the phases of emergency management
- Emergency federal guidance relevant to protecting state and local government records
- About the REAP
  - The definition of a REAP
  - How the REAP fits with other disaster plans
  - The benefits of a REAP
- Preparation for developing a REAP
  - Determine goals and timetables
  - Assess the fiscal implications of creating a REAP
  - Create your REAP Teams

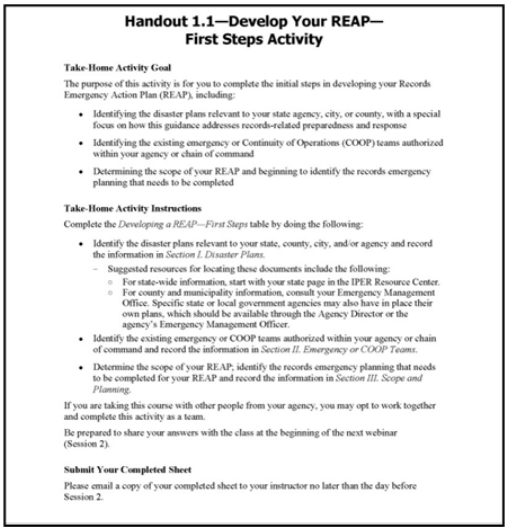
Activity: Develop Your REAP—First Steps

Activity materials:

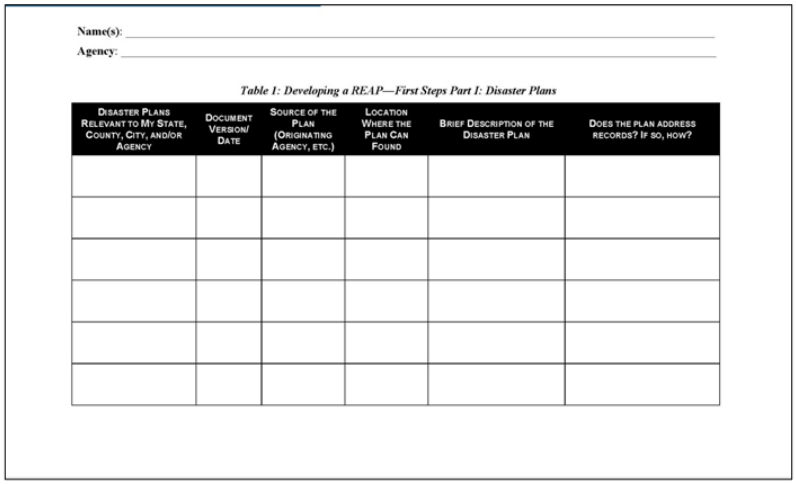
- **Handout 1.1—Develop Your REAP—First Steps Activity**
- **Georgia Disaster Recovery and Redevelopment Plan**

Materials for the Activity

Handout 1.1 —Develop Your REAP —First Steps



Handout 1.1—Table 1: Developing a REAP—First Steps



Handout 1.1—Develop Your REAP—First Steps Activity

Take-Home Activity Goal

The purpose of this activity is for you to complete the initial steps in developing your Records Emergency Action Plan (REAP), including:

- Identifying the disaster plans relevant to your state agency, city, or county, with a special focus on how this guidance addresses records-related preparedness and response
- Identifying the existing emergency or Continuity of Operations (COOP) teams authorized within your agency or chain of command
- Determining the scope of your REAP and beginning to identify the records emergency planning that needs to be completed

Take-Home Activity Instructions

Complete the *Developing a REAP—First Steps* table by doing the following:

- Identify the disaster plans relevant to your state, county, city, and/or agency and record the information in *Section I. Disaster Plans.*
  - Suggested resources for locating these documents include the following:
    - For state-wide information, start with your state page in the IPER Resource Center.
    - For county and municipality information, consult your Emergency Management Office. Specific state or local government agencies may also have in place their own plans, which should be available through the Agency Director or the agency's Emergency Management Officer.
- Identify the existing emergency or COOP teams authorized within your agency or chain of command and record the information in *Section II. Emergency or COOP Teams.*
- Determine the scope of your REAP, identify the records emergency planning that needs to be completed for your REAP and record the information in *Section III. Scope and Planning.*

If you are taking this course with other people from your agency, you may opt to work together and complete this activity as a team.

Be prepared to share your answers with the class at the beginning of the next webinar (Session 2).

Submit Your Completed Sheet

Please email a copy of your completed sheet to your instructor no later than the day before Session 2.

Name(s): _____

Agency: _____

Table 1: Developing a REAP—First Steps Part 1: Disaster Plans

Disaster Plans Relevant to My State, County, City, and/or Agency	Document Version/ Date	Source of the Plan (Originating Agency, etc.)	Location Where the Plan Can Found	Brief Description of the Disaster Plan	Does the plan address records? If so, how?

Georgia Archives Emergency Planning and Response for Essential Records

Session 2

Participant Guide

2024

Table of Contents

Session 2

Session 2 Welcome and Overview

Slide 2-1

Emergency Planning and Response
for Essential Records Course
Session 2
November 14, 2024

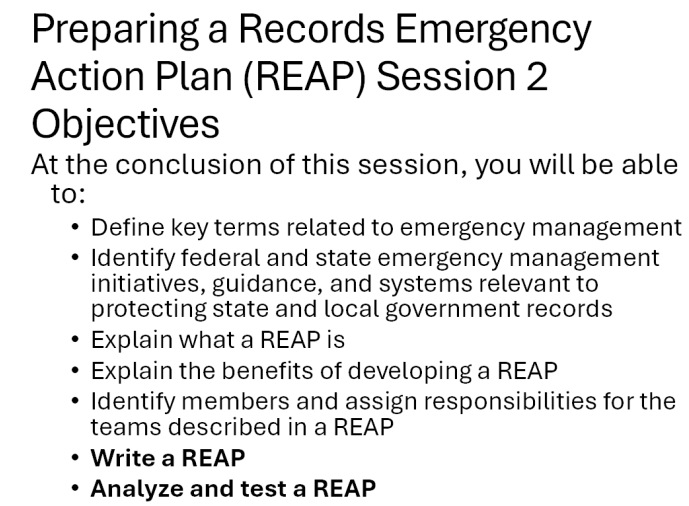
Required materials for Session 2:

- Session 2 Participant Guide
- Session 2 handout(s):
  - **Handout 2.1**—Emergency Contact Directory Template
  - **Handout 2.2**—Essential Records
  - **Handout 2.3**—Sample Records Priorities List
  - **Handout 2.4**—Supplies and Equipment List
  - **Handout 2.5**—Initial Damage Assessment and Response Checklist
  - **Handout 2.6**—Components of a REAP
  - **Handout 2.7**—Pocket Response Plan Template
  - **Handout 2.8**—Test a REAP and Develop Your REAP's Table of Contents Activity
- Materials from prior sessions:
  - Your completed handout from the Session 1 Activity: **Handout 1.1**—Develop Your REAP—First Steps Activity
- Course Reference(s):
  - **Reference 01**—Resource Center, References, Reading List

Session 2—
Preparing a Records Emergency Action Plan (REAP)

Session 2 Objectives

Slide 2-3



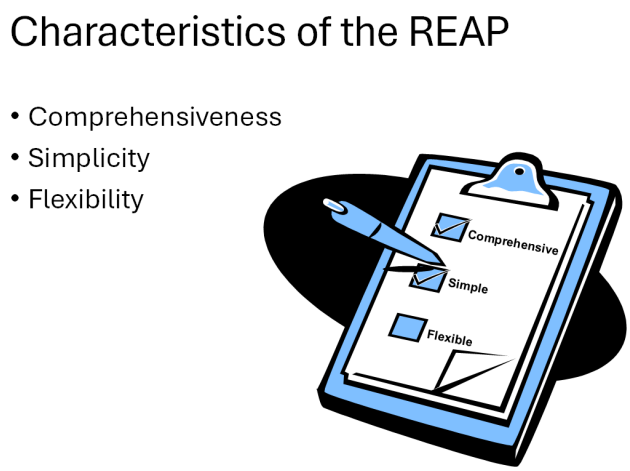
At the conclusion of this session, you will be able to:

- **Write a REAP**
- **Analyze and test a REAP**

Lesson 3: Developing the REAP

Characteristics of the REAP

Slide 2-4



There are three essential characteristics of an effective REAP: comprehensiveness, simplicity, and flexibility.

- **Comprehensiveness**—The REAP should address all hazards (types of emergencies or potential risks) as identified in the risk assessment. It should include immediate and long-term responses for recovery efforts.
- **Simplicity**—The REAP should be easy to follow, with checklists to be used in the event of an emergency. The key is to write it as simply and clearly as possible without sacrificing comprehensiveness.
- **Flexibility**—The REAP should delineate a control structure that allows for a quick assessment of the damage and an accurate determination of the best course of action for response and recovery of records and information. However, you may not be able to anticipate every contingency, so the Plan should allow for rapid decision-making for unanticipated situations.

Components of the REAP

Slide 2-5

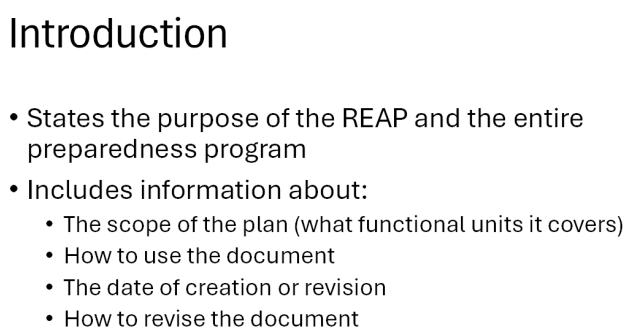
A REAP provides direction for reducing the risk to records and information from natural and human-caused hazards. It addresses the appropriate measures necessary to protect records and information, and the appropriate actions necessary to respond to and recover from an emergency event.

No two REAPs are the same, because every agency has its own risks, protection strategies, resources, policies, etc. However, there are several common components that should be part of every REAP. These components are:

- Introduction
- Policy Statement
- Responsibilities and Authorities (Delegations of Authority)
- Communication Plan
- Emergency Contact Directory
- Locations of Essential Records
- Salvage Priorities
- Supplies
- Financial or Funding Information
- Vendors and Suppliers
- Contractor Statement of Work
- Facility Information
- Staging Space
- Preparedness, Response, and Recovery Procedures
- Training, Testing, and Updating
- Appendixes

Introduction

Slide 2-6

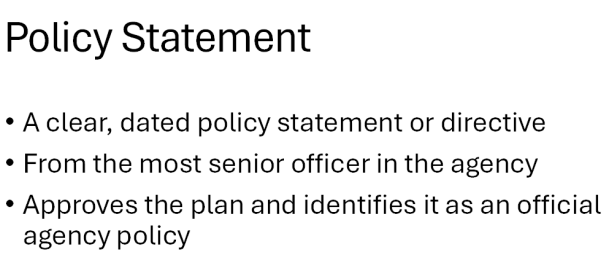


The **Introduction** should be the briefest part of the REAP. It should state the purpose of the REAP and the entire preparedness program. It should also include information about:

- The scope of the Plan (what functional units it covers)
- How to use the document
- The date of creation or revision
- How to revise the document

Policy Statement

Slide 2-7



The REAP should include a clear, dated **Policy Statement** or directive from the most senior officer in the agency that approves and identifies the Plan as an official agency policy.

The Policy Statement should clearly mandate the preparation, maintenance, testing, and implementation of the REAP; it is needed to:

- Secure the necessary cooperation among departments
- Confer the authority to examine business processes and functions
- Assign the organizational resources needed to prepare and implement the REAP

Responsibilities and Authorities

Slide 2-8

The **Responsibilities and Authorities** component should provide the following information:

- Delegation of authority and Chain of Command
- Roles and Responsibilities for Various Activities

Delegation of Authority and Chain of Command

It is essential for everyone to know who has the authority to make decisions regarding the response to an emergency and the recovery of records. The REAP must specify the positions designated to activate the Plan, as well as the conditions under which those positions are authorized to activate the Plan.

If those positions do not have the authority to execute major expenditures, then the Plan must include someone who has such authority—for example, the Procurement Officer.

The REAP should include a clear statement of the chain of authority and composition of a crisis team, including alternates, when key officers are unavailable. In the event that the agency loses one or more of its leaders in an emergency, remaining executives should be prepared to assign temporary authority.

Include at least one person from another office, such as your parent agency, a regional office, or another office that is located at least 30 miles away, if possible. If personnel from your office are not reachable during an emergency, this informed person will still be available to implement your Plan. For smaller jurisdictions, consider including people in fire and rescue departments, or others not in the main administrative building.

Roles and Responsibilities for Various Activities

REAP Teams

The list of REAP Team members and duties should appear in this section and should include the following information for each person

- Name
- Response and recovery responsibility
- Phone numbers: work, cell, and home phones
- Beepers, pagers, radio contact protocols
- Physical location of home and/or work place
- Email addresses (to allow broad distribution, if available)

If your REAP Teams are large, you may want to limit the list to the REAP Team leaders.

Records Response and Recovery Manager

Name one person to be the Records Response and Recovery Manager to head the Action Team and all response and recovery procedures, with alternates and backups named in the list. Even if you are going to rely on an outside consultant or vendor to help, you should still have a point of contact named from your agency.

The Records Response and Recovery Manager should be qualified to exercise authority during a time of crisis and should be able to make on-the-spot decisions that management will support. This person must understand all phases and activities of the response and recovery effort in order to provide direction, prevent duplication of effort, and make sure the response and recovery steps are carried out properly and in the proper sequence.

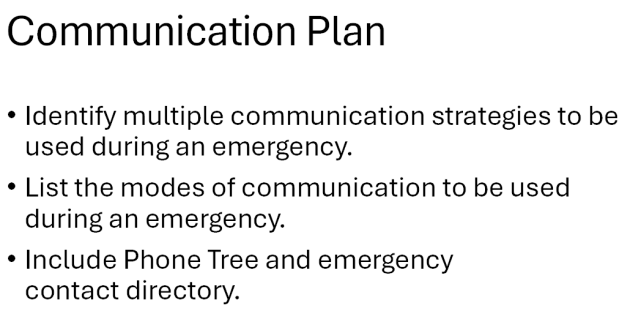
Other Assignments

Also include assignments for coordinating various other activities, including, but not limited to:

- Communications among staff (Phone Trees)
- Media contacts
- Offers of assistance (volunteer labor, supplies, cash donations, etc.)

Communication Plan

Slide 2-9



The **Communication Plan** section should identify multiple communication strategies to be used during an emergency, at both the primary site and an alternative site, if required.

The Communication Plan should list the modes of communication to use during an emergency, taking interoperability capabilities into consideration. Capture and record all information about the phone conference system, login procedures, beepers, pager numbers, smart phone numbers, and ham radio call letters in this section.

Identifying communications strategies is usually a major component of the larger Continuity Plan; it is also a critical part of your REAP.

Communication Strategies

Examples of communication strategies to consider include:

- Alternative or backup means of communication—In addition to listing the primary sources of communication to be used during an emergency (phone, email, text messaging, etc.), the Communication Plan should also include strategies for alternate or backup means of communication. What will you do if phone lines are down? What if cell phones and Internet are also down or do not function inside the affected building? Examples of alternative or backup means include:
  - Predetermined meeting location and time
  - Couriers

- Call-in voice recording—To eliminate the need to phone all nonessential employees, indicate the procedures they can use to access a call-in voice recording. On the recording, indicate the date and time of the recording, the status of the emergency, who should report to work, and instructions for those employees who are to remain at home. Also, give instructions about when to call in next. Be careful not to say, “Call back in two hours,” but give a time: “Call back at 2:00 p.m. for more updates.”
- "Meet me" conference calls—Agencies that provide services or assistance to other entities, should consider setting up a “meet me” conference call. When there is advance warning for a disaster—for example, in the event of a hurricane or flooding event—send an email 1–3 days ahead of the expected impact asking constituents to “meet” you on a conference call at a specific time and date following the event to report on damage and/or request assistance as needed. Provide a conference line phone number to call and tell them that you would like to hear from them whether or not they sustained any injuries and/or damage so you will know that they are safe.
- Information relay system—Set up a system for relaying information to members of your team. As we saw from Hurricane Katrina, communication is very important during a large-scale emergency. Prescribed messages are less likely to be misunderstood, so it might be wise to develop in advance the specific wording to be used.

Phone Tree

The Phone Tree is an essential part of communication during an emergency. List by title or position and name everyone who will be expected to assist with the recovery, along with their work, cell, and home phone numbers, and email addresses. A Phone Tree helps to ensure that no single person has to devote an inordinate amount of time to making calls. It will save time and facilitate a more rapid response.

Follow a few simple rules to make sure the Phone Tree is effective:

- When you get a call, call the next person(s) immediately.
- If the person you are calling does not answer, leave a message if possible, and also state that you are calling the people on their branch, since they were unavailable to do so. You are responsible for calling all the branches below that person.
- When you get a message, write it down, so that when you pass it on, you pass on the same message you received.

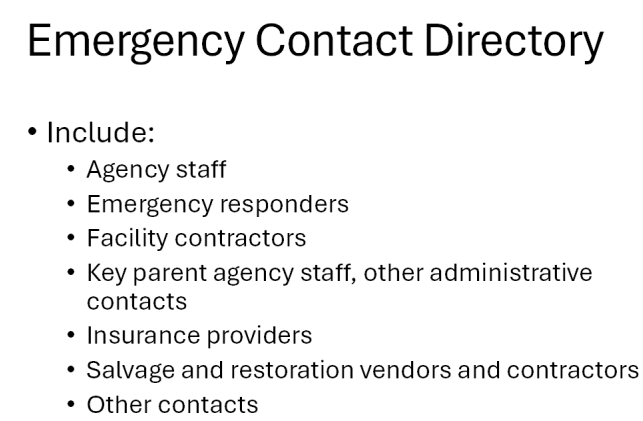
The structure of the Phone Tree should reflect the lines of authority that you have established, with the head of each division responsible for initiating contact with the other members of his or her team. It should include a backup-planning component in the event that these key positions are unavailable. Place the name and phone numbers of the lead coordinator of the Phone in a prominent place in the Phone Tree document.

It is imperative to keep your Phone Tree up to date. This is a critical piece of your REAP. An outdated Phone Tree will jeopardize your response and recovery efforts.

You should place the Phone Tree in the *appendix section* of the REAP, allowing for quick access in the event of an emergency and preventing the Phone Tree from getting buried within the narrative portion of the Plan.

Emergency Contact Directory

Slide 2-10



An important adjunct to your Communication Plan is an **Emergency Contact Directory**. It should be included in the REAP, perhaps as an appendix. Ideally, it can also be condensed in size to carry in a wallet or purse, ensuring that key contact information is always at hand.

As you compile the Emergency Contact Directory, consider whom you will need to contact immediately, within a few hours of the event, and whom you will need to contact within a day or two.
For each emergency contact, list appropriate contact information, such as phone numbers (work, cell, home); email addresses (work, home); and addresses. If an individual's address is a post office box, try to locate a physical address as well.

Be sure to include the following:

- Agency staff (in addition to basic contact information, also note distance from home to work)
- Emergency responders
  - Fire department
  - Police department
  - Ambulance, emergency medical technicians, hospitals
  - Utility companies (e.g., water, gas, electric)
  - Communication systems (e.g., telephone, Internet)
  - Security officers assigned to agency facilities
  - State and/or local emergency management agency

- Facility contractors
  - Architect
  - Electrician
  - Heating, ventilating, and air conditioning (HVAC) contractor
  - Elevator companies
  - Fire alarm, detection, suppression systems
  - Security personnel
  - Security system, locksmiths
  - Facility management, maintenance, janitorial and cleaning contractors
- Key parent agency staff and other administrative contacts, including purchasing office or financial manager
- Insurance providers
- Vendors and contractors for salvage and restoration
  - Recovery and restoration service providers for paper, photographs, film, electronic, and other media
  - Conservators and preservation specialists
  - Freezer storage providers
  - Trucking firms
  - Exterminator and fumigation services
  - Industrial hygienists, mycologists (mold specialists)
  - Glaziers
- Other contacts
  - Media contact (television, radio, newspaper)
  - State Archives

To help you prepare your Emergency Contact Directory, the Resource Center contains a directory of vendors, contractors, and suppliers who specialize in various aspects of emergency response and recovery. You can search the directory by state as well as viewing nationwide providers.

Refer to **Handout 2.1—Emergency Contact Directory Template** for an example of how to create a directory.

Locations of Essential Records

Slide 2-11

Locations of Essential Records

- Include the essential records inventory.
- Necessary information:
  - Title
  - Location
  - Retention period
  - Container ID
  - Format and media
  - Volume
  - Location of master copy (if one exists)

In the *Essential Records Course*, you learned how to identify which records were essential—the records needed to respond to an emergency and resume operations after an emergency.

Your REAP should include the essential records inventory, including title, location, retention period, container ID, format and media, volume, and location of master copy (if one exists).

For electronic media, indicate whether or not each container holds essential or permanently valuable records not duplicated elsewhere.

Records Salvage Priorities

Slide 2-12

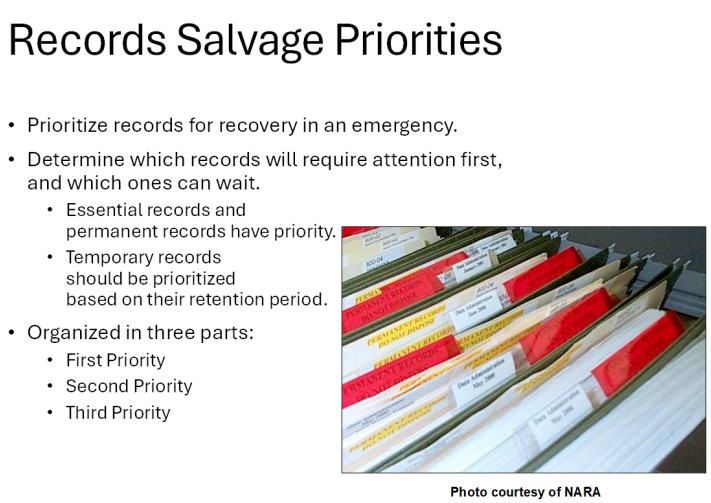


Photo courtesy of NARA

It is important that you **prioritize your records for recovery** in an emergency, determining which records will require attention first, and which ones can wait. Essential records and permanent records have priority over any other type of record.

Although essential (and permanent) records have general priority over other records in your salvage after an emergency, there are specific priority levels based on how quickly access will be required following an emergency:

- Priority 1: Access required in first 0–12 hours
- Priority 2: Access required in first 12–72 hours
- Priority 3: Access required after 72 hours

These specific salvage priorities correspond to the function of the essential records. The guidelines are explained further in **Handout 2.2—Essential Records**.

Media Considerations

In addition, you will recover some types of media more successfully if you take prompt action. Media that may require prompt action to ensure successful salvage include electronic (hard drives, flash drives) and magnetic tapes, parchment, and some photographic material. If essential or permanent records are stored on these media, you should take that into consideration when establishing your salvage priorities.

Temporary Records

Temporary records should be prioritized based on their retention period; the longer the retention period, the higher the priority. Some agencies create records with 75- to 100-year retention periods. These records should take priority over records with short retention periods. If you have a currently functioning records management program in place, your job has been made easier because you can rely on current records inventories, file plans, and retention schedules to help you prioritize.

Organization of the Records Salvage Priorities Section

The Records Salvage Priorities section should be organized in a list containing the following categories:

- First Priority—This includes materials that are difficult or impossible to replace or replicate, and those that are essential for resuming operations if they are not duplicated elsewhere. This category includes permanent records.
- Second Priority—This includes items that are difficult to replace, that provide significant operational or research value, and that are not duplicated elsewhere.
- Third Priority—This includes materials that can be replaced or that can be considered expendable.

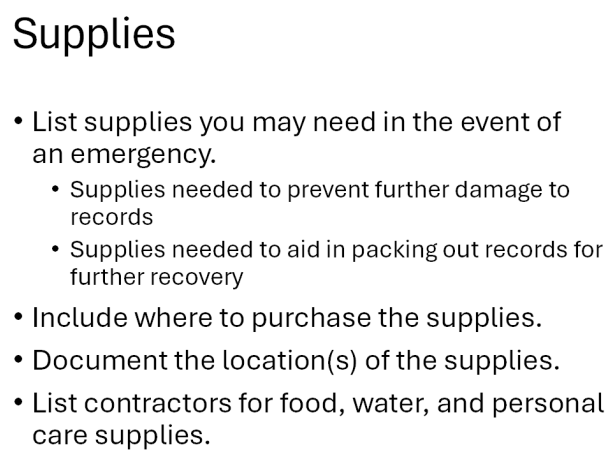
Also include in the list the following information about the records:

- Record series under each category
- Record retention schedule number and item
- Retention period
- Physical location of the records

(Refer to **Handout 2.3—Sample Records Priorities** List for an example of a records priorities list.)

Supplies

Slide 2-13



The **Supplies** section should list supplies you may need in the event of an emergency. Include those that will be needed to prevent further damage to records and to aid in packing out records for further recovery, along with information on how to purchase the supplies.

Once you have created the list, start purchasing the supplies so that you have them on hand if an emergency occurs. The supplies should be stored and secured in a protected room or closet that is accessible to emergency team members.

Refer to **Handout 2.4—Supplies and Equipment List** for an example of a Supplies section of a REAP. Use this list as a basis for your own list or rearrange it to suit your needs—for example, by types of items, where to purchase them, or areas where they will be stored or used.

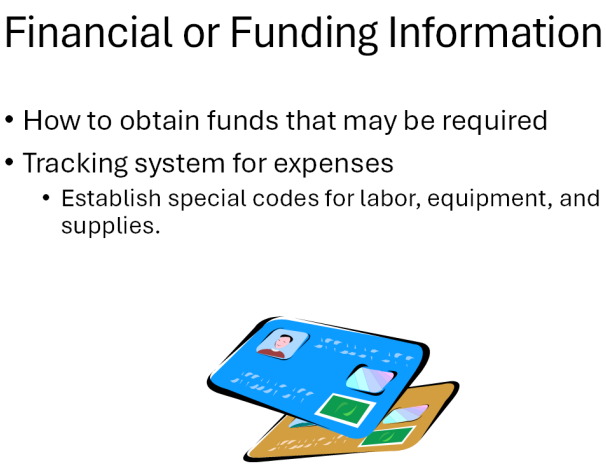
The Supplies section should also document the *location(s) of the supplies*, including several optional recovery areas with some pre-positioned supplies. Be aware that some states may have stockpiles of supplies available for your use. Determine whether your state has emergency stockpiles of supplies, and if it does, indicate where those stockpiles are located, what supplies are included, and points of contact for accessing the stockpiles.

Inventory your emergency supplies at least once a year. They are very tempting to staff who know where they are and how to access them. Make sure you have funds to replenish the supplies as needed.

Place the supply lists in the appendix section of the REAP to allow for quick access in the event of an emergency and to prevent the lists from getting buried within the narrative portion of the Plan.

Financial or Funding Information

Slide 2-14



You will also need to plan and document how you will obtain **funds** that may be required to purchase any necessary equipment and supplies you may not have on hand. Options include:

- Designated account for emergency funds
- Petty cash
- Purchase orders or requisitions
- Government credit cards

It is important to understand your agency's procurement process and to have the *Procurement Officer* activated. Additionally, finance and accounting personnel need to track expenses associated with an emergency. Records of expenses, staff time, overtime, and so forth, will be crucial if FEMA reimbursement is available for the emergency. Establish special codes for labor, equipment, and supplies to ensure proper accounting of expenses.

As part of your planning, discuss what reimbursement provisions should apply in an emergency and identify staff that might have this option in case supplies are needed before the normal acquisition process can deliver them.

Vendors and Suppliers

Slide 2-15

Vendors and Suppliers

- List vendors and suppliers of records emergency services and supplies.
- Consider developing standing contracts.

FEMA/Win Henderson—New Orleans—2005

Include a list of **vendors and suppliers** of records emergency services and supplies in your REAP. Make sure to review the list annually and keep it up-to-date. Consider developing standing contracts for these.

Suggested vendors and suppliers to include are:

- Services:
  - Appraisers
  - Archivists and records managers
  - Conservators and preservation specialists (for paper, books, magnetic media, videotape, film, photos, textiles, paintings, objects)
  - Data recovery specialists
  - Debris removal
  - Disaster recovery consultants
  - Exterminator, fumigation
  - Freeze drying (vacuum, thermal)
  - Locksmith
  - Microfilming, digitization labs
  - Moisture, mold removal
  - Trucking and transportation
  - Caterers
  - Water delivery services

- Supplies, equipment, and facilities
  - Supplies
    - Storage containers and supplies
    - Archival and conservation supplies
    - Cleaning supplies
    - Cots
    - Bathing facilities
    - Portable toilets
  - Equipment
    - Wet/dry vacuums
    - Generators
    - Sump pumps
    - Dehumidifiers
    - Fans
  - Facilities
    - Refrigeration
    - Temporary storage with appropriate environmental controls and security

Statement of Work, Contract, and Memorandum of Understanding

Slide 2-16

Statement of Work, Contract, and Memorandum of Understanding

- A generic draft Statement of Work (SOW), ready to use
  - Obtained from your Procurement Office
- Signed contracts or Memorandums of Understanding (MOU)

You should include in your REAP a generic draft **Statement of Work (SOW)** ready to use to obtain needed services in the event that an emergency befalls your records. You can obtain this draft SOW from your Procurement Office.

If you have signed **contracts** or **Memorandums of Understanding (MOUs)** with individual contractors for specific services, you should put these in your REAP as well. However, if they contain confidential or private information, access to them should be restricted.

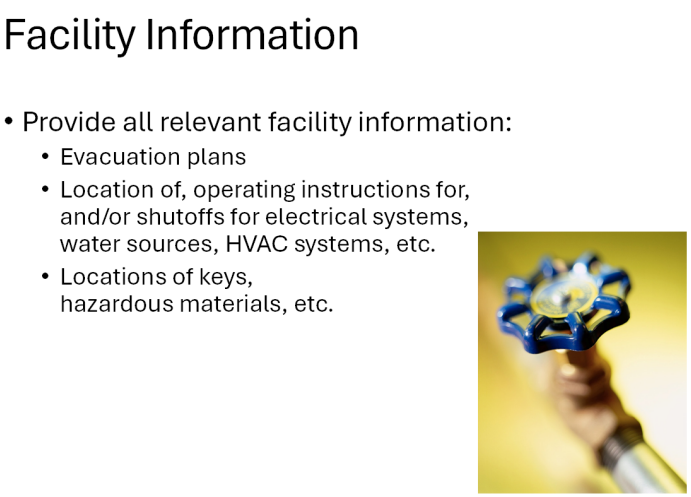
Make sure to include in your REAP the procedures for activating the contract or MOU. Include the names, addresses, phone numbers, and 24-hour contact number of the contractors with which you have established contracts for response and recovery.

Make sure that your contractor has prior experience dealing with the formats of records and types of damage that may be involved in an emergency. Always require references from previous clients, including a contact person, current phone number, email address, and brief description of the services provided.

Another key point your contract must address is the confidentiality and security of your records. Require the contractor to demonstrate that it can meet appropriate levels of confidentiality and security for its facility and for its employees. Municipal or county government agencies should note that some states have statewide emergency response contracts or other resources, and that localities should look into those before using their own. Some state agencies may be able to purchase from federal contracts. Check with your state emergency management agency for their guidance. Also check with your state's procurement agency.

Facility Information

Slide 2-17



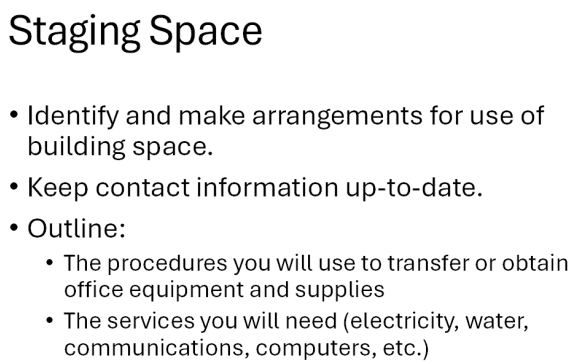
The REAP should contain all relevant **facility information** (unless such information is already contained in your overall disaster plan), including:

- Evacuation plans, including provisions for employees and visitors with disabilities
- Location of, operating instructions for, and/or shutoffs for:
  - Smoke detectors
  - Fire alarms, extinguishers, hoses, sprinklers, and other suppression equipment
  - Electrical systems
    - Fuse boxes, outlets, light switches
  - Water sources, pipes
  - HVAC systems
  - Elevators
- Locations of:
  - Master keys
  - Floor plans
  - Hazardous materials

You should place the facility information in the appendix section of the REAP, to allow for quick access.

Staging Space

Slide 2-18



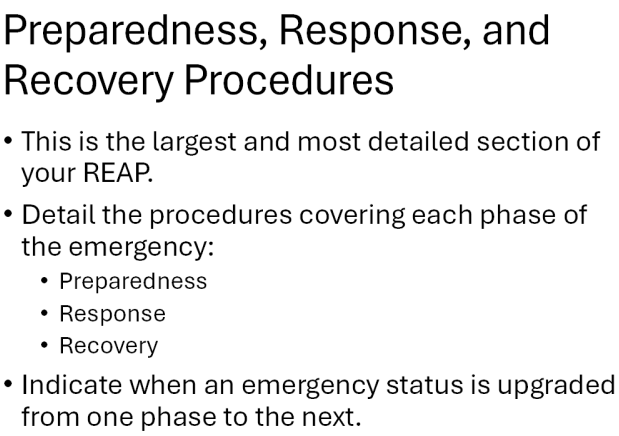
Survey your building(s) for **space** that might be useful to stage for salvage of records. Contact the proprietors of your building(s) about the availability of space and make arrangements for use of the space in the event of an emergency. Document these arrangements in your REAP.

Spell out agreements and procedures, and keep contact and all other information up-to-date in your REAP.

Also outline the procedures you will use to transfer or obtain office equipment and supplies and the services you will need, such as electricity, water, communications, and computers.

Preparedness, Response, and Recovery Procedures

Slide 2-19



The **Preparedness, Response, and Recovery Procedures** section will comprise the largest and most detailed section of your plan. As explained earlier, your REAP must address specific emergencies and how to handle them, as identified in your risk assessment. It must provide for both major and minor emergencies and should include both site-specific and community-wide events. This is the section of your REAP that captures this information.

In the Preparedness, Response, and Recovery Procedures section, agencies should detail the procedures covering each phase of the emergency and the steps necessary to prepare for and control the emergency. These steps should be continuous across the phases, from preparedness to response to recovery. You should include disaster recovery procedures, disaster recovery services and resources, and salvage equipment and supply listings, as needed, for each phase.

This section should also indicate when an emergency status is upgraded from one phase to the next.

Examples of the emergencies you may include in the Preparedness, Response, and Recovery Procedures section are:

- Fire, smoke
- Pipe breaks and/or water leaks
- Floods
- Hurricanes
- Tornadoes

- Other severe weather
- Earthquakes
- Bomb threats
- Explosions, including aircraft crashes in vicinity
- Medical emergencies involving employees or visitors
- Hostile confrontations
- Elevator emergencies
- Hackers, denial-of-service attacks (information systems, website)
- Contamination (chemical, biological, radioactive, gas leak)
- Terrorism (letter bombs, chemical, biological, radioactive attacks)

Unforeseen problems will inevitably arise during any emergency, but it is still possible to develop successful plans of action. Lay out a sequence of logical steps ahead of time to mitigate further damage to the records. Make instructions clear and simple so that any worker can understand and implement them during an emergency. This is especially important for a recovery operation. You never know who is going to be on the front lines of an emergency—it may not always be someone with experience.

Preparedness Procedures

The preparedness procedures should describe any actions that should be taken to mitigate damage to records and information if there is advance warning of an emergency. Examples include:

- Covering shelving, file cabinets, and computers with plastic sheeting
- Making sure that all files are housed in appropriate containers, such as boxes or file cabinets
- Moving records off the ground to higher shelving
- Implementing system security restrictions to protect data from a disgruntled employee

The action(s) that should be taken will depend on the nature of the anticipated emergency.

Response Procedures

The response procedures should show the continuing steps from the preparedness phase to the response phase. The response procedures should include:

- All response actions that need to be taken with regard to records in the event of an incident
- Who is responsible for each response action, such as:
  - Activating the Phone Tree
  - Evaluating and documenting damage to records
  - Determining mitigation actions to prevent further damage to records

You should also include a damage assessment checklist or similar document in your response procedures. This checklist provides a way to gather the initial emergency information needed to establish priorities and appropriate recovery responses. It also allows for all assessments to be assembled into a single comprehensive overview of damage, which is very important in a medium- to large-scale event where multiple forms are completed. Additionally, it provides a structure to ensure that Assessment Teams gather the same information.

An example of a damage assessment checklist is provided in **Handout 2.5—Initial Damage Assessment and Response Checklist**. It was adapted from a checklist included in the Field Guide to Emergency Response, produced by Heritage Preservation in support of the Heritage Emergency National Task Force. A copy can be purchased at the American Institute for Conservation website: *https://store.culturalheritage.org/site/*

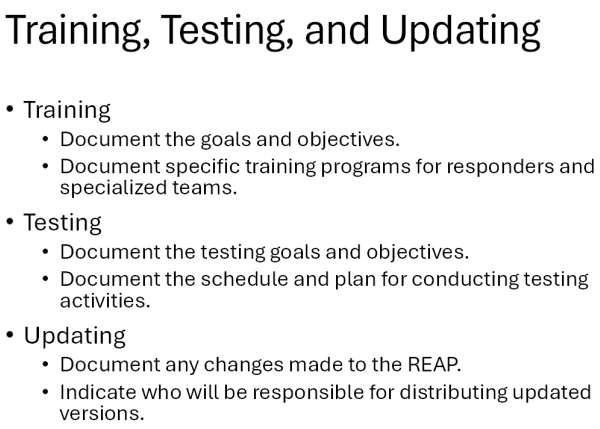
Recovery Procedures

The recovery procedures should show the continuing steps from the response phase to the recovery phase and should include:

- All recovery actions that need to be taken with regard to records in the event of an incident
- Who is responsible for each recovery action, such as:
  - Securing recovery areas
  - Starting damage assessment
  - Activating the hot site

Training, Testing, and Updating

Slide 2-20



Training

Once you have developed the REAP, you should obtain final management approval. When the plan is approved and ready for distribution, make sure to inform employees about the plan and how it will be implemented. You will need to provide periodic refreshers on the content and use of the REAP. The REAP should document the goals and objectives for training all employees. Specific training programs for responders and specialized teams should also be developed and documented in the REAP.

Testing

A REAP must be tested routinely to ensure that it is accurate and functional. You should develop a plan—with goals and objectives—and a schedule for conducting tests of the REAP, and document the plan and schedule in your REAP.

Updating

REAP Teams must review and update the REAP, not only to ensure that all information is accurate and up-to-date, but also to integrate any new elements of their agency's records program. Events such as the introduction of new computer hardware or software, the development of new essential records for a new product or service, a change in accounting procedures, etc., all directly affect the Plan.

Establish a schedule for routine reviews and updates and identify the responsible parties. Document the schedule and list of responsible individuals in the REAP. Record any changes made to the REAP in a separate section of the document. Include the change number, the date of the change, the pages of the REAP affected, and a description of the change. You will need to make sure that REAP updates are distributed. Be sure to indicate who will be responsible for sending out the updated versions.

Appendixes

Slide 2-21

Appendices

- Information which is needed for the effective execution of the REAP, but which should be kept separate from the main narrative of the Plan

The final section of the REAP provides information which is needed for the effective execution of the Plan, but which should be kept separate from the main narrative of the Plan. Place these items in the Plan as **appendixes**:

- Phone Tree
- List of additional essential contacts and resources including vendors
- Essential personnel from outside your agency's location
  - Safety and Facility Managers
  - Security experts
  - Agency Records Officer and other regional or Headquarters staff—names, titles, home and work phone numbers, cell phone and pager numbers, and email addresses
- Contact information for agencies that can assist or advise during an emergency, which may include:
  - State archives and records management agency(ies)
  - State, county, and/or local emergency management agencies
  - State or local information technology agency
  - State environmental and public health agencies
- Supplies, equipment, and space list

- Forms for:
  - Assessing damage
  - Tracking records (pack-out tracking log)
- Reduced floor plans with locations of:
  - Fire extinguishers
  - Emergency lights
  - Smoke detectors
  - Fire exits
  - Evacuation routes
  - Water shutoff valves
  - Fire alarms
  - Locations of records indicating the type and response priority
  - Computer network servers and mainframes
  - Phone switchboards
  - Cutoffs for gas and electricity
  - Emergency supplies
  - First aid equipment
  - Hazardous materials
- Essential records inventory and plan

(Refer to **Handout 2.6—Components of a REAP** for a template to help you develop your REAP.)

Resources for Help

Slide 2-22

Pocket Response Plan (PReP)

EMERGENCY PREPAREDNESS INITIATIVE
Securing Our Nation's Essential Records

Several resources are available that can either complement your REAP or help you create your REAP, including:

- The Pocket Response Plan (PReP)
- dPlan
- Heritage Preservation's Field Guide and Wheel

Pocket Response Plan (PReP)

As a complement to—not a substitute for—your REAP, the Council of State Archivists (CoSA) created the Pocket Response Plan (PReP), a concise document for recording essential information needed by staff in case of an emergency.

The PReP is designed to be carried by each staff member who has specific responsibilities during an emergency. It should focus on information and guidance that will be needed during the first 24 to 72 hours after an event occurs. It is formatted as a two-sided, legal-sized document that can be folded to the size of a credit card, inserted in a Tyvek® envelope for protection, and carried in a wallet.

The PReP document should contain the most critical information needed in a crisis and cover any kind of emergency, including natural disasters, accidents, attacks, and medical emergencies.

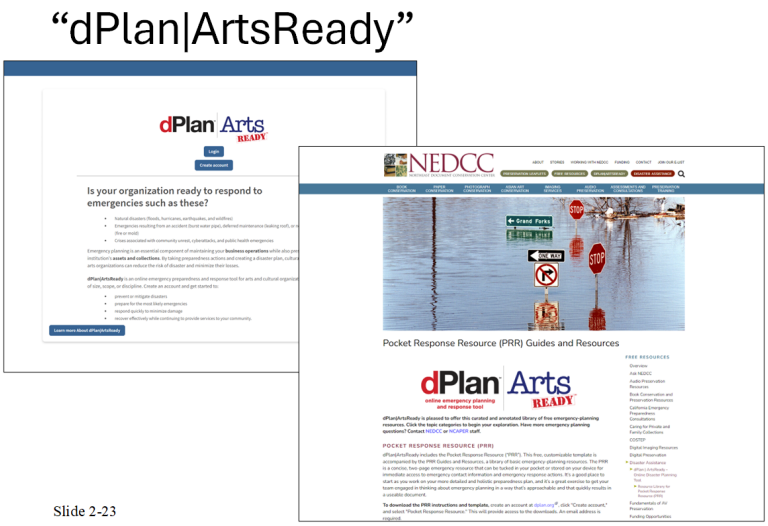
To restate: The PReP document is NOT intended to be a substitute for a REAP. Instead, it should distill the most important actions to be taken in the first minutes and hours after an event occurs, especially those that occur when staff members are away from their offices. It also assumes that most staff will have access to the full disaster plan when they are at work and that senior officials and other key staff have copies of the full plan with them at home or while on extended travel.

(Refer to **Handout 2.7—Pocket Response Plan Template** for CoSA's PReP template.)

For more information on the PReP, including detailed instructions for creating and completing a PReP, and access to PReP templates, refer to the PReP page on CoSA's website: *https://www.statearchivists.org/research-resources/emergency-preparedness/pocket-responce-templates*

"dPlan|ArtsReady"

Slide 2-23



As a tool to help create your REAP, you might consider using dPlan, a free online tool that simplifies the process of writing a disaster plan for your collections. dPlan was developed by Northeast Document Conservation Center (NEDCC) and the Massachusetts Board of Library Commissioners (MBLC) to assist organizations that hold cultural collections (such as libraries, archives, historical societies, and local governments) in preparing disaster plans.

In 2017, the Mellon Foundation awarded a grant to LYRASIS for the Performing Arts Readiness project, which included funding to combine and upgrade NEDCC's dPlan with South Arts' ArtsReady online preparedness tool. This new and improved tool was released in 2022.

Today, dPlan|ArtsReady provides comprehensive fill-in-the-blanks templates into which you enter information about your institution. The tool offers guided planning for risk assessment and preparedness actions, as well as Cloud storage for your agency's essential records needed for disaster response. dPlan|ArtsReady provides printable versions of your disaster plan elements in the event that the technology powering dPlan goes down for any reason.

New users to dPlan|ArtsReady should be aware that there are two options for creating an account for this online tool:

- Free Plan - this account type does not require a subscription fee. It allows users to download the PrEP and have access to the PRR Guides and Resources with emergency-planning resources.
- Paid Subscription Plan - this account type offers users to sign-up for one year of access to dPlan|ArtsReady. It allows users to have the guided risk assessment, Cloud storage, printable reports, and more. This subscription plan offers options for individual organizations or state agencies.

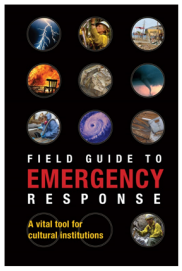
To view both subscription options and the resources that are provided, please visit the dPlan| ArtsReady website: *https://www.dplan.org/*

If your organization had an account with dPlan prior to 2021, please be aware that your data may have been transferred into the updated dPlan|ArtsReady. You will need to check the dPlan|ArtsReady website for steps on how to access your data.

Heritage Preservation's Field Guide and Wheel

Slide 2-24

American Institute for Conservation
Field Guide and Wheel



Field Guide to Emergency Response

Emergency Response and Salvage Wheel

Heritage Preservation's Field Guide to Emergency Response

Heritage Preservation's Field Guide to Emergency Response provides step-by-step instructions on how to respond to an emergency, form a response team, and stabilize your collections. Although written from the point of view of cultural heritage collections, the Field Guide information applies to all records and information.

Heritage Preservation's Emergency Response and Salvage Wheel

Heritage Preservation's Emergency Response and Salvage Wheel is a hands-on tool that helps you:

- Find reliable information instantly
- Protect precious collections and significant records
- Take steps to save damaged objects

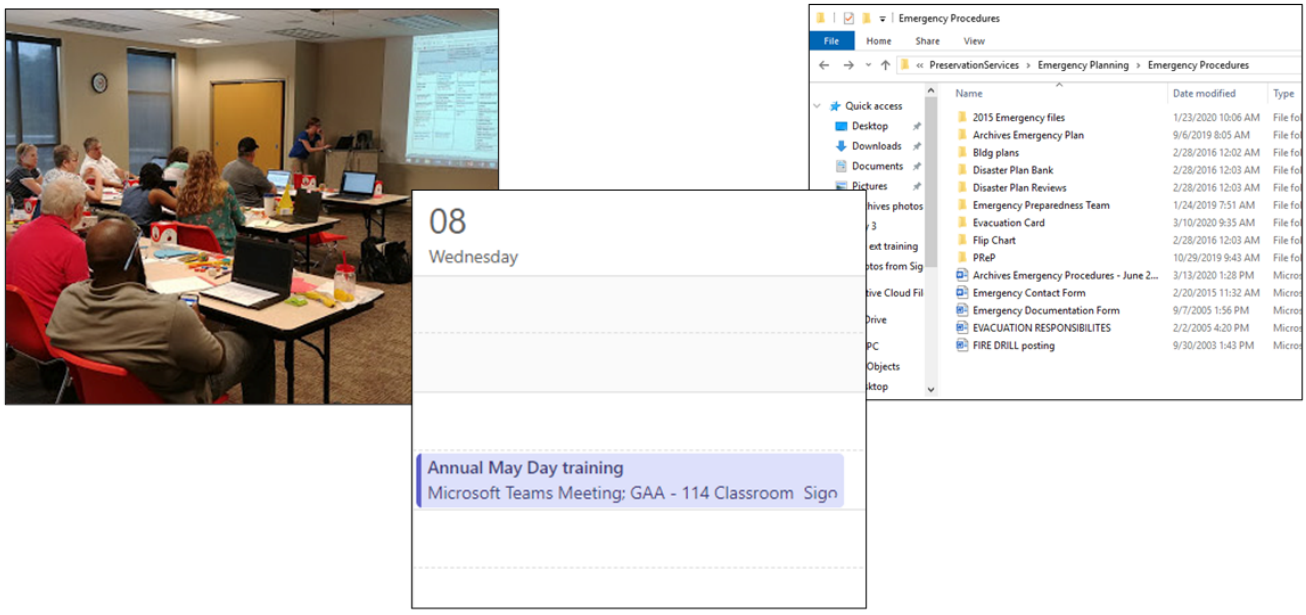
The field guide and wheel are available for purchase on the American Institute for Conservation website, at: *https://store.culturalheritage.org/site/*

Lesson 4: Maintaining the REAP

Slide 2-25

Session 2 —Preparing a Records Emergency Action Plan (REAP)

Lesson 4: Maintaining the REAP



Five Steps for Success

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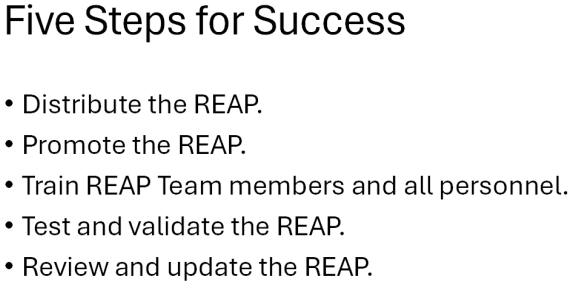


Maintaining the REAP involves the following five steps:

- Distribute the REAP.
- Promote the REAP.
- Train REAP Team members and all personnel.
- Test and validate the REAP.
- Review and update the REAP.

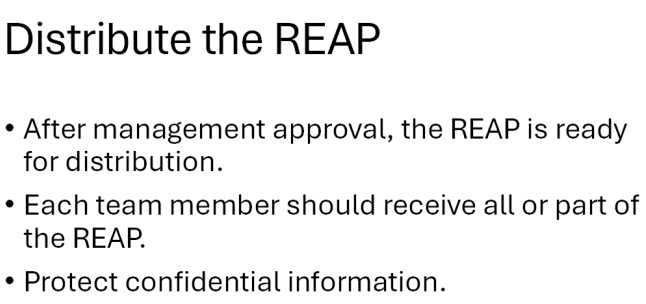
The purpose of these steps is to ensure that you and the REAP Team members know how to minimize loss and damage to records, while protecting human health and safety and ensuring continuous operations. Unless you and your team perform these critical steps, it is likely that the Plan will become outdated and that key personnel will be unfamiliar with their responsibilities in an emergency. However, if you and the team follow these steps, an emergency response is more likely to be effective and to prevent serious damage to records.

An Ongoing Process

It's important to note that maintaining a REAP is not a one-time procedure, in which you complete the five steps and you're done. Rather, it is an ongoing process, in which those responsible for maintaining it perform the five steps on a regular and routine basis.

Distribute the REAP

Slide 2-27



Once management has approved the REAP, it is ready for distribution—the approved REAP is useless if it is not available to the people who need to use it in an emergency.

Each team member should receive all or part of the REAP—it is not necessary to distribute the entire Plan to people who will be performing only limited functions or who do not need access to confidential components of the Plan. For example, a checklist for retrieving emergency supplies or telephoning employees may be all that you need to give to the employee responsible. Checklists are easy to read and follow when responding to an emergency. However, team leaders and management need to have the full Plan, as they will be responsible for overseeing all aspects of the preparedness, response, and recovery phases.

Keep copies of the REAP in a three-ring binder—not bound—because updates and page changes will continue to be made. The binder should have a distinctive cover—something eye-catching that cries out “Emergency!”—such as a red cover.

Each person who receives a copy of the REAP should be required to sign for the Plan indicating that they have read the Plan, updated it, and destroyed the old Plan if applicable.

Protect Confidential Information

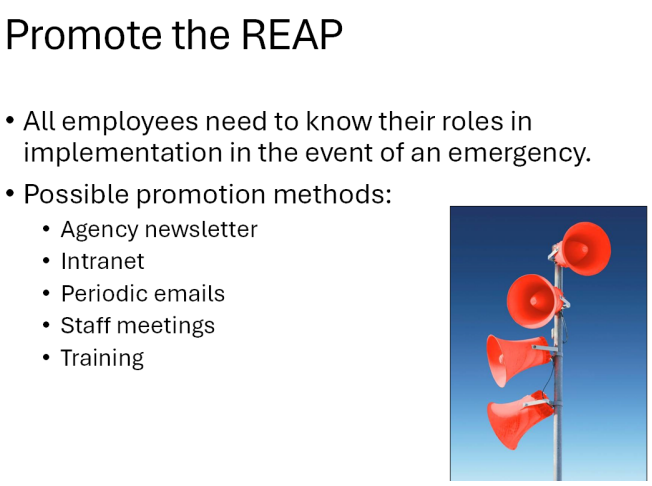
When distributing the Continuity Plan, remember that it may contain confidential information, so you should carefully control distribution of the complete Plan. Employees involved in records management and Continuity Plan, as well as management, should have a complete copy of the Plan in both paper and electronic formats. Other employees should receive only the portion of the Plan that is pertinent to their assigned duties.

The REAP is an Essential Record

The REAP itself is an essential record, one that is dynamic and always changing. Copies should be kept in a variety of locations besides the office, so that they can be retrieved quickly during an emergency. You may not be able to get back into your building, so if you have a copy in your car, at home, and/or stored in an adjacent building, your response will be much more effective.

Promote the REAP

Slide 2-28



It is essential that you promote the REAP to all employees. All employees need to know what their roles will be in the event of an emergency, even if that role is only to ensure the safety of the records in their office.

There are several ways to promote the Plan internally. Possible promotion methods include:

- Adding a REAP section to the agency newsletter
- Putting a link on the intranet with local information
- Sending periodic emails to employees
- Getting on the agenda for staff meetings on a recurring basis, two to four times a year
- Incorporating regular REAP training and awareness activities in employee performance plans and annual work plans

Train REAP Team Members and All Personnel

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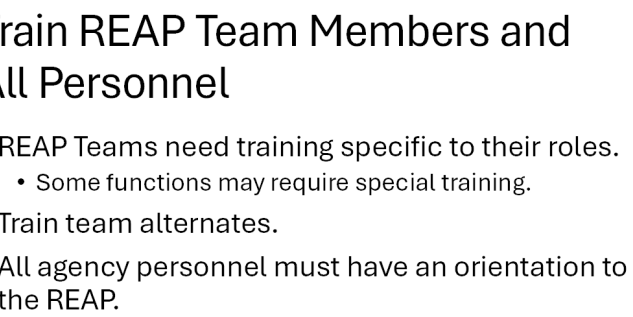


REAP Teams

All REAP Teams will need training specific to their roles. The training may include:

- Fire extinguisher use
- Records salvage practice
- Evacuation drills
- How to clear the building for re-entry by staff or information technology (IT) staff
- How to set up an alternate worksite

Some functions may require special training; these include Facility Manager, Procurement Officer, and IT staff.

It is important to give team members the time to become knowledgeable about their responsibilities before an emergency occurs so that they will know exactly what to do when the time comes. REAPs can be quite lengthy and contain enormous amounts of information. Individuals cannot stop to read large tracts of information when they are trying to evacuate a building or move damaged records out of harm's way. Consider using checklists to ensure that critical actions are taken.

In the event of an emergency, it may be necessary to provide the security guard with a list of employees who have access to the facility during the different stages of recovery.

Don't forget to include training for the team alternates so that they too are properly trained, in case they need to step in.

All Personnel

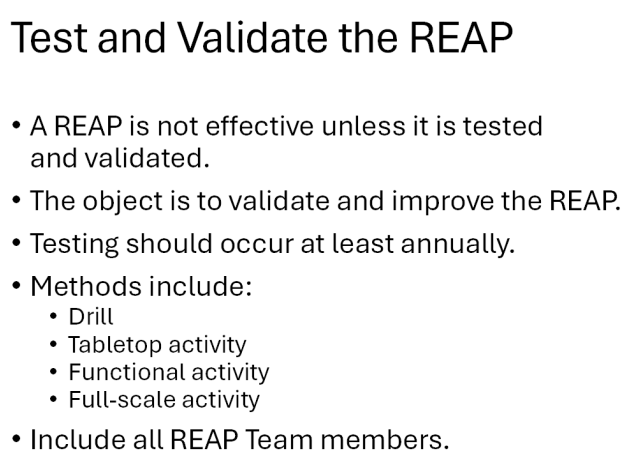
In addition to the REAP Team members, it is essential that all agency personnel have an orientation to the REAP. In the midst of an emergency, people will be distracted and will be unable to remember what they are supposed to do unless the Plan has been made familiar to them beforehand.

Outside Assistance

If you need assistance with your training, your state emergency management agency, state archives and records management agency, and professional records organizations, such as CoSA, the National Association of Government Archives and Records Administrators (NAGARA), and ARMA International, can be consulted or brought in to assist.

Test and Validate the REAP

Slide 2-30



No REAP can be effective unless it is tested and validated. Testing takes time and resources; however, without testing it is impossible to determine which aspects of the REAP will work and which will not during an emergency. Testing is also very effective for cementing a team into a functioning unit. Testing a REAP takes place in two stages:

- During development
- After the Plan is in place and on a recurring basis at least once a year thereafter

Tests will:

- Reveal weaknesses in the REAP
- Validate planning assumptions
- Identify shortages of supplies and personnel
- Improve coordination between people and departments
- Help agency leaders gain confidence in the Plan
- Improve the knowledge and skills of the employees who participate in the test
- Help ensure that people know and understand what they are supposed to be doing during an emergency

Your test will reveal the strong points and weak points of the REAP. For example, the backup power supply on your network computer may prove to keep the server in continuous operation successfully during a one-hour “power outage” test, while the Phone Tree fails because certain people weren’t at home to take calls and pass information on to others.

The object of the test is to validate and improve the REAP. The more the Plan is tested, the more resilient it will be.

Testing should occur at least annually, much as fire drill mechanisms and building evacuation procedures are tested. Agencies can use several models of testing, including:

- Drill—A basic exercise that tests a simple function, such as a communications drill
- Tabletop exercise—A simulation of an emergency in which the exercise is conducted in narrative format to discuss various scenarios and actions around a table
- Functional exercise—A simulation of an emergency in which only portions of a REAP are tested (the exercise is limited to specific functions of an agency)
- Full-scale exercise—A simulation of an emergency in which all functions and all elements of the REAP are tested

The tasks to include in the testing should match those that would be performed during an emergency, including:

- Verifying the availability of team members by activating the Phone Tree
- Briefing the team on incident and current conditions
- Working with the Continuity staff to coordinate business at the alternate site. Obtaining access to essential records stored off site, possibly during non-business hours
- Testing communications equipment (cell phones, walkie-talkies, etc.) to determine that they function within the affected building
- Assessing the damage to records at the affected location
- Establishing records recovery worksites and gathering supplies
- Coordinating salvage efforts with emergency recovery firms

The test should include all REAP Team members and should evaluate the condition and readiness of the Plan and the team members.

You can make the test into a fun event. Come up with an interesting scenario like a power outage that shuts off the lights to one part of the building and have the employees act out the roles of the "distressed worker," the "confused manager," and the "reporter from the local evening news" who descends on your building to investigate. You do not have to test the Plan in its entirety. You can test portions of it in several small phases using different scenarios.

After the test is completed, determine what worked and what did not, and make the necessary modifications to the Plan as soon as possible. Report test results to management within 30 days of the test, along with recommendations for resolving any deficiencies.

Review and Update the REAP

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Review and Update the REAP

- Regularly review and update information contained in the REAP to ensure that it is accurate and current.
- Establish a schedule.
- Regularly check and update all dynamic data, especially in appendixes.
- Distribute updates immediately.

As mentioned earlier, it is important to review and update information contained in the REAP regularly to ensure that the information remains accurate and current. An outdated REAP will do you no good when you are in the throes of an emergency.

Thorough evaluation and testing are important not only when you first write your Plan but also at regular intervals, at least annually. It is crucial that a single person in a policy position (assistant city or town manager, deputy commissioner) have overall responsibility for assuring top agency officials that the REAP is always ready for emergency use.

Assign the person on the Action Team who follows your established schedule for periodic reviews, tests, and updates to report REAP readiness status to the person in the policy position mentioned above.

The first day of May is the day that archives traditionally focus their attention on emergency preparedness as part of an event called “MayDay.” You might plan to re-evaluate your REAP each year on MayDay. Regularly check and update all dynamic data, especially those found in appendixes. Dynamic data include:

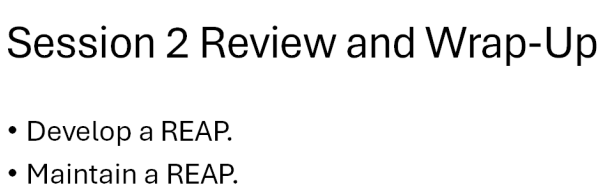
- All contact information (phone numbers, names, addresses, etc.)
- Contractor information
- The list of records emergency recovery specialists with their areas of expertise and points of contact
- Internal and external regulations

Distribute updates to staff immediately, as needed.

Session 2 Review and Wrap-Up

Session Review

Slide 2-32



In Session 2, you learned:

- How to develop a REAP
- How to maintain a REAP

Georgia Archives Emergency Planning and Response for Essential Records Course

Session 3

Participant Guide

2024

Table of Contents

Session 3 Welcome and Overview

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Emergency Planning and
Response for Essential Records Course
Session 3
November 14, 2024

Required materials for Session 3:

- Session 3 Participant Guide
- Session 3 handout(s):
  - **Handout 3.1**—Response Plan Template
  - **Handout 3.2**—Personal Health and Safety During Response
  - **Handout 3.3**—Emergency Response Checklist: First 48 Hours
  - **Handout 3.4**—CyberSecurity Activity
  - **Handout 3.5**—Develop Your REAP—Decision Maker, Site Assessment, Goals and Timetables, or Action Team
- Materials from prior sessions:
  - **Handout 2.4**—Supplies and Equipment List
  - **Handout 2.5**—Initial Damage Assessment and Response Checklist
- Course Reference(s):
  - **Reference 01**—Resource Center, References, Reading List

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Session 3 Overview

- Sessions 1 & 2 —Preparing a Records Emergency Action Plan (REAP)
- Session 3—Records Emergency Response and Recovery
  - Lesson 1: Assessing the Damage to Records
  - Lesson 2: Developing the Response
  - Lesson 3: Implementing the Response

Session 3—
Records Emergency Response and Recovery

Session 3 Introduction

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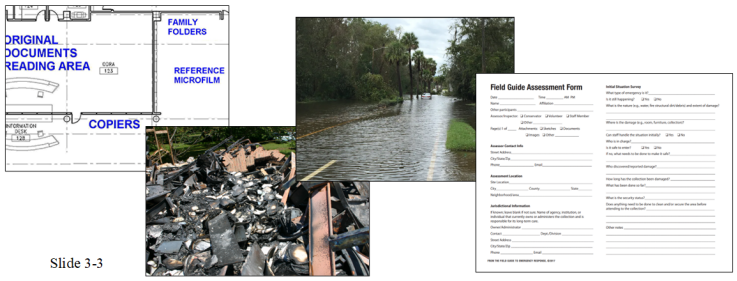
Session 3—Records Emergency Response and Recovery

Introduction and Objectives



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How Bad Can It Get?

Photo courtesy of CoSA/David Carmicheal, Christine Wiseman—Damaged maps and atlases, Biloxi Public Library, Biloxi, MS

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Slide 3-5

How Bad Can It Get? (cont'd)

Photos courtesy of CoSA/Christine Wiseman—Historic photographs—Mississippi, post-Hurricane Katrina

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Slide 3-6

How Bad Can It Get? (cont'd)

Photo courtesy of CoSA—Office records and computers damaged by arson

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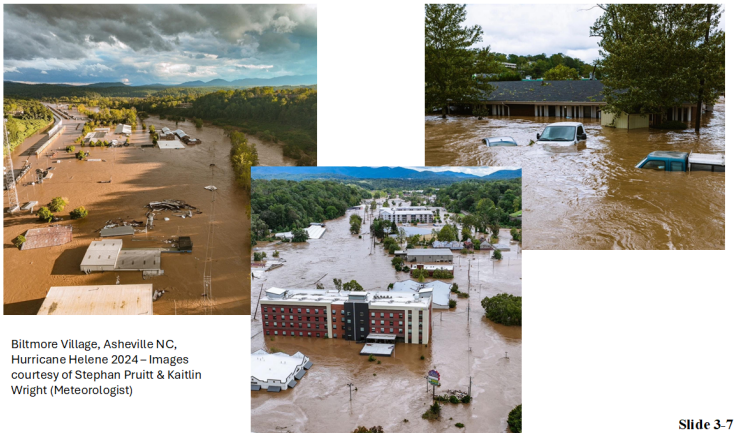
How Bad Can It Get? (cont'd)



Biltmore Village, Asheville NC, Hurricane Helene 2024 – Images courtesy of Stephan Pruitt & Kaitlin Wright (Meteorologist)

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How Bad Can It Get? (cont'd)

Photos courtesy of Georgia Archives– Damaged books and records from fire and water

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Records Emergency Response and Recovery—Terms, Concepts, and Tips

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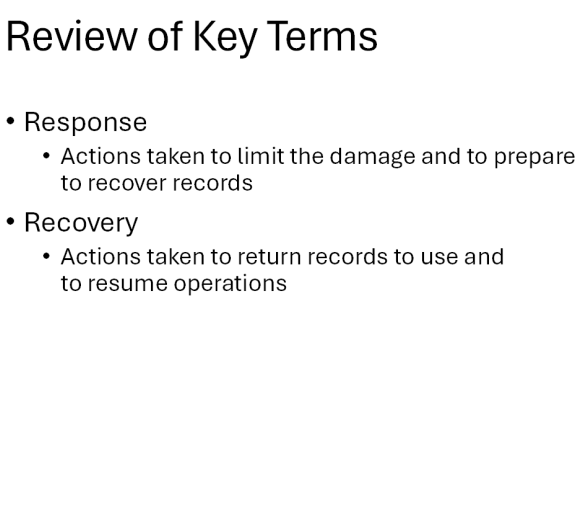

Review of Key Terms

In Session 1 we discussed the terms “response” and “recovery.” Now we’re going to focus on how to put them into action. Let’s review each term quickly:

- **Response**—Response is the taking of action to save lives, prevent injuries, and prevent or limit property damage when an incident occurs. The damage or impact is assessed and the level of containment and control activity is determined. The primary activity during this phase is activating the REAP.
- **Recovery**—Recovery is the implementation of the procedures and activities necessary to restore resources or resume operations following an emergency, incident, or other atypical disruption of routine activities. During this phase, those engaged in recovery efforts try to reconstruct damaged agency records in order to restore normal operations.

Six Keys to Successful Response and Recovery

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Six Keys to Successful Response and Recovery

1. A detailed REAP
2. Committed management
3. Educated and trained staff
4. Timely initial response
5. Effective communication
6. Quick, informed decisions

Slide 3-10

1. A detailed REAP
2. Committed management
3. Educated and trained staff
4. Timely initial response
5. Effective communication
6. Quick, informed decisions

Immediate Response is Necessary

Slide 3-11

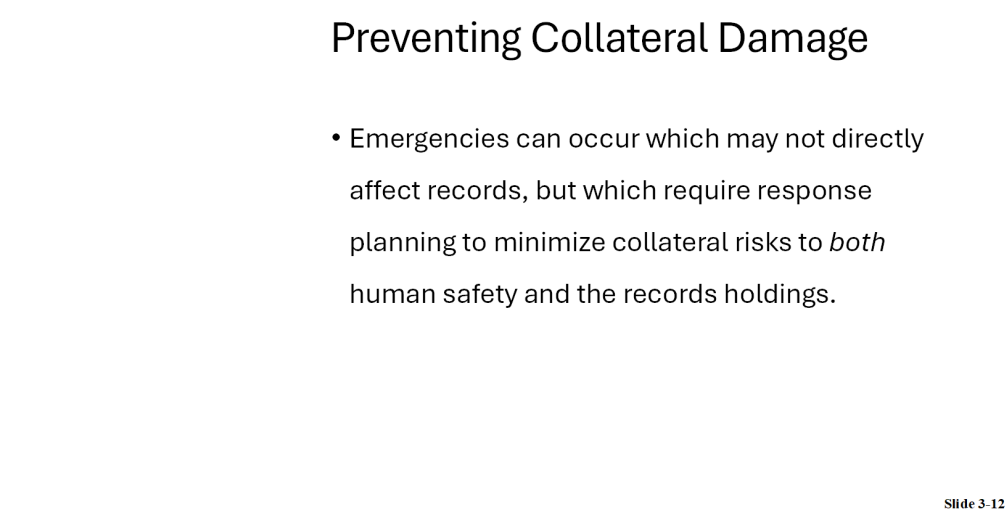
You must respond at once if an incident occurs which puts human safety at high risk and/or in which records or information will be lost if you do not take immediate action. For example:

- A water main has broken and records, PCs, and/or servers are wet.
- There has been a fire or an explosion, and water has been used to extinguish the fire.
- Wind has blown the roof off, or high winds have broken windows, and the rain is streaming in.
- Records have suffered water damage that was not discovered in time, and mold has begun to spread on them.

In incidents like these, the threat is that future use of the records is compromised.

Preventing Collateral Damage

Slide 3-12



Slide 3-12

In addition to events that directly affect records, emergencies can occur which may not directly affect records but which require response planning to minimize collateral risks to the holdings. For example:

- There has been a power outage. Security, computer systems, and cold-storage conditions are disrupted.
- There has been an explosion or fire, but no records have been affected directly. Security of holdings can be affected.
- A bomb threat or contamination threat has been received.

If You Have Advance Warning

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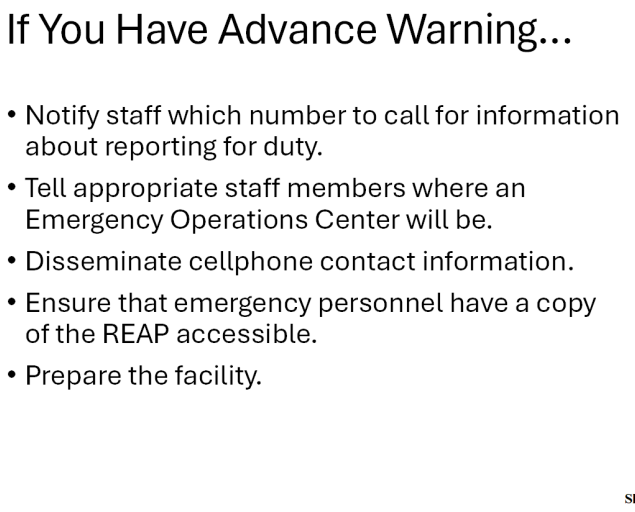

If you have been warned during business hours of an impending emergency, such as flooding or storms, you should do the following:

- Notify staff of the number to call for information on reporting for duty.
- Tell appropriate staff members where an Emergency Operations Center will be set up before the building is closed and the staff dispersed.
- Distribute beepers or pagers to key staff if they do not have them already.
- Ensure that emergency personnel have a copy of the REAP accessible, including copies in their cars and/or homes.
- Prepare the facility. For example:
  - Move or secure records, PCs, and servers.
  - Move high-priority records away from windows, and toward safer areas protected from water.
  - Move key records, PCs, and servers to higher floors if there is danger from flooding.
  - Move records from the top floor or out from under the roof if a hurricane or flood waters are threatening.
  - Wrap highly vulnerable materials in plastic and seal with waterproof tape.
  - Verify that master switches are shut off for gas, water, and electricity, if this can be done without shutting off the sprinkler system for fire.
  - Cover windows (plywood screwed into the frame) or tape them to reduce the shattering of glass.

Session 3 Objectives

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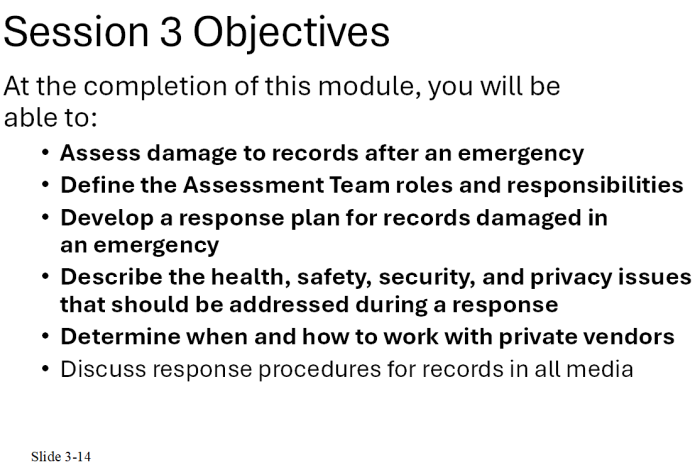

At the conclusion of this session, you will be able to:

- **Assess damage to records after an emergency**
- **Define the Assessment Team roles and responsibilities**
- **Develop a response plan for records damaged in an emergency**
- **Describe the health, safety, security, and privacy issues that should be addressed during a response**
- **Determine when and how to work with private vendors**
- Discuss response procedures for records in all media

Lesson 1: Assessing the Damage to Records

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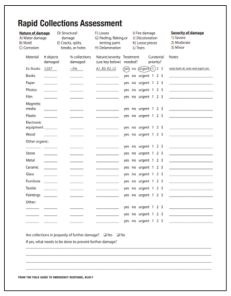
Session 3—Records Emergency Response and Recovery

Lesson 1: Assessing the Damage to Records

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Assess the Nature and Severity of the Damage

Slide 3-16

Assess the Nature and Severity of the Damage

- Now's the time to use your:
  - PReP
  - Phone Tree
  - Initial Damage Assessment and Response Checklist
  - REAP
- The scale of your response depends on the answers to these questions:
  - How many staff do you have available?
  - Do you have appropriate staff available?
  - How many records are affected?
  - Is this too large or complicated for you to handle?

Slide 3-16

First Steps

If the incident has occurred with no prior warning, and if you've now been notified that there has been damage to the buildings and/or records, then:

- Don't simply rush in—keep your response plan in mind!
- Your first step is to secure the building and assess the safety status of the building for entry, both structurally and in terms of its contents.
- Your next step is to assess the damage to records.

Address the recovery process systematically. If you created a Pocket Response Plan (PReP), you will use it now.

It will be important to answer a series of questions as quickly as possible to determine the necessary actions. This is where your Phone Tree and Initial Damage Assessment and Response Checklist come into action.

(Refer again to **Handout 2.5—Initial Damage Assessment and Response Checklist** for an example of a damage assessment checklist.)

To assess the nature and severity of the damage, you will need to answer a number of questions immediately, including:

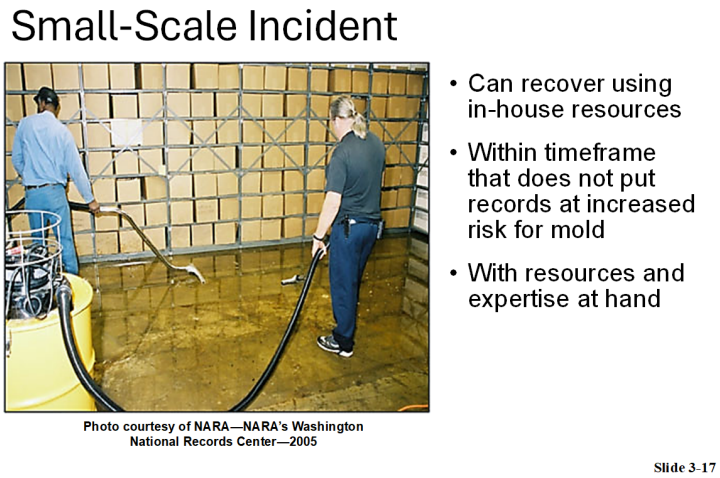
- How many staff do you have available?
- Do you have appropriate staff available?
- How many records are affected?
  - What formats?
  - What is their value?
- Is this too large or complicated for you to handle?

The scale of your response depends on the answers to these questions.

Have your REAP ready and inform senior management about your needs, resources, priorities, and any other relevant issues.

Determine Whether the Incident is Small-, Medium-, or Large-Scale

Slide 3-17



To answer the last two questions—how many records are affected and whether the incident is too large or complicated—you need to determine whether the incident is small-, medium-, or large-scale.

Set ahead of time your limits for what to consider small-, medium-, and large-scale incidents. For example, 10 record boxes affected by an emergency may be your in-house limit for a small-scale incident.

Small-Scale Incident

A small-scale incident means that you can recover all the damaged records using in-house staff expertise and resources (space, in particular) within a timeframe that does not put the records at additional risk.

For example, flooding that does not reach the level of the lowest shelf of records might be fully recoverable using in-house staff in a timely way.

If the incident is small-scale and occurs within your agency space, on-site coordination will be provided by your REAP.

Medium-Scale Incident

Slide 3-18

Medium-Scale Incident

- Need to reassign staff
- Need a structure and response plan
- May need limited outside expertise or contracted resources

Photo courtesy of NARA—Suitland fire—2000

Slide 3-18

A medium-scale incident affects all the staff in an agency. You will need to reassign staff to respond to the crisis, and you may need a limited contractor response.

What is considered medium-scale will depend to a great extent on the resources of the agency.

For a medium-scale incident, you should refer to the Incident Command System (ICS) to assist with managing the assessment, response, and recovery. In fact, the ICS is useful for managing assessment, response, and recovery for incidents of any scope or size, including those that only affect records in your agency's own facility. It is designed to be useful for any kind of emergency, from routine to massive.

Large-Scale Incident

Slide 3-19

Large-Scale Incident

- Affects all staff and the long-term mission of the agency
- Requires extensive resources and use of contractors, including labor, beyond those available in the agency

Photo courtesy of NARA—Gulfport SBA and Court—2005

Slide 3-19

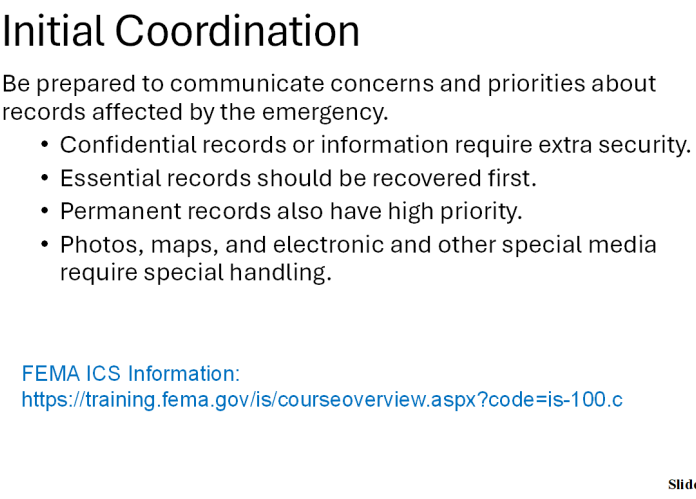
A large-scale incident will affect a large local area or region, and/or involve more than one agency or jurisdiction. If this happens, you should begin working as soon as possible within the regional ICS. Your objective is to make sure that the protection, response, and recovery of records are addressed early in the overall response.

One important reason to work within the ICS system is to gain safe access to your own facility and advocate for a quick assessment of your institutional needs. You may require assistance to reach your own facility or you may need to have local, state, or national responders secure the facility.

You will also need to know the big picture—how this all fits together, who does what tasks, and how the larger incident response works. Records may not have the highest priority in the incident.

Initial Coordination for Medium- and Large-Scale Incidents

Slide 3-20



Communicating Records Concerns and Priorities

The structure of the Incident Command System (ICS) and the roles and responsibilities of participants will vary, depending on the size and complexity of the incident. Records managers and archivists may be activated to serve as technical specialists in a variety of roles within the ICS for medium- and large-scale incidents.

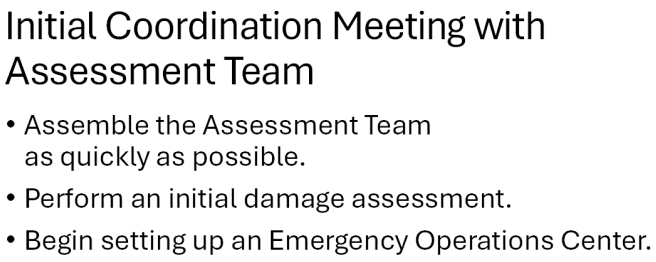
Whether the records that have sustained damage or are threatened belong to your own agency or another agency, be ready to speak openly and frankly about your considerations, priorities, and concerns. You will want to make the incident commanders fully aware of all issues relating to the security of, and need for quick response for, damaged records.

Your agency representatives should be ready to brief those managing the response about the agency's authorities, responsibilities, equipment, skills, experience, and capabilities with respect to records, as well as any constraints under which it may be operating.

- Be prepared to demonstrate the significance of the affected records and the functions they support.
- Security will have to be provided for confidential records or information.
- Essential records which have not been, or could not be, duplicated and stored off site will have a higher priority for recovery than essential records which have been protected through duplication and dispersal.
- Permanent records also have a high priority.
- Special handling will be required for materials such as photographs, architectural and cartographic records, and electronic media.

Initial Coordination Meeting with Assessment Team

Slide 3-24



Slide 3-24

Using the Communication Plan from your REAP, assemble the **Assessment Team** as quickly as possible to help control the situation and to assess and document the extent and nature of the damage.

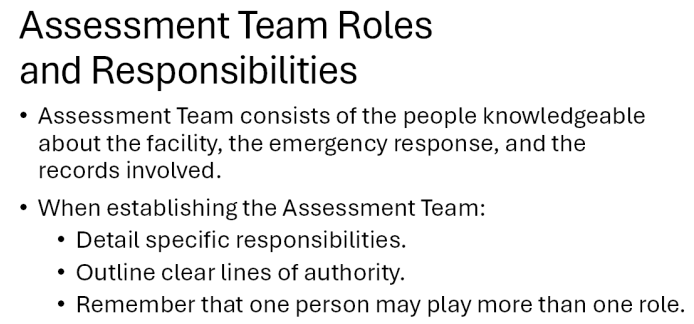
The Assessment Team should perform an initial damage assessment to determine the extent and kinds of damage to records. Be prepared to start your initial assessment off site, based on what you know.

Also, begin the process of setting up an Emergency Operations Center from which all actions regarding all records in the damage area must be cleared.

- Insist that everyone follow agency policy and procedure regarding the handling of all records after an emergency. Experience shows that often agency staff will attempt to take matters into their own hands, resulting in further damage and loss of records and of intellectual control over them (what records existed, where, extent of damage and what happened to them, information essential for insurance and disclosure purposes).
- If necessary, assign recovery team members the task of enforcing agency emergency recovery policy and securing records from uncontrolled and untrained efforts to “clean house” or recover records.
- Make sure everyone follows appropriate health and safety procedures.

Assessment Team Roles and Responsibilities

Slide 3-25

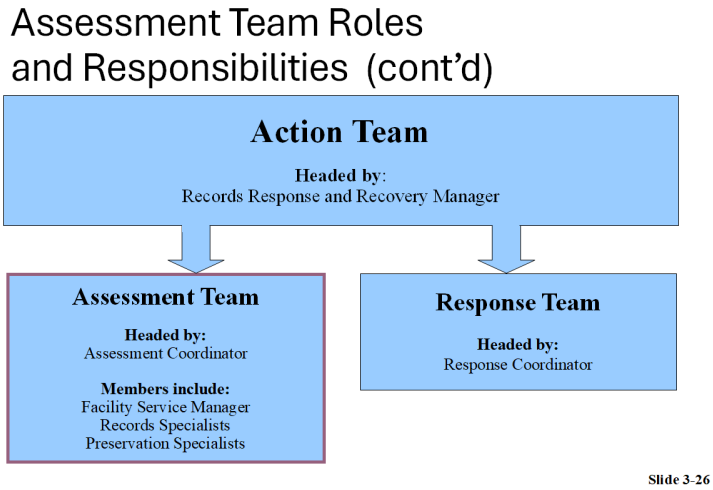


Slide 3-25

The **Assessment Team** consists of the people knowledgeable about the facility, emergency response, and the records involved. The following sections outline the Assessment Team's roles and responsibilities for a records damage assessment. When establishing the Assessment Team, it is important to detail specific responsibilities, outline clear lines of authority, and remember that a person may play more than one role.

Assessment Coordinator

Slide 3-26



The **Assessment Coordinator,** who reports to the Records Response and Recovery Manager, organizes and manages the process by which damage is evaluated and is responsible for:

- Selecting and assembling the Assessment Team
- Instructing the team on methods of inspection and investigation, assessing damaged records, and documenting the process
- Evaluating findings and making recommendations
- Notifying and gaining necessary approvals from senior management to enlist the assistance of in-house or outside experts and resources
- Contacting the Response and Recovery Coordinator and planning with him or her the response and recovery steps

Facility Services Manager

The **Facility Services Manager** is responsible for:

- Securing the affected area and/or buildings
- Ensuring that the building is safe and contaminant-free
- Stabilizing environmental conditions by lowering the temperature and relative humidity and increasing air circulation to prevent mold growth.

- Evaluating damage to the building
- Implementing measures to remedy immediate threats to human safety or to the records
- Establishing priorities for facility clean-up (e.g., turning off water, providing lighting for Assessment Teams, removing water and debris from the floors, overseeing clean-up of debris, etc.)

Records Specialists and Preservation Specialists

The team should include **Records and Preservation Specialists** (conservators, if they are available), whose responsibilities include:

- Recording observations and recommending priorities for response and recovery
- Photographing types of damage to records
- Investigating and documenting the location, indicating the extent of the damage to the records, and documenting the significance of the records
- Assessing potential, apparent, and actual damage to IT media (some media or equipment may appear undamaged but may have problems due to dampness, dust, heat, etc.)
- Estimating the volume of records requiring response and recovery
- Noting additional risks

Carry Out the Assessment of the Damage to Location and Space, Then to Physical Records

Slide 3-27

Carry Out the Assessment of the Damage to Location and Space, Then to Physical Records

- First assess damage to the location and space.
- Then assess damage to the physical records.
- Base your response on the priorities set forth in your REAP.

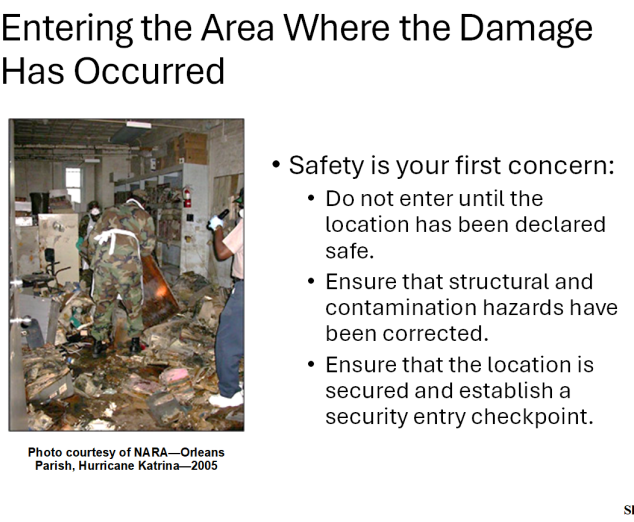
Photo courtesy of NARA—Orleans Parish, Hurricane Katrina—2005

Slide 3-27

As stated earlier, the first step after an emergency is to assess the type and extent of the damage. This assessment should be made first for damage to the location and space, and then for damage to the physical records. Once an accurate assessment has been made, the response can be implemented based on the priorities set forth in your REAP.

Entering the Area Where the Damage Has Occurred

Slide 3-28



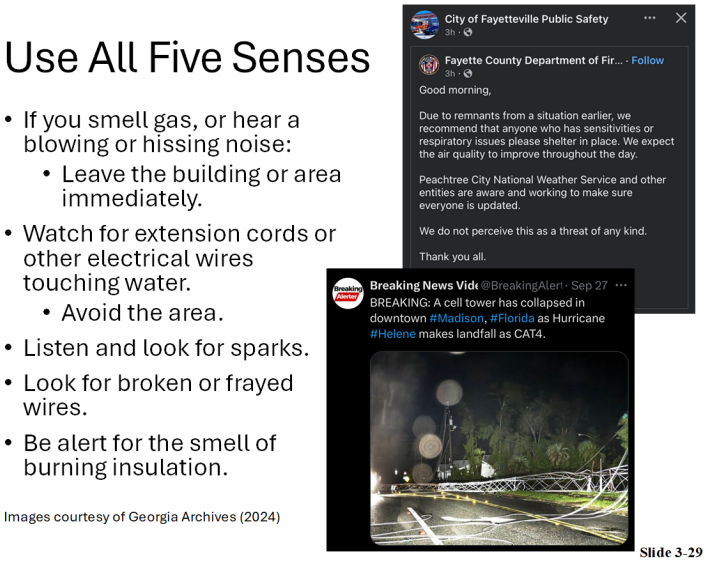
To assess the damage, you need to enter the area where the damage has occurred. It is essential to gain access as quickly as possible because some records will begin to deteriorate within 12 hours, and mold will begin to grow within 48 to 72 hours. Access will be decided by the fire department, safety officer, or another authority and can be delayed for days or weeks.

No matter what, safety should always be your first concern:

- Do not enter until the location has been declared safe by the Facility Services Manager or first responders.
- Ensure that structural and contamination hazards have been corrected so that it is safe to enter the location.
- Ensure that the location is secured and establish a security entry checkpoint.
- Do not enter the location without the proper personal protective equipment (PPE) as mold and other contaminants are a risk.

Use All Five Senses

Slide 3-29



Use your five senses to assess the safety of areas where damage has occurred.

- If you smell gas, or hear a blowing or hissing noise, leave the building or area immediately. If it's not possible to leave the building, open windows.
  - Turn off the gas at the main valve if trained to do so. Call the gas company at once.
- Watch for extension cords or other electrical wires touching water. Avoid the area. In particular, do not step into water!
- Listen and look for sparks; look for broken or frayed wires; be alert for the smell of burning insulation.

Safety—Use Common Sense!

Slide 3-30

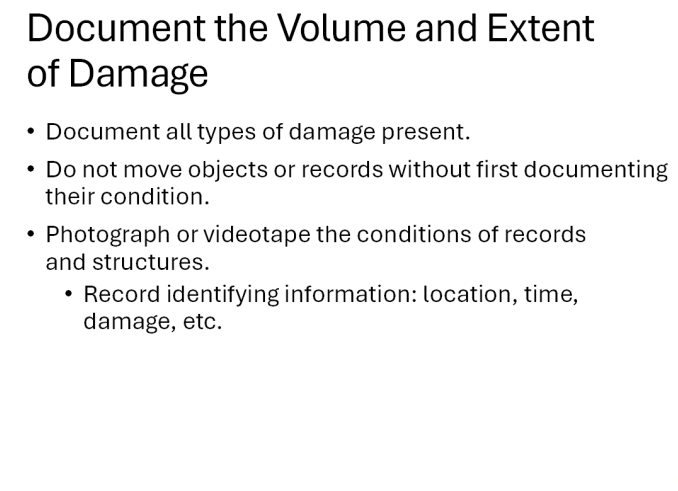
Even if the facility has been cleared for entry, be aware that there may still be hazards or issues that you will need to address before the assessment can begin. When in the facility, if something concerns you, leave immediately and report the problem. You are the only one who can take care of yourself, so be responsible for your own safety and health.

- **Remain calm**.
- Always work in pairs; never enter a damaged building alone.
- Wear protective clothing or gear at all times. Minimal preparation for an unknown situation includes wearing:
  - Durable and sturdy, close-toed shoes
  - Heavy duty and/or waterproof gloves that are also durable and sturdy
  - Protective clothing with long sleeves and pants in sturdy material including lab coats or hazmat suits (Tyvek® jumpsuits are waterproof and disposable if contaminated)
  - Hardhat
  - Light source (power might be lost while you are inside)
  - Protective eyewear
  - Appropriate type of mask or respirator (if warranted by the conditions)

Remember: The level of PPE required will depend on the scale of the incident. Some building contents may be contaminated. You should have a current tetanus immunization before entering an area that has been flooded, and there are other vaccinations that you may also want to keep current—check with local health officials.

Document the Volume and Extent of Damage

Slide 3-31



When it is safe to enter the site, in team(s) of at least two people, tour all affected areas and document all types of damage present. Documentation should include:

- The cause of the damage: for example, clean or contaminated water, fire or soot, and/or mold
- Volume of records damaged
- Locations of damaged records

Do not move objects or records without first documenting their condition. Photograph or recording the conditions of records and structures. Make sure the images clearly record the damage—a picture is worth 1,000 words (and several hours of writing). However, uncaptioned pictures do not tell the whole story, either. While one person takes photographs, the other should record information about location, time, damage, etc.

Photographic documentation of all damaged areas and records is the best method to illustrate the nature of the damage to, and the condition of, the records. The photographic documentation can be shared with the Response Team members to assist in planning the response and with consultants and contractors.

A camera should be included in the documentation supply kit for your Assessment Team.

Slide 3-32

What Does the Photograph Tell You?

Photo courtesy of NARA—Hurricane Katrina—Orleans Parish—2005

Slide 3-32

Slide 3-33

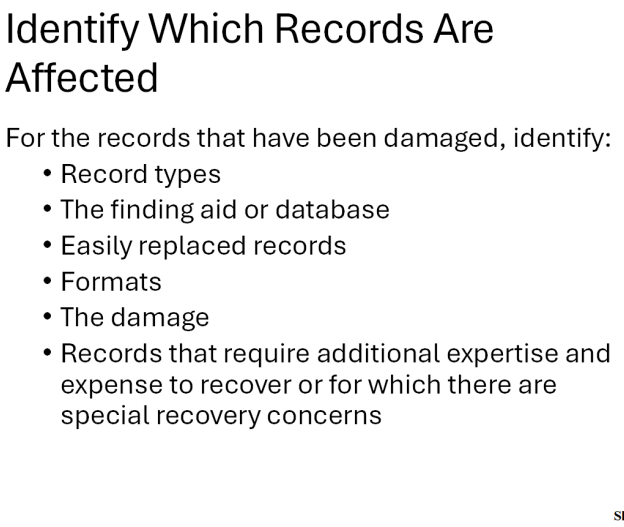
What Does the Photograph Tell You?

Photo courtesy of NARA—Suitland fire—2000

Slide 3-33

Identify Which Records Are Affected

Slide 3-34



In order to document the damage properly, you will need to identify the records that have been damaged, and you will need a rough estimate of the number of each record type damaged and the nature of the damage.

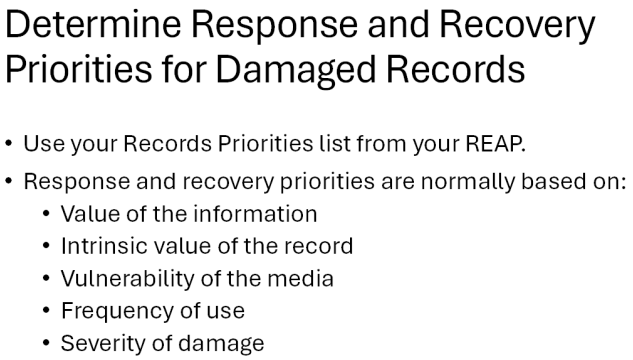
- Identify the record types—An archivist or a custodian of the affected records will need to provide important identification information, including:
  - The record type, series name, or other identification
  - Any other information that must stay with the records as they are recovered
- Identify the finding aid or database—Identify any indexes, inventories, folder lists, catalogs, databases, or other finding aids that are needed to use the record. If these exist in a database or other electronic format, access to the files will be needed.
- Identify easily replaced records—Rather than be recovered, can the records be replaced easily and more cost-effectively from copies held elsewhere, or are they unique and irreplaceable? It is important not to spend valuable time and resources to recover records when there is an undamaged copy of the record stored elsewhere or when the value is unknown.
- Identify formats—You will need to document the formats in order to determine the preservation expertise required for recovery. This includes documenting whether the records are boxed, in bound volumes, or unbound (loose) paper; oversized records including maps and plans; photographic records including both film and print; electronic media on tapes; disks, or in hard drives; magnetic tapes; CDs and DVDs; and artifacts.

- Identify the extent of damage—
  - Damp or wet box or container only
  - Damp records
  - Wet records
  - Damp or wet computers or servers, status of media unknown
  - Burnt or charred records or container only
  - Contaminated records or surface-soiled only
  - Evidence of mold
  - Current temperature and relative humidity in the affected area(s)
  - The kind of water that has damaged the records:
    - Clean water—from a supply water pipe that has been affecting records for less than 48 hours
    - Gray water—water from a pipe that is carrying some matter; for example, water coming from an appliance such as a dishwasher, washing machine, or garbage disposal
    - Black water—contaminated water from a source that carries sewage or flood waters from the river or ground surface where the water has picked up sewage, chemicals, oils, etc.
    - Salt water from tidal flooding
- Identify records that are difficult and/or expensive to recover or for which there are special recovery concerns.
  - Refer all damaged or potentially damaged electronic records and systems to IT specialists.
  - If you have particular concerns, it is best to photograph the damaged records and consult with experts on their conservation.

(Refer again to **Handout 2.5—Initial Damage Assessment and Response Checklist** for a checklist you can use to gather information about the damaged records.)

Determine Response and Recovery Priorities for Damaged Records

Slide 3-35



Slide 3-35

After you have determined what damage has occurred and which records are affected, your next step is to determine your response and recovery priorities.

Use your **Records Priorities** list from your REAP. If the Records Priorities list is not complete or current, consult with the owners of the records, as the value of the records may have changed, depending on business needs.

As we discussed earlier, response and recovery priorities are normally based on:

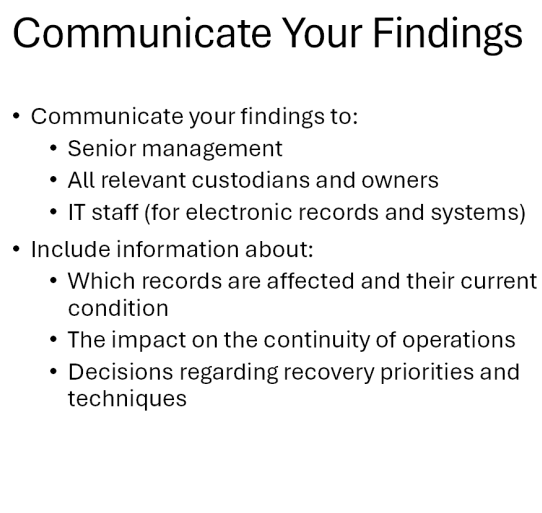
- Value of the information (for example, has it been determined to be essential or permanent?)
- Intrinsic value of the record
- Vulnerability of the media
- Frequency of use
- Severity of damage

You can obtain the information you need from:

- File plans or records schedules
- The prioritized list from your REAP
- Facility maps to determine where records are located, etc.

Communicate Your Findings

Slide 3-36



Your final step in assessing the damage to records is to communicate your findings to senior management and all relevant custodians and owners, including IT staff, when dealing with electronic records and systems.

Include information about:

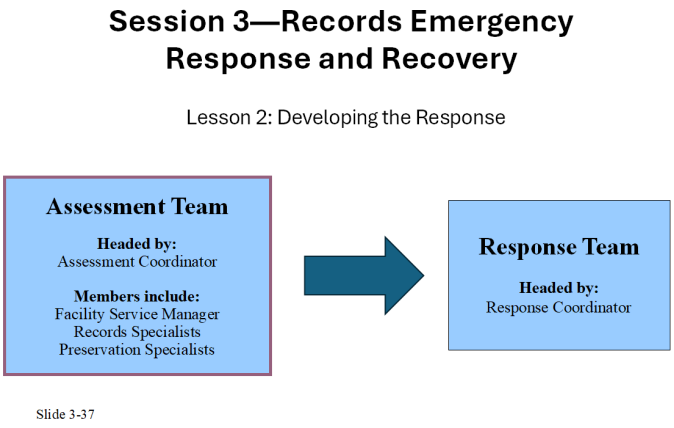
- Which records are affected and their current condition
- The impact on the Continuity of Operations
- Decisions regarding recovery priorities and techniques

Follow up by repeating the assessment as conditions change, and continue to make visual, written, and voice records of each step of the response procedures.

If you hold records for another office or agency, notify the owners of the records. Inform them as to which records are affected, their status, and their condition, and ask for their estimation of the value and importance of the records.

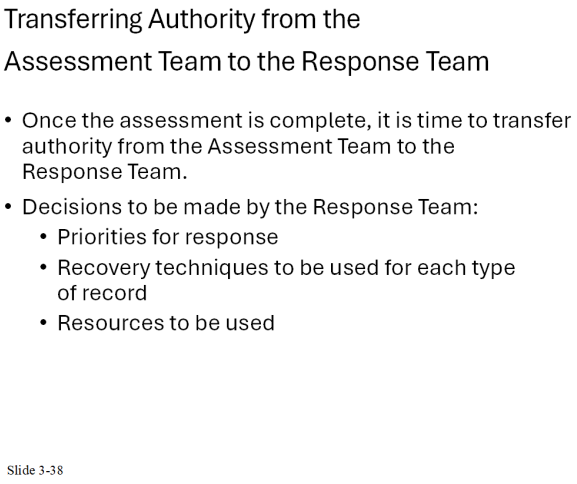
Lesson 2: Developing the Response

Slide 3-37



Transferring Authority from the Assessment Team to the Response Team

Slide 3-38



After the Assessment Team has completed its assessment of the damage, it's time to communicate what it has found and transfer authority to the **Response Team**. In many cases, especially in smaller communities or in small-scale incidents, there will be no difference in the membership of "Assessment" and "Response" Teams.

Hold a meeting to review the Assessment Team's findings, evaluate the magnitude of the incident and the impact on the records, and determine the needed and available resources. Everyone does not need to be present in the room, but should be available by teleconference or videoconferencing.

Decisions to Be Made

Decisions will need to be made on:

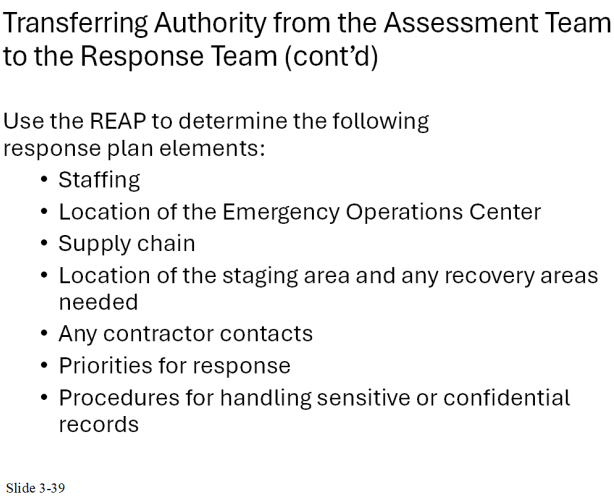
- Priorities for response
- Recovery techniques to be used for each type of record
- Resources to be used, including staff, contractors, space, and time

Everyone involved in the decision-making process will need access to the documentation from the assessment and will need to be present for the decisions, which should also be documented.

These decisions, which should be made based on the information provided in your REAP, will guide the Response Team in the development of the response plan—the guide that details the specific response and recovery actions that will be taken for a specific incident. The response plan enables team members to function effectively and provides documentation and a record of what needs to be done and what has been done.

Use Your REAP

Slide 3-39



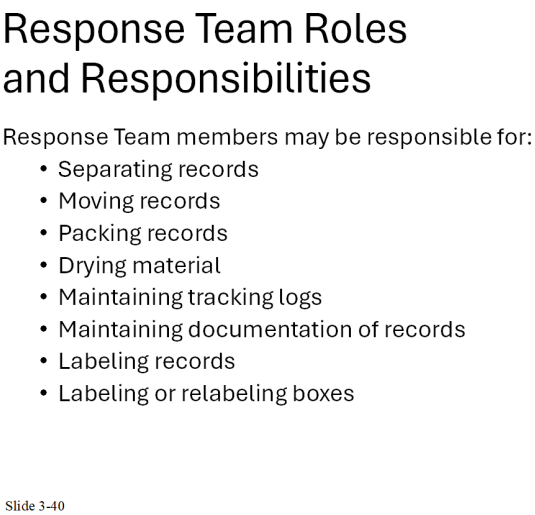
In developing the response plan, the Response Team will use the REAP to determine:

- The staffing for emergency response
- The location of the Emergency Operations Center for communications during the response
- The supply chain
- The location of the staging area and any recovery areas needed
- Any contractor contacts
- Priorities for response
- Procedures for handling sensitive or confidential records

Ultimately, once the response plan is agreed upon by all decision makers, including senior management, the **Response Coordinator** will be in charge of carrying out the plan to meet the objectives.

Response Team Roles and Responsibilities

Slide 3-40



Slide 3-40

The Response Team may include many or all staff members. It will require a mix of special skills, physical stamina, and expertise. The Response Team members may be responsible for:

- Separating records and other material to be recovered
- Moving records to be recovered from affected areas to drying, staging, or other storage spaces
- Packing records that will require shipment to another facility
- Drying material

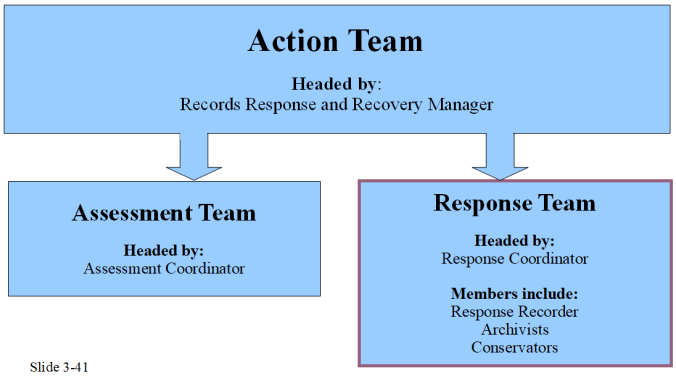
Other responsibilities may include:

- Maintaining tracking logs of the pack-out, including inventories and dates on which items are sent out of the building to off-site storage or other facilities
- Maintaining documentation of records which have been frozen, treated, or dried; documentation of where records have been relocated; and documentation of records in need of additional attention
- Labeling records that have lost identifying information
- Labeling or relabeling boxes with locator information and boxes ready for shipment

It makes sense, if there is sufficient space, to have different Response Team groups performing different sets of activities, so that they can proceed simultaneously.

Slide 3-41

Members of the Response Team



Members of the Response Team include:

- Response Coordinator
- Response Recorder
- Archivists and Conservators

Response Coordinator

The **Response Coordinator**, who reports to the Records Response and Recovery Manager, organizes and manages the response and recovery process. In many cases, the Assessment Team Coordinator and the Response Team Coordinator will be the same person.

The Response Coordinator is responsible for:

- Setting priorities based on information received from the assessment of the Assessment Team
- Assigning Response Team members to teams and designating roles and responsibilities
- Instructing the Response Team on the response plan and how the team will carry it out
- Providing the team with health and safety precautions and instructions
- Monitoring the progress of the response and the continuing health and safety concerns of the Response Team members
- Reporting on the progress achieved, actions taken, problems encountered, and future risks

Response Recorder

The **Response Recorder** is responsible for:

- Documenting the progress of the response
- Keeping records of all documentation (photographic, mapping, communications, and decisions) related to the incident
- Recording and tracking purchases and orders placed
- Coordinating requests for materials, information, and other assistance
- Recording the number of hours worked by Response Team members

This position will require immediate access to a telephone.

Archivists and Conservators

Archivists and conservators are responsible for:

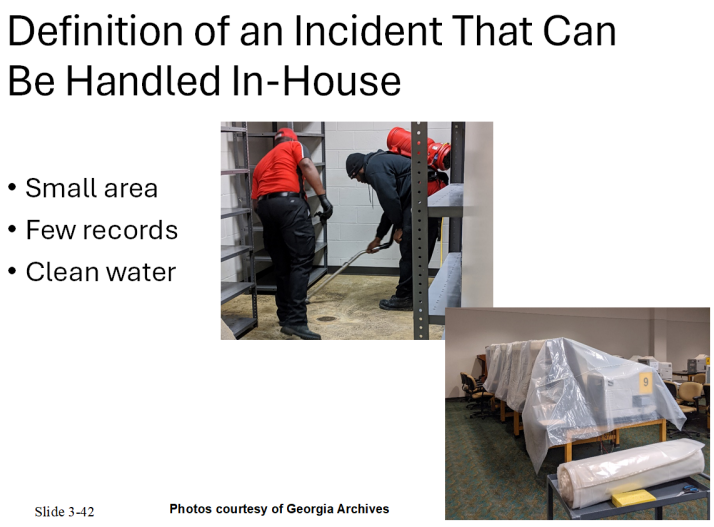
- Working with both the Assessment and the Response Coordinator to advise on recovery priorities concerning records and different types of materials
- Recommending appropriate techniques and procedures
- Assisting in choosing and locating supplies, equipment, and services necessary for recovery

The Archivists and Conservators may take on other leadership roles because of their familiarity with the records and recovery techniques for records composed of different materials.

Access to archivists and conservators will differ across state and local government agencies. To learn more about your state's sources of archivists and conservators, please visit the CoSA Resource Center, at: *https://www.statearchivists.org/research-resources/resource-center*

Definition of an Incident That Can Be Handled In-House

Slide 3-42



If the incident is confined to a small area or a few records and involves hardcopy records damaged by clean water, the Response Team may be able to respond and recover on site or at a nearby facility, with a minimal plan, using the staff and resources on hand. Evaluate the magnitude of the incident and its impact on your records against the resources you have available.

Clean-water damage that affects fewer than 10 boxes of records is the most common occurrence, and can be easy to recover from with sufficiently trained staff, space, and the appropriate supplies.

Even if the emergency is large-scale and affects a large volume of records in different formats, you may choose to recover some of the paper records on site if, for instance, they are only damp, are needed for resumption of operations, are confidential, or for another compelling reason.

With proper supervision, staff with no prior experience can be trained to handle pack-out, freezing, and drying procedures as appropriate.

Tips on Handling Wet Records In-House

Remember that paper swells when wet and becomes much heavier. One damp or wet records center box, which holds about one linear foot of records, can weigh up to 40–60 pounds, so be cautious when lifting. Also, damp or wet records are more easily torn, so be sure to handle them carefully.

Drying space is also a consideration—make sure you have enough space to accommodate the expected volume. A damp or wet records center box will require at least one 2.5' × 8' table to dry over several days. You will need to spread the records out in stacks no higher than one-quarter to one-half an inch thick. Under dry conditions with good air circulation, they should dry in one to three days.

If records are not dried in 48 to 72 hours, they may develop mold, which is:

- Dangerous for staff to handle without protective gear
- Damaging to the records
- Difficult and expensive to recover from

Mold can cause irreversible damage to the records. Recovery techniques for mold cause weakening and discoloration of the original records beyond the water and mold damage itself.

Definition of an Incident That Will Require External Resources and/or Contractors

Slide 3-43

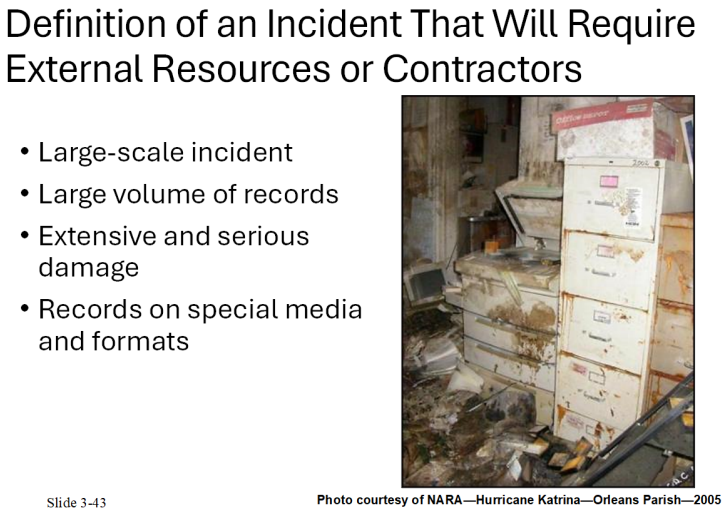


Photo courtesy of NARA—Hurricane Katrina—Orleans Parish—2005

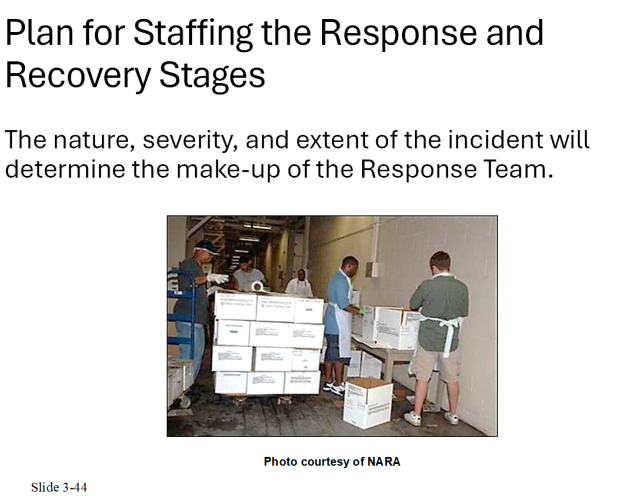
You will need to call on external resources, including the services of experts and contractors, if:

- The incident is large-scale and affects a large volume of records
- The incident is beyond the capability of your space and staff to perform an effective recovery

There are some instances in which you will need to implement special handling and pack-out procedures: if the damage to the records is extensive or serious, such as that caused by fire, mold, or contaminated water, or if the records are on special media formats, such as photographic material, hard drives, or magnetic tapes. If you don't have personnel trained in the appropriate handling and packing of such records, you will need to use a contractor who can provide these services.

Plan for Staffing the Response and Recovery Stages

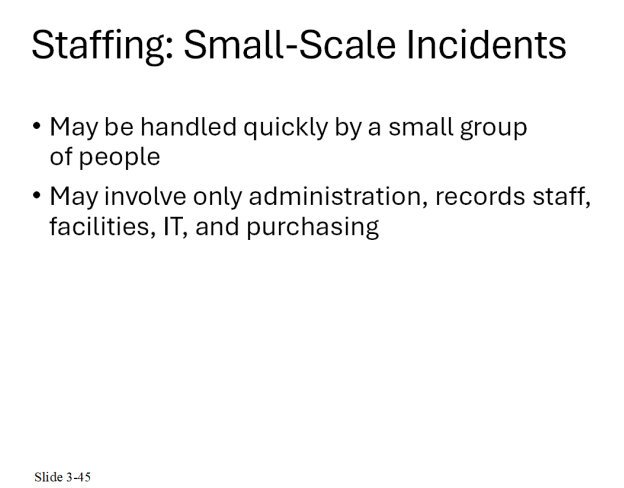
Slide 3-44



The nature, severity, and extent of the incident will determine the size and make-up of the team you assemble.

Small-Scale Incidents

Slide 3-45



A minor incident, such as a small leak in the ceiling during business hours or the collapse of a shelf, may be handled quickly by a small group of people, and may involve only administration, records staff, facilities, information technology (IT) (in the case of electronic records and equipment), and purchasing. This group may be able to:

- Recover the materials
- Assemble needed equipment such as book carts, fans, and dehumidifiers
- Purchase supplies and replacements with a relatively small outlay of time, money, and equipment.

Even though some incidents are small-scale, they should still be documented and made known to senior management. Small incidents should be reviewed by the administration to ensure that they do not lead to larger incidents later; for example, small leaks can be a precursor to failure of an entire piping system.

Large-Scale Incidents

Slide 3-46

For a large-scale incident, the Response Team may include some or all of the following:

- Response Coordinator
- Representative of senior management
- Public Relations Officer or Media Liaison
- Facility Manager and/or Building Engineer
- Chief Security Officer
- Personnel Manager and Health and Safety Officer
- Archivists and Records Managers
- Conservators and preservation specialists
- Assessment and Response Recorders
- IT Manager
- Chief Financial Manager and/or Procurement Officer

Determine Response Priorities

Slide 3-47

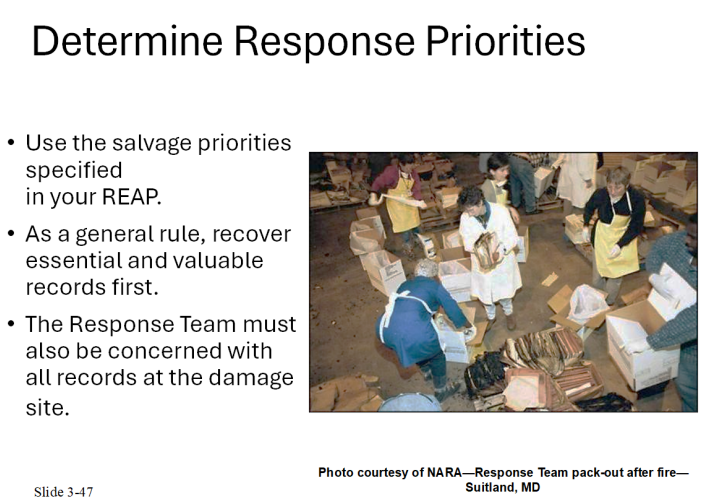


Photo courtesy of NARA—Response Team pack-out after fire—Suitland, MD

Determine which records to recover using the salvage priorities specified in your REAP. As a general rule, recover essential and valuable records first. However, you should determine the availability of essential record backups prior to initiating recovery. If it is confirmed that backups exist and that those backups are adequate surrogates and can be accessed, then you can refocus your recovery efforts on other records (inasmuch as having backups makes the salvage of the backed-up records a lower recovery priority).

In addition to essential and valuable records, the Response Team must also be concerned with all records at the damage site.

- Valueless records suddenly become important as a nuisance and cost factor if they must be moved out of the way for reconstruction or repair of the facility, for shredding, or because of mold growth.
- Undamaged records may be destined for storage, but if they have been in an environment conducive to mold growth, records storage facilities may refuse to take them.

Set Up the Emergency Operations Center

Slide 3-48

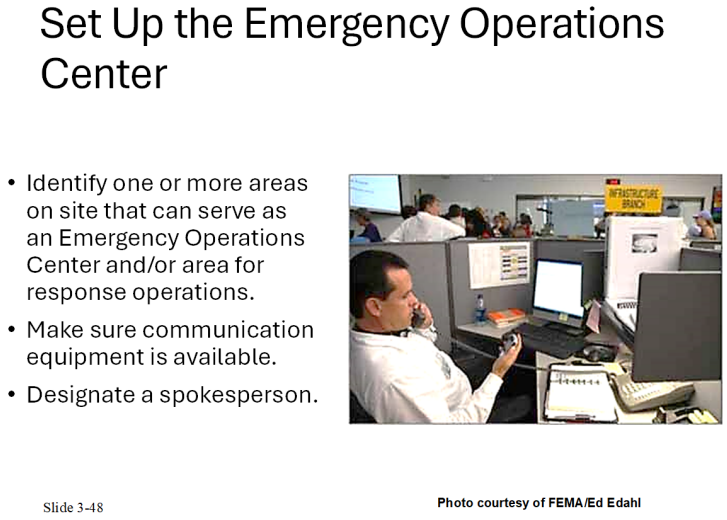


Photo courtesy of FEMA/Ed Edahl

As part of your response planning activities, you should identify one or more areas on site that can serve as an **Emergency Operations Center** and/or area for response operations.

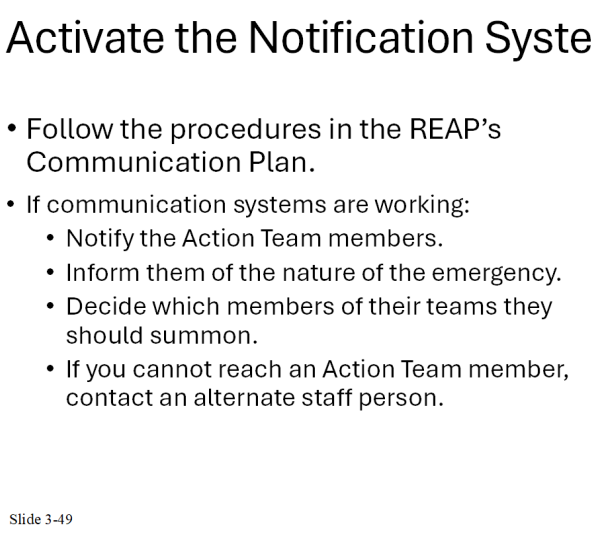
If the emergency is relatively small-scale and you can continue to occupy your building, set up an Emergency Operations Center on site with office equipment such as desks, computers, fax machines, a photocopier, and Internet access. Make sure communication equipment is available. If land lines and cell phones are not operable, use walkie-talkies.

Designate a Spokesperson

Make sure someone from your Public Relations, Communications, or Director's Office is available and authorized to act as spokesperson, and that you keep him or her informed so that he or she can provide accurate information to the media. The spokesperson can also make appeals for assistance and volunteers, if necessary.

Activate the Notification System

Slide 3-49



Slide 3-49

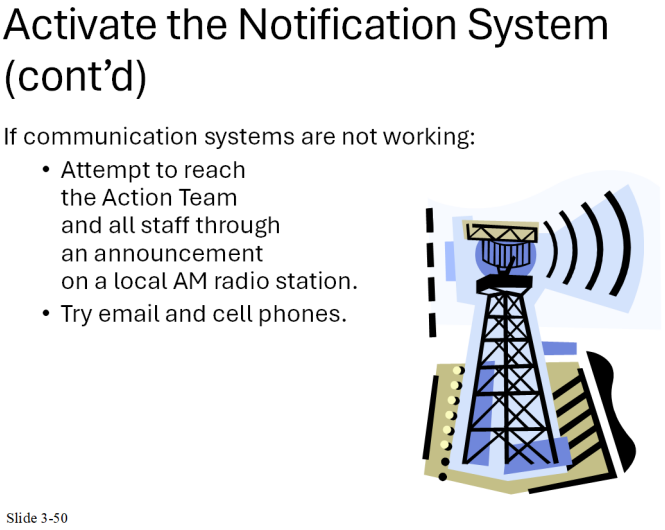
Activate the **Phone Tree** and make provisions to assemble the necessary equipment and services at the appropriate areas (staging area, emergency area, recovery area, etc.). Tell each staff person to whom he or she will report and what his or her role and responsibilities will be.

Follow the procedures as written and tested in your REAP Communication Plan.

If communication systems are working, do the following:

- Notify the Action Team members, who should include the Facility Manager as well as the heads of security, facilities, IT, and finance.
- Inform them of the nature of the emergency and decide which members of their teams they should summon.
- If you cannot reach an Action Team contact within a specified time period, such as an hour, contact his or her alternate.

Slide 3-50



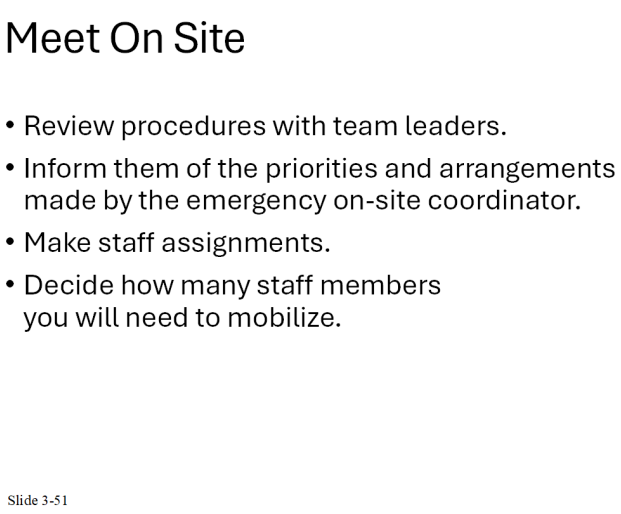
If communication systems are not working (for example, services are disrupted or it's after hours) and you have had no warning ahead of time:

- Attempt to reach the Action Team and all staff through an announcement on a local AM radio station which they have been monitoring as part of the disaster plan.
- Try email and cell phones in case service is available.

Remember that staff may be dealing with damaged or destroyed homes or injured or missing family members, and may not be able to respond until their personal situations are stabilized.

Meet On Site

Slide 3-51



Review procedures with team leaders and inform them of the priorities and arrangements made by the emergency on-site coordinator. Make staff assignments based on what needs to be done, as well as on individuals' skills, abilities, and experience. Decide how many staff members you will need to mobilize to implement the response plan.

Plan for Supply and Equipment Deployment or Purchase

Slide 3-52

Use the Supplies section of your REAP to help determine what supplies and equipment you will need (including IT equipment), what supplies you have on hand, and which additional items you will need to purchase.

If you will need protective equipment, such as hardhats, masks, gloves, rubber boots, respirators, and suits, make sure the equipment is available before staff enters the affected area.

Arrange for the supplies you will need to be delivered to the staging and/or recovery area.

(Refer to **Handout 2.4—Supplies and Equipment List** for an example of a supplies list.)

Plan the Record Tracking System

Slide 3-53

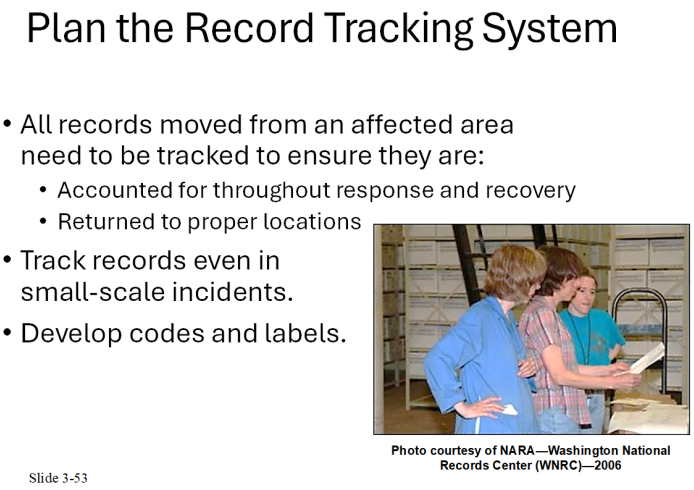


Photo courtesy of NARA—Washington National Records Center (WNRC)—2006

Records will have to be moved from the affected areas to the on-site recovery area or to the staging area for transport off site or to a contractor. These records need to be tracked to ensure that all records are accounted for throughout the entire response or recovery process and are returned to their proper locations.

Even if the incident is small-scale, you will need to track which records have been removed, their original location, their location during recovery, type(s) of damage, and all actions performed on the records.

Keep in mind that the "location during recovery" may require special security if the records contain sensitive content that could affect public safety, personal privacy, or similar issues. Special consideration will also be required for records having significant monetary value.

The list of records (with salvage priorities and locations) must itself be kept secure. If it is not, it could be easier for someone to steal valuable or sensitive records.

The person assigned to begin recording this information on site will need paper, pens, pencils, waterproof markers, and a clipboard.

From your initial assessment, you will have determined which records need to be removed and in what order, although you must remain flexible if additional damage is uncovered during the pack-out or if the damage is not as extensive as first thought.

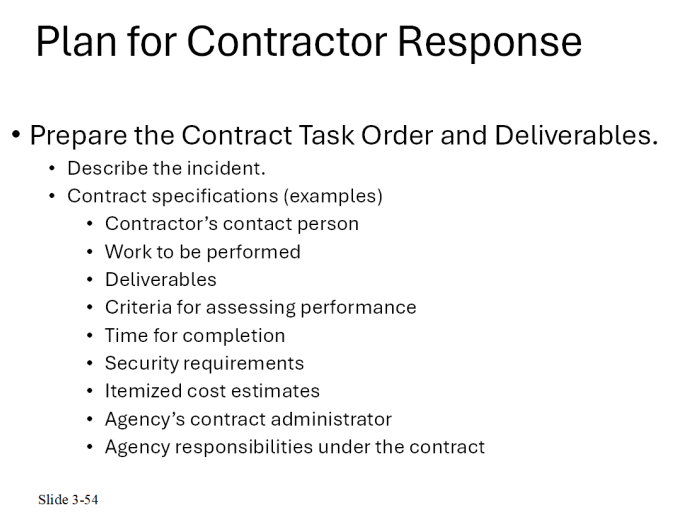
Develop codes and labels for tracking. The codes should denote the original location, type of treatment needed, level of security required, and/or priority. If you must improvise, try to stay within the naming conventions and select terms that are self-explanatory.

If you are working with contractors, they will have a tracking system in place. The agency will need to work with the contractor to link the contractor's tracking system to the agency's database.

(Refer to **Handout 4.1—Sample Pack-Out Tracking Log** for an example of a tracking system that can be set up easily and quickly using a word-processing document, a spreadsheet, or a simple database.)

Plan for Contractor Response

Slide 3-54



Prepare the Contract Task Order and Deliverables

Treat any outside entity that is providing assistance as a "contractor" to ensure clear communication about your requirements, even if your contractor is another government agency (such as an IT department) or your private IT support provider.

The Task Order to the contractor should do the following:

- Describe the incident or condition that triggered the emergency.
- Describe the formats of all of the affected records.
- Specify the work to be carried out by the contractor.
  - Spell out who will be responsible for what.
- Identify exactly what the agency representative has to approve.
  - Make it clear that the agency will make all major decisions.
- List the deliverables (be specific and try to cover all necessary work).
- Include specific security requirements.
- Identify who will oversee the pack-out, tracking system, etc.
- Include a cost estimate for every service.
- Establish a timeframe for completion of the work.
- Identify the criteria for accepting work performance.

It may be necessary to work with more than one contractor to achieve all of the objectives for the recovery in a timely and effective manner. This can be done either by subcontracting through a single contractor or contracting separately by record medium or recovery strategy.

The contractor may participate in developing an estimate for the incident. The estimate should include:

- A description of all services to be provided as Task Orders or Deliverables
- A cost estimate for each and every service
- A timeframe for completion of the work
- Criteria for accepting work performance

State in the Task Order that payment will be authorized only after the products are reviewed for quality and accepted.

Contractor Services and Equipment

Slide 3-55

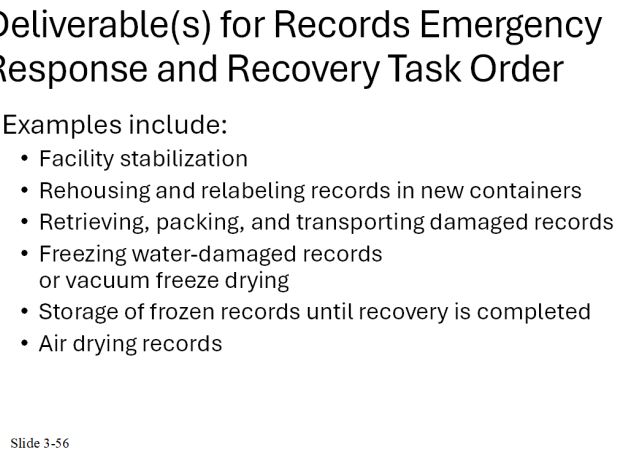
Photo courtesy of NARA—Suitland—Munters' Moisture Control providing building dehumidification—2000

Contractor services may include:

- Dehumidification for the location
- Freezer and cold storage facilities
- Transportation in freezer trucks
- Vacuum freeze drying
- Sanitization and decontamination services
- Mold remediation services
- Media recovery and preservation reformatting
- Data recovery services

Deliverable(s) for Records Emergency Response and Recovery Task Order

Slide 3-56



The deliverables on a Task Order for records emergency response and recovery may include any or all of the following actions:

- Facility stabilization
- Rehousing and relabeling records in new containers
- Retrieving, packing, and transporting of damaged records
- Freezing water-damaged records
- Storage of frozen records until recovery is completed
- Vacuum freeze drying water-damaged records
- Air drying records
- Cleaning records
- Sanitizing and/or decontaminating records
- Recovery of special formats, including photographs, microfilm, magnetic media, film, electronic record formats such as CDs, DVDs, optical disks, hard drives, etc.
- Reformatting of paper-based, film-based, electronic, microfilm, and magnetic tape records

Document Your Response Plan

Slide 3-57

Document Your Response Plan

Document the decisions and plans you have made while planning your response.

Slide 3-57

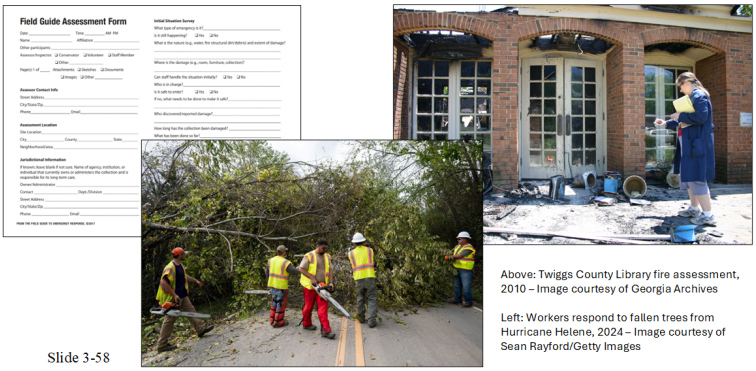
When planning your response, it's important to document the decisions and plans you've made. **Handout 3.2—Response Plan Template** provides a sample template for documenting your response plan.

Lesson 3: Implementing the Response

Slide 3-58

Session 3—Records Emergency Response and Recovery

Lesson 3: Implementing the Response



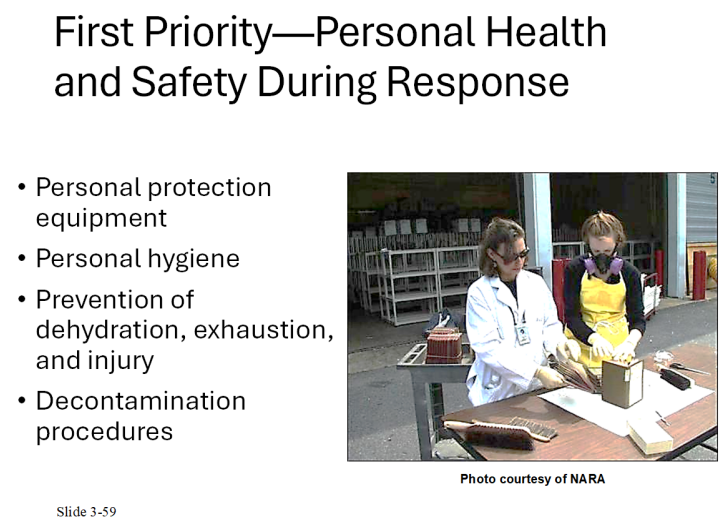
Slide 3-58

Above: Twiggs County Library fire assessment, 2010 – Image courtesy of Georgia Archives

Left: Workers respond to fallen trees from Hurricane Helene, 2024 – Image courtesy of Sean Rayford/Getty Images

First Priority—Personal Health and Safety During Response

Slide 3-59



The assessment of damage to the records has been made, the response has been planned, and the Response Team has been assembled and is ready to begin the response. But, as always, **personal safety and health come first**.

The health and safety issues that should be addressed during a response include personal protection equipment; personal hygiene; prevention of dehydration, exhaustion, and injury; and decontamination procedures.

Personal Protection Equipment

- Steel-toed boots, preferably water-proofed
- Heavy-duty, water-proof work gloves
- Something to cover your nose and mouth if there is a potential for splashes or airborne particulates (dust)
- Goggles or safety glasses with side shields
- Long-sleeve shirts and long pants or coveralls
- An ANSI-approved hardhat if there is a danger of falling debris
- Hearing protection such as ear plugs or landscaper's ear muffs if you are in an area where you must shout to be heard

- Mosquito repellent in tropical areas
- If there is a risk of contaminants, including mold, a fit-tested respirator with:
  - High Efficiency Particulate Air (HEPA) filtration for mold or biological hazards
  - N95-filtration (activated charcoal), if advised to minimize unpleasant odors

Personal Hygiene Rules

- Do not, under any circumstances, put your hands in your mouth or on objects that could go into your mouth, such as water bottles or food.
- Wash your hands and body with soap and warm, drinkable water. Don't scrub too hard, or rub overly hard on your skin, which needs to remain intact to prevent infection.
- Clean cuts and abrasions thoroughly with soap and water and apply antibiotic ointment.

Prevention of Dehydration, Exhaustion, and Injury

- Drink lots of water (or a 50:50 mix of sports drink and water), and drink at least every half-hour. Avoid soda, alcohol, coffee, and tea, as they can dehydrate your body.
- Take frequent rest breaks and rotate physical tasks.
- Eat light meals.
- Avoid direct sunlight; wear a hat, sunscreen, and loose-fitting clothes if you have to work in the sun.
- Take care when lifting heavy boxes, especially if they are waterlogged, because wet paper is significantly heavier than dry.
- Use caution when walking in water or when working with wet hands to avoid electrical shock or serious injury.
- If working in hot weather, do the heaviest work early in the morning, from 6:00 a.m. to 11:00 a.m., and late in the afternoon, from 3:00 p.m. to 7:30 p.m.
- Notify your supervisor if you or any of the Response Team members have health or medical conditions, such as high blood pressure, a heart condition, back problems, or allergies.
- If you or a team member begins to feel unwell, stop physical tasks and let someone know.

(Refer to **Handout 3.3—Personal Health and Safety During Response** for a one-page, printable version of this list.)

Decontaminating Equipment and Clothing

- Wash gear with warm, soapy water and/or bleach.
- Wash clothing normally in a household washer.

Working With Mold and Other Contaminants

Slide 3-60

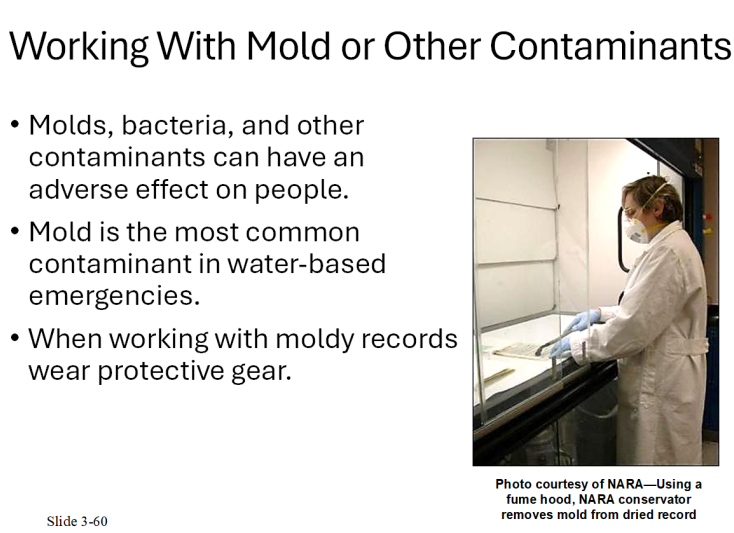


Photo courtesy of NARA—Using a fume hood, NARA conservator removes mold from dried record

Molds (fungi, bacteria, and other water- and air-borne contaminants) can have an adverse effect on people, particularly individuals with allergies, asthma, or other respiratory problems, or immune system problems. People with respiratory impairments and sensitivities or compromised immune systems should stay away from contaminated areas.

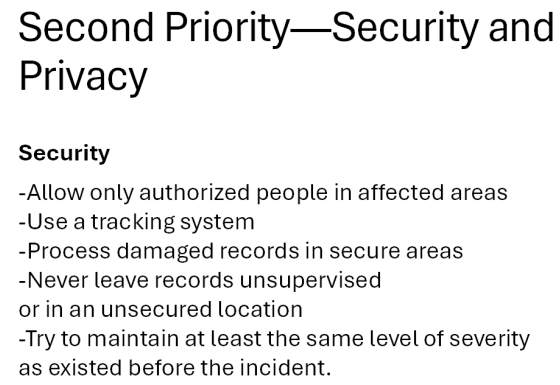
The most common category of contaminant in water-based emergencies is mold. Be warned that mold is most likely present in any building that was flooded. If mold is present, response personnel will require additional respiratory protection.

When working with moldy records, wear a respirator, disposable rubber or plastic gloves, a lab coat, and eye protection. Wash clothing in hot water and bleach after exposure to mold and make sure that you don't touch your mouth, nose, or eyes with contaminated fingers.

Ordinary dust masks are not sensitive enough to filter mold spores. You will need to be fit-tested for a respirator with a High Efficiency Particulate Air (HEPA) filter. Be aware that respirators are ineffective if used improperly. People with facial hair will not be protected, as they cannot get a sufficiently tight fit.

Second Priority—Security and Privacy

Slide 3-61



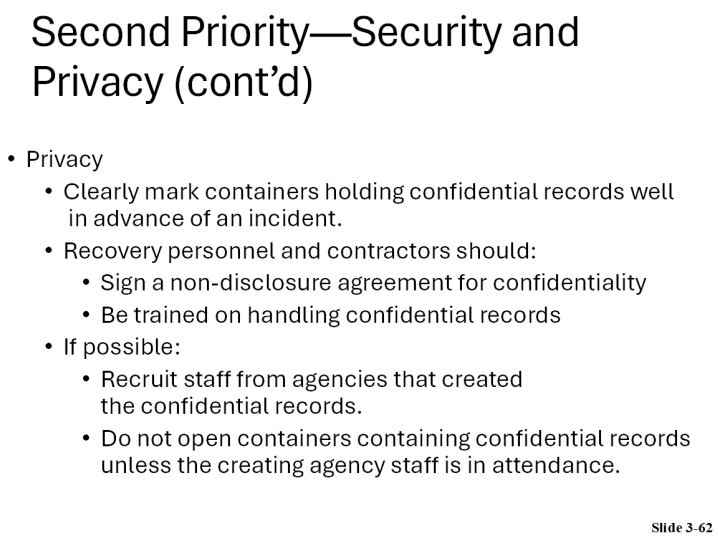
After ensuring the Response Team's health and safety during the response, your next priority is to **ensure the security and privacy of the affected records.**

Security

During a response, damaged records are typically relocated from their current location to a location not affected by the emergency. No longer in controlled-access offices or storage areas, the records face security issues such as theft, vandalism, or mutilation. Do the following to maintain the security of records:

- Ensure that only those people authorized to participate in recovery are allowed into affected areas.
- Ensure that a tracking system is in place and is monitored.
- Process damaged records in secure areas.
- Never leave the records unsupervised or in an insecure location.
- Try to maintain at least the same level of security as existed before the incident (locked storage, locked cabinets, safes), to the degree practicable, when recovery action is not taking place.

Slide 3-62



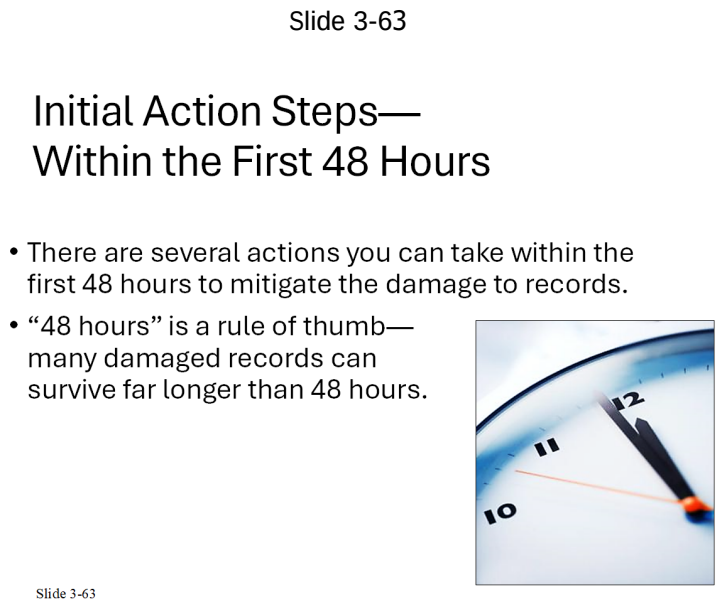
Privacy

In addition to security issues, privacy also becomes an issue when confidential records are affected. Do the following to maintain the privacy of confidential records:

- Ensure that containers holding confidential records are clearly labeled well in advance of any emergency and include the creating agency's name.
- Ensure that people authorized to participate in recovery (1) have signed an agreement not to disclose confidential information and (2) have been instructed on the importance of respecting confidentiality and on how to handle confidential records.
- Ensure that contractors recovering the records, who should be vetted by checking their references, sign an agreement not to disclose confidential information.
- If possible, recruit staff from agencies that created the confidential records to assist in recovery.
- If possible, do not open containers containing confidential records unless the creating agency staff is in attendance.

Initial Action Steps—Within the First 48 Hours

Slide 3-63



There are several actions you can take within the first 48 hours to help mitigate the damage to the records, including the following:

- Cover materials with plastic if water is dripping on them.
- Remove standing water.
- Drop temperature to 65° F or lower.
- Drop relative humidity (RH) to below 50 percent, and monitor.
- Use fans to circulate air, unless the records are contaminated by mold.

If you don't have access to the records, you can still take steps to mitigate damage, including the following:

- Start whatever planning is possible before actually seeing the damage.
- Order the recovery materials you know you'll need.
- Prepare your coding system and labels (for packing out).
- Get in touch with conservators and document restoration professionals.

It should be pointed out that the figure of 48 hours is given as a rule of thumb, and circumstances may dictate otherwise.

You may not get immediate access to emergency areas, and records professionals may be denied access for far longer than 48 hours.

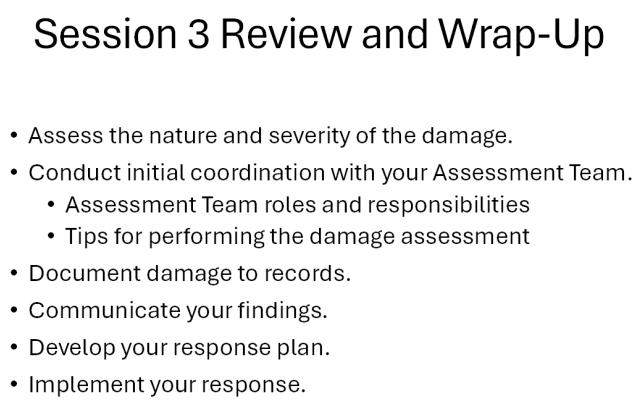
However, many damaged records can survive far longer than 48 hours, so don't think after 48 hours that you should throw in the towel and write off the records as lost.

For a thorough listing of actions that should be performed within the first 48 hours of an emergency, refer to **Handout 3.4—Emergency Response Checklist: First 48 Hours**.

Session 3 Review and Wrap-Up

Session Review

Slide 3-64



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In Session 3, you learned:

- How to assess the nature and severity of the damage
- How to conduct the initial coordination meetings your Assessment Team
  - Assessment Team roles and responsibilities
  - Tips for performing the damage assessment
- How to document damage to records
- The importance of communicating your findings
- Developing your response plan
- Implementing your response

Resources for Help

Slide 3-65

Slide 3-65

- **CoSA Resource Center—**
  https://www.statearchivists.org/research-resources/resource-center

Activity: Develop Your REAP— Action Team Activity

Slide 3-66

Break Activity

Develop Your REAP— Designate your Action Team

Handout 3.5—Develop Your REAP- Action Team Activity

Activity Goal

The purpose of this activity is to continue working on your Records Emergency Action Plan (REAP).

Activity Instructions

Establish your REAP Action Team. Identify the individuals you want to be on your team and assign their roles and responsibilities.

If you are taking this course with other people from your agency, you may opt to work together and complete this activity as a team.

Be prepared to share your answers with the class at the beginning of the next Session.

Name(s):

Agency:

Members of Your Action Team:

Name, Job Title, Action Team Responsibilities:

Slide 3-66

Georgia Archives Emergency Planning and Response for Essential Records

Session 4

Participant Guide

2024

Table of Contents

Session 4 Introduction

Session 4 Welcome and Overview

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Emergency Planning and Response
for Essential Records Course
Session 4
November 14, 2024

Required materials for Session 4:

- Session 4 Participant Guide
- Session 4 handouts:
  - **Handout 4.1**—Sample Pack-Out Tracking Log
  - **Handout 4.2**—Response and Recovery Procedures
  - **Handout 4.3**—Sample Records Emergency After-Action Report
  - **Handout 4.4**—Sample Post-Event Report
  - **Handout 4.5**—Common Drying Methods
- Materials from prior sessions:
  - Your completed handout from the Session 3 Take-Home Activity: **Handout 3.5**—Develop Your REAP—Decision Maker, Site Assessment, Goals and Timetables, or Action Team
- Course Reference(s):
  - **Reference 01**—Resource Center, References, Reading List

Slide 4-2

Session 4 Overview

- **Break Activity Debrief**
- **Session 4—Records Emergency Response and Recovery (cont'd)**
  - ❑ Lesson 4: Recovery Procedures
  - ❑ Summary & Wrap-up

Session 4—
Records Emergency Response and Recovery

Session 4 Introduction and Objectives

Session 4 Introduction

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Session 4—Records Emergency Response and Recovery (cont'd)

Introduction and Objectives

Session 4 Objectives

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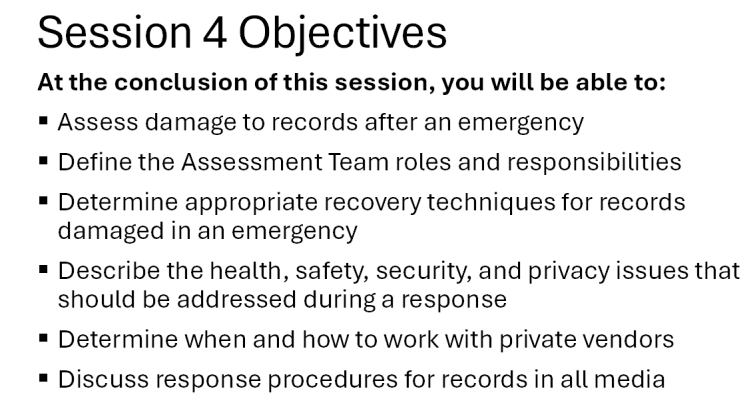


At the conclusion of this session, you will be able to:

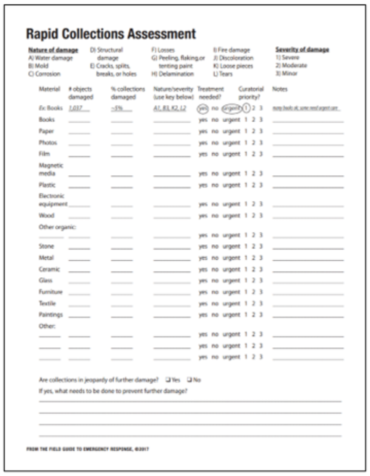
- Assess damage to records after an emergency
- Define the Assessment Team roles and responsibilities
- Develop a response plan for records damaged in an emergency
- Describe the health, safety, security, and privacy issues that should be addressed during a response
- **Determine when and how to work with private vendors**
- **Discuss response procedures for records in all media**

Lesson 4: Recovery Procedures

Slide 4-8

Session 4—Records Emergency Response and Recovery

Lesson 4: Recovery Procedures



Rapid Collections Assessment

Nature of damage
A) Water damage
B) Mold
C) Corrosion
D) Structural damage
E) Cracks, splits, breaks, or holes
F) Losses
G) Peeling, flaking, or tenting paint
H) Delamination
I) Fire damage
J) Discoloration
K) Loose pieces
L) Tears

Severity of damage
1) Severe
2) Moderate
3) Minor

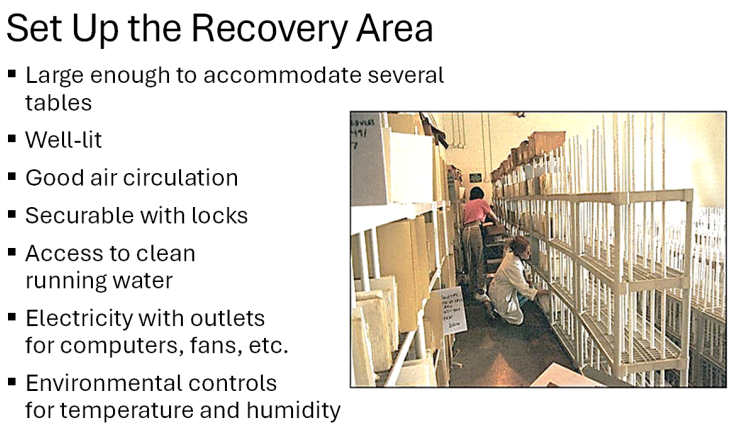
Material	# objects damaged	% collections damaged	Nature/severity (use key below)	Treatment needed?	Curatorial priority?	Notes
Ex: Books	1,037	~5%	A1, B3, K2, L2	yes no urgent	1 2 3	
Books				yes no urgent	1 2 3	
Paper				yes no urgent	1 2 3	
Photos				yes no urgent	1 2 3	
Film				yes no urgent	1 2 3	
Magnetic media				yes no urgent	1 2 3	
Plastic				yes no urgent	1 2 3	
Electronic equipment				yes no urgent	1 2 3	
Wood				yes no urgent	1 2 3	
Other organic:				yes no urgent	1 2 3	
Stone				yes no urgent	1 2 3	
Metal				yes no urgent	1 2 3	
Ceramic				yes no urgent	1 2 3	
Glass				yes no urgent	1 2 3	
Furniture				yes no urgent	1 2 3	
Textile				yes no urgent	1 2 3	
Paintings				yes no urgent	1 2 3	
Other:				yes no urgent	1 2 3	
				yes no urgent	1 2 3	
				yes no urgent	1 2 3	

Are collections in jeopardy of further damage? ❑ Yes ❑ No
If yes, what needs to be done to prevent further damage?

FROM THE FIELD GUIDE TO EMERGENCY RESPONSE, ©2017

Set Up the Recovery and/or Staging Areas

Slide 4-9



Recovery Area

If you are going to recover records on site, you will need a recovery area. Recovery areas should be large enough to accommodate several tables, be well-lit with good air circulation, and have access to clean running water. You may also need a computer, fans, plastic sheeting, shelves, drying materials, and dehumidifiers.

In addition, recovery areas should be environmentally controlled, as mold may develop in 48–72 hours if the temperature and humidity are high. Ideally, the temperature should be below 65° F, with the relative humidity less than 50 percent. Monitor the climate within the recovery area and make the relative humidity levels consistent.

Cover shelves with plastic sheeting and tables with sheeting or a water-absorbent material such as clean newsprint from rolls. Set up fans so they are circulating the air but not blowing directly on the records. Keep wet records away from supports made of metal, which will rust.

Staging Area

Slide 4-10

If you are not going to recover records on site, but instead will be shipping them off site or to a contractor for recovery, you will need a staging area where you can box or re-box records, record them in a tracking system, and prepare them for shipment.

Select a site that is large, with plenty of room for tables, supplies, and shelves; for boxing and loading records; for tracking them; for staff moving about, etc. The ideal site will be accessible to trucks unloading supplies and loading boxes of records and other materials.

Requirements for Recovery and Staging Areas

As mentioned earlier, both the recovery and staging areas should have good lighting, good air circulation, and access to clean running water.

Both areas must also be securable with locks. Make sure the area will remain secured at the appropriate level for the records being handled.

Do not begin moving records until the staging and/or recovery area is prepared.

Freezing Records On Site

Slide 4-11

Freezing records is a good option if you cannot treat all of the wet records within 48 hours. You can try to locate large freezers on site—for example, those in a cafeteria—or rent freezer trucks or freezers. You can also use small household chests or upright freezers.

Also think about alternate resources—store freezers, local universities, colleges, food banks, etc.

What If You Don't Have Room for a Staging or Recovery Area?

Slide 4-12

If the emergency is large-scale, or you do not have access to suitable areas on site, you will have to locate appropriate facilities elsewhere. Look for sites nearby that meet your criteria. These may include:

- Public buildings with large open areas, such as recreation centers or schools
- Buildings with private meeting facilities
- Church activity buildings
- Commercial property for rent or lease
- Rental trailers or tents

Pack-Out Guidelines

Slide 4-13

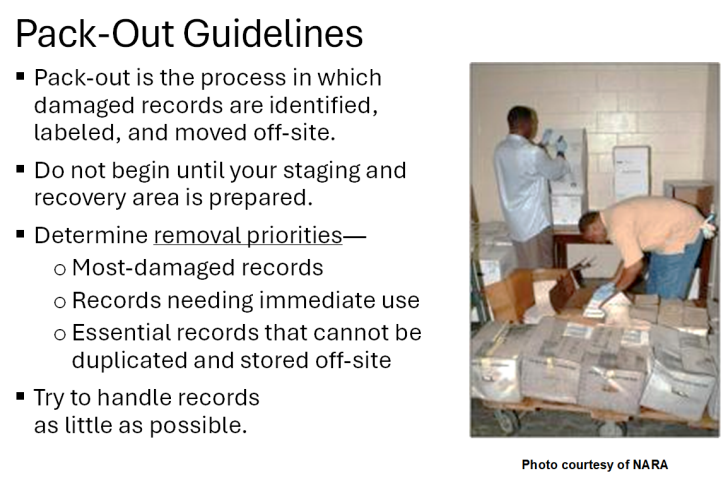


Photo courtesy of NARA

Pack-out is the phase of emergency response in which damaged records are identified, labeled, and moved off site either for immediate recovery operations or to frozen storage until recovery operations can begin.

Do not begin moving records until your staging and/or recovery area is prepared. You must also decide whether you are going to try to recover the records on site or ship them to a contractor. You may decide to recover some on site, such as damp paper records, while sending records in other media, such as photographs, microforms, tapes, and hard drives, off site for special handling.

Determine removal priorities from your assessment. Usually the wettest or most damaged records are removed first, along with any records that are needed for immediate use or essential records that cannot be duplicated and stored off site.

Try to handle the records as little as possible and make sure they are well supported.

Packing-Out Boxes

Slide 4-14

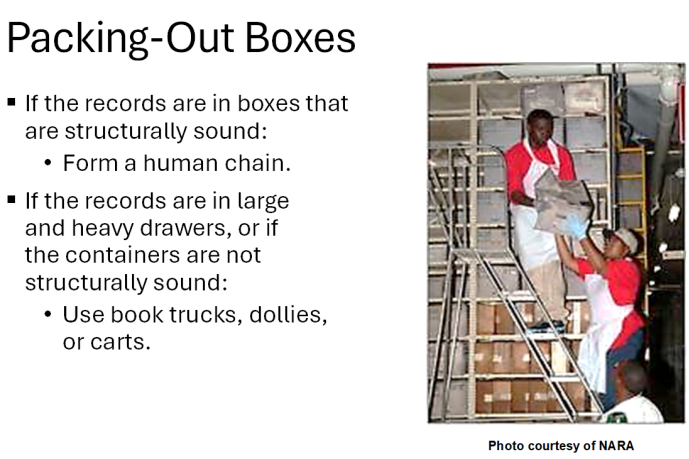


Photo courtesy of NARA

You must also decide how to remove the records physically from the area where the damage occurred.

If the records are in boxes that are structurally sound, the fastest and most efficient way to remove them is usually by forming a human chain. This is especially effective in removing materials from cramped quarters.

However, if the records are in large and heavy drawers, or if their containers are not structurally sound, you should use book trucks, dollies, or carts. Removal equipment should be made of metal. If you must use wooden carts, cover them well with heavy plastic sheeting before placing records or containers on them. For maps and flat files, remove drawers to protect and transfer the materials to the recovery or staging area. Materials may be frozen right in the drawers.

Slide 4-15

Packing-Out Boxes (cont'd)

- If the records are not in structurally sound boxes or could collapse during the move:
  - Transfer them to other receptacles before removal.

Photo courtesy of NARA

If the records are in boxes that are not structurally sound and could collapse during the move, you must transfer them to other receptacles before removal. Options include:

- Clean, dry cardboard or plastic boxes
- Plastic milk crates lined with garbage bags or Rescubes
- Book carts, hand carts, or dollies
- Plastic garbage bags (one box per bag)

Identification for Tracking

Slide 4-16

Identification for Tracking

- Each box or drawer of records removed must be identified by a unique number or code.

For tracking purposes, each box or drawer of records removed must be identified by a unique number or code. Make sure all containers are labeled on two sides, using waterproof permanent markers. If you cannot write directly on the receptacle, place the panel from the box or a sheet of paper with identifying information in the container along with the records. Record the necessary information on the moved records electronically if computers or laptop computers are available, or on hardcopy forms, if they are not.

If you are using paper to record the tracking information, you should assign someone as soon as possible to enter the data into the tracking system designed and set up when your response was being developed. Use a design that is flexible, as you may need to add or change fields as the emergency unfolds. At a minimum, you should collect information on:

- Contents
- Original location
- Type(s) of damage
- Box number
- Response priority
- Destination during recovery
- All actions performed, and by whom
- Decisions made, and by whom

(Refer again to **Handout 3.1**—Sample Pack-Out Tracking Log for an example of a pack-out tracking form.)

Stacking Pallets for Transport

Slide 4-17

Records that are sent off site are typically shipped in freezer trucks on pallets that have been shrink-wrapped. There are several systems for stacking pallets for transport. One system involves stacking the boxes in an alternating pattern (like bricks). This allows each level to stabilize the one below it, and uses the strength of the box walls to support the weight of the uppermost boxes. Usually, you can stack the pallets three levels high before the weight becomes too great for the lowest level. You can place a sheet of cardboard between levels to help to stabilize them.

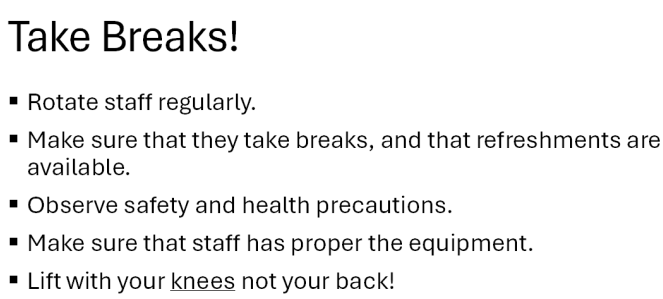
If you are putting pallets in a freezer truck, make sure that there is enough space for air to circulate. Otherwise, the records will not freeze and mold will develop.

Never move wet records in large batches or pile them on top of each other, because the weight damages them. Before moving wet records, always repack materials in boxes or containers strong enough to hold their weight.

If reboxing, pack the materials loosely, but so they do not slump; they will swell as they absorb water. Remove them from shelves and drawers in a horizontal sequence. After you have removed the wettest records, the remainder can be moved in an orderly fashion.

Take Breaks!

Slide 4-18

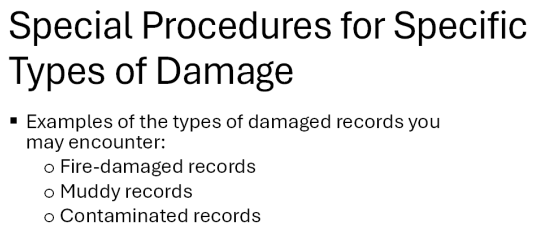


Wet records and boxes are heavy, sometimes weighing 40-60 pounds each. Locations may be awkward, hard to maneuver around, and staff may not be used to lifting heavy boxes for long time periods.

During pack-out and recovery, rotate staff regularly to avoid exhaustion and stress. Make sure that they take breaks, and that refreshments are available. Always observe safety and health precautions for workers, and make sure that they have the proper equipment. And remember: lift with your knees not your back!!

Special Procedures for Specific Types of Damage

Slide 4-19



Be aware that specific types of damage require specialized treatment. The following are just three examples of the types of damaged records you may encounter. Consult the conservation professionals you identified in your REAP regarding incidents that may occur in your area, producing a need for special treatment of damaged records.

Fire-Damaged Records

If a fire has occurred, the records may be both wet and brittle. You can provide support by placing pieces of paper toweling or clean newsprint under charred materials before they are moved.

Muddy Records

Do not attempt more than a minimal cleaning of wet records that are also muddy, unless you have available a large quantity of clean running water and you have the time. Attempting to remove mud from wet paper records may force dirt farther into the paper if a rubbing action is used. Mud may be easier to remove when dry. You may be able to rinse some tightly wound tapes, as only the edges will be exposed to additional water. It may be possible to rinse mud off boxes or enclosures to make the drying process faster.

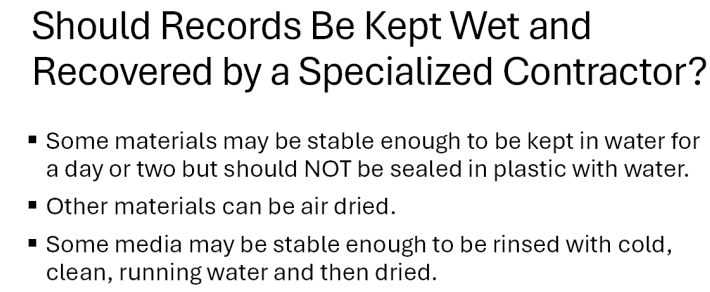
Contaminated Records

Sometimes records are flooded by water containing raw sewage, covered with asbestos from crumbling ceilings, or otherwise contaminated with materials that make them unsafe to handle without special precautions. If records are contaminated, or you suspect that they may be, make sure that all staff members use proper protective equipment and clean-up procedures. It is often best to leave this to trained operators under your supervision.

A contractor who specializes in treatment of contaminated materials should always be consulted, as these records require special handling and treatment.

Should Records Be Kept Wet and Recovered by a Specialized Contractor?

Slide 4-20



With film-based media in particular—because there are so many photographic processes—unless you are sufficiently knowledgeable about photographic process identification, it is important to receive expert advice from a photograph conservator as soon as possible before determining how to proceed with the response.

If you determine that the photographic process is stable enough:

- Wet microfilm or motion picture film may be kept in clean water for a day or two until it can be handled by an experienced conservator or specialized contractor. Do not place film or photographs in plastic with water for long time periods!
- With guidance from a conservator, you may be able to wash off mud or dirt under cold, clean, running water, and then dry those materials.

Some photographic processes and other media should never be exposed to water. Take special care to keep them dry if they are important to the agency. Boxes with water-proof coating would be best for storing these records.

There are many good resources on the special needs of special-format records, including photographs. These resources are provided on the CoSA Resource Center.

Steps for Handling Mold

Small Outbreaks

Slide 4-21

Steps for Handling Mold: Small Outbreaks

- Quarantine moldy records from unaffected areas.
- Dry and clean the areas where the molder records were found.
- Mold cannot be removed from wet or damp records.

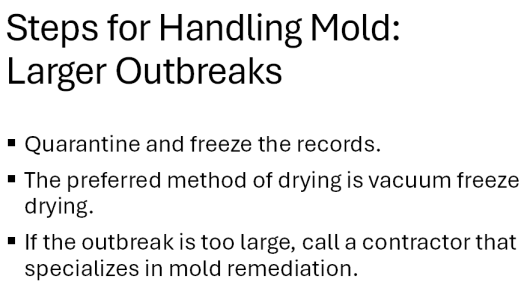
Quarantine moldy records from unaffected records. You will need to dry them in a location that vents to the outside. The area where the moldy records were found will need to be thoroughly dried and cleaned to ensure that mold does not germinate elsewhere.

Mold cannot be removed from wet or damp collections. Items must be completely dry before any attempt is made to remove mold. If using fans to dry the records, make sure the fans are not blowing directly on the materials or you will spread the mold spores. Point the fans at the ceiling.

You will have to clean the records once the mold has dried. You may use a High Efficiency Particulate Air (HEPA) filtered vacuum and micro-hose kit, but this is very labor-intensive and should be carried out in a fume hood to avoid exposing others to the particulates produced by the vacuuming. This works better than brushing records clean and keeps the mold spores from returning to the air. Vacuum through a screen if the item is fragile.

Larger Outbreaks

Slide 4-22



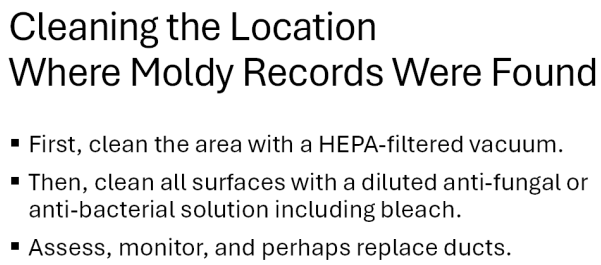
Quarantine and freeze the records. Placing the moldy items in an environment with a temperature below freezing will halt growth but will not kill spores.

The preferred method of drying is vacuum freeze drying, so as not to spread the dry mold spores.

If the outbreak is too large for local staff to handle, call a contractor that specializes in mold remediation. Vacuum freeze drying is an effective method for eliminating most molds and may be considered for records that have special value or are irreplaceable.

Cleaning the Location Where Moldy Records Were Found

Slide 4-23



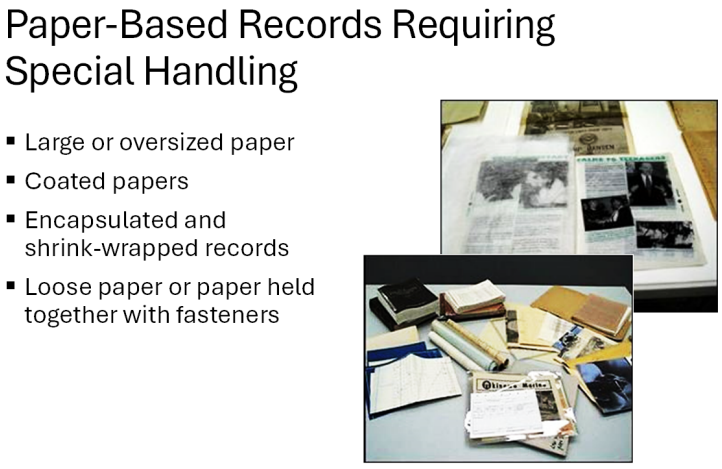
Begin by cleaning the area with a HEPA-filtered vacuum. Then clean all surfaces—shelves, floors, walls, ceilings, and windows—with an anti-fungal or anti-bacterial solution, including bleach.

The best solution to clean surfaces is to use diluted bleach or diluted rubbing alcohol of 70-99%. Remember - do not spray any chemicals on your materials, just on the surfaces! Make sure to wear the proper PPE when cleaning moldy surfaces, too.

You will also need to assess ducts for air circulation and air conditioning, and monitor them for the presence of mold. If molds persist, then you may need to clean or replace the ducts.

Paper-Based Records that Require Special Handling

Slide 4-24



Large or Oversized Paper (Maps, Architectural or Engineering Drawings)

- Large or oversized paper records often require two people to handle and transport them safely, and will require a secondary support (the original drawer, a tray, or spun-bond polyester).
- If the record is rolled or folded, make sure there is enough space on the table to accommodate the record when it is unrolled or unfolded.
- Rolled and folded paper can be vacuum freeze dried successfully.

Coated Papers

- Coated paper such as magazines or journals stick together, or "block," and must be dried immediately to prevent damage. (Coated paper is usually glossy and is frequently used for color and photographic illustrations.) You must not allow coated paper surfaces to be in contact with one another during drying. Architectural linen can also block because it is coated with starch, which acts as an adhesive when wet.
- If the pages are stuck together, or blocked, an attempt can be made to recover them by placing the record in a freezer and vacuum freeze drying.
- If the pages are not stuck or blocked, gently place pre-cut pieces of spun-bond polyester fabric between the pages.
  - Allow air to circulate, and wait until the record is completely dry to remove interleaving material (the absorbent material placed between leaves of paper to hasten drying; interleaving material should be thin, absorbent, ink-free, and acid-free).

Encapsulated and Shrink-Wrapped Records

Although exterior housings such as encapsulation and shrink-wrap do slow the intrusion of water, encapsulated or shrink-wrapped records are not protected from water damage. If the records do become wet, it is possible to vacuum freeze dry the encapsulated record successfully.

If you are planning to air dry the records, the exterior housing must be removed:

- Using scissors, cut through the encapsulation bond or weld on all sides of the record. If the plastic sheet is clean, it can be re-used to support the wet record while it is carried to the drying site.

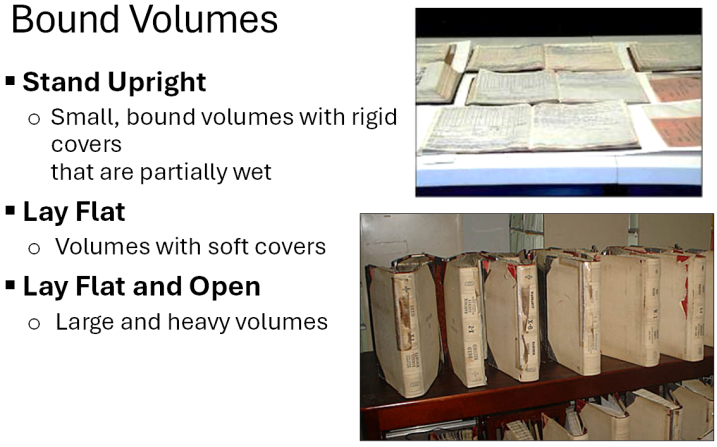
Loose Paper or Paper Held Together with Fasteners

Follow these steps when handling loose pages or paper held together with fasteners:

- Remove outer paper or paperboard folders and/or record jackets. If they contain valuable identification information, place the folders near their contents to dry.
- In some cases, it may not be prudent or possible to remove fasteners, but when it is possible, removing them will hasten drying and prevent corrosive rust from forming on the records.
- To prevent tearing when moving older and fragile paper, use supports such as sheets of polyester film, nylon screening, or spun-bond polyester. Modern printer papers contain fillers that give the paper wet-strength even when it is wet or saturated with water. It is important to recognize the difference between more modern and older papers, and to act according to the paper's need for support.
- Arrange paper records individually, if possible, or in small stacks of 1–5 records each. Turn records over frequently to increase exposure to the air.
- Do not rebox records until they are completely dry.

Bound Volumes

Slide 4-25



It is preferable to freeze and vacuum freeze dry bound volumes quickly, because this will help minimize the danger of paper distortion and warping of bindings.

Bound volumes can also be air dried successfully, but will require attention to ensure that the spine area of the book is completely dry before returning the book to a location without air circulation and with high humidity; book spines and covers are highly susceptible to mold.

Small Bound Volumes

Small bound volumes with rigid covers that are only partially wet can be dried by standing them upright:

- Place the book upright and hold it open with blotter pieces to allow increased air circulation and to expose the tightly bound spine to air.
- If the book covers are sturdy enough, fan the pages open and interleave with small pieces of pre-cut blotter paper placed close to the spine.
- Place fanned volumes in front of a fan with the fan aimed at the ceiling. This will speed drying.
- Invert books to even the stress on the binding, rotating books upside-down to right-side-up while drying.
- Remove the blotters when the book is dry.

Large or Ledger Bound Volumes

You may need to dry large or ledger bound volumes flat and open if their weight does not allow them to stand upright and open. This includes bound volumes with soft covers that are not sturdy enough to stand upright.

- If the pages are damp but not totally wet, fan them open.
- Otherwise, interleave pages with blotter paper, clean newsprint, or spun-bond polyester to wick moisture away from the paper.
- Turn the pages frequently and change the absorbent paper.
- Spun-bond polyester does not absorb water, and does not need to be changed if it is clean. It can be re-used

Slide 4-26

Paper-Based Records Requiring Special Handling (cont'd)

An encapsulated item with water damage

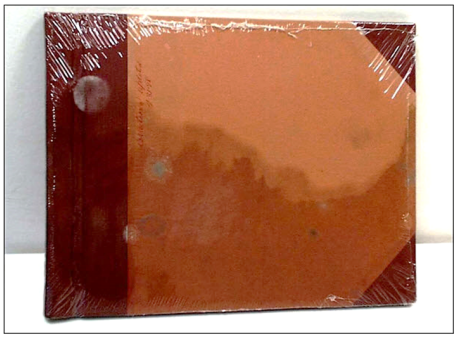
Slide 4-27

Paper-Based Records Requiring Special Handling (cont'd)

Water damage detail view

Slide 4-28

Paper-Based Records Requiring Special Handling (cont'd)



Shrink wrap does not provide a moisture barrier.

Slide 4-29

Paper-Based Records Requiring Special Handling (cont'd)

Rust from wet staples

Photo courtesy of Georgia Archives

Slide 4-30

Paper-Based Records Requiring Special Handling (cont'd)

Drying bound volumes

Handling of Special Media Records

Slide 4-31

Handling of Special Media Records

Photos courtesy of NARA

Photographs

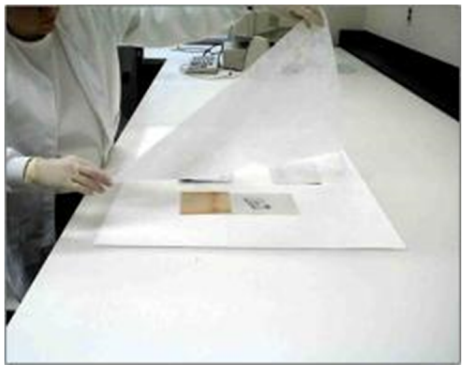
Photographs, both negatives and prints, involve such a wide variety of material types and such a long history of technological innovation that it is difficult to give general advice on the recovery of photographic materials. If the photographs in your office are valuable to your agency, it is best to have the advice of a conservator or expert, because they have the requisite knowledge of photographic history and preservation.

- Just like coated paper, photographs will stick together, or "block," and therefore must be dried immediately to prevent damage.
  - Do not allow their surfaces to come in contact with one another during drying.
- If the photos are stuck together or blocked, do not try to separate them. Contact a conservator for advice.
- Photographs can usually be vacuum freeze dried successfully. Do not vacuum freeze dry glass plate and cased photographs.
- When air drying, you must dry photographs under restraint or they will curl and distort.
  - Photographs are made up of more than one layer, and each layer dries at a different speed. This causes them to curl as they dry, which is why you need to apply pressure to keep them flat.
  - It is very difficult to correct this problem.

- If air drying:
  - If the surface is not cracked or flaking, and the photographs have soot or mud on the surface, you may be able to rinse them in a tray of cool, clear water while they are still wet.
  - Dry photographs image side up on clean blotters for at least one hour.
  - If the emulsion or surface of the photograph is sticky or tacky to the touch, you will need to interleave it with sheets of spun-bond polyester to prevent disturbance of the surface during drying.
  - Place the polyester and photographs between blotters to create a stack.
  - Put a flat sheet of Plexiglas™ or other heavy-weight flat material on top of the stack.
  - Suitable weights include telephone books or bricks wrapped in plastic to add additional pressure.

Slide 4-32

Handling of Special Media Records (cont'd)



Photographs drying in blotter stacks, the optimum method of recovery

Photo courtesy of NARA

Slide 4-33

Handling of Special Media Records (cont'd)

Multiple layers of sandwiched photographs are placed on top of each other, saving valuable work space.

Photo courtesy of NARA

Slide 4-34

Handling of Special Media Records (cont'd)

The entire stack is covered with Plexiglas™ for even pressure, and weights are added to minimize distortion.

Photo courtesy of NARA

Slide 4-35

Handling of Special Media Records (cont'd)

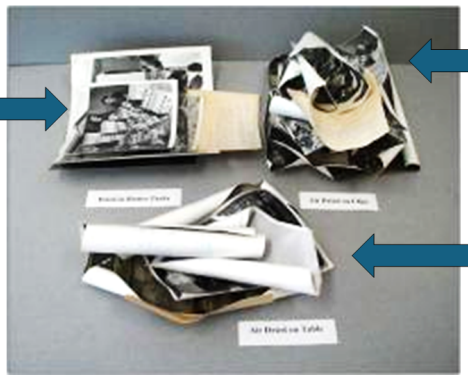


Photo courtesy of NARA

Optical Media

Slide 4-36

Handling of Special Media Records (cont'd)

CDs and floppy disks air drying

Photo courtesy of NARA – Suitland – NIH material 2006

All types of disks are composed of several layers. Of these, the metal reflective layer is probably the most important and the most vulnerable to physical damage. Normally, this layer is covered by a very thin protective coating.

The metal reflective layer is usually unaffected by water unless it has been soaking for a week or longer.

If time and resources permit, immediate response can save the information on the disks.

- Remove the disk from its case or cartridge. Cases that are not damaged can be cleaned thoroughly with water or soap and water and re-used. Damaged ones should be discarded.
- Rinse the disk in clean room-temperature tap water and then in distilled water.
- If any residue remains, using distilled water, gently wipe the disk surface with a wet, soft cotton tissue—not paper towels, as they are too abrasive.
- Wipe in a radial direction from the center out, not a circular direction, to remove the water. Follow this wiping with another rinse in clean, distilled water.
- After rinsing, gently blot up any excess water with a soft, lint-free tissue to prevent water spots during drying.

The best chance of avoiding damage is to limit the time a disk is wet. Therefore, it is best to recover disks immediately. If immediate recovery is impossible, rinse the disks in distilled water and dry them.

Computer Hard Drives

Slide 4-37

Handling of Special Media Records (cont'd)

A CPU that was wrapped and sealed in plastic – it dried in the plastic and parts rusted over.

Photo courtesy of NARA – Orleans Parish post-Hurricane Katrina - 2005

Electronic information carriers such as computer hard drives and electronic media also require immediate attention to ensure recovery.

Computer hard drives have a large number of components, some of which are metal and susceptible to rust and oxidation; others are composed of soft plastics and materials susceptible to mold.

- Have computer hard drives examined by a professional immediately.
- Most often, computer hard drives are **not** salvageable after they are submerged in water. This is an important reason why multiple, routine backups are needed!

Magnetic Tapes

Slide 4-38

Handling of Special Media Records (cont'd)

Proper positioning to air dry audio and video cassettes

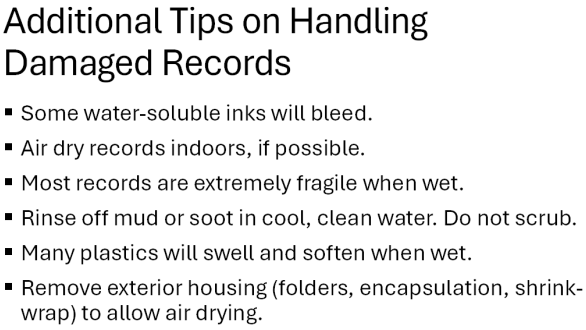
Photo courtesy of NARA – WNRC - NARA - 2006

Tapes are constructed of layers of water-resistant materials. Although water will not cause these layers to swell and break up (as would the layers in a photograph), tapes can still be damaged. Both the tape and the binder layer may be susceptible to degradation when exposed to water. A fully wound tape is less susceptible to water damage than a loosely wound tape.

- Magnetic tape recovery should be a high priority if the tapes are valuable to your agency.
- Do not play or rewind a tape that is wet.
- You should consider sending the magnetic tapes to a contractor who specializes in recovery of magnetic tape.
- Initial response steps, if air drying:
  - Drain any excess water out of the cassette or off the reel of tape. The cassette gate, if present, may be flipped open to allow water to drain.
  - If the tape is wet with seawater or contaminated water, rinse the tightly wound tape with cool, clean water.
  - For reel-to-reel tapes, wipe the wound surfaces with a wet or soft, damp, lint-free cloth.
  - For cassette tapes, shake as much excess moisture out of the cassette housing as possible and stand the tape vertically with the empty hub on the bottom for air drying.
  - Allow the tape to acclimatize to the new environment for at least two days before any further treatment.

Additional Tips on Handling Damaged Records

Slide 4-39



- Some water-soluble inks will bleed.
- Air dry records indoors if possible. Sunlight and heat may dry certain materials too quickly—particularly bound volumes or artifacts made of wood—causing splitting, warping, and buckling. Changing weather, such as wind, can send documents flying and volumes falling.
- Documents, books, photographs, and special media are extremely fragile when wet. They tear easily and require caution when being handled. Always consider providing a secondary support to prevent more physical damage.
- When mud or soot is present, with guidance you may be able to rinse off some of the particulate in cool, clean water, but do not scrub the surface.
- Many plastics will swell and soften when they are wet. Sensitive surfaces, including wet photographs or electronic media such as CDs or DVDs, must be handled with care to avoid scratching the surface.
- While exterior housings such as folders, encapsulation, or shrink-wrapping may slow the seepage of water into the records, they will not prevent water damage and must be removed to allow air drying.

(Refer to **Handout 4.1**—Response and Recovery Procedures for the preceding recovery and response procedures presented in a quick-reference format that can be used as a job aid and incorporated into your REAP.)

For demonstrations of how to handle records damaged by water, mold, corrosion, pests, and other threats safely, refer to: The DVD that comes with the *Heritage Preservation's Field Guide to Emergency Response*, available for purchase on the American Institute for Conservation website: *https://store.culturalheritage.org/site/*

Implement Contractor Response

Slide 4-40

Implement Contractor Response

- Consult the list of contractors in your REAP.
- Make sure that the procedures for activating the contract or Memorandum of Understanding (MOU) are part of your REAP.

Photo courtesy of NARA

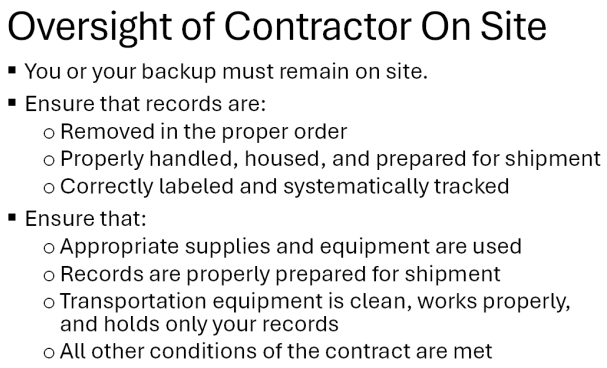
If, because of the scale, nature, or impact of the incident, or because the affected records require special treatment, you determine that a contractor's services are required, consult the list of contractors you compiled as part of your REAP.

Remember to make sure that the procedures for activating the contract or Memorandum of Understanding (MOU) are part of your REAP and that you know how and from whom to obtain any authorizations needed. You should work with your contract, purchasing, or procurement staff.

Remember to review the list and contact information provided in the REAP annually to ensure that they remain current.

Oversight of Contractor On Site

Slide 4-41



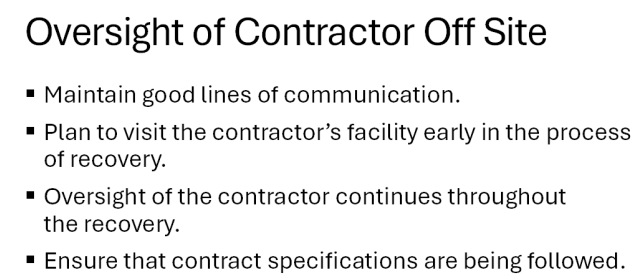
When you and your contractor(s) have decided how you will proceed, your job is not finished. You or your backup must remain on site to make sure that the work is carried out properly and with due diligence, and to make any decisions required. For example, you may need to approve the use of additional equipment, housing materials, or add-ons to the contract if additional damage is discovered.

You must ensure the following:

- Records are removed in the proper order.
- Records are properly handled and housed.
- Records are not handled by a subcontractor without informing the client.
- Records are systematically tracked.
- Records are correctly labeled.
- Appropriate supplies and equipment are used.
- Records are properly prepared for shipment and are physically secure.
- Transportation equipment used to ship records is clean, in proper working order, and holds only records from your agency.
- All other conditions of the contract are met.

Oversight of Contractor Off Site

Slide 4-42



Maintaining good lines of communication with the recovery contractor is critical. You are now partners in the recovery.

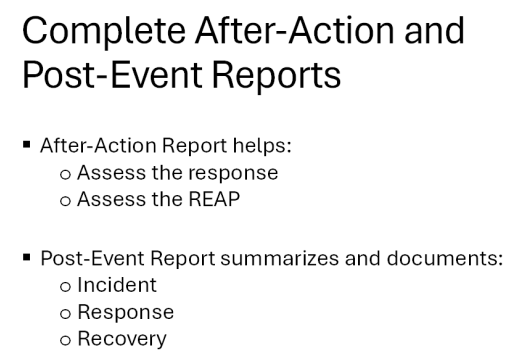
You should plan to visit the contractor's facility early in the process of recovery to ensure that procedures have been communicated properly and that any issues that have arisen during the recovery steps are resolved appropriately.

Oversight of the contractor continues throughout the recovery to ensure the following:

- Your records are not mingled with those of another agency.
- Records continue to be properly labeled and tracked.
- Appropriate recovery methods and equipment are used.
- Records are maintained in their original order.
- Records are secure.

Complete After-Action and Post-Event Reports

Slide 4-43



After an emergency event has been fully resolved, it's important that you complete after-action and post-event reports to capture the details of the incident and of your response.

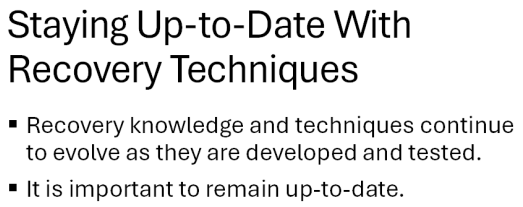
The after-action report helps you assess your response and the REAP, while the post-event report summarizes and documents the incident, response, and recovery.

Therefore, not only do these reports provide a documented history of the event, they also provide data that can be used to assess your REAP and develop lessons learned and best practices. You can then use this information to determine and implement mitigation steps to avoid another similar event.

(Refer to **Handout 4.2**—Sample Records Emergency After-Action Report and **Handout 4.3**—Sample Post-Event Report for sample templates of after-event reports.)

Staying Up-to-Date With Recovery Techniques

Slide 4-44



Recovery knowledge and techniques continue to evolve as they are developed and tested. The international preservation community, institutions, and practitioners continue to share their experiences as they work to recover damaged historic, cultural, and documentary resources. They have commercial partners who are constantly developing, testing, and sharing experiences and working toward better methods to dry large quantities of records and other paper-based bound and unbound materials.

If, during your assessment, you determine that it is necessary to contract out all or a portion of the recovery effort, it is important for you to know the terminology and understand the techniques that contractors offer, in order to be able to provide clear instructions and specifications to contractors and to manage and oversee the work they perform.

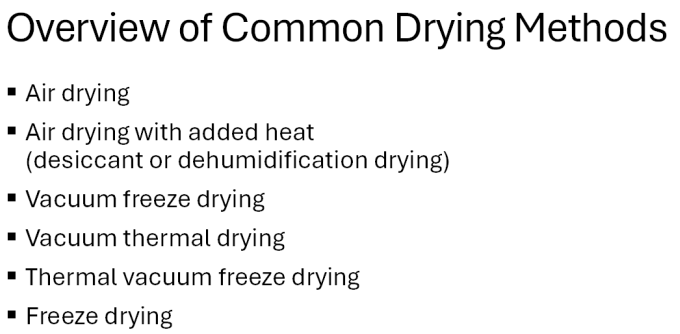
Being an informed consumer about the recovery services purchased will help make the best value of limited resources and yield the most satisfying results from recovery from a water-related incident.

In addition, as part of your annual review, you should update the response and recovery information in your REAP to reflect any changes in the field. A REAP containing an outdated response or recovery technique is not an effective REAP.

Keeping informed on recovery techniques, through trade publications, white papers, and studies such as the one done by NARA, will help you stay on top of new developments and will help you stay knowledgeable about what works and what doesn't.

Overview of Common Drying Methods

Slide 4-45



NOTE: This section provides a brief overview of the techniques most commonly used for drying records. For additional information on each of these methods, refer to **Handout 4.4—Common Drying Methods**.

Much of the following information comes from a presentation by Kathy Ludwig at the NARA Preservation Conference in 2002; the presentation was based on research carried out in the Conservation Laboratory at NARA.

Additional information comes from the article by Betty Walsh, "Salvage Operations for Water Damaged Archival Collections," combined with NARA's "Comparison of Drying Techniques: Understanding the Differences Between Vacuum Freeze Drying, Conventional Freezing, and Other Drying Methods," and information from the Florida state website.

All three of these references are in **Reference 01**.

Air Drying

Air drying involves drying records at room temperature. Typically materials are spread out on, or interleaved with, absorbent papers. In some instances, materials may be dried under restraint in a stack of weighted blotters.

Air drying is a tried and true method most familiar to many, has been proven through long experience, and provides the greatest control over the drying process.

Air Drying with Added Heat (Desiccant or Dehumidification Drying)

Materials are dried by pumping cycles of moist air out of a chamber or space and introducing dried (desiccated or dehumidified) air with relative humidity (or moisture content) lower than 15 percent. One potential problem with this is that air temperatures are usually in the range of 80° F–100° F, which can over-dry paper records, resulting in distortion, increased volume, and reboxing problems.

The literature often cites this method as giving excellent results for damp collections, and it allows access to the materials during the drying process, if that is required.

Vacuum Freeze Drying

Vacuum freeze drying is almost always recommended for most incidents involving records in boxes, where the quantities are large and the records are of varying degrees of wetness. The records will generally be frozen first for transport to the facility and then held in storage in a freezer until the drying process is carried out.

Contractors dry the materials using a very strong vacuum to lower the pressure while holding the temperature below freezing. Cycles of controlled heat may be used on the shelving. This process sublimates the frozen water—that is, the water passes from the frozen state to the vaporous state without passing through the liquid phase. The items remain frozen throughout the drying process.

Vacuum freeze drying is most commonly performed off site at a contractor’s facility and occasionally on site in a mobile vacuum-freeze-drying chamber. Only a few national vendors have vacuum-freeze-drying capabilities, so your records will likely be out of state for several weeks during drying.

Vacuum Thermal Drying

Vacuum thermal drying is similar to vacuum freeze drying in the kind of chamber used, but different in that cycles of warm to hot air are used. Vacuum thermal drying is a cost-effective option for temporary records or archival materials of low intrinsic value. The procedure distorts paper considerably, causes coated records to block, and exacerbates the feathering and bleeding of soluble inks. The drying time is usually less than that for vacuum freeze drying, but drying time also depends on how wet the materials are initially.

Most vacuum drying facilities no longer use this method because of the problems described.

Thermal Vacuum Freeze Drying

The technique of thermal vacuum freeze drying is similar to vacuum freeze drying in that a vacuum is used with controlled heat to vaporize the water, but this method also has a patented procedure to compress the materials into shape. It is more expensive per cubic foot than vacuum freeze drying.

Freeze Drying

Freeze drying is a very slow technique. Records are packed in permeable containers and kept in a cold storage vault for months. Over time, moisture sublimates out of the records, in the same way that food gets freezer burn. This slow process will dry damp and partially wet records, but the records are inaccessible for a long time. In addition, the energy used to keep the records frozen is very expensive, and the freezer storage may result in monthly costs that are ultimately as expensive as vacuum freeze drying.

NARA's Study of Drying Techniques

Slide 4-46

NARA's Study of Drying Techniques…and the winner is VACUUM FREEZE DRYING!

https://www.archives.gov/preservation/conservation/drying-methods-01.html

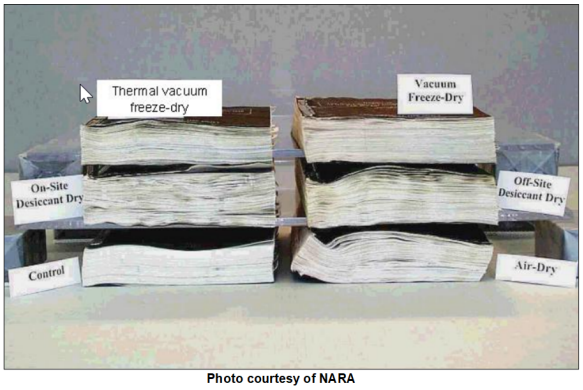


Photo courtesy of NARA

In the NARA study "Efficacy of Various Drying Methods," NARA preservation staff in the Conservation Laboratory compared four drying techniques on various records media including paper, photographs, and records that were encapsulated. The drying techniques assessed were:

- Air drying
- Desiccant drying
- Vacuum freeze drying
- Vacuum thermal drying

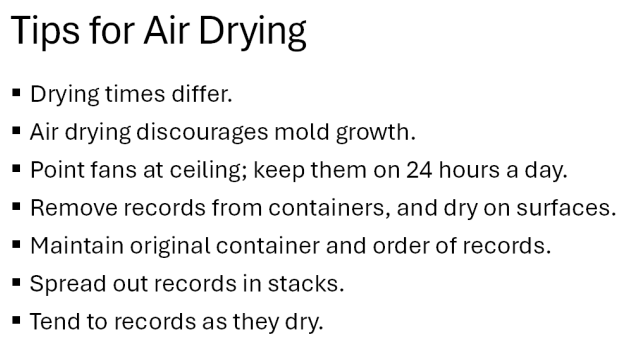
The Results of the Comparison

The results of NARA's study showed that each method had its advantages and disadvantages, but overall, the best results came from vacuum freeze drying all paper-based records, including those damaged by smoke, soot, or mold.

The complete report on the comparison study is available on NARA's website, at: *http://www.archives.gov/preservation/conservation/drying-methods-01.html*

Lessons Learned

Slide 4-47



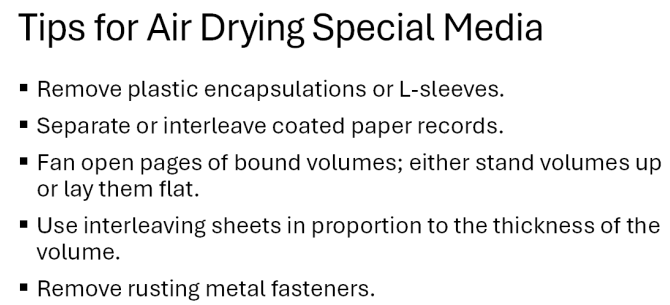
In addition to determining the best overall drying technique, and identifying the pros and cons of each technique, the study also resulted in several lessons learned.

Tips for Air Drying

- Drying time will depend on the wetness of records, the relative humidity in the room, the type of record material, and the amount of exposed surface for drying. Optimizing all of these variables will take thought and patience.
- To discourage mold growth, the temperature should be below 65° F, and the relative humidity (RH) should be as low as possible (at least below 50 percent, or drying will be too slow and the risks of mold growth will become very high).
- Point fans at the ceiling and keep them on 24 hours a day to keep the air circulating.
- Records must be removed from containers and spread on surfaces to dry in the air. The process requires vast surface areas covered with absorbent papers.
- It’s important to ensure that the original container and order of records are identified, labeled, associated, and maintained throughout the drying process.
- Records should be spread out in stacks no more than one-quarter to one-half inch thick.
- As records dry, the absorbent paper underneath must be changed frequently, and the papers must be turned over.

Tips for Air Drying Special Media

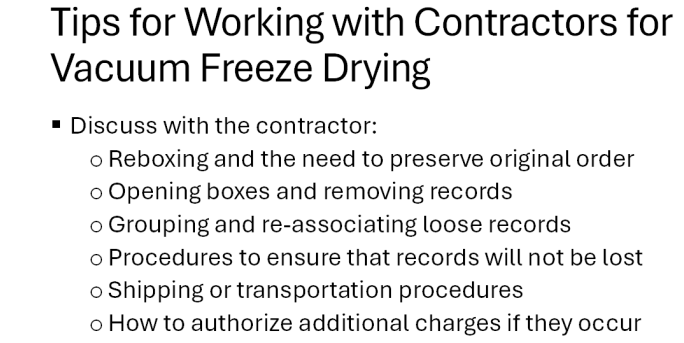
Slide 4-48



- Records in encapsulations or L-sleeves of plastic must be removed to dry.
- Records on coated paper must be separated and/or interleaved to dry in order to prevent sticking or blocking.
- Bound volumes, depending on the sturdiness of the covers, must either be standing with pages fanned open or lying flat with pages fanned open.
- For interleaving bound volumes, the total number of interleaving sheets should be no more than one-third the thickness of the volume, to limit damage to the binding.
- You may need to remove metal fasteners if they have begun to rust or corrode.

Tips for Working with Contractors for Vacuum Freeze Drying

Slide 4-49



If an emergency incident is larger than your current staff or space can handle, or the situation is too dangerous to staff or to the records involved, you may choose to select an outside contractor to undertake some or all of your recovery. Make sure that you understand the technology, the terminology, and all of the steps in the process.

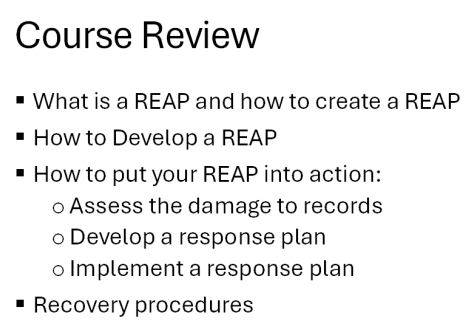
Unless you work carefully with the contractors to specify in the Task Order or Deliverables what the requirements are, the results may not be what you expect. Determine up front if there is a minimum fee for small jobs and if there are cost breaks for large services. Other matters to discuss include:

- Whether records may be reboxed; the need to preserve the original order
- Whether the contractor may open boxes and/or remove records; ensure that intellectual control is preserved
- How you would like records grouped and/or re-associated if the fastener, folder, or adhesive attachment cannot be preserved and retained with the records
- Procedures to ensure that records will not be lost
- Shipping or transportation procedures to ensure that records are not further distorted; length of time required to freeze the records in the trailer during shipping
- How additional charges will be authorized if they occur (e.g., special handling fees, boxing fees, etc.)
  - One record storage box is not one cubic foot, but 1.2 cubic feet in terms of storage and space in a vacuum-freeze-drying chamber. This will be reflected in your charges and should be clear in the estimate you receive.

Course Summary

Course Review

Slide 4-50



In the *Records Emergency Planning and Response Webinar*, you learned:

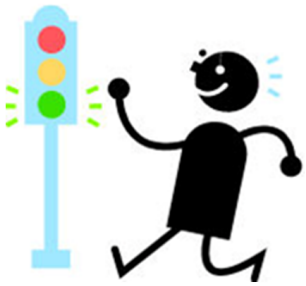
- What a REAP is and how to prepare for creating a REAP
- How to develop a REAP
- How to put your REAP into action and:
  - Assess the damage to records
  - Develop a response plan
  - Implement a response plan
- Recovery procedures

Next Steps

Slide 4-51

Next Steps

- What next steps will you take to develop, enhance, revise, or update your REAP?
  - In the next two weeks?
  - In the next month?



Next Steps Worksheet

What next steps will you take to develop, enhance, revise, or update your REAP?

In the next two weeks?

In the next month?

Course Evaluations and Course Certificates

Slide 4-52

COURSE EVALUTATIONS

DUE BY 11/20

Records Emergency Planning and Response Post-Test

Slide 4-53

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