## Module C2 PRINCIPLES OF DISASTER MANAGEMENT IN EOCs STUDENT REFERENCE MANUAL

# I. Module Description

Module C2 is designed to provide an understanding of the differences and similarities of an incident, emergency, disaster, and covers the essential principles and functions associated with emergency/disaster management.

The following topics will be covered:

- Contrast between Incidents, Emergencies and Disasters
- Identification of disaster management problems
- Common goals of emergency/disaster management
- Phases of emergency/disaster management
- Management principles applied to emergency/disaster management
- Lessons learned from past emergencies/disasters
- Centralized versus decentralized emergency/disaster management
- Keys for effective emergency/disaster management

## II. Module Content

## A. Contrast between Incidents, Emergencies and Disasters

These terms are often used somewhat interchangeably and in some cases are used to both <u>define a situation</u> and to describe <u>a level of response</u> to a situation.

## 1. Incident

An incident is an occurrence or event, either human-caused or caused by natural phenomena, that requires action by emergency response personnel to prevent or minimize loss of life or damage to property and/or natural resources. Incidents may result in extreme peril to the safety of persons and property and may lead to, or create conditions of disaster. Incidents may also be rapidly mitigated without loss or damage. Larger incidents, while not yet meeting disaster level definition may call for local governments to proclaim "a Local Emergency".

## 2. Emergency

The term emergency is used in several ways:

An emergency is a condition of disaster or of extreme peril to the safety of persons and property. In this context, an emergency and an incident could mean the same thing, although an emergency could have more than one incident associated with it.

Emergency is also used in SEMS to describe agencies or facilities e.g., Emergency Response Agency, Emergency Operations Center etc.

Emergency is also used to define a conditional state such as proclamation of "Local Emergency". The California Emergency Services Act of which SEMS is a part, describes three states of Emergency:

State of War Emergency State of Emergency Local Emergency

#### 3. Disaster

A disaster is defined as a sudden calamitous emergency event bringing great damage, loss or destruction. Disasters may occur with little or no advance warning, e.g., an earthquake or a flash flood, or they may develop from one or more incidents e.g., a major brush fire.

Some of the usual distinguishing characteristics of incidents, and disasters are listed below:

#### Incident

- Usually a single event -may be small or large
- Has a defined geographical area
- Will use local resources and mutual aid may be applied
- Usually only one to a few agencies involved
- Ordinary threat to life and property limited population and geographic area
- Usually a local emergency will not be declared and jurisdictional EOC will not be activated for a single or multiple small incidents
- Usually a fairly short duration measured in hours or a few days
- Primary command decisions are made at the scene Incident Command Post(s)
- Strategy, tactics and resource assignments are determined on scene

#### Disaster

- Single or multiple event (can have many separate incidents associated with it)
- Resource demand is beyond local capabilities and extensive mutual aid and support needed
- Many agencies and jurisdictions involved -(multiple layers of government)
- Extra ordinary threat to life and property
- Generally a widespread population and geographic area affected
- Will last over a substantial period of time (days to weeks) and local government will proclaim a Local Emergency.
- Emergency Operations Centers are activated to provide centralized overall coordination of jurisdiction assets, department and incident support functions, and initial recovery coordination.

# B. Management problems during a disaster

The following problems are often seen at EOCs at all levels:

- Activation usually takes place after the fact resulting in a "catch up" process
- Lack of good and complete information at the beginning
- Possible loss or degraded communications capability
- Possible loss or late arrival of key, trained staff Often a shortfall of resources available to meet demands

## C. Common goals of emergency/disaster management

Disaster and emergency responders share a number of common goals, including the desire to protect life, environment and property. Identifiable goals include:

- Save lives
- Care for casualties
- Limit further casualties
- Limit further damage to structures and environment
- Reassure and care for the public
- Restore area to normal as soon as possible

## D. Phases of comprehensive emergency/disaster management

The four commonly used phases of comprehensive emergency/disaster management are:

- Mitigation
- Preparedness
- Response
- Recovery

## Mitigation -

Mitigation is perhaps the most important phase of emergency management. However, it is often the least used and generally the most cost effective. Mitigation is often thought of as taking actions to strengthen facilities, abatement of a nearby hazard, and reducing the potential damage either to structures or their contents.

While it is not possible to totally eliminate either the destructive force of any potential disaster or its effects, doing what can be done to minimize the effects may create a safer environment which will result in lower response costs, and fewer casualties.

## Preparedness

Preparedness is the quality or state of being prepared. Preparedness is often associated with activities related to personnel readiness, preparation of plans, resource inventorying, setting up the EOC and support systems, training and exercising. Preparedness can also be measured in degrees of preparedness.

The mere existence of a formal written plan does not automatically indicate preparedness. All too often emergency plans are developed to meet the requirements of law, regulation or the "dictates of the boss". When plans are developed under such conditions, they generally do not satisfy emergency needs when the time comes to use the plan.

## Response

The response phase is when we can see the effectiveness of mitigation and preparedness measures. Generally the response phase encompasses the actions taken to address the direct effects of an incident or disaster. These could include saving lives and property, care of casualties and displaced persons, reducing the risk of further damage, containing and controlling the hazard, initiating recovery plans etc.

## Recovery

Essentially, recovery is taking all actions necessary to restore the area to pre-event conditions or better if possible. Therefore, mitigation for future hazards plays an important part in the recovery phase for many emergencies. There is no clear time separation between response and recovery. In fact, planning for recovery should be a part of the response phase. In California emergency planning, there are three phases:

- Pre-emergency (Mitigation and Preparedness)
- Emergency Response
- Post Emergency Recovery

The EOC has a role in all phases of emergency management:

- In the pre-emergency period, the EOC is developed and prepared for any contingency. It is used for orientations and for training and exercising.
- In the emergency response phase, the EOC along with Department Operations Centers (DOCs) serves as the central point for agency or jurisdiction coordination and overall management of the emergency.
- In the post emergency or recovery phase, the EOC can be used to house and direct the recovery operation.

# E. Management principles applied to emergency/disaster management

The effectiveness of the EOC during an emergency will to a large extent be determined by how well the process of management is done. There are several steps involved in the EOC management process. These steps work together to create an effective, efficient EOC operation.

The EOC management process will be described in terms a sequence of related and connected activities:

- Planning
- Organizing
- Leading (coordinating/communicating)
- Evaluating
- Improving

**Planning** is taking the actions in advance which are required to ensure an effective operation. These actions can include both mitigation and preparedness measures described earlier. In EOCs, planning also comes in the form of EOC Action Plans which address specific and measurable objectives and assignments during specific periods.

**Organizing** is ensuring that there is adequate trained staff, that an overall organization structure is in place that operates with an effective span of control, that assignments and responsibilities are known and understood, and with appropriate procedures and systems to make the organization function effectively.

**Leading** (coordinating/communicating) is a three step process of guiding and supervising the efforts of the management team and support staff. It involves providing proper motivation, lines and systems of communication, leadership and delegation of authority. In EOC management using the SEMS principal functions, responsibility and authority for specific activities are delegated in the organization. This accomplishes several objectives:

- Uses other peoples' knowledge, talents and skills
- Completes tasks without unnecessary delay
- Enhances training and personnel development
- Provides a more meaningful work environment

**Evaluating -** EOC Action Plans provide the primary vehicle for addressing overall EOC performance effectiveness. Action Plans lay out objectives to be achieved, and provide all personnel with knowledge about :

- What is to be done (objectives)
- Priorities to accomplish objectives
- Tasks necessary for each objective
- Assignments to complete tasks

At the conclusion of each operational period, an assessment can be made of performance effectiveness, and changes can then be made as necessary. This method of evaluation is a dynamic process which takes place continuously over the life-cycle of the EOC activation.

**Improving** - An essential last step in the management process is the implementation of needed changes or fixes to make operations more effective. Some of these can be made on the spot as a result of the evaluation of EOC action Plans. Others may have to wait and become part of a longer range EOC improvement program.

## F. Lessons Learned from Past Emergencies

What are some of the lessons learned from experiences in EOC operation?

- Activate as early as possible
- Staff initially to a high enough level
- Delegate authority for SEMS functions to primary staff
- Assume and plan for some degradation in personnel or systems
- Closely monitor operating effectiveness
- Make changes when necessary if possible

# G. Centralized vs. Decentralized emergency disaster management

What are the proper roles of the EOC, DOCs and Field incident Command Posts in managing the emergency? A key concept in all emergency planning, is to establish command, strategy and tactical control at the lowest level that can perform that role effectively in the organization.

In the Incident Command System, (ICS) which is the management system used at the SEMS field level, the Incident Commander (IC) is always on-scene at the incident location. The IC, with appropriate policy direction and authority from the responding agency sets the objectives to be accomplished, and approves the strategy and tactics to be used within the realm of available resources to meet those objectives.

The Incident Commander must respond to higher authority. Depending upon the incident's size and scope, that higher authority could be the next ranking level in the organization up to the agency or department executive. This is often the "chain of command to the Department Operations Center (DOC).

Similarly, department executives also report to a higher authority. That authority may rest in city or county administrative offices, with mayors, city councils, county Boards of Supervisors, or Boards of Directors.

What is the appropriate role of the EOC in the emergency management process? The answer will differ based upon the size and policy of the jurisdiction, staff and resources availability.

In general the EOC is the facility within which necessary coordination takes place to ensure that there is an effective response. The EOC may also have a primary role in setting jurisdictional objectives and priorities which may have an impact on resource allocations and incident level planning.

As a rule, EOCs do not directly manage or "command" incidents. This would imply setting incident objectives, determining strategy and tactics and assigning and supervising tactical resources. Within the SEMS organizational structure, this is the role of the on-scene incident commanders using the component elements of the Incident Command System.

Field Incident Commanders requests for additional resources, or a request to deviate from agency policy, will be directed to a higher authority within the discipline which has primary incident responsibility. This communication may be to the Department Operations Center or to the appropriate departmental authority within the EOC depending upon how the jurisdiction is set up.

Further description of these relationships and information flow will be covered in the EOC specific modules 5-8.

## H. Keys for effective emergency/disaster management

At least five key factors have been identified that are necessary for effective emergency/disaster management:

- 1. Disaster plan in place and ready to be implemented.
- 2. Good Standard Operating Procedures (SOPs) in place, with adequate checklists.
- 3. Adequate training and exercises.
- 4. Use of the Standard Emergency Management System (SEMS).
- 5. An effective Emergency Operations Center (EOC).