L0930 Integrated Emergency Management Course: Yolo Operational Area Operations Track

Student Manual

May 2017
Version 1.1

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May 19, 2017

UNIT 1
ADMINSTRATIVE ANNOUCEMENTS, COURSE INTRODUCTIONS, AND COURSE OVERVIEW

May 17, 2017

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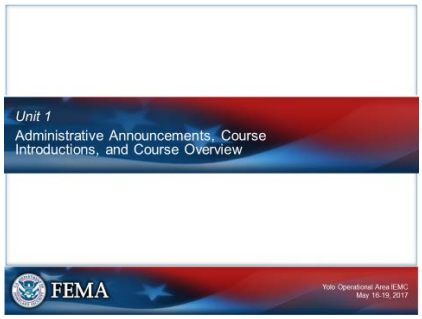


Visual 1.1

VISUAL 1.1 - UNIT 1:

ADMINISTRATIVE ANNOUNCEMENTS, COURSE INTRODUCTIONS, AND COURSE OVERVIEW

Visual 1.2

VISUAL 1.2 - WELCOME

Emergency Management Insitute (EMI) Course Staff

Class Manager	Exercise Director
Doug Kahn, PACEM Training Specialist Integrated Emergency Management Branch 301-447-7645	Doug Kahn, PACEM Training Specialist Integrated Emergency Management Branch 301-447-7645

IEM Branch Email: fema-emi-iemb@fema.dhs.gov

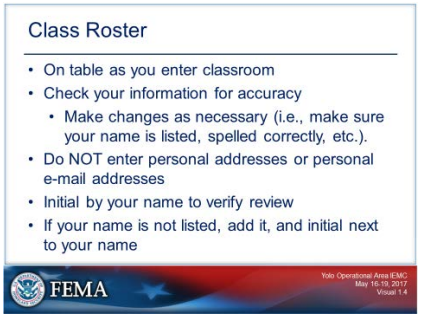
Branch Phone: 301-447-1381

Visual 1.3

VISUAL 1.3 WELCOME TO THE EMERGENCY MANAGEMENT INSTITUTE (EMI)

Integrated Emergency Management Concepts Course for the Yolo Operational Area

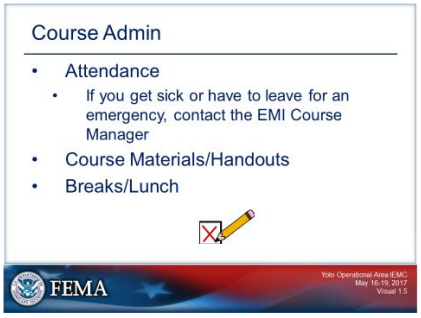
Visual 1.3 Photo Caption: Seals of Davis California, City of Woodland, County of Yolo, City of West Sacramento, Yolo County Housing, Yocha Dehe Wintun Nation, City of Winters California and County of Yolo Office of Emergency Services



Visual 1.4

VISUAL 1.4 - CLASS ROSTER

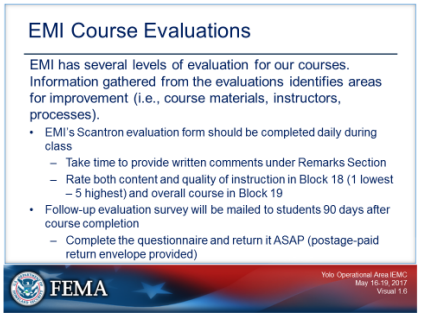
- On the table as you enter classroom
- Check your information for accuracy
  - Make changes as necessary (i.e., make sure your name is listed, spelled correctly, etc.)
- Do NOT enter personal addresses or personal e-mail addresses (except FEMA Reservists)
- Initial by your name to verify review
- If your name is not listed, add it, and initial next to your name



Visual 1.5

VISUAL 1.5 - COURSE ADMIN

- Attendance
  - If you get sick or have to leave for an emergency, contact the Class Manager
- Course Materials/Handouts
- Breaks/Lunch

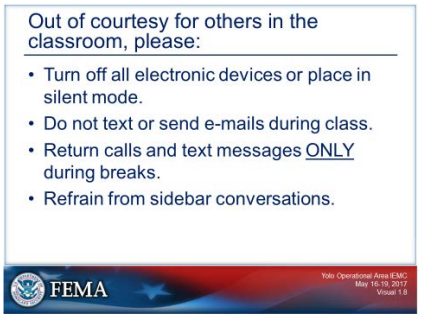


Visual 1.6

VISUAL 1.6 – EMI COURSE EVALUATIONS

EMI has several levels of evaluation for our courses. Information gathered from the evaluations identifies areas for improvement (i.e., course materials, instructors, processes).

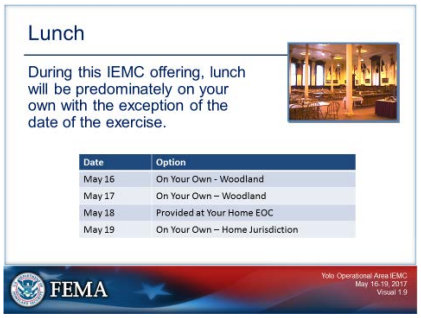
- EMI's Scantron evaluation form should be completed daily during class
  - Take time to provide written comments under Remarks Section
  - Rate both content and quality of instruction in Block 18 (1 lowest – 5 highest) and overall course in Block 19
- Follow-up evaluation survey will be mailed to students 90 days after course completion
  - Complete the questionnaire and return it ASAP (postage-paid return envelope provided)



Visual 1.7

VISUAL 1.7 - OUT OF COURTESY FOR OTHERS IN THE CLASSROOM, PLEASE:

- Turn off all electronic devices or place in silent mode.
- Do not text or send e-mails during class.
- Return calls and text messages ONLY during breaks.
- Refrain from sidebar conversations.



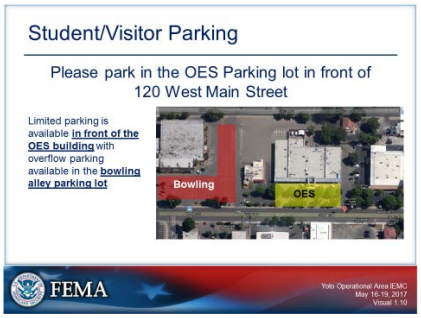
Visual 1.8

VISUAL 1.8 – LUNCH

During this IEMC offering, lunch will be predominately on your own with the exception of the date of the exercise.

Date	Option
May 16	On Your Own – Woodland
May 17	On Your Own – Woodland
May 18	Provided at Your Home EOC
May 19	On Your Own – Home Jurisdiction

Visual 1.8 Photo Alternative Text: Photo of the EMI Dining Facility.



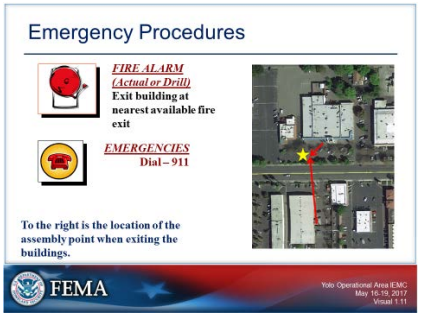
Visual 1.9

VISUAL 1.9 – STUDENT/VISITOR PARKING

Please park in the OES Parking lot in front of 120 West Main Street.

Limited parking is available **in front of the OES building** with overflow parking available in the **bowling alley parking lot.**

Visual 1.9 Photo Alternative Text: Aerial image showing the primary parking lot (OES building) and the secondary parking lot (Bowling Alley).



Visual 1.10

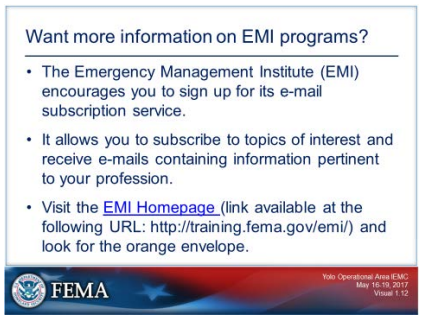
VISUAL 1.10 – EMERGENCY PROCEDURES

Fire Alarm (Actual or Drill): Exit building at available fire exit.
nearest

Emergencies – Dial 911

Below is a map with the location of the assembly point when exiting the buildings.

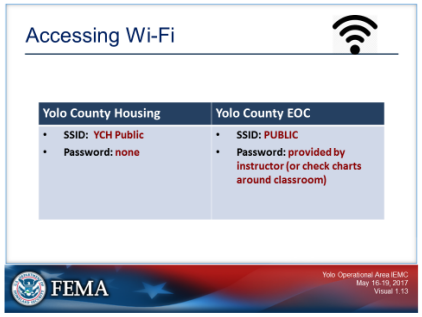
Visual 1.10 Image Alternative Text: Aerial image consisting of the two building locations used for training. The assembly area in case of emergency is located in the southwestern section of the OES Parking lot.



Visual 1.11

VISUAL 1.11 – WANT MORE INFORMATION ON EMI PROGRAMS?

- The Emergency Management Institute (EMI) encourages you to sign up for its e-mail subscription service.
- It allows you to subscribe to topics of interest and receive e-mails containing information pertinent to your profession.
- Visit the EMI Homepage (link available at the following URL: http://training.fema.gov/emi/) and look for the orange envelope.



Visual 1.12

VISUAL 1.12 – ACCESSING WI-FI

Yolo County Housing	Yolo County EOC
• **SSID:** YCH Public • **Password**: None	• **SSID:** Public • **Password:** provided by instructor (or check charts around classroom)

Visual 1.13

VISUAL 1.13 – STAY CONNECTED WITH THE FEMA APP

- Download the App: Google Play, App Store, or BlackBerry App World.
- You can also download the app via text messaging:
  - If you have an Apple device: Text APPLE to 43362 (4FEMA).
  - If you have an Android device: Text ANDROID to 43362 (4FEMA).

- If you have a Blackberry device: Text BLACKBERRY to 43362 (4FEMA).

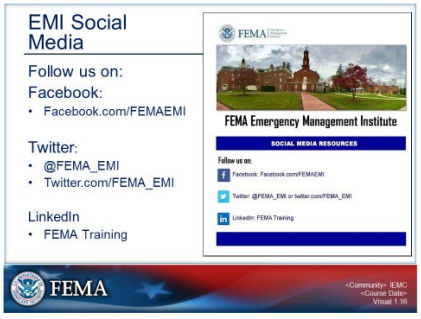
Visual 1.13 Image Alternative Text: Photo of a cell phone showing the FEMA App. Cell phone screen displays – FEMA Logo – Weather Alerts, Prepare, Disaster Resources, Submit Disaster Photos, Contenido en Espanol, How to Help, Blog, Supporting Disaster, Communications from Space.

Text in photo: (Red lightning bolt) Receive alerts from the National Weather Service for up to five locations. (Green checkmark) Get safety reminders, read tips to survive natural disasters, and customize your emergency checklist. (Blue plus) Locate open shelters and where to talk to FEMA in person (or on the phone). (Camera icon) Upload and share your disaster photos to help first responders.

Visual 1.14

VISUAL 1.14 – STAY CONNECTED WITH THE FEMA APP (CONT.)

- Receive alerts from the National Weather Service for up to five locations.
- Get safety reminders, read tips to survive natural disasters, and customize your emergency checklist.
- Locate open shelters and where to talk to FEMA in person (or on the phone).
- Upload and share your disaster photos to help first responders.



Visual 1.15

VISUAL 1.15 – EMI SOCIAL MEDIA

Follow us on:

Facebook:

- Facebook.com/FEMAEMI

Twitter:

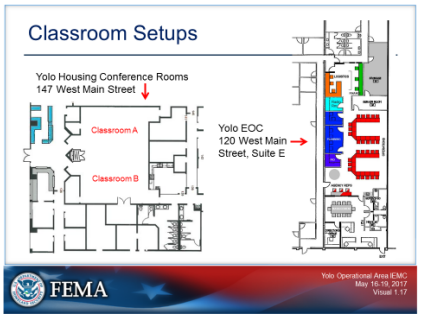
- @FEMA_EMI

- Twitter.com/FEMA_EMI

LinkedIn:

- FEMA Training

Visual 1.15 Photo Alternative Text: FEMA Emergency Management Institute Social Media Resources. Photo of FEMA Campus. Text in photo: Follow us on: Facebook: Facebook.com/FEMAEMI; Twitter: @FEMA_EMI or twitter.com/FEMA_EMI; LinkedIn: FEMA Training

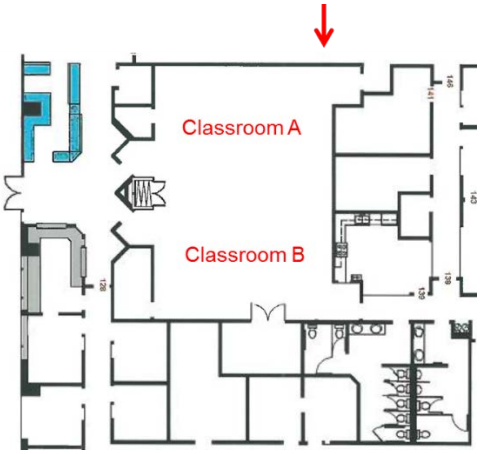


Visual 1.16

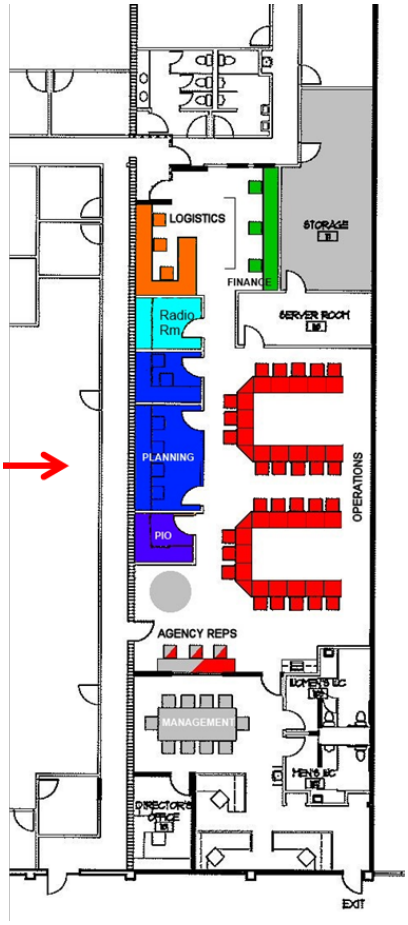
VISUAL 1.16 – CLASSROOM SETUPS

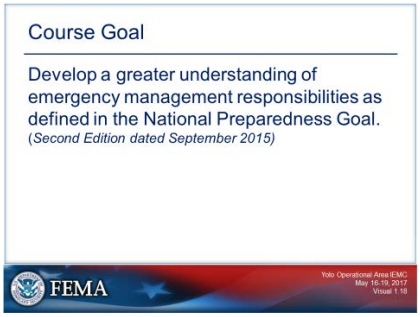
Yolo Housing Conference Rooms

147 West Main Street



Yolo EOC
120 West Main Street, Suite E

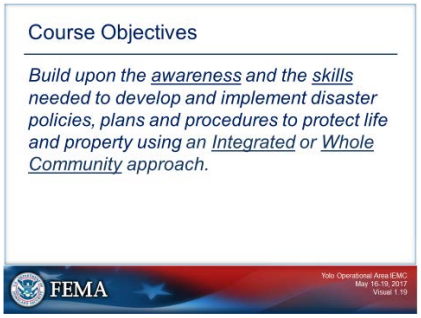




Visual 1.17

VISUAL 1.17 – COURSE GOAL

Develop a greater understanding of emergency management responsibilities as defined in the National Preparedness Goal. (*Second Edition dated September 2015)*



Visual 1.18

VISUAL 1.18 – COURSE OBJECTIVES

Build upon the awareness and the skills needed to develop and implement disaster policies, plans and procedures to protect life and property using an Integrated or Whole Community approach.

Visual 1.19

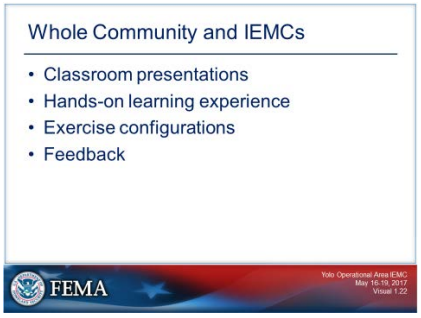
VISUAL 1.19 – WHOLE COMMUNITY

- Shared understanding of community needs and capabilities
- Greater empowerment and integration of resources from across the community
- Stronger social infrastructure
- Greater resiliency at the community and national levels

Visual 1.20

VISUAL 1.20 – WHOLE COMMUNITY (CONT.)

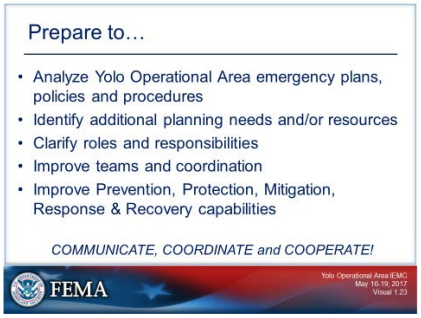
- Establishment of relationships that facilitates more effective prevention, protection, mitigation, response, and recovery activities
- Increased individual and collective preparedness
- Locate open shelters and where to talk to FEMA in person (or on the phone).



Visual 1.21

VISUAL 1.21- WHOLE COMMUNITY AND IEMCS

- Classroom presentations
- Hands-on learning experience
- Exercise configurations
- Feedback



Visual 1.22

VISUAL 1.22 – PREPARE TO…

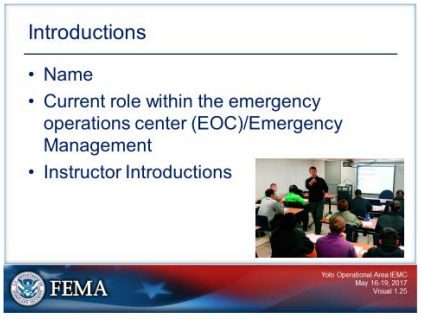
- Analyze Yolo Operational Area emergency plans, policies and procedures
- Identify additional planning needs and/or resources
- Clarify roles and responsibilities
- Improve teams and coordination
- Improve Prevention, Protection, Mitigation, Response & Recovery capabilities

COMMUNICATE, COORDINATE and COOPERATE!

Visual 1.23

VISUAL 1.23 – COURSE SCHEDULE

May 16, 2017	PIO, Logistics, & Planning Training Tracks
May 17, 2017	Policy, Operations & Finance Training Tracks
May 18, 2017	Exercise
May 19, 2017	Exercise Hotwash & Final Instruction



Visual 1.24

VISUAL 1.24 – INTRODUCTIONS

- Name
- Current role within the Emergency Operations Center (EOC)/Emergency Management
- Instructor Introductions

Visual 1.24 Image Description: An instructor pointing in a classroom to the class.

Visual 1.25

VISUAL 1.25 - QUESTIONS, COMMENTS, OR CONCERNS?

UNIT 2
OPERATIONS SECTION

May 17, 2017

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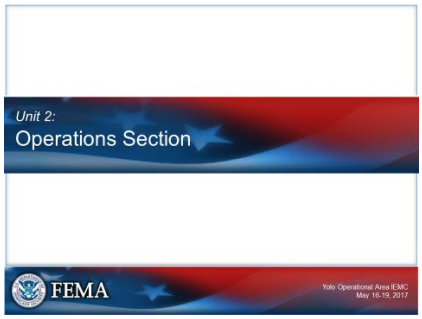


Visual 2.1

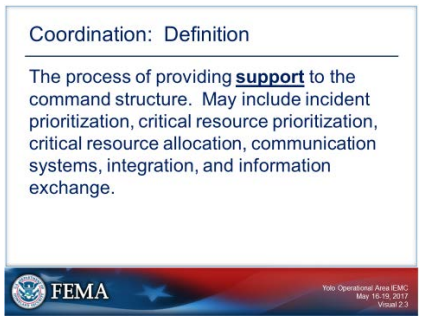
VISUAL 2.1 - UNIT 2

OPERATIONS SECTION

Visual 2.2

VISUAL 2.2 - UNIT 2.A

COORDINATION & COLLABORATION



Visual 2.3

VISUAL 2.3 – COORDINATION: DEFINITION

The process of providing **support** to the command structure. May include incident prioritization, critical resource prioritization, critical resource allocation, communication systems, integration, and information exchange.

Student Notes:

Visual 2.4

VISUAL 2.4 – COLLABORATION

Collaboration occurs when organizations produce something by:

- Combining efforts
- Sharing ownership of the outcome
- Making joint decisions
- Exchanging expertise, information, and resources

We often use the terms collaboration and coordination interchangeably. However, collaboration differs from coordination.

Coordination is about having different organizations or groups accomplish their individual missions in harmony with one another.

Collaboration is the process of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have come to on their own.

"Collaboration creates a shared meaning about a process, a product, or an event. In this sense, there is nothing routine about it. Something is there that wasn't there before." Source: Michael Schrage, *Shared Minds: The New Technologies of Collaboration*, NY: Random House, 1990, p. 140.

Exchanging expertise, information, and resources.

According to Russell Linden, "The focus of collaboration is on producing (or implementing) something. Collaboration is about *co-labor*, about *joint effort* and *ownership*." Source: *Working Across Boundaries: Making Collaboration Work in Government and Nonprofit Organizations*, San Francisco: Jossey-Bass, 2002.

The products developed through collaboration may be anything, including a policy recommendation, resolution of a dispute, planning document, innovative procedures, or a new facility.

Visual 2.4 Photo Caption: Volunteers lifting a side frame for a house.

Student Notes:

Visual 2.5

VISUAL 2.5 – COLLABORATION CHALLENGES

Turf Concerns:

- Differences in statutory responsibilities
- Conflicting goals and measures
- Need for power
- Competition for resources

Lack of Trust:

- Different rules, organizational cultures, and values
- Unfamiliarity or prior relationships among key players
- Withholding information

Challenges to collaboration include the following:

- **Turf Concerns:** For collaboration to work, the parties need to be assured that they have everything to gain and nothing to lose. Turf concerns may include:
  - Differences in statutory responsibilities. A ground rule for collaboration has to be that all parties operate within the legal boundaries. When those collaborating include governmental entities, it is critical to educate all of the partners about any applicable statutory responsibilities and limits. Often conflict arises because the parties are unaware of each other's legal responsibilities.

- **Conflicting goals and measures.** Parties often disagree about what should be accomplished and how to measure success. Collaboration is most effective when the parties send time defining goals and success measures.
- **Need for power.** People with the need for power are likely to feel threatened by collaboration. An individual's need for power may be derived from: (1) a perceived need to control in order to achieve high standards for the organization or oneself; (2) personal satisfaction from having control over others; or (3) desire for recognition and status from others. People who are traditional power brokers often will collaborate if they can answer the question: "What's in it for me?"
- **Competition for resources.** Collaboration works best when the parties are not competing over the same resources. In addition, each party should be seen as contributing something of value (resources, enthusiasm, influence, expertise, etc.) to the collaborative process.

- **Lack of Trust**
  - **Different rules, organizational cultures, and values.** Organizational culture includes assumptions, philosophy, and values that hold the organization together. Members of an organization often share similar attitudes and beliefs. They also follow written and unwritten rules that the organization develops over time. Oftentimes, people are unaware of the influence of organizational culture on the way they act. Therefore, when parties try to collaborate across organizations, they may violate these unspoken rules, leading to a loss of trust.
  - Unfamiliarity or prior relationships among key players. People who do not know each other, professionally or personally, are less likely to collaborate comfortably with one another. Collaboration works best when the parties are aware of each other's background and expertise. It is important for newly formed

collaborative groups to spend time learning about one another.

- Withholding information. Trust breaks down when others perceive that one party is withholding information. There may be times during a collaborative effort where one party is not allowed to share sensitive information. It is important to explain any limitations on information sharing when the team is first established.

Discussion Question: What are some additional challenges to collaboration?

Student Notes:

Visual 2.6

VISUAL 2.6 – HIGHLY EFFECTIVE TEAMS

- Participative leadership
- Shared responsibility
- Commitment to a common purpose and performance goals
- Use of resources and talents
- Open communications
- Capacity for self-evaluation

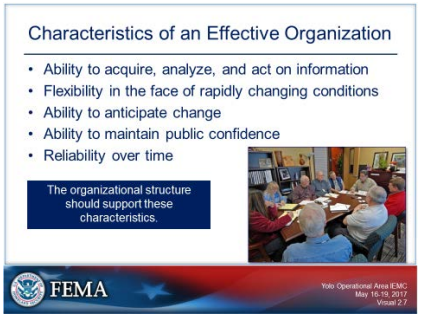
- **Participative Leadership.** Team members have opportunities to participate in decision-making.

Team members help set goals and develop strategies for achieving these goals. Team members help identify tasks and decide how to approach and evaluate them.

- **Shared Responsibility.** Team members feel equally responsible for the performance of the team and its outcomes. Individuals may have primary roles for completing team tasks, but they remain flexible and do what is necessary to accomplish the team's goals and tasks.
- **Commitment to a Common Purpose and Performance Goals.** Team members have a sense of common purpose about why the team exists and the functions it serves. They demonstrate their commitment to achieving the purpose by:
  - Keeping the purpose in the forefront of their decision-making and evaluations of team practices
  - Helping one another maintain their focus on results
- **Use of Resources and Talents.** Team members utilize the resources and talents of the group members. Highly effective teams make good use of their creative talents, openly share skills and knowledge, and learn from one another.
- **Open Communications.** The team creates and maintains a climate of trust and open, honest communication. Team members talk openly with one another, are open to giving and receiving feedback, and work through misunderstandings and conflicts.
- **Capacity for Self-Evaluation.** Effective teams stop and assess how well they are doing and what, if anything, may be hindering their performance and communications.

Visual 2.6 Photo Caption – Individuals in a team meeting.

Student Notes:



Visual 2.7

VISUAL 2.7 – CHARACTERISTICS OF AN EFFECTIVE ORGANIZATION

When emergency management personnel "put it all together" to accomplish pre-incident, incident, and post-incident tasks, the net result is an effective emergency management operation characterized by:

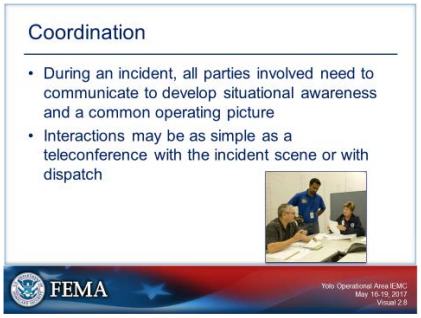
- Ability to acquire, analyze, and act on information
- Flexibility in the face of rapidly changing conditions
- Ability to anticipate change
- Ability to maintain public confidence
- Reliability over time

The organizational structure should support these characteristics.

An effective Emergency Manager will organize and manage operations in a way that maximizes each characteristic.

Visual 2.7 Photo Caption - A group of people sitting around a conference table in a meeting.

Student Notes:



Visual 2.8

VISUAL 2.8 – COORDINATION

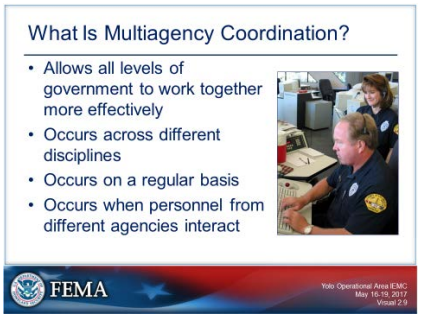
- During an incident, all parties involved need to communicate to develop situational awareness and a common operating picture
- Interactions may be as simple as a teleconference with the incident scene or with dispatch

All parties involved need to communicate to develop situational awareness and a common operating picture and to carry out an effective response.

The majority of incidents involve only one or two agencies—perhaps the fire department or law enforcement. In small, uncomplicated incidents, interactions may consist of telephone or radio communications with those agencies.

<u>Visual 2.8 Photo Caption</u> – A group of FEMA employees coordinating response efforts.

<u>Student Notes:</u>



Visual 2.9

VISUAL 2.9 – WHAT IS MULTIAGENCY COORDINATION?

- Allows all levels of government to work together more effectively
- Occurs across different disciplines
- Occurs on a regular basis
- Occurs when personnel from different agencies interact

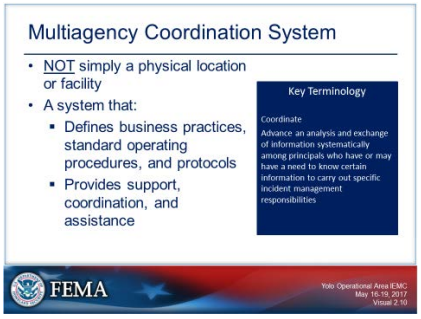
Multiagency coordination (MAC):

- Is a process that allows all levels of government and all disciplines to work together more efficiently and effectively

- Occurs across the different disciplines involved in incident management, across jurisdictional lines, or across levels of government
- Can and does occur on a regular basis whenever personnel from different agencies interact in such activities as preparedness, prevention, response, recovery, and mitigation

Visual 2.9 Photo Caption: Two dispatchers at a computer.

Student Notes:



Visual 2.10

VISUAL 2.10 – MULTIAGENCY COORDINATION SYSTEM

- NOT simply a physical location or facility
- A system that:
  - Defines business practices, standard operating procedures, and protocols
  - Provides support, coordination, and assistance

Key Terminology

Coordinate - Advance an analysis and exchange of information systematically among principals who have or may have a need to know certain information to carry out specific incident management responsibilities

A MAC System is not simply a physical location or facility. Rather, a MAC System:

- Defines business practices, standard operating procedures, and protocols by which participating agencies will coordinate their interactions

- Provides support, coordination, and assistance with policy-level decisions to the Incident Command System (ICS) structure managing an incident.
- Cooperating agencies and organizations may develop a MAC System to better define how they will work together, and to work together more efficiently.

The National Incident Management System (NIMS) describes MAC Systems as providing "the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. MAC Systems assist agencies and organizations responding to an incident.

The elements of a MAC System include facilities, equipment, personnel, procedures, and communications."

Student Notes:

Visual 2.11

VISUAL 2.11 – WHY MULTIAGENCY COORDINATION?

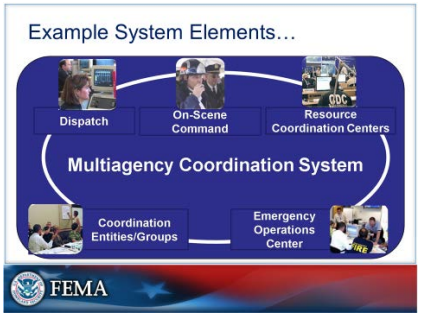
- To establish and clarify policy
- To help establish a common operating picture
- To set priorities among incidents and resolve critical resource issues
- To facilitate logistics support and resource tracking
- To synchronize messaging to ensure that we are speaking with one voice

MAC provides critical resource and information analysis support to the Incident Command/Unified Command.

Coordination does **not** mean assuming command of the incident scene.

Visual 2.11 Photo Caption – Photo of two responders talking.

Student Notes:



Visual 2.12

VISUAL 2.12 – EXAMPLE SYSTEM ELEMENTS

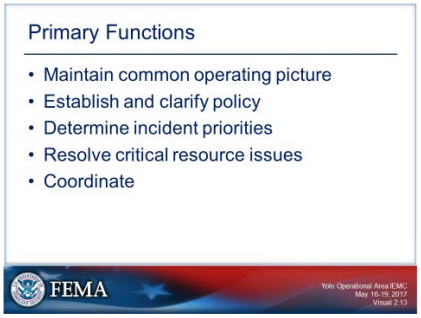
A MAC System may include:

- On-scene command structure and responders
- Resource coordination centers
- EOCs
- Coordination entities and groups
- Dispatch

In many emergencies, agencies have statutory responsibilities at incidents that extend beyond political jurisdictional boundaries. Many larger emergencies will involve two or more political subdivisions. It may be essential to establish a MAC System to assist the coordination efforts on an area or regional basis.

Visual 2.12 Diagram Alt Text - Full-screen diagram of a Multiagency Coordination System. Elements of the MACS include On-Scene Command; Resource Coordination Centers; Emergency Operations Centers; Coordination Entities/Groups, and Dispatch.

Student Notes:



Visual 2.13

VISUAL 2.13 – PRIMARY FUNCTIONS

- Maintain common operating picture
- Establish and clarify policy
- Determine incident priorities
- Resolve critical resource issues
- Coordinate

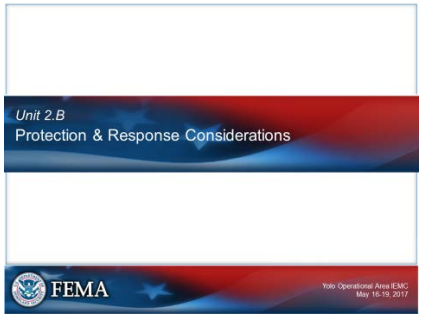
Student Notes:

Visual 2.14

VISUAL 2.14 – EFFECTIVE MULTIAGENCY COORDINATION

- Provides reliable system and resources
- Acquires, analyzes, and communicates information
- Is flexible in supporting the command structure
- Anticipates change
- Promotes public confidence

Student Notes:



Visual 2.15

VISUAL 2.15 – UNIT 2.B

PROTECTION & RESPONSE CONSIDERATIONS

Visual 2.16

VISUAL 2.16 – PROTECTION MISSION ACTIVITIES

- Community and Infrastructure Protection
- Transportation and Trans-border Security
- Protection of Key Leadership and Events

The Protection mission activities can be grouped into three categories: Community and Infrastructure Protection, Transportation and Trans-border Security, and Protection of Key Leadership and Events.

Community and Infrastructure Protection

- **Agriculture and Food** - Defend agriculture and food networks and systems from all-hazards threats and incidents.
- **Critical Infrastructure Protection** - Protect the physical, cyber, and human elements of critical infrastructure. This includes actions to deter the threat; reduce vulnerabilities; and minimize the consequences associated with a terrorist attack, natural disaster, or man-made disaster.

- **Defense Against WMD Threats** - Protect against threats associated with WMD and related materials and technologies including their malicious acquisition, movement, and use.
- **Cybersecurity** - Secure the cyber environment against or from damage, unauthorized use, or malicious exploitation while protecting infrastructure, civil rights, individual privacy, and other civil liberties.
- **Health Security** - Secure the population in the face of health threats or incidents with potentially negative health consequences.

Transportation and Trans-border Security

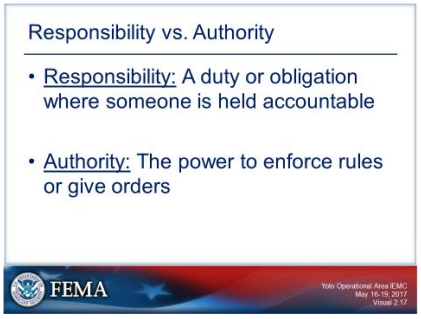
- **Border Security** - Secure air, land, and sea borders against the illegal flow of people and goods while facilitating the flow of lawful travel and commerce.
- **Immigration Security** - Secure the Nation from illegal immigration through effective, efficient immigration systems and processes that respect human rights.
- **Maritime Security** -Secure maritime infrastructure, resources, and the marine transportation system from terrorism and other threats and hazards. Secure the homeland from an attack from the sea, while enabling legitimate travelers and goods to efficiently move without fear of harm, violation of civil rights, reduction of civil liberties, or disruption of commerce.
- **Transportation Security** - Secure transportation systems against terrorism and other threats and hazards while enabling legitimate travelers and goods to move without significant disruption to commerce, undue fear of harm, violation of civil rights, or loss of civil liberties.

Protection of Key Leadership and Events

- Protect key leadership from hostile acts by terrorists and other malicious actors and ensure security at events of national significance.

Visual 2.16 Photo Caption: Top – Farmer feeding cattle, Middle – Crane maneuvering shipping containers, Bottom – Military members talking on a radio.

Student Notes:



Visual 2.17

VISUAL 2.17 – RESPONSIBILITY VS. AUTHORITY

- Responsibility: A duty or obligation where someone is held accountable
- Authority: The power to enforce rules or give orders

Responsibility is a duty or obligation where someone is held accountable. A duty is something you must do by virtue of your position and is a legal or moral obligation. For example, an Emergency Manager's duty is to protect the community.

Authority is the power to enforce rules or give orders within the scope of someone's position. Another way of looking at authority is the ability to make particular decisions without having to ask someone else's permission. If no one can make decisions, the organization cannot act. If everyone can make decisions, there is no organization.

In the ideal situation, our authority to issue orders or make decisions would be in perfect balance with the scope of the responsibility being assumed. However, Emergency Managers may find that their professional and personal level of responsibility may not be commensurate with their level of authority.

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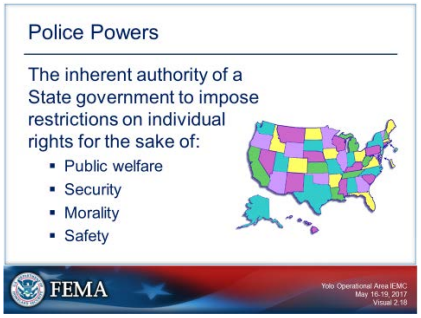


Visual 2.18

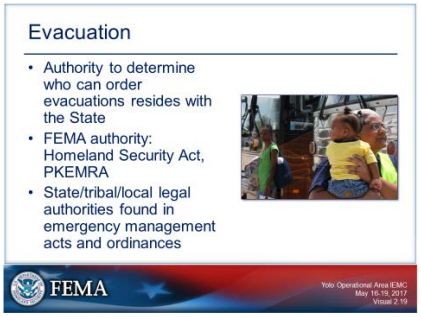
VISUAL 2.18 – POLICE POWERS

The inherent authority of a State government to impose restrictions on individual rights for the sake of:

- Public welfare
- Security
- Morality
- Safety

<u>Visual 2.18 Photo Caption</u> – Map of the United States.

<u>Student Notes:</u>



Visual 2.19

VISUAL 2.19 – EVACUATION

- Authority to determine who can order evacuations resides with the State
- FEMA authority: Homeland Security Act, PKEMRA
- State/tribal/local legal authorities found in emergency management acts and ordinances

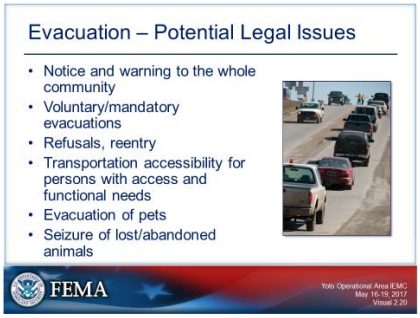
The authority to determine who can order evacuations resides with the State. That authority may be delegated to local jurisdictions.

FEMA was given original authority for evacuations in the Homeland Security Act; PKEMRA included evacuation authority for FEMA in Sections 402(1) and 402(2).

Legal authorities are found in State/Tribal/Local emergency management acts and ordinances.

<u>Visual 2.19 Photo Caption</u> – People standing around buses being used in evacuation operations.

Student Notes:



Visual 2.20

VISUAL 2.20 – EVACUATION – POTENTIAL LEGAL ISSUES

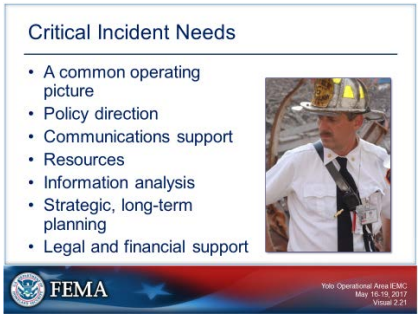
- Notice and warning to the whole community
- Voluntary/mandatory evacuations
- Refusals, reentry
- Transportation accessibility for persons with access and functional needs
- Evacuation of pets
- Seizure of lost/abandoned animals

Important information to know in your jurisdiction includes:

- What are the legal authorities to order an evacuation?
- Who has the authority to order an evacuation?
- What is required for a mandatory evacuation?
- What are the limits on enforcement?
- Who has authority to control reentry into evacuated areas?
- What provisions are there to ensure that vulnerable populations will be adequately served?
- What do local codes say about transporting and sheltering pets?

Visual 2.20 Photo Caption - Line of stopped cars along an evacuation route.

Student Notes:



Visual 2.21

VISUAL 2.21 – CRITICAL INCIDENT NEEDS

- A common operating picture
- Policy direction
- Communications support
- Resources
- Information analysis
- Strategic, long-term planning
- Legal and financial support

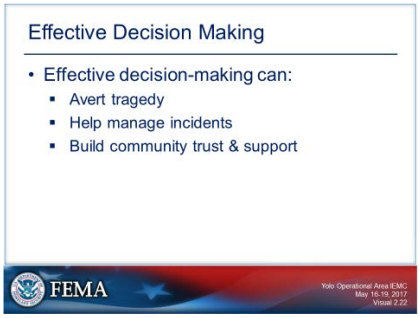
The EOC is able to facilitate critical incident needs:

- A **common operating picture** is particularly important during incidents that are geographically large or complex or that involve personnel from multiple response agencies.
- **Policy direction** is critical when agencies or jurisdictions with differing policies are involved in a response.
- **Communications support** is always critical in large, complex incidents or when multiple agencies or jurisdictions are involved in a response.
- **Resources** (people, equipment, and supplies) are required for any response. Acquiring needed resources and prioritizing their allocation through a centralized location relieves the Incident Command of this burden.
- **Information analysis** is critical in terms of keeping Incident Command informed of information that is not readily available at the scene.

- **Strategic, long-term planning** allows the Incident Command to focus on implementing tactics to meet operational objectives.
- **Legal and financial support** from the EOC frees on-scene resources to focus on the response while providing the guidance necessary to protect the jurisdiction from unnecessary costs and the potential for litigation.

Visual 2.21 Photo Caption – Photo of an On-Scene Incident Commander.

Student Notes:



Visual 2.22

VISUAL 2.22 – EFFECTIVE DECISION MAKING

- Effective decision-making can:
  - Avert tragedy
  - Help manage incidents
  - Build community trust & support

Two key elements of effective decision making are accurate information and communications flow.

Accurate and timely information is an essential ingredient for making effective decisions. All too often, after-action reports cite communications failures as an impediment to effective incident management. Often, initial reports are incomplete and/or erroneous and must quickly be replaced with accurate information.

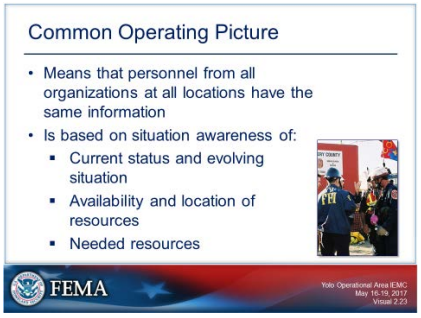
Communication flows mean establishing and maintaining a common operating picture and ensuring that accessibility and interoperability are the principal goals of the Communications and Information Management component of NIMS.

Properly planned, established, and applied communications enable the dissemination of information among command and support elements and, as appropriate, cooperating agencies and organizations.

Communications breakdowns are not limited to equipment- and systems-related failures. There are numerous impediments to our ability to share critical information and make effective decisions, including:

- Use of different communications protocols
- Use of codes instead of plain language
- Non-standardized reporting formats

Student Notes:



Visual 2.23

VISUAL 2.23 – COMMON OPERATING PICTURE

- Means that personnel from all organizations at all locations have the same information
- Is based on situation awareness of:
  - Current status and evolving situation
  - Availability and location of resources
  - Needed resources

Decisions made at all levels of the incident response structure and the EOC must be based on a common operating picture.

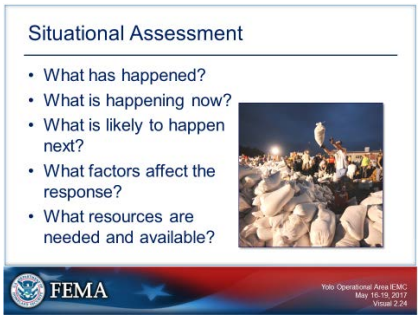
A common operating picture is established and maintained by gathering, collating, synthesizing, and disseminating incident information to all appropriate parties.

Achieving a common operating picture allows all personnel at all locations—such as those at the EOC and the Incident Command Post, or within a Multiagency Coordination Group—to have the same critical information about the incident, including:

- Current status and evolving situation
- Availability and location of resources
- Needed resources

Visual 2.23 Photo Caption – Responders from different agencies.

Student Notes:



Visual 2.24

VISUAL 2.24 – SITUATIONAL ASSESSMENT

- What has happened?
- What is happening now?
- What is likely to happen next?
- What factors affect the response?
- What resources are needed and available?

A clear understanding of an incident or event is critical to establishing priorities and determining incident objectives. Failing to assess the situation will lead to poor tactical decisions. However, taking too much time to assess the situation will cause a loss of command and control.

The EOC manager and/or on-scene Incident Commander must use his or her expertise and experience to perform a rapid assessment of the situation by addressing the following questions and concerns to assess the situation:

- What has happened?
  - What initially happened to create the emergency?
  - How long has it been since the initial event?
  - What may have caused the emergency?
  - Do you suspect criminal activity?
- What is happening now?
  - Are there injuries or safety concerns?
  - Is immediate intervention needed to save lives?
  - What are the risks to emergency responders?
  - Are crowds and bystanders at risk?
  - Are there routes to gain access to the incident scene?
- What is likely to happen next?
  - Is the situation stable or getting worse?
  - Is there a possibility that secondary incidents could occur?
  - Are there continuing threats or hazards?
  - Can these and any other safety considerations be handled with resources on scene or en route?
- What factors affect the response?
  - Is the weather or wind affecting the response?
  - Is the time of day a factor? Is it getting dark?
  - Are responders familiar with the incident scene or building layout?
  - Are there hazardous materials or other dangers near the incident scene?
  - Are there security concerns?
  - Does evidence need to be preserved?
- What resources are needed and available?
  - What resources will be required?
  - Are those resources immediately available or will they be delayed?

- How can the available resources best be deployed now?
- The first responder to arrive must assume command and size up the situation by determining:
- Nature and magnitude of the incident
- Hazards and safety concerns
- Hazards facing response personnel and the public
- Evacuation and warnings
- Injuries and casualties
- Need to secure and isolate the area
- Initial priorities and immediate resource requirements
- Location of Incident Command Post and Staging Area(s)
- Entrance and exit routes for responders

Visual 2.24 Photo Caption – Individual throwing sandbags into a pile.

Student Notes:

Visual 2.25

VISUAL 2.25 – COMMAND VS. COORDINATION PLANS

Incident Action Plan

Focuses on tactical objectives; for example:

- Rescuing trapped persons
- Establishing perimeter control
- Extinguishing fires

- Providing emergency food and shelter
- Collecting evidence

EOC Action Plan
Focuses on coordination objectives; for example:

- Coordinating information
- Coordinating resources
- Coordinating public information
- Coordinating policy decisions

EOCs develop coordination plans to support the achievement of the objectives identified in the Incident Action Plan.

The following table presents a comparison of the types of plans:

- Incident Action Plan
  - Focuses on the achievement of **tactical** objectives, for example:
  - Rescuing trapped persons
  - Establishing perimeter control
  - Extinguishing fires
  - Providing emergency food and shelter
  - Collecting evidence
- EOC Action Plan
  - Focuses on the achievement of **coordination** objectives, for example:
  - Coordinating information
  - Coordinating resources
  - Coordinating public information
  - Coordinating policy decisions

The tactical objectives and resource needs identified in the Incident Action Plan serve as the basis for the EOC Action Plan. On longer incidents, the operational periods and planning cycles must be developed in coordination

between the Incident Commander and EOC manager. In addition, the EOC manager must be aware of the operational period established at the scene so that he or she can provide trend information, forecasts, or other relevant information when tactical objectives are being established.

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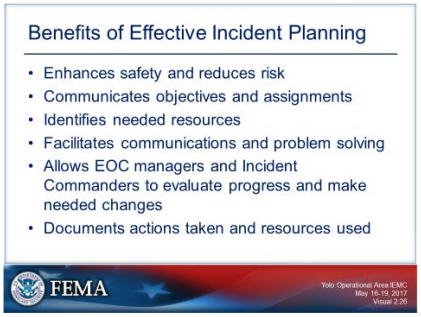

Visual 2.26

VISUAL 2.26 – BENEFITS OF EFFECTIVE INCIDENT PLANNING

- Enhances safety and reduces risk
- Communicates objectives and assignments
- Identifies needed resources
- Facilitates communications and problem solving
- Allows EOC managers and Incident Commanders to evaluate progress and make needed changes
- Documents actions taken and resources used

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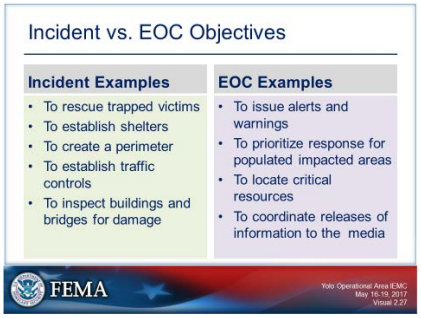

Visual 2.27

VISUAL 2.27 – INCIDENT VS. EOC OBJECTIVES

Incident Examples:

- To rescue trapped victims
- To establish shelters
- To create a perimeter
- To establish traffic controls
- To inspect buildings and bridges for damage

EOC Examples:

- To issue alerts and warnings
- To prioritize response for populated impacted areas
- To locate critical resources
- To coordinate releases of information to the media

The most important part of the planning process is the development of objectives.

Incident Action Plan - The objectives in an Incident Action Plan will focus on tactics.

EOC Plan - The objectives in an EOC Plan will focus on support and coordination.

Whenever possible, objectives should be **S M A R T**:

- **S -** Specific
- **M -** Measurable
- **A -** Achievable
- **R -** Realistic
- **T -** Time-Bound

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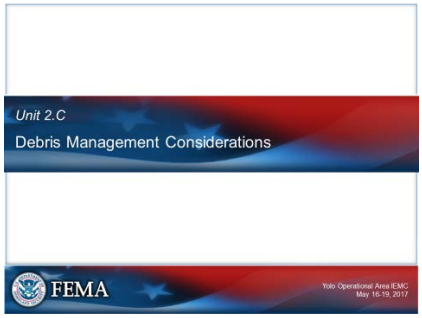
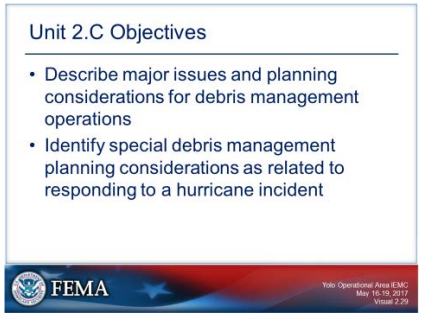


Visual 2.28

VISUAL 2.28 – UNIT 2.C

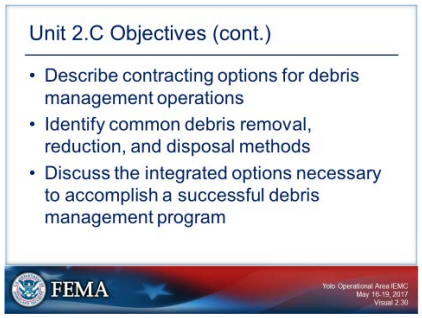
DEBRIS MANAGEMENT CONSIDERATIONS



Visual 2.29

VISUAL 2.29 – UNIT 2.C OBJECTIVES

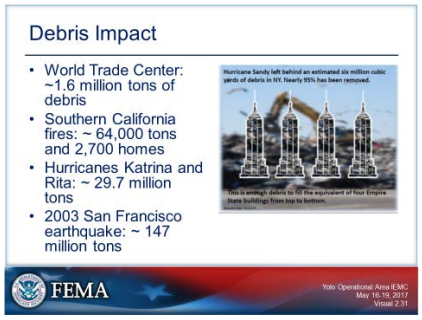
- Describe major issues and planning considerations for debris management operations
- Identify special debris management planning considerations as related to responding to a hurricane incident



Visual 2.30

VISUAL 2.30 – UNIT 2.C OBJECTIVES (CONT.)

- Describe contracting options for debris management operations
- Identify common debris removal, reduction, and disposal methods
- Discuss the integrated options necessary to accomplish a successful debris management program



Visual 2.31

VISUAL 2.31 DEBRIS IMPACT

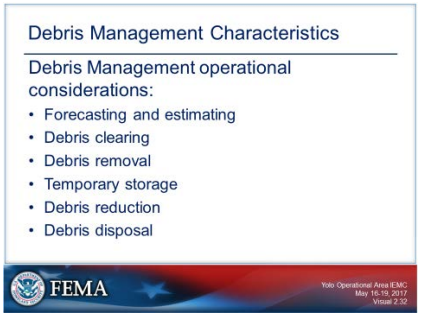
- World Trade Center: ~ 1.6 million tons of debris
- Southern California fires: ~ 64,000 tons and 2,700 homes
- Hurricanes Katrina and Rita: ~ 29.7 million tons
- 2003 San Francisco Earthquake: ~147 million tons

In recent years, debris removal operations have accounted for approximately 27 percent of disaster recovery costs. Debris quantities in natural events are increasing as a result of:

- Natural disasters are becoming more numerous and generating unprecedented amounts of debris.
- More development is present in disaster-prone areas.
- Large and more complex buildings, homes, and mobile home parks result in larger quantities of debris.

Visual 2.31 – Photo Alt Text - Debris pile photo with four outlines of the Empire State Building. Image Text: Hurricane Sandy left behind an estimated six million cubic yards of debris in NY. Nearly 95% has been removed. This is enough debris to fill the equivalent of four Empire State buildings from top to bottom.

Student Notes:



Visual 2.32

VISUAL 2.32 – DEBRIS MANAGEMENT CHARACTERISTICS

Debris Management operational considerations:

- Forecasting and estimating
- Debris clearing
- Debris removal
- Temporary storage
- Debris reduction
- Debris disposal

Forecasting the type and quantity of debris expected from a disaster event is an effective planning strategy. This forecast enables local staff to plan for needed response and recovery resources, the number and size of debris storage and reduction sites, and Final disposition of disaster-related debris. Techniques and methods for forecasting are continually being developed and refined.

Debris estimates are normally included in the disaster Preliminary Damage Assessment (PDA) post disaster. These estimates are used to determine a community's actual capability to handle the situation, the need for Debris Management Sites, contracts, and landfill space requirements. These estimates should include the quantity and mix of debris, its impact on critical facilities, and its impact on residential and commercial areas.

Debris Clearance refers to the clearance of debris that hinders immediate life-saving actions and poses an immediate threat to public health and safety.

Debris Removal refers to the removing and disposing of debris that hinders the orderly recovery of the community and poses less immediate threats to health and safety.

For more information on debris management refer to the Public Assistance Debris Management Guide, FEMA-325 (This link can also be accessed at the following URL: https://www.fema.gov/media-library/assets/documents/25649)

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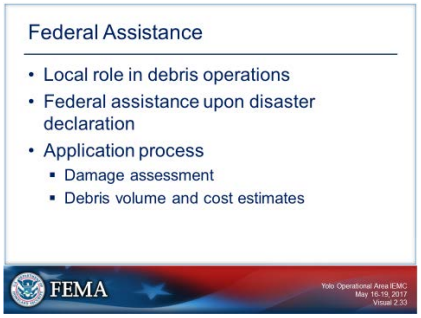

Visual 2.33

VISUAL 2.33 – FEDERAL ASSISTANCE

- Local role in debris operations
- Federal assistance upon disaster declaration
- Application process
  - Damage assessment
  - Debris volume and cost estimates

The ability to manage debris clearance, removal, and disposal is dependent on the size of the local jurisdiction, and the magnitude of the disaster.

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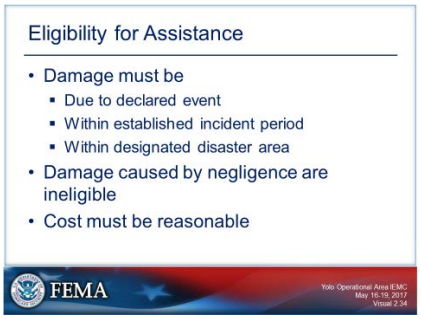

Visual 2.34

VISUAL 2.34 – ELIGIBILITY FOR ASSISTANCE

- Damage must be
  - Due to declared event
  - Within established incident period
  - Within designated disaster area
- Damage caused by negligence are ineligible
- Cost must be reasonable

FEMA may provide assistance with debris removal when:

- It is necessary to eliminate immediate threats to life, public health, and safety,
- Eliminate immediate threats of significant damage to improved public or private property,
- Ensure economic recovery of the affected community, or

- Mitigate the risk to life and property by removing structures and converting the land for specified uses.

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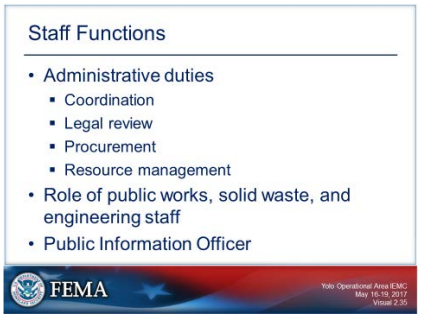
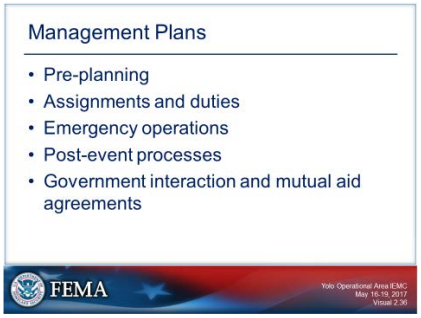


Visual 2.35

VISUAL 2.35 – STAFF FUNCTIONS

- Administrative duties
  - Coordination
  - Legal review
  - Procurement
  - Resource management
- Role of public works, solid waste, and engineering staff
- Public Information Officer

Student Notes:



Visual 2.36

VISUAL 2.36 – MANAGEMENT PLANS

- Pre-planning
- Assignments and duties
- Emergency operations
- Post-event processes
- Government interaction and mutual aid agreements

Debris Management Plans are developed to establish the jurisdiction's debris management strategy. This strategy will address the use of limited resources efficiently to assess, remove, and dispose of the various types of debris resulting from a disaster. The developed strategy would include mechanisms to coordinate debris operations among all governmental levels and mutual aid partners and to ensure that all involved in debris operations work within established parameters.

The Debris Management Plan should describe:

- The types of disasters most likely to occur.
- The degree of damage likely to occur.
- The type and quantity of equipment and personnel available within the jurisdiction for debris operations.
- Other sources of equipment and personnel available outside of the jurisdiction include private contractors.
- Staff safety, training, and exercising provision.
- The forecasted amount of debris for each type of disaster and the locations where the debris is most likely.
- Debris collection methods are identifying priorities, response operations, and recovery operations.
- Debris management sites, including locations for sorting, recycling, reducing, and disposal of the anticipated types of debris.
- Contracted services, including the services to be outsourced and the process for emergency contracting.
- Plans for removing debris from private property that poses an immediate threat to the public-at-large. Processes addressed should include condemnation and hazardous materials removal procedures.
- Public information considerations, including identification of the Public Information Officer, public service announcements (PSAs) for each type of disaster anticipated, and a strategy for distribution to the media.

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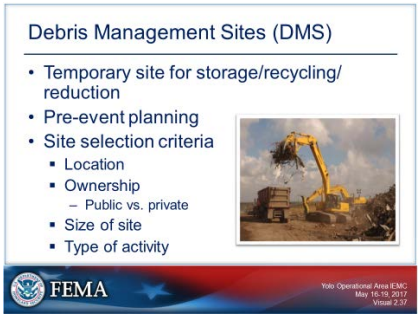


Visual 2.37

VISUAL 2.37 – DEBRIS MANAGEMENT SITES (DMS)

- Temporary site for storage/recycling/reduction
- Pre-event planning
- Site selection criteria
  - Location
  - Ownership
    - Public vs. private
  - Size of site
  - Type of activity

Debris management sites (DMSs) are temporary locations where debris can be hauled and segregated for recycling or reduction. In a small disaster, a community with available landfills or where debris is not easily reduced or recycled might not need to establish a DMS.

A current list of potential sites should be maintained in the Debris Management Plan. Identifying potential sites before a major natural disaster expedites activation of the debris removal operation. Site selection should be based on the location, ownership, size, and type of activity. Location, Size, and Type of activity will be discussed on the following slides.

- Site ownership:
- Use public lands to avoid costly leases
- Use private land only is public sites are unavailable.
- Have attorneys review leases to avoid closeout claims.

Visual 2.37 Photo Caption – Photo of construction equipment loading debris from piles onto a dump truck.

Student Notes:

Visual 2.38

VISUAL 2.38 – SITE LOCATION

When selecting a temporary debris site (TDS), the following factors should be considered:

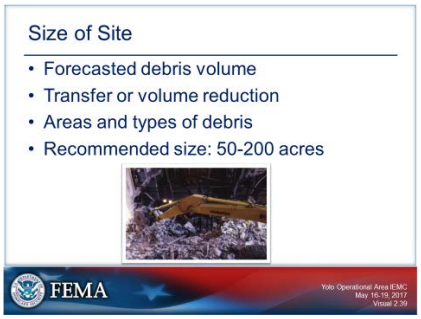
- Geography
  - Political location – NIMBY
- Traffic
- Residential areas
- Ingress and egress
- Environmental impacts and wetlands

Additional things to consider include:

- The impact of noise, traffic, and environment
- Look for good ingress/egress at sites to maximize efficiency of flow of traffic
- Impacts on neighboring communities of trucks hauling to sites
- Geological site conditions (stable ground, groundwater levels, soil, or rock relatively impervious).
- Prevailing winds which tend to carry air particulates and noise in a particular direction
- Visibility from the surrounding area
- Avoid environmentally sensitive areas
- Residential areas:
  - Around-the-clock light and noise

- Dust and traffic
- Smoke from burning activities
- Runoff

Student Notes:



Visual 2.39

VISUAL 2.39 – SIZE OF SITE

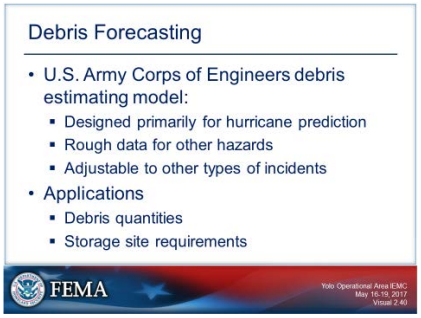
- Forecasted debris volume
- Transfer or volume reduction
- Areas and types of debris
- Recommended size: 50-200 acres

A significant component of the evaluation is to optimize the size of the site.

- Size depends on volume of debris to be collected and planned volume reduction methods
- Volume reduction rate related to how fast debris will move through the site
- Sites typically range between 50 and 200 acres
- Experience has shown that it takes an average of 100 acres to process 1 million cubic yards of debris

Visual 2.39 Photo Caption – Photo of construction equipment tearing down a damaged structure.

Student Notes:

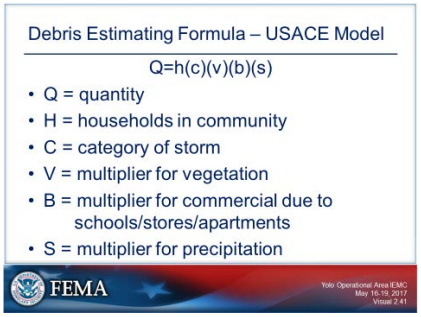


Visual 2.40

VISUAL 2.40 – DEBRIS FORECASTING

- U.S. Army Corps of Engineers debris estimating model:
  - Designed primarily for hurricane prediction
  - Rough data for other hazards
  - Adjustable to other types of incidents
- Applications
  - Debris quantities
  - Storage site requirements

Student Notes:



Visual 2.41

VISUAL 2.41 – DEBRIS ESTIMATING FORMULA – USACE MODEL

$$Q = h(c)(v)(b)(s)$$

- Q = quantity
- H = households in community
- C = category of storm
- V = multiplier for vegetation
- B = multiplier for commercial due to schools/ stores/apartments
- S = multiplier for precipitation

There are many different ways to forecast and estimate debris. The USACE Emergency Management staff developed a modeling methodology designed to forecast potential amounts of a hurricane (and tornado) generated debris. This model was initially based on actual data from Hurricanes Frederic, Hugo, and Andrew. It considers the category of Hurricane 1 through 5 and assigns a volume of debris based on

single-family homes. Multipliers are then used to compensate for other factors, such as tree cover, commercial density, and precipitation. The formula can be put into a spreadsheet and calculations made. The model has an accuracy of plus or minus 30 percent. In the formula, Q=h(c)(v)(b)(s):

- Q is the calculated volume of debris in cubic yards
- H is the number of households involved. If no better information is available, divide the population of the area by 3.
- C is a factor based on the category of hurricane, 1 through 5.
- V is the vegetative characteristic: 1.1 for light, 1.3 for medium, and 1.5 for heavy.
- B is a multiplier that takes into account areas that are not solely single-family residential. Built into this factor is the offsetting commercial insurance requirement.
- S is a storm precipitation multiplier that takes into account the fact that storms have heavy precipitation will generate more vegetative debris because of uprooting of trees.

Student Notes:

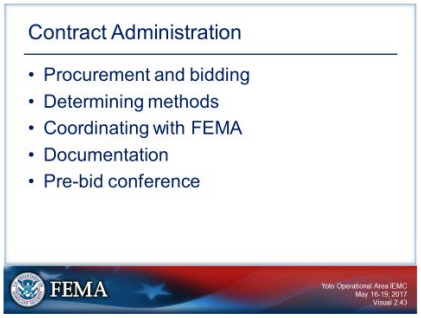
Visual 2.42

VISUAL 2.42 – CONTRACTING

Procurement functions:

- Administration
- Contracting and types of contracts
- Contract monitoring

Student Notes:



Visual 2.43

VISUAL 2.43 – CONTRACT ADMINISTRATION

- Procurement and bidding
- Determining methods
- Coordinating with FEMA
- Documentation
- Pre-bid conference

An applicant who contracts for debris removal services must:

- Use competitive bidding procedures
- Define the scope of work and monitoring requirements clearly in the request for proposals/bids
- Require bidders to provide references and proof of licensing and bonding
- Obtain a review of procurement processes and award of contracts from legal counsel
- Document the procedures used to obtain and award contracts

FEMA does not review or approve contracts. FEMA does provide technical assistance to ensure compliance with Federal laws, assistance in determining whether projects are eligible for funding, and information about whether costs are reasonable.

A Presidential Disaster Declaration does not allow communities to waive the competitive bidding process. Competitive bidding can be done is a short timeframe, sometimes within 24 to 48 hours. Noncompetitive

contracts are allowed only if the emergency is such that the contract award cannot be delayed by the amount of time required to obtain competitive bidding. An example would be when debris cuts off emergency vehicle access.

Student Notes:

Visual 2.44

VISUAL 2.44 – TYPES OF CONTRACTS

- Time and Materials Contracts
- Lump Sum Contracts
- Unit Price Contracts

Time and Materials: Time and Material Contracts may be used when a clear scope of work cannot be developed. They are limited to 70 hours and are suitable for early debris rights-of-way clearances. These contracts require close monitoring and detailed documentation.

Lump Sum: Lump Sum Contracts are used for debris removal from a specific area, with clearly defined scope of work and a total price. When the scope of work is well defined, it is easy to establish the cost of the work and to monitor the contractor.

Unit Price: Unit Price Contracts require trained contract monitors for an accurate accounting. Transport trucks must be accurately measured and numbered, and all truckloads must be documented.

Student Notes:

Visual 2.45

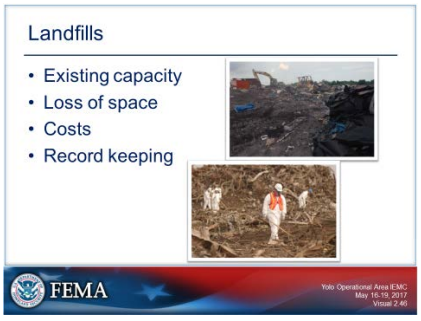
VISUAL 2.45 – CONTRACT MONITORING

- Need for close supervision and detailed record keeping
  - Potential Issues
    - Disposal and tipping fees
    - Mixed debris
    - Wet debris and dirt (weight issues)
    - Illegal dumping
    - Environmental precautions

Implementing an effective monitoring process means:

- Requiring all trucks to be measured periodically and the truck capacities calculated.
- Inspecting for techniques used to inflate debris quantities and watching for new techniques.
- Documenting questionable activities through aerial or ground-level photographs, or through sketches.

Student Notes:



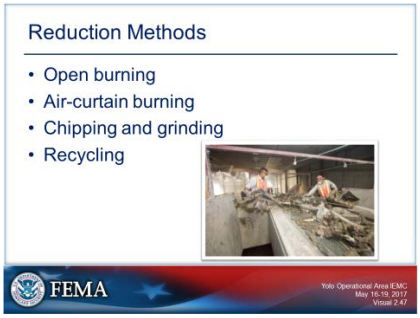
Visual 2.46

VISUAL 2.46 – LANDFILLS

- Existing capacity
- Loss of space
- Costs
- Record keeping

Visual 2.46 Photo Caption – Top Photo: Photo of a landfill. Bottom Photo: Photo of individuals searching through a landfill.

Student Notes:



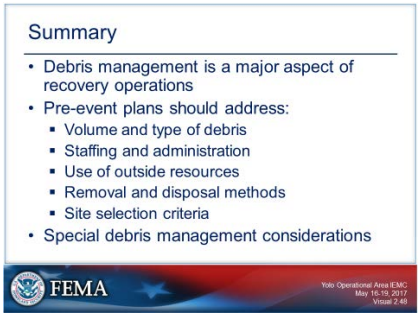
Visual 2.47

VISUAL 2.47 – REDUCTION METHODS

- Open burning
- Air-curtain burning
- Chipping and grinding
- Recycling

Visual 2.47 Photo Caption – Photo of individuals searching through a landfill.

Student Notes:



Visual 2.48

VISUAL 2.48 – SUMMARY

- Debris management is a major aspect of recovery operations
- Pre-event plans should address:
  - Volume and type of debris
  - Staffing and administration
  - Use of outside resources
  - Removal and disposal methods
  - Site selection criteria

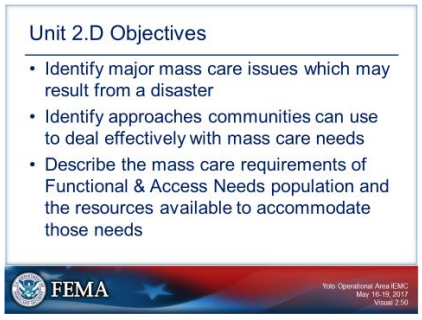
- Special debris management considerations

Student Notes:

Visual 2.49

VISUAL 2.49 – UNIT 2.D

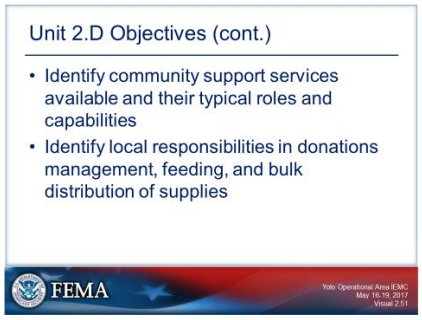
MASS CARE



Visual 2.50

VISUAL 2.50 – UNIT 2.D OBJECTIVES

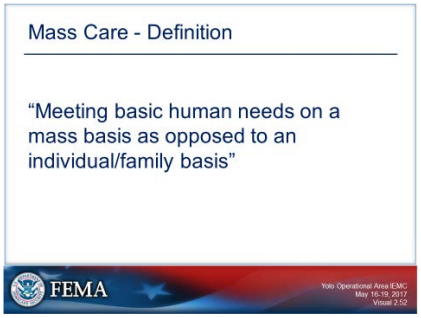
- Identify major mass care issues which may result from a disaster
- Identify approaches communities can use to deal effectively with mass care needs
- Describe the mass care requirements of Functional & Access Needs population and the resources available to accommodate those needs



Visual 2.51

VISUAL 2.51 – UNIT 2.D OBJECTIVES (CONT.)

- Identify community support services available and their typical roles and capabilities
- Identify local responsibilities in donations management, feeding, and bulk distribution of supplies



Visual 2.52

VISUAL 2.52 – MASS CARE – DEFINITION

"Meeting basic human needs on a mass basis as opposed to an individual/family basis"

Student Notes:

Visual 2.53

VISUAL 2.53 – FUNCTIONS OF MASS CARE

- Coordinate mass care and emergency assistance activities
- Sheltering
- Feeding
- Bulk distribution of emergency items
- Reunification services

Emergency Assistance Activities include support of people with disabilities and other access and functional needs; house pet and service animal support and mass evacuation support.

Sheltering is the provision of life-sustaining services in a safe, sanitary, and secure environment for survivors who have been affected by disasters and people who evacuate before disaster strikes. Sheltering includes: identifying facilities; providing life-sustaining and essential services; supporting the closing of shelters and placement of shelter residents into other housing solutions.

Feeding is the provision of foods, snacks, and hydration to the affected population and emergency workers. Feeding can be provided at fixed and mobile sites and are based on the demographic, cultural, dietary, and ethnic diversity of a community.

Distribution of Emergency Supplies. Emergency supplies are divided into three categories: life sustaining, comfort, and other essential supplies. Distribution

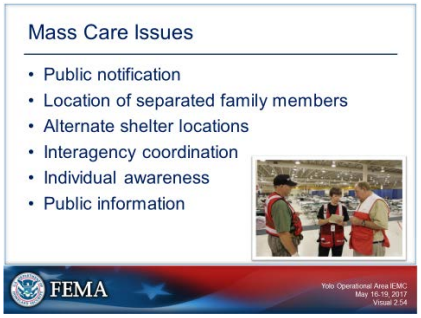
activities include acquiring and delivering of life-sustaining resources, hygiene items, and clean-up items to meet the urgent needs of disaster survivors. Additional support includes transportation, warehousing, equipment, technical assistance, and other mission critical services.

Reunification Services provide mechanisms that help displaced disaster survivors; including children, reestablish contact with family and friends. This service is critical for the personal reconnection of disaster survivors and their relatives who may have limited means to communicate and reunify. Reunification services include awareness of mechanisms (e.g. social media) as a means of communication and the physical reunification.

Mass Care and Emergency Assistance needs to "consider the needs of all members of the whole community, including children; individuals with disabilities and others with access and functional needs; those from religious, racial, and ethnically diverse backgrounds; and people with limited English proficiency. The potential contributions of all these individuals toward delivering core capabilities during incident response (e.g., through associations and alliances that serve these populations) should be incorporated into planning efforts. Staff must also consider those who own or have responsibility for animals both as members of the community who may be affected by incidents and as a potential means of supporting response efforts. This includes those with household pets, service and assistance animals, working dogs…" – National Response Framework

Visual 2.53 Photo Caption – Photo of an American Red Cross volunteer providing assistance to a disaster survivor.

Student Notes:



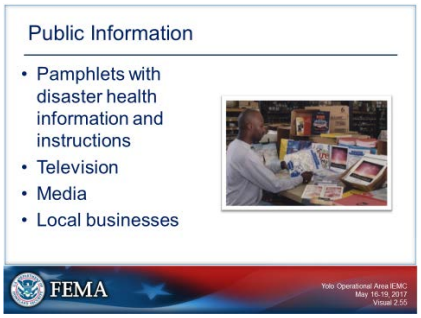
Visual 2.54

VISUAL 2.54 – MASS CARE ISSUES

- Public notification
- Location of separated family members
- Alternate shelter locations
- Interagency coordination
- Individual awareness
- Public information

Visual 2.54 Photo Caption – Photo of three Mass Care Volunteers having a discussion in a Shelter Location.

Student Notes:



Visual 2.55

VISUAL 2.55 – PUBLIC INFORMATION

- Pamphlets with disaster health information and instructions
- Television
- Media
- Local businesses

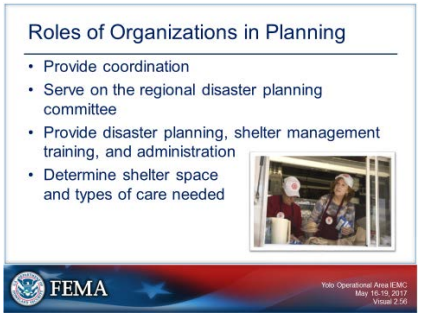
The public needs shelter information in any disaster. Information should include where shelters are located,

what evacuees should expect, and what they should bring with them.

These sources of public information should also urge people to find alternatives to public shelters and to make arrangements to stay with relatives and friends during evacuations, if possible. Although shelters must be available for those who need them, they should be a last resort.

<u>Visual 2.55 Photo Caption</u> – Photo of an individual sorting through disaster pamphlets.

<u>Student Notes:</u>



Visual 2.56

VISUAL 2.56 – ROLES OF ORGANIZATIONS IN PLANNING

- Provide coordination
- Serve on the regional disaster planning committee
- Provide disaster planning, shelter management training, and administration
- Determine shelter space and types of care needed

A mass care committee chaired by a local government health department or the local Red Cross chapter can provide coordination. One or more representatives from this committee should serve on the regional disaster planning committee. These community service organizations will usually refer regional issues to an organization's headquarters for decisions.

The mass care committee asks organizations to contribute data about the composition and health needs of the area's population. Planners will use this data to predict the portion of the population likely to go to shelters, the shelter space needed, and the types of care required.

Visual 2.56 Photo Caption – Photo of two disaster volunteers serving meals from a food truck.

Student Notes:

Visual 2.57

VISUAL 2.57 – ORGANIZATIONS INVOLVED IN MASS CARE

- Law enforcement
- County, regional, or other government health departments
- National Volunteer Organizations Active in Disaster (VOAD) (e.g. American Red Cross, Salvation Army)
- Community service organizations
- School boards

Coordination among these groups is vital for mass care to take place effectively. By coordinating relief efforts with such groups, the various mass care providers ensure that the full spectrum of victims' needs are met quickly, efficiently, and cost-effectively.

Student Notes:

Visual 2.58

VISUAL 2.58 – ORGANIZATIONS INVOLVED IN MASS CARE (PART 2)

- Religious or other nonprofit/volunteer organizations
- Community Emergency Response Team (CERT)
- Animal Control
- American Radio Relay League, Inc. (e.g. RACES and ARES)
- Transportation

Student Notes:

Visual 2.59

VISUAL 2.59 – ORGANIZATIONS INVOLVED IN MASS CARE (PART 3)

- Hospitals, nursing homes, and other community healthcare facilities
- Housing
- Public health and medical services
- Media
- Emergency Management

Student Notes:

Visual 2.60

VISUAL 2.60 – NATIONAL VOLUNTEER ORGANIZATIONS ACTIVE IN DISASTER (VOAD)

- Contains over 50 organization members
- Coordinates disaster services for humans and animals
- Prevents duplication of services
- VOAD Website (This link can also be accessed at the following URL: www.nvoad.org)

National VOAD is an association of organizations that mitigate and alleviate the impact of disasters by providing a forum promoting cooperation, communication, coordination and collaboration. For more information on VOADs refer to the VOAD website (This link can also be accessed at the following URL: www.nvoad.org).

Visual 2.60 Photo Caption – The Regional Center for Volunteerism, Handson Superior California Logo.

Student Notes:

Visual 2.61

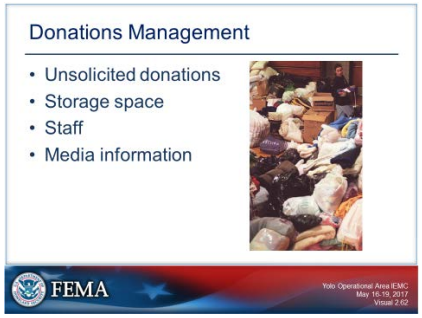
VISUAL 2.61 – COMMUNITY BASED ORGANIZATIONS

- C.E.R.T.
- Churches
- Business and professional
- Youth groups
- Communications organizations
- Humane society

Visual 2.61 Photo Caption – Top Left – California Citizens Corps Logo. Top Right – Disaster Healthcare

Volunteers California Seal. Middle Photo – City of West Sacramento CERT. Bottom Photo – YoloAres – Amateur Radio Emergency Services Logo.

Student Notes:



Visual 2.62

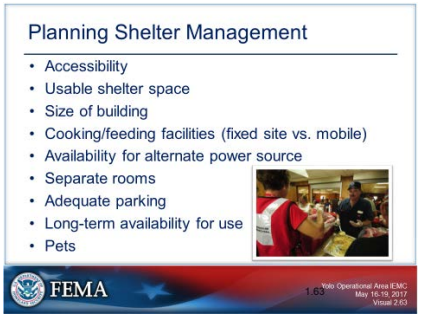
VISUAL 2.62 – DONATIONS MANAGEMENT

- Unsolicited donations
- Storage space
- Staff
- Media information

Donations Management is a function of the Supply/Procurement unit within the Logistics structure and Volunteer Management is a function of the Personnel unit within the Logistics structure, but that they work closely with Ops & ESF6 to do these tasks.

Visual 2.62 Photo Caption – Bags of unsorted donated items.

Student Notes:



Visual 2.63

VISUAL 2.63 – PLANNING SHELTER MANAGEMENT

- Accessibility
- Usable shelter space
- Size of building
- Cooking/feeding facilities (fixed site vs. mobile)
- Availability for alternate power source
- Separate rooms
- Adequate parking
- Long-term availability for use
- Pets

Plans need to account for feeding and for distribution of supplies that might be needed in addition to care provided at shelters.

Organizations operating shelters must address the issues of designating shelters, recruiting volunteers to staff them, and managing their facilities and operations.

In the response phase, mass care organizations also must plan for helping the emergency workers with feeding and sheltering. Designating ahead of time which organizations will care for the emergency workers and their families is crucial.

Student Notes:

Visual 2.64

VISUAL 2.64 – SHELTERING

Potential legal issues:

- Privacy
- Care for vulnerable populations, accessibility
- Evacuee tracking, family reunification
- Unaccompanied minors or adults
- Unclaimed animals and lost property
- Acts of violence
- Sheltering of animals – liability issues

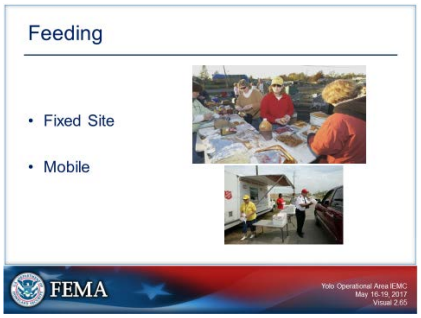
Potential sheltering issues include:

- Intake identifications (refusal to show ID, sexual offenders, other). Note: State laws may differ regarding registration at shelters. For example, persons coming to shelters may not be required to register. It is important to be familiar with any legal provisions that govern sheltering in your situation.
- Care for vulnerable populations
- Accessibility of shelter facilities for individuals with access and functional needs (communication, physical access)
- Evacuee tracking systems—privacy issues
- Family reunification
- Unaccompanied minors or adults
- Unclaimed animals and lost property
- Acts of violence
- Sheltering of animals—liability issues

Don’t assume all shelters are run by the American Red Cross (ARC). In some States, the majority are not. They may be government-run, under contract with the ARC, or under some other arrangement. They may be located in schools, churches, public event spaces, or anywhere that works.

"You do the best you can with what you've got." As one emergency manager put it, "Sheltering is an issue you want to get ahead of."

Student Notes:



Visual 2.65

VISUAL 2.65 – FEEDING

Fixed Site

Mobile

Visual 2.65 Photo Caption: Top photo - Volunteers providing meals at a fixed site. Bottom photo – Salvation Army Canteen

Student Notes:

Visual 2.66

VISUAL 2.66 – INDIVIDUALS WITH DISABILITIES, ACCESS, AND FUNCTIONAL NEEDS

- Hearing impaired
- Visually impaired
- Insulin-dependent diabetics
- Elderly with physical and psychosocial needs
- Recent post-operative patients
- Physically handicapped

- Electrically dependent patients

General shelter conditions may not be able to foster the safety and well-being of many special needs individuals without certain accommodations and additional care. It is important to remember that all services for the general population need to be available for all individuals; that means equal access to programs, physical access for sites, and effective communications systems.

Children represent approximately 25% of our nation's population, and their specific needs (different than the general population) must continue to be identified and addressed throughout all planning and guidance to include children and children with access and functional needs.

The Americans with Disabilities Act mandates that service animals remain with a person with a disability through all phases of disaster response and recovery. Mass care providers should consider how they may need to collaborate to address a service animal's needs (feeding, veterinary care, routine care) within a general population shelter.

Visual 2.66 Photo Caption – Photo of a family member and a medical volunteer with a patient in a medical shelter.

Student Notes:

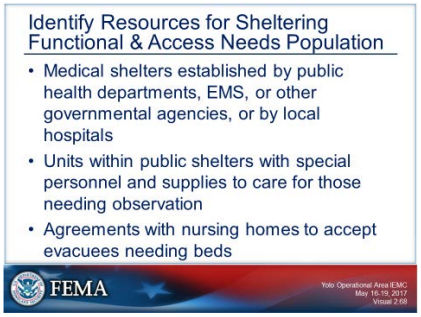
Visual 2.67

VISUAL 2.67 – INDIVIDUALS WITH DISABILITIES, ACCESS, AND FUNCTIONAL NEEDS (CONT.)

- I.V. patients
- Mentally disabled persons
- Bedridden persons
- Respiratory patients requiring oxygen
- Colostomy and dialysis patients
- Non-English speaking populations

Visual 2.67 Photo Caption – Photo of a volunteer, family member, and a disaster survivor with functional and access needs being taken into a medical shelter.

Student Notes:



Visual 2.68

VISUAL 2.68 – IDENTIFY RESOURCES FOR SHELTERING FUNCTION & ACCESS NEEDS POPULATION

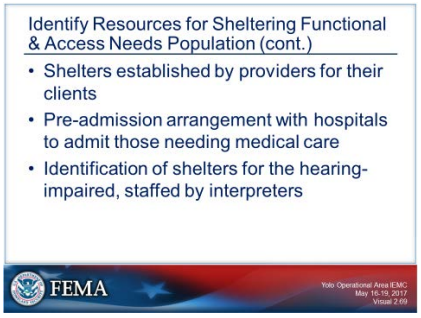
- Medical shelters established by public health departments, EMS, or other governmental agencies, or by local hospitals
- Units within public shelters with special personnel and supplies
- Agreements with nursing homes to accept evacuees needing beds

The first step in formulating plans for those with special needs is to identify the type and number of those individuals in your community. Some states require local governments to register persons with special needs, but registry along provides incomplete information. Better sources for identification information are agencies serving individuals with special needs including:

- Social service agencies
- Home health agencies
- Advocacy groups
- Senior citizen groups

Once target populations are identified, these groups can also help to explore the community's resources for the identified population and assist with planning. The type of plan best suited to a particular community will depend on that community's needs and resources.

Student Notes:



Visual 2.69

VISUAL 2.69 – IDENTIFY RESOURCES FOR SHELTERING FUNCTIONAL & ACCESS NEEDS POPULATION (CONT.)

- Shelters established by providers for their clients
- Pre-admission arrangement with hospitals to admit those needing medical care
- Identification of shelters for the hearing-impaired, staffed by interpreters

Student Notes:

Visual 2.70

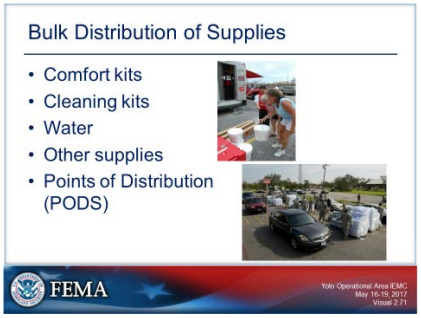
VISUAL 2.70 – PETS IN DISASTERS

- Pet Evacuation and Transportation Standards (PETS) Act
- Rescue and care
- Temporary shelters
- Animal lost and found
- The Humane Society of the U.S. (This link can also be accessed at the following URL: http://www.hsus.org)
- American Veterinary Medical Association (This link can also be accessed at the following URL: https://www.avma.org)

The PETS Act amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act to ensure that State and local emergency preparedness plans address the needs of individuals with household pets and service animals following a major disaster or emergency. For more information on the PETS Act refer to the American Veterinary Medical Association's website (This link can also be accessed at the following URL: https://www.avma.org/KB/Resources/Reference/disaster/Pages/PETS-Act-FAQ.aspx).

Visual 2.70 Photo Caption – Top Photo: Photo of a line of dogs in their kennels within a pet shelter. Bottom Photo: Photo of two horses being handled by a volunteer at a pet shelter.

Student Notes:



Visual 2.71

VISUAL 2.71 – BULK DISTRIBUTION OF SUPPLIES

- Comfort kits
- Cleaning kits
- Water
- Other supplies
- Points of Distribution (PODS)

Visual 2.71 Photo Caption – Top Photo: Photo of disaster survivors and volunteers picking up supplies Bottom Photo: Photo of National Guard members placing packs of water in vehicles of disaster survivors in a distribution line.

Student Notes:

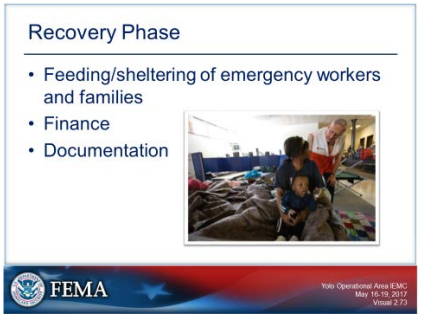
Visual 2.72

VISUAL 2.72 – PREPAREDNESS ACTIVITIES

- Public education
- Media Advisories
- Publications
- Internet

Visual 2.72 Photo Caption – Individuals creating an at home emergency kit.

Student Notes:



Visual 2.73

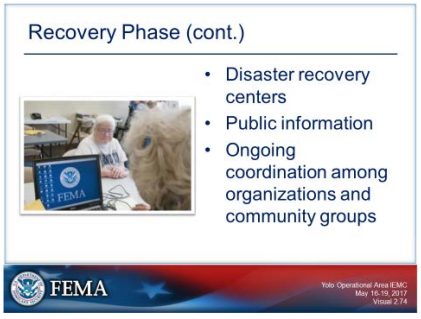
VISUAL 2.73 – RECOVERY PHASE

- Feeding/sheltering of emergency workers and families
- Finance
- Documentation

Planning for long-term mental health care, family services, financial aid, and support after a disaster is necessary for mass care to be effective.
During the recovery phase, residents begin to leave shelters, and some shelters may be able to close. After an incident, the recovery phase will focus more on physical and mental health needs of victims of the disaster. Family services will also continue for a long period.

Visual 2.73 Photo Caption – Photo of a Red Cross volunteer providing assistance to a mother and child at a disaster shelter.

Student Notes:



Visual 2.74

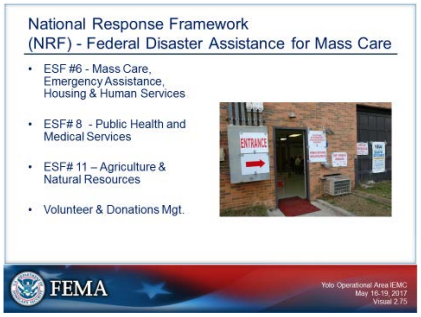
VISUAL 2.74 – RECOVERY PHASE (CONT.)

- Disaster recovery centers
- Public information
- Ongoing coordination among organizations and community groups

Ongoing coordination between organizations can provide assistance to individuals and families to re-establish suitable housing. However, depending on the scale of the damage and resources available, some people may continue to need shelter for weeks or even months.

<u>Visual 2.74 Photo Caption</u> – Photo of a FEMA volunteer providing assistance to a disaster survivors at a disaster recovery center.

<u>Student Notes:</u>

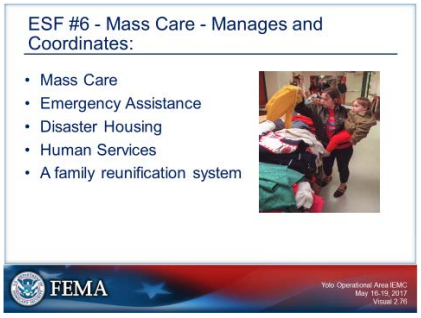


Visual 2.75

VISUAL 2.75 – NATIONAL RESPONSE FRAMEWORK (NRF) – FEDERAL DISASTER ASSISTANCE FOR MASS CARE

- ESF #6 - Mass Care, Emergency Assistance, Housing & Human Services
- ESF# 8 - Public Health and Medical Services
- ESF# 11 – Agriculture & Natural Resources
- Volunteer & Donations Mgt.

<u>Student Notes:</u>



Visual 2.76

VISUAL 2.76 – ESF #6 MASS CARE – MANAGES AND COORDINATES:

- Mass Care
- Emergency Assistance
- Disaster Housing
- Human Services
- A family reunification system

<u>Visual 2.76 Photo Caption</u> - Individuals searching through clothing at a shelter.

Student Notes:

Visual 2.77

VISUAL 2.77 – ESF #8 PUBLIC HEALTH AND MEDICAL SERVICES

- Public health
- Medical
- Mental health services
- Mass fatality management

Visual 2.77 Photo Caption: Individuals providing medical care to a disaster survivor.

Student Notes:

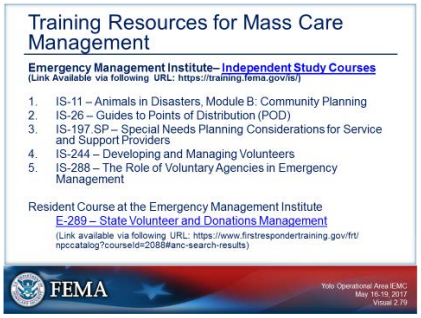
Visual 2.78

VISUAL 2.78 – ESF #11 – AGRICULTURE & NATIONAL RESOURCES

- Nutrition
- 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

Visual 2.78 Photo Caption - Disaster volunteers sorting through supplies.

Student Notes:



Visual 2.79

VISUAL 2.79 – TRAINING RESOURCES FOR MASS CARE MANAGEMENT

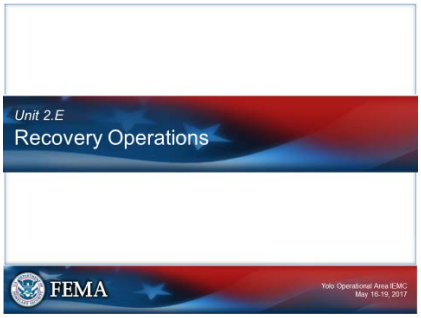
Emergency Management Institute– Independent Study Courses (Link Available via following URL: https://training.fema.gov/is/)

1. IS-11 – Animals in Disasters, Module B: Community Planning
2. IS-26 – Guides to Points of Distribution (POD)
3. IS-197.SP – Special Needs Planning Considerations for Service and Support Providers
4. IS-244 – Developing and Managing Volunteers
5. IS-288 – The Role of Voluntary Agencies in Emergency Management

Resident Course at the Emergency Management Institute

1. E-289 – State Volunteer and Donations Management (Link available via following URL: https://www.firstrespondertraining.gov/frt/npccatalog?courseId=2088#anc-search-results)

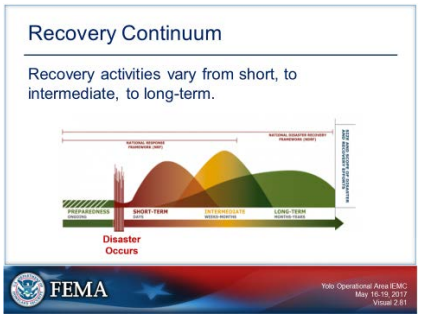
Student Notes:



Visual 2.80

VISUAL 2.80 – UNIT 2.E

RECOVERY OPERATIONS



Visual 2.81

VISUAL 2.81 – RECOVERY CONTINUUM

Recovery activities vary from short, to intermediate, to long-term.

The recovery process is a sequence of interdependent and often concurrent activities that progressively advance a community toward a successful recovery. However, decisions made and priorities set early in the recovery process by a community will have a cascading effect on the nature and speed of the recovery progress.

Four periods and their duration are shown in the graphic:

- Preparedness (ongoing, before the disaster)
- Short-term recovery (days)
- Intermediate recovery (weeks to months)
- Long-term recovery (months to years)

The vertical dimension shows the size and scope of disaster and recovery efforts.

Pre-disaster Preparedness
Examples include:

- Pre-disaster recovery planning
- Mitigation planning and implementation
- Community capacity and resilience building
- Conducting disaster preparedness exercises
- Partnership building

- Articulating protocols in disaster plans for services to meet the emotional and health care needs of adults and children

Short-Term Recovery
Examples include:

- Mass care/sheltering:
- Provide integrated mass care and emergency services
- Debris:
- Clear primary transportation routes
- Business:
- Establish temporary or interim infrastructure to support business re-openings
- Reestablish cash flow
- Emotional/psychological
- Identify adults and children who would benefit from counseling or behavioral health services and begin treatment
- Public health and health care:
- Provide emergency and temporary medical care and establish appropriate surveillance protocols
- Mitigation activities:
- Assess and understand risks and vulnerabilities

Intermediate Recovery

Examples include:

- Housing:
- Provide accessible interim housing solutions
- Debris/infrastructure:
- Initiate debris removal
- Plan immediate infrastructure repair and restoration
- Business:
- Support reestablishment of businesses where appropriate

- Support the establishment of business recovery one-stop centers
- Emotional/psychological:
- Engage support networks for ongoing care
- Public health and health care:
- Ensure continuity of care through temporary facilities
- Mitigation activities:
- Inform community members of opportunities to build back stronger

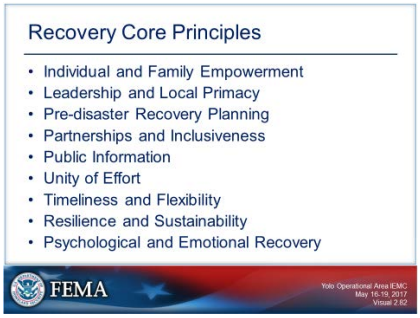
Long-Term Recovery
Examples include:

- Housing:
- Develop permanent housing solutions
- Infrastructure:
- Rebuild infrastructure to meet future community needs
- Business:
- Implement economic revitalization strategies
- Facilitate funding to business rebuilding
- Emotional/ psychological:
- Follow up for ongoing counseling, behavioral health, and case management services
- Public health and health care:
- Reestablishment of disrupted health care facilities
- Mitigation activities
- Implement mitigation strategies

Visual 2.81 Diagram Alternative Text - This figure illustrates that recovery activities which occur along varying timeframes (short, intermediate and long-term) overlap with one another overtime. The timeline begins with a period of ongoing preparedness, just before we see the disaster on the timeline. Immediately following the disaster is the short-term period, usually contained within a few days. This period overlaps with both the intermediate (weeks to months) and long-term (months

to years) timeframes. Continuing down the timeline we see the intermediate timeframe overlapping into both the short and long-term timeframes, and finally the long-term timeframe overlapping both the two timeframes before it. The graphic also depicts the work of the National Response Framework taking place from preparedness to approximately half way through the intermediate timeframe whereas the National Disaster Recovery Framework extends across the whole timeline.

Student Notes:



Visual 2.82

VISUAL 2.82 – RECOVERY CORE PRINCIPLES

- Individual and Family Empowerment
- Leadership and Local Primacy
- Pre-disaster Recovery Planning
- Partnerships and Inclusiveness
- Public Information
- Unity of Effort
- Timeliness and Flexibility
- Resilience and Sustainability
- Psychological and Emotional Recovery

The Recovery Core Principles serve as a guideline for all recovery activities and programs. The principles are briefly described as follows:

- **Individual and Family Empowerment**—Individuals and households are encouraged to engage in their own recovery.
- **Leadership and Local Primacy**—It is important to remember that all disasters are Local; therefore,

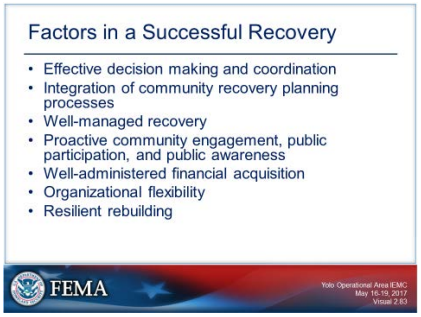
Local governments must be partners in all recovery actions taken on their behalf.

- **Pre-disaster Recovery Planning**—Individuals, households, and Local governments can enhance their recovery from disaster by taking preparedness measures such as developing a Pre-disaster Recovery Plan, using disaster-resistant building practices, and participating in or conducting training and exercise programs.
- **Partnerships and Inclusiveness**—Successful recovery involves the support and involvement of all stakeholders within the community and with outside entities that are assisting in recovery operations.
- **Public Information**—The public must be kept informed of the status of recovery operations if they are to support and participate in recovery activities.
- **Unity of Effort**—The combined efforts of all stakeholders will help achieve an effective recovery.
- **Timeliness and Flexibility**—There is no established time frame for recovery to be accomplished. It depends on the makeup of the community, the nature and complexity of the incident, and the combined efforts of all stakeholders.
- **Resilience and Sustainability**—Successful recovery incorporates mitigation actions and best practices to help ensure the future viability of the community. It also involves the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies.
- **Psychological and Emotional Recovery**—Disaster recovery isn't just about restoring places and things. It also involves the actions to help individuals and households cope with stress, illness, and uncertainty resulting from the disaster.

Instructor Note: You may wish to distinguish between the concepts of sustainability and resilience:

- Sustainability—having resources in place to sustain a particular function
- Resiliency—having the fortitude to bounce back

Student Notes:

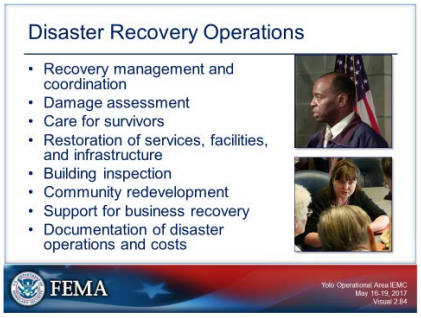


Visual 2.83

VISUAL 2.83 – FACTORS IN A SUCCESSFUL RECOVERY

- Effective decision making and coordination
- Integration of community recovery planning processes
- Well-managed recovery
- Proactive community engagement, public participation, and public awareness
- Well-administered financial acquisition
- Organizational flexibility
- Resilient rebuilding

Student Notes:



Visual 2.84

VISUAL 2.84 – DISASTER RECOVERY OPERATIONS

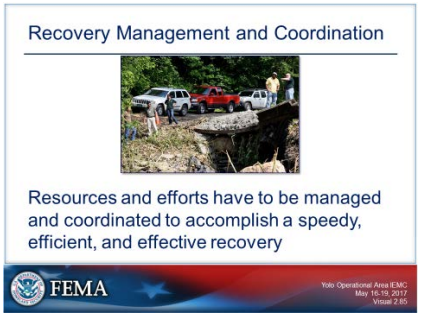
- Recovery management and coordination
- Damage assessment
- Care for survivors
- Restoration of services, facilities, and infrastructure
- Building inspection
- Community redevelopment

- Support for business recovery
- Documentation of disaster operations and costs

Disaster recovery operations will vary with the type, scope, and duration of the disaster

Visual 2.84 Photo Caption*: Top photo – An individual standing next to the American flag. Bottom photo – Individuals conducting a meeting.*

Student Notes:



Visual 2.85

VISUAL 2.85 – RECOVERY MANAGEMENT AND COORDINATION

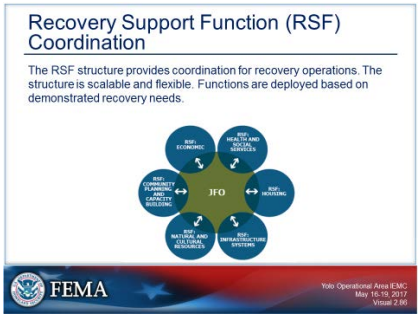
Resources and efforts have to be managed and coordinated to accomplish a speedy, efficient, and effective recovery.

Many partners are involved in a community's disaster recovery. Each partner contributes resources and capabilities and represents different stakeholders within the community.

These resources and efforts have to be managed and coordinated in order to accomplish a speedy, efficient, and effective recovery. Community leaders are ultimately responsible for the recovery of their community; however, they rely on the emergency management team in general, and the Emergency Manager specifically, to manage and coordinate the disaster recovery effort.

Visual 2.85 Photo Caption - Individuals looking at a collapsed road.

Student Notes:



Visual 2.86

VISUAL 2.86 – RECOVERY SUPPORT FUNCTION (RSF) COORDINATION

The RSF structure provides coordination for recovery operations. The structure is scalable and flexible. Functions are deployed based on demonstrated recovery needs.

The Recovery Support Function (RSF) coordinating structure described in the previous module is scalable and adaptable to meet different levels and types of needs, as well as specific recovery requirements of large to catastrophic incidents.

Each RSF has a predesignated coordinating agency that works with the Federal Disaster Recovery Coordinator (FDRC) to promote communication and collaboration among its members.

This tiered leadership structure helps to accommodate the rapid surge of Federal resources that may be needed to assist in large-scale or catastrophic incidents.

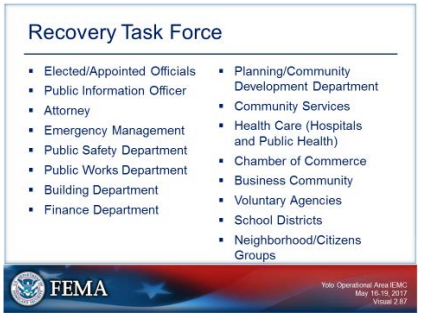
Through the RSFs, Federal resources are organized into a number of field teams led by the most appropriate primary agencies to cover multiple localities.

Each team is then adapted to comprise only the RSF functions (or the Federal department or agency) that have the authority, expertise, and resources appropriate to the locality assigned. Based on assessments and recovery management structures established by State and Local officials, only the RSFs that are needed deploy.

Visual 2.86 Diagram Alternative Text:

Flow diagram with JFO in the center and the following RSFs connected to the center by a double sided arrow -
RSF: Economic
RSF: Health and Social Services
RSF: Housing
RSF: Infrastructure Systems
RSF: Natural and Cultural Resources
RSF: Community Planning and Capacity Building

Student Notes:



Visual 2.87

VISUAL 2.87 – RECOVERY TASK FORCE

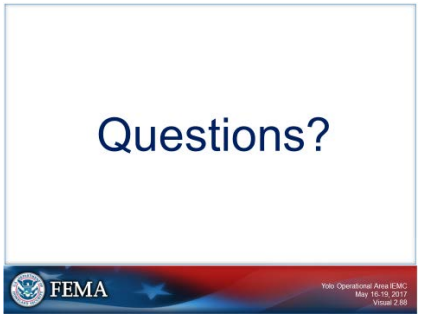
Some jurisdictions establish a local Recovery Task Force to guide the community through recovery. The visual lists potential members of a Recovery Task Force:

- Elected/Appointed Officials
- Public Information Officer
- Attorney
- Emergency Management
- Public Safety Department
- Public Works Department
- Building Department
- Finance Department
- Planning/Community Development Department
- Community Services
- Health Care (Hospitals and Public Health)
- Chamber of Commerce
- Business Community
- Voluntary Agencies
- School Districts

- Neighborhood/Citizens Groups

In many cases, the Emergency Manager leads the Recovery Task Force. If a community does not create a Recovery Task Force, the responsibility for managing and coordinating recovery resources and activities is still often accomplished by the Emergency Manager.

Student Notes:



Visual 2.88

VISUAL 2.88 - QUESTIONS

UNIT 3: TABLETOP EXERCISE

May 17, 2017

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Yolo County IEMC Hazardous Material – Anhydrous Ammonia Tabletop Exercise

Situation Manual

May 17, 2017

This Situation Manual (SitMan) provides exercise participants with all the necessary tools for their roles in the exercise. Some exercise material is intended for the exclusive use of exercise planners, facilitators, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan.

Rev. April 2013
HSEEP-DD05

EXERCISE OVERVIEW

Exercise Name	Yolo County, IEMC Hazardous Materials – Anhydrous Ammonia
Exercise Dates	May 17, 2017
Scope	This exercise is discussion based TTX, planned for four hours.
Mission Area(s)	Response and Recovery

Exercise Objective	Core Capability
Assist participants' knowledge, skills, and abilities to effectively support all-hazards emergency response from an EOC.	Planning, Public Information and Warning,
Allow participating locations to share real-time Hazardous Materials related preparation, response and recovery solutions with all participants.	Operational Coordination,
Enable participants to better coordinate response operations with counterparts from Federal agencies, State governments, local governments, private sector organizations, and nongovernmental agencies.	Mass Care Services, Protection and Law Enforcement, Public Health, Healthcare and Emergency Management Services, Situational Assessment and Health and Social Services

Threat or Hazard	Anhydrous Ammonia
Scenario	This TTX was designed around an Anhydrous Ammonia release.
Sponsor	FEMA – Emergency Management Institute (EMI)
Participating Organizations	See IEMC roster of participants.
Point of Contact	Douglas M. Kahn at douglas.kahn@fema.dhs.gov or 301-477-7645 General Inquires: fema-emi-iemb@fema.dhs.gov or call 301-447-1381 Dana Carey, Office of Emergency Services Coordinator dana.carey@yolocounty.org or (530) 406-4933

GENERAL INFORMATION

Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Exercise Objective	Core Capability
Assist participants' knowledge, skills, and abilities to effectively support all-hazards emergency response from an EOC.	Planning, Public Information and Warning,
Allow participating locations to share real-time Hazardous Materials related preparation, response and recovery solutions with all participants.	Operational Coordination,
Enable participants to better coordinate response operations with counterparts from Federal agencies, State governments, local governments, private sector organizations, and nongovernmental agencies.	Mass Care Services, Protection and Law Enforcement, Public Health, Healthcare and Emergency Management Services, Situational Assessment and Health and Social Services

Table 1. Exercise Objectives and Associated Core Capabilities

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Observers.** Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.
- **Facilitators.** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key Exercise Planning Team members also may assist with facilitation as subject matter experts (SMEs) during the exercise.

Exercise Structure

This exercise will be a multimedia, facilitated exercise. Players will participate in the following three modules:

- Module 1: Initial Response
- Module 2: Extended Response

- Module 3: Recovery

Each module begins with a multimedia update that summarizes key events occurring within that time period. After the updates, participants review the situation and engage in functional group discussions of appropriate prevention/protection/mitigation/response/recovery issues.

Exercise Guidelines

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent-setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve prevention/protection/mitigation/response/recovery efforts. Problem-solving efforts should be the focus.

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively affect their participation. During this exercise, the following apply:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- All players receive information at the same time.

Exercise Evaluation

Players will be asked to complete participant feedback forms. These documents, coupled with facilitator observations and notes, will be used to evaluate the exercise.

MODULE 1: Initial Response

Date: Sunday, May 21
Time: 1700 hrs
Location: Yolo County, CA

The Calgene (Monsanto) plant in Davis is a multinational agrochemical and agricultural biotechnology corporation manufacturing and supply company that employs 300 people.

Approximately one month ago, due to the age of the facility, the roof repaired. These repairs were programmed into the manufacturing cycle as not to interfere with any current operations being performed on site. The roof was repaired by Ace Roofing of Reno, NV the lowest bidder. Virtually unknown in the Davis/Woodland area, this company was previously used to repair a Montesano facility in Salinas.

Monday, May 22 – 0115 hrs
Winds gusts up to 40 mph have persisted overnight had a sustained wind speed of 15 mph out of the southwest. Just after midnight, these winds began to compromise the structure in the area of previously damaged area of the roof. Due to substandard repair work on the roof, the ceiling has collapsed releasing Anhydrous Ammonia stored in an industrial tank.

A few calls into 911 from the area of Pomona Drive has alerted Davis Police to investigate a loud "crashing sound".

Monday, May 22 – 0125 hrs
A Davis Police Officer has arrived at the location to see the facility in ruin, knowing this facility stores hazardous materials, they have retreated to a location to better assess the facility. Davis fire department has been requested and advised that this will be a hazardous material response.

The Davis fire department arrives on the scene, setting up incident command, and immediately requests support from other fire units in surrounding jurisdictions, and the police.

Fire department preplans of the facility indicate that Anhydrous Ammonia is stored at the facility Placard 1005, ERG Guide 125. Firefighters put on self-contained breathing apparatus (SCBA) masks as they see a plume moving slowly away from the factory along the ground.

The Incident Commander requests two additional alarms and a HazMat Team response activation. The IC also has dispatch notify local law enforcement that a hazmat spill has occurred. Additionally, the first responders to the scene begin complaining of respiratory irritation and small skin burns on their hands. Immediate decontamination and medical attention is needed.

The IC has advised per the 2016 Emergency Response Guide to start an initial evacuation of a half-mile around the plant and downwind of 1.3 miles with the possibility of having to evacuate the area up to 2 miles. Due to the time of day, most will shelter in place.

Key Issues

- Preplans show Anhydrous Ammonia stored in the facility.
- First responders have arrived and require hazardous material and mutual aid assistance.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

1. What preparedness actions have you been taking to prepare for hazardous materials incidents?

2. Will the area surrounding the chemical plant need to be evacuated? Who would make these decisions and what resources would be required?

3. How will responders identify the substance released?

4. Are the community and county resources sufficient to respond to the disaster?

5. What data points are you planning to monitor for Situational Awareness (SA) and how will you share your SA to develop a Common Operating Picture (COP)?

6. What is your public information strategy at this point and what methods/means are you using to provide credible and accurate information?

7. Should the City EOC open for this level of event? Should the Operational Area EOC open?

MODULE 2: Extended Response

Date: Monday, May 22
Time: 0400 hrs
Location: Yolo County, CA

Monday, May 22 – 0400 hrs
Several firefighters and police officers are having coughing fits and are clearly suffering from distress. Those arriving to the scene first were exposed to concentrations of toxic gas between 350-750 ppm and begin to vomit and convulse. One firefighter loses consciousness and later dies. Emergency Medical Service (EMS) technicians quickly take three firefighters and two police officers to Sutter Davis Hospital, where they are treated for severe exposure to Anhydrous Ammonia gas. Incident Command is struggling to locate the manager of the chemical plant to find out the exact contents and volume of chemicals in the plant.

Police begin evacuating residents from the surrounding area and conducting door-to-door notifications.

Monday, May 22 – 0435 hrs
As more police officers arrive on-scene, a large perimeter of isolation is established. Downwind to the northeast, police begin to evacuate all residences and businesses near the plant but are asking for guidance on the size of the area to be evacuated.

Monday, May 22 – 0538 hrs
Local and national media representatives arrive on the scene. TV camera crews have gathered at the edge of the isolation zone and are broadcasting live feeds. Media representatives are requesting information from responders and plant workers. Two media helicopters are circling the plant, and broadcasting live aerial footage. Some of the footage shows the gas cloud slowly moving around the perimeter of the building along the ground toward the northeast.

Monday, May 22 – 0555 hrs
While evacuation efforts continue, the gas plume enters a populated part of Davis northeast of the plant, engulfing entire city blocks as it moves northeast at 10-15 mph. With concentrations still well above 150 ppm, the toxic plume presents a major danger to those who have not evacuated. Police and firefighters rush to get the remaining people out of harm's way, but many elderly people are unable to move quickly enough to stay ahead of the plume. Traffic is congested and many people leave their vehicles in the street to flee on foot, creating more congestion on the roads. Persons unable to evacuate quickly become too disoriented to self-evacuate; medical transports are necessary but any responders entering the area would be putting themselves in great danger as well, even with PPE.

It is estimated that nearly 200 people are suffering symptoms of severe Anhydrous Ammonia exposure and require immediate removal from this high concentration area.

Monday, May 22 – 0600 hrs
First responders inside the Hot Zone do their best to assist in evacuating residents to safety.

Monday, May 22 – 0610 hrs
The Yolo EMS Agency (YEMSA), having notified area hospitals of the crisis and to expect a drastic influx of Anhydrous Ammonia and exposure victims, is currently coordinating the transport of victims to area medical facilities.

Monday, May 22 – 0635 hrs
State and Federal authorities have arrived onsite at the request of the State governor. State and Federal authorities are inquiring about what assistance they will be asked to provide.

Key Issues

- First responders are taken to the local hospital with symptoms of chemical exposure.
- Isolation perimeters and evacuation zones are established.
- Assistance is requested from neighboring communities and the State.
- Toxic gasses enter populated areas and responders struggle to assist residents with the evacuation.
- Assistance from the Hazardous Materials Team and neighboring jurisdictions speed up response efforts.
- Chemical release identified as Anhydrous Ammonia.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

1. What is the field's response priorities? What are the EOC's support priorities? How will resources be prioritized between rescue of citizens and controlling the hazardous materials spill?

2. What information should be communicated to the public at this point? How can residents be encouraged to evacuate without causing panic or impeding response efforts?

3. What are the potential short and long-term environmental impacts of the incident?

4. How would an EOC gain SA and share information to achieve a COP?

5. What health risks do responders face at this point?

6. How long will residents be forced to remain out of their homes? Who makes this determination?

MODULE 3: Recovery

Date: Monday, May 22
Time: 0800 hrs
Location: Yolo County, CA

Winds grow stronger as the afternoon approaches, the toxic cloud that has settled in a low-lying area. Testing indicates concentrations of Anhydrous Ammonia gas have dropped to less than 10% of what they were at dawn, but officials warn that the area is still too dangerous for residents to return.

Questions abound, however, regarding the appropriate next steps at the plant. The plant manager, who was finally located. The area is crowded with reporters and cameras looking to get quotes from city officials, water experts, and environmental experts.

Monday, May 22 – 0830 hrs
Community officials and chemical plant management begin to plan next steps on decontamination of the surrounding environment exposed to liquid and gas chemicals and debris removal and disposal.

Crews are told water runoff may be causing the odor that residents are complaining of. Local health departments have confirmed that there is localized contamination within the stormwater tunnels. They have pledged to continue to monitor and test the water in the area.

Monday, May 22 – 0935 hrs
Responders have taken photoionization detector (PID) readings that indicate the high concentration area of Davis now contains less than 0.5 ppm of Anhydrous Ammonia gas. Community leaders tell residents that residents may be allowed back into the area.

Tuesday, May 23 – 1000 hrs
Hazardous Materials and other crews begin working to clean-up the damaged plant. Their first step is to remove any remaining chemicals from the few intact containers still inside the factory and neutralize and collect liquid chemicals that have gathered on the floor of the plant.

Local and national print and electronic media picked up the story the previous afternoon and have run updates consistently throughout the evening and night. Newspapers and morning shows have praised the first responders for their efforts, but blame is being cast squarely on local and state officials, as well as the plant itself, for their "inability to enforce chemical facility building standards".

As health, officials have asked citizens to return to their homes, many are unsure whether they will be safe. Readings in the low-lying area of Davis indicate there is no elevated presence of Anhydrous Ammonia gas in the area, but many parents are still hesitant to bring their families back into the neighborhood only a day after the incident.

Saturday, May 27 – 1600 hrs
Hazardous Materials teams finish with the cleanup of spilled chemicals at the site as demolition and construction crews standby.

Wednesday, May 31 – 0800
The district attorney is considering whether to file charges of criminal negligence against Monsanto management.

Key Issues

- Anhydrous Ammonia concentration levels return to normal in most of the community.
- Plant manager demands restitution and access to the site.
- Clean up begins at the chemical plant site.
- Residents are urged to return to their homes.
- Legal battle over responsibility begins.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 3. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

1. How will your organizational structure change during the recovery phase?

2. Does the community have any obligation to assist the chemical company in cleaning up the site and repairing damage to the plant?

3. What decontamination procedures exist for first responders and their equipment?

4. How will the fears of residents returning to their homes be managed? For how long will the community watch for lingering effects of chemical exposure?

5. Will long-term environmental remediation be required?

APPENDIX A: EXERCISE SCHEDULE

May 16, 2017

Time	Activity
13:00	Welcome and Opening Remarks
13:15	Module 1: Briefing, Caucus Discussion, and Brief-Back
14:15	Module 2: Briefing, Caucus Discussion, and Brief-Back
15:15	Module 3: Briefing, Caucus Discussion, and Brief-Back
16:00	Hot Wash
16:30	Closing Comments

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations
Cities
Davis
West Sacramento
Winters
Woodland
County
Yolo
Tribal Nation
Yocha Dehe Wintun Nation
Special Districts
Yolo County Housing
Other
CalOES
FEMA

APPENDIX C: ACRONYMS

Acronym	Term
COP	Common Operating Picture
DHS	U.S. Department of Homeland Security
EOC	Emergency Operations Center
EMI	Emergency Management Institute
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
FOUO	For Official Use Only
HSEEP	Homeland Security Exercise and Evaluation Program
PID	Photoionization Detector
POC	Point of Contact
PPE	Personal Protective Equipment
PPM	Parts Per Million
SA	Situational Awareness
SCBA	Self-Contained Breathing Apparatus
SITMAN	Situation Manual
TTX	Tabletop Exercise

UNIT FE: FUNCTIONAL EXERCISE

May 18, 2017

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Refer to the exercise player handbook supplied for this class.

UNIT 5
ALL SECTION TRAINING

May 19, 2017

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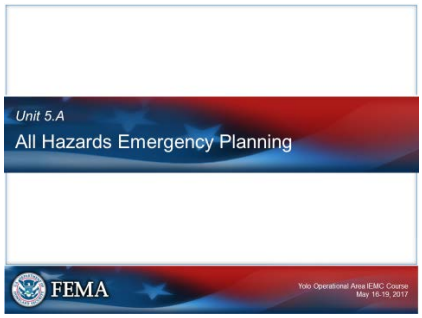
Visual 5.1

VISUAL 5.1 – UNIT 5

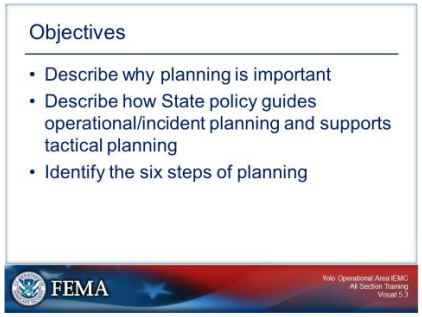
ALL SECTION TRAINING



Visual 5.2

VISUAL 5.2 - UNIT 5.A

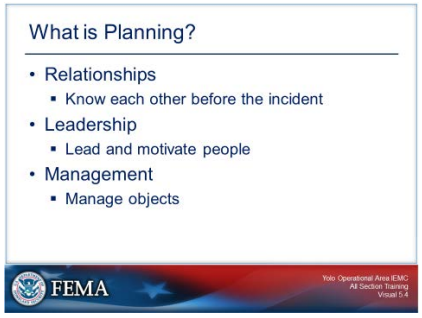
ALL HAZARDS PLANNING



Visual 5.3

VISUAL 5.3 – OBJECTIVES

- Describe why planning is important
- Describe how State policy guides operational/ incident planning and supports tactical planning
- Identify the six steps of planning



Visual 5.4

VISUAL 5.4 – WHAT IS PLANNING?

- Relationships

Know each other before the incident

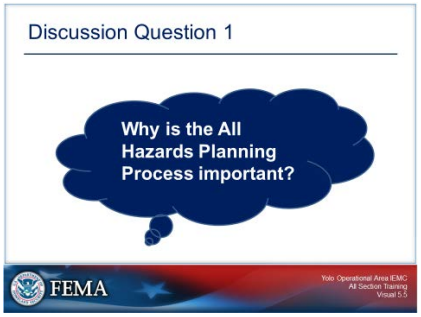
- Leadership

Lead and motivate people

- Management

Manage objects

Student Notes:

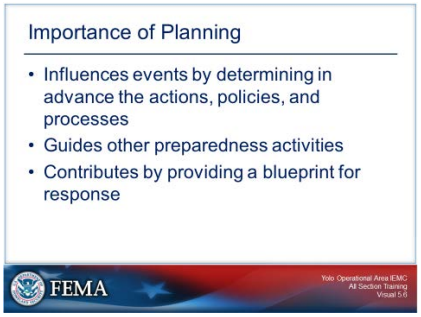


Visual 5.5

VISUAL 5.5 - DISCUSSION QUESTION 1

Why is the All Hazards Planning Process important?

Student Notes:



Visual 5.6

VISUAL 5.6 – IMPORTANCE OF PLANNING

- Influences the course of events in an emergency by determining in advance the actions, policies, and process that will be followed
- Guides other preparedness activities
- Contributes to unity of effort by providing a common blueprint for response in the event of an emergency

Student Notes:

Visual 5.7

VISUAL 5.7 – IMPORTANCE OF PLANNING (CONT.)

- Establishes priorities
- Identifies expected levels of performance and capability
- Provides standards for assessing capabilities
- Helps stakeholders understand their roles

"Let our advance worrying become advanced thinking and planning." – Winston Churchill

Planning makes it possible to manage the entire life cycle of a potential crisis. Strategic and operational planning establishes priorities, identifies expected levels of performance and capability requirements, provides the standard for assessing capabilities and helps stakeholders learn their roles.

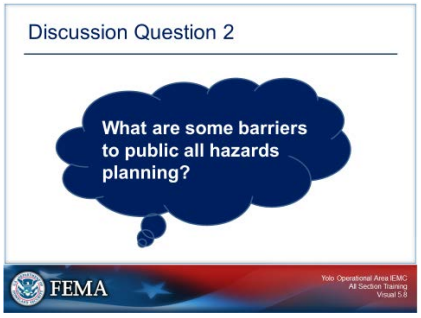
- Resources for planning are:

NRF

Comprehensive Preparedness Guide (CPG 101) v2

CPG 502 (fusion center and EOC coordination)

Student Notes:

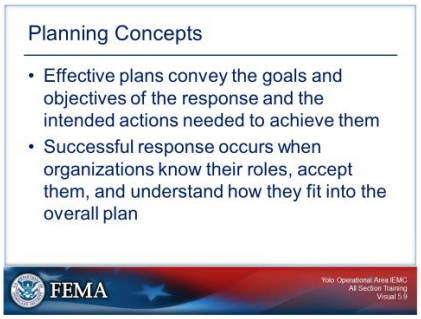


Visual 5.8

VISUAL 5.8 – DISCUSSION QUESTION 2

What are some barriers to public all hazards planning?

Student Notes:



Visual 5.9

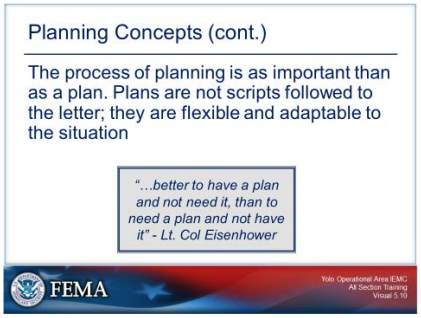
VISUAL 5.9 – PLANNING CONCEPTS

- Effective plans convey the goals and objectives of the response and the intended actions needed to achieve them
- Successful response occurs when organizations know their roles, accept them, and understand how they fit into the overall plan

Goals and objectives must be carefully crafted to ensure they support accomplishing the plan mission and operational priorities. They must also clearly indicate the desired result or end-state they are designed to yield. This approach enables unity of effort and consistency of purpose among the multiple organizations and activities involved in executing the plan.

Using a team or group approach helps organizations define their perception of the role they will play during an operation.

Student Notes:



Visual 5.10

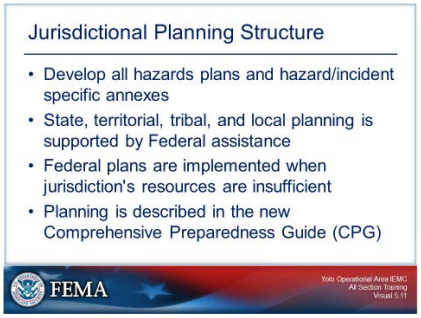
VISUAL 5.10 – PLANNING CONCEPTS (CONT.)

The process of planning is as important as a plan. Plans are not scripts followed to the letter; they are flexible and adaptable to the situation.

The most realistic and complete plans are prepared by a diverse planning team, including representatives from the jurisdiction's departments and agencies, civic leaders, businesses, and organizations (e.g., civic, social, faith-based, humanitarian, educational, advocacy, professional) who are able to contribute critical perspectives and/or have a role in executing the plan.

"…better to have a plan and not need it, than to need a plan and not have it" – Lt. Col Eisenhower

Student Notes:



Visual 5.11

VISUAL 5.11 – JURISDICTIONAL PLANNING STRUCTURE

- Develop all-hazards plans and hazard/incident specific annexes
- State, territorial, tribal, and local planning is supported by Federal assistance
- Federal plans are implemented when a jurisdiction's resources are insufficient
- Planning is described in the new Comprehensive Preparedness Guide (CPG)

State, territorial, tribal, and local governments have responsibility to develop detailed, robust all-hazards plans and hazard- or incident-specific annexes with supporting procedures and protocols to address their locally identified hazards and risks. Hazard identification and risk assessment (HIRA) serves as a foundation for planning, resource management, capability

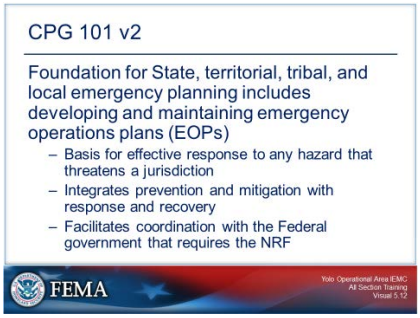
development, public education, and training and exercises.

State, territorial, tribal, and local planning is supported by Federal preparedness assistance, which supports the Framework and the Federal planning structure by building capabilities that contribute to National response capacity.

In most instances, Federal plans are implemented when a State/territorial/tribal resources are not sufficient to cope with an incident and the Governor has requested Federal assistance.

The intersection of the Federal and State, territorial, tribal, and local plans and planning is described in the CPG 101, “Developing and Maintaining Emergency Operations Plans”

Student Notes:



Visual 5.12

VISUAL 5.12 – CPG 101 V2

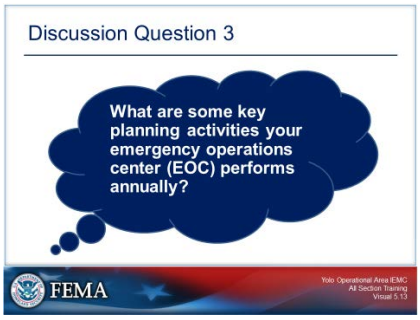
Foundation for State, territorial, tribal, and local emergency planning includes developing and maintaining emergency operations plans (EOPs)

- Basis for effective response to any hazard that threatens a jurisdiction
- Integrates prevention and mitigation with response and recovery
- Facilitates coordination with the Federal government that requires the NRF

CPG 101 provides guidelines on developing emergency operations plans (EOP). It promotes an understanding of the fundamentals of risk-informed planning and decision making to help planners examine a hazard or threat and produce integrated, coordinated, and synchronized plans. The goal of CPG 101 is to make the planning

process routine across all phases of emergency management and for all homeland security mission areas. It also helps planners at all levels of government to develop and maintain viable all hazards and threats EOPs. Accomplished properly, planning provides a methodical way to engage the whole community in thinking through the life cycle of a potential crisis, determining required capabilities, and establishing a framework for roles and responsibilities.

Student Notes:

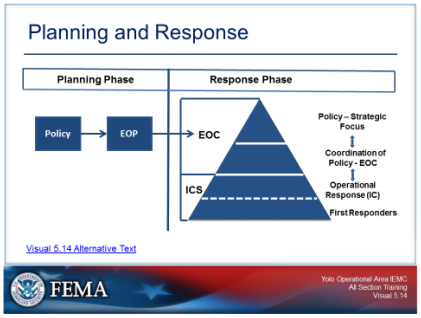


Visual 5.13

VISUAL 5.13 - DISCUSSION QUESTION 3

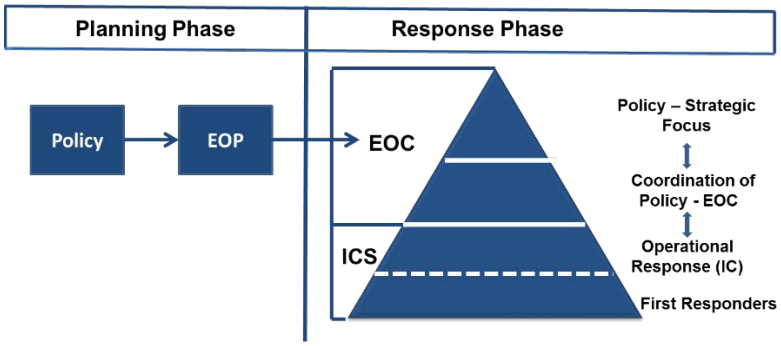
What are some key planning activities your emergency operations center (EOC) performs annually?

Student Notes:



Visual 5.14

VISUAL 5.14 – PLANNING AND RESPONSE



The left side of the graphic shows how policy incorporates into the EOP during the planning phase.

EOC Level: (Top two lines of the triangle)
The planning process guides policy development, which becomes part of the EOP. Policy in the EOP contains pre-determined decisions that are necessary to implement during a disaster or emergency. When a response is necessary, the EOC will coordinate policy level actions using the EOP as well as implement the incident support plan (ISP). To ensure policy level decisions made in the EOC are implemented, information sharing must occur between the EOC and ICS/Field levels. The Incident Command System (ICS)/field level must also share information with the EOC to coordinate policy decisions. The EOC must also inform the ICS/field level what policy level decisions were implemented.

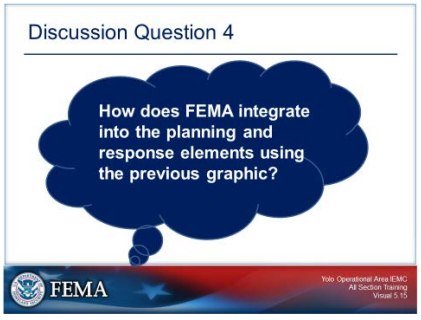
ICS/Field Level: (Bottom two lines of the triangle)
At the ICS/field level, they are implementing the operational and tactical plans, which we discuss later in the module. Policy in the EOP will impact/guide operational and tactical plans at the ICS/field level.

Visual 5.14 Alternative Text:
The left side of the graphic shows how policy incorporates into the EOP during the Planning Phase. After the incident occurs the EOP is implemented in the Response Phase by the EOC. On the right side of the graphic is a pyramid. The top two levels of the pyramid is the EOC. Policy within the EOC consists of the pre-determined decisions that are necessary to implement

during the disaster/emergency which come from the EOP which was developed during the Planning Phase. During the response phase, the incident planning consists of Policy – Strategic Focus. Coordination of policy is conducted by the EOC. The EOC, however, must share information with the Policy Group (delineated by the double arrow connection) is order to help ensure that the strategic focus is in line with the needs for the incident. The EOC will also inform the Incident Command/First Responders of the EOP and Policy.

The Bottom two levels of the pyramid make up the ICS. The ICS consists of the Incident Command (top section) and First Responders (bottom section). Operational Response (IC) received Policy information from both the EOP and the EOC and in turn, must share information back to the EOC and Policy.

Student Notes:

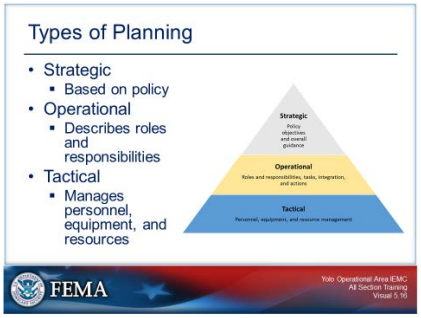


Visual 5.15

VISUAL 5.15 – DISCUSSION QUESTION 4

How does FEMA integrate into the planning and response elements using the previous graphic?

Student Notes:



Visual 5.16

VISUAL 5.16 – TYPES OF PLANNING

- Strategic

Based on policy

- Operational

Describes roles and responsibilities

- Tactical

Manages personnel, equipment, and resources

Strategic Planning

Strategic plans describe how a jurisdiction wants to meet its emergency management or homeland security responsibilities over the long-term. A strategic plan aligns the organization and budget structure with Federal priorities, missions, and objectives These plans are driven by policy from senior officials (e.g. EOP) and establish planning priorities.

Catastrophic planning is also part of strategic planning. The focus is on life-saving, sustainment, and stabilizing catastrophic effects for up to 72 hours after an incident. Catastrophic plans differ from traditional plans and address no-notice or short-notice incidents of catastrophic magnitude, where the need for Federal assistance is obvious and immediate, where anticipatory planning and resource pre-positioning were precluded,

and where the exact nature of needed resources and assets is not known.

Just as coordinated 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 government; the private sector; and NGOs that will participate in executing the plan.

In the event of a catastrophic event, the State must generate a request to FEMA for resources.

Operational Planning

Operational plans provide a description of roles and responsibilities, tasks, integration, and actions required by a jurisdiction or its departments and agencies during emergencies. Jurisdictions use plans to provide the goals, roles, and responsibilities that a jurisdiction's departments and agencies are assigned, and to focus on coordinating and integrating the activities of the many response and support organizations within a jurisdiction. An example of an operational plan is a CEMP.

They also consider private sector planning efforts as an integral part of community-based planning, and to ensure efficient allocation of resources. Department and agency plans do the same for the internal elements of those organizations.

Operational plans tend to focus more on the broader physical, spatial, and time-related dimensions of an operation; thus, they tend to be more complex and comprehensive than a strategic plan, yet less defined, than tactical plans. Operational plans also provide a framework for tactical planning.

Tactical Planning

Tactical planning focuses on managing personnel, equipment, and resources that play a direct role in the incident response. Pre-incident tactical planning, based upon existing operational plans, provides the opportunity to pre-identify personnel, equipment, exercise, and training requirements. Any gaps identified during tactical planning can be filled through various means including

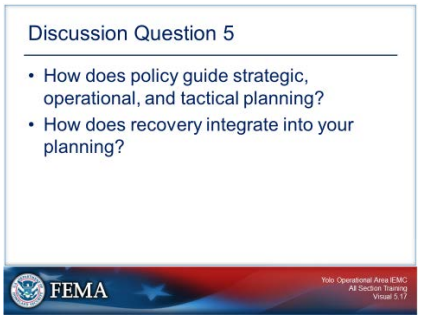
mutual aid, technical assistance, updates to policy, procurement, and contingency leasing. Tactical planning results in the development of a tactical plan. An example of a tactical plan is an Incident Action Plan (IAP). An IAP provides a single, unified roadmap for responders and decision makers to follow during an operational period and helps guide priorities for the next operational period. The combined efforts of all agencies are optimized as they perform their respective assignments under a single IAP.

When an incident or potential incident occurs, responders assess the situation, identify and prioritize requirements, and activate available resources and capabilities and develop an IAP. The IAP is developed to work within the parameters of existing plans, personnel, and resources outlined in a jurisdiction's operational plan which supports the overall strategic plan. A clear, concise IAP is essential to guide the initial incident management decision process and the continuing collective planning activities. An IAP provides concise, coherent means of capturing and communicating the overall incident priorities, objectives, strategies, and tactics in the context of both operational and support activities.

Planning also involves plan integration. Plan integration means that planning must be vertically integrated to ensure that all response levels have a common operational focus. Below are types of plan integration.

Visual 5.16 Alternative Text:
Three tiered pyramid that delineates the three types of planning and how they related to each other. At the top of the pyramid is Strategic Planning which is the policy objectives and overall guidance. The middle section of the pyramid is Operational Planning. Operational Planning consists of the Roles and responsibilities, tasks, integration, and actions. The bottom of the period (largest section) is Tactical Planning. Tactical Planning consists of the personnel, equipment, and resource management.

Student Notes:

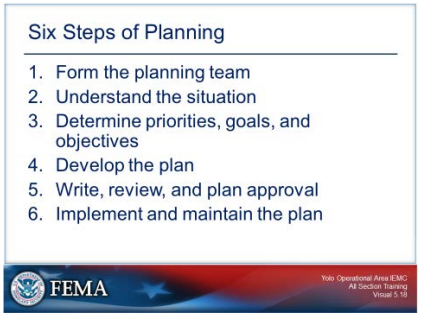


Visual 5.17

VISUAL 5.17– DISCUSSION QUESTION 5

- How does policy guide strategic, operational, and tactical planning?
- How does recovery integrate into your planning?

Student Notes:



Visual 5.18

VISUAL 5.18 – SIX STEPS OF PLANNING

1. Form the planning team
2. Understand the situation
3. Determine priorities, goals, and objectives
4. Develop the plan
5. Write, review, and plan approval
6. Implement and maintain the plan

Emergency planning is not a one-time event. Rather, it is a continual cycle of planning, training, exercising, and revision that takes place throughout the five phases of the emergency management cycle (preparedness, prevention, mitigation, response, and recovery).

The planning process does have one purpose—the development and maintenance of an up-to-date emergency operations plan (EOP). An EOP can be defined as a document maintained by various jurisdictional levels describing the plan for responding to a wide variety of potential hazards.
Although the emergency planning process is cyclic, EOP development has a definite starting point.

There are six steps in the emergency planning process:

1. **Form a collaborative planning team.** Using a team or group approach helps organizations define their perception of the role they will play during an operation. One goal of using a planning team is to build and expand relationships that help bring creativity and innovation to planning during an event. This approach helps establish a planning routine so that processes followed before an event occurs are the same as those used during an event.

2. **Understand the situation.** Hazards and threats are the general problems that jurisdictions face. Researching and analyzing information about potential hazards and threats a jurisdiction may face brings specificity to the planning process. If hazards and threats are viewed as problems and operational plans are the solution, then hazard and threat identification and analysis are key steps in the planning process.

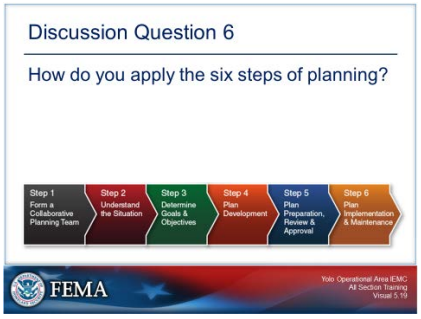
3. **Determine goals and objectives.** By using information from the hazard profile developed as part of the analysis process, the planning team thinks about how the hazard or threat would evolve in the jurisdiction and what defines a successful operation. Starting with a given intensity for the hazard or threat, the team imagines an event's development from prevention and protection efforts, through initial warning (if available), to its impact on the jurisdiction (as identified through analysis) and its generation of specific consequences (e.g., collapsed buildings, loss of critical services or infrastructure, death, injury, or displacement).

4. **Develop the plan.** The same scenarios used during problem identification are used to develop potential courses of action. For example, some prevention and protection courses of action can be developed that may require a significant initial action (such as hardening a facility) or creation of an ongoing procedure (such as checking identity cards.). Planners consider the needs and demands, goals, and objectives to develop several response alternatives.

5. **Prepare, review, and approve the plan.** The planning team develops a rough draft of the base plan, functional or hazard annexes, or other parts of the plan as appropriate. As the planning team works through successive drafts, the members add necessary tables, charts, and other graphics. A final draft is prepared and circulated to organizations that have responsibilities for implementing the plan to obtain their comments.

6. **Implement and maintain the plan.** Exercising the plan and evaluating its effectiveness involve using training and exercises and evaluation of actual events to determine whether the goals, objectives, decisions, actions, and timing outlined in the plan led to a successful response. Similarly, planners need to be aware of lessons and practices from other communities. The planning process is all about stakeholders bringing their resources and strengths to the table to develop and reinforce a jurisdiction's emergency management and homeland security programs. Properly developed, supported, and executed operational plans are a direct result of an active and evolving program.

Student Notes:



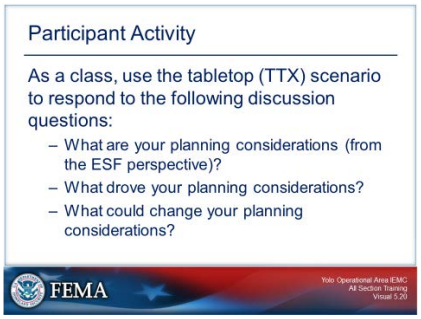
Visual 5.19

VISUAL 5.19 – DISCUSSION QUESTION 6

How do you apply the six steps of planning?

Visual 5.19 Alternative Text: Identifies the six steps of planning: Step 1 - Form a Collaborative Planning Team, Step 2 - Understand the Situation, Step 3 - Determine Goals & Objectives, Step 4 - Plan Development, Step 5- Plan Preparation, Review & Approval, Step 6 - Plan Implementation & Maintenance

Student Notes:



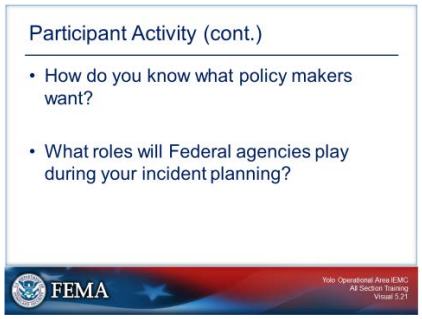
Visual 5.20

VISUAL 5.20 – PARTICIPANT ACTIVITY

As a class, use the tabletop (TTX) scenario to respond to the following discussion questions:

- What are your planning considerations (from the ESF perspective)?
- What drove your planning considerations?
- What could change your planning considerations?

Student Notes:

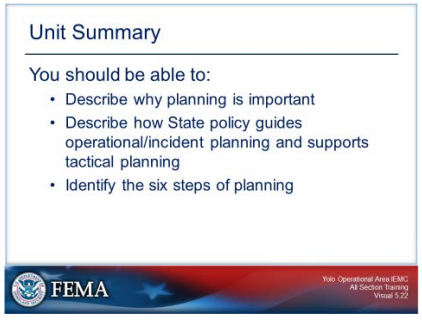


Visual 5.21

VISUAL 5.21 – PARTICIPANT ACTIVITY (CONT.)

- How do you know what policy makers want?
- What roles will Federal agencies play during your incident planning?

Student Notes:



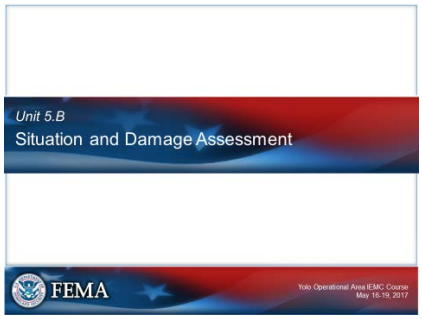
Visual 5.22

VISUAL 5.22 – UNIT SUMMARY:

You should now be able to:

- Describe why planning is important
- Describe how State policy guides operational/incident planning and supports tactical planning
- Identify the six steps of planning

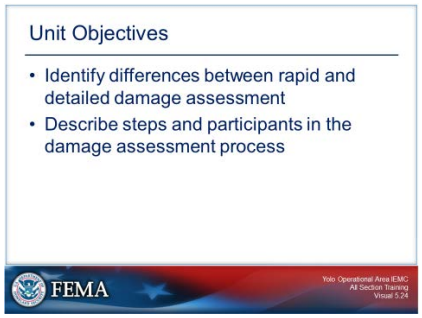
Student Notes:



Visual 5.23

VISUAL 5.23 – UNIT 5.B

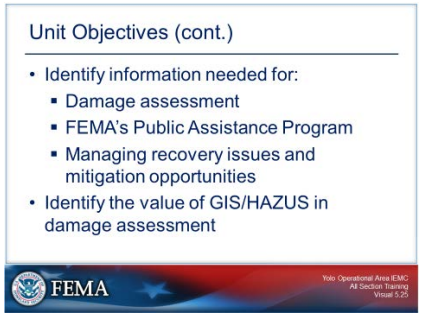
SITUATION AND DAMAGE ASSESSMENT



Visual 5.24

VISUAL 5.24 – UNIT OBJECTIVES

- Identify differences between rapid and detailed damage assessment
- Describe steps and participants in the damage assessment process



Visual 5.25

VISUAL 5.25 – UNIT OBJECTIVES (CONT.)

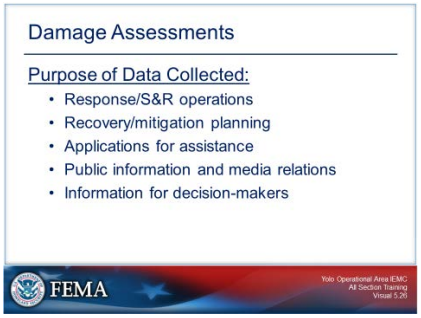
- Identify information needed for:

Damage assessment

FEMA's Public Assistance Program

Managing recovery issues and mitigation opportunities

- Identify the value of GIS/HAZUS in damage assessment



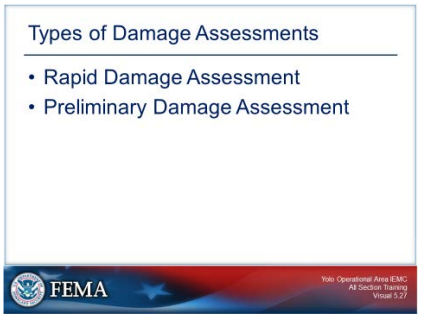
Visual 5.26

VISUAL 5.26 – DAMAGE ASSESSMENTS

Purpose of Data Collected:

- Response/S&R operations
- Recovery/mitigation planning
- Applications for assistance
- Public information and media relations
- Information for decision-makers

Student Notes:

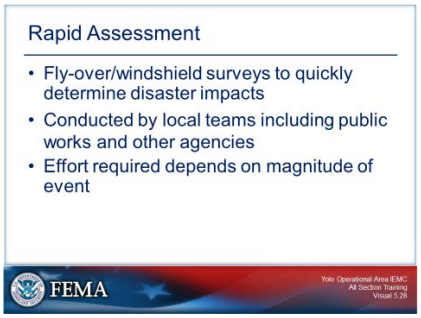


Visual 5.27

VISUAL 5.27 – TYPES OF DAMAGE ASSESSMENTS

- Rapid Damage Assessment
- Preliminary Damage Assessment

Student Notes:

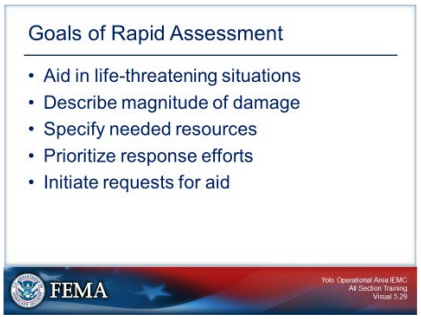


Visual 5.28

VISUAL 5.28 – RAPID ASSESSMENT

- Fly-over/windshield surveys to quickly determine disaster impacts
- Conducted by local teams including public works and other agencies
- Effort required depends on magnitude of event

Student Notes:

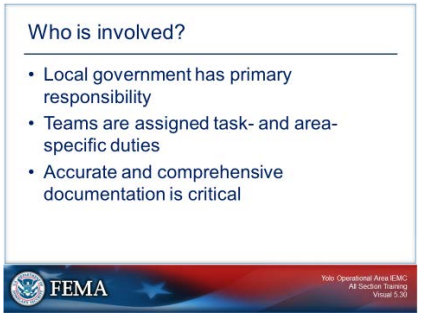


Visual 5.29

VISUAL 5.29 – GOALS OF RAPID ASSESSMENT

- Aid in life-threatening situations
- Describe magnitude of damage
- Specify needed resources
- Prioritize response efforts
- Initiate requests for aid

Student Notes:

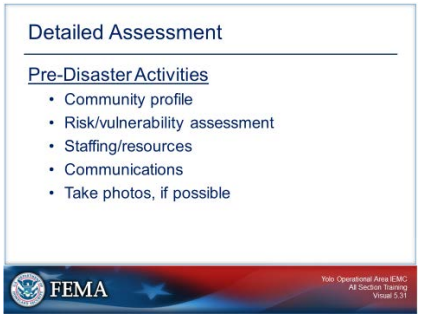


Visual 5.30

VISUAL 5.30 – WHO IS INVOLVED?

- Local government has primary responsibility
- Teams are assigned task- and area-specific duties
- Accurate and comprehensive documentation is critical

Student Notes:



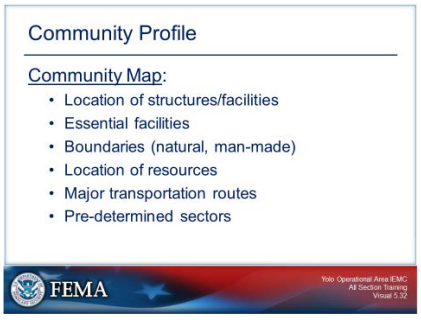
Visual 5.31

VISUAL 5.31 – DETAILED ASSESSMENT

Pre-Disaster Activities

- Community profile
- Risk/vulnerability assessment
- Staffing/resources
- Communications
- Take photos, if possible

Student Notes:



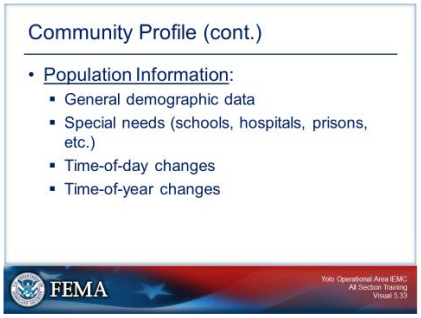
Visual 5.32

VISUAL 5.32 – COMMUNITY PROFILE

Community Map:

- Location of structures/facilities
- Essential facilities
- Boundaries (natural, man-made)
- Location of resources
- Major transportation routes
- Pre-determined sectors

Student Notes:



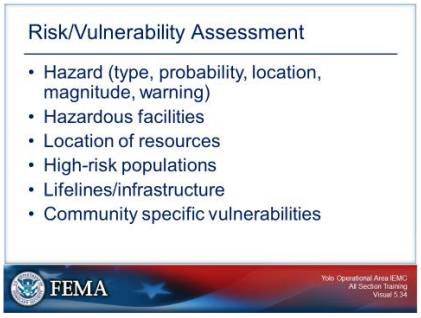
Visual 5.33

VISUAL 5.33 – COMMUNITY PROFILE (CONT.)

Population Information:

- General demographic data
- Special needs (schools, hospitals, prisons, etc.)
- Time-of-day changes
- Time-of-year changes

Student Notes:



Visual 5.34

VISUAL 5.34 – RISK/VULNERABILITY ASSESSMENT

- Hazard (type, probability, location, magnitude, warning)
- Hazardous facilities
- Location of resources
- High-risk populations
- Lifelines/infrastructure
- Community specific vulnerabilities

Student Notes:

Visual 5.35

VISUAL 5.35 – STAFFING AND RESOURCES

- Responders vs. non-responders
- Use of community groups
- Assignments/positioning of staff
- Call-up roster
- Equipment needs

Student Notes:

Visual 5.36

VISUAL 5.36 – COMMUNICATIONS

- Damage data must be collected, processed and reported to State
- Personnel must be trained in:
  - Communications flow
  - Methods: radio, cell phone, etc.
  - Roles and procedures
  - Urgency/accuracy of information

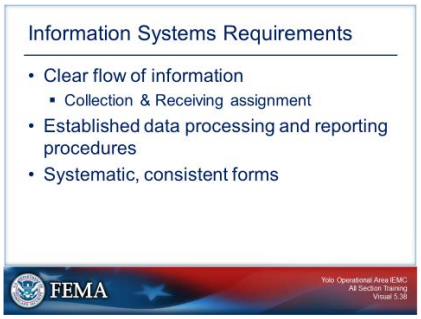
Student Notes:

Visual 5.37

VISUAL 5.37 – COMMUNICATIONS (CONT.)

- Many groups play a part
  - Dispatch center/911
  - Command post
  - EOC
- Coordination is critical
- State must be kept informed

Student Notes:

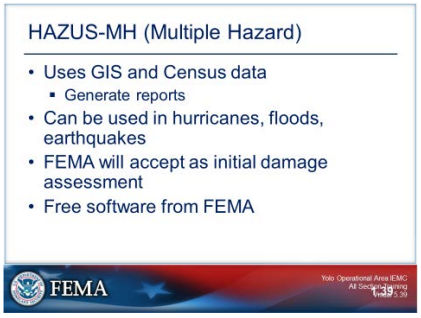


Visual 5.38

VISUAL 5.38 – INFORMATION SYSTEMS REQUIREMENTS

- Clear flow of information
  - Collection & Receiving assignment
- Established data processing and reporting procedures
- Systematic, consistent forms

Student Notes:

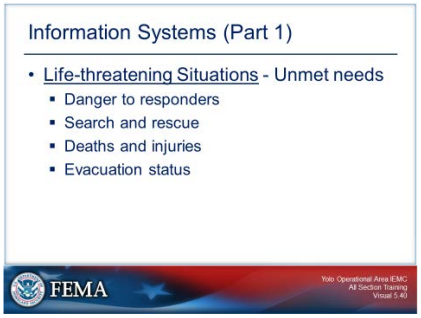


Visual 5.39

VISUAL 5.39 – HAZUS-MH (MULTIPLE HAZARD)

- Uses GIS and Census data
  - Generate reports
- Can be used in hurricanes, floods, earthquakes
- FEMA will accept as initial damage assessment
- Free software from FEMA

Student Notes:

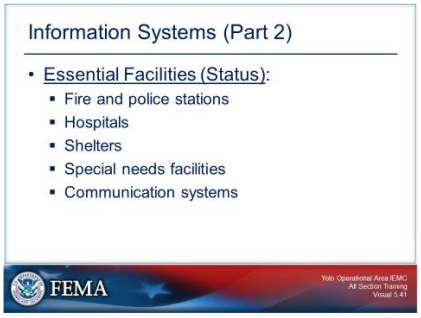


Visual 5.40

VISUAL 5.40 – INFORMATION SYSTEMS (PART 1)

- Life-threatening Situations - Unmet needs
  - Danger to responders
  - Search and rescue
  - Deaths and injuries
  - Evacuation status

Student Notes:

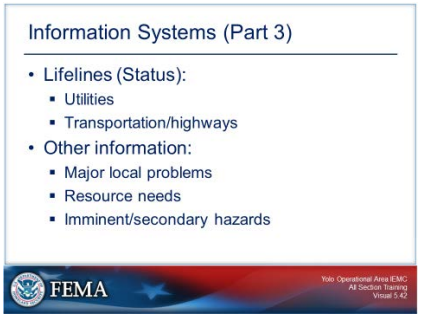


Visual 5.41

VISUAL 5.41 – INFORMATION SYSTEMS (PART 2)

- Essential Facilities (Status):
  - Fire and police stations
  - Hospitals
  - Shelters
  - Special needs facilities
  - Communication systems

Student Notes:

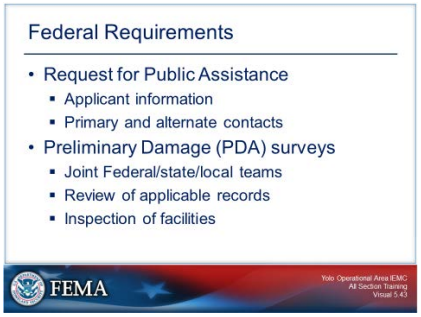


Visual 5.42

VISUAL 5.42 – INFORMATION SYSTEMS (PART 3)

- Lifelines (Status):
  - Utilities
  - Transportation/highways
- Other information:
  - Major local problems
  - Resource needs
  - Imminent/secondary hazard

Student Notes:

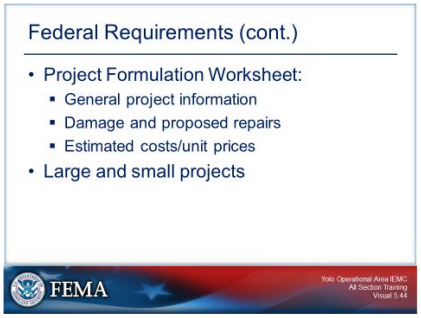


Visual 5.43

VISUAL 5.43 – FEDERAL REQUIREMENTS

- Request for Public Assistance
  - Applicant information
  - Primary and alternate contacts
- Preliminary Damage (PDA) surveys
  - Joint Federal/state/local teams
  - Review of applicable records
  - Inspection of facilities

Student Notes:

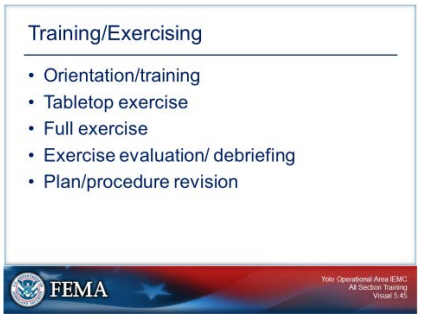


Visual 5.44

VISUAL 5.44 – FEDERAL REQUIREMENTS (CONT.)

- Project Formulation Worksheet:
  - General project information
  - Damage and proposed repairs
  - Estimated costs/unit prices
- Large and small projects

Student Notes:

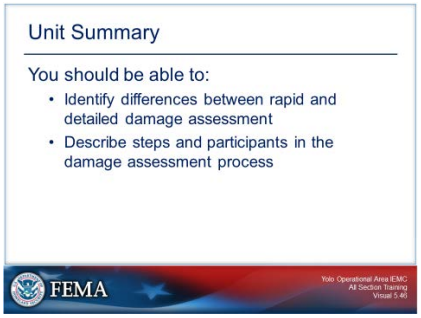


Visual 5.45

VISUAL 5.45 – TRAINING/EXERCISING

- Orientation/training
- Tabletop exercise
- Full exercise
- Exercise evaluation/ debriefing
- Plan/procedure revision

Student Notes:



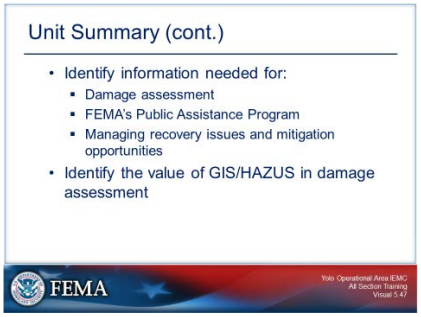
Visual 5.46

VISUAL 5.46 – UNIT SUMMARY

You should be able to:

- Identify differences between rapid and detailed damage assessment
- Describe steps and participants in the damage assessment process

Student Notes:



Visual 5.47

VISUAL 5.47 – UNIT SUMMARY (CONT.)

- Identify information needed for:
  - Damage assessment
  - FEMA's Public Assistance Program
  - Managing recovery issues and mitigation opportunities
- Identify the value of GIS/HAZUS in damage assessment

Student Notes:

Visual 5.48

VISUAL 5.48 – UNIT 5.C

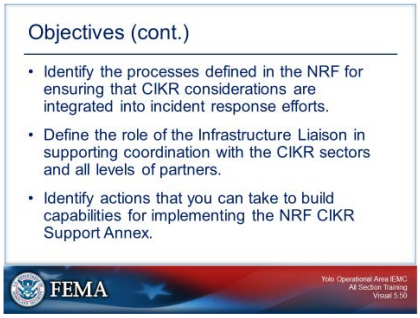
CRITICAL INFRASTRUCTURE / KEY RESOURCES

Visual 5.49

VISUAL 5.49 – OBJECTIVES

- Describe the relationship between the National Response Framework (NRF) and critical infrastructure and key resources (CIKR) prevention, protection, response, and recovery activities.
- Describe how the NRF promotes engaged partnerships to enhance our Nation's incident management capabilities.

Student Notes:

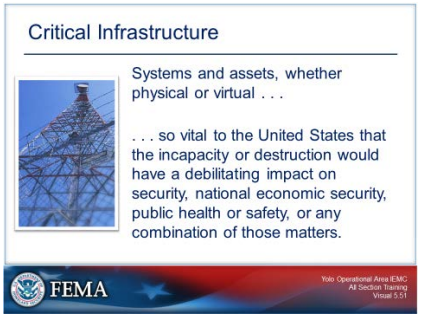


Visual 5.50

VISUAL 5.50 – OBJECTIVES (CONT.)

- Identify the processes defined in the NRF for ensuring that CIKR considerations are integrated into incident response efforts.
- Define the role of the Infrastructure Liaison in supporting coordination with the CIKR sectors and all levels of partners.
- Identify actions that you can take to build capabilities for implementing the NRF CIKR Support Annex.

Student Notes:



Visual 5.51

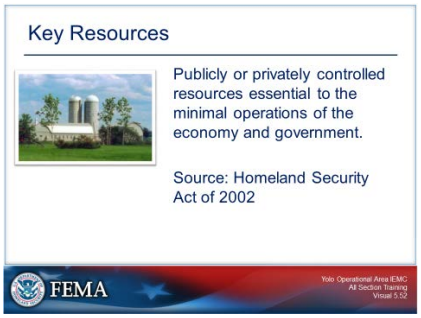
VISUAL 5.51 – CRITICAL INFRASTRUCTURE

Systems and assets, whether physical or virtual . . .

. . . so vital to the United States that the incapacity or destruction would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters.

Visual 5.51 Photo Caption: Photo of a communication tower.

Student Notes:



Visual 5.52

VISUAL 5.52 – KEY RESOURCES

Publicly or privately controlled resources essential to the minimal operations of the economy and government.

Source: Homeland Security Act of 2002

The National Infrastructure Protection Plan (NIPP), 2009, Glossary of Key Terms, is the source for the definitions of critical infrastructure and key resources. These definitions are derived from the provisions of the Homeland Security Act of 2002 and Homeland Security Presidential Directive 7 (HSPD-7).

Visual 5.52 Photo Caption: Photo of a farm.

Student Notes:

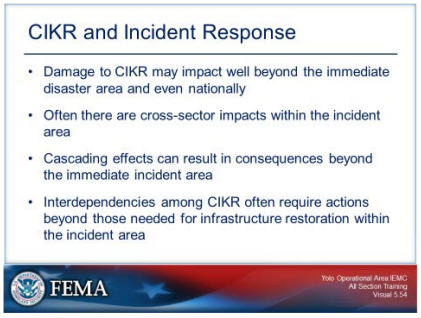
Visual 5.53

VISUAL 5.53 – THREATS TO CIKR

- The Terrorist Threat
- All-Hazards Approach

Visual 5.53 Photo Caption: Photo on the left shows an image of a collapsed building with an American Flag placed in the rubble. The photo on the right shows an image of first responders climbing on a roof of a flooded house.

Student Notes:



Visual 5.54

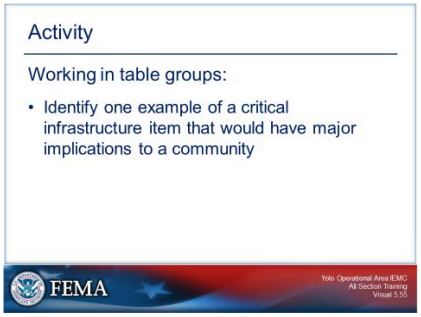
VISUAL 5.54 – CIKR AND INCIDENT RESPONSE

- Damage to CIKR may impact well beyond the immediate disaster area and even nationally
- Often there are cross-sector impacts within the incident area
- Cascading effects can result in consequences beyond the immediate incident area
- Interdependencies among CIKR often require actions beyond those needed for infrastructure restoration within the incident area

The vast majority of CIKR is owned and operated by the private sector.

Owners and operators are responsible for the protection, response, and restoration of their facilities and services.

Student Notes:



Visual 5.55

VISUAL 5.55 – ACTIVITY

Working in table groups:

- Identify one example of a critical infrastructure item that would have major implications to a community

Instructor Notes:
Identifying one example of critical infrastructure in your jurisdiction.

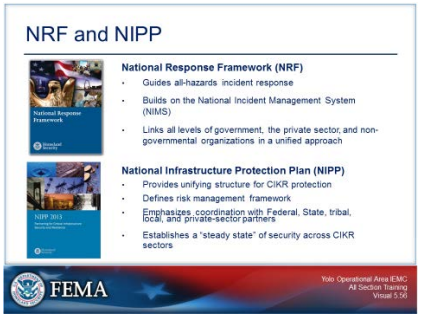
Describing:

- Potential threats or risks.
- Likely consequences of a terrorist attack, natural disaster, or other emergency.

Be prepared to present your team's answers in 5 minutes.

Remember that damage to critical infrastructure often has a wider impact than just within the incident area. Therefore, protection of CIKR, as well as well-planned and integrated CIKR-related response activities when incidents do occur, are essential to the Nation's security, public health and safety, economic vitality, and way of life.

Student Notes:



Visual 5.56

VISUAL 5.56 – NRF AND NIPP

National Response Framework (NFR)

- Guides all-hazards incident response
- Builds on the National Incident Management System (NIMS)
- Links all levels of government, the private sector, and non-governmental organizations in a unified approach

National Infrastructure Protection Plan (NIPP)

- Provides unifying structure for CIKR protection
- Defines risk management framework
- Emphasizes coordination with Federal, State, tribal, local, and private-sector partners
- Establishes a "steady state" of security across CIKR sectors

National Response Framework (NRF): Guides how the Nation conducts all-hazards response. The Framework documents 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. And it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. The NRF allows first responders, decision makers, and supporting entities to provide a unified national response.

National Infrastructure Protection Plan (NIPP): The overarching goal of the NIPP is to build a safer, more secure, and more resilient America by:

- Enhancing protection of the Nation's CIKR to prevent, deter, neutralize, or mitigate the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and

- Enabling national preparedness, timely response, and rapid recovery in the event of an attack, natural disaster, or other emergency.
- The NIPP and its associated CIKR Sector-Specific Plans (SSPs) work in conjunction with the NRF and its supporting annexes to provide a foundation for CIKR preparedness, protection, response, and recovery efforts in an all-hazards context.

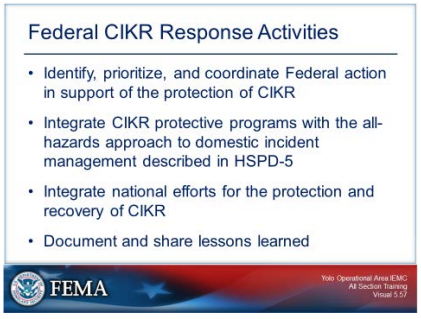
In fact, day-to-day public-private coordination structures, information-sharing networks, and risk management frameworks used to implement NIPP steady-state CIKR protection efforts continue to function and enable coordination and support for CIKR protection and restoration for incident management activities under the NRF.

Visual 5.56 Photo Caption:

Top Photo: Image of the FEMA National Response Framework. Image Hyperlink to Document.

Bottom Photo: Image of Department of Homeland Security National Infrastructure Protection Plan, 2009. Image hyperlink linked to document.

Student Notes:



Visual 5.57

VISUAL 5.57 – FEDERAL CIKR RESPONSE ACTIVITIES

- Identify, prioritize, and coordinate Federal action in support of the protection of CIKR
- Integrate CIKR protective programs with the all-hazards approach to domestic incident management described in HSPD-5
- Integrate national efforts for the protection and recovery of CIKR

- Document and share lessons learned

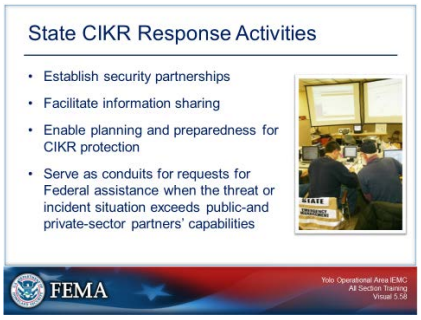
The Department of Homeland Security (DHS) responsibilities for CIKR support that are most applicable during incident response include:

- Identifying, prioritizing, and coordinating Federal action in support of the protection of nationally critical assets, systems, and networks, with a particular focus on CIKR that could be exploited to cause catastrophic health effects or mass casualties comparable to those produced by a weapon of mass destruction.
- Establishing and maintaining a comprehensive, multitiered, dynamic information-sharing network designed to provide timely and actionable threat information, assessments, and warnings to public- and private-sector CIKR partners. This responsibility includes protecting sensitive information voluntarily provided by the private sector and facilitating the development of sector-specific and cross-sector information-sharing and analysis systems, mechanisms, and processes.
- Coordinating, facilitating, and supporting comprehensive risk assessment programs for high-risk CIKR, identifying protection priorities across sectors and jurisdictions, and integrating CIKR protective programs with the all-hazards approach to domestic incident management described in HSPD-5.
- Identifying and implementing plans and processes for threat-based increases in protective measures that align to all-hazards warnings, specific threat vectors as appropriate, and each level of the Homeland Security Advisory System (HSAS).
- Conducting modeling and simulations to analyze sector, cross-sector, and regional dependencies and interdependencies, to include cyber-related issues, and sharing the results with CIKR partners as appropriate.
- Integrating national efforts for the protection and recovery of CIKR, including analysis, warning,

information sharing, vulnerability reduction, and mitigation activities and programs.

- Documenting and sharing lessons learned from exercises, actual incidents, and predisaster mitigation efforts and applying those lessons, where applicable, to CIKR protection efforts.
- Working with the Department of State, Sector-Specific Agencies (SSAs), and other NIPP partners to ensure that U.S. CIKR protection efforts are fully coordinated with international partners.

Student Notes:



Visual 5.58

VISUAL 5.58 – STATE CIKR RESPONSE ACTIVITIES

- Establish security partnerships
- Facilitate information sharing
- Enable planning and preparedness for CIKR protection
- Serve as conduits for requests for Federal assistance when the threat or incident situation exceeds public- and private-sector partners' capabilities

State, tribal, and local government entities establish security partnerships, facilitate information sharing, and enable planning and preparedness for CIKR protection within their jurisdictions.

State governments are responsible for:

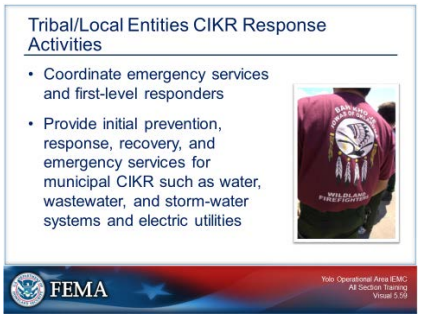
- Developing and implementing statewide or regional CIKR protection programs integrated into homeland security and incident management programs.
- Serving as crucial coordination hubs, bringing together prevention, preparedness, protection, response, and recovery authorities, capacities, and

resources among local jurisdictions, across sectors, and across regional entities.

- Acting as conduits for requests for Federal assistance when the threat or incident situation exceeds the capabilities of public- and private-sector CIKR partners in their jurisdictions.
- Coordinating with the State, Local, Tribal, and Territorial Government Coordinating Council (SLTTGCC) to ensure full integration with national- and regional-level CIKR prevention, protection, response, and restoration efforts.

Visual 5.58 Photo Caption: State emergency management personnel at an emergency operations center.

Student Notes:



Visual 5.59

VISUAL 5.59 – TRIBAL/LOCAL ENTITIES CIKR RESPONSE ACTIVITIES

- Coordinate emergency services and first-level responders
- Provide initial prevention, response, recovery, and emergency services for municipal CIKR such as water, wastewater, and storm-water systems and electric utilities

Tribal governments are responsible for public health, welfare, safety, CIKR protection, and continuity of essential services within their jurisdictions.

Local governments usually are responsible for emergency services and first-level responses to CIKR incidents. In some sectors, local governments own and operate CIKR such as water, wastewater, and stormwater systems and electric utilities, and are responsible for initial prevention, response, recovery, and emergency services provision.

Visual 5.59 Photo Caption: *A picture of a Tribal firefighter.*

Student Notes:

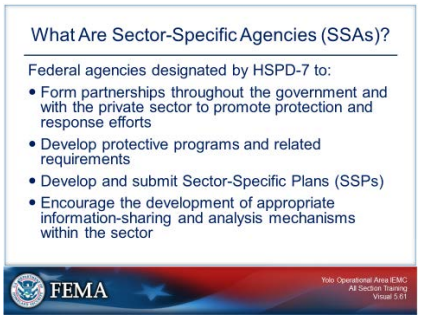
Visual 5.60

VISUAL 5.60 – OTHER CIKR RESPONSE PARTNERS

- Sector-Specific Agencies (SSAs)
- Emergency Support Functions (ESFs)
- Owners and Operators (private & public)

Visual 5.60 Photo Caption: *Photo on left is an image of CDC EOC. Middle photo is image of US Army Corps of Engineer Staff inspecting damages. Right photo shows a power company basket lift truck.*

Student Notes:



Visual 5.61

VISUAL 5.61 – WHAT ARE SECTOR-SPECIFIC AGENCIES (SSAS)?

Federal agencies designated by HSPD-7 to:

- Form partnerships throughout the government and with the private sector to promote protection and response efforts
- Develop protective programs and related requirements
- Develop and submit Sector-Specific Plans (SSPs)
- Encourage the development of appropriate information-sharing and analysis mechanisms within the sector

HSPD-7 designated responsibility to various Federal Government departments and agencies to serve as Sector-Specific Agencies (SSAs) for each of the CIKR sectors.

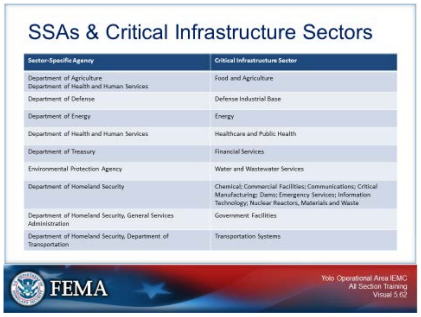
SSAs are responsible for working with DHS to:

- Implement the NIPP sector partnership model and risk management framework.
- Develop protective programs and related requirements.
- Provide sector-level CIKR protection guidance.

In addition, SSAs collaborate with partners to:

- Develop and submit Sector-Specific Plans (SSPs) and sector-level performance feedback.
- Encourage the development of appropriate information-sharing and analysis mechanisms within the sector.

Student Notes:



Visual 5.62

VISUAL 5.62 – SSAS & CRITICAL INFRASTRUCTURE SECTORS

Sector-Specific Agency

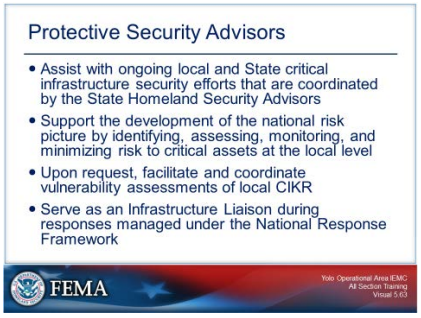
- Department of Agriculture
- Department of Health and Human Services
- Department of Defense
- Department of Energy
- Department of Treasury
- Environmental Protection Agency
- Department of Homeland Security
- Department of Homeland Security, General Services Administration

- Department of Homeland Security, Department of Transportation

Critical Infrastructure Sector

- Food and Agriculture
- Defense Industrial Base
- Energy
- Healthcare and Public Health
- Financial Services
- Water and Wastewater Services
- Chemical; Commercial Facilities; Communications; Critical Manufacturing; Dams; Emergency Services; Information Technology; Nuclear Reactors, Materials and Waste
- Government Facilities
- Transportation Systems

Student Notes:



Visual 5.63

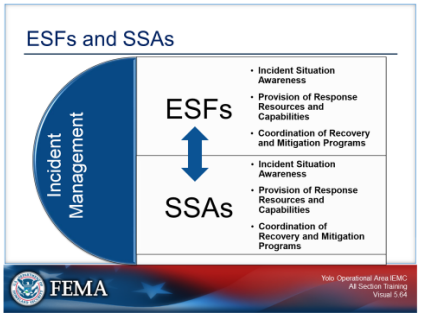
VISUAL 5.63 – PROTECTIVE SECURITY ADVISORS

- Assist with ongoing local and State critical infrastructure security efforts that are coordinated by the State Homeland Security Advisors
- Support the development of the national risk picture by identifying, assessing, monitoring, and minimizing risk to critical assets at the local level
- Upon request, facilitate and coordinate vulnerability assessments of local CIKR
- Serve as an Infrastructure Liaison during responses managed under the National Response Framework

Protective Security Advisors also:

- Provide reach-back capability to DHS and other Federal Government resources.
- Assist in verification of critical asset information for accurate inclusion into the National Asset Database.
- Provide local context and expertise to DHS to ensure that community resources are used effectively.
- Facilitate the flow of programmatic information between all parties with a vested interest in CIKR protection.
- Work in State and local emergency operations centers (EOCs) to provide expertise and serve as the DHS/Office of Infrastructure Protection's Infrastructure Liaison, who supports the Principal Federal Official and Federal Coordinating Officer responsible for domestic incident management.
- Support comprehensive risk analyses of local CIKR.
- Assist in the review and analysis of physical/technical security of local CIKR.
- Convey local concerns and sensitivities to DHS and other Federal agencies.
- Relay disconnects between local, regional, and national protection activities.
- Communicate requests for Federal training and exercises.

Student Notes:



Visual 5.64

VISUAL 5.64 – ESFS AND SSAS

Visual 5.64 Figure Caption: Depicts a chart demonstrating the linkage between Emergency Support Functions (ESFs) and Sector-Specific Agencies (SSAs) during Incident Management. Incident Management encompasses both ESFs and SSAs text boxes in this diagram.

ESFs text box consists of:

- *Incident Situation Awareness*
- *Provision of Response Resources and Capabilities*
- *Coordination of Recovery and Mitigation Programs*

SSAs text box consists of:

- *Incident Situation Awareness*
- *Provision of Response Resources and Capabilities*
- *Coordination of Recovery and Mitigation Programs*

The ESFs' and SSAs' text box are linked by a double arrow.

Student Notes:

Visual 5.65

VISUAL 5.65 – PRIVATE-SECTOR CAPABILITIES

- Management of a vast majority of CIKR in many sectors
- Knowledge of CIKR assets, networks, facilities, functions, and other capabilities
- Capability to take initial first-response actions in the event of an incident
- Ability to innovate and provide products, services, and technologies to address security gaps
- Robust mechanisms for sharing and protecting sensitive information regarding threats, vulnerabilities, countermeasures, and best practices

The vast majority of CIKR in many sectors is owned and operated by the private sector.

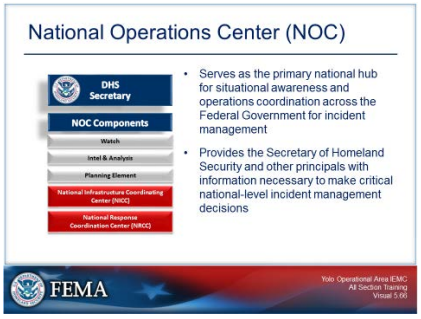
Private-sector owners and operators have a detailed knowledge of the CIKR assets they own and manage including the networks, facilities, functions, and other capabilities. That knowledge is not available to government agencies or other organizations that are not involved in the day-to-day management of these assets.

Private-sector owners and operators are there, on the ground, when an incident occurs and are thus able to take initial first-response actions.

Private-sector owners and operators are accustomed to using innovation to meet their business goals and these same abilities can be applied to provide products, services, and technologies to address security gaps.

Private-sector owners and operators have robust mechanisms in place for protecting sensitive business information while sharing best business practices. These same mechanisms can be used to share and protect sensitive information regarding threats, vulnerabilities, countermeasures, and security best practices.

Student Notes:



Visual 5.66

VISUAL 5.66 – NATIONAL OPERATIONS CENTER (NOC)

- Serves as the primary national hub for situational awareness and operations coordination across the Federal Government for incident management
- Provides the Secretary of Homeland Security and other principals with information necessary to make critical national-level incident management decisions

The National Operations Center (NOC) is the primary national hub for situational awareness and operations coordination across the Federal Government for incident management. The NOC includes the following components:

NOC – Interagency Watch (NOC-Watch): The NOC-Watch is a standing 24/7 interagency organization fusing law enforcement, national intelligence, emergency response, and private-sector reporting. The NOC-Watch facilitates homeland security information sharing and operational coordination with other Federal, State, tribal,

local, and nongovernmental emergency operations centers (EOCs).

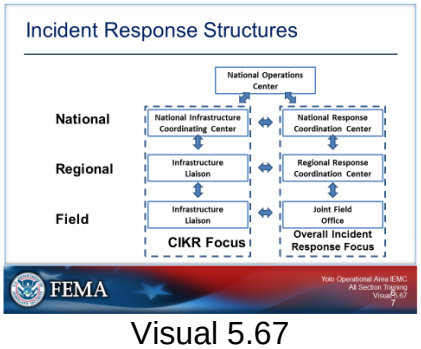
Intelligence and Analysis (NOC-I&A): NOC-I&A is responsible for interagency intelligence collection requirements, analysis, production, and product dissemination for DHS. The NOC-I&A provides threat information, analysis, and intelligence to all levels of government.

Interagency Planning Element (NOC-Planning): NOC-Planning conducts strategic-level operational incident management planning and coordination.

National Infrastructure Coordinating Center (NOC-NICC): The NOC-NICC monitors the Nation's CIKR on an ongoing basis. The NOC-NICC supports government and private-sector partners to protect and restore CIKR.

National Response Coordination Center (NOC-NRCC): As a component of the NOC, the NRCC serves as the DHS/Federal Emergency Management Agency (FEMA) primary operations center responsible for national incident response and recovery as well as national resource coordination. As a 24/7 operations center, the NRCC monitors potential or developing incidents and supports the efforts of regional and field components.

Student Notes:



Visual 5.67

VISUAL 5.67 – INCIDENT RESPONSE STRUCTURES

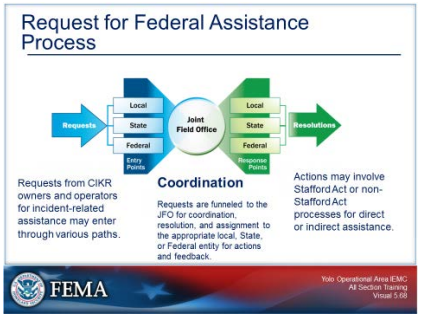
Visual 5.67 Organization Chart. At the top of the Organization Chart is the National Operations Center. Under the National Operations Center (NOC) are two columns a CIKR Focus and an Overall Incident Response Focus. The CIKR focus contains the National Infrastructure Coordinating Center (linked with double arrow to the NOC), the infrastructure liaison, and a second infrastructure liaison. All these entities are linked with a double-sided arrow to each other.

Under the Overall Incident Response Focus is the National Response Coordination Center (linked with a double arrow to the NOC), the Regional Response Coordination Center, and the Joint Field Office. All of these entities are also linked from National to Regional Response Coordination Center and the Joint Field Office by a double arrow.

The entities within the CIKR Focus column and the Overall Incident Response Focus column are also linked together by a double arrow. The National Infrastructure Coordinating Center is linked to the National Response Coordination Center. An Infrastructure Liaison is linked to the Regional Response Coordination Center. The second Infrastructure Liaison is also linked to the Joint Field Office.

- National organizational structures described in the NRF and NIPP provide formal and informal mechanisms for public- and private-sector coordination, situational awareness, impact assessments, and information sharing in regard to CIKR-related concerns on a sector-by-sector and/or a cross-sector basis.
- This coordination allows for broader engagement in one or more affected sectors. It also allows sectors to plan for and quickly react to far-reaching effects from an incident (or multiple incidents) and to alert individual owners and operators of the need to take specific actions to minimize impacts.

Student Notes:



Visual 5.68

VISUAL 5.68 – REQUEST FOR FEDERAL ASSISTANCE PROCESS

Coordination:

Requests from CIKR owners and operators for incident-related assistance may enter through various paths.

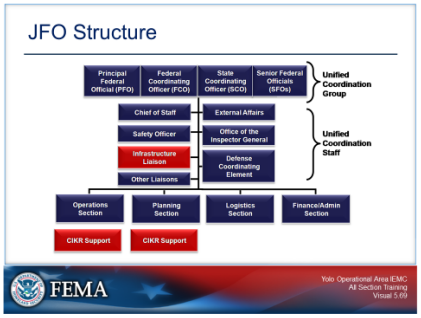
Requests are funneled to the JFO for coordination, resolution, and assignment to the appropriate local, State, or Federal entity for actions and feedback.

Actions may involve Stafford Act or non- Stafford Act processes for direct or indirect assistance.

<u>Visual 5.68 Figure Caption</u> - Flow Chart illustrating the flow of requests for Federal assistance.

Requests enter from the left and can enter the process through either the Local, State, or Federal Entry Points. (These entry points are linked together in this process). Requests then flow to the Joint Field Office in the center of the diagram. On the right of the Joint Field office are the response Points (Local, State, or Federal) that are also linked together. From the Response Points, Resolutions flow outside of the diagram.

<u>Student Notes:</u>



Visual 5.69

VISUAL 5.69 – JFO STRUCTURE

<u>Visual 5.69 JFO Organization Chart</u>. At the top of the chart is the Unified Coordination Group which consists of the Principal Federal Official (PFO), Federal Coordinating Officer (FCO), State Coordinating Officer (SCO), and the Senior Federal Officials (SFOs). The Unified Coordination Group is linked to the Unified Coordination Staff.

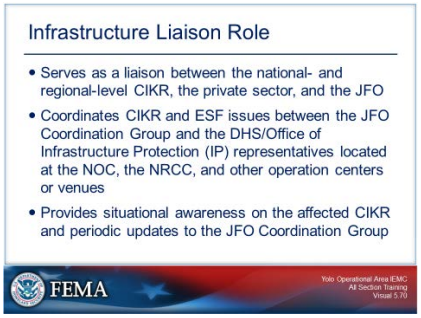
The Unified Coordination Staff consists of the Chief of Staff, Safety Officer, Infrastructure Liaison, Other Liaisons, External Affairs, Office of the Inspector General, and the Defense Coordinating Element.

The Unified Coordination Staff is linked to the Operations Section, Planning Section, Logistics Section, and the Finance/Admin Section. Under the Operations Section is CIKR Support. Under the Planning Section is CIKR Support.

The JFO is led by the Unified Coordination Group. The Unified Coordination Group typically consists of the Principal Federal Official (PFO) (if designated), Federal Coordinating Officer (FCO), State Coordinating Officer (SCO), and senior officials from other entities with primary statutory or jurisdictional responsibility and significant operational responsibility for an aspect of an incident (e.g., the Senior Health Official or Senior Federal Law Enforcement Official if assigned). Within the Unified Coordination Group, the FCO is the primary Federal official responsible for coordinating, integrating, and synchronizing Federal response activities.

Refer to the red boxes on the visual. Note that an Infrastructure Liaison may be assigned to the Unified Coordination Staff. CIKR support may also be provided to the Operations and Planning Sections. The Infrastructure Liaison function is task organized and task dependent on the needs of the incident and the requirements of the PFO, the Unified Coordination Group, and the Incident Management Team.

Student Notes:



Visual 5.70

VISUAL 5.70 – INFRASTRUCTURE LIAISON ROLE

- Serves as a liaison between the national- and regional-level CIKR, the private sector, and the JFO
- Coordinates CIKR and ESF issues between the JFO Coordination Group and the DHS/Office of Infrastructure Protection (IP) representatives located at the NOC, the NRCC, and other operation centers or venues
- Provides situational awareness on the affected CIKR and periodic updates to the JFO Coordination Group

The Infrastructure Liaison, in collaboration with SSAs and all activated ESFs, provides prioritized recommendations regarding CIKR concerns to the Unified Coordination Group and the PFO (if appointed).

The prioritized CIKR recommendations are developed using a collaborative process involving the cooperating agencies to this annex as well as CIKR owners and operators; State, tribal, and local entities; and others as appropriate. The prioritized recommendations are used by the Unified Coordination Group to support incident-related decision-making processes and the efficient application of limited resources within the affected area.

The Infrastructure Liaison provides knowledge and expertise regarding unique CIKR considerations, including: (a) impacts to nationally and regionally critical CIKR within the incident area; (b) cross-sector impacts within the incident area; (c) cascading effects that can result in consequences beyond the immediate incident area; (d) interdependencies that require actions beyond those needed for infrastructure restoration within the incident area; and (e) potential gaps or overlapping responsibilities among Federal departments and agencies that may function as SSAs, ESF primary or supporting agencies, or statutory or regulatory authorities.

Student Notes:

Visual 5.71

VISUAL 5.71 – INFRASTRUCTURE LIAISON ROLE (CONT.)

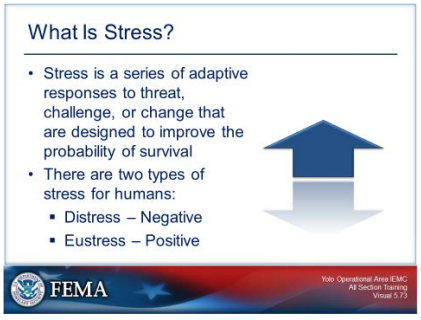
- Serves as the senior advocate within the JFO for CIKR issues within the JFO and to support the prioritization of response and restoration efforts
- Leverages private-sector relationships to support response and recovery efforts

Student Notes:

Visual 5.72

VISUAL 5.72 – UNIT 5.D

STRESS MANAGEMENT



Visual 5.73

VISUAL 5.73 – WHAT IS STRESS?

- Stress is a series of adaptive responses to threat, challenge, or change that are designed to improve the probability of survival
- There are two types of stress for humans:
  - Distress - Negative
  - Eustress – Positive

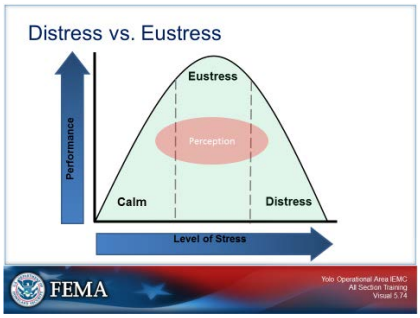
Stress isn't necessarily a bad thing. Stress is a series of adaptive responses (pumping adrenalin, quickened heartbeat, heightened senses, etc.) to threat, challenge, or change that are designed to improve the probability of survival. It is the basis of the "fight vs. flight" impulse.

There are two types of stress for humans—one negative and one positive.

Distress: Distress leaves you feeling under pressure, anxious, frustrated, and not at your best. It can sap your energy and leave you feeling unhealthy.

Eustress: There is a good form of stress called "eustress" ("eu" is from the Greek, meaning good or positive). This type of stress comes from embracing or seeking change or opportunity—a better outcome. Eustress is a form of stress that is taking you somewhere, the kind of pressure that gets you motivated to accomplish something or that leads you to an act of fulfillment. Eustress can result in peak performance.

Student Notes:



Visual 5.74

VISUAL 5.74 – DISTRESS VS. EUSTRESS

Visual 5.74 Figure Caption: This diagram represents one view of the relationship between level of stress and performance.

When there is a very low level of stress, there is a sense of calm and little impact on performance (unless the person is overtaken by sheer boredom, which could detract from performance).

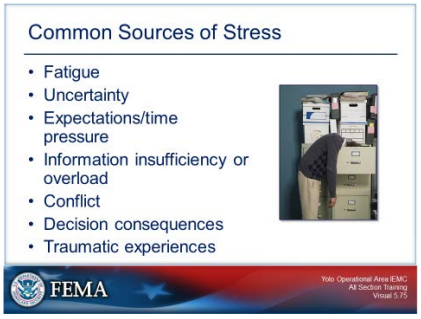
As the level of stress increases, it can be a positive force, pushing us to achieve and resulting in higher levels of performance. This is eustress. Some say that a "reasonable" amount of pressure, anxiety, or fear in the environment leads to higher performance among employees than if stress is not present.

At some point, if there is a high level of stress, it may become too much for the individual and have a negative impact on performance. This is distress. Distress occurs when the demands placed on the body (physical, emotional, and cognitive) exceed its capacity to expend energy in maintaining balance.

Perception plays an important part in whether stress is experienced as distress or eustress. The individual determines whether the experience is eustress or distress. That is, eustress is primarily a result of positive

perception of stressors, and distress is primarily a result of negative perception of stressors. For example, one person might be energized by a large and complicated task while another might become rattled and less effective.

Student Notes:



Visual 5.75

VISUAL 5.75 – COMMON SOURCES OF STRESS

- Fatigue
- Uncertainty
- Expectations/time pressure
- Information insufficiency or overload
- Conflict
- Decision consequences
- Traumatic experiences

People involved in emergency management often experience stress in response to:

Fatigue resulting from strenuous work, long hours, heavy workload, high demands over a long period, lack of sleep.

Uncertainty about requirements, procedures, the situation, the future, or whether they will be able to succeed at the task.

High expectations (imposed by self or others) combined with time pressure (much to do in a short period of time). A related stressor is inadequate resources to get the job done.

Information insufficiency or overload. This can occur when there isn't enough information available on which to base important decisions, or there is conflicting or unclear information, or there is so much information that it is difficult to get a clear picture.

Conflict, which may include:

Interpersonal conflict (for example, between colleagues or between manager and staff member).

Conflict between the individual and the group. This type of conflict often presents itself as role conflict (for example, between your role as an emergency manager and your role in the family).

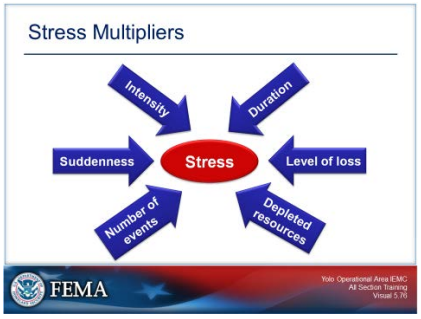
Conflict between one group and another (for example, between county and State or between a government entity and a nongovernmental organization).

Decision consequences—when there is a lot riding on the decisions you make, such as people's safety and welfare.

Traumatic experiences such as exposure to danger or witnessing widespread damage, injury, loss of life, and grief.

<u>Visual 5.75 Image Caption:</u> A man with his head in a filing cabinet.

<u>Student Notes:</u>



Visual 5.76

VISUAL 5.76 – STRESS MULTIPLIERS

Many things can multiply the impact of stress on an individual. The following are examples:

- Number of events: If you go through multiple stressful events in a row without a chance to recuperate, your ability to cope will be less than during the first event.
- Suddenness: Sudden onset of a stressful situation can increase the level of stress.
- Intensity or degree of stress (perceived or real): Deeper stress naturally has a greater impact than light stress.

- Duration: The longer stress is present, the greater harm it can do.
- Level of loss: Heavy losses (e.g., personal possessions, friends, family) can produce greater levels of grief, which add to the level of stress.
- Depleted coping skills/resources: If your coping skills and resources are depleted—or were at low levels to begin with—the stress you experience will appear greater.

Visual 5.76 Image Caption: Six arrows pointing to a central circle. The circle says Stress and the arrows say: Intensity, Duration, Level of loss, Depleted resources, Number of events, and Suddenness.

Student Notes:

Visual 5.77

VISUAL 5.77 – COMMON SIGNS AND SYMPTOMS (1 OF 3)

Physical

- Headache
- Stomach/intestinal problems
- Back pain, stiff neck
- Fatigue
- Difficulty sleeping
- Change in appetite

Visual 5.77 Photo Caption: A woman with a headache.

Student Notes:

Visual 5.78

VISUAL 5.78 – COMMON SIGNS AND SYMPTOMS (2 OF 3)

Emotional

- Mood swings
- Anger, irritability
- Sadness, easy tearfulness
- Cynicism or negativity
- Self-criticism or self-doubt
- Guilt
- Tension or anxiety

Emotional signs of stress may not be as easy to recognize as physical symptoms.

Mood swings, anger, irritability: High stress can cause mood swings and increased episodes of anger. The purpose of anger is to give us psychic energy to change something. When someone around you has angry outbursts, it is important to acknowledge the emotion. For example, you can ask, "What needs to be changed? (As angry as you are, there must be something pretty important to change.)" Then listen—be silent, let them struggle if needed; growth comes from struggle.

Sadness, easy tearfulness: Another result of stress is sadness (anhedonia, meaning "without joy"). Anhedonia is like a bad case of the blahs over time. It's sadness, not depression, and it's a normal response to stress. (Sadness is normal; depression is not.)

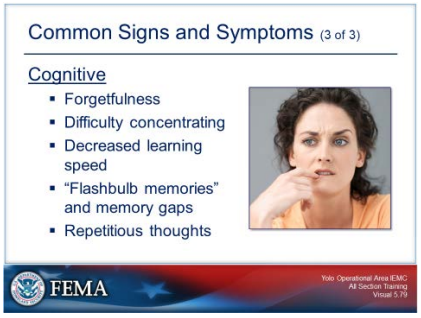
Cynicism, negativity, distrust: Disasters can leave people feeling a lack of control over their lives and their surroundings, and a feeling of betrayal (nature failed them, material things failed them, government couldn't protect them, etc.). These negative emotions can lower one's level of trust and bring on feelings of cynicism.

Self-criticism, self-doubt, guilt: When things go wrong and stress builds up, many people respond with self-criticism, self-doubt, and guilt. "If only I had .

Tension or anxiety: High stress can leave a person feeling tense, anxious, jumpy, or in a prolonged worried state, which in turn can produce cognitive difficulties.

Visual 5.78 Photo Caption: Image of 2 people displaying different forms of stress - depression and someone yelling.

Student Notes:



Visual 5.79

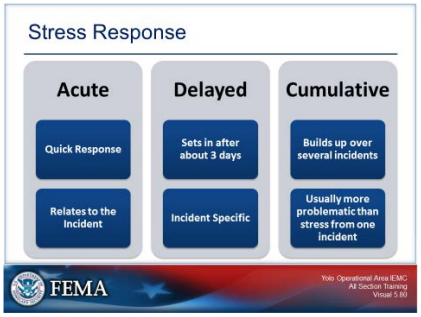
VISUAL 5.79 – COMMON SIGNS AND SYMPTOMS (3 OF 3)

Cognitive

- Forgetfulness
- Difficulty concentrating
- Decreased learning speed
- "Flashbulb memories" and memory gaps
- Repetitious thoughts

Visual 5.79 Photo Caption: A woman who looks like she is thinking.

Student Notes:



Visual 5.80

VISUAL 5.80 – STRESS RESPONSE

- Acute
  - Quick Response
  - Relates to the Incident
- Delayed
  - Sets in after about 3 days
  - Incident Specific

- Cumulative
  - Builds up over several incidents
  - Usually more problematic than stress from one incident

Stress can lead to cognitive difficulties. Examples include:

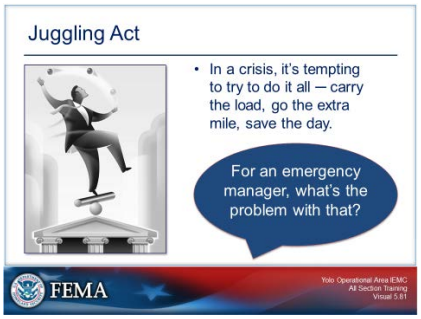
Forgetfulness and difficulty concentrating: High stress can be distracting and make you cognitively less efficient. This can show up as "losing" things, being unable to stay focused on what you are doing, and forgetting whether you have or haven't done something (because your mind was elsewhere while you were doing it). It can also lead to mistakes, so the quality of work suffers.

Learning: Difficulty concentrating also affects the ability to learn. Under stress, learning speed slows down about 20 percent. Remember, local volunteers have been through the disaster themselves, and it will likely take them longer to absorb the training than it would under normal conditions.

Memory: When you're highly stressed, your brain works differently. The brain creates "flashbulb memories." Memories are actually compilations of fragments of memories—mostly thoughts or words that we put together as memories. Under stress, we create sensory memories that often contain very vivid imagery—deeper and more elaborate but occupying fewer memory units. The vivid imagery gets replayed as flashbulb memories, and there tend to be memory gaps. (While the brain was registering sensory memories, it was failing to register other types of memories.)

Repetitious thoughts: During stressful times there is a tendency to "replay mental tapes" repeatedly in order to process them. In the end, it helps us accept the experiences, but in the meantime it can interfere with concentration on other things.

Student Notes:



Visual 5.81

VISUAL 5.81 – JUGGLING ACT

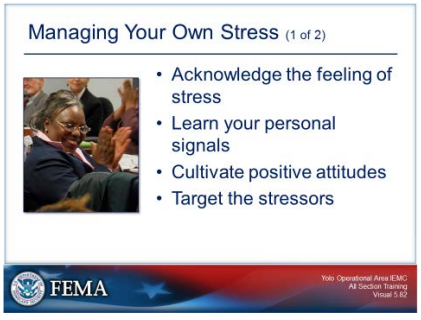
- In a crisis, it's tempting to try to do it all – carry the load, go the extra mile, save the day.

Discussion Question:

For an emergency manager, what's the problem with that?

Visual 5.81 Image Caption: A graphic image of a man juggling.

Student Notes:



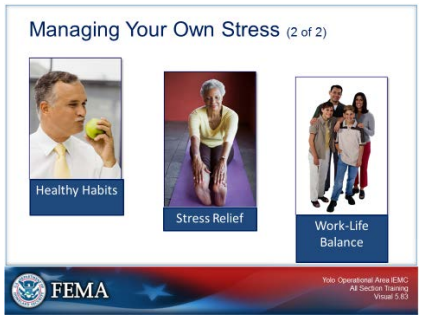
Visual 5.82

VISUAL 5.82 – MANAGING YOUR OWN STRESS (1 OF 2)

- Acknowledge the feeling of stress
- Learn your personal signals
- Cultivate positive attitudes
- Target the stressors

Visual 5.82 Image Caption: A woman smiling and clapping.

Student Notes:



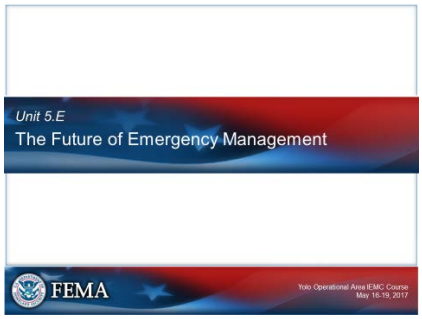
Visual 5.83

VISUAL 5.83 – MANAGING YOUR OWN STRESS (2 OF 2)

- Healthy Habits
- Stress Relief
- Work-Life Balance

Visual 5.83 Photo Caption: Photo on the left labeled Healthy Habits shows a man eating an apples. Photo in the middle labeled Stress Relief shows a woman doing yoga. Photo on the right labeled Work-Life Balance shows a smiling family.

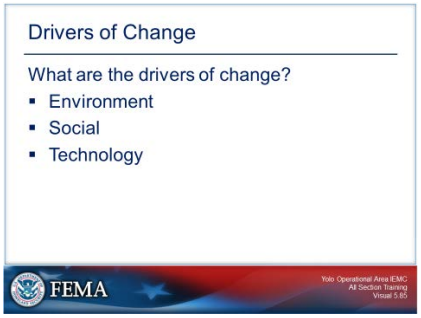
Student Notes:



Visual 5.84

VISUAL 5.84 – UNIT 5.E

THE FUTURE OF EMERGENCY MANAGEMENT



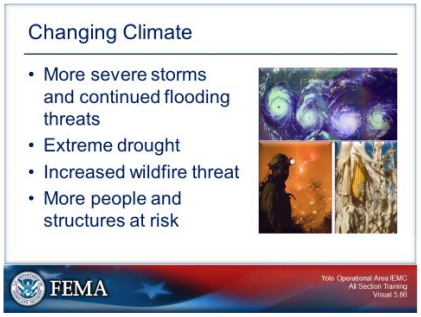
Visual 5.85

VISUAL 5.85 – DRIVERS OF CHANGE

What are the drivers of change?

- Environment
- Social
- Technology

Student Notes:



Visual 5.86

VISUAL 5.86 – CHANGING CLIMATE

- More severe storms and continued flooding threats
- Extreme drought
- Increased wildfire threat
- More people and structures at risk

Visual 5.86 Photo Caption: A collage of images of hurricanes, forest fires, and crop failures as a result of a drought.

Student Notes:

Visual 5.87

VISUAL 5.87 – AGING INFRASTRUCTURE

- Nearing End of Life Cycle
- In Danger of Failing

What are the implications?

Visual 5.87 Photo Image: Collage of photos: Collapsed bridge with vehicles in water. Collapsed electric towers. Emergency Room entrance.

Student Notes:

Visual 5.88

VISUAL 5.88 – EVOLVING TERRORIST THREAT

- Increased self-radicalization
- Diffusion of scientific knowledge and technological innovation
- Potential increase in domestic terrorism
- Uncertainty following the "Arab Spring" and Osama bin Laden's death

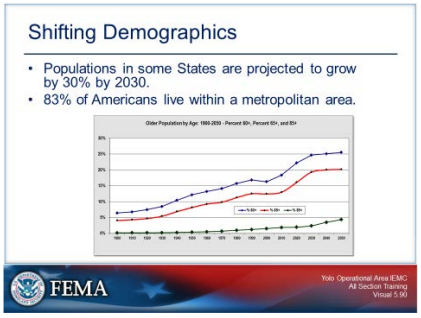
Student Notes:

Visual 5.89

VISUAL 5.89 – CHANGING ROLE OF THE INDIVIDUAL

- Increased empowerment of the individual
- Changing definition of community
- Decreasing trust of official or governmental sources

Student Notes:



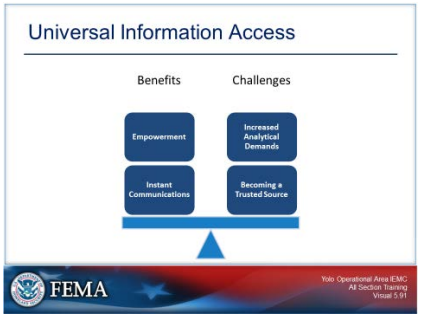
Visual 5.90

VISUAL 5.90 – SHIFTING DEMOGRAPHICS

- Populations in some States are projected to grow by 30% by 2030.
- 83% of Americans live within a metropolitan area.

Visual 5.90 Chart Caption: Chart shows the increase in the percent of the population 60 and older from 6 percent in 1900 to 16 percent in 2000, projected to 25 percent in 2030, to26 percent in 2050. Shows the percent of the population 65 to 85, and the population 85 and older.

Student Notes:



Visual 5.91

VISUAL 5.91 – UNIVERSAL INFORMATION ACCESS

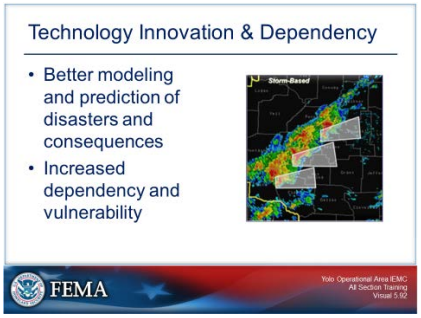
Benefits

- Empowerment
- Instant Communications

Challenges

- Increased Analytical Demands
- Becoming a Trusted Source

Student Notes:



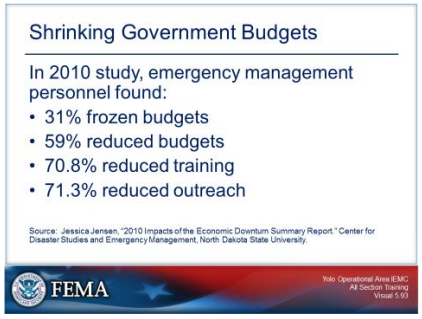
Visual 5.92

VISUAL 5.92 – TECHNOLOGY INNOVATION & DEPENDENCY

- Better modeling and prediction of disasters and consequences
- Increased dependency and vulnerability

Visual 5.92 Photo Caption: *Radar image of a storm system.*

Student Notes:



Visual 5.93

VISUAL 5.93 – SHRINKING GOVERNMENT BUDGETS

In 2010 study, emergency management personnel found:

- 31% frozen budgets
- 59% reduced budgets
- 70.8% reduced training
- 71.3% reduced outreach

Source: Jessica Jensen, "2010 Impacts of the Economic Downturn Summary Report." Center for Disaster Studies and Emergency Management, North Dakota State University.

Student Notes:

Visual 5.94

VISUAL 5.94 – QUESTIONS, COMMENTS, OR CONCERNS?

UNIT 6: EXERCISE HOTWASH

May 19, 2017

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This unit does not have any materials. Facilitated discussion.

UNIT 7: EMERGENCY MANAGEMENT PATH FORWARD

May 19, 2017

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This unit does not have any materials. Facilitated discussion.