



Fundamentals of Emergency Management

Independent Study 230.b
May 25, 2011



FEMA

Course Overview

Unit 1: Course Introduction

Course Overview 1.0
 Unit 1 Objectives 1.1
 Introduction 1.2
 How to Complete This Course 1.3

Unit 2: Overview of the Fundamentals of Emergency Management and the Integrated Emergency Management System

Introduction and Unit Overview 2.1
 Why an Integrated Emergency Management System? 2.2
 Response Authorities History 2.2
 Principles of Emergency Management..... 2.5
 Mandates: Incident Management and Coordination Systems 2.6
 National Incident Management System (NIMS) 2.6
 Post Katrina Emergency Management Reform Act (PKEMRA) 2.7
 National Response Framework (NRF) 2.8
 Emergency Management Accreditation Program (EMAP) 2.9
 National Fire Protection Association (NFPA) NFPA 1600 Standard Association 2.10
 Voluntary Private Sector Preparedness Accreditation and Certification Program 2.12
 What this means to you? 2.12
 Emergency Management Concepts and Terms 2.13

UNIT 3: OVERVIEW OF FEMA’S MISSION AND GOALS PARTNERS AND RELATED EMERGENCY MANAGEMENT TOPICS

Introduction and Unit Overview 3.1
 FEMA’s Mission and Goals..... 3.1
 Partners in the Coordination Network 3.2
 Private Sector and Non Governmental Organizations 3.4
 Communities and Citizens as Partners 3.5
 Activity: Partners in the Coordination Network 3.8
 Emergency Management in Local Government 3.9
 Activity: Where Is Emergency Management in My Community? 3.13
 Case Study: Tornado in Barneveld, Wisconsin 3.16
 Your Place in the Emergency Management System 3.18
 Case Study: Hazardous Chemical Release 3.19
 Activity: Where Do I Fit? 3.20

Unit 4: Emergency Management Key Components

Introduction and Unit Overview 4.1
 Introduction to Emergency Management Key Components 4.1
 Prevention/Protection 4.2
 Preparedness 4.2
 The Emergency Operation Plan 4.3
 Mitigation 4.8
 Response 4.11
 Activity: Response Operations 4.13
 Recovery 4.14

TABLE OF CONTENTS

Unit 5: Roles of Key Participants

Introduction and Unit Overview	5.1
The Role of the Local Emergency Manager	5.1
The Role of the Tribal Leader	5.3
State Emergency Management Role	5.4
How the Private Sector and Voluntary Organizations Assist Emergency Managers	5.6
Federal Emergency Management Role	5.7
The National Response Framework	5.8
Emergency Support Functions (ESFs)	5.8
Activity: Emergency Management Partners	5.11
Emergency Management Functional Groups	5.13
Case Study: Emergency Management Coordination	5.14

Unit 6: The Plan as a Program Centerpiece

Introduction and Unit Overview	6.1
What Is an EOP and What Does It Do?	6.1
Case Study: An EOP in Action	6.2
Activity: Where Do I Fit Into the EOP?	6.3
Developing and Maintaining Emergency Operations Plans Civil Preparedness Guide 101 (CPG 101) July 2010	6.4
Planning Principles	6.5
Hazard Vulnerability Assessment Worksheets	6.11
Hazard Vulnerability Assessment Worksheets (Example)	6.17
The Basic Plan	6.21
Functional Annexes	6.25

Unit 7: Planning and Coordination

Introduction and Unit Overview	7.1
Linking Risk Analysis to Capability Assessment	7.1
Activity: What can Your Organization Offer?	7.2
The EOP and the Incident Command System	7.4
The EOP and the EOC	7.10
Activity: The EOP, ICS, and EOC	7.14
Case Study: Multiagency Coordination	7.16
Augmenting Local Resources	7.19
Maintaining an Effective EOP	7.21
Interfacing with Other Plans	7.23

Unit 8: Functions of an Emergency Management Program

Introduction and Unit Overview	8.1
Introduction to Emergency Management Functions	8.1
Basis in Local Law	8.1
Emergency Management Core Functions	8.2
Emergency Management Program Functions	8.2
Case Study: Train Derailment Review	8.5
Activity: Emergency Management Functions in Action	8.7
Activity: Comparing Functions	8.11

TABLE OF CONTENTS

Unit 9: Applying Emergency Management Principles

Introduction and Unit Overview	9.1
Applying the Integrated Emergency Management System	9.1
Activity: Interdependence Within the Emergency Management Team	9.2
Activity: Problem Solving In Crisis-Prone County	9.7

Unit 10: Course Summary and Final Exam

Introduction and Unit Overview	10.1
Integrated Emergency Management System	10.1
Incident Management Actions	10.2
The Plan as Program Centerpiece	10.3
Planning and Coordination	10.4
Functions of an Emergency Management Program	10.7
Emergency Management Program Partners	10.7
Applying Emergency Management Principles	10.7
Next Steps	10.8
Final Exam	10.9

Appendix A: Hazard Vulnerability Assessment Forms	A.1
Appendix B: Acronym List	B.1
Appendix C: Emergency Supply Kit	C.1

About This Course

This course is the first introductory course in the Federal Emergency Management Agency (FEMA), Emergency Management Institute's (EMI) Independent Study Professional Development Series (PDS). Its goal is to introduce you to the fundamentals of emergency management (EM) as an integrated system, and how its resources and capabilities can be networked together for all hazards.

All communities are vulnerable to a variety of hazards. Emergency management provides a structure for anticipating and dealing with Preparedness, Prevention, Protection, Response, Recovery and Mitigation of, those hazards.

Emergency management involves participants at all governmental levels, the private sector, non-governmental (voluntary) organizations, and individuals. Activities are geared according to phases before, during, and after emergency or disaster events. The effectiveness of emergency management rests on the ability of this network to support our citizens and first responders.

The PDS includes a series of seven Emergency Management Institute independent study courses that provide a well-rounded set of fundamentals for those in the emergency management profession. Many students build on this foundation with additional training, education and exercises to develop their careers.

The additional six courses in the Professional Development Series are:

IS-139	Exercise Design
IS-235	Emergency Planning
IS-240	Leadership and Influence
IS-241	Decision Making and Problem Solving
IS-242	Effective Communication
IS- 244	Developing and Managing Volunteers

UNIT 1 OBJECTIVES

After completing this unit, you should be able to:

- Determine a strategy for completing the course successfully.

COURSE OBJECTIVES

This course is designed to introduce you to the fundamentals of emergency management. At the conclusion of this course, you should be able to:

- Organize emergency management functions, organizations, and activities using concepts and terms explained in the course.
- Explain the all-hazard emergency management process that integrates the resources of local, Tribal, State, and Federal governments and voluntary and business assets.
- Explain the local, Tribal, State, Federal, and individual and family roles in emergency management.
- Explain what individuals and families can do to protect themselves in emergencies.
- Describe the key components of an emergency management program.
- Discuss the role of individuals and organizations, as well as their relationships with one another, in emergency management.
- Explain the importance of networking for emergency management.
- Explain some of the social, political, and economic implications of a disaster.
- Describe alternate models for organizing emergency management programs.

UNIT 1 COURSE INTRODUCTION

When an emergency or disaster strikes, you work as part of a complex emergency management network that calls upon many functions, resources, and capabilities. Your ability to function effectively relates to your understanding of how the emergency management system works and how your agency fits into the network. This course will present the fundamental aspects of emergency management and provide opportunities for you to apply what you learn.

Fundamentals of Emergency Management contains nine units. Each unit is described below.

- **Unit 1: Course Introduction**, offers an overview of the course content
- **Unit 2: Overview of the Fundamentals of Emergency Management and the Integrated Emergency Management System**, presents a history of Emergency Management legislation and an overview of both the principles and the integrated emergency management system
- **Unit 3: Overview of FEMA's Mission and Goals Partners and related Emergency Management Topics** describes FEMA's mission and goals as well as Federal, State and Community Partners and related Emergency management topics
- **Unit 4: Emergency Management Key Components** describes the key components of emergency management activities
- **Unit 5: Roles of Key Participants**, examines the role of the local emergency manager and relationships with State and Federal emergency managers
- **Unit 6: The Plan as a Program Centerpiece**, focuses on community-specific risks, describes the Hazard Vulnerability Assessment process, and the Planning Process and Functional Annexes.
- **Unit 7: Planning and Coordination**, addresses resource requirements, how to supplement resources, the Incident Command System (ICS)-Emergency Operations Center (EOC) interface, and the connection between planning and emergency management.
- **Unit 8: Functions of an Emergency Management Program**, presents the core functions of an emergency management program.
- **Unit 9: Applying Emergency Management Principles**, provides practice in applying emergency management principles in a problem-solving activity.
- **Unit 10: Course Summary and Final Exam**, summarizes the course content. At the conclusion of this unit, you will have an opportunity to evaluate the course and your success in meeting your personal learning goals. The Final Exam is also included in this unit.

How to Complete This Course

Activities

This course will actively involve you as a learner by including activities that highlight basic concepts. It will also provide you with guidance on actions required in specific situations through the use of case studies. These activities emphasize different learning objectives, so be sure to complete all of them. Compare your answers to the answers provided following each activity. If your answers are correct, continue on with the material. If your answers are incorrect, go back and review the material before continuing.

Knowledge Checks

To help you know when to proceed to the next unit, Units 2 through 8 are followed by a Knowledge Check that asks you to answer questions that pertain to the unit content. The answers are given at the end of each knowledge check. When you finish each Knowledge Check, check your answers, and review the parts of the text that you do not understand. Do not proceed to the next unit until you are sure that you have mastered the current unit.

Appendices

In addition to the nine units, this course also includes three appendices.

- Appendix A includes the Hazard Vulnerability Assessment Forms Job Aid,
- Appendix B includes an acronym list, and
- Appendix C includes the Emergency Supply Kit.

UNIT 2 Introduction and Unit Overview

This unit will provide an overview of an integrated emergency management system, and where you fit within the system.

After completing this unit, you should be able to:

- Describe the history of National response authorities.
- Describe the Eight Emergency Management Principles.
- Describe the integrated emergency management system and what the system should do.
- Define emergency management concepts and terms.

Why an Integrated Emergency Management System?

When an emergency or disaster occurs:

- Personnel from different agencies, jurisdictions, and governmental levels need to work together to address areas of responsibility.
- Quick decisions are required to provide timely response.

To facilitate rapid, efficient emergency operations, a system is required that enables all participants in the incident to work together. An **integrated emergency management system** is a conceptual framework to increase emergency management capability through networking. That increased capability would not be readily available, especially in a disaster, without establishing prior networking, coordination, linkages, interoperability, partnerships, and creative thinking about resource shortfalls. The system should address all hazards that threaten a community, be useful in all four phases of emergency management, seek resources from any and all sources that are appropriate, and knit together all partnerships and participants for a mutual goal.

Response Authorities: A brief history

The role of the Federal Government in disaster response has evolved throughout the past 200 years. The Congressional Act of 1803 was the earliest effort to provide disaster relief on a Federal level after a fire devastated a New Hampshire town. From that point forward, assorted legislation provided disaster support. Between 1803 and 1950, the Federal Government intervened in approximately 100 incidents (earthquakes, fires, floods, and tornadoes). The Federal Government became more proactive based on the following authorities:

UNIT 2: OVERVIEW OF THE FUNDAMENTALS OF EMERGENCY MANAGEMENT AND THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM

The cornerstone of local response is either **Home Rule** or **Dillon's Rule** the authority of local government derives from the State government. There are two legal paths by which a State grants authority to a local government to govern its own affairs. The first is Home Rule authority and the second is Dillon's Rule. Although a majority of the states use Dillon's Rule it is important to note that either authority is derived from state sovereignty as delegated powers.

Home Rule is a delegation of power from the State to its sub-units of governments (including counties, municipalities, towns or townships, or villages.) That power is limited to specific fields, and subject to constant judicial interpretation. Home Rule creates local autonomy and limits the degree of state influence in local affairs.

Dillon's Rule is derived from a written decision by Judge John F. Dillon of Iowa in 1868. It is a cornerstone of American municipal law. It maintains that a political subdivision of a State is connected to the State as a child is connected to a parent. Dillon's Rule is used in interpreting State law when there is a question of whether or not a local government has a certain power. Dillon's Rule narrowly defines the power of local governments.

As long as there have been incidents, emergencies, and disasters local responders and communities have been conducting aspects of emergency management. Events impact local emergency managers and their jurisdictions long before anyone else is involved. For large events surrounding jurisdictions and charities have played a major role in support. President Theodore Roosevelt entrusted The American Red Cross with coordinating relief efforts. Political jurisdictions and the States have also played a role in supporting activities related to these events when necessary. Historically as events exceeded the capability of local jurisdictions, charities, and even State governments, national support was requested under separate legislation from Congress. This unit will describe the current fundamentals of EM and the use of the integrated emergency management system. An historic perspective of milestones is also included.

The Defense Production Act of 1950 was the first comprehensive legislation pertaining to Federal disaster relief.

In 1952, President Truman issued Executive Order 10427, which emphasized that **Federal disaster assistance was intended to supplement, not supplant, the resources of State, local, and private-sector organizations.** This role is still the same today.

Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §5121 et seq: (1988 amended 2008-9)

Today, the centerpiece legislation for providing Federal aid in emergency and disaster relief is the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-707). The Stafford Act:

- Provides a system of emergency preparedness for the protection of life and property from hazards.
- Vests responsibility for emergency preparedness jointly in the Federal Government, State governments, and their political subdivisions.
- Gives FEMA responsibility for coordinating Federal Government response.

Under the Stafford Act, assistance is limited to:

- Natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or,
- Regardless of cause, any fire, flood, or explosion.

The Stafford Act is designed to supplement the efforts and available resources of States, tribes, local governments, and disaster relief organizations.

Under the Stafford Act, the President can designate an incident either as an “emergency” or a “major disaster.” Both authorize the Federal Government to provide essential assistance to meet immediate threats to life and property, as well as additional disaster relief assistance.

The President may, in certain circumstances, declare an “emergency” unilaterally, but may only declare a “major disaster” at the request of a Governor who certifies the State and affected local governments are overwhelmed.

Stafford Act: Emergency and Major Disaster Declarations

Types of Incidents

Emergency: An emergency is defined as, “Any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or lessen or avert the threat of a catastrophe in any part of the United States.” A variety of incidents may qualify as emergencies. The Federal assistance available for emergencies is more limited than that which is available for a major disaster.

A Presidential declaration of an emergency provides assistance that:

- Is beyond State and local capabilities.
- Serves as supplementary emergency assistance.
- Does not exceed \$5 million of Federal assistance.

The Governor of an affected State must request a Presidential Declaration for an emergency within 5 days of the incident.

Major disaster: Major disasters may be caused by such natural events as floods, hurricanes, and earthquakes. Disasters may include fires, floods, or explosions that the President feels are of sufficient magnitude to warrant Federal assistance. Although the types of incidents that may qualify as a major disaster are limited, the Federal assistance available for major disasters is broader than that available for emergencies.

A major disaster is defined as, “Any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this chapter to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.”

A Presidential disaster declaration provides assistance that:

- Supplements available resources of State and local governments, disaster relief organizations, and insurance.
- Is beyond State and local capabilities.

The Governor of an affected State must request a Presidential declaration for a major disaster within 30 days of the incident. Additional information on the request process is presented later in this section.

Principles of Emergency Management

In March of 2007, FEMA's Emergency Management Institute's Higher Education Project convened a working group of emergency management practitioners and academics to consider principles of emergency management. This project was prompted by the realization that while numerous books, articles, and papers referred to "principles of emergency management", nowhere in the vast array of literature on the subject was there an agreed upon definition of what these principles are.

The group agreed on eight principles that will be used to guide the development of a doctrine of emergency management.

Emergency Management should meet the following principles:

- **Comprehensive** - emergency managers consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters.
- **Progressive** - emergency managers anticipate future disasters and take protective, preventive, and preparatory measures to build disaster-resistant and disaster-resilient communities.
- **Risk-Driven** - emergency managers use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources.
- **Integrated** - emergency managers ensure unity of effort among all levels of government and all elements of a community.
- **Collaborative** - emergency managers create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.
- **Coordinated** - emergency managers synchronize the activities of all relevant stakeholders to achieve a common purpose.
- **Flexible** - emergency managers use creative and innovative approaches in solving disaster challenges.
- **Professional** - emergency managers value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship, and continuous improvement.

Mandates: Incident Management and Coordination Systems

Homeland Security Presidential Directive 5 (HSPD-5), February 28, 2003, "Management of Domestic Incidents," directed the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). This system provides a consistent nationwide template to enable Federal, State, Tribal, and local governments, nongovernmental organizations (NGOs), and the private sector to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity. This consistency provides the foundation for utilization of NIMS for all incidents, ranging from daily occurrences to incidents requiring a coordinated Federal response.

National Incident Management System (NIMS)

NIMS is not an operational incident management or resource allocation plan. NIMS represents a core set of doctrines, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management.

Building on the foundation provided by existing emergency management and incident response systems used by jurisdictions, organizations, and functional disciplines at all levels, NIMS integrates smart practices into a comprehensive framework for use nationwide by emergency management/response personnel in an all-hazards context. These smart practices lay the groundwork for the components of NIMS and provide the mechanisms for the further development and refinement of supporting national standards, guidelines, protocols, systems, and technologies. NIMS fosters the development of specialized technologies that facilitate emergency management and incident response activities, and allows for the adoption of new approaches that will enable continuous refinement of the system over time.

Five major components make up the NIMS system approach:

- **Preparedness:** Effective emergency management and incident response activities begin with a host of preparedness activities conducted on an ongoing basis, in advance of any potential incident. Preparedness involves an integrated combination of assessment; planning; procedures and protocols; training and exercises; personnel qualifications, licensure, and certification; equipment certification; and evaluation and revision.
- **Communications and Information Management:** Emergency management and incident response activities rely on communications and information systems that provide a common operating picture to all command and coordination sites. NIMS describes the requirements necessary for a standardized framework for communications and emphasizes the need for a common operating picture. This component is based on the concepts of interoperability, reliability, scalability, and portability, as well as the resiliency and redundancy of communications and information systems.

UNIT 2: OVERVIEW OF THE FUNDAMENTALS OF EMERGENCY MANAGEMENT AND THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM

- **Resource Management:** Resources (such as personnel, equipment, or supplies) are needed to support critical incident objectives. The flow of resources must be fluid and adaptable to the requirements of the incident. NIMS defines standardized mechanisms and establishes the resource management process to identify requirements, order and acquire, mobilize, track and report, recover and demobilize, reimburse, and inventory resources.
- **Command and Management:** The Command and Management component of NIMS is designed to enable effective and efficient incident management and coordination by providing a flexible, standardized incident management structure. The structure is based on three key organizational constructs: the Incident Command System, Multiagency Coordination Systems, and Public Information.
- **Ongoing Management and Maintenance:** Within the auspices of Ongoing Management and Maintenance, there are two components: the National Integration Center (NIC) and Supporting Technologies.

Additional information about NIMS can be accessed online at <http://www.fema.gov/emergency/nims/> or by completing EMI's IS-700 online course.

The **Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA)** provided important provisions, including the key principle that after a major disaster or emergency declaration “accelerated Federal assistance” could be sent by FEMA, in the absence of a specific request by a State, to save lives and prevent suffering. There are too many important provisions to list all of them, but to mention a few:

- Requirements for the development of pre-scripted mission assignments as part of the planning efforts for Emergency Support Functions (ESF) response efforts.
- Transfers to FEMA various preparedness functions formerly contained within DHS.
- Employs the National Incident Management System (NIMS) and the National Response Framework, as the “framework” for emergency response and domestic incident management.
- Requirements for the development of comprehensive plans to respond to catastrophic incidents to include clear standardization, guidance, and assistance to ensure common terminology, approach, and framework for all strategic and operational planning.
- Direction for the development of a National Disaster Recovery Strategy and National Disaster Housing Strategy.
- Amends the Stafford Act to direct FEMA to appoint a Disability Coordinator to ensure that the needs of individuals with disabilities are being addressed in emergency preparedness and disaster relief.

- Requires an annual report to Congress on all Federal planning and preparedness efforts.
- Added protection for household pets and service animals (uses same language as in the Port Security Act.)

National Response Framework (NRF)

The National Response Framework (NRF) is a guide to how the Nation conducts all-hazards response – from the smallest incident to the largest catastrophe. This key document establishes a comprehensive, national, all-hazards approach to domestic incident response. The Framework identifies the key response principles, roles, and structures that organize national response. It describes how communities, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response.

The NRF is:

- **Always in effect, and elements can be implemented as needed on a flexible, scalable basis to improve response.** It is not always obvious at the outset whether a seemingly minor event might be the initial phase of a larger, rapidly growing threat. The NRF allows for the rapid acceleration of response efforts without the need for a formal trigger mechanism.
- **Part of a broader strategy.** The NRF is required by, and integrates under, a larger National Strategy for Homeland Security that:
 - Serves to guide, organize, and unify our Nation's homeland security efforts.
 - Reflects our increased understanding of the threats confronting the United States.
 - Incorporates lessons learned from exercises and real-world catastrophes.
 - Articulates how we should ensure our long-term success by strengthening the homeland security foundation we have built.
- **Comprised of more than the core document.** The NRF is comprised of the core document, the Emergency Support Function (ESF), Support, and Incident Annexes, and the Partner Guides. The core document describes the doctrine that guides our national response, roles and responsibilities, response actions, response organizations, and planning requirements to achieve an effective national response to any incident that occurs.

UNIT 2: OVERVIEW OF THE FUNDAMENTALS OF EMERGENCY MANAGEMENT AND THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM

The following documents provide more detailed information to assist practitioners in implementing the Framework:

- **Emergency Support Function Annexes** group Federal resources and capabilities into functional areas that are most frequently needed in a national response (e.g., Transportation, Firefighting, Search and Rescue).
- **Support Annexes** describe essential supporting aspects that are common to all incidents (e.g., Financial Management, Volunteer and Donations Management, Private-Sector Coordination).
- **Incident Annexes** address the unique aspects of how we respond to seven broad incident categories (e.g., Biological, Nuclear/Radiological, Cyber, Mass Evacuation).

Additional information about the NRF can be accessed online at <http://www.fema.gov/emergency/nrf/> or by completing EMI's IS-800.b online course.

Emergency Management Accreditation Program (EMAP) *1

EMAP is a standard-based voluntary assessment and accreditation process for government programs responsible for coordinating prevention, mitigation, preparedness, response, and recovery activities for natural and human-caused disasters. Accreditation is based on compliance with collaboratively developed national standards, the *Emergency Management Standard by EMAP*.

*1 <http://www.emaponline.org/>

The *Emergency Management Standard by EMAP* is designed as a tool for continuous improvement as part of a voluntary accreditation process for local and State emergency management programs.

EMAP Purpose

The goal of EMAP is to provide a meaningful, voluntary accreditation process for State, territorial, and local programs that have the responsibility of preparing for and responding to disasters. By offering consistent standards and a process through which emergency management programs can demonstrate compliance, EMAP will strengthen communities' capabilities in responding to all types of hazards, from tornadoes and earthquakes to school violence and bioterrorism. Accreditation is voluntary. Its intent is to encourage examination of strengths and weaknesses, pursuit of corrective measures, and communication and planning among different sectors of government and the community.

The National Emergency Management Association (NEMA) and other stakeholder organizations began working on what is now EMAP in 1997 after a presentation on the need for emergency management standards and accreditation at a (NEMA) conference. EMAP builds on standards and assessment work by various organizations, adding requirements for documentation and verification that neither standards nor self-assessment alone can provide.

UNIT 2: OVERVIEW OF THE FUNDAMENTALS OF EMERGENCY MANAGEMENT AND THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM

Agreed-upon national standards (*Emergency Management Standard*) developed with input from emergency managers and State and local government officials include:

- Program Management
- Administration and Finance
- Laws and Authorities
- Hazard Identification, Risk Assessment and Consequence Analysis
- Hazard Mitigation
- Prevention and Security
- Planning
- Incident Management
- Resource Management and Logistics
- Mutual Aid
- Communications and Warning
- Operations and Procedures
- Facilities
- Training
- Exercises, Evaluations and Corrective Action
- Crisis Communications, Public Education and Information

EMAP Assessor Training and Accreditation Manager courses are now held at EMI. Visit <http://www.training.fema.gov> for more information.

National Fire Protection Association (NFPA) *2 1600 Standard on Disaster/Emergency Management and Business Continuity Programs

History

The NFPA Standards Council established the Disaster Management Committee in January 1991. The committee was given the responsibility for developing documents relating to preparedness for, response to, and recovery from disasters resulting from natural, human, or technological events.

The first document that the committee focused on was NFPA 1600, *Recommended Practice for Disaster Management*. NFPA 1600 was presented to the NFPA membership at the 1995 Annual Meeting in Denver, CO. That effort produced the 1995 edition of NFPA 1600. Subsequently there have been updated editions in 2000, 2004, 2007, and 2010.

UNIT 2: OVERVIEW OF THE FUNDAMENTALS OF EMERGENCY MANAGEMENT AND THE INTEGRATED EMERGENCY MANAGEMENT SYSTEM

NFPA was formed in 1896 by a group of insurance representatives. It creates and maintains minimum standards and requirements for life-safety codes and standards such as fire suppression and suppression activities. The process is approved by the American National Standards Institute.

*2 <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1600>

The 2010 standards address:

- Leadership and Commitment
- Program Coordinator
- Program Committee
- Program Administration
- Performance Objectives
- Laws and Authorities
- Finance and Administration
- Records Management
- Planning and Design
- Risk Assessment
- Incident Prevention
- Mitigation
- Planning Process
- Common Plan Requirements
- Resource Management
- Mutual Aid/Assistance
- Communications and Warning
- Operational Procedures
- Emergency Response
- Business Continuity and Recovery
- Crisis Communications, Public Information, and Education
- Incident Management
- Emergency Operations Centers (EOCs)
- Training and Education
- Testing and Exercises
- Program Improvement
- Program Review
- Corrective Action

Voluntary Private Sector Preparedness Accreditation and Certification Program

The Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep) is mandated by Title IX of the *Implementing Recommendations of the 9/11 Commission Act of 2007 (the Act.)* Congress directed the Department of Homeland Security (DHS) to develop and implement a voluntary program of accreditation and certification of private entities using standards adopted by DHS that promote private sector preparedness, including disaster management, emergency management and business continuity programs. Three private sector preparedness standards were approved in June 2010. The purpose of the PS-Prep Program is to enhance nationwide resilience in an all-hazards environment by encouraging private sector preparedness. The program provides a mechanism by which a private sector entity—a company, facility, not-for-profit corporation, hospital, stadium, university, etc.—may be certified by an accredited third party establishing that the private sector entity conforms to one or more preparedness standards adopted by DHS. Participation in the PS-Prep program is completely voluntary. No private sector entity will be required by DHS to comply with any standard adopted under the program. DHS encourages all private sector entities to seriously consider seeking certification on one or more standards that has been or will be adopted by DHS. Visit http://www.fema.gov/media/fact_sheets/vpsp.shtm for more information on the PS-Prep Program.

What This Means to You

Your jurisdiction should:

- Use NIMS to manage all incidents, including recurring and/or planned special events.
- Integrate all response agencies and entities into a single, seamless system, from the Incident Command Post, through department Emergency Operations Centers (DEOCs) and local Emergency Operations Centers (EOCs), through the State EOC to the regional and national-level entities.
- Develop and implement a public information system.
- Identify and type all resources according to established standards.
- Ensure that all personnel are trained properly for the job(s) they perform.
- Ensure communications interoperability and redundancy.

Remember the importance of working with Voluntary Organization Active in Disasters (VOADs), Non-Governmental Organizations (NGOs), business and industry, and others to develop a plan for addressing volunteer needs *before* an incident to help eliminate some of the potential problems that can occur.

Emergency Management Concepts and Terms

Many emergency management terms are used throughout this course. To avoid confusion, this course establishes a single definition for each term. These may differ from how you use the terms in your community.

For clear reference during the course, however, please use the definitions on the pages that follow.

Emergency: Any incident, whether natural or manmade, that requires responsive action to protect life or property. Typically, emergencies can be handled at the local level.

However, under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, an emergency “means any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States” (Stafford Act, Sec. 102(1), 42 U.S.C. 5122(1)).

Emergency Management: The coordination and integration of all activities necessary to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, or mitigate against threatened or actual natural disasters, acts of terrorism, or other manmade disasters.

Hazard: Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome.

Threat: An indication of possible violence, harm, or danger. Natural threats tend to occur repeatedly in the same geographical locations because they are related to weather patterns and/or physical characteristics of an area. Examples include: severe weather, fire, drought, typhoons, epidemics, etc. Technological threats originate from technological or industrial accidents, infrastructure failures, or certain human activities. Technological threats may include: cyber/database failures, urban fires, radiological or hazardous material releases, power failures, transportation accidents, dam failures, bridge collapses, etc. Human-caused threats arise from deliberate, intentional human actions to threaten or harm the well-being of others or an infrastructure. Human-caused threats may include: kidnappings, hostage situations, sabotage, civil disturbances, bombings, hijacking, and terrorist acts.

Unit 3 Introduction and Unit Overview

This Unit will provide an overview of FEMA's Mission and Goals identify key partners, and related emergency management topics for your job and community.

After completing this unit you should be able to:

- State FEMA's Mission and Goals.
- Identify the players in the emergency management network.
- Describe the roles of the key players in the emergency management system.
- Identify the location of the emergency management function within your local government.
- Relate the topics to your job and community.

FEMA Mission and Goals

In 1979, the Federal Emergency Management Agency (FEMA) was established by an Executive Order 12148 of President Jimmy Carter, which merged many of the separate disaster-related responsibilities in other federal government agencies into a single agency. FEMA later became part of the Department of Homeland Security (DHS) in 2003.

FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. FEMA leads and supports the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery and mitigation.

FEMA's role is to coordinate federal resources that support state and local efforts when a federal emergency or disaster is declared. One of FEMA's most important supporting roles is to provide disaster assistance to individuals and communities. FEMA does not assume total responsibility for disaster assistance but does assume the role of coordinating Federal resources and supporting State and local efforts when a Federal emergency or disaster is declared.

Partners in the Coordination Network

Effective action to respond to, prepare for, recover from, and mitigate against a disaster requires the active involvement of numerous partners.

Government Partners

- Each level of government participates in and contributes to emergency management.
- Local Government has direct responsibility for the safety of its people, knowledge of the situation and accompanying resource requirements, and proximity to both event and resources. Within local government are Emergency Services departments of local government that are capable of responding to emergencies 24 hours a day. They include law enforcement, fire/emergency medical services, and public works. They may also be referred to as emergency response personnel or first responders.
- Tribal Government - The United States has a trust relationship with Indian tribes and recognizes their right to self-government. As such, Tribal governments are responsible for coordinating resources to address actual or potential incidents. When local resources are not adequate, Tribal leaders seek assistance from States or the Federal Government.
 - For certain types of Federal assistance, Tribal governments work with the State; however, as sovereign entities, they can elect to deal directly with the Federal Government for other types of assistance. In order to obtain Federal assistance via the Stafford Act, a State Governor must request a Presidential declaration on behalf of a tribe.
- At the Tribal level, the Tribal leader is responsible for the public safety and welfare of the people of that Tribe. As authorized by Tribal government, the Tribal leader:
 - Communicates with the Tribal community, and helps people, businesses, and organizations cope with the consequences of any type of incident.
 - Can request Federal assistance under the Stafford Act through the Governor of the State when it becomes clear that the Tribe's capabilities will be insufficient or have been exceeded.
 - Can elect to deal directly with the Federal Government. Although a State Governor must request a Presidential declaration on behalf of a tribe under the Stafford Act, Federal departments or agencies can work directly with the tribe within existing authorities and resources.

UNIT 3: OVERVIEW OF FEMA'S MISSION AND GOALS PARTNERS AND RELATED EMERGENCY MANAGEMENT TOPICS

- State Government has legal authorities for emergency response and recovery and serves as the point of contact between local and Federal governments.
 - At the State level, the Governor's Authorized Representative (GAR), State Director (of Emergency Management), and State Coordinating Officer can share information with State agencies (e.g., Department of Agriculture) and FEMA regional representatives to bring the necessary response and recovery resources to bear on the incident.
 - Interstate mutual aid is an important element in the partner coordination network. EMAC, the Emergency Management Assistance Compact, is a congressionally ratified organization that provides form and structure to interstate mutual aid. Through EMAC, a disaster impacted state can request and receive assistance from other member states quickly and efficiently, resolving two key issues upfront: liability and reimbursement. (see <http://www.emacweb.org/> for additional information).
- Federal Government has legal authorities; fiscal resources; research capabilities, technical information and services; and specialized personnel to assist local and State agencies in responding to and recovering from emergencies or disasters.
 - Organizations at all government levels can share their knowledge and resources with nongovernmental service providers. For example: At the Local level, emergency response agencies share information about injuries with local medical providers. Information about those who are left homeless from a disaster is shared with The American Red Cross and other community service organizations.
 - At the Federal level, when an incident occurs that exceeds or is anticipated to exceed local or State resources – or when an incident is managed by Federal departments or agencies acting under their own authorities – the Federal Government uses the National Response Framework to involve all necessary department and agency capabilities, organize the Federal response, and ensure coordination with response partners.

The Private-Sector and Nongovernmental Organizations

- Government agencies are responsible for protecting the lives and property of their citizens and promoting their well-being. However, the government does not, and cannot, work alone. In many facets of an incident, the government works with private-sector and nongovernmental organizations (NGO) as partners in emergency management.¹
- Consistent with the National Response Framework, the private-sector organizations play a key role before, during, and after an incident. First, they must provide for the welfare and protection of their employees in the workplace. In addition, emergency managers must work seamlessly with businesses that provide water, power, communications networks, transportation, medical care, security, and numerous other services upon which both response and recovery are particularly dependent.¹
- NGOs play enormously important roles before, during, and after an incident. For example, NGOs provide sheltering, emergency food supplies, counseling services, and other vital support services to support response and promote the recovery of disaster survivors. These groups often provide specialized services that help individuals with functional needs, including those with disabilities.¹
- A key feature of NGOs is their inherent independence and commitment to specific sets of interests and values. These interests and values drive the groups' operational priorities and shape the resources they provide. Such NGOs bolster and support government efforts at all levels – for response operations and planning the allocation of local community emergency management resources and structures, some government organizations provide direct assistance to NGOs. NGOs collaborate with responders, governments at all levels, and other agencies and organizations.¹
- A key NGO is the National Voluntary Organizations Active in Disasters (National VOAD). National VOAD is the forum where organizations share knowledge and resources throughout the disaster cycle – preparation, response, and recovery – to help survivors and their communities. National VOAD is a consortium of approximately 50 national organizations and 55 State and territory equivalents. During major incidents, National VOAD typically sends representatives to DHS and FEMA's National Response Coordination Center to represent voluntary organizations and assist in response coordination.¹

The Private-Sector and Nongovernmental Organizations (continued)

- Private-sector organizations and NGOs are encouraged to develop contingency plans and to work with State and local planners to ensure that their plans are consistent with pertinent plans, NIMS, and the National Response Framework (NRF).¹ The Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep) is mandated by Title IX of the *Implementing Recommendations of the 9/11 Commission Act of 2007*. DHS encourages all private sector entities to seriously consider seeking certification on one or more of the three standards that were adopted by DHS in June 2010. The purpose of the PS-Prep Program is to enhance nationwide resilience in an all-hazards environment by encouraging private sector preparedness. Visit http://www.fema.gov/media/fact_sheets/vpsp.shtm for more information on the PS-Prep Program.

¹ National Response Framework. US Department of Homeland Security; January 2008.

Communities and Citizens as Partners

FEMA will foster a national approach to emergency management that is built upon a foundation of proactive engagement with neighborhood associations, businesses, schools, faith-based community groups, trade groups, fraternal organizations, and other civic-minded organizations that can mobilize their networks to build community resilience and support local needs in times of catastrophe.

Our society must be prepared to respond in ways that lie outside the routine paradigms in which we traditionally operate. The health, safety, and security of millions of citizens may be imperiled without swift and aggressive intervention and assistance. Time is of supreme importance, and that imperative to action begins within communities where people live and work, where businesses and industries operate, and where local governments and government institutions reside.

Individual citizens serve as “force multipliers” during incidents if they can care for themselves, families, and neighbors by rendering assistance and preventative property damage thereby freeing up response resources to help those most in need.

Resources for an integrated emergency management system include the force multiplier role that public citizens can play, as illustrated in the London Assembly report of the July 7th, 2005 bombings.

7th July Review Committee:

“There is an overarching, fundamental lesson to be learnt from the response to the 7th July attacks, which underpins most of our findings and recommendations. The response on 7th July demonstrated that there is a lack of consideration of the individuals caught up in major or catastrophic incidents. Procedures tend to focus too much on incidents, rather than on individuals, and on processes rather than people. Emergency plans tend to cater for the needs of the emergency and other responding services, rather than explicitly addressing the needs and priorities of the people involved.

This is particularly evident when we consider what happened to some of those survived the attacks, both on the day and in the weeks and months that followed. In New York on 11 September 2001, many people died and few survived. The situation on July 7th was the opposite: a relatively small proportion of victims lost their lives, but there were hundreds of survivors. Because emergency plans following 9/11 are based very much on the lessons learnt from that specific incident, they tend not to consider the needs of survivors.

We argue in this report that London's emergency plans should be re-cast from the point of view of people involved in a major or catastrophic incident, rather than focusing primarily on the point of view of each emergency service. A change of mindset is needed to bring about the necessary shift in focus, from incidents to individuals, and from processes to people.”

Communities and citizens play an important role in the overall emergency management process. Private individuals and families can contribute by:

- Reducing hazards in and around their homes. By taking simple actions, such as raising utilities above flood levels or taking in objects that could become projectiles in a high wind, citizens and families can reduce the amount of damage caused by an emergency or disaster event.
- Preparing a citizen and family preparedness plan. A personal preparedness plan should address such issues as a communication point of contact out of the area, a mustering site, phone numbers for family members programmed into cell phone and subscriptions to email alert services.
- Preparing a disaster supply kit. By assembling disaster supplies in advance of an event, citizens and families can take care of themselves until emergency responders arrive. (See the recommended disaster supplies list in Appendix C to this course.)

- Monitoring emergency communications carefully. Throughout an emergency situation, critical information and direction will be released to the public via electronic and other media. By listening and following these directions carefully, citizens and families can reduce their risk of injury, keep emergency routes open to response personnel, and reduce demands on landline and cellular communication.
- Volunteering with an established organization. Organizations and agencies with a role in emergency response and recovery are always seeking hard-working, dedicated volunteers. By volunteering with an established voluntary agency, citizens and families can become part of the emergency management system and assure that their efforts are directed to where they are most needed. Community CERT Teams (referred to below) are an excellent vehicle for the volunteer service.
- Taking training in emergency response. Taking training in emergency response, whether it is basic first aid through The American Red Cross, or a more complex course through a local community, will enable citizens and families to take initial response actions required to take care of themselves. This may also free emergency response personnel to respond to higher-priority incidents that affect the entire community.
- **Community Emergency Response Team (CERT)** training is one way for communities and citizens to prepare for an emergency. CERT is designed to prepare citizens to help themselves, their families, and their neighbors in the event of a catastrophic disaster. Because emergency services personnel may not be able to help everyone immediately, citizens can make a difference by using the training obtained in the CERT course to save lives and protect property and take other directed actions from their community CERT Programs.
- CERT training covers basic disaster survival and rescue skills that are important to have in a disaster when professional emergency services are not available. Some of the topics covered are:
 - Disaster preparedness—anticipating the impact on an infrastructure, safety precautions during a disaster, and the role of CERTs in disaster response.
 - Basic fire safety—identifying and reducing potential fire hazards, how to evaluate fires, and firefighting resources and techniques (e.g., use of portable fire extinguishers).
 - Disaster medical operations—principles of triage, assessment of injuries, and treatment.
 - Light search and rescue operations—priorities and resources; lifting, cribbing, and victim removal; and rescuer safety.

- Disaster psychology team organization—the psychological impact of a disaster on rescuers and survivors, and how to provide psychological “first aid”.
- Ready.gov is a resource located at <http://www.ready.gov/>.
- Additional courses of interest are available through FEMA's Emergency Management Institute Independent Study program (<http://www.training.fema.gov/>).
- Your State may also offer training opportunities through its Emergency Management Agency.



Activity: Partners in the Coordination Network

The purpose of this activity is to ensure that you understand the functions of key participants in emergency management.

For each participant in Column A, choose a description from Column B.

Matching Participant to Description	
1. ____ Emergency services	a. Acts as a liaison between local and Federal authorities
2. ____ Local government	b. Includes law enforcement, fire/rescue, and public works
3. ____ State government	c. May offer fiscal resources, technical assistance, and specialized personnel
4. ____ Federal government	d. Has proximity to the event and resources



Activity: Emergency Management Participants (Continued)

1. b
2. d
3. a
4. c

Emergency Management in Local Government

A successful emergency management program facilitates the development of a network of relationships among all partners and stakeholders that understand their roles and are able to act when needed.

Emergency Managers must consider the whole community in planning and training activities so that the broadest possible network of stakeholders is included and consulted as valuable partners.

Personnel resources in your area include:

- Elected and appointed officials and executives.
- Emergency program managers.
- Emergency operations staff.
- Police and fire departments.
- Other local service providers, such as the local council on aging and public works agency.
- Voluntary organizations such as The American Red Cross, The Salvation Army, and local Voluntary Organizations Active in Disasters (VOAD).

An integrated emergency management system links these personnel resources through:

- Planning.
- Direction.
- Coordination.
- Clearly defined roles and functions.

The organizational placement of emergency management affects the way that relationships are developed.

Where is the emergency management function in your local government's organization chart? Some options include placing it within:

- A separate organization that reports directly to a governing or executive body.
- The fire/rescue department.
- Law enforcement, located in a police department or sheriff's office.

Separate Emergency Management Organization

An advantage of working within a separate organization is that the perception of bias is minimized. The emergency management function may become more visible and have increased access within local government.

A disadvantage of working within a separate organization is that the emergency management staff must work to build rapport with officials from many departments and agencies and avoid becoming isolated. Establishing strong networks is critical in this situation.

Placement Within Fire/Rescue or Law Enforcement Departments

These agencies are among the traditional emergency responders to emergencies and disasters, so placing the emergency manager within a first-response agency can be an asset.

An advantage of working within a first-response agency is that being close to the day-to-day operations of law enforcement or fire personnel builds personal relationships that pay off in coordination when developing and maintaining an emergency management program.

A disadvantage of working within an emergency response agency is that association with one or another of these basic services may hamper coalition-building efforts if others perceive the emergency management staff as owing allegiance to its own service. It may also lead to the perception that emergency management is limited to being an emergency response agency and not an entity interested in an all hazards approach and active in all phases of disasters.



Activity: Where Is Emergency Management in My Community?

This activity will provide you with an opportunity to explore the emergency management functions in your community. Please take some time to research your local emergency management functions. Then, answer the questions below.

1. The local emergency management function is located (organizationally):

- As part of the fire department.
- As part of law enforcement.
- As an independent agency.
- Other

2. Who is the local emergency manager?

3. To whom does the emergency manager report?

4. What are the advantages and disadvantages of this reporting relationship? Also, think about recent emergency responses. How do you think the emergency management's organization facilitated that response?



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. A(n) _____ is defined as something that is potentially dangerous or harmful, often the root cause of an unwanted outcome.
 - a. Hazard
 - b. Chemical spill
 - c. Emergency activation
 - d. Drought
 - e. Power outage

2. In emergency management, personnel are considered one type of resource.
 - a. True
 - b. False

3. One key principle of emergency management is to:
 - a. Predict and minimize damage resulting from earthquakes.
 - b. Conduct exercises based on simulated incidents.
 - c. Supplement State and local efforts and capabilities.
 - d. Identify hazards.
 - e. Prevent injuries resulting from hazards.

4. A local emergency manager and staff often serve as a function of which department in the local government?
 - a. Finance department
 - b. Public works department
 - c. Planning commission
 - d. Fire/rescue service
 - e. Volunteer coordination office

5. An emergency management program will work well in practice if most emphasis and attention focus upon _____.
 - a. A comprehensive written plan
 - b. Well-established, day-to-day relationships
 - c. Reliance on State assistance
 - d. Mutual aid and assistance



Knowledge Check (Continued)

1. a
2. a
3. d
4. d
5. b



Case Study: Tornado in Barneveld, Wisconsin

The case study on the following pages illustrates the need for emergency management. Read the case study and answer the questions that follow.

On June 8th, at 12:50 a.m., a devastating tornado struck the small village of Barneveld, Wisconsin. Although a tornado watch was in effect, no warning was issued because the tornado originated near the town and there was not adequate time or warning systems. The town, which had approximately 580 residents, was literally flattened by winds in excess of 200 miles an hour. Casualties add up to about 11% of the population: 9 lives were lost and 57 persons were treated for injuries. The storm destroyed 120 homes, 11 businesses, the village elementary school, 5 churches, and all of the municipal buildings, including a new fire station and the equipment. The village was left without electricity, telephone service, or water. Damage was estimated at over \$20 million.

The local power company was in radio contact with the sheriff's office within 5 minutes and was moving trucks into the area within 40 minutes, encountering such hazardous conditions as exposed fuel oil and liquid propane tanks. The telephone company set up an emergency bank of phones. Both companies needed several days to complete repairs. A command post was established to coordinate emergency operations. Local officials immediately began to clear debris from the stricken area. Police, fire, and emergency medical personnel concentrated their efforts on search and rescue operations for those who were trapped in collapsed structures. The village was evacuated to another town where congregate care was set up by the Red Cross, which also assisted in preliminary damage assessment.

The town received State assistance immediately. The State response was coordinated through the Emergency Operations Center, which was also dealing with other tornado damage. The State patrol directed traffic and assisted in securing portions of the affected area, and the National Guard assisted in security and law enforcement, as well as emergency operations. The Department of Natural Resources assisted in security, traffic control, and recovery operations. The State Department of Health and Social Services supported the county social service offices, which were quickly overwhelmed with requests for assistance.

The State requested Federal assistance on June 9th, and it was granted. The disaster assistance center was located 20 miles from the town to serve survivors in other locations as well. Because few residents had cars in working order, transportation to the center was difficult. Many residents were angered to find that emergency loans required several months to process. Having no way to earn a living, many left the village.

The after-action report noted that the county had no plan for debris removal, and that combustibles and non-combustibles should have been separated. There was no plan for a systematic turn-off of gas or for identification of hazardous materials and toxic substances. There was no plan designating who would be in charge of cleanup, although the highway commissioner eventually took this role. A best site for disposal had not been pre-designated. With 20-20 hindsight, officials realized that each county's emergency program manager should identify landfills in advance and mark out procedures for getting burning permits.

Your Place in Emergency Management

Normally, you work in a setting where day-to-day responsibilities are clear and lines of communication are well established through experience.

However, when an incident occurs, you also are part of a complex network of people and organizations responsible for dealing with disasters in your local community. It is important that when the need arises, you know where you fit into that network and how to work within it.



Case Study: Hazardous Chemical Release

The case study that follows will help you think about where you fit into your community's emergency management network. Read the following description of a hazardous chemical release.

Think about what your role might be in such an incident. Your community may be exposed to a similar risk from hazardous chemical spills because of nearby rail lines, highways, or chemical plants or you may have responded to a similar incident. When you have finished reading the case study, answer the questions that follow.

A freight train derailed in the upper Midwest in January, in a county with a population of 60,000. Fifteen of the cars on the train contained anhydrous ammonia. (Anhydrous means "without water." Anhydrous ammonia seeks water from any source—even the human body. The compound will, therefore, seek the moisture in the eyes, nose, mouth, and lungs, causing caustic burns as it dissolves into body tissue. Inhaling large amounts of anhydrous ammonia will cause swelling of the throat and suffocation. Anhydrous ammonia is transported as a liquid under pressure.)

When the train derailed, eight of the fifteen cars ruptured, causing an explosion of the pressurized chemical. The force of the explosion sent one piece of a car slicing into a house a mile away. The blast caused the release of 240,000 to 290,000 gallons of anhydrous ammonia gas—the largest release in the world to date.

The incident occurred at 3:00 AM, when warning systems that rely on radio or television transmission fail to alert most people. Any evacuation attempt would have exposed residents to greater hazard. As a result, they were initially advised to shelter in their homes. Eventually 21 homes were evacuated. One resident died while attempting to leave the area. Approximately one third of a nearby city was also affected, but residents were not able to evacuate. Those affected were advised to shelter in place.

There were also some delays in activating responders, who could not enter the accident vicinity without proper gear. Fire-fighting gear does not offer adequate protection. One responder was trapped after he drove into a ditch trying to leave the scene because his vehicle windshield was coated with frozen gas in the toxic cloud. The responder was rescued some time later.

Residents were told to turn off their furnaces to avoid drawing outside air into their homes. Public health was a major concern. Approximately 400 patients were processed through hospitals.

Media attention was intense. Individuals and families needed public information on treating exposure symptoms, cleaning homes, and dealing with exposed pets and livestock. Many horses, being especially sensitive to airborne contaminants, died.

The National Transportation Safety Board determines that the probable cause of the derailment of Canadian Pacific Railway train 292-16 was an ineffective Canadian Pacific Railway inspection and maintenance program that did not identify and replace cracked joint bars before they completely fractured and led to the breaking of the rail at the joint. Contributing to the severity of the accident was the catastrophic failure of five tank cars and the instantaneous release of about 146,700 gallons of anhydrous ammonia.

Unit 4 Introduction and Unit Overview

This unit examines incident management actions, to include the five key components of emergency management. After completing this unit, you should be able to:

- Describe the five key components of emergency management.
- Identify measures that communities, individuals and families can take in connection with each of the key components.
- Describe the planning activities and documents that pertain to the local, Tribal, State, and Federal levels.
- Identify the types of assistance that may be available from the Federal government.
- Describe the EMAC process by which partners provide assistance

Introduction to Emergency Management Key Components

An emergency management program examines and identifies potential emergencies and disasters based on the risks posed by:

- Likely threats and hazards;
- Develops and implements programs aimed toward reducing the impact of these events on the community;
- Prepares for those risks that cannot be eliminated; and
- Prescribes the actions required to deal with the consequences of actual events and to recover from those events.

Emergency Management actions occur as:

- Pre-incident activities, such as information sharing, threat and hazard identification, planning, training, and readiness exercises.
- Incident activities that include lifesaving missions and critical infrastructure support protection.
- Post-incident activities that help people and communities recover and rebuild for a safer future.

Introduction to Emergency Management Key Components (Continued)

Emergency management key components include:

- Prevention/Protection
- Preparedness
- Mitigation
- Response
- Recovery

Each of the emergency management key components will be described in more detail in the next sections.

Prevention/Protection:

- Means actions taken to avoid an incident or to intervene to stop an incident from occurring.
- Involves actions taken to protect lives and property.
- Involves applying intelligence and other information to a range of activities that may include such countermeasures as:
 - Deterrence operations
 - Heightened inspections
 - Improved surveillance

Preparedness:

Preparedness is defined as the range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from incidents. Preparedness is a continuous process involving efforts at all levels of government and between government and private-sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources.

Because it is not possible to completely prevent or mitigate every hazard that poses a risk, **preparedness** measures can help to reduce the impact of the remaining hazards by taking certain actions before an emergency event occurs. Preparedness includes *plans or other preparations made to save lives and facilitate response and recovery operations.*

Preparedness (Continued):

The preparedness cycle outlines the sequence of events that should be utilized to Plan, Organize and Equip, Train, Exercise, Evaluate and Improve as a part of the overall Preparedness process.

Preparedness measures involve all of the players in the integrated emergency management system—local, Tribal, State, and Federal agencies and individuals and families—and, at the local level, may include activities such as:



- Developing an Emergency Operations Plan (EOP) that addresses identified hazards, risks, and response measures.
- Recruiting, assigning, training, and exercising staff that can assist in key areas of response operations.
- Identifying resources and supplies that may be required in an emergency.
- Designating facilities for emergency use.
- Individual preparedness activities and training.
- Community and private sector partnerships.

The Emergency Operations Plan

Generally, the Emergency Operations Plan (EOP) describes how the community (or State) will conduct operations in a disaster. The EOP:

- Assigns responsibility to organizations and individuals for carrying out specific actions that exceed the capability or responsibility of any single agency.
- Establishes lines of authority and organizational relationships, and shows how all actions will be coordinated.
- Describes how people and property will be protected in major emergencies and disasters.
- Identifies personnel, equipment, facilities, supplies, and other resources that can be made available—within the jurisdiction or by agreement with other jurisdictions—for use during response and recovery operations.
- Identifies steps to address mitigation concerns during response and recovery operations.

Local government is responsible for attending to the public's emergency needs. Therefore, the local EOP focuses on measures that are essential for protecting the public, including:

- Warning and communications: How the local government will warn the public of an existing or impending emergency and communicate internally before, during, and after an event occurs.
- Emergency public information: How government will communicate with the public before, during, and after an emergency occurs.
 - Decisions about what to tell the public and when are critical to gaining a reasoned response from the public providing confidence that the government is doing all it can to protect the public and control the situation, and
 - Perhaps most importantly—inclusion of public or community resources.
- Mass care and emergency assistance: Where and for how long the public's emergency needs, such as shelter and food distribution, will be accomplished. What facilities will be available, what supplies will be stocked, and how the supplies will be distributed, are all covered under mass care in the EOP.
- Health and medical services: How survivors will be cared for, where, and by whom are addressed in the health and medical portion of the EOP. Special issues, such as decontamination, must also be addressed for hazardous materials and terrorist events.
- Public protection: Plans for in-place sheltering or evacuation. What routes will be used if evacuation becomes necessary, special transportation or routing requirements (e.g., evacuating the disabled, identified functional needs populations, or making evacuation routes one way to accommodate increased traffic flow), and other issues dealing with emergency egress are all part of the evacuation portion of the EOP.

States also have EOPs. State EOPs serve three main purposes:

1. Facilitate a State response to certain emergencies.
2. Expedite the State in assisting local jurisdictions during major emergencies and disasters in which local response capabilities are overwhelmed.
3. Enable the State to appoint liaisons with the Federal government in cases where Federal assistance is necessary and authorized.

The State EOP establishes the framework within which local EOPs are created and through which the Federal Government becomes involved in response, recovery operations, and mitigation. As such, the State government acts as the coordinating entity to ensure that all levels of government are able to respond to safeguard the well-being of their people and protect property.

More information on the EOPs as they relate to preparedness is included in Unit 5 of this course.

Recruiting, Assigning, and Training Staff

During a major emergency or disaster response, it may be necessary to assign personnel to jobs other than those that they normally perform. Some personnel may already be employed within the community, but others may be recruited specifically for service in emergencies. Regardless of employment status, these personnel must be recruited, assigned, and trained for their jobs before an incident occurs. Whenever possible, these persons should be included in exercises that enable them to practice the job under simulated emergency conditions so that, when an actual incident occurs, they are ready to perform in their new capacities with little or no time lost to training that may delay or detract from the mission.

Identifying Resources and Supplies

Identifying the resources and supplies that will be available for an emergency or disaster response is a crucial part of preparedness. All jurisdictions should take an inventory of their personnel and equipment resources to determine what they have and align it with what they may need in an emergency. Identified gaps between on-hand resources and additional requirements can be filled in a number of ways. Among the most common in emergency management are:

- Mutual aid and assistance agreements with neighboring jurisdictions. Mutual aid and assistance agreements are written (or oral) agreements between and among agencies/organizations and/or jurisdictions that provide a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and/or after an incident.
- Memoranda of Understanding/Agreement (MOU/MOA) is less formal than a mutual aid agreement. It essentially expresses intent. MOUs are useful to avoid duplication or overlap of duties. If responsibilities are missing from a preliminary EOP, these responsibilities can be included in the MOU until appropriate legislation is enacted. By doing this in advance, confusion over responsibilities, liabilities, and financial commitments can be avoided. ²
- Standby contracts with suppliers of critical equipment and supplies. Standby contracts typically are made for equipment, such as dump trucks or other construction equipment, but are also used for supplies, such as plastic sheeting and water for example. Under a typical standby contract, the supplier agrees to provide an established quantity of an item at the unit cost in effect on the day *before* the emergency occurs. Standby contracts are a good way for local governments to meet their resource supply requirements without incurring the costs of stockpiling and without paying the rapidly increasing prices that often follow an emergency.

- Resource typing is designed to enhance emergency readiness and response at all levels of government through a comprehensive and integrated system that allows jurisdictions to augment their response resources during an incident. Specifically, it allows emergency management personnel to identify, locate, request, order, and track outside resources quickly and effectively and facilitate the response of these resources to the requesting jurisdiction. NIMS has a specific standard for resource typing available through the National Integration Center's (NIC) NIMS Guide 0001, National Resource Typing Criteria. Our own website describes preparedness activities (resource typing, credentialing, and inventorying), and that resource typing is "...categorizing, by capability, the resources requested, deployed, and used in incidents."

2 Independent Study Course: Livestock in Disasters. State and Federal Disaster Preparedness. Federal Emergency Management Agency. P. 17-1.

In some large emergencies, State and Federal resources may be required. For example, the National Guard may be activated following an extremely heavy snow, in the case of wildfire, or following a terrorist incident. Federal resources, including Disaster Medical Assistance Teams (DMATs) and Disaster Mortuary Teams (DMORTs) may be activated following a mass-casualty incident. All requests for State and Federal resources must originate from the State and its components.

Designating Facilities for Emergency Use

To ensure an effective and efficient response, certain facilities are designated as part of the emergency planning process. Typically, these facilities include:

- The Emergency Operations Center (EOC), which is the central location from which all off-scene activities are coordinated. Senior elected and appointed officials are located at the EOC, as well as personnel supporting critical functions, such as operations, planning, logistics, and finance and administration. The key function of EOC personnel is to ensure that those who are located at the scene have the resources (i.e., personnel, tools, and equipment) they need for the response. In large emergencies and disasters, the EOC also acts as a liaison between local responders and the State. (Note that States operate EOCs as well and can activate them as necessary to support local operations. State EOC personnel report to the Governor and act as a liaison between local and Federal personnel.)
- Shelters, which are used to house survivors. Shelters should be designated *before* an event occurs, and the public should be aware of shelter locations and transportation routes from their neighborhoods or workplaces to the shelters. In most areas, The American Red Cross operates shelters and coordinates with the local volunteer program manager to ensure that sheltering needs are met.
- Distribution centers, from which food and emergency supplies are made available to the public. In most areas, The American Red Cross, and/or National Guard together with other local voluntary agencies, coordinate distribution centers.

- Storage areas for specific types of equipment. Warehouses, supply yards, and other facilities that will be used as providers of the equipment necessary for a response should be designated as part of the planning process.

Other facilities may also be designated in advance, based on the jurisdiction's resources and the areas of the community that are likely to be affected. On-scene facilities, such as the Incident Command Post (ICP), Disaster Field Offices (DFOs), Joint Field Offices (JFOs), Fusions Centers, and staging areas, typically are *not* designated in advance because of the requirement for close proximity to the incident site.

For example, fusion centers are physical locations that are staffed by personnel to gather, analyze and disseminate intelligence information. Many fusion centers across the nation take an all-hazards approach to preparedness (terrorist attacks, major disasters, and other emergencies). Fusion centers can partner with EOC's during a response to provide planning and coordination considerations.

Preparedness covers a range of activities and can be taken at all levels of government. Some examples that have been cited as being particularly effective for individuals and families are shown below.

Text Telephone (TTY) Alert: Lee County Division of Public Safety, Fort Myers, Florida

TTY Alert is an emergency warning system for deaf and hard-of-hearing residents in northwest Florida. It is the first system of its kind in the United States. When an emergency occurs, the Lee County EOC sends out an alert to the TTY machines with information about the emergency and information about what to do to every registered TTY user in the county. If necessary, the system can target a specific area. TTY Alert also allows TTY users to access the system to obtain headline news, weather bulletins, and family disaster preparedness information.

TTY Alert has been well received by the hearing-impaired community and has been recognized by the National Institute on Disabilities Rehabilitation Research.

Local Emergency Management/Industry Partnership: St. Charles Parish, Louisiana

The local emergency management/industry partnership program offers a telephone hotline system to coordinate response to disasters and emergencies. The program was established by the St. Charles Parish EOC in cooperation with 26 petrochemical companies. The system serves as a 24-hour warning system, an emergency information exchange, and a link between the companies and the parish Department of Emergency Preparedness for support during emergencies.

This system has been recognized by the American Chemistry Council as a model of government–industry cooperation.

Source: *Partnerships in Preparedness: A Compendium of Exemplary Practices in Emergency Management*, Federal Emergency Management Agency, December 1995

Mitigation:

Mitigation refers to activities that are designed to:

- Reduce or eliminate Long-Term Risk to persons or property, or
- Lessen the actual or potential effects or consequences of an incident.

Mitigation measures:

- May be implemented prior to, during, or after an incident.
- Are often developed in accordance with lessons learned from prior incidents.
- Can include efforts to educate governments, businesses, and the public on measures that they can take to reduce loss and injury.

Mitigation is accomplished in conjunction with a Hazard Vulnerability Assessment (HVA) (which will be covered in Unit 5). A HVA helps to identify:

- The natural or technological hazard events that can occur in and around the community.
- The likelihood that such an event will occur.
- The consequences of the event in terms of casualties, destruction, disruption to critical services, and costs of recovery.

To be successful, mitigation measures must be developed into an overall **mitigation strategy** that considers ways to reduce consequences together with the overall risk from specific threats and other community goals.

Developing a Mitigation Strategy

A sound mitigation strategy is one that is based on several factors:

- Prevention measures are intended to prevent existing vulnerabilities from becoming more significant based on new development or other changes within the community (e.g., road construction, zoning or building code changes). Prevention measures can be very effective in areas that have not been developed or are in an early phase of development. By implementing prevention measures, such as open space preservation and storm water management, future development can be directed in such a way as to minimize the vulnerability from known hazards while maintaining other community goals and the overall quality of life in the community.

Developing a Mitigation Strategy (Continued)

- Property protection measures are used to modify buildings or their surroundings to reduce the risk of damage from a known hazard. Property protection measures directly protect people and property at risk. They may be simple and relatively low cost (e.g., raising utilities or strapping water heaters) or they may be more elaborate and expensive (e.g., acquiring land and using that land for recreational purposes or building earthquake-resistant structures in earthquake zones).
- Natural resource protection measures are used to reduce the consequences of a known hazard and to improve the overall quality of the environment. Natural resource protection measures can range from erosion and sediment control to wetlands protection to controlling runoff from farmland sediment into downstream waterways.
- Emergency protective measures protect people before and after an event occurs and may include:
 - Installing and maintaining warning systems.
 - Ensuring the protection of emergency responders.
 - Protective measures for critical facilities.
 - Maintenance of the public's health and safety.

To be effective, emergency protective measures should be built into the emergency planning process, exercised, and revised to incorporate lessons learned from both exercises and actual incidents.

Mitigation measures can be developed and implemented at the local or State level. Two examples of mitigation measures that have been cited for their effectiveness follow.

The Unified Hazard Mitigation Assistance Grant Programs include:

The Hazard Mitigation Grant Program (HMGP) is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (the Stafford Act), Title 42, United States Code (U.S.C.) 5170c. The key purpose of HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster. HMGP is available, when authorized under a Presidential major disaster declaration, in the areas of the State requested by the Governor. The amount of HMGP funding available to the Applicant is based upon the total Federal assistance to be provided by FEMA for disaster recovery under the Presidential major disaster declaration.

The Pre-Disaster Mitigation (PDM) program is authorized by Section 203 of the Stafford Act, 42 U.S.C. 5133. The PDM program is designed to assist States, Territories, Indian Tribal governments, and local communities in implementing a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding from future disasters.

The Flood Mitigation Assistance (FMA) program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42 U.S.C. 4104c, with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP).

The Repetitive Flood Claims (RFC) program is authorized by Section 1323 of the NFIA, 42 U.S.C. 4030, with the goal of reducing flood damages to individual properties for which one or more claim payments for losses have been made under flood insurance coverage and that will result in the greatest savings to the National Flood Insurance Fund (NFIF) in the shortest period of time.

The Severe Repetitive Loss (SRL) program is authorized by Section 1361A of the NFIA, 42 U.S.C. 4102a, with the goal of reducing flood damages to residential properties that have experienced severe repetitive losses under flood insurance coverage and that will result in the greatest amount of saving to the NFIF in the shortest period of time.

For further information on Mitigation utilize www.fema.gov/government/mitigation.shtm

Response:

Response begins when an emergency incident is imminent or immediately after an event occurs. Response encompasses the activities that address the short-term, direct effects of an incident. Response also includes the execution of EOPs and of incident mitigation activities designed to limit the loss of life, personal injury, property damage, and unfavorable outcomes.

As indicated by the situation, response activities may include:

- Rescue operations to reduce the loss of life.
- Mass care as required.
- Medical care/treatment
- Sheltering
- Applying incident command.
- Applying intelligence and other information to lessen the effects or consequences of an incident.
- Increasing security operations.
- Continuing investigations into the nature and source of the threat.
- Ongoing public health and agricultural surveillance and testing processes, immunizations, isolation, or quarantine.
- Specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice.
- Restoring critical infrastructure (e.g., utilities and roads).
- Ensuring continuity of critical services (e.g., government, hospitals and medical facilities, public works).

In other words, response involves putting preparedness plans into action.

One of the first response tasks is to conduct a situation assessment. Local government is responsible for emergency response and for continued assessment of its ability to protect its people and the property within the community. To fulfill this responsibility, responders and local government officials must conduct an immediate **rapid assessment** of the local situation.

Rapid assessment includes all immediate response activities that are directly linked to determining initial lifesaving and life-sustaining needs and to identifying imminent hazards. The ability of local governments to perform a rapid assessment within the first few hours after an event is crucial to providing an adequate response for life-threatening situations and imminent hazards. Coordinated and timely assessments enable local government to:

Response (Continued):

- Prioritize response activities.
- Allocate scarce resources.
- Request additional assistance from mutual aid partners, as well as the State, quickly and accurately.

Obtaining accurate information quickly through rapid assessment is the key to initiating response activities, and needs to be collected in an organized fashion. Critical information, also called **essential elements of information (EEI)**, includes information about:

- Lifesaving needs, such as evacuation and search and rescue.
- The status of critical infrastructure, such as transportation, utilities, communication systems, and fuel and water supplies.
- The status of critical facilities, such as police and fire stations, medical providers, water and sewage treatment facilities, and media outlets.
- The risk of damage to the community (e.g., dams and levees, facilities producing or storing hazardous materials) from imminent hazards.
- The number of individuals who have been displaced because of the event and the estimated extent of damage to their dwellings.

Essential elements of information also include information about the potential for **cascading events**. Cascading events are events that occur as a direct or indirect result of an initial event. For example, if a flash flood disrupts electricity to an area and, as a result of the electrical failure, a serious traffic accident involving a hazardous materials spill occurs, the traffic accident is a cascading event. If, as a result of the hazardous materials spill, a neighborhood must be evacuated and a local stream is contaminated, these are also cascading events. Taken together, the effect of cascading events can be crippling to a community.

Good planning, training, and exercising before an event occurs can help reduce cascading events and their effects. Maintaining the discipline to follow the plan during response operations also reduces the effects of cascading events.



Activity: Response Operations

This activity provides you with the opportunity to reflect on past response operations in your community. To complete this activity, read and respond to the questions below.

1. Think about a recent emergency event that occurred in your community. What types of damage occurred as a result of the event?
2. Were you involved in the response? If yes, what was your job?
3. What do you think worked well with the response?
4. If the situation occurred again, what would you do differently (or what would you want local officials to do differently)?
5. List ways in which you think that preparedness activities contributed to the response.

Recovery:

The goal of recovery is to return the community's systems and activities to normal. Recovery begins right after the emergency. Some recovery activities may be concurrent with response efforts.

Recovery is the development, coordination, and execution of service- and site-restoration plans for impacted communities and the reconstitution of government operations and services through individual, private-sector, nongovernmental, and public assistance programs that:

- Identify needs and define resources.
- Provide housing and promote restoration.
- Address long-term care and treatment of affected persons.
- Implement additional measures for community restoration.
- Incorporate mitigation measures and techniques, as feasible.
- Evaluate the incident to identify lessons learned.
- Develop initiatives to mitigate the effects of future incidents.

Long-term recovery includes restoring economic activity and rebuilding community facilities and housing. Long-term recovery (stabilizing all systems) can take years.

Although recovery is primarily a responsibility of local government, if the emergency or disaster received a Presidential Declaration, a number of assistance programs may be available under the Stafford Act. There are two major categories of Federal aid: Public Assistance and Individual Assistance.

Public Assistance is for repair of infrastructure, public facilities and debris removal, and may include:

- Repair or replacement of non-Federal roads, public buildings, and bridges.
- Implementation of Mitigation measures.

Individual Assistance is for damage to residences and businesses or for personal property losses, and may include:

- Grants to individuals and families for temporary housing, repairs, replacement of possessions, and medical and funeral expenses.
- The Small Business Administration (SBA) loans to individuals and businesses.
- Crisis counseling for survivors and responders; legal services; and disaster unemployment benefits.

Recovery (Continued):

Recovery from disaster is unique to each community depending on the amount and kind of damage caused by the disaster and the resources that the community has ready or can get. In the short term, recovery is an extension of the response phase in which basic services and functions are restored. In the long term, recovery is a restoration of both the personal lives of individuals and the livelihood of the community.

After the short-term recovery, when roads have been opened, debris has been removed, supplies and shelters secured, communication channels, water and power, life safety and other basic services restored, the community and its leadership must rebuild.

Long term recovery may take months or years because it is a complex process of revitalizing not just homes but also businesses, public infrastructure, and the community's economy and restoring quality of life.

There are many long term leadership and planning considerations. Applying for assistance programs available from the Federal Government, as mentioned previously, is important to consider for obtaining financial and other resources in the case of a Presidential Disaster Declaration. Other considerations include:

- Keeping people informed and preventing unrealistic expectations
- Mitigation measures to ensure against future disaster damage
- Donations Management
- Partnerships with business and industry for resources
- Competing interests of groups involved in the planning process
- Environmental issues
- Public health measures to take against the risks of diseases, contamination, and other cascading effects from a disaster
- The unmet needs of survivors
- Rebuilding bridges, roads, public works, and other parts of the infrastructure



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. Each phase of the emergency management cycle ends before the next one begins.
 - a. True
 - b. False

2. One example of mitigation is:
 - a. Preparing a home disaster kit.
 - b. Ordering evacuation.
 - c. Learning cardiopulmonary resuscitation.
 - d. Passing an ordinance controlling development in a floodplain.

3. The five functions of emergency management are useful for:
 - a. Limiting activities to certain times.
 - b. Keeping staff within boundaries.
 - c. Prioritizing actions and resources.
 - d. Providing categories to organize similar activities.

4. Response imposes the greatest time pressures on emergency management.
 - a. True
 - b. False

5. Federal assistance is available for which of the following purposes?
 - a. Mitigation measures
 - b. Medical and funeral expenses
 - c. Temporary housing
 - d. All of the above

6. Match each of the following activities with the emergency management phase during which the activity would occur.

Activity

Phase

- | | |
|-----------------------------------|--------------------|
| a. Conducting a training exercise | _____ Mitigation |
| b. Floodplain mapping | _____ Recovery |
| c. Opening shelters | _____ Preparedness |
| d. Rebuilding roads | _____ Response |



Knowledge Check (Continued)

1. b
2. d
3. d
4. a
5. d
6. b, d, a, c

Unit 5 Introduction and Unit Overview

In the previous unit, you learned about emergency management key components. After completing this unit you should be able to:

- Describe the role of the local Emergency Manager.
- Describe the Tribal role in emergency management.
- Discuss the State's emergency management role.
- Describe how private sector and Non Governmental Organizations participate in emergency management.
- Describe the community member role.
- Discuss the Federal role in major emergencies and disasters through the National Response Framework (NRF).
- List the emergency management functional groups.

The Role of the Local Emergency Manager

The Local Emergency Manager has the day-to-day responsibility of coordinating emergency management programs and activities. And most emergencies are handled at the local level without State or Federal assistance. This role entails coordinating all aspects of a jurisdiction's prevention, mitigation, preparedness, response, and recovery capabilities.

Emergencies and crisis events impact the local community and its local emergency manager first. If disasters always occurred in wildernesses, there would be no disasters. A disaster only occurs where you have vulnerable populations, buildings and infrastructures that can be endangered or damaged. Most emergencies and disasters are day-to-day events that are handled by local first responders and coordinators or emergency managers. The majority of emergencies and disasters are local and are handled locally. It is that rare major event that gets declared and may get State or even Federal disaster assistance.

Communities are unique in their characteristics, assets, outlooks and people. As Bob Bohlmann, former Government Affairs Chair and Scholarship Commission Chair for International Association of Emergency Managers (IAEM) and emergency manager in York County, Maine, explained it on August 5, 2010:

Local emergency management comes in all sizes and shapes; from the small town where the EOC is the First Selectman's kitchen table, to the larger rural town with an EOC that has two telephones in a room off the fire station, to the larger city where there is a dedicated EOC set up on a full time basis in the rebuilt school ready for the next event to occur. The Emergency Manager in U.S. towns is often a volunteer and then may have a whole array of other jobs both full and part time, with perhaps a second job assigned to work for or as the Police or Fire Chief or

Public Works Director. We have them all. The levels of responsibility differ greatly as well. In small communities, with next to no town-owned resources, the emergency manager is the only subject matter expert in the area and that person has a lot on his or her shoulders. Small towns still have to do every portion of the emergency management program done by cities but with a lot less support.

The Emergency Manager:

- Coordinates resources from all sectors before, during, and after a major emergency or disaster
- Manages activities relating to mitigation, preparedness, response, and recovery
- Ensures that all players of the process:
 - Are aware of potential threats to the community.
 - Participate in mitigation and prevention activities.
 - Plan for emergencies and disasters using an all-hazards approach.
 - Operate effectively in emergency situations.
 - Conduct effective recovery operations after a disaster.

The Emergency Manager coordinates all components of the emergency management system for the community, to mitigate, prepare for, respond to, and recovery from disasters. These components include:

- Fire services.
- Police/law enforcement services.
- Emergency medical programs.
- Public works.
- Volunteers and voluntary organizations.
- Private sector.
- Other groups involved in emergency activities.

Other duties of the Local Emergency Manager might include the following:

- Coordinating the planning process and working cooperatively with organizations and government agencies.
- Advising and informing the Chief Elected Official about emergency management activities.
- Identifying and analyzing the potential impacts of hazards that threaten the jurisdiction.

- Conducting risk and hazard assessments.
- Taking inventory of personnel and material resources to include the private sector sources that would be available in an emergency.
- Identifying resource deficiencies and working with appropriate officials on measures to resolve them.
- Developing and carrying out public awareness and education programs. Establishing a system to alert officials and the public in an emergency or disaster.
- Establishing and maintaining networks of expert advisors and damage assessors for all hazards. Coordinating a review of all local emergency- and disaster-related authorities and recommending amendments, when necessary.

Earlier in the course, you reviewed the placement of the emergency manager within local government. Based on the community's organizational strategy, the Emergency Manager may serve as:

- Head of a separate organization that reports directly to a governing or executive body.
- Part of a law enforcement agency, located in a police department or sheriff's office.
- Part of the fire/rescue department.

Regardless of location, the person in this position obviously must devote significant time and energy coordinating with a variety of people and organizations within and outside of the community.

The Role of the Tribal Leader

The Tribal Leader is responsible for the public safety and welfare of the people of that tribe. As authorized by Tribal government, the Tribal leader:

- Is responsible for coordinating Tribal resources needed to prevent, protect against, respond to, and recover from incidents of all types. This also includes preparedness and mitigation activities.
- May have powers to amend or suspend certain Tribal laws or ordinances associated with response.
- Communicates with the Tribal councils and community, and helps people, businesses, and organizations cope with the consequences of any type of incident.
- Negotiates mutual aid and assistance agreements with other Tribes or jurisdictions.
- Can request Federal assistance under the Stafford Act through the

The Role of the Tribal Leader (continued)

Governor of the State when it becomes clear that the tribe's capabilities will be insufficient or have been exceeded.

- Can elect to deal directly with the Federal Government. Although a State Governor must request a Presidential declaration on behalf of a Tribe under the Stafford Act, Federal departments or agencies can work directly with the tribe within existing authorities and resources.

State Emergency Management Role

The role of State government in emergency management in many ways parallels the role of the local emergency management function.

- Legislative and executive authorities exist for State emergency programs, with a range of programs usually operating in a variety of State agencies.
- The State has a responsibility to develop and maintain a comprehensive program for mitigation, preparedness, response, and recovery activities.

The State's role is to supplement and facilitate local efforts before, during, and after emergencies. The State must be prepared to maintain or accelerate services and to provide new services to local governments when local capabilities fall short of demands.

A State government is in the unique position to serve as a link between those who need assistance and those who can assist. It is able to:

- Coordinate with local governments to meet their emergency needs.
- Assess available State and Federal resources.
- Help the local governments apply for, acquire, and use those resources effectively.

The State also provides direct guidance and assistance to its local jurisdictions through program development, and it channels Federal guidance and assistance to the local level. In a disaster, the State office helps coordinate and integrate resources and apply them to local needs. The State's role might best be described as "pivotal."

The Governor of a State, who is responsible for the general welfare of the people in that State, has certain legislated powers and resources that can be applied to all-hazards emergency management.

All State Governors have authority and responsibility for:

- Issuing State or area emergency declarations.
- Initiating State response actions (personnel, materials).

State Emergency Management Role (continued)

- Activating emergency contingency funds and/or reallocating regular budgets for emergency activities.
- Overseeing emergency management for all four phases.
- Applying for, disbursing, and monitoring Federal assistance.

The State Emergency Management Agency:

- Carries out statewide emergency management activities.
- Helps coordinate emergency management activities involving more than one community.
- Assists individual communities when they need help.
- Provides financial assistance on a supplemental basis through a process of application and review.

The Governor reviews the application, studies the damage estimates and, if appropriate, declares a State of emergency.

If the local community's resources are not adequate, the first place to turn for additional assistance is to the county or state Emergency Management Agency.

Response and recovery resources are used to repair critical infrastructure. This may include restoring utility services, conducting radiological decontamination, and removing debris.

Acting on the information provided, the county or State office will dispatch personnel to the scene to assist in the response and recovery effort. Only the Governor, however, can request the Federal aid that comes with a Presidential Declaration.

All states have laws which require them to have a State Emergency Management Agency and an Emergency Operations Plan coordinated by that agency.

How the Private Sector and Voluntary Organizations Assist Emergency Managers

The private sector, including individuals and families and voluntary organizations, plays a major role in emergency management before, during, and after an emergency.

- Private industry contributes by:
 - Provide technical assistance on such matters as utilities, engineering, and other areas.
 - Developing and exercising emergency plans before an emergency occurs.
 - Working with emergency management personnel before an emergency occurs to ascertain what assistance may be necessary and how they can help.
 - Providing assistance (including volunteers) to support emergency management during an emergency and throughout the recovery process.

Communities and Citizens contribute by:

- Taking the time necessary to understand the types of emergencies that are likely to occur and preparing a personal disaster kit and emergency plans for those events.
 - Volunteering with an established organization and receiving training before an emergency occurs.
 - Taking direction and responding reasonably to alerts, warnings, and other emergency public information.
 - Individual citizens that can take care of themselves, families, and neighbors free up response resources to help those most in need.
- Voluntary organizations contribute by:
 - Training and managing volunteer resources.
 - Identifying shelter locations and needed supplies.
 - Providing critical emergency services to those in need, such as the provision of cleaning supplies, clothing, food, and shelter, or assisting with post-emergency cleanup
 - Identifying those whose needs have not been met and coordinating the provision of assistance.

How the Private Sector and Voluntary Organizations Assist Emergency Managers (continued)

Each of these players is critical to ensuring an appropriate and efficient response. However, each must become involved during the preparedness phase of the integrated emergency management system to ensure that, when an emergency occurs, all players understand their roles and are ready to contribute without delay.

Federal Emergency Management Role

The Federal Government's involvement in emergency management crosses all five key components of emergency management (to include prevention, preparedness, response, recovery, and mitigation). Assistance may take the form of fiscal support, technical assistance, or information about materials, personnel resources, and research.

The Federal Government provides legislation, Executive Orders, and regulations that influence all disaster activities. It also maintains the largest pool of fiscal resources that can be applied to emergency response and recovery.

FEMA takes a lead role in national preparedness for major crises. It also plays coordinating and supportive/assistance roles for integrated emergency management in partnership with State and local emergency management entities. As necessary, FEMA provides funding, technical assistance, services, supplies, equipment, and direct Federal support.

FEMA provides technical and financial assistance to State and local governments to upgrade their communications and warning systems, and it operates an emergency information and coordination center that provides a central location for the collection and management of disaster and emergency information.

FEMA provides information to the President concerning matters of national interest to help with decisions about disaster declarations. The President of the United States is responsible for:

- Protecting the public.
- Making an emergency and/or disaster declaration upon a request from a governor before federal funds are released to aid disaster survivors or provide public assistance.
- Making a declaration under unique authority in such circumstances as events on federal property.

The National Response Framework (NRF)

As we reviewed in Unit Two of this course, the NRF is a guide to how the Nation conducts all-hazards incident response. It uses flexible, scalable, and adaptable coordinating structures to align key roles and responsibilities across the Nation. It captures specific authorities and smart practices for managing incidents that range from the serious, but purely local, to large-scale terrorist attacks or catastrophic natural disasters.

Emergency Support Functions (ESF) groups resources and capabilities into functional areas that are most frequently needed, e.g., Transportation, Firefighting, Search and Rescue). In addition to the national response, many state and local programs utilize ESF functions to manage incidents. Within state and local government many emergency operations centers follow the ESF structure. Other key federal partners of FEMA participate in national response through the NRF ESF structure.

Emergency Support Functions (ESFs)

Each Emergency Support Function (ESF) is composed of an ESF coordinator and primary/support agencies.

- **ESF Coordinator**: The agency that has ongoing responsibilities throughout the prevention, preparedness, response, recovery, and mitigation phases of incident management for the particular ESF. The ESF coordinating agency is responsible for steady-State planning, preparedness, and other activities.
- **Primary Agencies**: The NRF identifies primary agencies based on authorities, resources, and capabilities.
- **Support Agencies**: Support agencies are assigned based on resources and capabilities in a given functional area. The resources provided by the ESFs reflect the resource typing categories identified in the NIMS.

ESFs may be selectively activated for both Stafford Act and non-Stafford Act incidents. Not all incidents requiring Federal support result in the activation of ESFs. For Stafford Act incidents, the NRCC or RRCC may activate specific ESFs/or other Federal Agencies (OFA) by directing appropriate departments and agencies to initiate the actions delineated in the ESF Annexes.

Resources coordinated through ESFs are assigned where needed within the response structure. For example, if a State requests assistance with a mass evacuation, resources from several different ESFs may be integrated into a single Branch or Group within the Operations Section. During the response, these resources would report to a supervisor within the assigned Branch or Group.

Regardless of where ESFs may be assigned, they coordinate closely with one another to accomplish their missions.

<p>ESF #1 – Transportation ESF Coordinator: Department of Transportation</p> <ul style="list-style-type: none"> • Aviation/airspace management and control • Transportation safety • Restoration and recovery of transportation infrastructure • Movement restrictions • Damage and impact assessment
<p>ESF #2 – Communications ESF Coordinator: DHS (National Communications System)</p> <ul style="list-style-type: none"> • Coordination with telecommunications and information technology industries • Restoration and repair of telecommunications infrastructure • Protection, restoration, and sustainment of national cyber and information technology resources • Oversight of communications within the Federal incident management and response structures
<p>ESF #3 – Public Works and Engineering ESF Coordinator: Department of Defense (U.S. Army Corps of Engineers)</p> <ul style="list-style-type: none"> • Infrastructure protection and emergency repair • Infrastructure restoration • Engineering services and construction management • Emergency contracting support for lifeaving and lifesustaining services
<p>ESF #4 – Firefighting ESF Coordinator: Department of Agriculture (U.S. Forest Service)</p> <ul style="list-style-type: none"> • Coordination of Federal firefighting activities • Support to wildland, rural, and urban firefighting operations
<p>ESF #5 – Emergency Management ESF Coordinator: DHS (FEMA)</p> <ul style="list-style-type: none"> • Coordination of incident management and response efforts • Issuance of mission assignments • Resource and human capital • Incident action planning • Financial management
<p>ESF #6 – Mass Care, Emergency Assistance, Housing, and Human Services ESF Coordinator: DHS (FEMA)</p> <ul style="list-style-type: none"> • Mass care • Emergency assistance • Disaster housing • Human services
<p>ESF #7 – Logistics Management and Resource Support ESF Coordinators: General Services Administration and DHS (FEMA)</p> <ul style="list-style-type: none"> • Comprehensive, national incident logistics planning, management, and sustainment capability • Resource support (facility space, office equipment and supplies, contracting services, etc.)

UNIT 5: ROLES OF KEY PARTICIPANTS

ESF #8 – Public Health and Medical Services ESF Coordinator: Department of Health and Human Services
<ul style="list-style-type: none">• Public health• Medical• Mental health services• Mass fatality management
ESF #9 – Search and Rescue ESF Coordinator: DHS (FEMA)
<ul style="list-style-type: none">• Life-saving assistance• Search and rescue operations
ESF #10 – Oil and Hazardous Materials Response ESF Coordinator: Environmental Protection Agency
<ul style="list-style-type: none">• Oil and hazardous materials (chemical, biological, radiological, etc.) response• Environmental short- and long-term cleanup
ESF #11 – Agriculture and Natural Resources ESF Coordinator: Department of Agriculture
<ul style="list-style-type: none">• Nutrition assistance• Animal and plant disease and pest response• Food safety and security• Natural and cultural resources and historic properties protection• Safety and well-being of household pets
ESF #12 – Energy ESF Coordinator: Department of Energy
<ul style="list-style-type: none">• Energy infrastructure assessment, repair, and restoration• Energy industry utilities coordination• Energy forecast
ESF #13 – Public Safety and Security ESF Coordinator: Department of Justice
<ul style="list-style-type: none">• Facility and resource security• Security planning and technical resource assistance• Public safety and security support• Support to access, traffic, and crowd control
ESF #14 – Long-Term Community Recovery ESF Coordinator: DHS (FEMA)
<ul style="list-style-type: none">• Social and economic community impact assessment• Long-term community recovery assistance to States, tribes, local governments, and the private sector• Analysis and review of mitigation program implementation
ESF #15 – External Affairs ESF Coordinator: DHS
<ul style="list-style-type: none">• Emergency public information and protective action guidance• Media and community relations• Congressional and international affairs• Tribal and insular affairs



Activity: Emergency Management Partners

The purpose of this activity is to match the emergency management partner to a description of that partner's role in emergency management. For a role in the first column, choose a partner from the second column.

Emergency Management Partners	
1. ___ Declares a local emergency	a. Individual and family
2. ___ Requests a Presidential Declaration of Disaster	b. Local government official(s)
3. ___ Activates the National Response Framework	c. Voluntary agency
4. ___ Responds reasonably to public information	d. Local emergency manager
5. ___ Supplements and facilitates local emergency efforts	e. State Emergency Management Agency
6. ___ Coordinates all components of the emergency management system for the community	f. State Governor
7. ___ Provides mass care and sheltering	g. FEMA



Activity: Emergency Management Partners (Continued)

1. b
2. f
3. g
4. a
5. e
6. d
7. c

Emergency Management Functional Groups

An integrated approach to emergency management is based on solid general management principles and the common theme of protecting life and property. It provides direction so that participants can begin working together with all of the principals in the network. The structure outlined below should be implemented in local emergency operations centers. This structure should not be confused with the Incident Command Structure emergency responders use for tactical field operations. The functional groups are meant to support field operations and not be involved in tactical decision making.

On this team are individuals who have obvious responsibilities in disaster response, as well as others whose roles may appear to be minor but which are, in fact, very important. For example, the editor of the local newspaper and the supervisor of a local construction crew may be important members of the emergency management community.

It is helpful to imagine the working relationships of the team as divided into four broadly defined groups at each governmental level, typical of those that exist in many organizations.

Policy Group. This is an informal and flexible grouping of experienced public officials representing State, county, and municipal governments. They meet to develop emergency policies and then, as required by the disaster situation, discuss the economic, political, legal, and social implications of both the threat and the response to determine the best general approach to the situation.

- Members of a policy group can include the Governor, Adjutant General, State Director of Emergency Services, County Manager, etc. The Emergency Program Manager serves as the liaison between the policy group and the coordination group.

Coordination Group. This group typically consists of the assistants, deputies, and staff of agencies and departments represented in the policy group. The coordination group performs a staff function by coordinating the types and number of personnel and material resources deployed, providing logistical support to field units, contracting for relief of forces, and carefully monitoring both the immediate emergency situation and other threats.

- The Emergency Manager is responsible for coordinating the efforts of various agency and department personnel assigned to this group. Typically, the coordination group does not command field-level personnel.

Field Response Group. This includes the fire, law enforcement, medical, military, and public works units that normally would be on the scene of the incident.

**Case Study: Emergency Management Coordination**

The following description of the response to a tornado illustrates the coordination among local, State, and Federal agencies, and the roles of functional groups at different levels. When you have finished reading the case study, answer the questions on the following page.

Tornadoes caused massive property damage and loss of life along a path from northeast Mississippi through central Alabama into northern Georgia. Hardest hit were Jefferson and St. Clair Counties in Alabama. Casualties included 36 fatalities, 273 injuries, and property damage estimated at over \$300 million.

After the tornado, the first priority was search and rescue to assist the injured and find missing people. The second priority was to care for people and identify those needing shelter and other assistance.

Local agencies responded quickly to assist the injured and find missing people, joined by county and State agencies coordinated through the Emergency Operations Center (EOC).

The agencies listed below were involved in the response:

Fire and rescue services. Three fire and rescue services from the affected areas coordinated with 26 other fire departments to assist them with search and rescue and emergency medical support.

Law enforcement. The Jefferson County Sheriff's Department and the City of Birmingham police department were the primary responding agencies, assisted by numerous other local and State agencies.

Public Works. The primary response agencies were the Jefferson County Roads and Transportation Department and the City of Birmingham Streets and Sanitation Department, along with Horticulture and Urban Forestry Department, assisted by Public Works Departments from other cities within the county.

EOC Staff. 35 or more agencies, departments, and organizations provided personnel to coordinate the response and recovery efforts.

Other local agencies. Many community groups, churches, State and Federal assistance organizations, and numerous volunteer groups provided assistance, including shelter, mass care, mental health, donated goods and services, and animal rescue and care.

State and Federal agencies. The State Emergency Management Agency coordinated State assistance that included the National Guard, public safety, the State Department of Transportation, and the State Forestry Commission. FEMA provided disaster and community relations teams, established Disaster Recovery Centers to assist survivors seeking individual and housing assistance, and held applicant's briefings for jurisdictions that suffered damage to their infrastructure.

Case Study: Emergency Management Coordination (Continued)

Did Alabama receive a Presidential disaster declaration for the disaster? How can you tell?

Name two Jefferson County agencies that were involved in the response and recovery.

Name two State agencies or organizations that were involved in the response and recovery.

Name two services performed by voluntary agencies after the tornado.



Case Study: Emergency Management Coordination (Continued)

Did Alabama receive a Presidential Declaration of Disaster? How can you tell?

Yes, there was a Presidential Declaration. Disaster Recovery Centers were established, Community Relations and disaster teams were provided, and applicant's briefings for damaged infrastructure were being held.

Name two Jefferson County agencies that were involved in the response and recovery.

Any two of the following:

Sheriff's Department, Emergency Management Agency, Jefferson County Roads and Transportation Department

Name two State agencies or organizations that were involved in the response and recovery.

Any two of the following:

State Emergency Management Agency, National Guard, State Department of Transportation, State Forestry Commission

Name two services performed by voluntary agencies after the tornado.

Any two of the following

Shelter, mass care, mental health services, donated goods and services, and animal rescue and care



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. The local emergency program manager coordinates:
 - a. The National Response Framework.
 - b. Search and Rescue.
 - c. The National Guard.
 - d. The disaster declaration process.
 - e. The emergency management programs.

2. The State government is in a unique position to serve as a link between those who need assistance and those who can assist.
 - a. True
 - b. False

3. If the local community's resources are not adequate to deal with an emergency, it can request assistance from:
 - a. Neighboring jurisdictions.
 - b. Congressional representatives.
 - c. The President.
 - d. FEMA.

4. If a disaster response demands more resources than any local governments can supply without assistance, the next step is to request assistance from:
 - a. Congressional representatives.
 - b. The President.
 - c. FEMA.
 - d. The State Emergency Management Agency.



Knowledge Check (Continued)

1. e
2. a
3. a
4. d

Unit 6 Introduction and Unit Overview

This unit will describe the risk analysis process and why conducting a thorough risk analysis forms the basis for all emergency operations planning. After you complete this unit, you should be able to:

- Describe why an Emergency Operations Plan (EOP) must be the centerpiece of an Emergency Management Program.
- Identify the high-risk hazards facing your community.
- Describe the structure of an EOP.
- Determine the annexes that should be included in community plans.

What is an EOP and What Does It Do?

An EOP is a key component of an emergency management program. It establishes the overall authority, roles, and functions performed during incidents.

The emergency operations plan is continuously maintained by the emergency management office but has no influence during non-emergency activities.

The EOP is utilized to guide emergency response and recovery, and is implemented only after being activated by local authorities in response to an emergency or disaster. Even during emergencies, only those parts of the EOP that are required for the response are activated.

The EOP enables the community to be prepared to take immediate action when disaster threatens or strikes. An EOP describes:

- What emergency response actions will occur
- Under what circumstances
- By whom
- By what authority
- Using what resources

An EOP describes how the government does business in an emergency.

Developing and maintaining an EOP is a crucial task of an emergency operations program. The program should bring together representatives of all involved agencies who could have a role in a response. Agency participation is necessary to ensure that all who have a role in a response are brought into the process and understand their responsibilities thoroughly.

To illustrate how an EOP organizes a response to an emergency, consider the train derailment and subsequent hazardous chemical release described earlier in the course.



Case Study: An EOP in Action

The freight train derailed at approximately 3:00 AM, releasing anhydrous ammonia.

The local EOP designates the Emergency Management Agency (EMA) as the county's 24-hour crisis monitor. The EMA received first notification of the incident from a railroad official shortly after 3:00 A.M.

Because the derailment occurred outside of the city limits, the Chairman of the County Board of Supervisors had direction and control under the plan, and declared a State of Emergency in the county soon after being notified.

Each department listed in the plan was notified and alerted its employees and volunteers. The EMA activated the Emergency Operations Center (EOC). County communications staff moved operations to the EOC, and following the procedures in the Communications Annex, representatives of fire departments, law enforcement agencies, public works agencies, and the Department of Health deployed to the EOC.

The plan designated the hazardous chemical release as a level 3 emergency, which is used for all major technological disasters. The State EOC was notified, as was required for level 3 emergencies.

The designated on-scene Incident Commander was the County Fire Chief. The fire department checked the Material Safety Data Sheet (MSDS) for anhydrous ammonia and discovered that protective gear would be needed for any response personnel at the scene. No one was allowed near the toxic gas cloud until gear could be obtained.

A Hazardous Materials Appendix to the EOP listed sources for protective gear, protective actions that could be taken, and information that should be given to the public. The appendix established cleanup of the site as the responsibility of the railroad company in coordination with the county fire department, as the controlling authority for incidents involving hazardous materials.

The EMA followed the procedures included in the Warning Annex by activating warning sirens and broadcasting instructions to "shelter in place" by closing all windows and turning off furnaces to avoid bringing outside air into their homes. Public works employees set up a perimeter a safe distance from the scene that was manned by police and sheriff's officers to limit access to the release area.

After the immediate danger passed, the "shelter in place" advisory was lifted, and survivors could seek medical treatment. Hospitals activated procedures to mobilize extra staff to treat hundreds of survivors suffering from exposure to the chemical.



Activity: Where Do I Fit Into the EOP?

This activity will provide you with an opportunity to analyze the role you (and your agency) would play in a response similar to the train derailment. To complete this activity, respond to the questions below. You may need to refer to the local EOP for this activity.

1. Would your agency or organization participate in the response described in the case study?

Yes

No

If your agency would not be deployed based on the procedures in your community's EOP, do you see a role that it might have played? If yes, describe the role that your agency could perform.

2. If you answered yes to question 1, where would your agency deploy?

To the scene

To the EOC

Representatives would be deployed to the scene and to the EOC

3. Describe the specific duties your agency would perform in the case study.

Developing and Maintaining Emergency Operations Plans Comprehensive Preparedness Guide 101 (CPG 101)

The NRF identifies State, Territorial, Tribal, and local jurisdiction responsibility to develop detailed, robust, all-hazards/all-threats EOPs. It says that these plans:

- Should clearly define leadership roles and responsibilities and clearly articulate the decisions that need to be made, who will make them, and when;
- Should include both hazard- and threat-specific and all-hazards/all-threats plans tailored to the locale;
- Should be integrated and operational and incorporate key private sector business and NGO organizations; and
- Should include strategies for both no-notice and forewarned evacuations, with particular consideration given to assisting functional needs populations.

CPG 101 is the foundation for State and local planning in the United States. CPG 101 expands on the Federal Emergency Management Agency's (FEMA's) efforts to provide guidance about response and recovery planning to State, Territorial, Tribal, and local governments. It also extends those planning concepts into the prevention and protection mission areas.

CPG 101 provides general guidelines on developing emergency operations plans. It promotes a common understanding of the fundamentals of planning and decision making to help operations planners examine a hazard or threat and produce integrated, coordinated, and synchronized plans. This Guide helps emergency and homeland security managers in State, Territorial, Tribal, and local governments (hereafter, State and local governments) in their efforts to develop and maintain viable all-hazard, all-threat emergency plans. Each jurisdiction's plans must reflect what the **Whole of Community** will do to protect itself from *its* unique hazards and threats with the unique resources *it* has or can obtain.

Consideration should be given to resources and needs of the whole of community. **Whole of Community** encompasses two key concepts:

1. Ensuring that our response and recovery actions are driven by the actual needs of the entire affected community and conditions on the ground, including the population demographics and geographic locations; and
2. Ensuring that we leverage and rely upon the resources of the entire emergency management team to the greatest extent possible in meeting these needs.

As part of a larger planning modernization effort, CPG 101 provides methods for State, Territorial, Tribal, and local planners to:

Developing and Maintaining Emergency Operations Plans Comprehensive Preparedness Guide 101 (CPG101) (Continued)

- Develop sufficiently trained planners to meet and sustain planning requirements;
- Identify resource demands and operational options across all homeland security mission areas throughout the planning process;
- Link planning, preparedness, and resource and asset management processes and data in a virtual environment;
- Prioritize plans and planning efforts to best support emergency management and homeland security strategies and allow for their seamless transition to execution;
- Produce and tailor the full range of combined Federal, State, Territorial, Tribal, and Local government options according to changing circumstances; and
- Quickly produce plans on demand, with revisions as needed.

CPG 101 provides emergency and homeland security managers and other emergency services personnel with FEMA's recommendations on how to address the entire planning process — from forming a planning team, through writing and maintaining the plan, to executing the plan. It also encourages emergency and homeland security managers to follow a process that addresses all of the hazards and threats that might impact their jurisdiction.

Planning includes **senior officials** throughout the process to ensure both understanding and buy-in. Potential planning team members have many day-to-day concerns. A planning team's members must be convinced that emergency planning is a high priority. Chief executive support helps the planning process meet requirements of time, planning horizons, simplicity, and level of detail. The more involved decision makers are in planning, the better the planning product will be.

PLANNING PRINCIPLES

The challenge of developing an all-hazards plan for protecting lives, property, and the environment is made easier if the planners preparing it apply the following principles to the planning process:

Planning must involve *all* partners. Just as coordinated emergency operations depend on teamwork, good planning requires a team effort. The most realistic and complete plans are prepared by a team that includes representatives of the departments and agencies, as well as the private sector, NGOs, and community members that can contribute critical perspectives or that will have a role in executing the plan. This principle is so important that the first step of the planning process is forming a planning team. When the plan considers and incorporates the views of the individuals and organizations assigned tasks within it, they are more likely to accept and use the plan.

Emergency operations planning addresses all hazards and threats. The causes of emergencies can vary greatly, but many of the effects do not. Planners can address common operational functions in the basic plan instead of having unique plans for every type of hazard or threat. For example, floods, wildfires, hazardous materials releases, etc. may lead a jurisdiction to issue an evacuation order and open shelters. Even though each hazard's characteristics (e.g., speed of onset, size of the affected area) are different, the general tasks for conducting an evacuation and shelter operations are the same. While differences in the speed of onset may affect when the order to evacuate or to open and operate shelters is given, the process of determining the need for evacuation or shelters and issuing the order does not change. All hazards and all-threats planning ensure that, when addressing emergency functions, planners identify common tasks and who is responsible for accomplishing those tasks.

Planning does not need to start from scratch. Planners should take advantage of existing plans and others' experience. The State is a valuable resource for the local jurisdiction. Many States publish their own standards and guidance for emergency planning, conduct workshops and training courses, and assign their planners to work with local planners. FEMA supports State training efforts by offering resident, locally presented, and independent-study emergency planning courses. FEMA also publishes many documents related to planning for specific functions and hazards and threats. By reviewing existing emergency or contingency plans, planners can:

- Identify applicable authorities and statutes;
- Gain insight into community risk perceptions;
- Identify organizational arrangements used in the past;
- Identify mutual aid agreements with other jurisdictions;
- Identify private sector planning that can complement and focus public sector planning;
- Learn how some planning issues were resolved in the past; and
- Identify preparedness gaps in available personnel, equipment, and training.

The emergency or homeland security manager should seek the chief executive's support for and involvement in the planning effort. The emergency or homeland security manager must explain to the chief executive what is at stake in emergency planning by:

- Identifying and sharing the hazard, risk, and threat analyses for the jurisdiction;
- Describing what the government body and the chief executive will have to do prior to, during, and after an event;
- Determining what the government body and the chief executive can do to either prevent or minimize the impact of an event;
- Discussing readiness assessments and exercise critiques; and

- Reaffirming the chief executive's understanding that planning is an iterative, dynamic process that ultimately facilitates his or her job in a crisis.

Planning is influenced by time, uncertainty, risk, and experience. These factors define the starting point where planners apply appropriate concepts and methods to create solutions to particular problems. Because this activity involves judgment and the balancing of competing demands, plans cannot be overly detailed — to be followed to the letter — or so general that they provide insufficient direction. This is why planning is both science and art, and why plans are evolving frameworks.

Unit 4: Developing and Maintaining Emergency Operations Plans (CPG 101) November 2010 outlines the following steps in the planning process:

1. Form a collaborative planning team
2. Understand the situation
3. Determine goals and objectives
4. Plan development
5. Plan preparation, review and approval
6. Planning implementation and maintenance

One key new focus in this revised guidance is the concept of Community-Based Planning or engaging the whole community in the planning process.

Step 1: Form a Collaborative Planning Team explains the valuable effort to expand membership in the team and engage the whole community in the planning effort. One of the most valuable efforts in this process is building the team because the trust and working relationships fostered by participating together as members of the team will pay dividends in more comprehensive and creative planning and will extend into operations when these same people have to work together during crises and emergencies. The following three page chart suggests some community officials and workers who might participate on the planning team because of what they bring to the effort.

Potential Members of a Larger Community Planning Team	
Individuals/Organizations	What They Bring to the Planning Team
Senior Official (elected or appointed) or designee	<ul style="list-style-type: none"> • Support for the homeland security planning process • Government intent by identifying planning goals and essential tasks • Policy guidance and decision-making capability • Authority to commit the jurisdiction's resources
Emergency Manager or designee	<ul style="list-style-type: none"> • Knowledge about all-hazard planning techniques • Knowledge about the interaction of the tactical, operational, and strategic response levels • Knowledge about the prevention, protection, response, recovery, and mitigation strategies for the jurisdiction • Knowledge about existing mitigation, emergency, continuity, and recovery plans
EMS Director or designee	<ul style="list-style-type: none"> • Knowledge about emergency medical treatment requirements for a variety of situations • Knowledge about treatment facility capabilities • Specialized personnel and equipment resources • Knowledge about how EMS interacts with the Emergency Operations Center and incident command
Fire Services Chief or designee	<ul style="list-style-type: none"> • Knowledge about fire department procedures, on-scene safety requirements, hazardous materials response requirements, and search- and-rescue techniques • Knowledge about the jurisdiction's fire-related risks • Specialized personnel and equipment resources
Law Enforcement Chief or designee	<ul style="list-style-type: none"> • Knowledge about police department procedures; on-scene safety requirements; local laws and ordinances; explosive ordnance disposal methods; and specialized response requirements, such as perimeter control and evacuation procedures • Knowledge about the prevention and protection strategies for the jurisdiction • Knowledge about fusion centers and intelligence and security strategies for the jurisdiction • Specialized personnel and equipment resources
Public Works Director or designee	<ul style="list-style-type: none"> • Knowledge about the jurisdiction's road and utility infrastructure • Specialized personnel and equipment resources
Public Health Officer or designee	<ul style="list-style-type: none"> • Records of morbidity and mortality • Knowledge about the jurisdiction's surge capacity • Understanding of the special medical needs of the community • Knowledge about historic infectious disease and syndrome surveillance • Knowledge about infectious disease sampling procedures

UNIT 6: THE PLAN AS A PROGRAM CENTERPIECE

Hazardous Materials Coordinator	<ul style="list-style-type: none"> • Knowledge about hazardous materials that are produced, stored, or transported in or through the community • Knowledge about U.S. Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and U.S. Department of Transportation (DOT) requirements for producing, storing, and transporting hazardous materials and responding to hazardous materials incidents
Hazard Mitigation Specialist	<ul style="list-style-type: none"> • Knowledge about all-hazard planning techniques • Knowledge of current and proposed mitigation strategies • Knowledge of available mitigation funding • Knowledge of existing mitigation plans
Transportation Director or designee	<ul style="list-style-type: none"> • Knowledge about the jurisdiction's road infrastructure • Knowledge about the area's transportation resources • Familiarity with the key local transportation providers • Specialized personnel resources
Agriculture Extension Service	<ul style="list-style-type: none"> • Knowledge about the area's agricultural sector and associated risks (e.g., fertilizer storage, hay and grain storage, fertilizer and/or excrement runoff)
School Superintendent or designee	<ul style="list-style-type: none"> • Knowledge about school facilities • Knowledge about the hazards that directly affect schools • Specialized personnel and equipment resources (e.g., buses)
Social services agency representatives	<ul style="list-style-type: none"> • Knowledge about functional needs populations
Local Federal asset representatives	<ul style="list-style-type: none"> • Knowledge about specialized personnel and equipment resources that could be used in an emergency • Facility security and response plans (to be integrated with the jurisdiction's EOP) • Knowledge about potential threats to or hazards at Federal facilities (e.g., research laboratories, military installations)
NGOs (including members of National VOADs) and other private, not-for-profit, faith-based, and community organizations	<ul style="list-style-type: none"> • Knowledge about specialized resources that can be brought to bear in an emergency • Lists of shelters, feeding centers, and distribution centers • Knowledge about functional needs populations
Local business and industry representatives	<ul style="list-style-type: none"> • Knowledge about hazardous materials that are produced, stored, and/or transported in or through the community • Facility response plans (to be integrated with the jurisdiction's EOP) • Knowledge about specialized facilities, personnel, and equipment resources that could be used in an emergency

Amateur Radio Emergency Service (ARES)/Radio Amateur Civil Emergency Service (RACES) Coordinator	<ul style="list-style-type: none"> List of ARES/RACES resources that can be used in an emergency
Utility representatives	<ul style="list-style-type: none"> Knowledge about utility infrastructures Knowledge about specialized personnel and equipment resources that could be used in an emergency
Veterinarians/animal shelter representatives	<ul style="list-style-type: none"> Knowledge about the special response needs for animals, including livestock

Step 2: Understand the Situation, describes important actions and procedures needed to research the community’s vulnerabilities and analyze the potential consequences of these threats. This is where a Hazard Vulnerability Assessment (HVA) fits into the planning process.

When assessing risk, it is important to keep in mind the following hierarchy of response priorities:

1. **Life safety.** Conditions that could affect the health and/or safety of the population.
2. **Essential facilities.** Facilities, such as fire houses, precinct houses, or waste water treatment facilities that, if affected by the threat, would seriously and adversely affect the community’s ability to respond.
3. **Critical infrastructure.** Roadways, utilities, and other components of the infrastructure that, if damaged, would seriously and adversely affect life safety or response capability.

When surveying your community for risks to these important resources, include such characteristics as geographic features, infrastructure lifelines, essential facilities, special facilities, population densities and shifts (demographics), and availability of response resources.

In order to give a “hands on” approach to the discussion in Step 2, you may use the following 5 charts to help you address the risks in your community. (You can also find these forms available for download in **Appendix A**.)

Hazard Vulnerability Assessment Worksheet

1. Identify Hazards

What Hazards can affect your community

Natural	Technological	Man made

2. Profile Each Hazard

Look at each hazard and develop characteristics

HAZARD				
Frequency of Occurrence				

UNIT 6: THE PLAN AS A PROGRAM CENTERPIECE

Magnitude				
Location				
Area				
Duration				
Seasonality				
Speed of Onset				
Availability of Warning				

3. Develop Community Profile
Get the information for your community or each segment/sector; e.g.
Industrial/Residential, high ground/low lying areas, political entities

Information	Segment
Geography	
Property	
Infrastructure	
Demographics	
Response Agencies	

4. Compare and Prioritize Risk

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		

UNIT 6: THE PLAN AS PROGRAM CENTERPIECE

Compare and Prioritize Risk (continued)

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		

UNIT 6: THE PLAN AS PROGRAM CENTERPIECE

5. Develop the Scenario

What is each hazard going to do?

Hazard: _____

Initial Warning	
Overall Impact on the Community	
Impact on Actual Segment	
Consequences- damage, casualties	
Needed Actions and Resources - Including Mitigation efforts	

Hazard Identification: Northeast Community (Example)

Natural	Technological	Man made
Hurricane Winter Storm* Flood* Tornadoes	Fire* Explosion Transport (Hazmat Event)* Sewage release Radiological (Transport) Radiological (Power Plant)	Terrorist (Biological) Terrorist (Chemical) Terrorist (Radiological)

Hazard Profile: (Example)

Hazard	Winter Storm	Flood	Fire	Transport
Frequency	Likely	Possible	Highly likely	Likely
Magnitude	Critical	Limited	Limited ¹	Critical
Location	Wide spread	Riverside	Wide spread	Highways
Area	Wide spread	Local	Local	Local
Duration	Up to week	< week	Days	Day(s)
Seasonality	Winter	Spring	Anytime	Anytime
Onset	Slow	Slow	Fast	Fast
Warning	> 24 hours	12 – 24 hours	None	None

¹. Limited jurisdictional resources, but may have multiple death and multiple sheltering issues.

Community Profile: (Example)

Information	Winter Storm	Flood	Fire	Transport
Geography	Entire city affected, downtown to rural areas	Low lying areas along river (provided stop logs installed)	Apartments	Major Highways
Property	Residential, Commercial, & Government	Residential & Commercial	Residential & Commercial	Commercial
Infrastructure	Roads, Streets, services affected	Roads, services, sewerage treatment	Roads, Streets, services affected	Highways
Demographics	All residents of area	All residents of area	All residents of area	Local area
Response Agencies	City Public Works, Fire, EMS, Police	Public Works, Commercial enterprises	Fire, EMS, Ambulance Service	Fire, EMS, Police, Dept. of Environmental Protection, Mutual Aid

Comparison and Priority (Example)

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
Winter Storm	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)		11	3
Flood	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Seasonal, damage limited as long as proper precautions taken.	7	4
Fire	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Limited Jurisdictional resources, but may have multiple death and multiple sheltering issues.	12	2
Transport	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Evacuation issues may be biggest problem	13	1

Scenario Development: Transport Accident (Hazardous Material Event)

Accident between truck carrying pool chemicals and a Propane truck accident resulting in fire engulfing both vehicles and a danger of the propane truck explosion.

Initial Warning	<ul style="list-style-type: none"> Initial warning will be from first police cruiser on scene. Report of two truck accident, propane truck and another (as yet unidentified) truck.
Impact on Community	<ul style="list-style-type: none"> Initial impact will be thick foul smelling dark smoke. Police will close roadway. Fire Dept will contain fire in an effort to prevent propane explosion Boiling Liquid Expanding Vapor Explosion (BLEVE). Exposure to people down wind will alert officials to contents of burning truck. Notification to shelter in place or evacuate. Evacuation may require additional resources to move people.
Impact on Actual Segment	<ul style="list-style-type: none"> Impact on businesses that were forced to evacuate, lost production. Impact on jurisdictional resources in handling evacuation/sheltering. Impact on Police resources in directing traffic out of effected area. Impact of transportation segment, lost time as traffic is directed around accident. Impact on residents of area, due to evacuation/sheltering.
Consequences- damage, casualties	<ul style="list-style-type: none"> Smoke damage to buildings, possible damage to elevated roadway from fire. If explosion does occur then damage will include blow out windows within the blast radius, damage to structural integrity of roadway. Possible damage to vehicles parked near roadway. Possible civilian casualties if unable to evacuate. Fire, Police and vehicle driver casualties.
Needed Actions & Resources – including Mitigation efforts	<ul style="list-style-type: none"> Fire Dept. contain fire, plot plume exposure in effort to identify direction and magnitude of contaminates in plume. Additional resources needed to transport people out of area, place to shelter individuals. Mitigation efforts: truck identification placards, emergency shelters stocked and ready to be opened, Fire Dept. training in handling this type of fire.

In CPG 101 (July 2010) Unit 3: Format and Function: Identifying the Right Plan for the Job explains several ways you can format an Emergency Operations Plan (EOP). The following discussion provides you with further information about traditionally formatted EOP's and their content.

The Basic Plan

The Basic Plan provides an overview of your community's response organization and policies. It also cites the legal authority for conducting emergency operations, describes the hazards that the EOP is intended to address, explains the general concept of emergency operations, and assigns responsibility for emergency planning and operations.

Note: The following EOP format is not required but is based on FEMA's experience in responding to disasters and with working with State and local governments as they develop their plans. Regardless of how your community's EOP is organized, the important point to note is that it must be easy to understand and easy to use *by all* who have a role in a response. The Basic Plan is typically organized into the following sections:

- **Introductory Material.** The introductory material provides the authority and responsibility for responding agencies to perform their tasks under the plan. It also facilitates the ease of use for the overall document. Typically, the introductory material includes:
 - A promulgation document that provides the legal authority and the responsibility to respond to emergencies.
 - A signature page that includes the signatures of the agency executives for responding agencies. The signature page indicates that the signatory agencies have worked together in the plan's development and agree to the performance commitments made in the plan.
 - A dated title page and record of changes that indicates the date of original publication and of any subsequent changes to the plan. Including a change record in the Basic Plan helps users keep the plan up to date and know that they are using the most recent version.
 - A record of distribution that indicates the individuals and agencies (or organizations) that received a copy of the plan. The record of distribution provides proof that the EOP has been distributed and that the individuals and agencies have had a chance to review the plan.
 - A Table of Contents that includes all of the section titles and
 - Subtitles for the plan to provide a topical overview of the document.
- **Purpose.** The Purpose statement explains why the plan has been developed and what it is meant to do. When properly developed, all other information contained in the plan flows logically from the purpose statement.
- **Scope.** The operations plan should also explicitly State the scope of emergency and disaster response to which the plan applies and the entities (departments, agencies, private sector, individuals, etc.) and geographic areas to which it applies.

- Situation Overview. The Situation characterizes the planning environment, making clear why emergency operations planning is necessary. It draws from the risk analysis to narrow the scope of the EOP and includes the following types of information:
 - Hazards addressed by the plan
 - Relative probability and impact
 - Areas likely to be affected
 - Vulnerable critical facilities
 - Population distribution
 - Functional needs populations
 - Inter-jurisdictional relationships
 - Maps
- Planning Assumptions. The Assumptions statement delineates what was assumed to be true when the EOP was developed. The Assumptions statement shows the limits of the EOP, limiting liability. It may be helpful to list even “obvious” assumptions, such as:
 - Identified hazards will occur.
 - Individuals and organizations are familiar with the EOP.
 - Individuals and organizations will execute their assigned responsibilities.
 - Assistance may be needed and, if so, will be available.
 - Executing the EOP will save lives and reduce damage.
- Concept of Operations. The Concept of Operations provides a basic statement of **what response activities should occur, within what timeframe, and at whose direction**. A good Concept of Operations describes the community’s approach to emergency response. Typically, the Concept of Operations should include such topics as:
 - Division of responsibilities between local and State responders.
 - The procedure for activating the EOP.
 - Alert levels and the tasks that should be performed at each level.
 - The general sequence of actions to be taken before, during, and after an emergency.
 - Who can request aid and under what conditions.

- Organization and Assignment of Responsibilities. The Organization and Assignment of Responsibilities describes how the community will be organized to respond to emergencies. The section includes a list, by position and organization, of the types of tasks that will be performed. At a minimum, the Organization and Assignment of Responsibilities should include a task listing for the:
 - Chief Elected Official
 - Fire Department
 - Police Department
 - Health and Medical Coordinator
 - Public Works Department
 - Warning Coordinator
 - EOC Manager
 - Emergency Manager
 - Communications Coordinator
 - Public Information Officer (PIO)
 - Evacuation Coordinator
 - Mass Care Coordinator
 - Resource Manager
 - School Superintendent
 - Animal Care and Control Agency

The Organization and Assignment of Responsibilities section specifies reporting relationships and lines of authority for an emergency response. In addition, this section is where a jurisdiction discusses the response organizing option that it uses for emergency management – ESF, or agency and department, or functional areas of ICS/NIMS, or a hybrid.

- Direction, Control, and Coordination. This section:
 - Describes the framework for all direction, control, and coordination activities.
 - Identifies who has tactical and operational control of response assets.
 - Discusses multiagency coordination systems and processes used during an emergency.
 - Provides information on how department and agency plans nest into the EOP (horizontal coordination) and how higher-level plans are expected to layer on the EOP (vertical integration).

- Information Collection and Dissemination. This section:
 - Describes the required critical or essential information common to all operations identified during the planning process.
 - Identifies the type of information needed, where it is expected to come from, who uses the information, how the information is shared, the format for providing the information, and any specific times the information is needed.
 - May be expanded as an annex, or it may be included as an appendix or tab in the Direction, Control, and Coordination annex.
- Communications. This section:
 - Describes the response organization-to-response organization communication protocols and coordination procedures used during emergencies and disasters.
 - Discusses the framework for delivering communications support and how the jurisdiction's communications integrate into the regional or national disaster communications network.
 - May be expanded as an annex and is usually supplemented by communications Standard Operating Procedures (SOPs) and field guides.
- Administration, Finance, and Logistics. This section includes:
 - Assumed resource needs for high-risk hazards.
 - Resource availability.
 - Mutual aid agreements and assistance agreements.
 - Policies on augmenting response staff with public employees and volunteers.
 - A statement that addresses liability issues.
 - Resource management policies (acquisition, tracking, and financial recordkeeping).
- Plan Development and Maintenance. The Plan Development and Maintenance section describes the community's overall approach to planning, including the assignment of planning responsibilities.
- Authorities and References. The Authorities and References section should provide the legal basis for emergency operations. The section should include a list of laws, statutes, ordinances, Executive Orders, regulations, and formal agreements related to emergency response. This section should also provide the limits of the emergency authority of the Chief Elected Official, the circumstances under which the authorities become effective, and when they are terminated.

The Basic Plan may also include maps of the community and other documents that will assist the overall response. Despite the number of sections in the Basic Plan, it need not be long and complicated. In fact, a simple, concise Basic Plan that is easy to use is far preferable to one that includes too many details and too much verbiage.

Functional Annexes

Functional annexes include those parts of the plan that are organized around broad functions. Each annex focuses on one function that the community believes will be necessary during an emergency. The number and type of functional annexes may vary, depending on the community's needs, capabilities, risks, and resources.

FEMA recommends that communities include the functions listed below as functional annexes to their Basic Plan:

- **Direction, Control, and Coordination.** This annex allows the community to analyze the emergency and decide how to respond by directing and coordinating the efforts of the jurisdiction's response forces and coordinating with the mutual aid partners to use all resources efficiently and effectively.
- **Information Collection and Dissemination.** This annex describes the required critical or essential information common to all operations identified during the planning process.
- **Communications.** This annex focuses on the systems that will be relied on for responders and other emergency personnel to communicate with each other (i.e., not with the public) during emergencies. It describes the total communications system, including backup systems, and provides procedures for its use.
- **Population Warning.** This annex describes the warning systems in place and the responsibilities and procedures for issuing warnings to the public. All components of the warning system should be described, including contingency plans, to ensure that warning information is available to the public.
- **Emergency Public Information.** The Emergency Public Information (EPI) Annex describes the methods that the community will use to provide information to the public before, during, and after an emergency. Historically, the EPI Annex has been developed based on the assumption that an emergency is imminent or has occurred. Recent terrorism incidents, however, demand that some degree of preparedness be incorporated into the EPI Annex so that, when a terrorist incident occurs, the public is already aware of the potential implications of the incident and understands that government authorities are doing everything possible to control the situation. This expansion of the concept behind EPI will help ensure that the public takes the appropriate action. It will also minimize a panic response among the public and will give the public confidence that the government is in control.
- **Public Protection.** This annex describes the provisions (e.g., for evacuation

or in-place sheltering) that have been made to ensure the safety of people threatened by the hazards the jurisdiction faces.

- Mass Care and Emergency Assistance. This annex addresses the actions that will be taken to protect evacuees and others from the effects of the event. The Mass Care Annex describes how sheltering, food distribution, medical care, clothing, and other essential life support needs will be provided to those who have been displaced by a hazard. (Note that communities that are at risk from hurricanes should include a discussion of refuges of last resort in this annex.)
- Health and Medical Services. This annex addresses the activities associated with the provision of health and medical services in emergencies, including emergency medical, hospital, public health, environmental health, mental health, and mortuary services.
- Resource Management. Because emergencies can require more—and more specialized—resources than responding agencies have available, the Resource Management Annex facilitates the identification of existing resources, the identification of probable resource needs, and a description of how additional resources will be acquired and distributed.

Annexes should be organized in the same way as the Basic Plan (i.e., Purpose, Situation and Assumptions, etc.) but should not repeat the information that is included in the Basic Plan. Rather, annexes should include only the information that is specific to the emergency function covered by the annex.

Hazard, Threat, or Incident-Specific Annexes

The Annexes should be developed for each threat that the plan addresses (e.g., tornado, earthquake, terrorism). The decision of whether or not to include a specific annex should be based on the community's risk analysis. They are developed based on special planning requirements that are not common across all threats addressed by an annex.

By developing hazard-, threat-, or incident-specific annexes, planners address the special or unique response considerations related to each threat for which the community is at high risk, including regulatory requirements associated with specific hazard types (e.g., hazardous materials).



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. A risk analysis is the first step in the emergency planning process.
 - a. True
 - b. False

2. The first step in a risk analysis is _____.
 - a. Identifying sources of additional resources needed to respond to each hazard.
 - b. Determining the risk that each hazard poses to your community.
 - c. Prioritizing the risk of each hazard to your community.
 - d. Identifying all hazards that pose a risk to your community.

3. A hazard that causes a second emergency event to occur is called a:
 - a. Double event.
 - b. Cascading event.
 - c. Major disaster.
 - d. Complex response.

4. When assessing risk, the top response priority is:
 - a. Essential facilities.
 - b. Critical Infrastructure.
 - c. Life safety.

5. The Organization and Assignment of Responsibilities describes how the community will be organized to respond to emergencies.
 - a. True
 - b. False



Knowledge Check (Continued)

1. a
2. d
3. b
4. c
5. a

Unit 7 Introduction and Unit Overview

An integrated emergency management system depends on an EOP to organize response and other emergency activities. Most communities also have other plans, such as a comprehensive plan, that should be integrated with emergency management. In this unit, you will learn to:

- Identify resources that your organizations can offer during an emergency.
- Describe the benefits of using the Incident Command System for emergency response.
- Describe the interrelationships between ICS and the Emergency Operations Center.
- List four ways to augment local resources, and give an example of when each is appropriate.

Linking Risk Analysis to Capability Assessment

Each responding agency or organization in the community should have personnel rosters, training records, equipment inventories, and other information needed to develop a complete picture of the resources that are available in an emergency. During the planning process, this information should be compared with anticipated resource needs for emergencies of varying types and scales. Only by completing such a comparison can resource shortfalls be anticipated.

It would be useful to maintain a list of resources needed to respond to all or most of your community's identified hazards. The list should include:

- The resource type.
- The quantity of each item that is available.
- A point of contact and 24-hour contact phone numbers for activation of the resource.
- The cost or fee for use of the resource.
- The date that resource availability was last verified.
- Procedures for inspection, pick-up, and return of the resource.

After identifying potential resource shortfalls, the planning team must determine how to obtain the additional resources necessary. Some options for obtaining needed resources include:

Linking Risk Analysis to Capability Assessment (Continued)

- Mutual Aid and Assistance Agreements with neighboring jurisdictions. The most common agreements are usually voluntary agreements to pool resources when any participating community experiences a shortfall. The most common agreements are for fire, police, and Emergency Medical Services (EMS) services, but these agreements can be developed for any type of resource.
- MOU/MOAs are usually voluntary agreements to pool resources when any participating community experiences a shortfall.

Note: Do not assume that, because your community has agreements in place, its resource needs will be met. Disasters that affect multiple communities may make resource sharing impossible. Contingency plans should be developed to deal with situations in which resources from other organizations are not available.

- Standby contracts are contracts for critical equipment and supplies that become effective only if necessary following an emergency event. Typically, standby contracts establish prices as those in effect on the day *before* the event occurred. The use of standby contracts can help ensure that emergency supplies are available in the quantities needed and at a reasonable price.
- Private-sector organizations that have specialized expertise and equipment. Often, industrial facilities have their own response personnel and equipment that can be called upon in a general emergency.
- Local military installations have a sense of ownership in the community. They also have personnel with specialized training and equipment that can be used in a general emergency. Local governments can develop agreements, similar to mutual aid and assistance agreements, with commanders of local military installations to augment local response capabilities.
- State governments have additional technical and response capabilities that can be requested when local resources are overstretched. Additionally, most State governments have Emergency Mutual Aid Compacts (EMACs), which are similar to the local mutual aid and assistance agreements, with neighboring States to supplement their resources.
- The Federal Government can provide technical and other emergency assistance when requested by the Governor of the affected State *if* the President declares the area a major emergency or disaster. When an emergency or disaster declaration occurs, Federal departments and agencies provide full and prompt cooperation, available resources, and support consistent with their authorities.

There may be other ways to obtain the resources necessary for a given response need. Think expansively as you consider resource management so that no potential resource is missed.



Activity: What Can Your Organization Offer?

This activity is designed to make you think about the types of resources (i.e., personnel, tools, and equipment) that your organization or agency could provide in the event of an emergency. Consider your agency's role in an emergency response. Then, list the resources that the agency could provide to fulfill its response requirements.

Agency: _____

Primary Response Role: _____

Personnel	Tools	Equipment

The EOP and the Incident Command System

An EOP calls for a coordinated response to various events from a number of different governmental, private sector, and volunteer organizations.

Unit 2 described the NIMS requirement to institutionalize ICS, as well as how ICS fits with the other NIMS standard incident command structures and the major components of NIMS.

As defined in NIMS, ICS:

- Is a standardized, on-scene, all-hazard incident management system.
- Allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries.

ICS is an emergency management model for command and management and coordination of a response operation. It is based on core principles that have been successful in managing a wide range of emergencies, from wildfires to terrorism.

By using management smart practices, ICS helps to ensure the:

- Safety of responders and others.
- Achievement of tactical objectives.
- Efficient use of resources.

In an emergency, responders may be not be working for their day-to-day supervisors, or may be working in different locations. They need to function as part of a larger system. ICS provides a standardized structure that can pull the many parts of the on-scene response together.

An ICS organization can be made up of many different players, such as fire, police, medical, community and State officials, the private sector, and voluntary organizations.

The Direction and Control Annex of most EOPs describes the interface between ICS and the EOP.

The Incident Command System:

Is a standardized management tool for meeting the demands of small or large incidents. ICS represents "smart practices" and has become the standard for emergency management across the country.

- May be used for planned events, natural disasters, and acts of terrorism.
- Is a key feature of the National Incident Management System (NIMS).

The EOP and the Incident Command System (Continued)

As stated in NIMS, “ICS is a widely applicable management system designed to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. ICS is a fundamental form of management established in a standard format, with the purpose of enabling incident managers to identify the key concerns associated with the incident—often under urgent conditions—without sacrificing attention to any component of the command system.”

ICS Basic Management Characteristics

There are 14 basic features of ICS. These are:

1. Common terminology: ICS uses a common terminology as its base. This allows anyone from any part of the country to communicate effectively within an ICS system. Common terms for common functions, actions, and personnel prevent confusion.

Using common terminology helps to define:

- Organizational functions.
- Incident facilities.
- Resource descriptions.
- Position titles.

It is important to use plain English during an incident response, because often there is more than one agency involved in mitigation, response, and recovery. Ambiguous codes and acronyms have proven to be major obstacles in communications. Often, agencies have a variety of codes and acronyms that they use routinely during normal operations. Not every ten code is the same, nor does every acronym have the same meaning. When these codes and acronyms are used on an incident, confusion is often the result.

NIMS requires that all responders use “plain English,” referred to as “clear text,” and within the United States, English is the standard language.

ICS Basic Features (Continued)

2. Modular organization: The ICS organizational structure can contract or expand depending on the magnitude of the incident or the operational necessity. The structure includes five functional areas:

- Command
- Operations
- Planning
- Logistics
- Finance/Administration

Because ICS is a modular organization, it:

- Develops in a top-down, modular fashion
- Is based on the size and complexity of the incident.
- Is based on the hazard environment created by the incident.

When needed, separate functions can be established, each of which may be further subdivided to enhance internal organizational management and external coordination.

Employing a modular organization means that:

- Incident objectives determine the organizational size.
- Only functions/positions that are necessary will be filled.
- Each element must have a person in charge.

3. Management by Objectives: Another key ICS feature, this simply means that:

- ICS is managed by objectives.
- Objectives are communicated throughout the entire ICS organization through the incident planning process.

Incident objectives are established on the following priorities:

First Priority: Life Safety

Second Priority: Incident Stabilization

Third Priority: Property Preservation

ICS Basic Features (Continued)

4. Reliance on an Incident Action Plan (IAP): Every incident must have an IAP that:
 - Specifies the incident objectives.
 - States the activities to be completed.
 - Covers a specified timeframe, called an operational period.
 - May be oral or written—except for hazardous materials incidents, which require a written IAP.

5. Chain of Command and Unity of Command: Together, these principles help to clarify reporting relationships and eliminate the confusion caused by multiple, conflicting directives. Incident managers at all levels must be able to control the actions of all personnel under their supervision.

Chain of command is an orderly line of authority with the ranks of the incident management organization.

Under unity of command, personnel:

- Report to only one supervisor.
- Maintain formal communication relationships only with that supervisor.

6. Unified Command: The Unified Command structure:
 - Enables all responsible agencies to manage an incident together by establishing a common set of incident objectives and strategies.
 - Allows Incident Commanders to make joint decisions by establishing a single command structure.
 - Maintains unity of command. Each employee reports to only one supervisor.

7. Manageable Span of Control: Supervisors must be able to adequately supervise and control their subordinates, as well as communicate with and manage all resources under their supervision.

Span of control:

- Pertains to the number of individuals or resources that one supervisor can manage effectively during an incident.
- Is key to effective and efficient incident management.

The ICS span of control for any supervisor:

ICS Basic Features (Continued)

- Is between three and seven subordinates.
- Optimally does not exceed five subordinates.

The ICS modular organization can be expanded or contracted to maintain an optimal span of control.

8. Pre-designated Location and Incident Facilities: ICS uses pre-designated incident location and facilities, established by the Incident Commander based on the requirements and complexity of the incident. Various types of operational locations and support facilities are established in the vicinity of an incident to accomplish a variety of purposes, such as decontamination, donated goods processing, mass care, and evacuation.

Facilities may include:

- Incident Command Post (ICP): The field location at which the primary tactical-level on-scene incident command functions are performed.
- Base: The location at which primary Logistics functions for an incident are coordinated and administered. There is only one base per incident.
- Staging Area(s): Location established where resources can be placed while awaiting a tactical assignment.
- Camp: A geographical site, within the general incident area, separate from the Incident area, equipped and staffed to provide sleeping, food, water, and sanitary services to incident personnel.

9. Resource Management: Resources at an incident must be managed effectively. Maintaining an accurate and up-to-date picture of resource utilization is a critical component of incident management.

Resource management includes processes for:

- Categorizing resources.
- Ordering resources.
- Dispatching resources.
- Tracking resources.
- Recovering resources.
- Reimbursement for resources, as appropriate.

In ICS, resources are defined as personnel, teams, equipment, supplies, and facilities.

ICS Basic Features (Continued)

10. Information and Intelligence Management: It is important that the incident management organization establishes a process for gathering, sharing, and managing incident-related information and intelligence.

The following are examples of information and intelligence used to manage an incident:

- Risk assessments
- Medical intelligence (i.e., surveillance)
- Weather information
- Geospatial data
- Structural designs
- Toxic contaminant levels
- Utilities and public works data

11. Integrated Communications: It is important to develop an integrated voice and data communications system before an incident.

Incident communications are facilitated through the:

- Development and use of a common communications plan
- Interoperability of communication equipment, procedures, and systems

Types of resources that are available may include:

- Radio systems and frequencies
- Telephone systems
- Computers
- Message runners, coding, and signaling

12. Transfer of Command: The process of moving responsibility for incident command from one Incident Commander to another is called transfer of command. Transfer of command must include a transfer of command briefing—which may be oral, written, or a combination of both.

Transfer of command occurs when:

- A more qualified person assumes command.
- The incident situation changes over time, resulting in a legal requirement to change command.
- There is normal turnover of personnel on extended incidents.
- The incident response is concluded and responsibility is transferred to the home agency.

ICS Basic Features (Continued)

13. **Accountability**: Effective accountability during incident operations is essential. Individuals must abide by their agency policies and guidelines and any applicable local, State, or Federal rules and regulations.

The following principles must be adhered to:

- **Check-in**. All responders must report in to receive an assignment in accordance with the procedures established by the Incident Commander.
- **Incident Action Plan**. Response operations must be coordinated as outlined in the IAP.
- **Unity of Command**. Each individual will be assigned to only one supervisor.
- **Span of Control**. Supervisors must be able to supervise and control their subordinates and communicate with and manage all resources under their supervision.
- **Resource Tracking**. Supervisors must record and report resource status changes as they occur.

14. **Mobilization (Dispatch and Deployment)**: It is important to manage resources to adjust to changing conditions.

At any incident:

- The situation must be assessed and the response planned.
- Managing resources safely and effectively is the most important consideration.
- Personnel and equipment should respond only when requested or when dispatched by an appropriate authority.

The EOP and Multiagency Coordination/Emergency Operations Center (EOC)

Multiagency Coordination System (MACS) is a process that allows all levels of government and all disciplines to work together more efficiently and effectively. Multiagency Coordination occurs across the different disciplines involved in incident management, across jurisdictional lines, or across levels of government. Multiagency Coordination is a system and not simply a facility.

The EOP and EOC (Continued)

Multiagency coordination can and does occur on a regular basis whenever personnel from different agencies interact in such activities as preparedness, prevention, response, recovery, and mitigation. Often, cooperating agencies develop a MACS to better define how they will work together and to work together more efficiently; however, multiagency coordination can take place without established protocols. Since it is a system, and not just a facility, multiagency coordination may be put in motion regardless of location, personnel titles, or organizational structure. A MACS includes planning and coordinating resources and other support for planned, notice, or no-notice events. The MACS defines business practices, standard operating procedures, processes, and protocols by which participating agencies will coordinate their interactions. Integral elements of a MACS are dispatch procedures and protocols, the incident command structure, and the coordination and support activities taking place within an activated Emergency Operations Center (EOC). Fundamentally, MACS provides support, coordination, and assistance with policy-level decisions to the ICS structure managing an incident.

The two most commonly used elements of the MACS are EOCs and MAC Groups.

An EOC is a central location where agency representatives can coordinate and make decisions when managing an emergency response. The EOP designates the facility that will serve as the EOC during an incident. Specifying an EOC allows decision makers to operate in one place to coordinate and communicate with support staff.

The advantages of a single EOC location include:

- Centralized priority setting, decision making, and resource coordination.
- Simplified long-term operation.
- Increased continuity.
- Better access to all available information.
- Easier verification of information.
- Easier identification and deployment of available resources.

The EOC should be located away from vulnerable, high-risk areas but accessible to the local officials who will use it. A convenient, secure location will:

- Provide a single, recognizable focal point for emergency or disaster management.
- Allow emergency organizations to respond as a team.
- Permit a faster response and recovery than a fragmented approach would provide.

The EOP and EOC (Continued)

Also, a single facility can function more efficiently because calls for assistance can be made to a single location where key officials can:

- Meet.
- Make decisions.
- Coordinate activities.

The EOC/MAC Group does not provide on-scene management but manages the overall event through several key functions.

The MACS should be both flexible and scalable to be efficient and effective. MACS will generally perform common functions during an incident; however, not all of the system's functions will be performed during every incident, and functions may not occur in any particular order. The key functions are:

1. **Situation Assessment.** This assessment includes the collection, processing, and display of all information needed. This may take the form of consolidating situation reports, obtaining supplemental information, and preparing maps and status boards.
2. **Incident Priority Determination.** Establishing the priorities among ongoing incidents within the defined area of responsibility is another component of MACS. Typically, a process or procedure is established to coordinate with Area or Incident Commands to prioritize the incident demands for critical resources. Additional considerations for determining priorities include the following:
 - Life-threatening situations.
 - Threat to property.
 - High damage potential.
 - Incident complexity.
 - Environmental impact.
 - Economic impact.
 - Other criteria established by the MACS.
3. **Critical Resource Acquisition and Allocation.** Designated critical resources will be acquired, if possible, from the involved agencies or jurisdictions. These agencies or jurisdictions may shift resources internally to match the incident needs because of incident priority decisions. Resources available from incidents in the process of demobilization may be shifted, for example, to higher priority incidents.

Resources may also be acquired from outside the affected area. Procedures for acquiring outside resources will vary, depending on such things as the agencies involved and written agreements.

The EOP and the EOC (Continued)

4. **Interagency Activities.** A primary function of a MAC is to coordinate, support, and assist with policy-level decisions and interagency activities relevant to incident management activities, policies, priorities, and strategies.

5. Coordination:

- **With Other MACS Elements:** A critical part of MACS is outlining how each system element will communicate and coordinate with other system elements at the same level, the level above, and the level below. Those involved in multiagency coordination functions following an incident may be responsible for incorporating lessons learned into their procedures, protocols, business practices, and communications strategies. These improvements may need to be coordinated with other appropriate preparedness organizations.
- **With Elected and Appointed Officials:** Another primary function outlined in MACS is a process or procedure to keep elected and appointed officials at all levels of government informed. Maintaining the awareness and support of these officials, particularly those from jurisdictions within the affected area, is extremely important, as scarce resources may need to move to an agency or jurisdiction with higher priorities.



Activity: The EOP, ICS, and EOC

The purpose of this activity is to match each feature to the EOP, ICS, or EOC. For every feature in the first column, choose the appropriate category for that feature from the second column.

The EOP, ICS, and EOC	
1. ___ Modular organization	a. EOP
2. ___ Single location	b. ICS
3. ___ Responsibilities for core emergency management functions	c. EOC
4. ___ Maintaining an accurate picture of resource utilization.	
5. ___ Roles of participating agencies	
6. ___ Method of working together	
7. ___ Unified command structure	



Activity: The EOP, ICS, and the EOC (Continued)

1. b
2. c
3. a
4. b
5. a
6. b
7. b

**Case Study: Multiagency Coordination**

The following description of the response to an elevator grain explosion illustrates the complex coordination among the EOP, ICS, EOC, and individual agencies. When you have finished reading the case study, complete the questions on the following page.

A grain elevator exploded in the largely rural area of DeBruce, Kansas. There were 7 fatalities, 10 people injured, and 30 who had to be evacuated from the scene.

Sedgwick County and the Kansas State Governor declared a State of Emergency, and the disaster received a Presidential Declaration of Emergency. An Urban Search and Rescue Task Force was dispatched to the site.

The following local, State, and Federal personnel were involved in the response:

- 4 appointed officials
- 22 communications personnel
- 10 elected officials
- 73 emergency management personnel
- 250 fire/rescue personnel
- 12 health and medical specialists
- 9 human services personnel
- 62 law enforcement officers
- 28 military personnel
- 4 public relations officers
- 33 public works personnel
- 10 utility personnel
- 20 volunteers

The scene remained open for response operations over a period of 1 month and 2 days.

Case Study: Multiagency Coordination (Continued)

How did all of these responders know who was in charge at any given time?

What source did communications personnel consult for correct technical protocols and procedures?

Where did elected officials and agency heads meet to make policy decisions?



Case Study: Multiagency Coordination (Continued)

Answers to Case Study

How did all of these responders know who was in charge at any given time?

The ICS provides for unity of command. The Direction and Control Annex of the EOP specifies how the ICS is implemented.

What source did communications personnel consult for correct technical protocols and procedures?

Their agencies' SOPs.

Where did elected officials and agency heads meet to make policy decisions?

In the EOC.

Augmenting Local Resources

As mentioned earlier, resources for an integrated emergency management system include both personnel and equipment.

Response to an incident, such as the grain elevator explosion, called for far more personnel and equipment than local agencies could provide. Most ongoing emergency management programs anticipate possible resource shortages, and seek ways in which to augment them.

Some strategies for obtaining additional resources include:

- Pre-emergency purchase and storage of items that are known to be needed during an emergency, but are not currently in inventory (e.g., chain saws and other tools, plywood, plastic sheeting, drinking water).
- Standby contracts, which allow the community to purchase or lease needed items (ranging from plastic sheeting to heavy equipment) at a price equal to the price in effect on the day before the emergency.
- Mutual aid and assistance agreements with other neighboring communities, local, and State governments, in which resources from those groups are transported to the community experiencing the emergency, then returned when they are no longer needed.
- Solicited and Unsolicited donations.
- Resource typing to quickly and effectively identify, locate, request, order, and track outside resources.

The Resource Management Annex to the EOP directs how resource needs will be met during response to an emergency.

As resource shortages occur, the resource management staff at the EOC receives reports of any needs that cannot be met with an agency's resources. The Resource Management staff gathers essential information before trying to fulfill the needs. This information includes:

- What is needed?
- How it will be used. (Information should be as specific as possible because a different item might work as well or better and be readily available).
- How much is needed.
- Who needs it?
- Where it is needed.
- When it is needed.

Augmenting Local Resources (Continued)

It is important for EOC staff to set priorities when meeting needs. After a resource need is identified, it should be logged, passed on to those responsible for obtaining and committing resources, and then tracked.

Pre-emergency Purchase

Some communities make the decision to purchase and store items that are known to be needed in an emergency. The main advantage of purchasing items in advance of an emergency is that, when an emergency occurs, the items may not be available or may be available at a much higher price.

There are two key disadvantages to pre-emergency purchase, however:

- Purchase ties up funds for items that may not be used within a known timeframe. Emergency Managers and community leaders will have to determine whether the benefit of pre-emergency purchase outweighs the cost—especially for items that require controlled storage or that deteriorate over time.
- Purchase is not the only cost involved with the resources. The resources must be inventoried, stored, and maintained, adding an additional cost burden to the community.

After considering the costs versus the benefits of pre-emergency purchase, many communities opt for standby contracts as a more cost-effective alternative.

Standby Contracts

Standby contracts allow communities to purchase or lease items needed for an emergency response at the price in effect on the day before the emergency occurred. These contracts offer several advantages over pre-emergency purchase:

- They ensure that the resources required will be available within a specified timeframe and at an established price.
- They eliminate the need for inventory, storage, and maintenance that accompanies pre-emergency purchase.

A potential disadvantage exists with standby contracts if, in the aftermath of an emergency, the local infrastructure is so disrupted that accessing and distributing the contracted materials becomes a logistical nightmare. Additionally, in a widespread emergency, suppliers may be overextended and unable to deliver the supplies as agreed to in the contract.

Mutual Aid and Assistance Agreements

Most emergencies and disasters do not receive Federal disaster declarations. Developing mutual aid and assistance agreements with adjacent communities can be important to ensuring that adequate resources are available to address an emergency.

In any emergency or disaster, mutual aid partners may be able to provide:

- Emergency personnel.
- Equipment, such as bulldozers or dump trucks.
- Communications capability.
- Overall management strategy and program management.
- Sandbags.
- Facilities, such as warehouses or temporary shelters.

Mutual aid and assistance agreements usually are documented in the Resource Management Annex to the EOP. Although designed for emergencies, emergency management partnerships should operate outside of a disaster setting as well. Training, preparedness, and mitigation efforts also can be shared and enhanced through partnerships

Donations

Solicited Donations

During some types of emergencies, it may be possible to solicit donations of needed supplies from suppliers or directly from the public. Typically, solicited donations involve items such as four-wheel drive transportation following a blizzard or boats following a flood. However, soliciting other types of donations, such as emergency supplies, can cause major problems.

Unsolicited Donations

After-action reports are full of challenges relating to unsolicited donations that arrive at a disaster site in trailers that are filled with unsorted, unneeded goods. Even in communities that have an established mechanism for dealing with donated goods, unsolicited donations create huge logistical problems. Most communities, therefore, prefer to request cash instead of goods.

Maintaining an Effective EOP

Regardless of how good an EOP is, it will not work if it is not communicated. At a minimum, the plan must be communicated to:

Maintaining an Effective EOP (Continued)

- Local, State, and Federal officials who need to coordinate the plan with their EOPs.
- Response personnel both inside and outside of the community who share responsibility for implementing the plan, reducing damage, and saving lives.
- The local community, which has expectations concerning the government's role in an emergency and, collectively, is critical to the plan's success.

The best way to communicate the plan to response agencies that are responsible for implementing it is through training and exercising.

Training is critical to response personnel so that they know:

- What they are supposed to do.
- When they are to do it.
- How they are to do it, including
 - Procedures for accomplishing their task or mission.
 - Coordinating their efforts with personnel within and outside of the agency.
 - Communicating their needs and status.

Training can include a wide range of activities from classroom training; to on-the-job training; to the use of checklists, worksheets, and job aids. The type and duration of the training selected depends on the:

- Frequency with which the task is performed. (Tasks that responders perform often will require less training than tasks that they perform only during an emergency situation.)
- The complexity of the task.

Exercises are critical to a plan's success and a successful response because they:

- Test and evaluate plans, policies, and procedures.
- Identify planning weaknesses.
- Identify resource gaps.
- Improve interagency coordination and communication.

Maintaining an Effective EOP (Continued)

Exercises will show whether what appears to work on paper actually *does* work in practice. Exercising will help to:

- Clarify the roles and responsibilities of all who play any part in the response.
- Improve individual performance by providing an opportunity for responders and others to practice their assigned duties.
- Gain public recognition that the local government has taken steps to protect their safety—and gain the support of public officials who will support the response effort during an emergency.

There are several types of exercises graduating in realism, complexity, and stress levels.

Interfacing with Other Plans

Many cities and counties employ professional planners to develop and maintain comprehensive plans for their areas. A comprehensive plan includes a study of the traffic and transportation characteristics, population, economy and sociology, and the physical features of the community.

Emergency plans and comprehensive plans have obvious overlaps. While there is a mitigation component in local emergency management programs, comprehensive plans also address mitigation. For example, the land use element of the comprehensive plan may call for acquisition of park land where property is vulnerable to residential development within a floodplain. The community's land use plans may specify the location of future growth and development, as well as the stated goals and policies of the community. Regulations serve as tools for implementing plans and managing development.

Land use planning considers the impact of changes in land use and development that also change the hazard profile of the community. Potable water, sewer service, roads, storm water runoff patterns, and water quality all may be affected by development. Storms and erosion also alter a community's hazard areas.

Communities can incorporate emergency management policies and goals into the local planning process through enactment of regulations and policies that support structural and nonstructural mitigation measures. A close working relationship between the emergency planning and comprehensive planning functions strengthens both programs.

One critical area of interface between the EOP and other plans is in the hazardous materials arena.

Hazardous materials (HazMat) are accompanied by their own planning requirements, as established by:

Interfacing with Other Plans (Continued)

- The Department of Transportation (DOT) in 49 Code of Federal Regulations (CFR):
- Occupational Safety and Health Administration (OSHA) in 29 CFR.

The Environmental Protection Agency (EPA) places additional requirements for hazardous waste under 40 CFR.

These regulations cover a range of requirements, including:

- Transport and storage of hazardous materials, including placard requirements (49 CFR).
- Hazard communication under SARA Title III (29 CFR).
- Clean up and disposal of hazardous materials (49 CFR) and hazardous waste (40 CFR).

Additionally, these regulations require that all incidents involving hazardous materials or hazardous waste be managed using ICS.

If you are unfamiliar with planning requirements related to hazardous materials or hazardous waste, consult with your HazMat officers, Local Emergency Planning Committee (LEPC), or State emergency management agency to ensure that your local EOP also meets the requirements for hazardous materials and hazardous waste response.

**Knowledge Check**

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. Standby contracts establish the price as that which is/was in effect:
 - a. On the day before the emergency event.
 - b. On the day of the emergency event.
 - c. On the day after an emergency event.

2. The Incident Command System provides a model for command, control, and coordination of a response operation.
 - a. True
 - b. False

3. The EOP provides _____ during emergencies.
 - a. A method of working together
 - b. Centralized direction and control
 - c. A source of overall authority, roles, and functions
 - d. Communications capabilities
 - e. Recommended mitigation measures

4. Which of the following is not a feature of the Incident Command System?
 - a. Central location
 - b. Incident Action Plans
 - c. Manageable span of control
 - d. Common terminology
 - e. Modular organization

5. Mutual aid and assistance agreements may provide _____ when invoked.
 - a. Unity of command
 - b. Emergency public information
 - c. Policy decisions
 - d. Training
 - e. Equipment such as bulldozers or dump trucks



Knowledge Check (Continued)

1. a
2. a
3. c
4. a
5. e

Unit 8 Introduction and Unit Overview

This unit examines the functions of an emergency management program. After completing this unit, you should be able to:

- Describe the emergency management core functions that are performed during emergencies.
- Discuss the role of local laws in establishing emergency management authorities and responsibilities.
- Describe the emergency management program functions that continue on a day-to-day basis.
- Distinguish between core functions and program functions.

Introduction to Emergency Management Functions

Emergency management is most visible during emergencies, but successful response operations require continual operations between incidents.

There are two ways to categorize emergency management activities:

1. Emergency management core functions that are performed during emergencies.
2. Emergency management program functions that continue on a day-to-day basis.

In this unit you will learn about the emergency core functions and the essential functions of an ongoing emergency management program.

Basis in Local Law

Specific areas of authority and responsibilities for emergency management should be clearly stated in local ordinances. Local ordinances should spell out who has responsibility for:

- Emergency management operations in normal, day-to-day activities.
- Policy decisions affecting long-term emergency management.
- Final authority in actual disaster situations.

These ordinances should also stipulate when emergency authorities begin during an emergency and end following the response.

Local laws:

- Provide for a specific line of succession for elected officials and require that departments of government establish lines of succession. This ensures continuity of government and leadership in an emergency.
- Define and delineate responsibilities, scopes of authority, and standards for the position of emergency program manager for an all-hazards integrated local emergency plan, and for mutual support.

Emergency Management Core Functions (CPG 101 v.2)

The Nine EM Core Functions defined in CPG 101 v.2 during an emergency or disaster are:

1. Direction, Control, and Coordination.
2. Information Collection, Analysis and Dissemination.
3. Communications.
4. Population Warning.
5. Emergency Public Information.
6. Public Protection.
7. Mass Care and Emergency Assistance.
8. Health and Medical Services.
9. Resource Management.

Assigning work based on these core functions helps to ensure that continuity with the EOP is maintained during a response.

Note that some State and local EOPs use different terms for the core functions. If that is the case in your State, review the functions in your EOP to see where each of the core functions from CPG-101 are covered.

Emergency Management Program Functions

Most emergency management reports and surveys are organized according to a standard set of emergency management functions. The functions serve as a means to divide day-to-day program activities into categories. The Emergency Manager uses these functions to organize and direct the emergency management program.

The standard emergency management program functions used by most local governments are shown in the following table which was developed under the emergency management exercise reporting system.

Emergency Management Program Function (Daily Activities)

Emergency Management Program Functions	
Function	Description
1. Laws and Authorities	A legal basis for the establishment of the emergency management organization, the implementation of an emergency management program, and continuity of government exists in local law/ordinance and is consistent with State statutes concerning emergency management.
2. Risk Analysis	The jurisdiction has a method for identifying and evaluating natural, technological, and human-caused threats within its jurisdiction.
3. Hazard Mitigation	The jurisdiction has established a pre-disaster hazard mitigation program.
4. Resource Management	The local emergency management organization has the human resources required to carry out assigned day-to-day responsibilities.
5. Planning	The jurisdiction has developed a comprehensive mitigation plan and an EOP.
6. Direction, Control, and Coordination	EOC operating procedures are developed and tested annually.
7. Communication and Population Warning	Communications system capabilities are established.
8. Operations and Procedures	The jurisdiction has developed procedures for conducting needs and damage assessments, requesting disaster assistance, and conducting a range of response functions.
9. Logistics and Facilities	The primary and alternate EOCs have the capabilities to sustain emergency operations for the duration of the emergency and have developed logistics management and operations plans.
10. Training	The jurisdiction conducts an annual training needs assessment, incorporates courses from various sources, and provides/offers training to all personnel with assigned emergency management responsibilities.

Emergency Management Program Functions (Daily Activities) (Continued)

Emergency Management Program Functions	
Function	Description
11. Exercises, Evaluations, and Corrective Actions	The jurisdiction has established an emergency management exercises program, exercises the EOP on an annual basis, and incorporates an evaluation component and corrective action program.
12. Public Education and Information	An emergency preparedness public education program is established, procedures are established for disseminating and managing emergency public information in a disaster, and procedures are developed for establishing and operating a Joint Information Center (JIC).
13. Finance and Administration	The jurisdiction has established an administrative system for day-to-day operations.



Case Study: Train Derailment Review

The train derailment and anhydrous ammonia release incident that was described earlier in this course is recapped below. You will use the facts to identify how each of the emergency management program functions could be applied to this event.

The freight train derailed at approximately 3:00 AM, releasing anhydrous ammonia, a toxic gas.

The Chairman of the County Board of Supervisors declared a State of Emergency, activating the local EOP. The local EOP includes the county and all incorporated towns and cities within the county. There are mutual aid agreements with surrounding counties.

The EOC opened, and policymakers gathered to direct the response. Because warning systems that rely on radio or television transmission would fail to alert most people, warning sirens were used.

Any evacuation attempt would have exposed residents directly to the hazard, so they were initially advised to shelter in their homes. Eventually 21 homes were evacuated. One resident perished while attempting to leave the area.

Approximately one third of a nearby city was also affected, but residents were not able to evacuate. All those affected were advised to shelter in place.

There were some delays activating responders, who could not enter the accident vicinity without proper gear.

One responder was trapped after he drove into a ditch trying to leave the scene because his vehicle windshield was coated with frozen gas from the toxic cloud. The responder was rescued some time later.

Hazardous Materials appendixes in the EOP listed sources for protective gear, procedures for working with hazardous materials, protective actions that could be taken, and information that should be given to the public. The Emergency Management Agency had provided training on hazardous materials to local responders, and a disaster simulation involving a hazardous chemical release is scheduled.

The Emergency Management Agency followed appendix procedures by activating warning sirens and broadcasting instructions to “shelter in place” by closing all windows and turning off furnaces to avoid bringing outside air into buildings.

Media attention was intense. Survivors needed public information on treating exposure symptoms, cleaning homes, and dealing with exposed pets and livestock. Many horses, being especially sensitive to airborne contaminants, died.

Case Study: Train Derailment Review (Continued)

Transportation of hazardous materials is Federally regulated and imposes requirements on carriers. The railroad contracted with a HazMat team to clean up the site.

The railroad also contacted those with hospital bills and assumed responsibility for payment. The railroad had survivors sign releases of liability for additional damages. The State eventually forced the railroad to cease requiring releases.

The State Health Department has been monitoring air and water quality in the area. Some contaminated dirt has been removed.



Activity: Emergency Management Functions in Action

Jot down one way that each emergency management function actually applied or could apply to the train derailment and hazardous materials release described earlier. For example, the Laws and Authorities function established the legal basis for the emergency response by the involved jurisdictions.

Emergency Management Function	Application to the Derailment/Anhydrous Ammonia Release
1. Laws and Authorities	
2. Hazard Identification and Risk Assessment	
3. Hazard Mitigation	
4. Resource Management	
5. Planning	
6. Direction and Control	
7. Communication and Warning	
8. Operations and Procedures	
9. Logistics and Facilities	
10. Training	
11. Exercises, Evaluations, and Corrective Actions	
12. Public Education and Information	
13. Finance and Administration	



Activity: Emergency Management Functions in Action (Continued)

Here are some sample answers. There are many possible applications for each of the functions.

Emergency Management Function	Application to the Derailment/Anhydrous Ammonia Release
1. Laws and Authorities	The transportation of hazardous materials is Federally regulated, so Federal regulations affect the local response.
2. Hazard Identification and Risk Assessment	Transportation of hazardous materials close to population centers causes risk of releases. The EOP should have an appendix dealing with hazardous materials that address this risk.
3. Hazard Mitigation	Zoning changes and better management by the railroad are possible measures.
4. Resource Management	There were delays in getting protective gear for responders.
5. Planning	A single plan that tied together county and city responders avoided conflicts due to competing emergency plans.
6. Direction and Control	Policymakers gathered in the EOC to establish the overall direction of the response.
7. Communication and Warning	Warning sirens were used.
8. Operations and Procedures	Each department listed in the plan was notified, and alerted its employees and volunteers.
9. Logistics and Facilities	The EOC was activated.
10. Training	Local responders had received training in dealing with hazardous materials releases.
11. Exercises, Evaluations, and Corrective Actions	A simulation that includes a hazardous materials release is scheduled.
12. Public Education and Information	Residents were advised to shelter in place, and also received information on treating exposure symptoms, cleaning homes, and dealing with exposed pets and livestock
13. Finance and Administration	The Emergency Management Agency maintained records of expenses for possible compensation by the railroad.



Activity: Comparing Functions

Check one or both columns to show which functions are part of the core functions of emergency management, and which are functions of an emergency management program.

Function	Core Function	Program Function
Operations and Procedures		
Logistics and Facilities		
Mass Care		
Direction and Control		
Training		
Communications		
Exercises, Evaluations, and Corrective Actions		
Public Education and Information		
Evacuation or Sheltering In-Place		
Health and Medical		
Finance and Administration		
Warning		
Laws and Authorities		
Hazard Identification and Risk Assessment		
Hazard Mitigation		
Emergency Public Information		
Resource Management		
Planning		
Communication and Warning		

Activity: Comparing Functions (Continued)

Function	Core Function	Program Function
Operations and Procedures		
Logistics and Facilities		
Mass Care		
Direction and Control		
Training		
Communications		
Exercises, Evaluations, and Corrective Actions		
Public Education and Information		
Evacuation or In-Place Sheltering		
Health and Medical		
Finance and Administration		
Warning		
Laws and Authorities		
Hazard Identification and Risk Assessment		
Hazard Mitigation		
Emergency Public Information		
Resource Management		
Planning		
Communication and Warning		



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. Which statement is true?
 - a. Emergency program functions and emergency management core functions are totally separate.
 - b. Emergency program functions can be emergency management functions at the discretion of the emergency manager.
 - c. All emergency program functions also are emergency management core functions.
 - d. Some emergency program functions also are emergency management core functions.

2. The 13 emergency management program functions are the categories most often used by local jurisdictions but with modifications to suit their needs.
 - a. True
 - b. False

3. As an emergency management core function, _____ is a process to quickly procure, distribute, and utilize personnel and materials needed in an emergency.
 - a. Direction and Control
 - b. Logistics and Facilities
 - c. Resource Management
 - d. Communications

4. As an emergency management program function, Resource Management is described as _____.
 - a. The human resources required to carry out assigned day-to-day responsibilities
 - b. An administrative system for day-to-day operation
 - c. A process to quickly procure, distribute, and utilize personnel and materials needed in an emergency
 - d. Meeting the needs of the population despite disruption of commerce and infrastructure

5. In the train derailment case study, what function served to provide overall leadership to the response effort?
 - a. Resource Management
 - b. Laws and Authorities
 - c. Direction and Control
 - d. Operations and Procedures



Knowledge Check (Continued)

1. d
2. a
3. c
4. a
5. c

Unit 9 Introduction and Unit Overview

In the previous unit, you learned about local, State, and Federal participants in emergency management programs

- In this unit you will analyze the situations in the exercises, appropriately apply the Integrated Emergency Management System and effectively demonstrate the application of the emergency management principles you have learned.

Applying the Integrated Emergency Management System

The force behind integrated emergency management must be the desire to build partnerships for safer communities.

The approach to an integrated emergency management system includes all:

- Hazards.
- Resources.
- Jurisdictions.
- Emergency management phases.

An integrated approach to emergency management is based on solid general management principles, with the common theme of protecting life and property.

To achieve a truly integrated system, local, State, and Federal governments, as well as private sector agencies and individuals and families, must share responsibility for applying resources effectively at every stage and phase of emergency management. While each group, unit, and individual in the system has its own role and function, the ultimate responsibility is shared among all. The result of their joint effort is a team product that reflects the insights, experiences, and skills of the entire team.



Activity: Interdependence within the Emergency Management Team

This activity presents a structured format with which to explore relationships among emergency personnel in various programs and functional areas. Because a central goal of this course is to promote interrelationships, the effort you devote to exploring interdependence is especially valuable.

1. *To begin, choose a role to play (not your own) from the following list of roles.*
 - Local Fire Chief
 - Local Executive Officer (Chief Elected Official)
 - Chief of Emergency Medicine at the Local Hospital
 - State Director of Emergency Services
 - Superintendent of Schools
 - Local Public Information Officer
 - Red Cross Disaster Director
 - Hazardous Chemicals Safety Officer at Local Plant
 - Vice-President of Local Utility Company
 - Vice President for Operations of Major Regional Rail Freight Carrier
 - Local Police Chief

2. *Fill out the Interdependence Worksheets on the following pages. The worksheets will ask you to consider the following factors of the role you chose:*
 - Emergency protection responsibilities
 - Possible contacts
 - Resource and information needs
 - Results or accomplishments of specified interactions
 - Possible effects

**Activity: Interdependence within the Emergency Management Team
(Continued)**

Proceed through your worksheets in order, completing each question before moving on to the next.

Your answers may be general. For example, if you know a *function* for a person or organization, but not the correct *title*, a description of the type is sufficient. Also, if you are unsure about a contact but think it would be valuable, include it. The value of this activity is in thinking as expansively as possible.

You may not have the detailed knowledge of this role that you have of your own, but you do not need in-depth knowledge for this activity—just empathy, imagination, and appreciation for the general role of that person in all-hazards management.

Use what you know about emergency management to develop answers.

**Activity: Interdependence within the Emergency Management Team
(Continued)**

Select five of the contacts you listed on the previous page. For each, name one activity you will undertake involving this contact. Then briefly describe information or resources you will need from that person. Consider needs in all four emergency management phases (preparedness, response, recovery, mitigation).

Contact	Result or Activity	Phase	Your Needs
_____	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
_____	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
_____	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
_____	_____	_____	_____
	_____	_____	_____
	_____	_____	_____



Activity: Problem Solving In Crisis-Prone County

When you completed the Interdependence Worksheets on the preceding pages, you practiced thinking about an integrated emergency management system as a network of relationships. In this activity, you will apply your knowledge of the fundamental principles and advantages and of an integrated emergency management system. The purpose of this activity is to practice taking an integrated emergency management approach to a specific problem.

You meet a young woman at a business meeting. She is a new employee in Crisis-Prone, a county in another part of your State. She has a background in management and administration and is anxious to prove herself, yet she also is mindful of politics and diplomacy.

Six weeks later, you receive a letter from her asking for your assistance in an emergency management project.

Review this letter closely and prepare a written outline of an appropriate response. The questions that follow the letter will help you prepare the outline.

Her letter begins on the next page, and a structured guideline for outlining your response follows it. Be sure to cover, at a minimum, all issues identified in the guideline.

Activity: Problem Solving In Crisis-Prone County (Continued)

CRISIS-PRONE COUNTY

Division of Administration
Office of the County Executive

Dear _____:

Since our last conversation, Crisis-Prone County has experienced a near catastrophe. As a result, the county commissioners have decided that it is time to review the county's ability to respond to emergencies and to ascertain whether there is a need for a program beyond what is provided by the county.

The task of developing a briefing for the commissioners has been assigned to me. This is an opportunity to give them their first introduction to integrated emergency management, but, as a junior analyst in the organization, I will need to rely on the expertise of my more knowledgeable colleagues to develop an outline that sufficiently explains an integrated approach to emergency management.

The event that brought this need to the attention of the commissioners demonstrates both the nature and the urgency of our situation. As you know, our county has a population of 650,000 people and is situated primarily in urban and suburban communities. A variety of transportation systems crisscross the county, presenting a considerable resource and challenge. Substantial rail traffic passes through the county on a daily basis—including commercial freight traffic that runs adjacent to the AMTRAK passenger lines.

A week ago, a freight train carrying an explosive material derailed at a major rail crossing/intersection, just as a passenger train was passing on an adjacent track. Six of the 30 cars of the freight train derailed and were precariously perched—in such a way that any measurable jostling could have caused one or all of them to fall completely off the track, and perhaps even rupture and explode. At this time, the cause of the derailment is still under investigation.

The passengers from the AMTRAK train were evacuated (after some confusion) to a nearby auditorium, where they waited for several hours before AMTRAK could make alternative plans for them.

Meanwhile, five police officers and other public officials converged on the scene. Soon they were joined by officials from the freight and passenger lines. The group of "experts" grew substantially as time passed, and a heated debate erupted as to what steps should be taken, by whom, and when. Issues of authority and liability were raised and discussed—but never resolved. The entire discussion was observed and recorded by several reporters from newspapers, radio, and television. When the discussion concluded, it had been decided that the police chief and fire chief jointly would oversee operations to ensure the safety of life and property in the area surrounding the derailment.

Activity: Problem Solving In Crisis-Prone County (Continued)

In summary, the problem was resolved without loss of life or serious damage to property. However, media coverage of the event caused a public outcry the likes of which the county has not seen for years. Public scrutiny and demands for accountability have increased markedly. The commissioners are outraged at methods demonstrated during the event and have demanded a full inquiry and explanation of the entire episode.

So, we come to my task—preparing the initial outline of the briefing for the commissioners. While I certainly do not have any direct or significant influence on the final outcome, I am convinced that good work on this project will contribute to a more constructive approach. Any advice you can provide will be helpful. While this is all new to me, I recognize the crucial nature of integrated emergency management and want very much to cover at least the fundamentals in my submission.

I look forward to your response.

Sincerely Yours,

Jane Novice
Junior Management Analyst
Crisis-Prone County

Summary and Transition

In this unit, you practiced applying emergency management principles of coordination and interdependence and explained the fundamental features of an Integrated Emergency Management System. Unit 9 will provide a summary of what you have learned in this course.



Knowledge Check

Carefully read each question and all of the possible answers before selecting the most appropriate response for each test item. Circle the letter corresponding to the answer you have chosen.

1. The Red Cross Disaster Director works in the _____ sector.
 - a. Federal Government
 - b. State government
 - c. Local government
 - d. Nongovernment

2. The Superintendent of Schools works in the _____ sector.
 - a. Federal government
 - b. State government
 - c. Local government
 - d. Nongovernment

3. The central problem in Crisis-Prone County, as revealed by Jane Novice's letter, was:
 - a. Media attention that embarrassed local officials.
 - b. Lack of a coordinated plan for dealing with local emergencies.
 - c. Disagreements between police and public officials on resolving the derailment situation.
 - d. Lack of plans for dealing with evacuated AMTRAK passengers.
 - e. Failure to recognize the hazard posed by rail line locations.

4. Disagreements among police officers and public officials in Crisis-Prone County could have been avoided by:
 - a. Reaching agreement on direction and control of local emergencies.
 - b. Appointing the Board of Commissioners to oversee emergency operations.
 - c. Assuring that a Public Information Officer is always present to advise officials.
 - d. Conducting training courses on conflict resolution.

5. The best outcome of an official inquiry into the derailment incident would be _____.
 - a. Banning rail traffic through populated areas
 - b. Identifying officials who failed to properly perform their duties
 - c. Payment of damages by the railroad carrying the explosive material
 - d. Determination to develop an integrated emergency management system
 - e. Banning of transport of hazardous materials through populated areas



Knowledge Check (Continued)

1. d
2. c
3. b
4. a
5. d

Unit 10 Introduction and Unit Overview

This unit will briefly summarize what you have learned in the *Fundamentals of Emergency Management Course*.

At the end of this unit, you should be able to:

- Discuss the main points of the course.
- Resolve any questions that you may have about any of the materials.

When you are finished with this unit, be sure to take the final exam available at <http://training.fema.gov/EMWeb/IS/is230b.asp>

Integrated Emergency Management System

When an emergency or disaster occurs:

- Agencies from different jurisdictions and government levels need to work together. Major emergencies and disasters ignore city, county, and State boundaries.
- Rapid decision making is required.

Without planning and coordination, emergency operations can suffer from serious misdirection and mistakes.

An integrated emergency management system provides a conceptual framework for organizing and managing emergency protection efforts. This framework prescribes when and how local officials and agencies will work together to deal with a full range of emergencies, from natural disasters to terrorism.

Each level of government participates in and contributes to emergency management.

- Local government has direct responsibility for the safety of its people, knowledge of the situation and personnel, and proximity to both the event and resources. Emergency Support Services are the departments of local government that are capable of responding to emergencies 24 hours a day. They include law enforcement, fire/rescue, and public works. They may also be referred to as emergency response personnel or first responders.
- State government has legal authorities for emergency response and recovery and serves as the point of contact between local and Federal governments.
- Federal Government has legal authorities; fiscal resources; research capabilities, technical information and services, and specialized personnel to assist local and State agencies in responding to and recovering from emergencies or disasters.

Incident Management Actions

- Pre-incident activities, such as information sharing, threat identification, planning, and readiness exercises.
- Incident activities that include lifesaving missions and critical infrastructure support protections.
- Post-incident activities that help people and communities recover and rebuild for a safer future.

Emergency management activities, include:

Prevention: Actions taken to avoid an incident or to intervene to stop an incident from occurring, actions taken to protect lives and property, and applying intelligence and other information to a range of activities that may include countermeasures.

Preparedness: The range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness is a continuous process involving efforts at all levels of government and between government and private-sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources.

Mitigation: Activities that are designed to reduce or eliminate risks to persons or property, or lessen the actual or potential effects or consequences of an incident.

Response: The activities that address the short-term, direct effects of an incident. Response also includes the execution of EOPs and of incident mitigation activities designed to limit the loss of life, personal injury, property damage, and unfavorable outcomes.

Recovery: The development, coordination, and execution of service- and site-restoration plans for impacted communities and the reconstitution of government operations and services through individual, private-sector, nongovernmental, and public assistance programs.

The Plan as Program Centerpiece

Between emergencies and disasters, emergency managers can focus on mitigation and preparedness measures. Risk analysis is a crucial first step.

Risk analysis determines:

- What can occur.
- How often it is likely to occur.
- The devastation it is likely to cause.
- How likely it is to affect the community.
- How vulnerable the community is to the hazard.

The first step is to develop a list of hazards that may occur in the community.

Next, hazard profiles should address each hazard's:

- Duration.
- Seasonal pattern.
- Speed of onset.

The availability of warnings also will play a crucial role in a hazard profile.

Hazard-specific information is combined with a profile of your community to determine the community's vulnerability—or risk of damage—from the hazard.

After information about the community is gathered, emergency managers use it to develop the community's risk analysis. After a hazard and community profile has been compiled, it is helpful to quantify the community's risk by merging the information so that the community can focus on the hazards that present the highest risk.

Risk is the predicted impact that a hazard would have on people, services, and specific facilities and structures in the community. A severity rating quantifies the expected impact of a specific hazard.

Planning and Coordination

An Emergency Operations Plan (EOP) is a key component of an emergency program.

- The emergency program is in continuous operation and includes nonemergency activities, such as training and exercises.
- The EOP is activated to guide response to emergencies, and is only in effect during emergencies.

When an emergency threatens or strikes, the community must be prepared to take immediate action. An EOP describes:

- What emergency response actions will occur. . .
- Under what circumstances. . .
- Using what resources. . .
- Who will be involved and by what authority.

An EOP consists of the following components:

- The Basic Plan
- Annexes
- Appendixes
- SOPs

The EOP provides overall authority, roles, and functions during emergencies.

An Emergency Operation Center (EOC) is a central location where agency representatives can coordinate and make decisions when managing an emergency response. EOC personnel do not control the on-scene response but help on-scene personnel by establishing priorities, coordinating the acquisition and assignment of resources, and acting as a liaison with other communities and the State. The EOC is a place for working together.

The Multiagency Coordination System integrates facilities, equipment, personnel, procedures, and communications into a common system with responsibility for coordinating and supporting domestic incident management activities. The functions of the system are to support incident management policies and procedures, facilitate logistical support and resource tracking,

Planning and Coordination (Continued)

Inform resource allocation decisions, coordinate incident-related information, and coordinate interagency and intergovernmental issues regarding policies, priorities, and strategies.”

The Incident Command System (ICS) defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident. NIMS requires the use of ICS.

Conclusion of mutual aid agreements to augment local resources is an important part of developing and maintaining an emergency management program.

In any emergency or disaster, mutual aid partners may be able to provide:

- Communications capability.
- Emergency personnel.
- Overall management strategy and program management.
- Equipment such as bulldozers or dump trucks.
- Sandbags.
- Facilities such as warehouses or temporary shelters.

The best way to communicate the plan to response agencies that are responsible for implementing the plan is through training and exercising.

Training is critical to response personnel so that they know:

- What they are to do.
- When they are to do it.
- How they are to do it.

Functions of an Emergency Management Program

There are two ways to categorize emergency management activities:

- Emergency management core functions that are performed during emergencies.
- Emergency management program functions that continue on a day-to-day basis.

The nine emergency management core functions performed during emergencies are:

1. Direction and control
2. Information Collection and Dissemination
3. Communications
4. Warning
5. Emergency public information
6. Evacuation (or in-place sheltering)
7. Mass care
8. Health and medical
9. Resource management

Day-to-day emergency management program functions include:

- Laws and Authorities
- Risk Analysis
- Hazard Mitigation
- Resource Management
- Planning
- Direction, Control, and Coordination
- Communication and Population Warning
- Operations and Procedures
- Logistics and Facilities
- Training
- Exercises, Evaluations, and Corrective Actions
- Public Education and Information
- Finance and Administration

Emergency Management Program Partners

Emergency management partners include local, Tribal, State, and Federal emergency managers.

The local Emergency Program Manager has the day-to-day responsibility of managing emergency programs and activities. The role entails coordinating all aspects of a jurisdiction's, preparedness, response, recovery and mitigation capabilities.

The State's role is to supplement and facilitate local efforts before, during, and after emergencies. The State must be prepared to maintain or accelerate services and to provide new services to local governments when local capabilities fall short of disaster demands.

The State provides direct guidance and assistance to local jurisdictions through program development, and it channels Federal guidance and assistance down to the local level. In a disaster, the State office helps coordinate and integrate resources and apply them to local needs. The State's role might be best described as "pivotal."

The Federal government provides legislation, Executive Orders, and regulations that influence all disaster activities. It also maintains the largest pool of fiscal resources that can be applied to emergency management. Assistance may take the form of fiscal support, technical assistance, and information about materials, personnel resources, and research. FEMA takes a lead role in national preparedness for major crises. It also plays coordinating and supportive/assistance roles for integrated emergency management in partnership with State and local emergency management entities.

Applying Emergency Management Principles

Emergency management partners at all levels need to form interdependent networks to function as a team when responding to a given emergency situation.

You practiced describing a network of relationships connected to one emergency management system participant. You also provided a rationale for developing an integrated emergency management system in Crisis-Prone County.

Next Steps

You have now completed IS 230.b course and should be ready to take the final exam. You will find the IS 230.b exam questions on the next page.

Online Exam

Print out the exam and then go to <http://training.fema.gov/EMIWeb/IS/is230b.asp> and click on Take Final Exam to complete the exam online.

OpSCAN Form by Mail

To submit the final exam by mail using the OpSCAN Answer Sheet form, go to: <http://training.fema.gov/IS/> and click on the OpSCAN Form Request link. Follow the instructions printed on the form and mail it to the address indicated on the form.

If you have any questions about how to take the IS 230.b Final Exam, please call 1-301-447-1200.

**Fundamentals of Emergency Management
Independent Study 230.b
Final Exam**

1. _____: is the coordination and integration of all activities necessary to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, or mitigate against threatened or actual natural disasters, acts of terrorism, or other manmade disasters.
 - a. Mitigation
 - b. Emergency management
 - c. Command and Management
 - d. Preparedness

2. The role of the local Emergency Program Manager could best be described as:
 - a. Coordinating resources and activities in all phases of emergency management.
 - b. Always directing all operations at the scene of an emergency.
 - c. Usually working directly with the State and Federal governments.
 - d. Issuing press releases and making statements to the media about disasters.

3. A request for a Presidential Declaration of Disaster must be made by the:
 - a. Chief elected official of the affected area.
 - b. Governor of the affected State.
 - c. State Emergency Program Manager of the affected State.
 - d. Designated Federal Coordinating Officer.

4. An example of a mitigation activity is:
 - a. Training.
 - b. On-site operations to provide emergency assistance.
 - c. Building earthquake-resistant structures in earthquake zones.
 - d. Debris removal.

5. Which is the guiding document used to coordinate response and recovery actions?
 - a. Standard Operating Procedures
 - b. Emergency Operations Plan
 - c. Risk Management Plan
 - d. Community Comprehensive Plan

6. A hazard is defined as:
 - a. A quantified measure of risk.
 - b. A severity rating.
 - c. Something that is potentially dangerous or harmful.
 - d. Vulnerability to a technological hazard.

7. One of the planning factors to be considered during a risk analysis is:
 - a. Federal assistance that may be available.
 - b. How quickly the community can recover.
 - c. The speed of onset for each hazard.
 - d. What local industry can contribute to the response?

8. Training and exercising is an example of a _____ activity.
 - a. Mitigation
 - b. Preparedness
 - c. Response
 - d. Recovery

9. The predicted impact that a hazard would have on people, services, and specific facilities and structures in the community is called:
 - a. Hazard identification.
 - b. Risk.
 - c. Crisis index.
 - d. Sector profile

10. An agreement between two government entities for mutual support to one another in time of emergency is called:
 - a. Mutual Aid and Assistance Agreement.
 - b. Services Contract.
 - c. Reciprocity.
 - d. Resource Sharing Contract.

11. When assessing risk, the top response priority is:
 - a. Essential facilities.
 - b. Critical Infrastructure.
 - c. Life safety.
 - d. Property conservation.

12. An emergency management program will work well in practice if most emphasis and attention focus upon:
 - a. A comprehensive written plan.
 - b. Well-established, day-to-day relationships.
 - c. Reliance on State assistance.
 - d. Mutual aid and assistance.

13. If a disaster response demands more resources than any local governments can supply without assistance, the next step is to request assistance from:
 - a. Congressional representatives.
 - b. The President.
 - c. FEMA.
 - d. The State emergency management agency.

14. The first step in a Hazard Vulnerability Assessment is:
 - a. Identifying sources of additional resources needed to respond to each hazard.
 - b. Identifying all hazards that pose a risk to your community.
 - c. Determining the risk that each hazard poses to your community.
 - d. Prioritizing the risk of each hazard to your community.

15. Standby contracts establish the price as that which is/was in effect:
 - a. The day before the emergency event.
 - b. The day of the emergency event.
 - c. The month before.
 - d. The day after an emergency event.

16. The Red Cross Disaster Director works in what sector?
 - a. Federal government
 - b. State government
 - c. Nongovernment
 - d. Local government

17. The local emergency manager coordinates:
 - a. The National Response Framework.
 - b. The National Guard.
 - c. The local emergency management programs.
 - d. The disaster declaration process.

18. Who is the person in charge of an incident site?
 - a. Incident Commander
 - b. Emergency manager
 - c. Police chief
 - d. Fire chief

19. NIMS is a:
 - a. Foundation that ensures all responders can work together during emergencies.
 - b. Process for receiving disaster funding.
 - c. National plan for terrorism response.
 - d. Totally new way of doing business

20. CPG 101 provides:
 - a. The foundation for State and local planning in the United States.
 - b. A “fill in the blank” EOP template.
 - c. Specific requirements for EOP development.
 - d. Is only applicable to Federal planning.

21. The local EOC’s function during an emergency is to:
 - a. Give tactical direction to the incident commander.
 - b. Support the incident commander.
 - c. Manage the incident.
 - d. Assure span of control is not exceeded.

22. The National Response Framework:
 - a. Identifies response roles, responsibilities, and structures.
 - b. Is only applicable to Federal Departments and Agencies.
 - c. Needs to be activated before it is useful.
 - d. Uses non-NIMS compliant structures.

23. Congress passed the Post-Katrina Emergency Reform Act to:
 - a. Revise NIMS.
 - b. Improve disaster response.
 - c. Reduce Federal disaster assistance.
 - d. Mandate training for first responders.

24. Integrated emergency management increases capability by:
 - a. Establishing partnerships and good working relationships among all organizations involved in emergencies.
 - b. Reducing interagency collaboration.
 - c. Focusing on a single agency’s issues.
 - d. Conducting discipline specific training and exercises.

25. Individuals and families can contribute to an emergency management program by:
 - a. Assuming that the government will take care of their emergency needs.
 - b. Building in floodplains.
 - c. Allowing the batteries in their portable radios and flashlights to die.
 - d. Developing and exercising their own disaster plan.

Appendix A

Job Aids

Hazard Vulnerability Assessment Worksheet

1. Identify Hazards
What Hazards can affect your community

Natural	Technological	Man made

1. Profile Each Hazard
Look at each hazard and develop characteristics

HAZARD				
Frequency of Occurrence				
Magnitude				
Location				
Area				
Duration				
Seasonality				
Speed of Onset				
Availability of Warning				

- 2. Develop Community Profile
Get the information for your community or each segment/sector; e.g. Industrial/Residential, high ground/low lying areas, political entities

Information	Segment
Geography	
Property	
Infrastructure	
Demographics	
Response Agencies	

3. Compare and Prioritize Risk

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		

APPENDIX A: HAZARD VULNERABILITY ASSESSMENT FORMS JOB AID

Compare and Prioritize Risk (continued)

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		
	Highly Likely(4) Likely(3) Possible(2) Unlikely(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	Minimal(4) 6-12 Hours(3) 12-24 Hours(2) 24+ Hours(1)	Catastrophic(4) Critical(3) Limited(2) Negligible(1)	(4) (3) (2) (1)		

4. Develop the Scenario
What is each hazard going to do?

Hazard: _____

Initial Warning	
Overall Impact on the Community	
Impact on Actual Segment	
Consequences- damage, casualties	
Needed Actions and Resources - Including Mitigation efforts	

Hazard Identification: Northeast Community (Example)

Natural	Technological	Man made
Hurricane	Fire*	Terrorist (Biological)
Winter Storm*	Explosion	Terrorist (Chemical)
Flood*	Transport (Hazmat Event)*	Terrorist (Radiological)
Tornadoes	Sewage release	
	Radiological (Transport)	
	Radiological (Power Plant)	

Hazard Profile: (Example)

Hazard	Winter Storm	Flood	Fire	Transport
Frequency	Likely	Possible	Highly likely	Likely
Magnitude	Critical	Limited	Limited ¹	Critical
Location	Wide spread	Riverside	Wide spread	Highways
Area	Wide spread	Local	Local	Local
Duration	Up to week	< week	Days	Day(s)
Seasonality	Winter	Spring	Anytime	Anytime
Onset	Slow	Slow	Fast	Fast
Warning	> 24 hours	12 – 24 hours	None	None

^{1.} Limited jurisdictional resources, but may have multiple death and multiple sheltering issues.

Community Profile: (Example)

Information	Winter Storm	Flood	Fire	Transport
Geography	Entire city affected, downtown to rural areas	Low lying areas along river (provided stop logs installed)	Apartments	Major Highways
Property	Residential, Commercial, & Government	Residential & Commercial	Residential & Commercial	Commercial
Infrastructure	Roads, Streets, services affected	Roads, services, sewerage treatment	Roads, Streets, services affected	Highways
Demographics	All residents of area	All residents of area	All residents of area	Local area
Response Agencies	City Public Works, Fire, EMS, Police	Public Works, Commercial enterprises	Fire, EMS, Ambulance Service	Fire, EMS, Police, Dept. of Environmental Protection, Mutual Aid

APPENDIX A: HAZARD VULNERABILITY ASSESSMENT FORMS JOB AID

Comparison and Priority (Example)

Hazard	Frequency	Magnitude	Warning Time	Severity	Special Considerations (Define)	Total	Priority
Winter Storm	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)		11	3
Flood	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Seasonal, damage limited as long as proper precautions taken.	7	4
Fire	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Limited Jurisdictional resources, but may have multiple death and multiple sheltering issues.	12	2
Transport	Highly likely (4) Likely (3) Possible (2) Unlikely (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Minimal (4) 6-12 hr (3) 12-24 hr (2) 24+ hr (1)	Catastrophic (4) Critical (3) Limited (2) Negligible (1)	Evacuation issues may be biggest problem	13	1

Appendix B

Acronym List

APPENDIX B: ACRONYM LIST

CAR	Capabilities Assessment for Readiness
CERT	Community Emergency Response Team
DEOC	Department Emergency Operations Centers
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
DMAT	Disaster Medical Assistance Team
DMORT	Disaster Mortuary Team
EEI	Essential Elements of Information
EMA	Emergency Management Agency
EMAC	Emergency Mutual Aid Compacts
EMI	Emergency Management Institute
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPI	Emergency Public Information
ESFs	Emergency Support Functions
FEMA	Federal Emergency Management Agency
GAR	Governor's Authorized Representative
HHS	Department of Health and Human Services
HSPD	Homeland Security Presidential Directive
IACP	International Association of Chiefs of Police
IAP	Incident Action Plan
ICP	Incident Command Post
ICS	Incident Command System
JIC	Joint Information Center
NEST	Nuclear Emergency Support Team
NFA	National Fire Academy
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NGO	Nongovernmental Organization
NRF	National Response Framework
NSDS	National Safety Data Sheet

APPENDIX B: ACRONYM LIST

NVOAD	National Voluntary Organizations Active in Disasters
PDS	Professional Development Series
PIO	Public Information Officer
SBA	Small Business Association
SOP	Standard Operating Procedure
TTY	Text Telephone
USDA	U.S. Department of Agriculture

Appendix C
Emergency Supply Kit

Emergency Supply Kit

Water

Store water in plastic containers such as soft drink bottles. Avoid using containers that will decompose or break, such as milk cartons or glass bottles. A normally active person needs to drink at least 2 quarts of water each day. Hot environments and intense physical activity can double that amount. Children, nursing mothers, and ill people will need more.

- Store 1 gallon of water per person per day (2 quarts for drinking, 2 quarts for food preparation/sanitation.)*
- Keep at least a 3-day supply of water for each person in your household.

If you have questions about the quality of the water, purify it before drinking. You can heat water to a rolling boil for 10 minutes or use commercial purification tablets to purify the water. You can also use household liquid chlorine bleach if it is pure, unscented 5.25% sodium hypochlorite. To purify water, use the following table as a guide:

Ratios for Purifying Water with Bleach

Water Quantity	Bleach Added
1 Quart	4 Drops
1 Gallon	8 Drops ¹
5 Gallons	1 Teaspoon

After adding bleach, shake or stir the water container and let it stand 30 minutes before drinking.

¹ Emergency Disinfection of Drinking Water. U.S. Environmental Protection Agency. June 2010.

Emergency Supply Kit (Continued)

Food

Store at least a 3-day supply of nonperishable food. Select foods that require no refrigeration, preparation, or cooking, and little or no water. If you must heat food, pack a can of Sterno®. Select food items that are compact and lightweight. *Include a selection of the following foods in your Emergency Supply Kit:

- Ready-to-eat canned meats, fruits, and vegetables
- Canned juices, milk, soup (if powdered, store extra water)
- Staples—sugar, salt, pepper
- High-energy foods—peanut butter, jelly, crackers, granola bars, trail mix
- Vitamins
- Foods for infants, elderly persons, or persons on special diets
- Comfort/stress foods—cookies, hard candy, sweetened cereals, lollipops, instant coffee, tea bags

First Aid Kit

Assemble a first aid kit for your home and one for each car. A first aid kit* should include:

- Sterile adhesive bandages in assorted sizes
- 2-inch sterile gauze pads (4-6)
- 4-inch sterile gauze pads (4-6)
- Hypoallergenic adhesive tape
- Triangular bandages (3)
- Needle
- Moistened towelettes
- Antiseptic
- Thermometer
- Tongue blades (2)
- Tube of petroleum jelly or other lubricant
- Assorted sizes of safety pins
- Cleaning agent/soap
- Latex gloves (2 pairs)
- Sunscreen
- 2-inch sterile roller bandages (3 rolls)
- 3-inch sterile roller bandages (3 rolls)
- Scissors
- Tweezers

Nonprescription Drugs

- Aspirin or non-aspirin pain reliever
- Anti-diarrhea medication
- Antacid (for stomach upset)
- Syrup of Ipecac (used to induce vomiting if advised by the Poison Control Center)
- Laxative
- Activated charcoal (used if advised by the Poison Control Center)

Emergency Supply Kit (Continued)

Tools and Supplies

- Mess kits, or paper cups, plates and plastic utensils*
- Emergency preparedness manual*
- Battery-operated radio and extra batteries*
- Flashlight and extra batteries*
- Cash or traveler's checks, change*
- Nonelectric can opener, utility knife*
- Fire extinguisher: small canister, ABC type
- Tube tent
- Pliers
- Tape
- Compass
- Matches in a waterproof container
- Aluminum foil
- Plastic storage containers
- Signal flare
- Paper, pencil
- Needles, thread
- Medicine dropper
- Shutoff wrench, to turn off household gas and water
- Whistle
- Plastic sheeting
- Map of the area (for locating shelters)

Sanitation

- Toilet paper, towelettes*
- Soap, liquid detergent*
- Feminine supplies*
- Personal hygiene items*
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach

Clothing and Bedding

*Include at least one complete change of clothing and footwear per person.

- Sturdy shoes or work boots*
- Rain gear*
- Blankets or sleeping bags*
- Hat and gloves
- Thermal underwear
- Sunglasses

Emergency Supply Kit (Continued)

Special Items

Remember family members with functional needs, such as infants and elderly or disabled persons.

For Babies*

- Formula
- Diapers
- Bottles
- Powdered milk
- Medications

For Adults*

- Heart and high blood pressure medication
- Insulin
- Prescription drugs
- Denture needs
- Contact lenses and supplies
- Extra eye glasses

- Entertainment—games and books
- Important Family Documents —keep these records in a waterproof, portable container
- Will, insurance policies, contracts, deeds, stocks and bonds
- Passports, social security cards, immunization records
- Bank account numbers
- Credit card account numbers and companies
- Inventory of valuable household goods, important telephone numbers
- Family records (birth, marriage, death certificates)

For more information, go to <http://www.ready.gov>



As part of FEMA's Ready Program, FEMA has provided a directory of materials to enhance your community's and your family's preparedness at home, work, daycare and school. You will find many useful downloadable documents to help you with your community's preparedness.

You can find these particular documents on individual and community preparedness are located on the FEMA Independent Study website - IS-230.b Fundamentals of Emergency Management (<http://www.training.fema.gov/EMIWeb/IS/is230b.asp>) and/or on the READY.gov website (<http://www.Ready.gov>):

- A Family Emergency Plan Template
- An Emergency Supply List

Specific planning guidelines for:

- Families
- Older Americans
- People with disabilities or functional needs
- Pet Owners
- Ready Kids

We encourage you to take some time to review the information provided on these websites in an effort for your community and family to become better prepared.