

Emergency Management Principles and Practices for Health Care Systems

Unit 3:
Healthcare System
Emergency Response and
Recovery

Emergency Management Principles and Practices for Healthcare Systems

This educational curriculum was developed by The Institute for Crisis, Disaster and Risk Management (ICDRM) at The George Washington University (GWU) under contract to the Veterans Health Administration (VHA).

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Unit 3.

Healthcare System Emergency Response and Recovery

Unit Summary

This unit describes in detail the healthcare system Emergency Operations Plan (EOP) and how the Incident Command System (ICS) is specifically applied in the development and implementation of an effective EOP for healthcare systems.

Module 3.1

Introduction to the Healthcare System Emergency Operations Plan

Lesson 3.1.1 Overview, Concepts, and Principles: The Healthcare System Emergency Operations Plan

Lesson Objectives

- *Describe how to efficiently utilize the EOP, its annexes, and tools during emergency response and recovery.*
- *List the types of tools that should be found in the EOP and explain their utility.*
- *Describe how to access the healthcare system EOP during emergency response and recovery.*

Introduction and Background

Understanding the concepts and principles of the Incident Command System (ICS) is important. Optimal application of ICS during emergency response and recovery, however, requires that **ICS be incorporated into the healthcare organization's Emergency Operations Plan (EOP) in a comprehensive and consistent manner**. The lessons in this unit discuss the EOP in great detail, with ICS principles integrated into the EOP and each of its components.

Healthcare systems may be impacted by hazards in numerous ways. As emphasized in the introductory lesson in Unit 1, it is helpful to group these many impacts into summary categories:

- Mass Effect and Organizational Resiliency: Hazard impact on the healthcare system itself may compromise **operational continuity**, or the ability to maintain mission critical business operations and regular healthcare services. Examples include loss of normal water pressure after a hurricane, structural impact after an earthquake or an explosion, or loss of information systems from a power surge.¹
- Mass Casualties and Surge Capacity: The hazard impact on the community may create the service need to evaluate and care for a markedly increased volume of patients—one that challenges or exceeds normal operating capacity. The surge requirements may extend beyond direct patient care to include such tasks as extensive laboratory studies, epidemiological investigations, or business operations. Examples include multiple patients requesting evaluation after potential anthrax exposure, multiple victims after

It is important to consider the many ways in which Healthcare Systems can be impacted by hazards.

¹ Hazard impacts on healthcare systems may further be compounded by the need to provide surge capacity and/or capability.

bomb explosion, and many patients with chronic medical conditions lacking access to regular care after a hurricane.

- **Unusual Casualties and Surge Capability:** The hazard impact may create the need to manage patients requiring unusual or very specialized medical evaluation and care. Surge requirements span the range of specialized medical and health services (expertise, information, procedures, equipment, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities, or burn care services at a non-burn center). Surge capability also includes patient problems that require special intervention to protect medical providers, other patients, and the integrity of the medical care facility.²

To address these hazard impact and response issues, it is important that the mission and various roles of an organization during emergency response and recovery be well described. The mission and roles must be understood both internally and within the community's emergency response network. By delineating these prospectively for healthcare systems, the context is established for all actions undertaken during emergency response by the healthcare system.

Delineating Healthcare System response goals and objectives is a critical activity that provides context and direction.

The response and recovery mission of the healthcare system should be based upon the goals and objectives outlined during EOP development (see Lesson 1.5.2). As previously presented in this text, these include:

- **Primary goal:** Providing the best possible care to victims of the incident while maintaining safety for healthcare system personnel, integrity of the healthcare facility, and the ability to perform the regular medical mission in the community.
- **Control Objectives:** These include:
 - Protect the system's staff, the patients already under care, and visitors and patients families.
 - Maintain the healthcare system's integrity (structural, operational, roles within the community), particularly as it relates to maintaining healthcare services
 - Provide care to incident patients as indicated – not all hazard

² Incidents may occur where both surge capacity and capability are required in response to a hazard impact.

impacts result in the generation of additional patients.

- Efficiently integrate into the larger response community, including coordination with other healthcare facilities.
- Address environmental and regulatory concerns where indicated, without compromising the higher priority objectives above. (This recognizes that in extreme circumstances, conditions may exist where this objective is secondary to the preceding life-safety objectives).

The delineation of the healthcare system mission may at first appear unnecessary, but in fact has very real operational implications during response and recovery. It is also consistent with a systems approach and with NIMS/ICS. For example, by examining the objectives listed above, healthcare system worker safety has been established as a primary concern. This focus should translate into priority actions such as emphasis on worker safety procedures, medical prophylaxis, personal protective equipment, health monitoring, and rest/personnel rehabilitation during extended incidents.

In addition to intra-facility considerations, it is important to consider the relationships the healthcare system may have with other entities during emergency response and recovery. The role of the healthcare system may be critical to the activities of jurisdictional, State, or Federal response entities as described earlier in this unit.³ This larger role is more extensive than merely providing care to victims of an event and may include:

It is important to consider the Healthcare System's role in relation to other response entities.

- Supporting incident authorities: Providing a **visibly competent** response as part of the jurisdictional response. This provides reassurance to the public and may significantly assist in maintaining public confidence in authorities.
- Coordinating actions with community response: Coordinating strategy and actions with community response organizations, including other healthcare facilities.
- Giving expert advice: Providing medical advice to the jurisdictional response managers, as appropriate.

³ This can be true even for events that primarily affect the internal operations of a healthcare facility. For example, water supply disturbance would dictate external liaisons with not only public works, but also with vendors, local emergency management, and other facilities. The impact on the facility should be communicated to the rest of the emergency response and healthcare community.

***Pertinent
Healthcare System
response
assumptions must
be considered at
the beginning of
any incident.***

- Lending psychological support: Providing psychological support/advice to the jurisdictional responders if requested.
- Conveying consistent public messages: Maintaining consistency across response actions and media messages with the jurisdictional response.

Accomplishing these roles necessitates an efficient implementation of the EOP and smooth coordination with the community response.

A clear understanding of the assumptions upon which the healthcare system EOP is based is required. In fact, it is advisable to list the major response assumptions in the EOP, so they can be referenced for evaluation/verification at the beginning of any response and in an ongoing fashion. **Response assumptions** are distinguished from the **preparedness planning assumptions** utilized in the development of the EOP (see Lesson 1.5.1). Response assumptions are operationally relevant parameters that must be examined during incident response. If they are **not** valid for a specific incident's circumstances, the EOP-provided guidance may not be adequate to assure response success. This step alerts the appropriate managers that response adjustments or complete change in actions may be indicated before executing the response called for in the EOP.

Examples of response assumptions that should be considered at the beginning of any event include:

- Patient decontamination example:
 - Response Assumption: The hospital is not within the zone of release of a hazardous material incident.
 - Response Adjustment: If the hospital is in the zone of release for an incident, then Level C personal protective equipment may not be sufficient for hospital "first receivers"⁴ working in the outside environment. Alternative strategies must be considered, such as sheltering in place (with victim self-decontamination if possible) or facility evacuation.

⁴ The term "first receivers" is presented in OSHA. *OSHA Best Practices for Hospital-Based First Receivers of Victims*. U.S. Department of Labor, Occupational Safety & Health Administration (January 2005). Available at: http://www.osha.gov/dts/osta/bestpractices/firstreceivers_hospital.html, accessed January 17, 2006.

- Security example:
 - Response Assumption: Hospital security has adequate resources to control the surge of patients presenting, plus any identified security hazards that create life-safety concerns.
 - Response Adjustment: If this is not true, then alternative tactics, such as facility lock down, may be indicated until the security threat is addressed.
- Occupant Emergency Procedures (OEP)⁵ example:
 - Response Assumption: The surge capacity and capability measures for a hospital assume that the structure is safe for continued operations post-impact.
 - Response Adjustment: If a facility assessment conducted after hazard impact indicates otherwise, facility evacuation may be necessary. The usual objectives of treating new patients as they arrive may be altered or suspended until staff and current patients are evacuated to safety. Managers should have a contingency annex in the Healthcare System's EOP for resuming patient care operations in alternative facilities such as a back-up structure or temporary outside facilities.

Incorporating ICS into the organization's EOP

The stand-alone use of general ICS or any branded ICS product such as HEICS⁶ is relatively useless for healthcare systems, unless adapted specifically to each respective organization. **To be effective, ICS must be incorporated into individual response and recovery systems,** and ideally should be used in the conduct and management of all activities across the EM program.

During the preparedness phase of Comprehensive Emergency Management, ICS should be incorporated into all aspects of the EOP and its components. Consistency in ICS concepts, titles, and relationships must be maintained across all aspects of the EOP and

⁵ Occupant Emergency Procedures or Program are mandated by the U.S. General Services Administration (U.S. Code Title 41, Part 101-20.3- 4) for all federal buildings, and provide guidance for all publicly occupied structures.

⁶ HEICS: *Hospital Incident Command System*, available at: http://www.emsa.cahwnet.gov/dms2/heics_main.asp, accessed February 16, 2006. HEICS is undergoing major revisions and will be released as Hospital Incident Command System (HICS) in the fall of 2006.

recovery plan. This is a critical component of developing, implementing, and revising the EOP and its components.

Accomplishing this requires a thorough understanding of ICS as it applies to the healthcare system's EOP, and so this is extensively presented in Module 3.2. In writing each component of the EOP, ICS concepts should be considered, adapted, and incorporated into the guidance as it is developed.

Lesson 3.1.2 Using the Healthcare System Emergency Operations Plan

Lesson Objectives

- *Describe how to efficiently utilize the EOP, its annexes and appendices, and job aids during emergency response and recovery.*
- *Describe how to access the healthcare system EOP during emergency response and recovery.*

Use of the EOP

A recommended format for the healthcare system emergency operations plan (EOP) is presented in Lesson 1.5.2 (see Textbox 1.5.2.1). Many different EOP formats have been proposed by a variety sources. As noted in Unit 1, the following format is consistent with many of the general principles proposed by these sources, but it is not intended to be proscriptive. This format provides an EOP that is efficient to use and maintain for the healthcare system.

In reviewing EOP guidance, it is evident that a comprehensive EOP can be a formidable document in both length and complexity. It is important to recognize, however, that **the EOP serves primarily as an educational and implementation tool**, and that its size and complexity precludes it being a primary tool during emergency response and recovery. A portion of the EOP's content, therefore, must be formatted for incident guidance. The overall EOP is organized so that it can be referred to efficiently if questions arise during response and recovery.

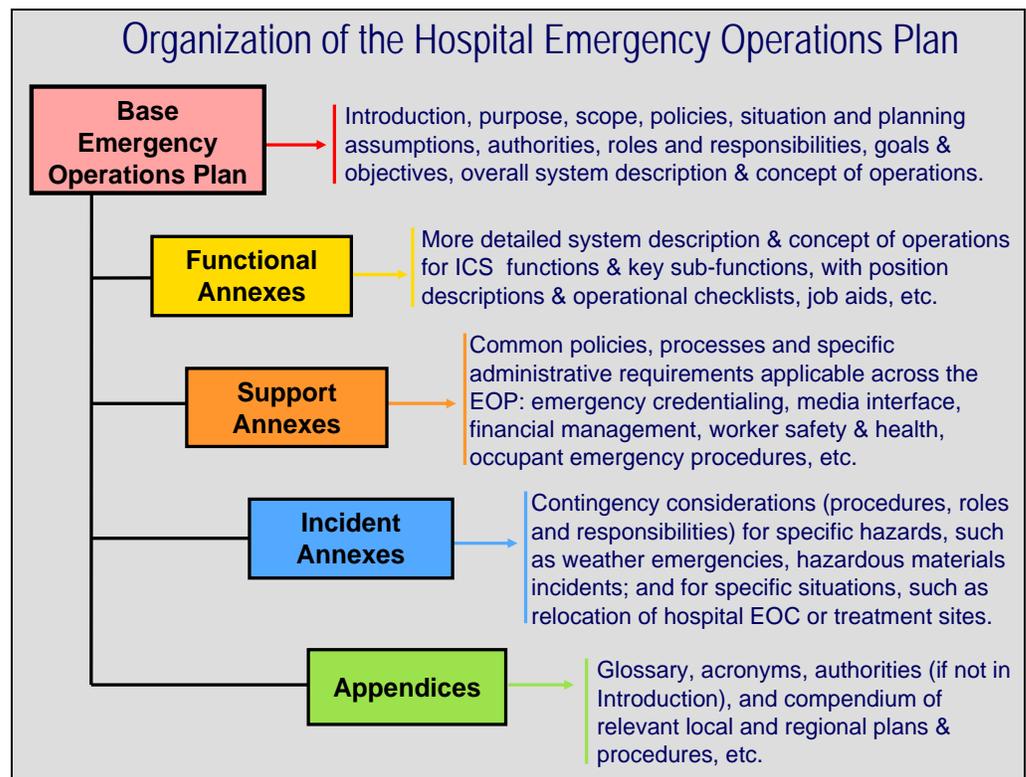
- **EOP organization**: A comprehensive EOP may be organized in many ways. As discussed in Lesson 1.5.2, the recommended EOP format in this text is patterned after that used for the National Response Plan and earlier non-healthcare EOPs. The format is summarized in Exhibit 3.1.2.1 and described in detail below:
 - **Title page and table of contents**: The title page defines the organization for which the EOP applies.
 - **List of revisions made to the EOP**: Dates, page numbers, and general headings of material that has been changed should be listed.

Demonstrable knowledge and skills regarding appropriate use of the Healthcare System EOP are critical for all personnel involved in emergency response.

EOP Executive Summary is not a primary instrument for use during response.

- **Executive Summary:** An Executive Summary can be used to provide a brief overview of the types of situations where the EOP may be used, how it is activated, the structure of the response and the procedures to be followed. As such, the Executive Summary is **not** ideal for use during emergency response and recovery. Instead, it is a tool utilized during mitigation and preparedness phases of Comprehensive Emergency Management (CEM) to explain the healthcare system response architecture to new healthcare system members and to entities external to the healthcare system. This provides an **awareness level of proficiency** in terms of any competency related to the structure and processes of the EOP.

Exhibit 3.1.2.1 One example of an EOP structure and format.



The Base Plan is expected to be used only as a "reference" for specific questions during response.

- **EOP Base Plan:** The base plan provides the all-hazards response guidance, including the purpose, responsibilities, authorities, and concept of operations.
 - **Purpose, Scope, Policies, Situation and Preparedness (or "Planning") Assumptions:** As described in Lesson 1.5.2, these components of the EOP provide the background, important context, and authorities for the EOP. This material is primarily

utilized in an administrative manner by the EM program during preparedness and mitigation and is rarely needed during response and recovery.

- **Concept of Operations:** As described in Lesson 1.5.2, the base plan should include a **System Description** which provides details on the organization of response assets in a format consistent with ICS and NIMS. The follow-on **Concept of Operations** provides detailed procedures to be followed during the successive stages of an event in order to integrate the different healthcare system components in the System Description. **In many plans, these are combined and referred to only as the “Concept of Operations,” but the System Description should be clearly delineated within it.**

The detail, volume, and presentation of this material **preclude** it from primary use during emergency response and recovery. Instead, this material is better utilized during system training, implementation and maintenance (education, training, drills), and answering specific questions that arise during response and recovery. For example, position descriptions for specific response and recovery roles should be included here. Prior to any response, the healthcare system personnel should demonstrate the designated level of competency with this material (as indicated by their position description and position qualifications).

- **EOP Functional Annexes:** This section of the EOP contains emergency response and recovery guidance that addresses sections of the EOP in greater detail than the base plan. “Function-specific” generally refers to areas within the five components of ICS (management, operations, logistics, plans, and finance/admin.), but the level of ICS organization that is bounded by each “functional annex” may be flexibly established.⁷ A functional annex usually encompasses more than a service-level department; it groups departmental guidance into response and recovery functional areas. For example, the “emergency department plan” is a service-level instrument. An “acute patient care functional annex” would describe how the emergency

The Base Plan contains a Concept of Operations (the “physiology” of the response and recovery system) that should include a Systems Description (the “anatomy” of response and recovery system).

⁷ For example: the National Response Plan organizes its functional annexes by its 15 Emergency Support Functions; the Veterans Health Administration defines its functional annexes as combinations of ICS sections (Command-Plans, Logistics-Admin./Finance) and by the ICS Operations Section groups that it has designated (business continuity, safety and security, health and medical, equipment/plant and utilities); the authors use functional areas that are narrower than those of the VHA.

department (ED) and other areas involved in surge capacity and capability receive, evaluate, and treat patients. This may include nearby ambulatory care areas, special procedures areas, and even ED waiting areas/conference rooms for holding low acuity and observation cohorts. Some healthcare organizations may have a single “health and medical functional annex” that encompasses all patient care services. Similarly, a command/management functional annex would describe the layout and function of the Emergency Operations Center (EOC) and is more expansive than a “hospital administration plan.”⁸ Specific guidance for any “key operating unit” within the function should be included within the functional annex. The guidance may refer to the departmental or other designation, but should relate the activities to their expected role within the annex function.

Like the base plan, the functional annexes are generally used for guidance during preparedness as well (i.e., not during response), including resource management, training and education, exercise development and evaluation, and other activities. For incident response, guidance addressed in this section of the EOP is best supplemented by accompanying “tools” and job aids that can be utilized under the duress of emergency response and recovery. Alternatively, the tools can be incorporated into the EOP in a separate appendix.

To facilitate the use of these tools and aids, they should be formatted as “tear-out” sections or rapidly printable files if the EOP is in an electronic format. During an incident, healthcare system personnel can rapidly acquire and distribute guidance documents and relevant forms specific to their area’s assigned role in the response. Several important types of EOP “tools” are presented below for consideration:

- Attachments to the Functional Annexes: Checklists and other brief documents can be used to guide many different activities and are especially useful if they have been developed in a self-explanatory manner. For specific functional areas, examples could include:

⁸ Hospitals and other healthcare organizations are organized for day-to-day services by departments, key operating units, or other nomenclature rather than by ICS functions. The functional annexes may refer to the departmental or other designation, but should relate the activities to their expected functional role within an ICS structure. This will promote better coordination of preparedness planning and incident response between otherwise separate hospital operating units.

- Mobilization checklist: This contains a series of steps that are necessary to transition a defined geographic or functional area from baseline to a response mode for the incident.
- Call-back checklist: For a particular department or functional area, a brief explanation (call-back methods, message development, call priorities) with the points of contact for key personnel.
- Operational checklists or job action sheets: The term “job action sheets” is often used in medicine and health to refer to what are really “operational checklists.” These sheets serve as “tear out” instructions for **each individual position** outlined in the System Description. The guidance provided is best presented in bulleted format, with brief statements about each required action for that position. The defined activities should cover each of the stages of an event as outlined in the Concept of Operations (see Lesson 3.4.3). The required actions may also refer to the use of other tools such as the checklists mentioned above, or the ICS forms presented below.

Textbox 3.1.2.1 demonstrates an example of a job action sheet from the VHA for a Healthcare System Incident Commander.

Operational checklists or Job Action Sheets are most effective if they provide direction for each individual stage of response (Incident Recognition, Activation/ Notification, Mobilization, Incident Operations, Demobilization, and Initial Recovery).

Textbox 3.1.2.1

A Job Action Sheet for “Hospital” Incident Commander⁹

Mission: Organize and direct emergency operations.

The checklist of activities presented below should be considered a minimum requirement for the position. Users of this manual are encouraged to augment this list as necessary. Note that some activities are one-time actions while others are ongoing or repetitive for the duration of the incident.

Timeframe

Immediate

- Receive a briefing from first response personnel, assess overall incident situation.
- Activate elements of the Incident Command System through the notifications system, as required to meet the needs of the situation.
- Put on position identification vest and ID badge.
- Brief the general staff (Section Chiefs) and the command staff (Public Information Officer, Liaison Officer, and Safety Officer); distribute Job Action Sheets.
- Convene an incident action planning meeting with the general staff and Logistics, Planning, and Finance Section Chiefs; provide incident policy, objectives, and general strategy.
- Approve and authorize implementation of incident action plan.
- Determine information needs and inform command and general staff of these needs.

Ongoing

- Coordinate staff activity.
- Manage incident operations.
- Ensure safety of all personnel.

⁹ Adapted from the Hospital Incident Commander job action sheet in the *Emergency Management Program Guidebook*, Department of Veterans Affairs, Washington, D.C., available at: <http://www1.va.gov/emshg/page.cfm?pg=114>, accessed June 6, 2006.

- Approve requests for additional resources and requests for release of resources.
- Approve the use of trainees on the incident.
- Authorize the release of information to the public.
- Ensure Incident Status Summary is completed on a regular basis.
- Ensure planning meetings are conducted on a regular basis.
- Communicate status to appropriate officials.
- Consult with Section Chiefs on needs for staff/responder food and relief. Consider same for dependents. Authorize plan of action.
- Determine appropriate level of service during immediate aftermath; confer with Section Chiefs on the development of objectives and strategy for the Incident Recovery Plan.
- Approve/authorize implementation of the incident recovery plan.
- Approve requests for the release of resources and supplies.
- Keep a log of decisions.
- Ensure records kept during the incident are compiled.
- Convene an incident [After Action Report Meeting] within a two-week period for the review of incident activities.
- Convene an [EM committee meeting] to discuss possible revisions to the hospital's emergency management program.

It should be noted that the job action sheet in Textbox 3.1.2.1 utilizes abbreviated incident stages to guide the actions of the Commander/Manager. A more detailed methodology might present specific tasks required during **each** of the individual “stages” of emergency response and recovery life cycle as presented in Unit 2 (Incident Recognition, Activation/Notification, Mobilization, Incident Operations, Demobilization, Recovery), so that all are noted in their appropriate response stage. The job action sheets present **functionally described actions** that are not hazard or incident specific. Incident specific information is maintained in the EOP's incident specific annexes.

- ICS forms:
 - ICS forms packet: Another type of tool that should be included as attachments to the EOP Functional Annexes is the ICS forms packet. As described in Lesson 2.1.2, the Incident

ICS forms are potentially powerful tools for Healthcare Systems during incident response, but require some adaptation from the standard ICS format and content.

Command System is in part “form driven.” This means that many of the important activities to be achieved during response and recovery, including developing and documenting critical response information, are guided by completing and processing the ICS numbered forms. These pre-formatted guides prompt decision making and capture specific information during an event. As an example, the ICS 207 is an ICS organization chart that, during completion, prompts the recording of names assigned to specific positions within the response organization. Having an ICS 207 completed and disseminated can be very helpful internally (so that personnel know who is filling what position) and externally (so that external agencies are able to see how the response organization is structured and who their points of contact may be).

ICS forms are also critical adjuncts to the incident action planning process, (see below in Lesson 3.4.3).

- Adjustment to wildland fire ICS forms: ICS forms were originally developed for the wildland firefighting environment. The format of the forms therefore requires adaptations for healthcare systems. The intent of each form, the designation of who is responsible for individual forms, and the designated disposition of each form should remain consistent within standard ICS. For example, in the ICS 207 example from above, it would be unlikely to have an Air Branch on the organizational chart for most healthcare facility-based systems.¹⁰ The ICS organizational chart for a healthcare organization may have different titles for branches, units, and other ICS sub-divisions, but would still be organized within the five sections (command or management, operations, logistics, plans, and admin./finance). The ICS-207 for the healthcare system would contain this organizational chart to fill in assigned positions, and would still be completed by the Plans Section during each operational period. In addition, some forms that are not contained within ICS may be needed for documentation of information within healthcare systems (e.g., forms related to patient tracking). As noted in Lesson 2.1.3, these generally would be subsets of standard ICS forms and numbered to reflect their relationship.

¹⁰ Adaptation of forms to organizational needs has been accomplished by several agencies within DHS. Two that serve as good examples of form adaptation are the U.S. Coast Guard and the FEMA Urban Search and Rescue System.

Exhibit 3.1.2.2 demonstrates the adaptation of an ICS form for the healthcare system.

Exhibit 3.1.2.2: Sample ICS Form 202 adapted for hospital use.

Purple Ridge Memorial Hospital 202 INCIDENT OBJECTIVES	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED
4. OPERATIONAL PERIOD (DATE/TIME)			
5. GENERAL CONTROL OBJECTIVES FOR THE INCIDENT			
6. OBJECTIVES SPECIFIC TO OPERATIONAL PERIOD			
7. WEATHER & OTHER HAZARDS FORECAST FOR OPERATIONAL PERIOD (RELEVANT TO HOSPITAL OPERATIONS):			
8. GENERAL SAFETY MESSAGE:			
9. ATTACHMENTS (* IF ATTACHED)			
<input type="checkbox"/> ORGANIZATION LIST (H 203)	<input type="checkbox"/> MEDICAL PLAN (H206)	<input type="checkbox"/> _____	
<input type="checkbox"/> ASSIGNMENT LIST (H 204)	<input type="checkbox"/> INCIDENT MAP	<input type="checkbox"/> _____	
<input type="checkbox"/> COMMUNICATION PLAN (H 205)	<input type="checkbox"/>	<input type="checkbox"/> _____	
Healthcare H 202 rev 10-05	10. PREPARED BY (PLANNING SECTION CHIEF)	11. APPROVED BY (HOSPITAL INCIDENT COMMANDER)	

- EOP Support Annexes: This section of the EOP outlines specific processes and procedures that may have application to multiple functions or sections. Some of the support annexes deserve special attention during EOP implementation, such as the Occupant Emergency Procedures annex. This support annex provides information on procedures for emergent facility evacuation and other protective actions, but the overall response management structure remains the same as described in the

EOP Support Annexes provide relevant information applicable across multiple functional areas of the healthcare facility during response.

base plan of the EOP. As such, organizational personnel should be proficient with support annexes before incidents occur, referring only to specific checklists (tools) during response.

Another example of an appropriate support annex might be the media policy (e.g., refer all inquiries to PIO). This should be briefed to all personnel as a reminder to avoid impromptu press conferences that could be counter-productive to the overall response and recovery effort. Another example would be a standard resource requests/ordering process for all areas of the healthcare system. A final example may be recurrent issues that must be addressed for worker safety and health during response.

- EOP Incident Annexes: These annexes provide short, concise guidance for priority hazard or threat events as a result of the hazard vulnerability analysis. The annexes build on the basic structure and procedures outlined in the functional annexes, with sections addressing considerations and actions specific to individual hazards or conditions that the healthcare system may confront. They document **only specific considerations that are not already addressed by the overall EOP**. The material contained in the incident specific annexes can be referred to as “pre-plans” (see terminology textbox).

The EOP Incident Annexes provide information specific to certain hazard impacts or threats and response considerations. These can be considered “pre-plans” which are implemented within the construct of the overall EOP.

Terminology alert!

Pre-plans: Processes and procedures to be followed, and other response considerations for specific hazards. These build upon the guidance in the functional annexes of the EOP, and therefore list additional considerations for the specific hazard. Most of these considerations can be accomplished through the usual EOP construct. The VHA and other organizations refer to these detailed pre-plans for complex events as “Standard Operating Procedures” or “SOPs.”

For example, the healthcare system Chemical Incident Annex would present specific steps for the decontamination of patients. The overall structure of the response and the procedures otherwise remain as described in the general EOP (e.g., reception, triage, and treatment of patients after decontamination). With any “pre-plan” in this annex, it is incumbent upon the Healthcare System Incident Commander to rapidly evaluate the pre-plan against current incident conditions to assure that the underlying response assumptions

remain valid for the specific incident, and to adjust the pre-plan as indicated to address deficiencies and assure operational success.

- Supporting documentation: These provide general references that may or may not be used during emergency response and recovery. For example, a glossary of EOP-specific terms can be very helpful to those utilizing the plan. Another candidate for this section is the general outline (or executive summary) of the community EOP, if it provides information important for interfacing with community response assets. Similarly, executive summaries for the plans of other specific organizations may be presented here (e.g., EMS, public health, and others).
- EOP Summary Statement: Brief statements should be provided that outline use and maintenance of the EOP.
- Summary plans versus plan incorporation into the EOP: Some issues have been addressed in the past through stand-alone plans that are distinct from the EOP. An example of this is continuity planning. In modern emergency management, it is usually more efficacious to incorporate these into the “all-hazard” EOP, while maintaining a descriptive plan for accountability and training purposes only (see Textbox 3.1.2.2).

Textbox 3.1.2.2

Continuity Planning in Relation to the EOP

A well-written EOP incorporates the major issues related to continuity of operations throughout the EOP. Continuity of operations is, in essence, about preserving the normal business of the organization. For healthcare facilities, this relates to the preservation of business processes (also referred to as “business continuity”) as well as preserving healthcare services and products. The following EOP considerations demonstrate how the concepts of continuity planning are integrated throughout the EOP:

- EOP Base Plan, Operations Section, and the Logistics Section: In some incidents, prominent activities may focus upon the restoration or maintenance of mission critical systems. As an example, these may include the restoration of IT capabilities or the recovery of power. These “continuity” activities would be covered in the objectives-based incident action planning and, hence, resources assigned to them would reside in the Operations Section.*
- EOP Support Annexes: EOP support annexes describe processes and procedures that may be relevant across multiple

functions during response to hazards. As such, some “continuity” processes may be described here. For instance, procedures outlining the following may be contained in a Continuity of Operations support annex:

- Maintenance of records
- Personnel support
- Devolution of control: selection of positions that assume Command/management positions in the event persons filling those positions are unable to continue their duties.
- Evacuation procedures and activities necessary for continuing medical care at non-routine sites (alternate treatment facilities) in case of evacuation.

The purpose, therefore, in having an independently written continuity plan is not primarily for operational guidance during an incident. It may be necessary to have a separate continuity plan for accountability purposes (e.g., regulatory requirements such as FPC #65 for Federal facilities) or for training purposes. In situations in which it is permitted, a suggested method for accomplishing this without writing a completely new document is to provide a cross walk of the EOP with the necessary components of a continuity plan.

* Terminology used in the business arena often refers to “recovery activities” when discussing restoration of services, even though these commonly occur under the response phase of comprehensive emergency management.

Accessing the EOP

Knowing where the healthcare system EOP is located and how to access it is just as important as knowing how to use it during response and recovery. Essentially, two options are available for healthcare systems, each with its own advantages and disadvantages. A critical competency that all employees of the healthcare system should demonstrate at the operational level of proficiency is the ability to find and access the EOP, to rapidly locate their relevant section of the EOP, and to use the document as directed.

- Hard copies: If the system utilizes printed (“hard”) copies of the EOP, multiple copies must be printed and kept at various locations. These should be in a consistent place in each geographic location (for instance, at a nursing station on each floor). EOP functional annexes that are applicable to that geographic location should be

Hard copies and electronic copies of the EOP both have specific challenges in relation to their maintenance and use.

highlighted in some fashion (for instance, management tools would be highlighted for the copy kept in the designated Healthcare System Command Post or Emergency Operations Center). For tools that might be distributed to several personnel during a response, multiple copies should be available. A major disadvantage of utilizing hardcopies is the difficulty in updating the EOP (requiring every copy to be updated every time the EOP is revised), and refurbishing it (replacing tear-out sheets, assure other pages weren't removed, returning it to designated location) after each exercise and incident. Without re-printing and re-distributing the entire EOP each time it is used or a change is made, it is difficult for users to know if they are working from a complete and up-to-date EOP.

- Electronic copies: For areas with easy access to computers, copies of the EOP may be kept on hard drives or an intranet (ideal). The intranet configuration should, if possible, allow completion of many forms on the computer and electronic submission of these to relevant parties within the intranet. For hard drive forms, they should be formatted to allow electronic completion and submission via email or other electronic filing. Many of the data forms are best developed in software (Microsoft Excel© and others) that allows rapid aggregation of data and other expedited processing. While the electronic methods facilitate keeping the EOP current (through a centralized process that changes only one master document), it carries vulnerability (electrical power or IT failure) and limitations (for example, if Occupant Emergency Procedures are activated requiring emergent evacuation). Back-up methods (CD copies and offsite but accessible storage of the EOP, for example) may mitigate the electronic risk. High-speed printers should always be available so that required forms, guides, and other documents may be printed rapidly and distributed to responders. Truly emergent guides, such as operational checklists and ICS-style forms, should be kept in hard copies that are immediately available.
- Combined approach: The best approach to maintaining the EOP in a consistent, up-to-date, and available state may be a combination of both hard copies and electronic files. All electronic "pages" should have a date-stamp, so that the hard copies can be periodically checked against the electronic version to assure that the printouts are current.

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Module 3.2

Healthcare Emergency Operations Plan: The Systems Description

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Lesson 3.2.1 System Description for Healthcare Emergency Response and Recovery: Overview and Command Function

Lesson objectives

- *List important considerations for the adaptation of ICS to healthcare systems.*
- *List the various ICS sections and describe their general roles.*
- *Explain the key concepts to be included in a well-structured systems description.*
- *Describe the responsibilities of the Command Function and explain the relationship between the Healthcare System Incident Commander, the CEO/Agency Administrator, and the board of directors.*
- *List position description and requirements for Healthcare System Command Staff.*

Overview

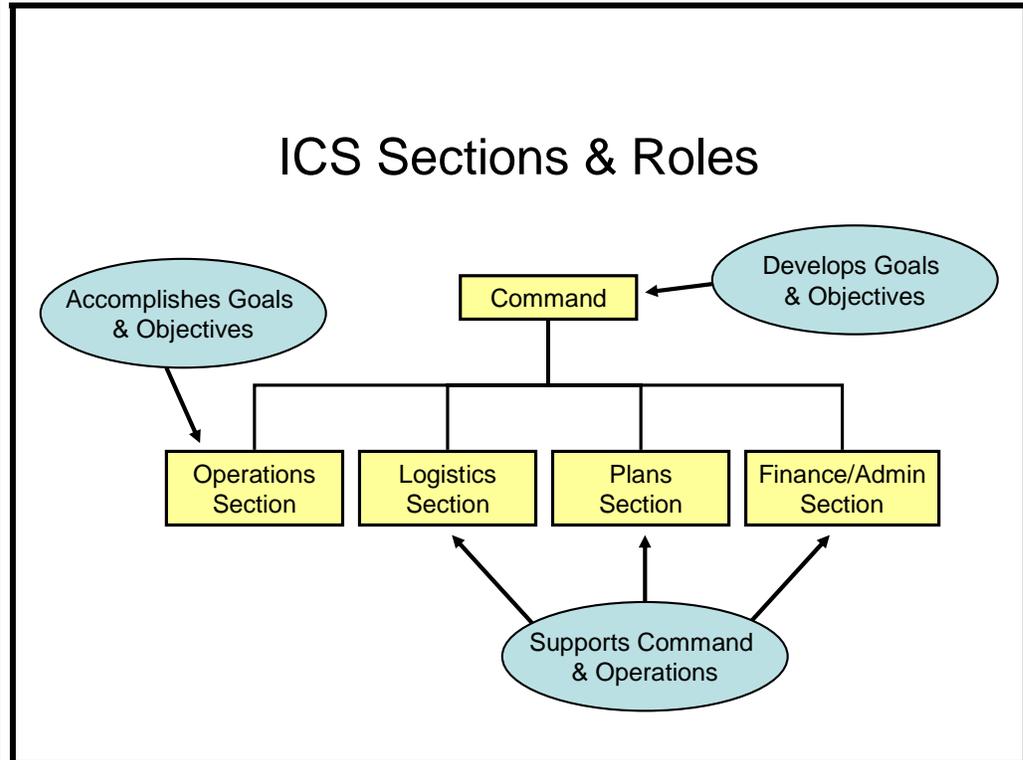
While a “system description” becomes absorbed into the “concept of operations” in many formal emergency operations plans, the importance of a very clear and operationally accurate system description cannot be over-emphasized. During the EOP development process, appropriate attention must be paid to this construct before delineating how the system will operate.

The system description for any healthcare organization should be based upon standard ICS principles as described in Lesson 2.1.2. This becomes increasingly important for healthcare organizations in light of the newly described National Incident Management System (NIMS), which promotes consistency among the many response organizations and disciplines through the universal use of ICS during response and recovery. As in other organizations where emergency response is not the primary mission, the day-to-day operations in individual healthcare systems are comprised of very differently named operating units, resources, and specialty care areas. Therefore, the systems description should be constructed around the five core functions described in ICS: Management, Operations, Logistics, Plans, and Finance/Administration (see Exhibit 3.2.1.1) and their sub-divisions. The adaptation of ICS to healthcare systems involves specific considerations as listed in Lesson 2.1.2.

The Systems Description should be consistent with NIMS/ICS principles.

Exhibit 3.2.1.1: ICS organization and primary roles

ICS organizes response roles by their relationship to incident objectives: developing incident objectives, accomplishing incident objectives, or supporting the groups that address incident objectives.



Overview: System Description Format

Various formats for a systems description have been promoted, but several key concepts should always be incorporated. As this part of the EOP is important for providing understanding among personnel in the organization during systems implementation and instructional activities, it should be detailed enough to impart a clear picture of the response structure and the response relationships between every-day operating units.

- Functional breakdown overview: The systems description should include an outline of how personnel are organized according to the five core functions described in ICS. The purpose and construct of each function should be delineated. As the Operations Section may vary incident to incident, a generic, all-hazards template may be described with any hazard-specific variations presented under the Incident Specific Annexes of the EOP.
- Position descriptions/position qualifications: As described in Lesson 2.1.2, specific positions within the functional breakdown warrant the delineation of position descriptions. These specifics

can be included in the functional annexes. For healthcare facilities, position descriptions for all Command and General Staff should be provided. In addition, it is advantageous to provide the position qualifications for these, specifying the competencies that the position must have in order for the function to be accomplished. It can therefore be considered unacceptable to fill critical positions with personnel who are not specifically qualified: Healthcare facilities would not consider staffing unqualified personnel for day-to-day operations, and it should be similarly unacceptable during emergency response and recovery.

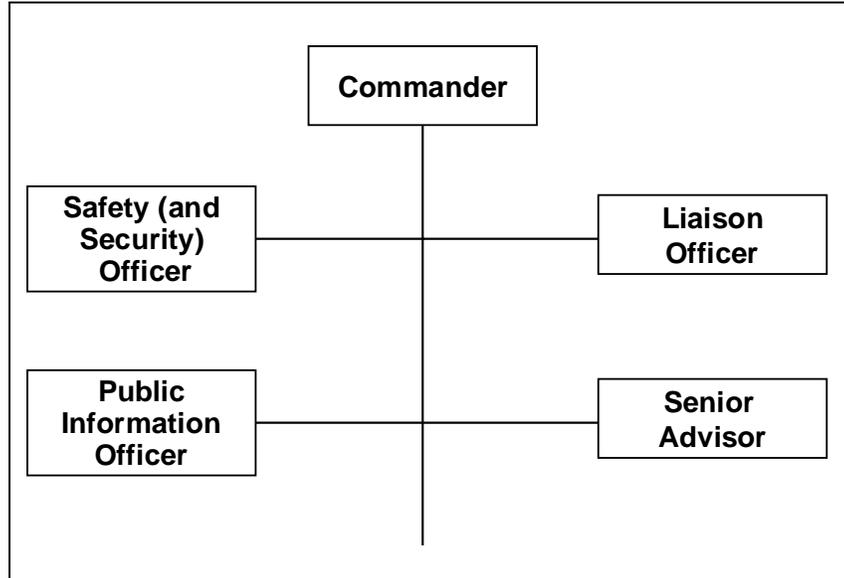
System Description: The Command Function

The Command function carries the overall responsibility for the healthcare system emergency response and recovery. In accordance with NIMS, Command provides guidance by establishing the healthcare system's response and recovery objectives and strategies. This important task can only be achieved if personnel assigned to Command avoid micromanagement of the other functions and delegate certain tasks. Conversely, Healthcare System Commanders will only be comfortable in delegating tasks if the remainder of the system is functioning adequately and reporting mechanisms are followed as required (through an adequately functioning Plans Section). For example, Commanders should not be involved in individual personnel assignments within a specific section. Instead, they should be kept abreast of the overall adequacy of the staffing of the respective sections.

The initial management of a healthcare system during an event will inherently be reactive and should involve the execution of predetermined activities as outlined on EOP tools such as operational checklists. For example, during initial stages of an event that may impact a facility with incoming patients, a specific patient care unit should execute specific activities, such as a determination of current patients that are eligible for early discharge, reporting available bed capacity, and designating personnel resources that could assist elsewhere in the organization. As the incident progresses, Command becomes more proactive by establishing response and then recovery objectives and strategies that coordinate the activities of the various sections and provides guidance for further activities. For events of any significant duration (more than a few hours) and complexity (beyond response where **direct** management of all activities can be accomplished), formal incident action planning is instituted and a cyclical process of refining response and recovery objectives and strategies is undertaken (see Lesson 3.5.2: Healthcare Systems Concept of Operations).

Healthcare System Command is responsible for the entire organizational response and for setting the organization's response objectives.

Exhibit 3.1.2.2: Healthcare System Command/Management positions



Specific positions within Healthcare System Command Staff are depicted in Exhibit 3.1.2.2 and include:

- Healthcare System Incident Commander: This important position oversees the Command function and thus the healthcare system response itself. A commonly held belief in healthcare organizations is that the CEO or the agency administrator should serve in this position, when in fact other arrangements may be more effective. A senior manager with extensive knowledge of the **healthcare system EOP** is usually best suited for this position. These personnel are more likely to have time to achieve competencies related to the EOP and this position (see competencies listed below for Commander). In some healthcare systems, the director of the EM program (the emergency program manager) or some other senior manager or administrator may be the ideal choice.
- Authority of the CEO or Agency Administrator: In situations where the command position is not filled by the senior executive for the organization, the CEO or Agency Administrator retains ultimate authority to meet his/her responsibility for an effective response. Decision-making authority for the response itself is essentially delegated to the Healthcare System Commander (see discussion of this issue for the “agency administrator”¹¹ in Lesson 2.1.2). The

A common misconception is that the CEO must always serve as the Healthcare System Commander.

¹¹ National Wildfire Coordinating Group. Incident Command System, National Training Curriculum Module 17: *ICS For Executives (October 1994) Instructor Guide*, pp. 17-5 to 17-7.

CEO therefore remains available for other important activities, such as speaking with the media, liaising with senior political or response authorities, and **continuing the management of the overall healthcare system.**

- CEO or Agency Administrator participation in ICS: The CEO may participate in any or all command meetings that establish objectives and strategies and that involve major expenditures. Their focus should be at the strategic level, and they may be primarily focused upon their role of assuring the continuing normal healthcare operations as the incident evolves. This type of arrangement has been utilized with great success in other disciplines (see Textbox 3.1.2.1).
- Oversight by board of directors or other overseers: The CEO or Agency Administrator retains the role of keeping these bodies informed. If input is requested from them, or they wish to have a formal role, the use of an “emergency policy group” or other titled structure may allow for formal policy-level input without opening up the ICS structure to micro-management.

Textbox 3.1.2.1

**Selection of the Incident Commander:
The 9-11 Pentagon Response Example**

During response to the Pentagon terrorist event on 9-11, Arlington County (Virginia) Fire Chief Ed Plaughner appointed his Assistant Fire Chief Jim Schwartz as the Incident Commander. Chief Schwartz focused his efforts on the complex activities involved with managing the incident while Chief Plaughner remained available to interact with political authorities (local, State, and Federal), provide media briefings (in conjunction with the PIO), monitor the overall system performance, and address other Arlington County issues as they arose.

- Healthcare System IC and position competencies: Individuals assigned as the healthcare system incident commander (IC) should

Given the position’s critical responsibilities, the Healthcare System Commander should possess the requisite command competencies.

possess certain competencies. These include the knowledge, skills, and abilities to:¹²

- Identify specific criteria of potential events that indicate the need for the full or partial activation of the healthcare system EOP.
- Activate or support full or partial EOP activation for appropriate events.
- Ensure rapid healthcare system mobilization that transitions day-to-day management and operations to a response organizational structure and processes.
- Ensure that Healthcare System Command is effective, utilizes EOP procedures and processes, and uses a pro-active “management by objectives” approach.
- Manage continuous incident planning through iterative planning cycle procedures that develop strategic and general tactical guidance to facility personnel.
- Manage efficient information processing regarding response activities.
- Provide information on the healthcare system’s response and recovery activities to patients, patients’ families, facility personnel families, media, and the general public as appropriate.
- Monitor the response and recovery needs of the healthcare system’s functional areas, and if needed, provide support with additional facilities, equipment, communications, personnel, or other assistance.
- Establish appropriate measures to document, track, or reimburse financial costs associated with the healthcare system response and recovery.
- Manage healthcare system response so that it adheres to appropriate regulations and standards or seeks relief as required.
- Problem-solve issues that aren’t resolved lower in the management structure, but avoid micro-management.

¹² Adapted from Barbera, J; Macintyre, A; Shaw G; et al. *VHA Emergency Response and Recovery Competencies: Competency Survey, Analysis, and Report*. Available at: <http://www.gwu.edu/~icdrm/>, last accessed January 9, 2006.

- Ensure that Business Continuity Program considerations are incorporated into the healthcare system incident action planning process.
- Ensure rapid and effective demobilization of the healthcare system response during the transition to recovery operations.
- Ensure recovery is accomplished to restore the healthcare system to baseline operations and to capture important lessons for organizational improvement.
- Availability and qualification: A Healthcare System Commander must, therefore, have prerequisite training and must be onsite to perform his/her duties.
- 24-hour coverage: For extended Incident Operations or incidents that require 24-hour staffing, a Deputy Commander may be selected to extend the coverage of this important position (this concept is used for other ICS positions as well).
- Healthcare System Safety Officer: This position traditionally has focused on the workplace safety and occupational health¹³ of the responders within an organization. This includes both preventive measures as well as reactive interventions if an injury or illness occurs. For healthcare system emergency and disaster incidents, security “safety” is also a vital component of this position’s responsibilities. The actual tasks that address these issues are performed by personnel in the appropriate ICS sections. Many healthcare systems use the regular day-to-day position of facility safety personnel to staff this position. Alternatives include security personnel or others. Types of activities the Safety Officer should be responsible for in the healthcare system include:
 - Input to Command decision making: Providing input to all Command decision making as it relates to workplace safety, preventive medicine, and security of healthcare system personnel. This necessitates participating in the development of the healthcare system incident action plan.

Healthcare System Safety Officers provide critical input to the Commander.

¹³ Occupational health can be defined as the science of designing, implementing and evaluating comprehensive health and safety programs that maintain and enhance employee health, improve safety and increase productivity in the workplace (Federal Occupational Health, U.S. Department of Health and Human Services, available at: <http://www.foh.dhhs.gov/Public/WhatWeDo/OHDefinition.asp>, accessed May 16, 2006).

- Monitoring fatigue of responders: During extended operations, personnel may be required to work longer than normal hours. This is especially true of Command and General Staff positions and these positions require special attention. Adequate breaks and rehabilitation may have to be mandated.
- Monitoring for nutrition and hydration: Similarly, personnel may require monitoring for adequate nutrition and hydration depending upon their activities (e.g., during decontamination of patients).
- Monitoring for adequate hygiene and infection control: In the healthcare system environment, regular hygiene and infection control should be maintained and in some circumstances (e.g., unusual infectious disease) extra-ordinary procedures may be required, such as specific environmental cleaning or the use of additional PPE.
- Monitoring for incident stress and its effects on responders: Incident stress, particularly during unusual or extremely traumatic events, is increasingly recognized as a cause for poor response performance, increased illness and injury among responders, and post-incident personnel problems. Intervention during response may be the most effective management strategy for this issue (see Lesson 3.5.2), and the safety officer should be monitoring this throughout the incident.
- Personal protective equipment: The type of PPE and the context in which it will be used should be monitored by the Safety Officer for adequacy of equipment for the circumstances, as well as adequate application and adherence to guidelines by responders.
- Monitoring of injuries and illnesses: Injuries or illnesses during response should be evaluated from an epidemiological perspective, looking for any indication that a change in response methodology or safety practices is warranted.
- Healthcare System Public Information Officer (PIO): Personnel assigned to this position develop the healthcare system's message for release to the media. Because the "public" includes patients already under care, and their families, the PIO must assure that messages are crafted and disseminated to them as well. For example, it could be important in some instances to communicate to pre-existing patients and their families that healthcare system response actions have not impacted the safety and quality of medical care being provided for current patients (see Textbox 3.1.2.2 for an expanded definition of the information officer from

The Healthcare System Public Information Officer (PIO) manages the healthcare system's messages for the public.

traditional ICS literature). This position is also responsible for monitoring media messages to ascertain whether the healthcare system response is adequately presented, and that other relevant information is available and accurate. Much has been written about effective crisis communications but specific issues relevant to healthcare systems should be considered:

- Avoid technical answers to questions: The provision of care to patients and the public can at times be highly complex and technical. Utilizing common language and explaining things in lay terms will facilitate communications with the media and the public.
- Maintain immediate access to expert information: Due to the complexity of information that may be covered in the media briefing and follow-on questions, having subject matter expertise readily available may prevent being caught off guard, while projecting an air of responsiveness to reporter's inquiry. If expertise is not immediately available or the answer is not clear at that time, obtain expertise through the healthcare system's ICS structure and maintain a responsive posture with the inquirer by providing an accurate and "cleared" answer.
- Define the issues for the healthcare system: When the incident involves more than just the healthcare system (i.e., a community-wide event), the healthcare system's media message should be limited to activities within the healthcare system's purview. These comments should be consistent with media messages from jurisdictional authorities and other healthcare organizations (to prevent public confusion or distrust) and should avoid speculation and debate. All information in an evolving healthcare incident should be presented as the best available at the time, but subject to change as additional details emerge. All actions should be explained as the best possible practice based upon currently available information.
- Provide accurate information with context: The provision of honest information is important, and attempting to hide "bad news" will ultimately be destructive. Providing the context for all actions and explanations from the outset (e.g., "This is a truly extreme event") can be helpful in providing understanding of difficult circumstances to the public.
- Locations of briefings: Always provide media briefings in controlled locations, away from clinical areas or other sensitive locations where patient care or other incident operations are occurring.

Healthcare System PIOs should monitor the media for message content and should ensure that the Healthcare System's messages are not in direct conflict with the message of other response entities.

Textbox 3.1.2.2

Information Officer¹⁴

The Information Officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one Information Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents.

The Information Officer may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

Position Descriptions

Responsibilities: Agencies have different policies and procedures relative to the handling of public information. The following are the major responsibilities of an Information Officer and would generally apply for any incident:

- Determine from the Incident Commander if any limits exist on information release.
- Develop material for use in media briefings.
- Obtain Incident Commander's approval of media releases.
- Inform media and conduct media briefings.
- Arrange for tours and other interviews or briefings that may be required.
- Obtain media information that may be useful to incident planning.
- Maintain current information summaries and/or displays on the incident and provide information on status of incident to assigned personnel.
- Maintain Unit Log.

Healthcare System Liaison Officers provide strategic links to the larger response community.

- Healthcare System Senior Liaison Officer: This position is responsible for establishing and maintaining coordination with the Command functions of external response organizations, such as public health, fire, EMS, law enforcement, other hospitals, or public

¹⁴ National Wildfire Coordinating Group. *Incident Command System National Training Curriculum: ICS Position Descriptions and Responsibilities* (October 1994), available at: <http://www.nwccg.gov/pms/forms/compan/pds.pdf> accessed February 16, 2006.

health. In addition, the Healthcare System Senior Liaison Officer may interact with local emergency management authorities. These interactions are best managed through pre-established essential elements of information that should be sought and shared between the healthcare system and external organizations (as are required by JCAHO regulations for healthcare systems). For instance, the use of an ICS 209 Incident Status Summary Form, completed on a regular basis during emergency response, can provide an excellent healthcare system update to external entities. The senior liaison position is responsible for addressing a common problem for healthcare systems: managing emergency operations through day-to-day relationships with external organizations, which can prevent important information from ever reaching the level of Command. Examples include:

- EMS communications with the Emergency Department: Tactical information (such as numbers of patients being transported) is appropriate for the Emergency Department to receive and maintain, with relay of this information to the Senior Liaison. Strategic discussions between EMS and the healthcare system (such as actual or anticipated changes in EMS response procedures as the event expands) or incident specific strategic information should be relayed to the Healthcare System Senior Liaison Officer for processing and inclusion in healthcare system incident action planning.
- Patient test results: In some instances, multiple parties may have an interest in the outcome of a specific patient's test results (e.g. blood culture for anthrax in an index case).¹⁵ Local public health, State public health, and Federal health and medical agencies may all have interest and may individually contact the healthcare system. As opposed to having all these agencies contact a healthcare system lab or clinical care provider directly, these calls should be referred to the Healthcare System Senior Liaison Officer. This approach provides a mechanism for addressing privacy and related concerns, and provides a forum for organized transfer of later follow-up responsibility from the healthcare facility to appropriate public health authorities.
- Senior Advisor/Technical Specialist Officer: This position provides **strategic advice** to the command/management group and is established only as needed. This assistance is distinguished from the usual "technical specialist," who is an individual providing

Healthcare System Senior Advisors possess specific knowledge that should be incorporated into strategic decision-making.

¹⁵ The communication of this information to appropriate external agencies would not violate HIPAA as the diseases often have tremendous public health impact.

tactical level expert advice and who is usually attached directly to the Plans Section or to the Operations Section. The Senior Advisor position may be variably staffed. One example might be a physician providing strategic guidance for what the healthcare system will need to have in place 24 hours later to treat the medical problems in an unusual illness or injury (such as radiation sickness). Alternatively, **the position could be staffed by an ICS expert, providing strategic advice on the optimal use of ICS by the organization that is a novice to ICS experience.**

Lesson 3.2.2 System Description for Healthcare Emergency Response and Recovery: Operations and Plans Sections

Lesson objectives

- *List the responsibilities of the Operations Section and describe how the organizational structure can vary according to the type of incident.*
- *Describe the organizational elements of the Healthcare System Operations Section.*
- *List the responsibilities of the Plans Section and describe the role of each of its functional units.*

System Description: The Operations Section

The Operations Section of the healthcare system is tasked with all activities designed to directly achieve the objectives set by Command. As mentioned above, the personnel assigned to, and the organizational structure of, the Operations Section can vary significantly based upon the incident's primary objectives. Examples of this include:

- Bombing external to the healthcare system resulting in multiple patients: In this example, the Operations Section will mainly be comprised of personnel assigned to the following:
 - Patient reception and emergency care: patients received and triaged according to injury. Emergency treatment and surgery provided.
 - Inpatient care: personnel assigned to the care of patients who cannot be treated and released.
 - Outpatient care: For some healthcare systems, outpatient treatment areas can be utilized for more minor injuries.
 - Patient diagnostics: Radiological and laboratory personnel would serve as part of the Operations Section in completing a portion of patient care.
 - Patient tracking: the real time documentation of the location of incident patients with the developed information maintained by the Plans Section.
 - Patient family assistance: the provision of information and assistance to the family's of patients or to families searching for

The Operations Section directly addresses the hazard-generated needs, accomplishing the operational period objectives set in the Planning Meeting.

The type and number of staff assigned to the Operations Section is dependent upon the hazard impact or threatened impact and what the organization is attempting to achieve.

- patients.
- Fatality care: the storage and processing of the deceased.
 - Winter storm: Objectives for this type of incident would mainly revolve around the maintenance of services.¹⁶ Therefore, the healthcare system Operations Section might include:
 - Business continuity:
 - Healthcare system staff: the provision of assistance to healthcare system staff to ensure transport to and from the healthcare facility, and possibly provide lodging services to key personnel.
 - Patient access: activities to enhance the ability of patients to access the facility.
 - Facility Engineering:
 - Infrastructure: activities to maintain the heating and water supplies, as well as clearing of roads and walkways around the facility and avoiding dangerous roof loads from accumulating snow.
 - Release of anthrax into the community mail system with unclear exposure of public: This type of incident would require that the Operations Section be configured slightly differently than the one for bombings listed above. Additional considerations would include:
 - Decontamination: personnel assigned to the decontamination areas for persons acutely exposed to aerosolized powders.
 - Patient follow up: personnel assigned to contact patients who have been screened and discharged to verify compliance with prophylaxis or to inform them of a change in public health recommendations regarding their prophylaxis.
 - Response to potential internal releases: potentially, personnel assigned to screen incoming mail and/or to isolate facility areas where suspicious mail has been received.

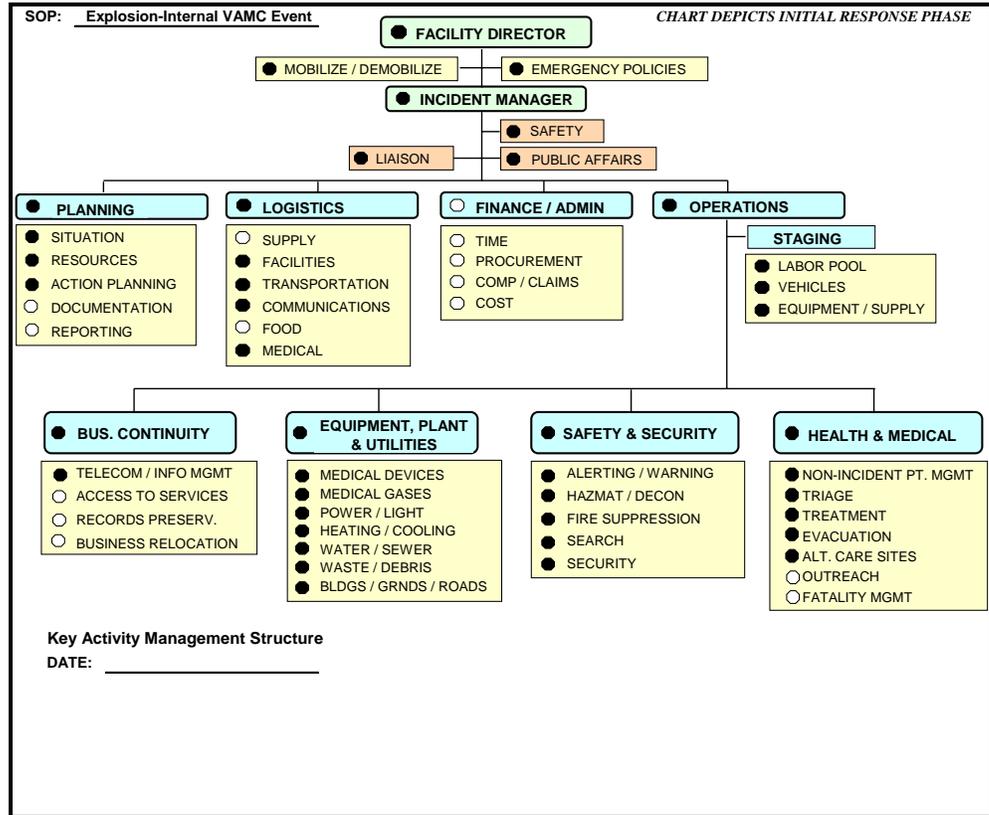
¹⁶ There may be a need for continuity planning activities in many other types of events.

This potential for the Operations Section to vary depending on the type of event is significant for healthcare systems compared to some other types of response resources such as the fire service. “Pre-plans” or standardized operations procedures specific to each type of hazard (contained within the Incident Specific Annexes) may simplify this issue. The procedures used by the Veterans Health Administration (VHA) provide an example of this approach:

- VHA example: The VHA describes four functional groups under its Operations Section:
 - Business Continuity
 - Equipment, Plant, and Utilities
 - Safety and Security
 - Health and Medical.

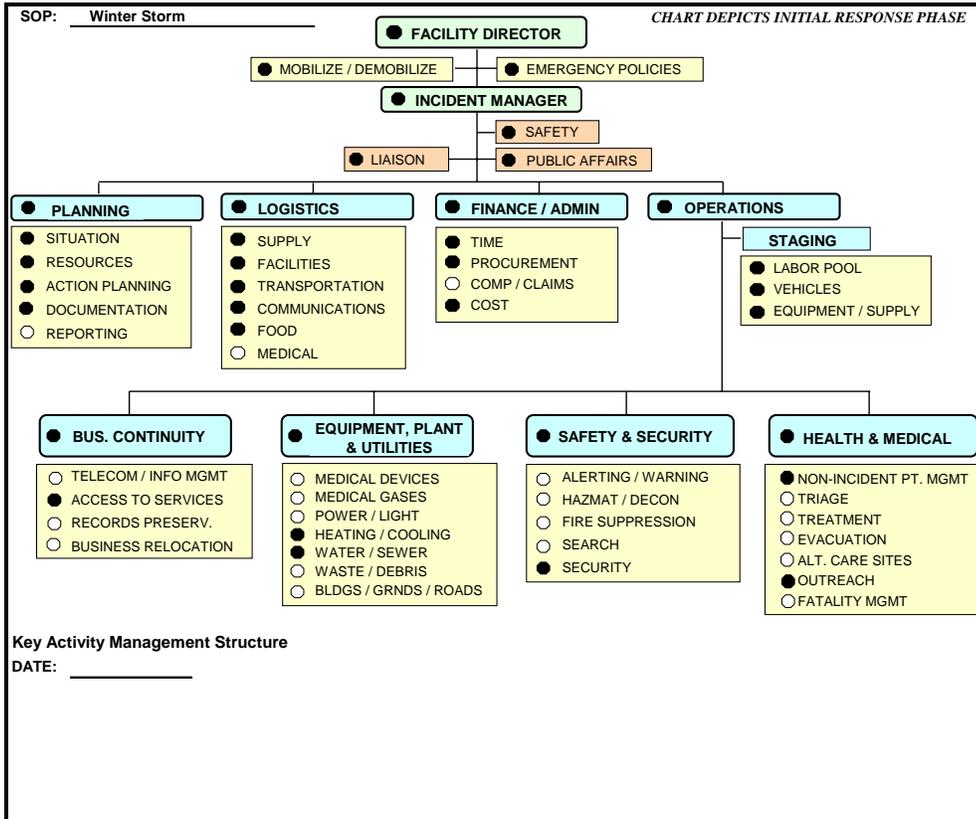
These are staffed as needed for specific events, through the use of pre-plans. The examples provided below are drawn from the *VHA Emergency Management Guidebook*. It should be noted that these diagrams (with the addition of spaces for names) could serve as templates for ICS 207 forms for individual pre-plans (see Exhibit 3.2.2.1 for examples).

Exhibit 3.2.2.1¹⁷: Bombing pre-plan organizational chart.

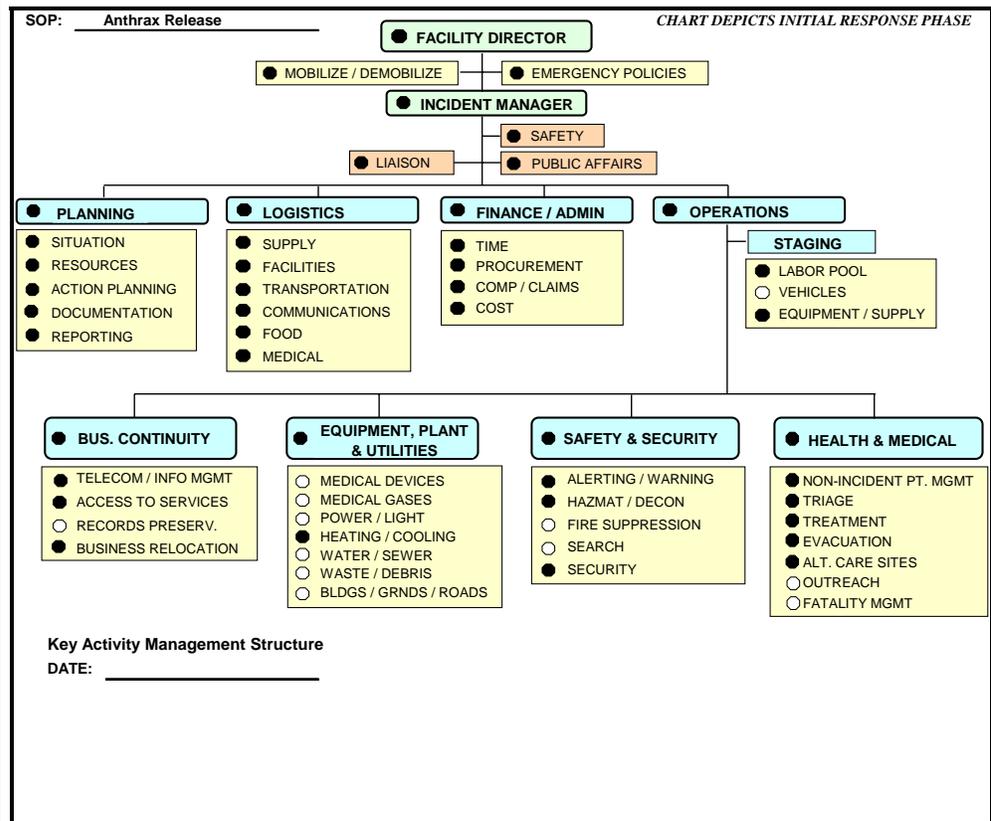


¹⁷ Veterans Health Administration. *Emergency Management Program Guidebook*, 2005, available at: <http://www1.va.gov/emshg/page.cfm?pg=114>, accessed June 6, 2006.

Winter storm pre-plan organizational chart.



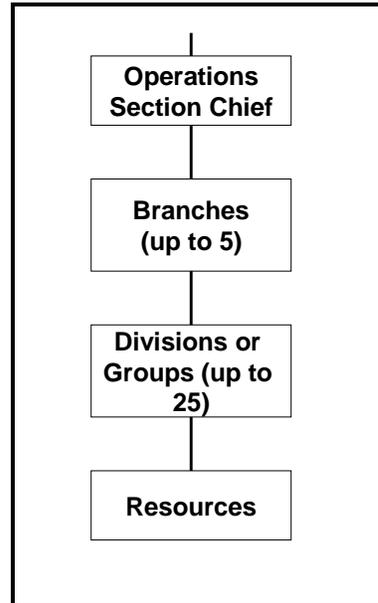
Anthrax incident pre-plan organizational chart.



The Healthcare System Operations Section, as required, should be further divided organizationally according to ICS principles.

- Position assignments within the operations section: The assignment of personnel and resources to the Operations Section is consistent with ICS and NIMS principles if the activities for which they are responsible address the objectives set by management. The breakdown or structure of resource positions within the Operations Section should also follow ICS principles (Exhibit 3.2.2.2) to include:
 - Branches: can represent either geographical or functional divisions of labor
 - Divisions: always refers to geographical divisions within a branch
 - Groups: always refers to functional divisions within a branch.

Exhibit 3.2.2.2: Operations Section as described by NIMS (page 67).



- Designation of specific resources within ICS: Specific resources are best described using the terms Strike Team (shortened to “Team”) or Task Forces. These resources have some internal management element. Strike teams have a single function, whereas task forces may incorporate multiple functions within the resource. Examples include:
 - Decontamination team: receives and decontaminates exposed casualties
 - Patient Surveillance and Follow-up Task Force: Enters appropriate patients into a registry, follows the status of patients given prophylaxis after a biological exposure, and calls patients back for a change in medications or other alterations in care (until the responsibility is transferred to public health).
- Staging areas: An additional organizational element for consideration in healthcare facilities is the concept of a **staging area**. In traditional ICS, staging areas are part of the direct responsibility of the Operations Section Chief as they contain assets that are assigned to Operations but have yet to be deployed or utilized. This is in distinction to the Logistics Section responsibility of finding, screening, and ensuring the adequacy of unassigned resources. Though a subtle distinction, this would argue for the placement of a personnel pool, as traditionally configured by healthcare organizations, under the Logistics Section but the placement of staged and assigned personnel (such as

surgical personnel awaiting work) into Operations Staging functions. This point becomes important when discussing the Labor Pool (see below).

- Addressing the flexibility of the operations section structure: In addition to the VHA examples provided above, there are other variations on how to organize the healthcare system Operations Section. Given the potential complexity of the Operations Section, the assignments, construction of, and documentation of the Operations Section remains a critical and primary task for command and the operations section chief. **While the configuration of the operations section is flexible, the attention to defining this configuration at the outset of every incident (establish, document, and disseminate) should be rigidly enforced,** and should be re-evaluated at the beginning of each planning cycle.
- Selection of the Operations Chief: The Operations Section Chief should be chosen based upon the incident/hazard type. For example, the Operations Section Chief position may best be filled by an individual from facility engineering during an event involving loss of water pressure or other traditional infrastructure compromise. Regardless of their day-to-day role, the operations section chief should have the demonstrated competencies designated for that position.

System Description: The Plans Section

The Plans Section supports the healthcare system response through the management and processing of incident information and through the development of incident action plans. The Plans Section, therefore, plays a critical role during response and recovery and yet it is often poorly understood and under-utilized by healthcare systems.¹⁸ The complexity and volume of incident information in healthcare emergencies will almost always require an efficient Plans Section. In any conceivable partial activation of the healthcare system EOP, therefore, the Plans Section should be staffed at least to a minimum level, unless the healthcare system Commander intends to accept all Plans responsibilities (see example in Textbox 3.2.2.1).

The Plans Section supports the response through information processing and Action Planning.

¹⁸ In fact, many ICS veterans, when given the choice between assignments as Incident Commander versus Plans Section Chief, will often choose the latter as they recognize the tremendous importance this position has on the overall response (authors' observations).

Textbox 3.2.2.1

Plans Section Activity in a Partial EOP Activation: An Example

Hospital X is located in a jurisdiction in which credible environmental samples have recently indicated the potential presence of aerosolized anthrax in three mailrooms in local businesses. Further tests are pending and local authorities have initiated prophylaxis of specific populations deemed “at risk.” Hospital X partially activates its EOP to include Command staff (Commander, PIO, Safety, and Liaison) as well as an Operations Section Chief and a Plans Section Chief. No other personnel are assigned at this point. The **Plans Section Chief is responsible for tracking and documenting jurisdictional information as it becomes available.** This is formatted for dissemination to all areas of the healthcare system, including clinical care areas that have the potential to receive patients concerned about exposure to anthrax. The strategy for addressing these patients’ concerns (work up, written recommendations, referrals, and treatment as necessary) is established by the Operations Section Chief in conjunction with Command and **documented by the Plans Section Chief.** This strategy is disseminated internally (to provide a consistent approach) and externally (so that other hospitals in the jurisdiction and public health are aware of Hospital X’s approach to these patients). If Hospital X’s strategy is significantly different than that recommended by public health or that performed by other hospitals, it should either change its approach or provide explanation to patients about the difference in strategy.

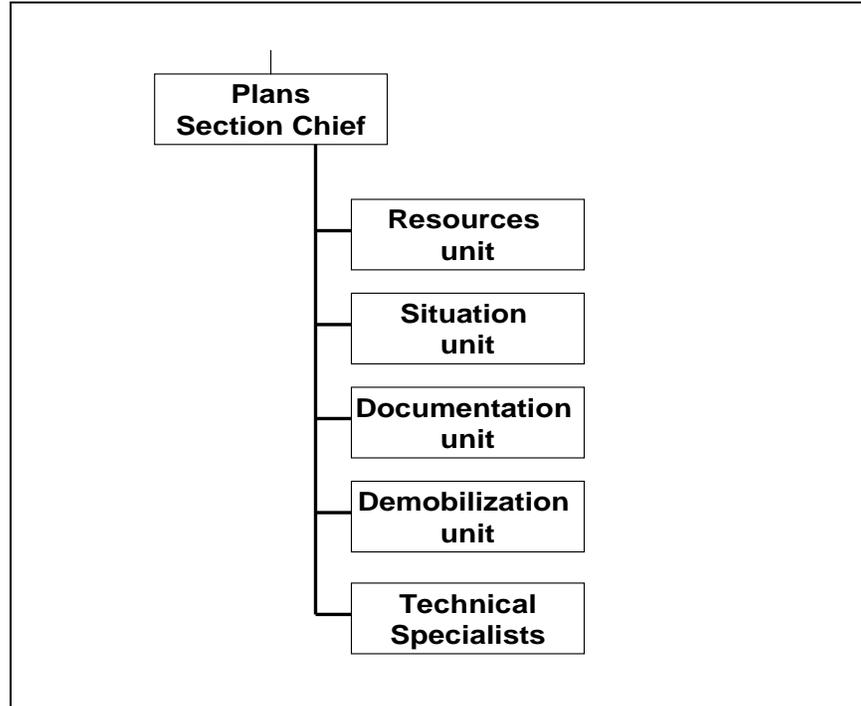
The Healthcare System Plans Section should be staffed for almost every disaster or emergency.

NIMS/ICS describes the Plans Section Chief as having several responsibilities. This individual not only oversees all planning activities, including information gathering, processing, and dissemination, but also is responsible for development of the incident action plan¹⁹ and for the development of alternative strategies for consideration by Command. Within the Plans Section in traditional ICS (Exhibit 3.2.2.3), several “units” are described:

¹⁹ In ICS, it is generally recognized that there is only one official Incident Action Plan for the incident (the frame of reference for this is usually the jurisdiction). This does not negate the need for the conduct of this incident action planning at the healthcare system level. The resultant action plan, however, may be designated as “Hospital X Action Plan” and qualified by the time period where it applies.

The Healthcare System Plans Section can be organized into traditional ICS units to cover the required types of information processing and incident planning.

Exhibit 3.2.2.3: Plans Section as described by NIMS (page 75).



- **Resources Unit:** In NIMS/ICS, the Resources Unit is responsible for tracking the status of all resources within the response system. Resources can include personnel, major items, and facilities (i.e., “people, places, and things”). For healthcare systems, other resources besides staff may require tracking. Other important resources such as the status of critical pharmaceutical items, ventilators, available blood products, and the status of certain facilities all may become important to track for Command. It is the responsibility of Command to determine what resources should be tracked at the beginning of any incident and to convey this to the Plans Section Chief. NIMS provides three categories by which resource status may be classified: assigned, available, or out of service. To accomplish its assigned responsibility, the Resource Unit may utilize the following ICS forms:
 - **211, Check-in Form:** to account for the personnel on duty
 - **221, Demobilization Check-out Form:** to provide accountability and to guide personnel through the necessary out-processing steps
 - **214, Unit Log:** to track the activities of all units within the healthcare incident response system.

- **Situation Unit:** A traditional Situation Unit is responsible for the tracking and processing of all information relevant to the incident. It may also develop forecasts for likely incident activities. Incident Status Summaries (ICS Form 209) can be prepared and disseminated on a regular basis by the Situation Unit (as determined by Command). For healthcare systems, situation data likely to need tracking includes information external to the system (e.g. number of trains bombed, jurisdictional response, numbers of patients trapped, etc.) or information internal to the system. A critical information component to be processed internal to the system would be patient tracking for those events that generate human casualties. Tracking may include total casualties, pending operative cases, etc., that allow Command and General Staff to assess the progression of the incident response in accomplishing its objectives. While the actual counting and reporting of this data may be accomplished by the Operations Section personnel, the information is forwarded to the Plans Section for processing (aggregates, categorizing, analyzing for trends, etc.), incorporation into incident action planning, and for further dissemination to relevant functions (e.g., forwarding names to the patients' family care areas to inform families whether an individual is being cared for at the facility). The importance of formally capturing this type of information creates the imperative that a Plans Section always be staffed, even for a minimal EOP activation.
- **Documentation Unit:** NIMS/ICS devotes a unit within the Plans Section to maintain files and documents relevant to the incident. This may include copying, organizing, and filing incident-related documents, while keeping them easily available for reference and other use within the incident response. Depending upon the complexity of an incident, healthcare systems may wish to assign personnel to a Documentation Unit or, alternatively, assign this responsibility to another Plans Section Unit.
- **Demobilization Unit:** NIMS/ICS assigns personnel to the early development of demobilization plans. This has tremendous advantages as some assets may be demobilized early in an incident, as soon as they have accomplished their objectives or otherwise are no longer needed. A plan for full system demobilization to occur defines the processes, procedures, and responsible parties to facilitate the process. For healthcare systems, which have day-to-day responsibilities to the community, an efficient demobilization process is critical to allow rapid restoration of services. For any significant event involving the assignment of numerous healthcare system personnel, a

The Healthcare System Situation Unit collates and disseminates patient tracking information, but the actual collection of this information is better suited to the Operations Section.

Healthcare System Technical Specialists provide advice to the organization at the strategic or tactical levels. They do not automatically qualify as Commander of a response based upon their technical expertise.

Demobilization Unit is critical in achieving this rapid turnaround, with plans to address “return to readiness” (rehabilitation of personnel and supplies, repacking of response cache, etc.) and the backlog of everyday medical workload that accumulates during the period of response (rescheduling staff, expediting the rescheduling of urgent and elective procedures, etc.).

- **Technical Specialists:** ICS and NIMS describe Technical Specialists as individuals with skills or knowledge that can be utilized to address incident specific parameters. They are utilized only as needed and can serve in a variety of ways or locations within the organizational structure. For instance, Technical Specialists can be assigned to report directly to the Command staff (see Senior Advisor earlier in this lesson), to the Operations Section, or to a support section. It should be noted that they serve only in a technical capacity for which they have the skills and knowledge. They are, therefore, usually only providing advice. An example for healthcare systems might be an infectious disease specialist who provides strategic advice to Command about the expected future characteristics and treatment needs for a certain infectious disease. This person would not assume any other Command role unless specifically certified and qualified for a Command staff position. If enough Technical Specialists are assigned to a given activity, they may form an independent Technical Specialist Unit within the Plans Section (for example, a radiation injury Technical Specialist Unit that provides treatment advice and chelation regimens to guide the actions of the healthcare system’s clinicians).
- **Plans Section summary of responsibilities:** An easy way for healthcare personnel to interpret the Plans Section’s responsibility is to refer to it in terms of “**information processing**” and “**incident action planning**.” These two critical activities can mean the difference between a successful or unsuccessful response, even for a small event. For healthcare systems, the information processing activities are addressed by the Plans’ units described above. The incident action planning itself, however, is traditionally a responsibility of the Plans Section Chief. An experienced Plans Section Chief will present Command with several options to choose from for each operational period’s objectives and strategies. Chosen incident objectives and strategies (along with assigned resources) are then documented on ICS Forms 202 and 204 for inclusion in the incident action plan. **This dynamic necessitates that the Plans Section Chief be as qualified in incident management as the Commander** and, hence, their position qualifications should be similar (see those listed for Hospital

Commander above). In addition, the Plans Section Chief conducts all Command and General Staff meetings. Defined methodology for these meetings ensures an efficient process and should be utilized in all healthcare system incident action planning (see Concept of Operations).²⁰

²⁰ This second critical activity (Action Planning) is of such importance that some systems describe it as a separate branch under the Plans Section [for example, see Barbera, J. and Macintyre, A. *Medical and Health Incident Management (MaHIM) System: A Comprehensive Functional System Description for Mass Casualty Medical and Health Incident Management*. Institute for Crisis, Disaster, and Risk Management, The George Washington University, Washington D.C., October 2002].

Lesson 3.2.3 System Description for Healthcare Emergency Response and Recovery: Logistics and Finance/Administration Sections

Lesson objectives

- *Describe the role of the Logistics Section and list its component units, providing a description of each one.*
- *Explain the difference between credentialing and privileging in healthcare system volunteer response.*
- *Describe the role of the Finance/Administration Section and list its component units, providing a description of each one.*

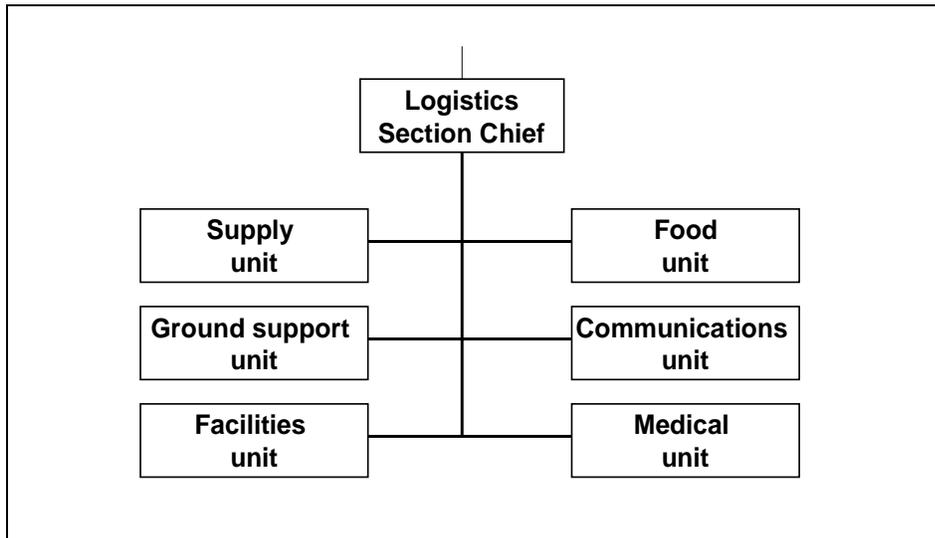
System Description: The Logistics Section

The Logistics Section provides support to the other ICS sections in the form of personnel, equipment, supplies, and response facilities. Logistics is in charge of these assets until they are assigned to a particular position within another ICS section, or to that section's staging area. Upon delivery of the assets to their assigned position, they become the responsibility of that section. For example, if the Logistics Section is able to identify and provide a nurse to a branch within the Operations Section, then that nurse reports to the responsible party within Operations and is considered a part of the Operations Section. Volunteers, for example, are the responsibility of the Logistics Section until they have been screened, credentialed, equipped, and staged (assigned, awaiting to perform tasks). Upon reporting to their assignment, they become the responsibility of their supervisor. This assignment of responsibility is often confused by health and medical providers but should be well understood (see Exhibit 3.2.3.1).

The Logistics Section in traditional and NIMS/ICS is comprised of several units:

The Healthcare System Logistics Section supports the response with "people, places, and things."

Exhibit 3.2.3.1: NIMS Logistics section (NIMS, page 81).



- Supply Unit: In NIMS/ICS, the Supplies Unit is responsible for “ordering, receiving, storing, and processing all incident related resources, supplies, and personnel.”²¹ It provides these resources as they are requested and, in fact, should anticipate needs so that they may be rapidly addressed. Once assigned, resources become the responsibility of the section where they are assigned, and are sent to staging areas if no other location assignment has been made. For healthcare systems, there are several important considerations that apply to a Supply Unit:
 - Labor Pool: Many healthcare systems in the past utilized a “Labor Pool,” a location where unassigned personnel or those with no current responsibilities position themselves awaiting an assignment.²² According to ICS principles, the responsibility for this would fall under the Supply Unit. Some personnel may, in fact, be automatically assigned (through a pre-established deployment tool) to staging areas under operations (for example, to an area proximate to the emergency department to await assignments for transporting patients, for incorporation into a

²¹ FEMA. *The National Incident Management System*, March 2004, p. 82; available at <http://www.fema.gov/nims/>, accessed January 16, 2006.

²² In today’s healthcare environment, all personnel are fully committed to everyday tasks, and so few personnel are “unassigned” and available to go to a “pool” and await assignments. An efficient method for developing a Labor Pool, therefore, may be to have physical or telephonic reporting to the labor pool supervisor and document reliable contact information for those responding to a Labor Pool request. Personnel are then released back to their usual workstation pending assignment from the Labor Pool.

Volunteer Management has become increasingly important for all response entities.

patient care team, or other tasking). Otherwise, as requests come in, the personnel pool may deploy workers to the emergency department staging, the operating suite staging, pharmacy staging, or other areas. Some organizations consider the Labor Pool as the “staging area” under the Operations Section, and therefore the responsibility of Operations, but this may be problematic for the Operations Section Chief, given his or her other foci of responsibility. Both configurations are acceptable, but the one in use must be clearly delineated so that proper supervisory responsibility is established.

Some personnel reporting to the labor pool may be immediately assigned to logistics tasks (for example, transporting supply carts from central supply or pharmacy) or to logistics staging (for example, reporting to the loading dock to anticipate tasking for unloading a pharmaceutical cache or other supplies).

- Volunteer Management: Unsolicited health and medical volunteers have always been and remain a challenge both in the field and at healthcare facilities. The “convergence” of those wanting to help, but who have not been formally requested or credentialed, appears to be increasing in frequency and scope. Since 9-11, numerous efforts have been initiated to recruit and verify the credentials of medical volunteers prior to an incident response (Medical Reserve Corps,²³ Emergency System for Advanced Registration of Volunteer Health Professionals or ESAR-VHP,²⁴ as well as numerous State and local initiatives). This is in an effort to provide structure and discipline to volunteer response. Any healthcare system should anticipate both the need to incorporate volunteers into the response and the need to manage unsolicited volunteers where no assignment is indicated. In certain circumstances, it may be helpful to establish a dedicated mechanism for processing volunteers.²⁵ An essential component of medical surge capacity is having a mechanism established to obtain qualified personnel when needed (see “qualification” terminology textbox in Lesson 2.1.2).

- Solicited volunteers: Obtaining personnel beyond the

²³ More information available at <http://www.medicalreservecorps.gov>, accessed January 9, 2006.

²⁴ More information available at <http://www.hrsa.gov/bioterrorism/esarvhp/>, accessed January 9, 2006.

²⁵ ICDRM/GWU. *Arlington County Public Health Volunteer Management System (ACPH-VMS)*. Institute for Crisis, Disaster, and Risk Management, The George Washington University (October 2005). Available at www.gwu.edu/~icdrm/, last accessed January 20, 2005.

healthcare organizations' regular personnel may best be accomplished through a mutual aid system between healthcare resources, such that "volunteers" are identified and accepted from similarly accredited healthcare assets.²⁶ Accepting the credentials and privileging from another accredited healthcare institution may decrease the burden on the impacted staff in terms of verifying identification and credentials. It also increases the likelihood of accepting volunteers who understand their role within healthcare system emergency operations. With proper preparedness phase accomplishments, the "volunteers" should already be trained on the roles and responsibilities (reporting to host institution personnel, accepting a supervised role, etc.) prior to dispatch to the affected facility. These types of arrangements are best established through cooperative planning during Preparedness (for example, as encouraged by JCAHO regulations).

- **Unsolicited and unneeded volunteers:** If these personnel are to be used by a healthcare organization, a mechanism must be in place to register, screen (verify identity and a level of credentials commensurate with their assignments), and train them on their roles as volunteers prior to providing an assignment. It is also critical that regular staff are trained and briefed on the role of supervising volunteers. If no unsolicited volunteers are needed, convergent volunteers should be thanked, provided with a brief statement that they are currently not needed within the healthcare system response, and that continued efforts to enter the facility could be viewed adversely (i.e., trespassing). They may also be requested to register and provide contact information for future incidents. If they are needed they are processed as below.
- **Credentialing versus privileging in healthcare system volunteer response:** A process should be established that verifies, to the degree of certainty indicated by the situation and role assignments, the credentials of the presenting volunteers (see "credentialing" terminology textbox in Lesson 2.1.2). Several current initiatives such as ESAR-VHP and the NIMS Integration Center Credentialing Program attempt to do this before an

²⁶ D.C. Hospital Association. *Mutual Aid Memorandum of Understanding* (1995 revised 2002); available at: <http://www.dcha.org/EP/dchamou.pdf>, accessed January 16, 2006 or American Hospital Association. *Model Hospital Mutual Aid Memorandum of Understanding* (March 2002); available at: http://www.aha.org/aha/key_issues/disaster_readiness/resources/HospitalReady.html, accessed January 16, 2006.

incident to facilitate volunteer integration into response. “Credentialing” must be distinguished from “privileging” (see terminology textbox). The healthcare system retains the right to “privilege” these pre-credentialed persons, or personnel credentialed through their own system. A credential, therefore, never confers automatic access to an incident site.

Terminology alert!

Privileging: The process where appropriately credentialed personnel (see credentialing) are accepted into an incident to participate in the response. This process may include both confirmation of a responder’s credentials and a determination that an incident need exists that the responder is qualified to address. Privileging is associated with a separate process, badging (see badging), which indicates that a person has been privileged to access a specific incident or to access a specific location.

The Healthcare System Logistics Section should maintain a “larger perspective” beyond the usual healthcare system confines when acquiring and managing scarce resources.

- Scarce resources: The current healthcare economics have generated a just-in-time supply chain and “just-enough” staffing for healthcare systems across the U.S. It is important that the Supply Unit coordinate beyond the healthcare system confines for certain scarce items (with concurrence from Command). This may necessitate early efforts to seek assistance from external support entities from mutual aid and local, State, or Federal authorities.
- Personnel family assistance: It is important for healthcare systems to recognize that many of their personnel may have family issues arise during a response that, if not addressed, could compromise their availability or full attention to response and recovery activities. Some employees may be single parents and unable to work extended hours (or regular day shifts if school is canceled) unless childcare assistance is identified. Though these contingencies should be a part of family preparedness plans (see Lesson 1.5.4), personnel and resources may need to be devoted to this effort, especially in a complex or prolonged event. For example, healthcare systems may wish to consider sheltering families of employees during events that have large community impacts (e.g., hurricanes). This can facilitate the overall response and demonstrates a concern on the part of the healthcare system for its personnel.

- Provision of Personal Protective Equipment (PPE): Response to incidents that involve certain hazard impacts may require the use of specific PPE not normally available in the healthcare setting. The Supply Unit should obtain these items and ensure that personnel have the necessary explanation or real-time training to utilize them.
- Ground Support Unit: In traditional ICS, the Ground Support Unit “maintains and repairs tactical equipment, vehicles, and mobile ground support equipment.”²⁷ It may also move newly assigned volunteers and mutual aid assets to their assigned locations. For many healthcare systems, including those within the VHA, this unit may also have the responsibility to deliver patient transport equipment during events that have generated excessive patients. The actual activity of transporting patients is more appropriately supervised within the Operations Section.
- Facilities Unit: NIMS/ICS provide personnel whose exclusive responsibilities are to set up, maintain, and demobilize all facilities required for the incident response. For healthcare systems, this might include activities supporting the healthcare facility itself. For example:
 - Healthcare System management facilities: Specific steps could be followed for establishing a well-supplied and constructed Healthcare System Command Post and/or Emergency Operations Center. In addition, Healthcare System Facilities Units may assist with maintaining this facility.
 - Rehabilitation and living areas: For incidents in which some personnel may not be able to leave the facility after a shift, the Facilities Unit may establish sleeping areas for use between assignments.

The Facilities Unit should be distinguished from the typical role that Plant and Engineering services provide to specifically address the hazard impact on the organization. The latter typically address continuity of operations and hence is more appropriately situated under the Operations Section.

- Food Unit: As ICS traditionally dealt with numerous personnel deployed for extended periods in austere field conditions, the Food Unit was critically important for providing safe and regular meals.

The Healthcare System Logistics Section is responsible for facilities used during response.

²⁷ FEMA: The National Incident Management System, March 2004, p. 82; available at <http://www.fema.gov/nims/>, accessed Jan 9, 2006.

Healthcare personnel require briefing on the use of radios to avoid communication problems.

For healthcare systems, a separate Food Unit may be required in extreme circumstances or could be tasked with supporting “rehabilitation”²⁸ needs in a specific geographical area (i.e., decontamination area).

- **Communications Unit:** NIMS/ICS describes the Communications Unit as those personnel assigned to the maintenance and distribution of all communication equipment that supports incident operations. This must be distinguished from information processing, which is a central Plans Section function. It is also distinguished from any major repair effort of communications equipment that is damaged by the hazard impact, since this would be an incident operations function. The Communications Unit may also staff a Communications Center if one is established. The Communications Unit develops the Communications Plan (ICS 205), which documents contact methods for important personnel and is included as a supporting plan in the healthcare system incident action plan. For healthcare systems, these activities can translate to overseeing the phone systems, distribution of portable radios, management of beepers or intra-facility phones, and support of intranet/Internet services. If radios are to be utilized in the healthcare system, it should be recognized that the average healthcare employee has not had training on “radio etiquette.” These critical concepts should be provided during initial training and should be reinforced as radios are distributed (see Textbox 3.2.3.1).

²⁸ Rehabilitation (“rehab”): Response terminology for rest, rehydration, feeding, and other activities so that responders may resume safe and effective operations.

Textbox 3.2.3.1:

Radio Etiquette for Healthcare Systems Personnel

- Transmissions are kept brief to avoid tying up channels.
- Do not begin speaking until you have pushed the talk button and the microphone indicates it has been “keyed” (usually by an electronic sound).
- No names are used (especially patient names!).
- To begin a transmission, identify the unit you are calling first then identify your position (e.g., “Plans Chief, this is Logistics Chief.”). Await confirmation before proceeding (confirmation often comes via “This is Plans Chief, go ahead.” or some similar phrase).
- The announcement of “priority traffic” requires the cessation of all other conversation as an urgent message is about to be transmitted.
- Confirm with the receiving party that they received your transmission: “Copy?”
- End the conversation with “clear” or some other communication that indicates you are breaking off the radio conversation.

- Medical Unit: NIMS/ICS places a Medical Unit within the Logistics Section. The Medical Unit’s primary responsibility is described as the treatment and processing of all **response personnel** injuries or illnesses, as well as fatalities. A component of these responsibilities should be the monitoring (with the Safety Officer) of the responders’ health. The Medical Unit develops the Medical Plan (ICS 206), which outlines how care can be provided to responders across the incident. This is also included in the healthcare system incident action plan. For healthcare systems that deal primarily in a day-to-day setting with the treatment of injuries and illnesses, these important activities are often overlooked during response and recovery. An example might be the provision of prophylaxis to healthcare system employees. While most healthcare organizations have an occupational health unit within their normal operating organization, it should not be

While the Healthcare System response may be focused upon the care of incident victims, the care of response personnel should be adequately addressed as well.

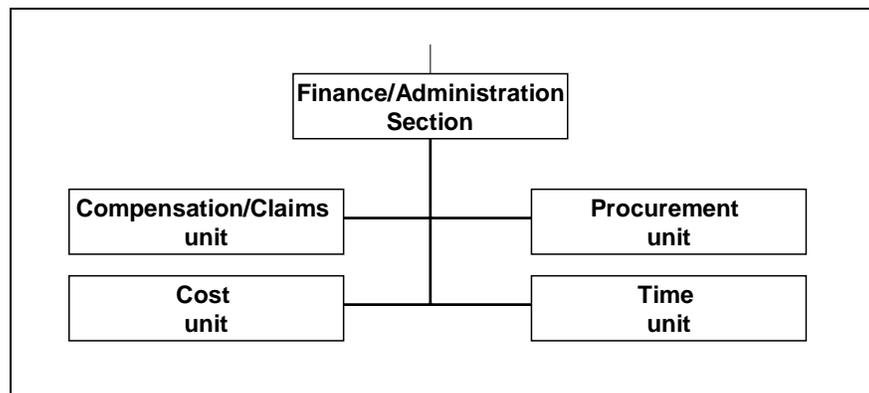
assumed that they are fully able to meet response needs of organizational personnel. Careful examination of their capability and capacity, and incorporation of the unit into the ICS structure, is necessary to assure adequate performance during incident response.

- Incident-specific activation: As with other ICS sections, only the required units within the Logistics Section are activated to meet incident needs. For example, for a large-scale event involving numerous patients over a prolonged period, all units within the Logistics Section should be considered for activation. For a brief decontamination event, perhaps only partially staffed Supplies, Facilities, and Medical Units would be required.

System Description: The Finance/Administration Section

The Finance/Administration Section exists in NIMS/ICS to address financial reimbursement and other administrative issues that result from response to an event. The need for this section can vary incident to incident but in its fully staffed form, it traditionally is configured as in Exhibit 3.2.3.2.

Exhibit 3.2.3.2: NIMS Finance/Administration (page 87).



If only one activity is occurring under the Finance/Admin. Section, the section can be folded into the Plans Section as a Technical Specialist Unit.

- Compensation/Claims Unit: In traditional ICS, this unit processes all injury claims from response personnel and also handles investigation of all civil tort claims. For healthcare organizations, the latter activity is well understood, but the capability to collect information surrounding any incident of concern should exist even in the hectic environment of incident response. In healthcare, this

The Healthcare System Finance/Administration Section addresses response costs, regulatory compliance, and claims.

unit may also track regulatory compliance. For example, if the hospital may exceed the patient capacity allowed by its licensed number of beds, an exception can be justified and sought through jurisdictional authorities.

- Cost Unit: Provides cost data and analysis for the system response. This can be a critically important continuity planning function, keeping the healthcare organization's leadership apprised of the financial burden being accrued and providing the documentation that allows successful reimbursement requests through appropriate authorities.
- Procurement Unit: Addresses all financial matters related to vendor contracts. For healthcare systems, this could have application to certain types of emergency (i.e., "contingency") contracts, such as emergency generators, water supply, or restock of critical supplies items. It may also be responsible for assuring reimbursement for assistance obtained through cooperative agreements or reimbursed mutual aid.
- Time Unit: Accounts for all personnel time, which serves both financial (i.e., "pay") and personnel liability coverage functions.
- Additional administrative and financial issues: These include:
 - Monitoring for compliance with the wide range of healthcare regulations
 - Seeking emergency modification of certain State and Federal requirements
 - Developing claims for cost recovery from local, State, and Federal resources.

These functions, if established, should be assigned to existing units or newly created units within the Finance/Administration Section.

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Module 3.3

Healthcare System Emergency Operations Plan: The Concept of Operations

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Lesson 3.3.1 Concept of Operations for Healthcare Emergency Response and Recovery: Overview and Incident Recognition Stage

Lesson objectives

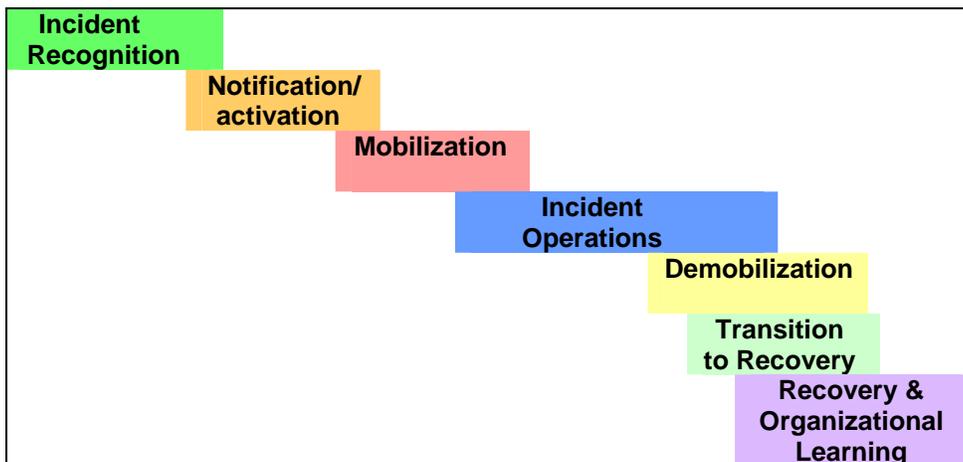
- Describe the emergency healthcare management processes that are critical during the Incident Recognition stage of incident response.
- List the possible sources for initial event information important to healthcare systems.
- List the key characteristics of the Baseline Situation Unit and describe its delineated procedures.

Overview

As mentioned earlier in this unit, the Concept of Operations provides details on the various processes important during the successive stages of an incident. While significant overlap occurs between stages, the complexity of the group of response and recovery tasks can be simplified through presentation according to stage. Exhibit 3.3.1.1 reviews the stages of an incident and demonstrates the areas of potential overlap between each stage.

Exhibit 3.3.1.1: Stages of an Incident.

The Healthcare System Concept of Operations provides specific procedures and tasks that must be accomplished during each stage of response.



In addition to the overlap of the individual stages, the transition timing between stages is not always distinct during incident response, but any important transition processes and procedures must be accomplished. The first place where this “transition” is important is from baseline, everyday operations into the beginning stage of EOP guided actions.

A smoother and more rapid transition from baseline to response mode, and the prevention of overreacting, is promoted through a continuously functioning Baseline Situation Unit.

The Incident Recognition Stage: actions to determine whether a baseline anomaly indicates the need for an organization to initiate “incident response.”

Hazards that have the potential to impact Healthcare Systems are sometimes difficult to identify.

- Importance of timely incident recognition: To begin the incident recognition process at the earliest possible time, a mechanism must be in place for immediate aggregation and analysis of details as they emerge. Information management is therefore a critical task from the very outset of the healthcare incident. The Plans Section is responsible for this important role and so should be capable of immediate mobilization into a functional incident response state. For this reason, healthcare systems should consider maintaining a functional Situation Unit that is operational, at a baseline level, **at all times.**²⁹ It can therefore be upgraded, rather than implemented from a cold start, at the time of a potential response. Methods to address this important issue are presented in this lesson.

The Incident Recognition Stage

Incident recognition is the process that identifies an “anomaly” (independently or through communication from others), develops a situational assessment of the anomaly and related details, and determines whether an “incident response” by the organization may be indicated. The level of response is determined in the follow-on stage of “Activation/Initial Notification.”

Recognizing that an event requires some specialized response from the healthcare system can be straightforward or, at times, very difficult.

- Obvious incidents: Some events present themselves at the outset with clear signs that the impact will challenge day-to-day healthcare operations or present a challenging array and/or number of casualties. A large earthquake in the surrounding community, for example, would immediately create a widely recognized impact directly or indirectly on the facility. In this example, incident recognition is immediate, even though the extent of impact and hospital business disruption has not been ascertained. Some events provide pre-impact notice, such as tornado warnings and other weather hazards. Rapid pre-impact incident recognition may provide enough time for the healthcare system to conduct certain incident-specific mobilization and protective actions prior to the actual hazard impact.
- Surreptitious incidents: Many incidents evolve with initial signs that are not nearly as clear-cut, and so the incident may be well

²⁹ This important role is best assigned to an everyday position of authority that is continuously staffed in the healthcare system (see examples below).

underway before being recognized and appropriate healthcare system response initiated (i.e., the impact may be either subtle or misinterpreted during initial stages). For example, an infectious disease outbreak with the sentinel case presenting to the facility may not even be diagnosed initially as a case of concern, until the disease course differentiates it from other, less dangerous illness (e.g., a lab test sent during initial evaluation of the patient returns concerning results at a later time). Even after diagnosis, the full impact to the healthcare system operations may not be immediately obvious.

- Initial information sources: To further complicate matters, information important to the incident determination decision may not initially be widely available. Sources that could have access to early warning or early information about an evolving hazard impact are presented in Textbox 3.2.1.1. Communication between the healthcare organization and these sources must therefore be well developed.

Textbox 3.3.1.1

Possible Sources for Initial Event Information Important to Healthcare Systems

Information sources external to the healthcare system include:

- Emergency Medical Services: EMS is the traditionally recognized source for notification of an “external” hazard impact that may adversely affect a healthcare system. Though this won’t always be the case, EMS remains an important early interface during community response to specific incidents. For healthcare systems, it is important that EMS information be rapidly and accurately conveyed beyond the Emergency Department, which is the usual point where this information is received (i.e., to the Baseline Situation Unit and then directly to administrative personnel responsible for activation or other major EOP decisions).
- Media: Healthcare system personnel may receive initial notification of an event at the same time as the general public through media outlets, such as television or radio announcements or through direct communications from concerned parties. An important consideration is the verification of initial information presented through these sources and rapid transfer of this information to appropriate healthcare system authorities.

Information indicating a possible Incident for Healthcare Systems can come from a variety of sources.

- Public health: Local or State health officials may provide notice of an evolving hazard with potential to impact a healthcare system (often accompanied by requests for specific actions such as reporting of cases). Public health notification can at times come to individual practitioners or departments within the healthcare system and it is the responsibility of those receiving this information to ensure that it has been appropriately disseminated internally (e.g., through a Baseline Situation Unit).
- Law enforcement: Representatives from a range of law enforcement agencies could provide information that represents a direct or indirect threat to the healthcare system. In some instances, the information may be considered “sensitive” but does not preclude the healthcare system from disseminating a carefully worded general message internally, describing the potential hazard and appropriate protective actions. Withholding security-related threats from staff will be indefensible if the threat is carried out without an opportunity for protective actions. When promulgated within a pattern of regular advisories and updates for weather hazards, large-scale community events, and other etiologies, the protective actions advisories for security threats may be considered more routine and received with less apprehension and an appropriate level of concern.
- Emergency Management Agency: Local emergency management authorities may provide information regarding potential threats or actual impact as they occur. Some of these (such as notice of planned mass gatherings) do not require EOP action, but the information should be passed on to staff as advisories or updates, depending upon whether directed actions are communicated with the information.
- Other healthcare systems: Other participants in the community’s healthcare delivery may identify an issue of concern (clinics, local Red Cross chapter, others).
- Utility Services Control Centers: Control Centers for various utilities (water, power, gas, etc.) can provide various information about hazard impact and can be invaluable in establishing the extent or timing of the utility outage.

Information sources internal to the healthcare system include:

- Medical care providers: In the day-to-day management of individual cases, medical care providers could potentially identify a single case of concern or a pattern of cases that warrant response from the healthcare system, even if the response is only a rapid and focused investigation of a potential sentinel case. It is important that the senior administrators of the healthcare system be kept informed of any evolving issue (through the Baseline Situation Unit) so that impact may be anticipated and appropriate external notifications made.
- Clinical support services: Departments that provide support services to clinical areas may identify a case or cases of concern (e.g., microbiology lab identifying anthrax in a blood culture from a patient). This information becomes relevant not only to the personnel providing care to the patient, but also to administrative and emergency management personnel due to its potential impact on the healthcare system. Both should be informed expeditiously.
- Non-clinical personnel: Security, plant operations, and others could all potentially identify issues of concern within the organization. For example, a loss of water pressure within the facility could initially be identified by plant operations personnel.
- Staff with contacts outside of the healthcare system: Designated representatives to local community response organizations or to local emergency preparedness organizations may obtain information regarding a potential hazard impact to the healthcare system. As with other sources of information, it is important that this be conveyed to appropriate personnel within the healthcare system.
- Alarm systems: Healthcare systems may have automated alarms that may be the first notification of a hazard impact (e.g., a fire in a section of the facility).

- The need for a defined healthcare system position responsible for Incident Recognition actions: The above issues spotlight the need to have a **single, always available, and competent position** to receive reports of anomalies, cases of concern, or other recognized hazard threat or impact. This position must be able to rapidly acquire pertinent information and efficiently conduct the incident recognition process described in this lesson. The position should have the following characteristics:

To facilitate Incident Recognition, the Baseline Situation Unit should possess certain characteristics such as 24-hour availability and specified procedures to follow.

- Twenty-four-hour availability: The designated position should be one that is continuously staffed and onsite, with reliable communications (cell phone and pager). The contact information (telephone and pager numbers) should remain constant, irrespective of the individuals assigned to the position.
- Broad understanding of the healthcare system operations: Personnel in this position must be experienced with healthcare system's operations, so that an informed judgment may be made in projecting whether the reported hazard information could require incident response actions.
- Recognized authority within the healthcare system: This position may need to make rapid inquiries and ask for information from within the healthcare system or from senior personnel in organizations listed in Textbox 3.3.1.2. The position must carry enough authority for this activity to be rapidly accomplished.
- Adequate visibility: The role must be widely understood and so should be assigned to a visible position within the organization. Supervisory employees at all levels of a healthcare system and relevant community response personnel should then be educated to this position and the 24/7/365 contact methods. Training should emphasize the fact that potential incident information, even if deemed "preliminary," should be communicated immediately. Personnel assigned to this function must also be responsive to the reported concern and provide timely feedback to the reporting source as the investigation unfolds.

A hospital can incorporate these considerations by assigning this role to a 24-hour administrative staff position(s). For example, the emergency program manager (acting as the organization's emergency manager) could manage this centralized role of receiving and analyzing information that could indicate the need for incident response and disseminating important information for the healthcare facility related to potential emergency situations. The emergency manager would transfer this responsibility (and point of contact) to the house Operations Supervisor or other onsite administrator (e.g., "Duty Officer," Police Desk, others) when leaving the facility. Alternatively, the House Operations Supervisor position (usually a nursing supervisor role that oversees clinical staff operations) may have this assigned as a duty on all shifts.

- Titling this position using ICS nomenclature: This entity functions essentially in the ICS role of the Plans Section Situation Unit Leader (see Lesson 3.2.2). The position is functional during

periods of non-response and so could be distinguished from the incident response Situation Unit by calling it the Baseline Situation Unit Leader.³⁰

- **Situation Unit Procedures:** Pre-event procedures for the Baseline Situation Unit Leader should be well delineated in the EOP. These include:
 - **Information gathering and processing:** The information that is important to determining whether a set of circumstances indicates an incident should be outlined in a simple document. This serves as a guide to the individual assigned to the position and when completed essentially becomes an initial Situation Assessment. The ICS Form 201, or Incident Briefing Form, is a good model to follow for this purpose. This instrument was originally developed in ICS to provide initial incident information to an IC arriving to assume leadership of an evolving incident. ICS Form-201 can be adapted for use by the healthcare system, incorporating prompts for essential elements of information that are important to initial healthcare command staff. The completed form may also be used as the initial healthcare system report that informs appropriate authorities.
 - **Incident determination:** Once information has been received, the task of defining whether it indicates an actual or potential hazard impact for the healthcare system becomes important. Guidelines for deciding that the circumstances are significant and should prompt an activation decision and response system notification should be developed as a decision-support tool.
 - **Trigger parameters:** Parameters that trigger an immediate EOP activation should be clearly delineated (for example, anything that presents an immediate danger to staff and other patients should prompt appropriate activation of the EOP).
 - **System leader interaction:** Most situations, however, require some interaction with healthcare system leaders to determine the need for initial or expanded healthcare system emergency response.
 - **Casualty numbers:** **The most frequent mistake made in public health and medicine is to narrowly define an**

Healthcare System incidents are not exclusively defined by casualty numbers.

³⁰ If an event warrants healthcare system response, the person(s) assigned to the Baseline Situation Unit could become the incident Situation Unit, or initially the incident Plans Chief, until relieved by other personnel as they mobilize.

incident based upon casualty numbers.³¹ Many situations generate few or no patients but still have potential to significantly impact a healthcare system's normal operations and should be considered an "incident" in terms of **priority and response management methods**. For example, the isolated loss of **mission critical systems** could cause a severe impact on the healthcare system continuity of normal operations. A good rule of thumb is that any event with significant **potential** to impact the day-to-day operations should be considered an incident for the healthcare system.

- Unusual situations: For unusual situations where it is not rapidly clear whether an incident response will be necessary, the "incident" may, in fact, be "to determine if the current circumstances are an incident." The pre-plan may direct a partial activation, designating minimal command, operations, and planning positions to focus upon evolving information and to develop/review contingency plans until an incident determination can be made.
- Information dissemination: Finally, the type of information to be disseminated from the Situation Assessment within the healthcare system, and the communication method, should be described (see notification in Lesson 3.3.2).
- Back-up mechanisms: Back-up mechanisms should exist in the event that the individual assigned is unavailable or the usual communications methods fail.
- Importance of training: All personnel assigned to this position must be trained to an operational level of proficiency on information gathering and processing, the decision-making process, and information dissemination.

³¹ This appears in part to be tied to concerns over the cost of activating an "all-or-nothing" EOP response. See discussion in next section.

Lesson 3.3.2 Concept of Operations for Healthcare Emergency Response and Recovery: Notification/Activation Stage

Lesson objectives

- *Describe the important concepts related to EOP activation for Healthcare Systems.*
- *List the general activation-related options for Healthcare Systems in events with prior warning and provide specific incident examples.*
- *Explain the importance of initial notification and activation messages and describe considerations for content development and message dissemination.*
- *Describe the categories of notification messages and their purpose in emergency response.*
- *List the different types of notifications methods and explain their relationship to the category of notification.*

Introduction

At the conclusion of the Incident Recognition stage, a determination has been made about whether the evolving circumstances constitute an incident (i.e., indicate that “incident response” may be required by the healthcare organization). The level of the organization’s response is determined in the follow-on stage of “Activation/Initial Notification.”

The decision on activation of the EOP and the notification of this determination to appropriate personnel should occur almost simultaneously. They are therefore presented together as a single response “stage” in the Concept of Operations.

Activation decision making

Important concepts related to EOP activation include:

- **Activation authority:** Preparedness planners must recognize that full healthcare system EOP activation can have significant financial impact, as well as business disruption, for healthcare systems. Many response actions that accompany full EOP activation can be costly, such as canceling elective procedures or admissions, diversion of staff from normal operations, holding staff over or calling in additional personnel, mobilizing equipment/supplies, and converting normal space to functional areas like the Healthcare System Command Post. The decision to activate the EOP, therefore, is usually reserved for appropriate administrative

The Activation/Initial Notification Stage encompasses the activities that determine the level of EOP activation and inform organizational personnel of both the incident circumstances and the organization’s response status.

Positions with responsibility for EOP activation should be clearly delineated.

personnel within the facility, with exceptions for life-threatening situations (see examples in next paragraph).

- Warning versus no warning: In some incidents, the impact occurs without notice and is immediately severe enough that the decision to activate the EOP is clear. Most incidents, however, begin with manifestations that don't indicate the immediate need for incident response by the organization. In these, standardized decision making and initial incident notification should be conducted.
 - Events without warning - Immediate activation situations: Pre-established procedures should allow full or partial activation (even if on an interim basis) by mid-level personnel in unusual circumstances that carry no warning. The fire alarm evacuation signal is a common example, triggering EOP activation of a pre-planned management and information component. Similarly, a hazard impact could result in the sudden, "no-notice" presentation of significant numbers of contaminated patients to the facility's emergency department. An unusual hazard event may be noted by facility engineering, such as a hazmat spill or potential explosion hazard, where rapid protective actions must be undertaken. In these cases, activation is initiated within the healthcare system to implement timely protective actions, while administrators are simultaneously notified and consulted. All information relevant to a potential hazard impact should be conveyed to the designated senior administrators as rapidly as possible in order to allow for timely follow-on decisions.
 - Events with warning - Activation determination procedures: In many incidents, early anomaly detection or early warning occurs, but rapid situation assessment does not indicate that immediate activation is indicated. A "meeting" between the Baseline Situation Unit Leader and senior organizational leaders should occur,³² possibly including consultation with technical experts and/or government authorities, to develop an activation determination for the organization. The meeting first examines the current status and a projection evolution of the incident based upon the situation assessment. The current and projected impact on the organization is also considered. The organization's immediate course of action and accompanying strategy is then decided. General activation-related options include:

³² This "meeting" may be a physical or virtual gathering of the personnel. It may be considered equivalent to a combined management/planning meeting from incident action planning and conducted in a similar manner.

- Full EOP activation
 - Partial EOP activation
 - No activation but increased organizational readiness
 - No activation or organizational readiness but information and recommendations for individual actions by organizational personnel
 - No activation or other actions are indicated or anticipated
 - These action options and accompanying strategy are more fully explained below.
- Events with warning - Pre-activation procedures: In events unfolding with some warning, but haven't reached a point where EOP activation is indicated, it is important to have designated specific actions that can be undertaken to ready the healthcare system for activation. These readiness actions may be conducted under the direction of on-duty administrative and clinical supervisory personnel who possess the necessary authority (see below under initial notification). The alert procedures are usually initial, low-impact mobilization steps, such as the set-up of the Healthcare System Command Post, notification of certain personnel, and preparations for perimeter control (signage and barrier placement, etc.) while awaiting an activation determination.
 - Events with warning - A step-wise approach to activation: Timely notification and activation of the EOP may be promoted by having a range of activation options beyond the "all-or-nothing" choices. This hurdle can be minimized by establishing an **EOP activation mechanism that creates flexible levels of activation, from a minimal partial activation to full response**. Initial cost and disruption to the organization can be appropriately minimized and continuity of operations more readily addressed with this approach. In addition, the **initial management team should have the ability to easily demobilize the response if early incident issues are rapidly addressed or otherwise resolved**.
 - Events with warning – Partial EOP activation strategy: Since the majority of incidents that confront a healthcare system should only require partial activation of specific components of the EOP, mechanisms must be in place for the **appropriate** partial activation. It is the responsibility of the individual making the

Partial EOP activations are cost-effective, efficient ways to react to unclear or small-scale events.

decision to activate the EOP to also determine what components should be initially activated and what strategy considerations should be applied to the situation (this may be expedited through “pre-plans” in the incident annex). An example of strategy considerations is the use of offsite personnel (see Textbox 3.3.2.1).

Healthcare System Activation strategy (and notification) should include consideration of off-site staff.

Textbox 3.3.2.1

Offsite Healthcare System Personnel: Activation and Notification Strategies

Personnel who are not present in the healthcare facility at the time of EOP activation but who are needed to staff a full or partial EOP activation should be rapidly identified and notified. This should occur through a process requiring minimal skilled labor, such as incorporating personnel contact information into an automatic process like a page group. Who to activate may involve some initial strategic planning based upon the incident specific annex “pre-plan” for that hazard type. For example, in EOP activation for an expected long response, some departments may wish to instruct personnel not present onsite to remain at home pending further information. This creates a reserve of personnel for staffing follow-on shifts. Alternatively, the offsite personnel may be called in later to relieve response personnel as normal activities resume, so that those involved with the response can demobilize the response system and undergo “out-processing” (see demobilization stage).

Example incidents with partial EOP activations are presented for illustration:

- **SARS:** A case of SARS has been diagnosed and confirmed in a healthcare facility located in a neighboring jurisdiction (information received simultaneously from the jurisdictional department of health and from the media), but no known cases have presented to the organization’s healthcare facility. In this instance, the Baseline Situation Unit in conjunction with healthcare system administration decides that a partial EOP activation is indicated. Components activated include limited personnel assigned to Command, the Plans Section, and the Operations Section. No delays or interruptions in regularly scheduled healthcare system activities occur. Some of the assigned activities would include:
 - Efforts to gather more incident information (Command and

Plans Section).

- Efforts to disseminate, through an advisory to healthcare system personnel, the known details about the incident at this point in time (Plans Section).
- Contingency planning (for example, what types of activities would be necessary if a patient or staff member with symptoms suspicious for SARS presents to the facility or reports to work? (Plans Section, with assistance from Technical Specialists from Infection Control/Infectious Diseases.)
- Efforts to determine whether any patient already being treated within the healthcare system is potentially infected with SARS (Operations Section).
- Efforts to screen patients at points of entry into healthcare system for potential SARS infection, utilizing both demographic information provided by public health and physiologic parameters, such as unexplained fever (Operations Section).
- **Hazardous Materials Incident:** The healthcare facility receives notification through the Emergency Department of the imminent arrival of five patients who have been contaminated with a liquid hazardous material. The emergency department staff relays this information to the Baseline Situation Unit and immediately activates the chemical incident annex. The informed administrator-on-duty, in conjunction with the senior administration, decides to partially activate the EOP to support the patient decontamination function. With a properly sited decontamination facility (fixed, external to the healthcare buildings), no delays or interruptions in regularly scheduled healthcare system activities occur, other than a temporary securing of the immediate vicinity around the decontamination area. ICS positions activated include limited personnel assigned to Command, Plans, Logistics, and Operations Sections. The Healthcare System's Commander in this incident could be an emergency department clinical supervisor or administrator, with the Operations Section Chief serving also as the Decontamination Branch Director. Some of the activities performed would include:
 - Attempts to gather more incident information, such as the

specific type of hazardous material (Command, Plans, Operations Sections).

- ❑ Efforts to disseminate to healthcare system personnel and current patients that a limited EOP activation is occurring and that the only indicated response from staff not involved in the decontamination of patients is to avoid the decontamination area (Plans Section and Public Information Officer).
- ❑ Procedures to mobilize the decontamination area (Logistics Section – Facilities Unit, accomplished by Engineering or Plant Operations).
- ❑ Procedures to secure decontamination area (Logistics Section – Facilities Unit).
- ❑ Addressing the receipt, triage, decontamination, and treatment of the five patients (Operations Section).
- ❑ Efforts to find expert information on the contaminant if it has been identified (Plans Section – through experts designated as Technical Specialists).
- ❑ Demobilization and cleanup of the decontamination area, with out-processing of decontamination area workers (Logistics Section).

In both examples listed above, the importance of information management becomes obvious early in any incident and therefore, for any partial activation of the EOP, it is recommended that some component of the Plans Section be activated.

Categorizing Healthcare System notifications can help message recipients understand what they should do with the information.

Healthcare System Initial Notification and Activation Messages

In the initial stages of a potential or actual incident, notification and activation messages convey the information necessary for the receiving parties to understand the actions they should undertake.

Terminology alert!

Notification: Information distributed to relevant personnel that contains important information regarding an actual or potential hazard impact and the response status of the organization. There are generally four categories of notifications: **update, alert, advisory, and activation.**³³

- Content of the emergency notification: Emergency notifications should provide the “who, what, when, where, and why” for recipients. These messages are best understood if they contain plain terminology and avoid “codes” or specialized terms. For simplicity sake and because of the current size limits in some text messaging services, the message should begin immediately by identifying the notification category and presenting the critical information. Within many U.S. Federal agencies, a generally accepted categorization scheme used for notification messages is presented below. Regardless of the scheme utilized, it is important that all healthcare system personnel are educated to what specific notification categories mean. Local jurisdictional agencies must have an understanding as well, so ideally, all healthcare facilities within the jurisdiction would use the same scheme and it would be consistent with that used by jurisdictional response agencies. If codes are going to be used, all parties must have immediate access to the code translation. For example, if the healthcare system uses a color-coded scheme (which some utilize to indicate hazard-specific incidents), then all personnel should have easy access to documents that translate the meaning of each color.³⁴
- Responsibility for message development: As with the Incident Recognition stage actions, the responsibility for the development of notification messages rests with the personnel maintaining the Baseline Situation Unit, in conjunction with senior healthcare system administrators when indicated. Other position-related considerations include:

³³ Other terminology has been used, but the most widely accepted terms with accepted descriptions are highlighted in this text.

³⁴ Though this methodology is popular with some health and medical systems, the authors do not generally support the use of color, numbers, letters, or other codes to indicate type of hazard impact or level of response. This can be confusing, and with NIMS implementation, plain English is rapidly becoming the accepted standard.

Recipients of Healthcare System notifications can vary depending on the type of incident and level of EOP activation.

- Who is sending the message: The EOP should assign responsibility to specific position(s) (available 24-hours/day) to disseminate the notification/activation messages. Though the Baseline Situation Unit may receive initial information and coordinate with healthcare administration on activation decisions and what the message will actually contain, the responsibility for sending notifications may rest with another position. For example, some healthcare systems assign the dissemination of messages to page center managers or to emergency communications center managers. If they are participating in developing the messages, they should be trained on the pre-established templates and how the content is rapidly approved (through the Baseline Situation Unit leader or administrative position) prior to dissemination.
- Who is receiving the messages: The recipients of incident notifications/activations should be based upon functional positions, not primarily upon named individuals. The recipient list should be organized according to the specified levels of EOP activation and the specific incident types. To facilitate this process, “pre-plans” or SOPs in the incident specific annexes should contain predetermined lists of response positions for notification. Even though only specific components of the healthcare system may be activated or directed to conduct pre-activation actions, all areas of the healthcare system should receive a message that an incident is occurring. Consideration should be given to what non-activated personnel may need to know (for example, telling personnel to avoid the Emergency Department receiving area that may be secured while decontamination operations are ongoing). Conveying this situation report facilitates the “common operating picture” for the organization and can convey important safety and operational information.
- The rationale behind standard message categories: Emergency notification can be grouped into standard categories that simplify message development by providing specific templates for each category. It also simplifies training and understanding by all message recipients (i.e., the message starts by specifying the notification category, allowing the recipient to immediately understand the gravity and urgency of the message content).
- Initial and Follow-on Notification Messages:
 - Initial Notification messages: These messages are sent to make administrators and key healthcare system personnel aware of

developing information, the activation status of the EOP, and any indicated pre-activation actions. Urgent messages can:

- Keep healthcare system personnel apprised of any rapidly evolving situation
 - Improve response time if activation is warranted later
 - Prompt immediate activation actions, as soon as the decision is made
 - Promote organizational cohesiveness.
- Follow-on Notification Messages: The same categories of messages may be used throughout an incident, conveying changes and new developments with the same levels of urgency.
- Notification Message categories described:
 - Healthcare System Advisory Notification: An Advisory (see terminology textbox) provides a brief description of an impending or threatened hazard impact or one that has occurred but is unlikely to require the organization's EOP activation. It may provide recommended actions that are usually accomplished on an individual basis rather than through the organization's incident command system. Advisories may be used regularly for events, such as weather warnings, intentional threats (e.g., telephone calls), and certain types of public health information (e.g., influenza detected in the region). Depending on the event, advisories may contain:
 - Incident summary details: These include an explanation that response actions may be necessary in the near future if conditions evolve.
 - Current circumstance details: These include description of the current circumstances but indicate that no response will be necessary. For example, if a newsworthy hazard (e.g., a store roof collapse secondary to snow) has impacted a nearby business, but no significant patient load is generated, an advisory may relay this information. This "lack of incident activity" is important to counter the predictable media sensationalism, removing concern on the part of personnel that could distract them from regular duties. It also informs system personnel so that they can appropriately respond to patient and telephone inquiries.

Healthcare System Advisories convey information that may or may not need to be acted upon.

- Hazard impact details: An advisory may also contain information on how the hazard may impact personnel and provide actionable information for the individuals (e.g., traffic disruption and expedient travel alternatives for reaching the healthcare facility).

Terminology alert!

Advisory: A notification category that provides urgent information about an unusual occurrence or threat of an occurrence, but no activation of the notified entity is ordered or expected at that time. This advisory notification may include actionable information for individual personnel even though the response entity is not being activated (for example, a weather advisory that includes recommended travel precautions for individuals).

Healthcare System Alerts convey urgent information that should be acted upon.

- Healthcare System Alert Notification: An alert (see terminology textbox) provides information on unusual occurrences that indicate probable or anticipated EOP activation. For many situations, an initial alert directs specific pre-activation actions that should be accomplished (e.g., situation assessment for facility work areas such as bed and staff accountability, holdover of staff about to go off shift, activation of some phone tree notifications, and others). As not all events present clear initial indication that EOP activation is warranted, this important message category allows some ramp-up of healthcare system activities without a full system commitment. It is important to recognize that this Healthcare System Alert can incur costs for the healthcare system, which should be documented for potential reimbursement (see Finance/Administration Concept of Operations). Alert messages are also commonly used throughout the response and recovery phases, conveying both urgent information and recommended or directed actions.

Terminology alert!

Alert: A notification category between “advisory” and “activation” that provides urgent information and indicates that system action may be necessary. An alert can be used for initial notification that incident activation is likely and for ongoing notification throughout an incident to convey incident information and directed or recommended actions.

- **Healthcare System Update Notification:** All non-urgent information conveyed through emergency management mechanisms is considered an “update.” Since emergency management updates are usually of less critical importance than advisories or alerts, they are often sent via a different mechanism (e.g., regular e-mail as opposed to a text message page or urgent e-mail tag). At the same time, using the “Update Notification” message category helps to distinguish important emergency management information from other message traffic. **Updates can be utilized during preparedness and mitigation phases as well as response and recovery.**
- **Healthcare System Activation Notification:** Activation messages (see terminology textbox) convey to the notified entity that emergency response by the organization is indicated. Activation messages usually request confirmation of receipt of the message. Activation notifications should be accompanied by a **request for confirmation of receipt of the message** and may also ask for a **status report** for the notified unit. The aggregate of the returned unit status information may rapidly provide the initial resource status report for the organization.

Terminology alert!

Activation: A notification category that provides urgent information about an unusual occurrence or threat of occurrence and orders or recommends that the notified entity activate its emergency response (usually via its emergency operations plan). An activation may be **partial** (stipulating the components of the EOP to activate or some other indication of the level of commitment to be made by the notified entity) or **full** (stipulating full activation of the notified entity’s EOP). It usually includes actionable information directing the notified

Healthcare System Updates are reserved for general EM program messages and non-urgent incident information.

Using a range of activation levels provides cost-effective and efficient means for addressing hazard impact without over-committing resources.

entity on initial actions for mobilization, deployment, and/or response.

- Level of activation: When the EOP is activated, the message should contain the level of activation and as appropriate refer to the components of the EOP that are being activated (using the hazard-specific annexes as appropriate for guidance).
 - Partial EOP activation: Partial EOP activation can be complex and involve major activities, but the activation is not usually disseminated as a single message to all components of the healthcare system. Instead, all are informed of the incident and the components of the system being activated. This provides a brief description of the event and the components that have been activated and direction to the rest that no activity is requested from them at the current time. A follow-on message to the activated functional areas and key personnel may provide more specifics about the incident and expected actions. Non-activated components are kept informed with **advisories** as the incident progresses.
 - Full EOP activation: The initial message to all employees contains the same information, but specific positions and units may subsequently require more details. The initial actions that personnel undertake for full activation should be well outlined in the EOP (e.g., surge capacity or facility protection/evacuation as outlined in the Support Annexes), so that very few detailed instructions need to be conveyed under the duress of initial response.

The format and message content of Healthcare System notifications have tremendous significance and deserve special attention.

- Format of notification and activation messages: Healthcare systems should pre-script a template for these message categories and stipulate the essential elements of information that should be included in them. Since some pager and text message systems truncate messages, critical information should be conveyed at the beginning of the message. The format should include:
 - The category of the message (“This is an advisory/alert/activation/update.”).
 - Brief description of the hazard/impact.
 - Brief description of expected impact on the healthcare system.

- Directives on how components of the healthcare system should react, what activities are indicated, and, as relevant, what portions of the EOP to reference.
- Reporting locations as appropriate to position (e.g., to regular areas of work, to personnel pool, others).
- A reminder to wear personal identification, if indicated.
- Information on any pertinent healthcare system infrastructure changes/impacts (such as changed access to the facility or changes in parking for arriving personnel).
- Request for confirmation of receipt of the message (as appropriate for position). This may also request a status of the notified operating unit (“normal,” “at capacity,” “operations compromised by the impact,” or other short but descriptive message).
- A time and date stamp, so personnel know when a message was conveyed.
- **Message detail:** The appropriate level of detail in any notification message can be challenging to establish and, to a certain degree, is dependent on the method used to disseminate the notification (see below). In general, when the technology permits, more detail is better than less detail. When the initial notification is limited by technology, other methods should be available to provide the remaining critical information (such as a call-in line and/or Internet/intranet message boards). **Unverified information should be qualified as such.** The types of detail provided about the incident can have important operational implications as the following example suggests:
 - Examples of notification messages are presented in Textbox 3.3.2.2.

Textbox 3.3.2.2

Examples of Healthcare System Notification Messages

Updates

“This is a Healthcare System **Update**: There will be a meeting of the EM committee this Monday in the hospital boardroom. All committee members are expected to attend and bring their

respective work products related to the recent after action report for the June 23 exercise.”

“This is a Healthcare System **Update**: The city is planning a large terrorism exercise next week. The hospital is participating only at the radio communication level. Be aware that heavy presence of police, fire, and EMS resources is expected at a focal point downtown during the indicated period.”

“This is a Healthcare System **Update**: Recent major revisions to the EOP have been accepted and are in full effect. The changes most affect the Emergency Department (ED). All ED personnel should read and understand the revised plan. Questions may be sent to XXXXX.”

Advisories

“This is a Healthcare System **Advisory**: The National Weather Service has posted a blizzard warning for the metropolitan area tomorrow. Personnel should review the healthcare system inclement weather policy. A follow-on advisory will be provided at 1800 hours.”

“This is a Healthcare System **Advisory**: A local activist group is planning a large demonstration on Main Street next week. Though expected to be peaceful, activity may compromise commuter traffic between 0900 -1400. Secure routes are being planned for emergency vehicles and essential travel. More information will be forthcoming.”

“This is a Healthcare System **Advisory**: The media is reporting a large explosion at the local refinery. EMS reports no casualties: **NO PATIENTS ARE EXPECTED AT THIS TIME** and no actions by the hospital are indicated. Administration is monitoring the situation and will provide more information as it becomes available.”

Alerts

“This is a Healthcare System **Alert**: The National Weather System is predicting 3 feet of snow for the metropolitan area tomorrow night. Light snow is expected to start at 1900 tonight. The Facility EOP, Inclement Weather Annex, will be implemented at 2200 tonight, including personnel holdover. All personnel should consult this incident annex to the EOP for expected actions. Department

managers must participate in a teleconference at 1700 using the regular Emergency Management teleconference number. Situation updates will be provided on a regular basis.”

“This is a Healthcare System **Alert**: A local community protest is underway with approximately 1,000 protestors gathered at city hall - unverified reports of violence and looting. The following departments are asked to provide a situation assessment relevant to their areas (and as outlined in the EOP) and to hold staff over at change of shift: X, Y, and Z departments are affected. Further information will be provided in 2 hours.”

“This is a Healthcare System **Alert**: Reports indicate that the local refinery explosion has resulted in a hazardous materials release. Public safety officials on-scene are evaluating the extent and content of the release. The hospital is not considered to be within the zone of release and is not considered in any direct danger. Southeast sections of the town may be affected and evacuation mandated. Happy Times Retirement Community is within the potential zone of release. The following departments are asked to provide a situation assessment relevant to their areas as outlined in the EOP: X, Y, and Z departments. If evacuation of Happy Times is ordered, these departments will hold staff over at change of shift. Further information will be provided in 30 minutes.”

- Notifications methods: Notifications (especially Healthcare System Alerts and Activations) should be based upon reliable **processes** and **technologies** that are regularly tested. As noted above, the method of dissemination may depend upon the type of notification or the intended recipients. In many instances, multiple methods are utilized simultaneously.
 - Overhead announcements: Public address systems in a healthcare facility are often used for major announcements. These are limited by the amount of information that can be conveyed, the lack of penetration into all areas of the facility, and the sensitivity of information that can be conveyed in a public forum. Overhead announcements are best utilized in conjunction with other notification methods and should be limited to briefly announcing an EOP alert or activation, with advice on where to obtain more information (call-in line, intranet, mass e-mail, from supervisor, etc.).
 - Pagers: The use of pagers can be beneficial, especially if they

Methods used to send Healthcare System notifications can vary depending on the category of notification being sent.

can provide text messages and pager groups have been established during preparedness activities. Many pagers have limitations to the number of characters contained in any single page. Information that has been truncated in a message can sometimes present confusing instructions (e.g., “**This is notification of a full EOP activation for**” [with additional text “**exercise**” ~truncated] instead of “**This is an exercise – full EOP activation**”).

- Posted messages: Notifications may be posted on Websites or presented on callback lines (recordings), allowing individuals to access the information, as they are able. This requires instruction to prompt appropriate individuals to access the information. The advantage is that more information may be contained within the posted message than in pages or public address announcements. If special numbers or access codes are provided during training (or ideally in pocket cards or other easily retained hard copy), the content can be restricted to intended personnel, even though a public address announcement was used to prompt access.
- Phone calls: The technology exists to send recorded messages to multiple pre-identified phones at the same time. This may have more utility for contacting individuals offsite at the time of the notification. Conducting individual telephone calls to those personnel can be time consuming, require extra staff, and may not be logistically possible through an overwhelmed or compromised public telephone system. “Telephone trees” directing a cascade of telephone notifications have been used, but the reliability of these is suspect unless carefully developed with personnel training. All telephone tree messages should be written down, short, specific, clear, and concise (i.e., similar or identical to pager messages developed by Plans). Reporting back by telephone tree callers of both confirmed contacts and those not contacted is important to maintaining accountability. Much of this activity could be accomplished by offsite personnel, freeing up onsite responders for other tasks. These considerations should be factored when establishing notification algorithms.
- Radios: Some healthcare systems dispense radios to key positions within the facility. Though advantageous for real time notification of these positions, there are several important considerations. Any person receiving a radio pre-event or during an event should concomitantly receive training on its use and on “radio etiquette” (see description above). Radios, unless they are encrypted through digital or other technology, can (and will)

be monitored by outside sources, particularly media. Personnel must remain cognizant of this critical privacy and security issue.

- E-mails: E-mail can provide large amounts of information efficiently. They should not be used as a primary method of notification unless other methods are available to prompt recipients to check their e-mail. Proprietary products are also available that can prompt computer screens to display an emergency signal.
- Face-to-face notifications: This type of communication may be necessary if hazard impact on technologies is severe or if limited components of the healthcare system require notification message.

Lesson 3.3.3 Concept of Operations for Healthcare Emergency Response and Recovery: Mobilization Stage

Lesson objectives

- *Explain the importance of the mobilization stage and list the main system management processes that should occur.*
- *Describe the key considerations for the mobilization of response personnel in Healthcare Systems.*
- *Describe the key considerations for the mobilization of response facilities and list the main functional areas to mobilize in Healthcare Systems.*

Mobilization is the Response stage that transitions the Healthcare System from baseline to incident operations, assuring an “operational” ability to address the hazard-generated and response-generated needs of the incident.

During the mobilization stage, appropriate personnel, facilities, and supplies transition from baseline to an incident operations state. This may have to occur rapidly, with incident operations beginning before mobilization is complete, or over a longer period of time (e.g., in anticipation of an impending hazard impact). Full EOP activation, and therefore full mobilization, is generally utilized either for the influx of large numbers of patients, significant numbers of patients with very unusual medical needs, facility threats that could require evacuation or other major life safety interventions, or the extended loss of mission critical systems. All aspects of the healthcare facility, therefore, mobilize in some fashion to focus upon the incident during full EOP activation. Partial EOP activations specify that only designated components of the healthcare facility mobilize for incident operations.

- **Mobilization of Personnel:** All personnel should clearly understand their assigned incident role and their section or functional role in EOP mobilization.
 - **On-duty versus off-duty:** Command and General Staff should, as an early action, evaluate the currently available personnel onsite and calculate staffing needs based upon current and projected incident parameters. Additional staff should be called in as indicated. Consideration should be given to staffing requirements that may occur later in the incident and thus some staff could potentially be requested to stage offsite or at home during the initial period (see Textbox 3.3.1). Another strategy for addressing personnel surge requirements is to hold staff over as a shift is ending, effectively doubling staffing in many areas of the hospital by adding the incoming shift.
 - **Check-in:** As recalled staff arrive to the facility, or reassigned staff report to new areas within the healthcare system, their

participation must be documented.

- Staff arriving from outside locations: Staff reporting for duty from outside locations should have a designated entrance separate from those for volunteers, visitors, patients, and the media. Security personnel may be needed to screen incoming personnel for current identification (ID) badges (see Security concept of operations). A process to confirm personnel without their badges should be established. Staff should “clock-in” for general accountability at this location, receive an oral or written briefing, and be re-directed from their usual job reporting location if indicated. The additional staffing resources should be reported to the Logistics Resource Unit on a regular basis.
- Staff assignments to sensitive areas: Admittance to high-activity, high-trust areas such as Emergency Department, the Healthcare System Command Post, or the Operating Suite should be through direct assignment only. For these functional areas, supervised admittance of personnel and the use of a check-in sheet, such as the ICS 211 (see Lesson 3.4.2), may be invaluable for assuring only assigned personnel are admitted.
- General staff accountability: Use of an ICS 211 in each staffed area can provide important accountability if, for example, a sudden evacuation is ordered or for post-incident reconstruction of activities.
- Operational Checklists (“Job Action Sheets”): All staff with specific assigned roles should be given or should locate their respective operational checklist for their assigned incident position. They should briefly review the material contained within this document and, as required, clarify any issues with immediate supervisors. Most operational checklists describe, as an initial activity, receiving a brief from the immediate supervisor to the position. Initial briefings should include confirmation of position assignment, relevant details of the hazard impact, and other instructions that may come from supervisors through a Healthcare System Incident Action Plan (see below). The operational checklist should also list all pertinent mobilization actions for the relevant position (or refer to the relevant mobilization checklist).
- Labor Pool: Full EOP activation often entails establishing a Labor Pool to meet emerging staffing needs. Personnel without a critical everyday or response assignment (approved by their supervisor) report physically, telephonically, or via e-mail to a

designated Labor Pool location. There are several considerations for the Labor Pool:

- Labor Pool responsibility: A Labor Pool is a roster of personnel without a section or position assignment and therefore is usually a mobilization responsibility for the Logistics Section. Personnel rostered in this general Labor Pool report to the Logistics Section until they receive their assignment and they report to their assigned section. They then operate under the section where they are assigned.
- Virtual Labor Pool: It may be most beneficial to establish the Labor Pool in a fashion in which those reporting do not have to physically report or linger. If a reliable contact method can be established, those signed in could leave the immediate vicinity. They should be trained to report any change in their availability status to the Labor Pool if, for example, they are subsequently assigned elsewhere.
- Labor Pool pre-plans: Procedures should be established during preparedness such that known mobilization or incident response tasks that require additional personnel are automatically listed for immediate staffing by the Labor Pool, and qualified personnel should be assigned as they report. For example, assistance in managing the perimeter, deploying supplies to critical areas (especially during off-peak shifts), and collecting adequate stretchers and wheelchairs could be immediate staffing assignments. Sending nursing personnel to an Emergency Department staging area (under the supervision of the Operations Section) may also be an automatic deployment in patient surge incidents.
- Task completion: Personnel should be instructed to report back to the Labor Pool upon completion of their assigned tasks or release from their assigned area, to maintain accountability and so they may be reassigned or returned to normal duty.
- Documentation: Labor pool logs, including assigned and available staff, assignments, and tasks completed, should be maintained, with copies provided to the Logistics Section Chief and the Healthcare System Command Post for planning purposes.

- **Mobilization of Response Facilities:**³⁵ Each functional area of the healthcare facility requires specific steps to mobilize the area for response. Standard actions should be listed on mobilization checklists, as well as action items on the operational checklists for responsible personnel.
 - **Healthcare System Command Post:** For both full and partial EOP activation, the need to establish a functional Healthcare System Command Post³⁶ (CP) is constant. The activities required to establish this fixed facility should be a high priority for assigned personnel. This is usually a Logistics Section, Facilities Unit task rather than a responsibility of Command and General Staff. The management group should instead be focused on the management of the incident operations. Important considerations for the Healthcare System Command Post include:
 - **Location:** Pre-selected areas for the Healthcare System Command Post should address important factors related to location. The ability to secure the command area is important, both for safety and for preventing interruption during meetings and other management activities. At the same time, the location should be widely disseminated and understood by personnel so that appropriate access may occur as indicated. Adequate space is required for the Command and General Staff and assisting personnel to work. The physical layout and work station arrangement should be conducive to appropriate interaction, as well as to frequent briefings during the early, reactive response period. Space should also be immediately available for smaller meetings (task planning, problem solving) so they are not disruptive to the full Command and General Staff and for secure conversations between Command Staff and outside agencies.
 - **CP infrastructure and supplies:** Appropriate infrastructure and

Specific response areas may need to be set-up during mobilization. One of the most critical is the Healthcare System Command Post.

³⁵ Any activation of the EOP (full or partial) would warrant the mobilization of the Healthcare System command post. Other facilities are activated as required and at the discretion of Commanders/Managers.

³⁶ In this section, the text is treating the “command post” as the fixed facility where incident management is addressed for the healthcare system. Some may consider the “command post” to be the site of a forward command element that is proximate to the area of central activity, and the fixed management area to be the “emergency operations center” (EOC) supporting the incident command post (see Textbox 3.3.4.1). In the latter arrangement, the EOC contains the five ICS sections with the objectives of supporting the incident, managing incident-related issues not addressed by the incident command post, and assuring continued function of the healthcare system as much as possible. Either configuration is acceptable, but the one selected must be clearly delineated.

supplies should be available in the Healthcare System CP. These include but are not limited to:

- Telecommunications equipment: The CP should be equipped with both primary and back-up telephone lines, teleconference microphones, computers with Internet and intranet access, radios, and potentially direct connect devices.
- Back-up power supplies: Adequate back-up power supplies should be available in any pre-selected Healthcare System CP.
- Furniture: Ideally, appropriate furniture for the sequestration of the different ICS sections as well as for group meetings.
- White boards and large flipcharts with writing instruments: for the tracking of incident information and important messages.
- Restrooms: Easy access to restrooms can prevent prolonged absences from personnel posts.
- Refrigerator (stocked): To provide fluids and refreshments when staff cannot leave their posts.
- Television and/or radio receiver: Available for monitoring the media message without intruding upon command post work activities.
- Job aids: Appropriate supplies of ICS forms and other job aids, such as call-back lists or job action sheets.
- Wall space: To maintain incident information in a visible format (via paper charts, LCD projection, and others).
- Office supplies: Notebooks, writing instruments, staplers, and miscellaneous supplies.
- Other functional areas to mobilize: The following facilities are usually necessary during full EOP activation or partial activation for an influx of victims:
 - Clinical treatment areas: These functional areas include the initial patient receiving areas, such as the Emergency

Specific strategies can be used to prepare clinical areas during Healthcare System Mobilization.

Department and outpatient clinical areas, as well as specialty treatment areas (operating suite, critical care areas, burn treatment, and others), and regular inpatient wards and overflow areas. Procedures to “clear” these clinical sites are necessary to optimally receive a surge of incoming victims (see Textbox 3.3.3.1 for an Emergency Department mobilization strategy).

- Creating surge capacity: This may involve the suspension of elective surgical and other procedures, rearrangement of patient space to accommodate a higher number of patients, and the expedited discharge (or transfer) of stable patients (see example below for Emergency Departments).
- Expedited discharge: This intervention has been the subject of extensive discussion and recent research.³⁷ The research efforts focus almost exclusively upon physiologic parameters of patients for hospital discharge, with little attention to the certainty that prematurely discharged patients need a supportive environment, a potentially more sophisticated outpatient care than is usually available, and a means for safe transport. These factors can be problematic for any premature hospital release, and so expedited discharge can become very time- and effort-intensive in assuring adequate arrangements, especially in a community impacted by a severe hazard. In the aftermath of Hurricane Katrina, several hospitals in the State of Mississippi were confronted with **delays in discharging both inpatients and outpatients** due to the lack of adequate locations for patient disposition.³⁸ In a major, fast-moving incident, healthcare system planners should recognize that additional patient care capacity would commonly be needed before significant numbers of in-patients can be fully discharged.³⁹ Clinical areas may best be “cleared” through internal transfers (from the ED, critical care units, and others) to staffed-up alternative areas. Premature discharge may be less efficient than identifying stable patients who can voluntarily accept transfer to an equivalent, non-impacted healthcare facility. This reality has important implications when planning

³⁷ *Discharge Criteria for Creation of Hospital Surge Capacity*. AHRQ Grant # U01 HS 14353 to Johns Hopkins University. Grant period 9/30/03-9/29/05. Research publication: Kelen G.D., Kraus C.K., Brill J.D. Creation of Hospital Surge Capacity by the Early Discharge of Inpatients (2005). *Academic Emergency Medicine*. Volume 12, Number 5, supplement 1/23.

³⁸ Authors' direct field observations.

³⁹ In addition, there is an ethics consideration in discharging patients prematurely without providing equivalent care post-discharge.

inter-facility mutual aid and cooperative assistance.

Exhibit 3.3.3.1:

Mobilization of the Emergency Department Receiving Area

In order to effectively prepare an Emergency Department for the influx of incident patients, it is helpful to rapidly re-triage existing ED patients, including those in the waiting area, during the mobilization period. Patients should be assigned to one of three action categories:

- Admission: For patients who ultimately may require admission, appropriate holding orders are rapidly written and accompany the patient to the designated inpatient department. Follow-on therapy and completion of the diagnostic work-up occurs at these locations, with alterations in procedures so that ED-level care is approximated. This type of rapid admission process requires multiple levels of “buy in” from across the healthcare facility, and includes training for registration personnel, admissions personnel, admitting physicians, and clinical staff on receiving wards.
- Discharge: Patients awaiting completion of care and discharge from the ED should have this process expedited (this is likely the smallest group in the existing ED population). Discharge should be accomplished in a separate area (see below) to provide immediate expansion of space in the ED.
- Further workup as necessary: Patients who do not have an obvious disposition in the two previous categories should be assigned a triage category consistent with incoming incident patients.

- Discharge/transfer area: Preparing and staffing a discharge/transfer area that is separate and distinct from the clinical areas can facilitate the expansion of space for the care of incoming patients. Since these patients generally require less intense care than other patients, grouping patients pending both discharge and transfer can free up clinical staff, while social service and other personnel can assist in discharge and transfer planning.

- Discharge activities: A discharge/transfer area can be established for both inpatients and for outpatients, or the two can remain separate. The important activities of arranging adequate disposition, completing registration for outpatients, ensuring adequate prescriptions and supplies,

- and confirming a clear patient understanding of discharge instructions all must be addressed before discharging patients.
- Transfer activities: Patient transfers require the provision of care while patients are staged awaiting transfer to a new facility. This wait can be lengthy. Personnel responsible for accomplishing the transfer must identify an appropriate accepting facility, copy records, arrange transport, notify family, and confirm that patients have reached their hospital destination.
 - Labor Pool: As noted in the Systems Description (see Lesson 3.2.3), a Labor Pool is often required during full EOP activations. The area for this function should be rapidly established and its location disseminated to all healthcare facility personnel. Adequate communications should be available to receive requests from across the organization in order to dispatch personnel (many directly from their usual job location) as they are needed. Required supplies include appropriate electronic equipment and paper supplies to roster and track Labor Pool personnel, and to keep Logistics section and the command post informed.
 - Patient family assistance area: For events involving the influx of patients (even stable patients being transferred from another impacted hospital), it is essential to establish a separate area to provide services to patients' families, both incident victims as well as regular inpatients. Ideally, the site is remote from clinical care areas and has space for receiving, registering, and providing information to people searching for news of family members who could have been admitted as patients. Telephone inquiries will commence almost immediately after the hazard impact, and so mobilization of the functional ability to meet this volley of calls is a critical priority. This area must be tightly integrated with the Situation Unit in the Plans Section so that patient tracking information can be relayed in real time. It also must have a communication flow with the patient care areas to convey messages to patients from their families, to provide critical health information (allergies, current medications, etc.) to clinical staff, and to obtain patient updates for family members. Depending on the healthcare organization, grief counselors, social workers, or psychiatrists may be helpful in this area as well. This facility most appropriately fits under the Operations Section, perhaps as a separate branch since its focus and actions vary from that of patient care services.

- Media areas: Establishing a space remote from patient care and family assistance areas to brief the media is mandatory. By providing frequent updates, members of the media can be engaged in this remote location, preventing them from “looking for stories.” Ideally, the space should accommodate the media, allowing them space to develop their stories and communications (usually telephones but also possibly including Internet access) for them to file their reports.
- Volunteer reception: As discussed earlier, incident response commonly generates a convergence of volunteers. Establishing an area to process volunteers separate from clinical care, media briefings, and family assistance is important. Effective volunteer processing requires: staffing; equipment and supplies for appropriate registration; credential verification; assignment briefing; privileging and badging; and tracking of volunteers accepted and assigned into service.
- Mobilization of security: Many EOP full or partial activations will require mobilization of healthcare facility security to address multiple critical tasks. A mobilization plan should delineate a surge capacity for security staffing (perhaps by drawing personnel from plant engineering or another source) to assure adequate manpower. For example, a chemical or radiation contamination incident warrants rapid and complete perimeter control to prevent the entry of contaminated patients. In this example, doors must be locked and appropriate personal protective equipment (PPE) must be immediately available to trained security personnel so they can intercept patients and redirect them to the decontamination facility. Security can also be important to manage convergence of volunteers and the media.
- Mobilization of supplies: Specific supplies that have been pre-designated for use during EOP activation should be identified and pre-positioned for easy deployment during mobilization. In some instances, this may require special “contingency contracts” with vendors, obligating them to deliver the supplies upon request and within a specified timeframe.
- Prepackaged: Supplies stored in a readiness state and for easy access during mobilization, but also allowing efficient maintenance of supplies. This includes rotation of stock to avoid shelf life expiration, re-charging batteries, bioengineering checks, and scheduled maintenance.

- Hazard-specific supplies: Some supplies may be required to address specific hazards, in addition to the usual supplies that focus upon trauma victims. As an example, supplies for the decontamination of patients can require setup during mobilization. Consideration should be given to the accessibility and ease of deployment (as well as maintenance issues mentioned above) related to the supplies storage areas.
- Mobilization reporting: Several types of reporting may be standardized across the organization's functional assets.
 - Resource Status Report: A critical mobilization step, immediately following the initial incident notification message, is for every department within the organization to provide an initial status report to the Plans Section.⁴⁰ The aggregation of these reports provides a full operational "snapshot" of the available operational capabilities, current activity load, and any hazard impact. This information is critical for Command and General Staff during the early stages of the event. Resource status assessment should move beyond the usual "bed counts" and should include available staffing, supplies and equipment, current patient load, hazard compromise to functional areas, and other incident relevant information. Pre-established forms to capture these critical parameters may facilitate the reporting process, particularly if they are formatted for rapid aggregation. Some functions, such as the blood bank, may have specific assets that should be confirmed in this initial resource status. The Plans Section (Resource Unit) is responsible for rapidly assembling a composite picture of the operational capabilities for the Command and General Staff.
 - Completion of Mobilization Actions: Functional areas that have been mobilized for response should report their readiness status at the completion of their mobilization actions.

⁴⁰ This status report may be requested in the initial notification message – see Lesson 3.3.2.

Lesson 3.3.4 Concept of Operations for Healthcare Emergency Response and Recovery: Incident Operations Stage – Command Staff Actions

Lesson objectives

- *Describe the overriding management priorities to be addressed during the Incident Operations response stage.*
- *List the key activities that should take place in the Transitional Management Meeting.*
- *Describe incident action planning processes for healthcare system response.*
- *List and describe the responsibilities of the Healthcare System Command Staff during incident operations.*

The Operations Stage: Overview

The Incident Operations stage is defined as the time interval in which the dominant organizational activity is incident management and operational response to the effects of the hazard impact. This varies from day-to-day management methods and operational interventions, and is guided by the EOP and the operational period objectives.

The overriding management priority for healthcare system incident management during the response phase is to move beyond the reactive management approach by achieving and maintaining a pro-active, management-by-objectives stance. Each section within the organization has specific ICS responsibilities related to proactive management, and these are presented in more depth below.

The Operations Stage: Command Staff Actions

The Command Staff in traditional ICS is described as the Incident Commander (IC), the Safety Officer, the Liaison Officer, the Public Information Officer (PIO), and senior advisors and additional staff as assigned. **Even with a minimal activation of the EOP, it is always necessary to designate a Healthcare System IC.** Several critical issues must be addressed by the Command Staff at the outset of any incident response. If formal incident action planning is instituted, each of these items is decided during a brief meeting that traditional ICS refers

Incident Operations is the response stage in which the Healthcare System primarily addresses the immediate hazard impacts.

to as a “**Transitional Management Meeting.**”⁴¹ As described in Lesson 2.1.3, this meeting should be kept brief even if the event is complex (it is important to distinguish this from the incident recognition and activation decision processes, which are assumed to have already occurred).

For healthcare systems, a Transitional Management Meeting includes key activities such as:

- Identification of IC: The Healthcare System IC should be explicitly determined to prevent any confusion (position competencies and other considerations are provided above in Systems Description discussion of this position). A deputy may be selected at this time as well to provide adequate coverage for 24-hour operations.
- Initial briefing: The selected Healthcare System IC then receives a briefing on incident parameters as they are known at that time. This briefing is usually conducted by the Situation Unit, possibly by personnel who functioned as the Baseline Operational Unit and so are familiar with incident information from the outset. To keep the briefing focused and concise, it is helpful to consider the use of the ICS Form 201. This form, if adapted to the healthcare setting, provides an orderly progression of critical incident information that should be provided to the Healthcare System IC and serves to document the early incident details.
- Initial incident objectives: With the initial briefing as a basis, the Healthcare System IC establishes initial incident objectives for the organization. Both control objectives and more specific operational period objectives are established (see Lesson 2.1.3 for distinction between two types of objectives). The latter may be broad during the initial stages of an event and become increasingly refined and specific as incident planning progresses. In some events where the need for operational response of healthcare medical assets is unclear, initial objectives may revolve around gathering more incident information and initiating contingency planning (see Lesson 3.3.2). These initial objectives should be documented, usually by a Plans Section Chief. The objectives should also address any significant continuity of operations issues. The use of an ICS Form 202, adapted to healthcare system incident orientation, will facilitate the capture of these objectives.

⁴¹ Though NIMS does not specifically refer to a Transitional Management Meeting, the activities performed during this meeting are critical and should be considered by healthcare systems.

Several critical tasks must be accomplished early during Incident Operations. One of the most important is to select the organizational structure (ICS based) that is predicted to meet the incident needs as known.

- **Initial organizational structure:** Each hazard impacts the healthcare organization in a different way, and the extent of impact is variable even within a single hazard type. This warrants the need for flexibility in defining the ICS organizational structure for each incident, within the level of activation determined in the preceding response stage. The next critical step, therefore, is to outline the organizational management structure for the “activated” components of the organization’s EOP. This critical step should designate the names of personnel assigned to all Command and General Staff positions, as well as the Operations Branch Directors and the Unit Leaders under each ICS section. Using ICS Forms 203 and 207, adapted for healthcare systems, will facilitate the capture of this assignment information. The rapid construction of this organization chart is facilitated by having pre-plans or SOPs for likely hazard types in the EOP’s Incident Annex (see Lesson 3.4.2). While this organizational documentation may superficially seem laborious, it is invaluable as an instrument for organizing the response and the reporting structure, both for responders internal and external to the healthcare system. A properly documented **and disseminated** organizational structure will significantly improve the ability to meet response-generated demands. Dissemination should occur immediately to section chiefs and to the Senior Liaison Officer for distribution to external agencies or to a Tier 2 healthcare coalition.
- **Command post location:** The issues of where healthcare facility command takes place and what the command facility/location is titled have been surprisingly controversial (see Textbox 3.3.4.1). This must also be rapidly determined and the location/contact information disseminated appropriately.

Textbox 3.3.4.1

Where Does Incident Command Occur?

ICS guidelines for titling incident command post, emergency operations centers, and other management areas have created confusion for healthcare organizations as to appropriate terminology for their facilities.

Traditionally, an **Incident Command Post (ICP)** is located in the field close to the site of the “incident.” This is where tactical management of the incident occurs and, by default, where specific activities such as Planning Meetings are conducted (see below – Concept of Operations). In contrast, an **Emergency Operations Center (EOC)** is usually remote from the incident and provides

support to those managing the “incident.” EOCs are typically pre-established at fixed locations. In certain widespread incidents, some jurisdictions may choose to co-locate the ICP and the EOC, but it is important to maintain separation between these distinctly different functions and their related activity. In this co-location situation, the physical facility would still be called an EOC, with IC/IM functions occurring there.

For healthcare facilities, several considerations are important to ensure consistency of terminology with other response organizations:

- Healthcare organizations may find utility in establishing both ICP and EOC functions but should designate them appropriately. For example, if the primary focus of the incident is in the Emergency Department, the healthcare facility ICP may be located there with support coming from a healthcare facility EOC located elsewhere. This would mean that all inherent command activities would occur at the ICP location (e.g., Planning Meetings). This, for obvious reasons, is not an ideal arrangement for some incidents.
- Healthcare organizations may choose to have command activities occur at a pre-established location titled the emergency operations center (EOC). Similar to the jurisdictional model above, command and support activities would occur in the same location but with appropriately organized and designated incident management personnel separated from the EOC support function.
- To add to the complexity of this issue, if the healthcare facility were to be viewed as an integral component of jurisdictional ICS, the location where hospital command is occurring could be more appropriately termed “Hospital X Operations Center” (if the healthcare organization is performing under the Operations Section of the jurisdiction). Since hospitals have rarely been fully incorporated into the ICS organizational structure (with full logistics, finance, and plans support by the jurisdiction), this is probably not an acceptable term for many healthcare organizations. Also, it would not apply if the incident were only occurring at the facility in question (for example, no jurisdictional response, so the “incident” is managed entirely by the healthcare organization). The general title that the Hospital incident Command System (HICS) applies to this entity is “Hospital Command Center,” defined as “the place where decision-making occurs.”
- Regardless of the terms utilized, **it is most important that the**

**Not all incidents
require formal
Healthcare System
Incident Action
Planning.**

healthcare organization use a qualifier in its title to designate it as theirs. For example, “Hospital X CP,” “Hospital X EOC,” or “Hospital X Command Center,” will all convey a clear distinction to other responding organizations and agencies.

Other terms utilized to describe this management facility may not be considered consistent with NIMS/ICS.

For the purposes of clarity in this text, the command location is designated as the Healthcare System Command Post (CP).

- Healthcare System incident action planning: Another critical decision to be made is whether formal incident action planning will be undertaken by the healthcare response organization (see discussion below under Plans Section).
 - Formal incident action planning: This requires dedicated personnel and resources and, therefore, for many healthcare systems, it can appear to be an undue burden during incident response. The following incident parameters may be helpful in making this decision:
 - Projected incident length: Generally, in any incident with early indications that the response will persist beyond a single day, or greater than one extended operational period, formal incident action planning should be strongly considered.
 - Complex hazard impact: For incidents that appear complex in nature (e.g., infectious disease outbreaks) or in size (large geographic area or crossing jurisdictional borders), formal incident action planning can enhance internal and external dissemination of information and coordination of actions.
 - Complex, multi-agency response: If multiple external agencies will be involved in the incident response, then formal incident action planning will almost always be required to facilitate integration of the healthcare system into the larger response. It promotes external dissemination of healthcare facility incident information and provides a mechanism to incorporate outside information across the organization’s response. This can be especially critical for events in which the local jurisdiction’s response will be dependent upon data from healthcare organizations, such as during an infectious disease outbreak.

Initial parameters may not clearly dictate the need for formal

incident action planning. It is generally better, however, to assume the need for formal incident action planning, even if the initial incident action plans generated are short and handwritten.

- Informal incident action planning: This may be the management strategy used during the early, relatively hectic period of response. It may initially be accomplished through announced Command and General Staff Situation Updates that evolve into more formal planning meetings as the incident unfolds. A template for rapidly covering key areas of healthcare system management during these types of meetings is presented in Textbox 3.3.4.2.

Textbox 3.3.4.2

**Situation Update Meeting Guide for Healthcare System
Command and General Staff**

1. Announce meeting and ground rules (Plans Chief)
 - Very brief reports that are focused
 - Major issues assigned for resolution and to report back
 - Pagers and phones placed on silence/vibrate.
2. Incident situation report (Plans Chief)
 - Pertinent incident details
 - Overall incident response, including ICS structure being used and objectives and major strategies established by overall response that are pertinent to healthcare systems
 - Healthcare system role in response.
3. Situation report (Operations Officer)
 - Incident as it has impacted the healthcare system
 - Healthcare system objectives, strategies, and general tactics
 - Brief review of activated components of healthcare system (e.g., current clinical and non-clinical operations, plus Family Assistance Services).
4. Plans report (Plans Section Chief)
 - Documentation issues related to information management, review of operational periods, etc.
 - Contingency, long-range, and demobilization planning issues.
5. Logistics report
 - Pertinent status of facilities, supplies, and personnel
 - Communications issues
 - Transport issues
 - Health issues of system responders.

Defining Healthcare System operational periods early is critical.

Coordinating Healthcare System operational periods with those of other response entities is also important.

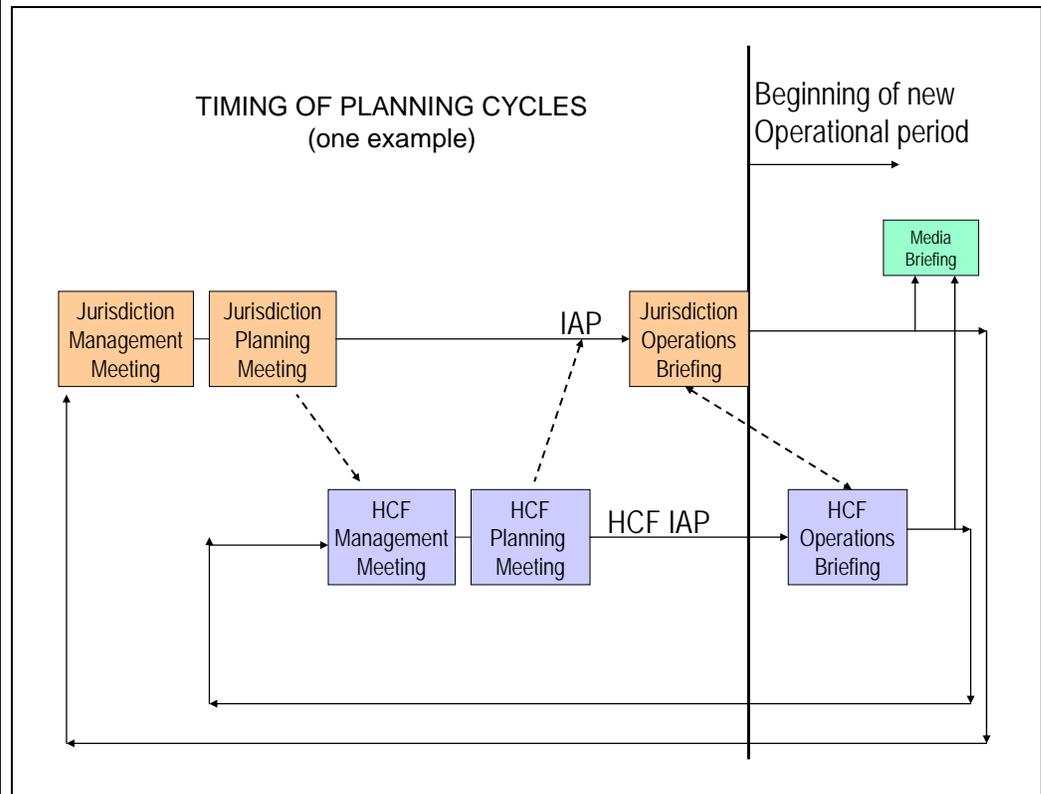
6. Safety and security report
 - Status of perimeter control and other incident security issues
 - General and incident-specific safety issues and interventions.
7. Medical Officer report (Senior Medical Advisor or Technical Specialist)
 - Any additional safety/preventative medical considerations
 - Any additional strategic planning issues based upon the types of casualties and their medical conditions (for example, anticipating 12- and 24- hour needs for burn patients, special transfer issues, and other concerns that are important for the entire Command and General Staff to understand).

- Planning cycle: If incident action planning is to be undertaken by the healthcare system, then defining the “operational period” is the next important step. The “operational period” is the time interval covered by incident objectives (see terminology textboxes in Lesson 2.1.3). The Planning Cycle is dictated by the timing of the operational period.
 - Twenty-four-hour operational periods: For most incidents that the healthcare facility will encounter, a 24-hour operational period is often adequate. Note that the operational period and work shifts may not coincide, although it is useful to have the onset of the operational period and one work shift synchronized (so that a current operational briefing and incident action plan is used to guide the work of the incoming personnel).
 - Shorter operational periods: For some incidents that involve rapidly changing parameters, a shorter operational period such as 12 hours may be indicated.
 - Longer operational periods: If incidents move into a semi-chronic timeframe, operational periods and planning cycles could be stretched out to longer time periods such as a week.
 - Changes in operational period length: The length of operational periods can be formally changed as incident parameters dictate (increase or decrease in length) but should occur deliberately through the incident planning process with adequate notification to response participants (through an incident action plan prior to the scheduled change).
 - Operational period timing considerations: There are two important considerations for determining the operations period:

- Jurisdictional planning cycles: In most well-run jurisdictional responses, an operational period/planning cycle will be established rapidly. For healthcare facilities, knowing the jurisdictional planning cycle can help in setting the timing of the planning cycle for the hospital. For example, if a jurisdictional health and medical authority has established a planning cycle such that it will conduct Operations Briefings to healthcare facilities every morning at 1000, then the healthcare facility supporting the jurisdiction's incident may establish its Operations Briefings internally at 1200 (see Exhibit 3.3.4.1). This will enhance coordination of information and planned actions across the jurisdiction.⁴² In ideal situations, once information is disseminated amongst the various healthcare facilities, media briefings are also timed so that the incident action plans can promote consistent public messages from across the response.

⁴² It is recognized that some jurisdictions may not have formally established planning cycles. This doesn't negate the importance of conducting incident action planning in a scheduled planning cycle at the level of the healthcare facility or, ideally, synchronized with other healthcare organizations through a coalition (Tier 2) platform (see Lesson 2.2.3). Also, it is recognized that some jurisdictions may be slow in establishing a formal operations period. Timing of incident planning meetings may be adjusted at the healthcare facility level as the incident evolves to be synchronized with the jurisdiction.

Exhibit 3.3.4.1: Timing of planning cycles between a healthcare facility (HCF) and the jurisdictional response, where the HCF is supporting the jurisdictional incident.



Establishing and disseminating the timing of specific meetings is an important early Plans task during Incident Operations.

- Timing of specific meetings: The timing of specific meetings that compose the planning cycle should be established early and disseminated to the appropriate internal personnel that are to attend. Initial timing of meetings can be subject to change as the incident evolves, but ideally, the organization should complete one full cycle of the following meetings, within the established time period designated as the first operational period:⁴³
 - Planning Meeting
 - Operations Briefing
 - Management Meeting (this begins the formal planning for the next operational period).

⁴³ See "Incident Operations: Plans Section" for further explanation of these meetings during the operations cycle.

- Importance of Transitional Management Meeting issues: The critical steps outlined earlier for the transitional management meeting hold paramount importance for the success or failure of the healthcare system to adequately address the hazard impacts. By addressing these concerns, the organization has already begun the transition from reactive to pro-active management of the incident (see Textbox 3.3.4.2 for an example of the alternative).

Textbox 3.3.4.2

Failure To Transition from Usual Management to EOP-guided Incident Management

Hospital X is located in a large metropolitan area with a robust healthcare system and a large public health department. Two cases of inhalational anthrax have been identified at another local hospital, Hospital Z, and the media has reported the cases. Public health has rapid epidemiological investigations occurring and has briefed all the facilities on what is known regarding the event at this point in time. Hospital X does not recognize this as an “incident” and no activation of the organization’s EOP occurs. No Transitional Management meeting is conducted and the hospital continues to operate using day-to-day structure and processes.

- At Hospital X, the ED, inpatient areas, and the outpatient clinics are not uniformly notified of the existence of the two confirmed cases of anthrax at Hospital Z, nor are they informed of the investigations other than what they have received through the media.
- As no objectives, strategies, or tactics have been established for the healthcare organization, these clinical care areas continue to operate in a usual manner with clinicians either oblivious to the current events (potentially missing cases of concern) or managing individual patients based upon traditional knowledge (e.g., disparate methods for diagnostic evaluation and treatment).
- No response organization has been delineated so agencies external to the healthcare facility struggle through traditional points of contact for Hospital X’s information that could be important in the epidemiological investigation. Similarly, important information on laboratory diagnosis and recommended initial therapies are conveyed to disparate nodes within the hospital (such as infection control and infectious disease consultants). These personnel do not normally transmit

The Healthcare System Commander is responsible for the organization's overall incident response.

Healthcare System response objectives can provide overall guidance or guidance for a specific operational period.

this type of information to hospital administrators, and so it is not available as factors for their decision making.

- No planning cycle has been established and, therefore, general information dissemination is uncoordinated and not regularly updated throughout the facility.
- A media briefing is conducted by an infectious disease specialist on the Hospital X staff, without the knowledge of hospital administration or local public health authorities (since no incident⁴⁴ was declared, no policy regarding incident media statements is applicable). The information conveyed in the media message contradicts the current recommendations made by local public health authorities, resulting in confusion among the media, and the general public. This diverts valuable attention away from the incident investigation and threatens the public's confidence in authorities, as well as the public's respect for the competence of Hospital X.

Ongoing Command Actions During Incident Operations

- **Command:** Throughout incident operations, Healthcare System Command is responsible for the entire organizational response. The following are all responsibilities of the Healthcare System Commander:
 - Proactive management methodology using organization-wide objectives specific to the incident. This includes both types of response and recovery objectives, briefly re-iterated here:⁴⁴
 - **Control Objectives:** These are essentially the organization's goals statement and are, therefore, expected to change little during Incident Operations. An example would be "to provide adequate care to patients presenting as a result of the hazard impact" or "to maintain the safety and welfare of healthcare facility personnel."
 - **Operational period objectives:** These are more specific objectives to guide the organization's response and are developed or revised for each specific operational period. They should be measurable and achievable within the operational period. An example would be "to initiate

⁴⁴ Objectives related to continuity of operations may exist as either control or operational period objectives, or both.

prophylaxis of hospital staff.” See Textbox 3.3.4.3 for an example of incident objectives during a hurricane incident.

- Developing objectives during informal incident management: Even if formal incident action planning is not to be undertaken, the Healthcare System Commander should establish control objectives for the incident. This provides direction for the overall system response and also establishes metrics (see Lesson 4.3.1) by which measures of effectiveness can be developed so that response performance can be objectively assessed by the Command and General Staff. Multiple approaches are used to develop the response objectives but all require final approval by the Commander:
 - Healthcare System Commander: In many instances, the Healthcare System Commander will establish the response objectives on his/her own or with input from the Operations Section Chief. These are then communicated to the Plans Section Chief during the Planning Meeting for documentation and then presented to key organizational personnel during the Operations Briefing.
 - Plans Section Chief: Another approach is for the Plans Section Chief to be assigned the task of developing options for response objectives. During the Management Meeting, the Commander selects from the list of options to delineate the organizational objectives. These are then processed and communicated as in the above bullet.
 - Operations Section Chief: A final method may be for the Operations Section Chief to develop the list of objectives from which the Commander selects, with assistance from Plans.

The Commander is responsible for final selection of the objectives that guide the organizations strategic actions.

Textbox 3.3.4.3

Example of Response Objectives Established by a Healthcare System

Hospital W is located in a coastal city in the Southeast. A major hurricane is approaching from the east and Hospital W decides to activate its EOP. Formal incident action planning is initiated as initial event parameters indicate a greater than a one-day response. Initial objectives established by Hospital W include:

Control objectives

- Protect the facility's staff and patients already in the healthcare system.
- Maintain the facility's integrity (structural, healthcare operations, business management, etc.).
- Provide care to incident victims.
- Efficiently integrate into the larger response community, including coordination with *other healthcare facilities*.
- Address environmental and regulatory concerns.

Operational period objectives

- Prompt healthcare system personnel to review their family and personal preparedness plans for adequacy and execute actions indicated for hurricane impact.
- Ensure adequate healthcare system personnel staffing for the hurricane impact and immediate post-impact period.
- Complete healthcare facility protective action checklist to reduce vulnerability to hurricane impact.
- Verify facility ability to operate 72 hours without re-supply or outside assistance.

After hurricane landfall, the hospital remains relatively intact but the surrounding community has received severe storm surge damage. The facility is operating on generator power but has air conditioning and running water, although it is not known if the water remains potable. The control objectives remain unchanged. Revised operational period objectives for the next operational period include:

- Provide support to staff (including lodging and food between shifts) to maximize operational status and maintain adequate staffing.
- Provide care to victims of the hurricane impact, including ensuring adequate disposition and follow-up when discharged.
- Maintain facility infrastructure using back-up generators.
- Determine potability of tap water and provide bottled water for

drinking, food preparation, and medical purposes until tap water determination is accomplished.

- Assure public awareness that the hospital is functioning and able to care for victims and normal healthcare needs.
- Identify projected healthcare system operational status over the next 24-, 48-, and 72-hour periods.

- Pre-plans: The Healthcare System Commander is responsible for the implementation and adaptation of any pre-plans or SOPs as required by the hazard.
- Problem solving: The Healthcare System IC is responsible for resolving problems that can't be addressed at a lower level in the ICS. These issues are generally related to resource needs, and the Healthcare System IC can make the determination to seek assistance through outside agencies, commercial vendors, or neighborhood business concerns.
- Participation in meetings: The Healthcare System Commander participates in the following meetings if formal incident action planning is undertaken (usually the Plans Section Chief facilitates these meetings – see Plans Section later in this Module):
 - Management Meeting
 - Planning Meeting
 - Operations Briefing.
- Other Command activities:
 - System monitoring: The responsibility to monitor system response sits within Command, as they have the authority to implement corrective actions **during the response**. Healthcare System Commanders should monitor the response system for adequacy and effectiveness. Part of this is achieved through a well-implemented incident action planning process, but other activities may be conducted as well. For example, Healthcare System Commanders should evaluate the adequacy of organizational structure and other parameters to ensure the ICS is functioning as designed. In addition, changes to the organizational structure (e.g., addition of a branch to the Operations Section) may be necessary during the response.

Commanders hold the important responsibility of monitoring the system response to ensure that it is functioning as intended.

- Spokesperson for healthcare system: At times, it may be appropriate for the Healthcare System Commander to speak publicly. This, however, should not be a primary responsibility, as it can detract from other critical tasks. If (as described above) the agency administrator or senior executive for the organization is not the Commander, the media duties may be best addressed by the senior personnel.
- Political liaison: The Commander may serve personally in a liaison role for direct coordination with senior public officials and other healthcare system's senior executives and for strategically important issues, such as funding guarantees for requested response actions. This is usually accomplished through teleconferencing or other communications method that allows the Healthcare System IC to remain onsite. In these situations, the usual senior liaison provides support to the Healthcare System IC, and monitors the exchanges closely so that they can effectively assume responsibility for follow-up issues and related liaison activities (see senior liaison officer position below).

Healthcare System Safety Officer

As described in the Systems Description, the Healthcare System Safety Officer has the overall responsibility for the safety and welfare of the organization's responders.

- Safety Role: In a large-scale or unusual hazard event, the Safety Officer's role is complex and requires a wide range of activity:
 - Developing a safety assessment: A Safety Officer devotes time to the Healthcare System Command Post as required for meetings and other decision-making interactions, for reviewing planned actions for safety concerns, and for gathering incident information from the senior liaison and other management staff.
 - Monitor work site actions for safety issues: The Safety Officer should also be monitoring personnel actions and behavior in various sites throughout the facility, particularly in areas where personnel are performing unfamiliar or high-risk tasks.
 - Review incident parameters for safety concerns: It is important for the Safety Officer to critically review incident and response safety parameters beyond traditional occupational health. Additional areas to examine include security safety, personnel fatigue, and

The Safety Officer oversees all safety considerations for the organization throughout its incident response.

any indicated prophylaxis.

- Monitor adherence to designated safety practices: Adherence to mandated safety practice (PPE, isolation rooms, etc.) must also be monitored closely for compliance.
- Safety input to planning: The main vehicle for incorporating safety considerations into the management of incident response is through incident action planning. The Safety Officer develops a safety message that is incorporated into each formal incident action plan. This can be provided as a brief message on the facility's ICS Form 202, or it can be lengthier with complex issues and recommendations and be presented using a separate instrument, ICS Form 208.
- Safety recommendations: While the Safety Officer identifies critical safety issues and lesser concerns, other sections are usually responsible for implementing the safety recommendations (e.g., Logistics Section providing PPE, or Operations Section changing their response tactics). All safety-related recommendations, therefore, should be actionable and easily translated into achievable safety intervention by the intended recipients.
- Safety responsibility in a partial EOP activation: As with other Command Staff positions, if Safety is not specifically assigned to an individual, the safety responsibilities rest with the Healthcare System Commander.

Healthcare System Public Information Officer (PIO)

As described in the System Description, the PIO develops the general media message on behalf of the healthcare system and develops update messages for patients and their families. All releases are subject to approval by the Healthcare System IC.

- Message timing: The timing of both types of messages should take into consideration the timing of the planning cycle for the organization. Early media messages may be released that focus more on the incident context ("this was a horrendous event") and general healthcare system response actions ("here is what we are doing about it"), as well as continuing to provide updates ("here is when we expect to know more"). More substantive media messages should be generated after the Operations Briefing conducted by the healthcare system. This ensures that the most up-to-date and pertinent incident information has been received

The Healthcare System PIO manages the media message from the organization throughout the response.

The timing of Healthcare System media messages can have important implications.

**Healthcare System
PIOs should be
cognizant of JICs
when they are
established.**

and processed by healthcare system personnel prior to briefing the media. It will also help prevent conflicting messages between the healthcare system and other external agencies.

- Message purpose: Usually, the media messages are for the purpose of informing the public about the incident and the healthcare system's response. In some incidents, a more specific, operationally relevant purpose may be indicated. The media may be recruited during the incident to shape the public's behavior in a manner that is beneficial to them and also may reduce the incident impact on the hospital. For example, providing relevant health self-assessment information to patients and telephone numbers for offsite locations where they can call for questions may reduce the telephone burden on the emergency department and other clinical areas. Alternatively, the media may be used for providing direction to response personnel. For example, if a hazard impact disrupted telephone communication, thereby preventing a telephone recall of staff, the media can broadcast messages with directions for off-duty and other offsite healthcare system staff.
- Message coordination: The Healthcare System PIO should be cognizant of media efforts by the jurisdiction or other external response agencies. For example, if a Joint Information Center (JIC) has been established as part of Federal response efforts, the healthcare facility should monitor messages as released from this entity. In events that are primarily health and medical in nature (e.g., infectious disease outbreak), the healthcare system PIO may benefit from closer ties, including direct contact with or potential visits to the JIC.
- Monitoring the media message: A significant amount of effort during Incident Operations should be committed by the PIO to monitoring the media message to the general public. This can be important for several reasons:
 - Obtaining incident information: Given the nature of real-time broadcasting, it is entirely possible that media will provide the earliest indications that a sudden change has occurred in incident parameters, well before this information is provided through official channels.
 - Assessing message consistency: The general media message from other healthcare facilities and external agencies should be monitored for consistency with that developed by the PIO and healthcare facility leadership.

- Identifying misinformation: Incorrect incident information can be transmitted to the public by the media. Especially when incorrect information relates to the healthcare facility in question, this misinformation should be identified and addressed as rapidly as is possible. For example, if a specific facility has been represented by the media as being seriously impacted and non-functional when this is not the case, rapid efforts to correct this misinformation should be initiated for obvious reasons.
- Identifying image issues: The general media portrayal of the healthcare system response performance should be monitored throughout the incident. Unflattering portrayals should be addressed (by the Healthcare System's Command staff, not just the PIO) as rapidly and robustly as possible. The response should be open and honest, correcting out-of-context portrayals with accurate facts and logical explanations. Failure to address this effectively can lead to serious business, regulatory, and legal difficulties.

Healthcare System Senior Liaison Officer

As described in the Systems Description, the Senior Liaison Officer is responsible for all **strategic information** exchange with entities external to the healthcare system. Communications can be with other response entities (jurisdictional, State, or Federal as appropriate); with Tier 2 healthcare coalition partners; and with other business, private, or voluntary organizations.

- Establishing appropriate external contacts: Early in an incident, the Liaison Officer is responsible for establishing, with technical assistance from the Communications Unit, contact with a pre-determined list of external organizations. This generally will include public safety and/or public health contacts managing the incident, the jurisdiction's emergency operations center, other healthcare institutions (ideally through a healthcare coalition, Tier 2 platform), EMS supervisors, and others, as developed during preparedness phase activities. Depending on the incident and the healthcare system actions, certain external response agencies should be notified very early, and this may be a statutory or regulatory requirement in some jurisdictions. Adequate attention to this issue during the preparedness phase of the EM program will expedite these important coordination and information sharing connections.
- Centralized reporting and liaison: In many jurisdictions, an Emergency Management Agency will staff a 24-hour telephone

Healthcare System Liaison Officers serve the important role of facilitating the two-way exchange of strategic information but may also have a role in handling tactical information as well.

line in an Emergency Operations Center, with an immediate emergency communications capability. This can provide a simple mechanism for reaching any local agency and providing a coordinating mechanism until formal jurisdictional Incident Command and Emergency Operations Center functions are established.

- Alternative reporting and liaison: In other jurisdictions, notification may be made through a “Tier 2” healthcare coalition (see Lesson 2.2.2), which subsequently forwards the message as indicated. As a general rule, healthcare systems should not bypass the local jurisdiction and attempt to contact State or Federal agencies directly during the initial stages of any incident. When State or Federal authorities communicate directly with the healthcare organization during incidents without local jurisdictional knowledge, effective overall incident management may be disrupted. In fact, many higher authorities will appropriately redirect the healthcare system liaison attempts to the local authorities.
- Appropriately disseminating organizational information: Liaison Officers may convey healthcare system response information via a range of formatted messages. Much of this can be efficiently accomplished by transmitting completed ICS forms that describe the healthcare system status; response organization; and objectives, strategy, and tactics (ICS Forms 202, 203, 207, and 205 as appropriate). To provide regular updates, the ICS Form 209 can efficiently convey important information to external authorities and to a healthcare coalition. In addition, the Healthcare System IC may direct the forwarding of a Form 209 to others, such as the organization’s board of directors or the parent organization for the facility. Requests for assistance and sudden changes in event parameters, as identified at the healthcare facility, should be transmitted rapidly to jurisdictional authorities using a **written message** (ICS general message Form 213 or as designated by the jurisdiction) to assure that accuracy and accountability is maintained. Receipt of message by the intended recipient should be confirmed and documented by the Liaison Officer (a liaison log may serve this purpose). Some specific and regular external communications, such as sending and receiving patient information between the healthcare facility and a community-wide patient tracking service, is accomplished using the transmission format inherent to that service.
- Receipt of information: Various types of information should be received and processed by the Liaison Officer. Incident updates

from the jurisdiction are one example. This information should ideally be processed for consideration in the appropriate Healthcare System's incident action plan. Due to the complexities of certain types of incidents, the healthcare systems may designate the Liaison Officer as the point of contact for more specific or tactical information as well. For example, in an event in which diagnostic testing for an infectious agent is being performed by an outside laboratory, test results can be conveyed to the Senior Liaison Officer to ensure timely receipt and adequate internal dissemination of results.

Lesson 3.3.5 Concept of Operations for Healthcare Emergency Response and Recovery: Incident Operations Stage – Operations Section Actions

Lesson objectives

- *Describe the primary responsibilities of the Operations Section during incident operations.*
- *Describe the healthcare systems incident management considerations associated with different incident types.*
- *List and describe Operations Section tasks related to patient surge capacity and capability during the response to mass casualty incidents.*
- *Explain the concept of engineered or managed degradation of services.*

Operations Section

The Healthcare System Operations Section establishes the specific tactics for achieving objectives set by Command.

The structure of, and the personnel assigned to, the Operations Section is determined by the incident type and the stage of incident response and recovery. Though healthcare systems typically view themselves as primarily filling a patient surge role, this is not always the case. For example, the extended loss of mission critical systems will dictate a very different configuration for the Operations Section than for one designed to manage only patient surge. Since the Operations Section is responsible for achieving the incident objectives established by Command, the Operations Section construct, its position assignments, and the selected expertise should be guided by the organization's control and operational period objectives. The Section's configuration and assignments for each hazard type may be expedited through carefully developed pre-plans (or SOPs) in the incident-specific annexes.

The Operations Section Chief selects the specific strategy and tactics for achieving the defined incident objectives. If formal incident action planning is conducted, the Operations Section Chief participates in the Management Meetings, the Planning Meetings and other pertinent planning activities, and in the Operations Briefings.

Mass Effect Incidents

Though much of the material presented in this lesson focuses upon the Concept of Operations related to patient surge, the following are provided for mass effect incidents:

- Incidents that primarily affect facility operations: In many incidents, the primary hazard effect for healthcare facilities is related to physical impact on the facility and/or its facility-related functions.
 - Examples: These mass effect incidents can include primary power failure, flooding affecting infrastructure, or information technology (IT) failure.
 - Operations Sections staff: In these incidents, the Operations Section Chief and many of the Operations Section Branch or Group Leader position assignments will be personnel from facilities engineering, information systems, or other non-clinical administrative area.
 - Continuity of operations: Even without additional patients, these incidents affect the resiliency of the organization (see Lesson 2.1.1) and its ability to continue normal care to its patient population. A Branch of Operations may be needed to address the additional or altered medical services required by patients while the impact effects are addressed.
- Mass effect incidents combined with patient surge: For some incidents, there will be a need to address both continuity issues and patient surge simultaneously. For these incidents, the elements within the organization addressing resiliency would most appropriately belong under the Operations Section. Examples are provided below. They are not intended to be proscriptive, but consistent with ICS where the Operations Section is tasked with achieving objectives set by Command.
 - Facility assessment: An initial activity for the Facilities Unit within the Logistics Section is conducting an assessment of the organization's facilities related to both hazard impact and incident response. Early in the Incident Operations stage, therefore, the Logistics Section/Facilities Unit should accomplish a facility assessment that evaluates both the ability to manage the patient surge and the impact on the facility for continuity of normal operations. Normally, the findings are reported to the Resource Unit in the Plans Section, and directly to the Incident Management Team if major impact is noted. The extent of hazard impact (if any) on the facility will be critical to early Command/Management decision making.
 - Surge capacity for security services: Multiple security activities may be required simultaneously during an incident. Since the number of hospital security personnel on duty at any one time is

usually limited, pre-planning should address coverage of some responsibilities with non-security personnel (as appropriate) or with assistance from outside law enforcement agencies (if available). Tasks include:

- Perimeter management: An important early responsibility is to secure the facility, and initial lockdown of the facility may be warranted. Arriving individuals must be queried and directed to appropriate entrances.⁴⁵ These groups include:
 - Patients: Clearly designated and well-managed portals of entry to the hospital may be necessary for patients to be rapidly processed. In some incidents, entry will vary from usual patient entrances (e.g., contaminated patients to the decontamination area, alternative care facilities if the ED has been impacted). Vigilance to prevent inappropriate entry by media and others is important.
 - Staff: Staff reporting for duty from outside locations should have a designated entrance separate from those for volunteers, visitors, patients, and the media. Security personnel may be needed to screen incoming personnel for current identification (ID) badges, but a process using other administrative staff should be in place for the time-consuming task of verifying arriving personnel without IDs.
 - Volunteers: A separate volunteer entrance steers arrivals to the volunteer processing and staging area.
 - Family members and other visitors: Persons seeking information regarding patients should be directed to the entrance that leads only to the patient family assistance area.
 - Supplies and equipment: This receiving area should be dedicated to accepting resources that Logistics receives, processes, and distributes as indicated.
 - Internal perimeters: There may be particularly sensitive areas that should be restricted to authorized staff only. The Emergency Department and the Healthcare System Incident Command/Management Post, for example, may warrant attention to prevent unassigned staff from

⁴⁵ In some instances, this may require the use of PPE by personnel managing some of the portals, such as during the receipt of potentially contaminated patients.

engaging in activities in these locations.

- External locations: Depending on the facility's campus size and configuration, external areas, such as decontamination facilities, parking lots, or critical roadways, may require security services.
- Mass effect incidents with warning: Protective actions may be critical for maintaining function despite impact. Examples include:
 - Physical plant mobilization: Protective measures examples of this include sandbags and additional pumps for an imminent flood, hurricane shutters, and acquiring additional snow removal equipment prior to snowfall in a "rare snow" climate area.
 - Security mobilization: Protective measures examples of this include perimeter lockdown, screening for weapons in all incoming patients and visitors, integrating healthcare system management with police tactical team management at the outset of law enforcement operation on healthcare system property, and others.
 - Infrastructure protection: Protective measures examples of this include securing records and computing and performing other continuity of operations infrastructure issues in vulnerable hospital functional areas.
- Incidents with an evolving focus: In some incidents, the operational period objectives may evolve from patient care to facility repair as the incident progresses (or vice versa).
 - Transitioning position assignments: In these incidents, position assignments, including the Healthcare System IC and Operations Section Chief, may transition as the response objectives change. For example, after a sudden flood impact in which all patients have been transferred from the facility (the initial primary operational objectives), both the Operations Section Chief and the hospital Incident Commander positions may transition from clinically oriented management personnel to personnel with engineering/facilities expertise. This may optimally address the remaining operational objectives (removal of water and debris, returning the facility to operational status) during the follow-on response operations.

Mass Casualty Incidents

In a mass casualty incident, the primary focus of the healthcare organization is usually casualty care activities. This should not be construed as minimizing the importance of facility-related impact and operations to minimize evolving impact and to restore facility integrity, as discussed in the preceding section. Major facility restoration activities would also be managed by the Operations Section, usually through a separate Operations branch.

The following concepts describe Operations Section tasks related to patient surge capacity and capability. These may be less applicable to mass effect incidents where no incident patients are generated (e.g., power failure).

- Patient Reception: To manage a large number or unusual types of casualties effectively, efficient patient care must begin at the point of receiving the casualties at the entrance to the healthcare facility.
 - Location of patient reception: In almost any incident, rapid perimeter control must be achieved so that arriving patients, families, media, curious bystanders, and other outsiders can be rapidly sorted and re-directed. Each arriving group must be received at a functional area ready to receive and rapidly process them. Security personnel, with appropriate PPE if indicated, may need to be assigned to facility entrances to redirect walk-ins to the appropriate areas. This is particularly important for patient reception, especially in events where patient contamination is possible. In this particular example, initial patient reception should be accomplished outside the healthcare facility whenever possible, with capabilities immediately available to accomplish patient decontamination.
 - Patient reception site considerations:
 - Victim screening: Arriving individuals may require screening to separate patients from people belonging in the other categories described above. Those identified as patients should also be rapidly screened for contaminants, weapons (if indicated by circumstance), and other conditions that could be hazardous to healthcare responders or other patients. They must also be separated from family members, who should be re-directed to a family assistance center.
 - Accepting hand-off of victims: Clinical staff must be immediately prepared to accept incapacitated patients from

EMS and other public safety transporters, as well as from civilian Good Samaritans. The ability to capture important clinical information and keep it with the relevant patient may be important both to optimal patient care and to efficient evaluation and disposition of patients.

- Controlling vehicle and pedestrian traffic: Without careful attention to physical layout and control of the patient reception area, pedestrian and vehicle traffic can disrupt the smooth hand-off of victims to the healthcare system. Security personnel should be present and, if necessary, have an interface with local law enforcement to control traffic flow and prevent intrusion by onlookers. Adequate numbers of staff, stretchers, wheelchairs, and other transport devices could be important to maintaining vehicle flow through the drop-off area.
- Patient Triage: Patient triage should occur a short distance beyond the patient reception area. Even though triage may be accomplished in the field by EMS, it is performed for a different purpose (to determine the order and destination of patient transport). Therefore, it is repeated upon patient reception. This will capture change in patients' clinical status during transport and allow accurate assignment of patients to the appropriate patient care area. Important considerations include:
 - Purpose of patient triage at hospital reception: Patient triage in general is a process of sorting patients into categories for a specific purpose. The purpose of triage at this point is to match patient needs with available medical care resources, such that those selected to wait are unlikely to have their eventual outcome significantly affected. Ideally, all patients needing truly emergent care will be selected to receive it in a priority fashion, while those with medical problems not affected by delayed care will be assigned to a minor or delayed care category. How this differs from everyday emergency department triage is in the details: the triage categories and assignments likely differ from everyday; the time for the triage evaluation may be much shorter; privacy may be compromised (as little as possible); and the mechanisms of injury may be unusual, altering the significance of the clinical findings from the triage evaluation (see triage tools discussion below).
 - Triage categories: Healthcare system triage categories should reflect the need to assign patients based upon both the immediacy of evaluation/treatment need and upon the anticipated utilization of important but scarce resources.

Triage categories should take into account the availability of medical evaluation and treatment resources.

Suggested triage categories are:

- ❑ **Major**: Cases that could require life- or limb-saving interventions and/or the immediate use of major hospital resources, such as operating rooms or critical care units.
- ❑ **Moderate**: Cases that require extended physician or nursing time and urgent therapy (e.g., IV fluids or pain medications), but do not necessarily require immediate life-saving interventions or immediate use of major hospital resources.
- ❑ **Minor**: Cases without life- or limb-threatening conditions that will not suffer ill effects from a delay in care. Asymptomatic patients should be included in this group, since further observation and careful disposition may be required (i.e., do not rapidly “treat and release” if the potential exists for delayed medical or psychological injury manifestation). In certain situations (i.e., immediately after a release of a hazardous chemical), the asymptomatic group may be large enough to warrant a separate category and location.
- ❑ **Expectant**: This category is intended as a waiting station for patients with little chance of survival, given their injury and the scarce medical resources. This is a very difficult designation to make, especially under the time and public view constraints of initial patient triage. The authors of this text discourage the use of this category assignment during initial patient triage in the healthcare system setting. Patients suspected to be in this category should receive a more thorough evaluation inside the care facility (which can be accomplished very rapidly by a senior, experienced emergency physician) before being moved to an area where supportive and comfort care can be provided. This will avoid the potential psychological trauma to staff, patients, and other potential witnesses who do not understand the difficult triage decision realities. In addition, the Healthcare System Operations Section Chief should be specifically informed if this category is being utilized. If circumstances allow, reuniting the dying patient with family members (through the efforts of the family assistance personnel) should be accomplished.
- ❑ **Deceased**: Patients arriving already deceased should be assigned to a “deceased” category. Expedient relocation

of human remains must be pre-planned to minimize personnel needs while adequately addressing privacy, respect, security, and forensic issues (see Fatality Management section below).

- **Triage personnel assignment:** Patient triage should be conducted by experienced staff, usually a registered nurse or physician. For optimal effectiveness, their pre-incident training should provide a full understanding of the healthcare system's patient care scheme during emergencies and to use the triage decision-support tools developed for the hazard agent.
- **Triage tools:** An effective patient triage tool essentially provides accurate predictive power for deciding which patients can tolerate a wait for services or assignment to a lower level treatment area. Multiple guides have been promulgated to assist in these triage decisions. The selected methods should be easily remembered, relatively simple, and address the specific hazard type. For example, START⁴⁶ is an excellent pre-hospital triage guide for victims of blunt trauma. Adhering strictly to the START scheme for victims of an aerosol HAZMAT exposure, however, could be dangerous. For example, a patient complaining only of a sore throat after toxic smoke exposure from a chemical blast would be assigned to a delayed or less urgent triage category under START. This can have serious consequences, as this symptom and mechanism of injury potentially indicates an impending airway compromise. Similarly, small thorax skin punctures after a bomb explosion could signal life-threatening penetrating injuries, which would be missed using common blunt trauma triage schemes. In this latter example, a triage methodology should include a rapid inspection of the skin surface, including under cervical collars and in the axillae. Finally, triage for specific toxins such as organophosphate poisoning might include attention to pupil diameter to assist in determining significant exposure.
- **Shaping the triage instrument to fit the incident circumstances:**
 - Initial triage during a sudden, no-notice event will

Patient reception and initial evaluation must take into account the hazard type.

An effective patient triage tool essentially provides accurate predictive power for deciding which patients can tolerate a wait for services or assignment to a lower level treatment area.

⁴⁶ Simple Triage and Rapid Treatment (START) is a pre-hospital blunt trauma triage tool developed in California by Hoag Hospital and Newport Beach Fire Department. It has been adopted as the triage instrument by many healthcare facilities. A description of START is available at:

http://www.sacdhhs.com/CMS/download/pdfs/EMS/EMS_Policy%207508.08%20Simple%20Triage%20and%20Rapid%20Treatment.pdf, accessed April 12, 2006.

necessarily be conducted using a pre-designated triage methodology pertinent to hazard type.

- ❑ An important task for any Clinical Branch Supervisor (or their designee) is to rapidly gather incident information (mechanisms of injury, expected numbers of casualties, etc.) AND response information (such as available medical resources for the expected casualty types). This comparison of expected needs versus available resources will influence the criteria used to assign patients to triage categories.
- ❑ For unusual or rarely experienced hazard agents, (such as certain chemicals, radiation exposure, and aggressive infectious disease), additional assistance (e.g., from Technical Specialists, such as Poison Control or radiation or infectious disease experts) may be required in adjusting the triage tool to provide more accurate predictive power.
- ❑ Incident characteristics will influence triage tool adjustments as well. For example, less injured patients are commonly transported to medical facilities first (via self-referral in private vehicles), and so rapidly filling the major and minor treatment areas with early patients can be problematic. In addition, changes in resource availability can impact triage methodologies. Having the flexibility to make post-triage patient category changes (for those already triaged) may also be a way to address this issue.
- ❑ During incidents where the pace of patient arrival allows the triage officer several minutes for each patient, a more thorough triage evaluation may be performed (see Textbox 3.3.5.1). This approach may provide the most accurate triage assessment and may also be used for secondary triage of patients initially triaged to a minor (delayed care) category.
- ❑ Any triage tool that is utilized during response should be monitored for its efficacy. Any triage “failures” must be immediately recognized and analyzed to determine if adjustments to the triage instrument are indicated. For example, if a patient triaged to a minor treatment area suddenly deteriorates, the patient’s signs and symptoms during triage should be reviewed. The significance of those findings may need to be re-defined so that follow-on patients with similar findings are triaged into a higher

treatment category.

Textbox 3.3.5.1

**Example Triage Evaluation Process:
Rapid Assessment of the Awake, Stretcher-bound Patients
After Traumatic Hazard Impact**

- Introduce self to patient
- Ask, “What happened to you?”
 - To assess the direct hazard impact to the patient
 - To assess the patient’s mental status
- Complete this conversation while performing the physical assessment.
- Rapidly inspect the face and mouth for trauma. Assess skin color.
- With gloved hands, rapidly palpate:
 - Scalp and face (if indicated by the hazard impact)
 - Anterior neck through the cervical collar (for tenderness, deviation, or crepitus)
 - Thorax (for tenderness or for subcutaneous or bony crepitus)
 - Abdomen (for significant tenderness and/or guarding)
 - Pelvis (push downward on each iliac crest, then pull inward for pain/stability)
 - Roll each thigh to evaluate hip rotation and hip/femur pain.
 - Palpate pulse (for rate and strength) – this can be done while performing the next step:
- Ask patient to wiggle their fingers and toes (assess ability to follow directions and to complete neuromuscular task).
- View under axillae and roll patient for quick inspection of back.
- Auscultate lungs for normal and equal breath sounds.

A practiced clinician can perform this evaluation in less than 60 seconds and develop an appreciation for findings that indicate potential injury or illness. Based upon this evaluation, availability of follow-on medical care, and the known casualty load, the triage officer assigns the patient to the major, moderate, or minor treatment area. If a life-threatening problem is identified during this evaluation, the triage assessment is aborted and the patient transferred immediately to major treatment area practitioners.

Patient triage is by definition a superficial evaluation. Triage should therefore be considered an iterative activity, with repetitive examination/re-triage of each patient until a thorough medical evaluation is performed.

Healthcare Systems should maintain a capability to account for patient belongings.

- Triage limitations: The context and nature of patient triage under duress is such that it is never a perfect screening process. **Patient triage is by definition a superficial evaluation. Triage should therefore be considered an iterative activity, with repetitive examination/re-triage of each patient until a thorough medical evaluation is performed.** Additionally, competent clinical staff should be assigned to monitor the delayed category patients, with a protocol in place for rapid re-evaluation and transfer to a higher-level patient care area if concerning symptoms evolve.
- Patient registration: In a patient surge situation, initial patient registration should be abbreviated, obtaining only the information necessary for adequate patient identification and tracking, test ordering, and delivery of therapeutic interventions. This pre-planned, expedited process may limit patient information to name (if available) and one other identifier (e.g., date of birth or social security number). If this can't be definitively obtained, physical and other characteristics should be collected under the "John or Jane Doe" designation, so that identification may be expedited through missing person lists or through inquiries from relatives to the patient family assistance function. Pre-established charts for emergency response (either electronic or paper) may be extremely helpful for the initial processing of these patients. Some systems have pre-developed registration numbers assigned to the charts, indicating that they are members of the incident cohort. A more definitive registration can be accomplished at a later time. This adjustment is in fact an example of "engineered degradation" (see Lesson 2.1.1 and later in this lesson).
- Accountability for patient belongings: For situations involving surge capacity and capability, special consideration should be given to processing patient belongings. One method that promotes consistent accountability despite the context of emergency response is presented:
 - Matching numbers: Each patient receives a numbered plastic necklace or bracelet upon arrival, with the number matching the pre-designated emergency chart number and the numbers on accompanying belonging bags (see below).
 - Bagging possessions: Patient receives two plastic bags – one large and one small – with the same numbers permanently attached. The small bag is used for valuables and the large is used for clothing. In the case of contaminated patients, this

process separates valuable items from common clothing, which could assist in ultimate disposal. In all cases, securing valuables separate from clothing allows the valuables to be stored in a more compact secure location (such as a safe) until they can be returned to the patient or family members.

- Securing and chain-of-custody issues: Patient belongings should be secured by security personnel, who can provide for chain of custody and forensic purposes. This could be valuable during forensic investigations, especially for the unlikely (but possible) scenario where perpetrators are among the incident victims in an intentional hazard event.
- Patient evaluation and treatment: The Plans, Logistics, and Finance/Administration Sections should all provide necessary support to the Operations Section such that patient evaluation and treatment is as close to regular procedures as is possible. It is the activities of these sections in addition to efficient Management that leverage existing resources to provide “Medical Surge.” However, a significant difference for personnel may exist in reporting requirements. As an example, necessary organizational changes may require that clinicians have additional reporting requirements to their superiors (e.g., to an Operations Branch Director). Reporting could include additional information on types of patients or resources utilized. Furthermore, practitioners may find directives issued by supervisors that impact care delivered. For instance, the delivery of certain types of medications or specific medical diagnostic evaluations may be dictated by information submitted by jurisdictional authorities (e.g., work-up of potentially exposed infectious disease patients). In addition, for:
 - Surge evaluation and treatment capacity: It is critical to achieve this through a reasoned, organized approach. A range of strategies can be applied to achieve maximal capacity for evaluating and treating victims. These include:
 - Focused scope of treatment: Patient evaluation and treatment may focus initially on life- or limb-threatening conditions. Less concerning ailments (e.g., closed upper extremity fracture, simple lacerations) may receive delayed attention to treatment.
 - Additional treatment areas: The use of additional treatment areas may become necessary. These might include post-operative suites, endoscopy and other specialized diagnostic and treatment areas, lobbies, outpatient clinics, or other areas (ideally, these have been identified and prepared during the

Healthcare System surge capacity and capability considerations must be addressed during Incident Operations.

preparedness phase of the emergency management program). It is best to stratify these areas, so that “major category” cases (see triage category definitions above) are cared for in areas that commonly provide sophisticated medical care.

- Additional clinical personnel: Additional personnel, internal or external to the healthcare system, may be integrated into Incident Operations by Command. These additional personnel assets will only be useful to the Operations Section if other components of the system have done their job in adequately requesting, screening, training, and supporting them (see volunteer management).
- Integrating clinical personnel into unfamiliar patient treatment areas: Physicians, nurses, and others conducting patient evaluation and providing medical care will be much less efficient in a new healthcare setting than those familiar with the treatment area. This issue may be addressed by establishing “Patient Care Teams” (essentially “strike teams” in NIMS terminology), pairing one clinical staff member from the treatment area with clinical personnel brought in from elsewhere. Patients triaged to that treatment area are then assigned to specific teams. The team member who is familiar with policies, procedures, location of medical supplies, and operation of medical equipment may be designated the team leader, rather than the senior clinical provider.
- Appropriate support to skilled clinical personnel: Another strategy that can maximize skilled care capacity (critical care units, emergency department, and other functional areas) is to provide personnel to perform lower level tasks for patient care, allowing skilled personnel to care for a larger number of patients. For example, recruiting emergency medical technicians to perform serial vital signs, assist with moving patients, drawing blood for lab work (if qualified), and other time-consuming tasks may allow critical care nurses to care for more patients than usual during the patient surge capacity crisis.
- Additional supplies: Pharmaceuticals, disposable supplies, and durable goods may be obtained by Logistics personnel and provided to the Operations Section during Incident Operations. Similar to the concept of processing volunteer personnel, these supplies should be screened (by pharmacy, bioengineering, or other appropriate experts), and provided upon request with instructions on how to use them. Maintaining accountability will

be important for financial settlement later and so should be accomplished if possible.

- Surge evaluation and treatment capability: In some incidents, healthcare organizations may receive patients with medical issues not commonly encountered at that particular facility (see Lesson 3.1.1). Examples include pediatric cases in a non-pediatric facility, burn and trauma patients in non-trauma centers, dangerously contaminated victims, very unusual and contagious infectious disease, and severe pulmonary cases in community hospital settings. Similar to surge capacity, carefully developed strategies for **surge capability** can maximize the quality of care, the protection of workers and other patients, and the confidence of treating personnel.
 - Obtaining expert guidance: A critical step can be obtaining expert advice on evaluation and treatment through remote access of medical experts (using telephonic or video conferencing or other interactive methods). This can be invaluable to treating personnel both in receiving advice as well as receiving reassurance that they are providing adequate care under the circumstances. Advice should be sought through institutions not impacted by the hazard or mass casualties. In ICS, this is usually the job of the Plans Section to 1) obtain the advice and 2) to set up a method to convey the advice effectively to the Operations Section. Communications Unit personnel may be assigned to establish and maintain the remote link between experts and clinical providers.
 - Decomposing critical care services to develop strategic plans for optimal patient care: Some specialty illnesses and injuries, such as burn cases, can be managed adequately in regular medical facilities during the initial treatment period. For example, burn victims need airway management, pulmonary support, control of pain, management of body fluid and electrolyte loss, and attention to thermal regulation while minimizing infection exposure. This can be accomplished in non-burn centers for the first 24 hours, possibly longer with expert telephonic advice and possibly with physical arrival of burn experts to more closely assist in care. Burn center services such as skin grafting, tissue debridement, and other important services are necessary later, but the need varies by depth and size of the burns and the involved body surfaces. Strategic advice, in addition to the tactical patient care recommendations, may be sought to prioritize patient transfers as transport services and receiving burn centers become

Patient transfers may require the establishment of a separate branch in the Operations Section depending on the volume of transfers.

Healthcare System capability to identify abnormal behavioral reaction to a hazard and to provide care for patients with these findings should be available.

available. Using strategies such as this injects a logical planning basis to an otherwise overwhelming situation and enhances patient outcomes.

- **Patient transfers:** During regular healthcare facility operations, the individual practitioner may be responsible for setting up the transfer arrangements for an individual patient. During emergency response and recovery, the act of transferring a patient or multiple patients takes on new significance. The workload and focus on special circumstances, accountability, and other issues may best be addressed through a functional “Patient Transfer Group,” with “safe and efficient patient transfers” as their objective. This decision should involve the Operations Section Chief, and the transfer process may involve the Senior Liaison Officer interacting with a local or regional healthcare coalition (Tier 2- see Lesson 3.3.) to identify accepting facilities, available patient care providers, and appropriate transport assets. During incidents in which large numbers of patients are being transferred, Command may choose to elevate this function and establish a “Patient Transfer” Branch with responsibility for overseeing this activity for the healthcare facility.
- **Ancillary diagnostic services:** Patient surge can stress diagnostic services as well as patient care. Careful attention should be paid to developing methods for processing larger numbers of lab studies, both in patient-care areas as well as in the labs and imaging (radiology, ultrasound, MRI) areas. Expanding capacity without compromising quality, accountability, and speedy return of results is the goal. If enhanced capacity is severely challenged, consideration should be given to establishing a prioritization scheme (i.e., “triage”) of these diagnostic services. In some cases, it may be prudent to assign qualified medical personnel to triage use of these services in the clinical areas. Additionally, the expanded use of point of service (bedside) testing devices may augment diagnostic capacity.
- **Patient psychological support:** Psychological effects from a hazard impact are not necessarily pathologic. In fact, psychological stress is an expected reaction to many extreme incidents. The challenge is to discern which reactions are normal but may be helped through general psychological support measures and which indicate the need for mental health intervention. Furthermore, some behavioral changes can be delayed in their manifestation. For these reasons, it is essential that psychiatric and behavioral health professionals are included “real time” in surge capacity and capability response to patient-care areas. **The most valuable psychological**

interventions may be the provision of accurate and understandable information (best in a written format) regarding the nature of the hazard impact, the care delivered, future actions (including long-term surveillance if indicated), and the signs and symptoms of normal stress reactions. Behavioral health interventions may be required for those with unusual reactions to the hazard impact (expected to be the minority) and for those with pre-existing psychiatric illness that deteriorates under the stress of the post-impact stress. An example scheme of psychological support measures for chemically contaminated patients is presented in Textbox 3.3.5.2.

Textbox 3.3.5.2

Chemically Contaminated Patient Psychological Support Considerations⁴⁷

- Provide step-wise information to victims as it becomes available: what steps are being taken for the patient's care, results of testing as available, credible event information as it becomes available, and so on.
- Stress the positive actions being taken.
- Provide written information as soon as possible after decontamination, triage, and initial treatment. Include agent specific information (summarized for patients) as appropriate.
- Assure full registration of all victims (for entry into a long-term surveillance program that is established).
- Explain to observed patients that they are being monitored for delayed symptoms.
- Explain to discharged patients that a surveillance system may be instituted to assess late symptoms and to provide further information or treatment as it becomes available.
- Provide individual evaluation by mental health workers and treatment as indicated.
- Provide small group and individual counseling (as available) for those who request it.
- Provide written information on stress and on stress control resources, including resource telephone numbers.

⁴⁷ Barbera, J; Macintyre, A; DeAtley, C. *Chemically Contaminated Patient Annex: Hospital Operations Planning Guide Final Draft*; Washington D.C.; The George Washington University Institute for Crisis Disaster and Risk Management; August 23, 2001.

Healthcare System fatality management may require additional measures as dictated by the jurisdiction.

- Fatality management: In many situations, field fatalities will never be transported to the healthcare facility (e.g., after an intentional event, fatalities are typically secured in the field as part of the criminal investigation). Despite this, an unusual number or special types of fatalities may be transported to the hospital or initially live victims may expire early in their hospital course. Most traditional preparedness resources focus only on the extra space required to store human remains (and the unique requirements a specific hazard may dictate – e.g., chemically contaminated, isolation of corpses). Little discussion is traditionally offered on the unique requirements for management and disposition of the deceased, yet this is one of the most critical aspects of successful response in many events. Initiation of the bereavement process and community closure may only start after the successful securing, identification, and return of the deceased to their families. The healthcare facility can have a significant role in this process:
 - Identification: The positive identification of the deceased may be challenging after certain hazard impacts. Securing personal possessions and having procedures for keep them associated with the human remains may be extremely helpful later during the identity confirmation process. In addition, information not typically considered important may take on new forensic or epidemiological relevance. For example, during outbreak investigations, obtaining specific demographic information and recent activity information on the deceased from other sources may become important in defining the parameters of the outbreak. These types of activities must be coordinated with the jurisdiction.
 - Disposition procedures: Depending upon the nature of the event, disposition of the deceased may vary significantly from usual methods. These variances may be even greater after an intentional or terrorist event because of the necessary criminal investigation. If new procedures are not provided to the healthcare facility early in these incidents, it is advisable to query jurisdictional authorities for alterations from usual procedure.
 - Notification: Tracking the deceased and providing timely notification to family members is an essential activity of the Operations Section, but should be assigned to personnel outside the clinical treatment area. Many of these considerations are similar to those for live patient tracking presented below. Conducting the process of locating family members and informing them of the death may be an appropriate duty for the family assistance area.

- **Patient tracking:** Identifying patients and tracking their clinical conditions and location within the healthcare system directly addresses patient care and patient family assistance. This is in line with the organization's incident objectives and, therefore, the work performed in tracking patients is best situated within the Operations Section. The information generated is transmitted to the Plans Section, Situation Unit for collation and dissemination and for inclusion in incident action planning activities. The Situation Unit is responsible for establishing the frequency of reporting. This is a critical activity during response to events that have generated casualties:
 - **Internal tracking:** There are many ways in which patient tracking may occur, ranging from paper-based systems with runners to high-tech solutions with remote tracking devices on the individual patient's stretcher or wheelchair. Every method requires significant participation from numerous healthcare facility personnel and, therefore, the specific tracking system used should be familiar to all clinical supervisory personnel: It should be considered an important competency for all personnel in these positions. The information that is generated should be forwarded to both the Plans Section and to any family assistance area that has been established. Similarly, names from the patient discharge area (see above) should be forwarded on a regular basis to the Situation Unit.
 - **External coordination:** In many incidents, an extraordinary burden is placed on hospitals by public inquiries regarding patients receiving care at the facility. Inquiries may be received in multiple different areas throughout the hospital (Healthcare System Command Post, clinical areas, family assistance areas). A uniform policy for handling inquiries should be developed early in the incident (ideally from a pre-plan) and disseminated to all personnel. The policy should address patient privacy (see Textbox 3.3.5.3) and other regulatory issues.

Healthcare System patient tracking requires coordination internally and externally.

Textbox 3.3.5.3

HIPAA and the Use of Patient Information during Emergency Response

As the time this text was written, no standard variance to the application of HIPAA regulations during emergency response had been developed. The following statements are summaries of

comments provided by the Department of Health and Human Services (DHHS) during recent responses to Hurricane Katrina:⁴⁸

- Telephone calls seeking a patient by name: The healthcare system may affirm or deny that the patient is receiving care in the facility. The “general condition” of the patient may be conveyed as well.
 - Information to authorized (by law) relief agencies: The healthcare system may share patient names with these agencies and “it is unnecessary to seek patient permission to share information if doing so would interfere with the organization’s ability to respond to the emergency.”
 - Information to the general media and public: If the patient is incapable of giving permission, the healthcare organization can share information with the media and general public in order to notify family members.
 - All other circumstances: For all other circumstances, patient verbal permission, at a minimum, should be sought prior to the sharing of information (this is exclusive of other usual HIPAA allowances, such as the sharing of information with public health agencies).
-
- Patient family assistance: This is a critical service area that requires significant attention both during preparedness and during incident response, if surge capacity is to meet incident needs. Essentially, this functional area performs all services related to family interface that are usually conducted by emergency department staff during normal operations. These include:
 - Addressing inquiries about whether a person is under care at the facility.
 - Confirming that patient inquiries are coming from family members with legitimate right to patient information (this is

⁴⁸ U.S. Department of Health and Human Services Office for Civil Rights. Hurricane Katrina Bulletin #2: HIPAA Privacy Rule Compliance Guidance and Enforcement Statement for Activities in Response to Hurricane Katrina (September 9, 2005). Available at: <http://www.hhs.gov/ocr/hipaa/EnforcementStatement.pdf>, accessed February 4, 2006.

particularly important if public figures are involved in the casualty incident).

- Confirming that a missing family member is a patient in the healthcare facility.
- Confirming that a missing family member is **not** a patient in the healthcare facility and maintaining contact information so that if the patient arrives later, the family can be notified. While it is important to know that a specific patient is in the facility, it is just as important to **definitively know that a patient is not in the facility**. This can be quite difficult, especially early in the incident or if multiple unidentified patients are transported for care. Telephone inquiries could be overwhelming if not efficiently managed, which should include the use of advanced technology to register the callers for verification and possible call-back after determining whether the missing family member is present. This must be effectively addressed both for humanitarian reasons as well as to minimize the physical arrival of people looking for loved ones.
- Conveying health information from family members to patient care providers, which is especially important for incapacitated and pediatric patients.
- Conveying messages from family members to patients in lieu of a physical visit. This may include arranging telephonic communication between patients and family members.
- Providing patient condition updates for family members.
- Arranging escorted visits to patients when deemed acceptable by clinical area supervisors.
- Providing a comfortable area for family members to wait for additional information or until they can visit with the patient.
- Providing information to family members on lodging, victim services, and other potential assistance.
- Providing pastoral care and psychological support to family members as indicated.

Lesson 3.3.6 Concept of Operations for Healthcare Emergency Response and Recovery: Incident Operations Stage – Plans Section Actions

Lesson objectives

- *Explain the major responsibilities of the Plans Section during incident operations.*
- *List and describe the key elements contained in a Healthcare System Incident Action Plan.*
- *List the types of meetings to be held under the supervision of the Plans Sections and describe the characteristics of each meeting type.*
- *List and describe other types of planning activities related to comprehensive incident action planning that are the responsibility of the Plans Section.*

As previously stated, the ICS Plans Section has two major responsibilities: incident action planning⁴⁹ and information management. For smaller events in which formal incident action planning is not necessary, the requirement remains for effective information management (including the development of regular healthcare facility situation assessments). The Plans Section, therefore, should always be staffed with at least a minimum number of personnel to accomplish the indicated incident planning and information processing tasks.

- **Management by objective:** As described in Lesson 2.1.3, one of the most efficient methods of managing a complex organization during incident response is through “management by objective,” a process where organizational objectives are established and subsequently strategies and tactics (i.e., parameters within which the objectives are to be accomplished) are developed to achieve these objectives. This essentially describes the incident action planning process contained in NIMS/ICS (see Exhibit 2.1.2.2). By establishing incident objectives, healthcare facilities are in a sense developing measures of effectiveness for their response; if at the end of a defined period, objectives are being achieved, then the response can be considered successful. The development and internal

⁴⁹ Technically, there is only one Incident Action Plan for each incident. Other entities participating in the response but not the primary incident management team should use different terminology for the “Incident Action Plan” that they produce. Healthcare facilities, for example, may wish to use the term “Hospital X Action Plan” or more appropriately “Hospital X Operations Plan” for their instrument, since from the point of view of the jurisdictional ICS, hospitals would usually sit within an Operations Section.

dissemination of a written incident action plan can facilitate incident information response direction across the organization, as well as providing a basis for conveying information external to the organization. The Plans Section provides the workforce for incident action plans review, revision, and acceptance by the healthcare organization's IC and dissemination for each operational period.

- Incident action plan content: For healthcare facilities, incident action planning crosses a range of activities, with the information developed from these activities captured in an appropriate format on ICS forms. It includes:
 - Organizational objectives for the incident response:
 - Control objectives: Essentially the organization's goals statement, these are expected to change little during Incident Operations (ICS 202).
 - Operational period objectives: These are developed or revised for each specific operational period. They should be measurable and achievable within the operational period (ICS 202).
 - Other mission-critical information:
 - Structure of the organization's response: The incident command structure that the healthcare response organization is using should be documented, including the names of personnel assigned to key positions. An accompanying organizational chart with names placed in boxes can be helpful (ICS 203 and 207).
 - Assignments, strategy, and general tactics: Resources assigned at the strategic or management levels (i.e., functional areas activated and units assigned to key tasks, but not those in charge of component tactical actions or the names of individual responders) should be listed and described (ICS 204). The defined strategy and general tactics for them to achieve the objectives should be included. An example might be to provide information on what group is assigned to initiate personnel prophylaxis, the medications to be used, and where/when/how this will happen in general terms (thus leaving specific tactics to the individuals responsible for achieving the assignment).
 - Safety message: In most incidents, a brief safety message is

**Healthcare System
Incident
Action Plans
should contain
specific
organizational
objectives.**

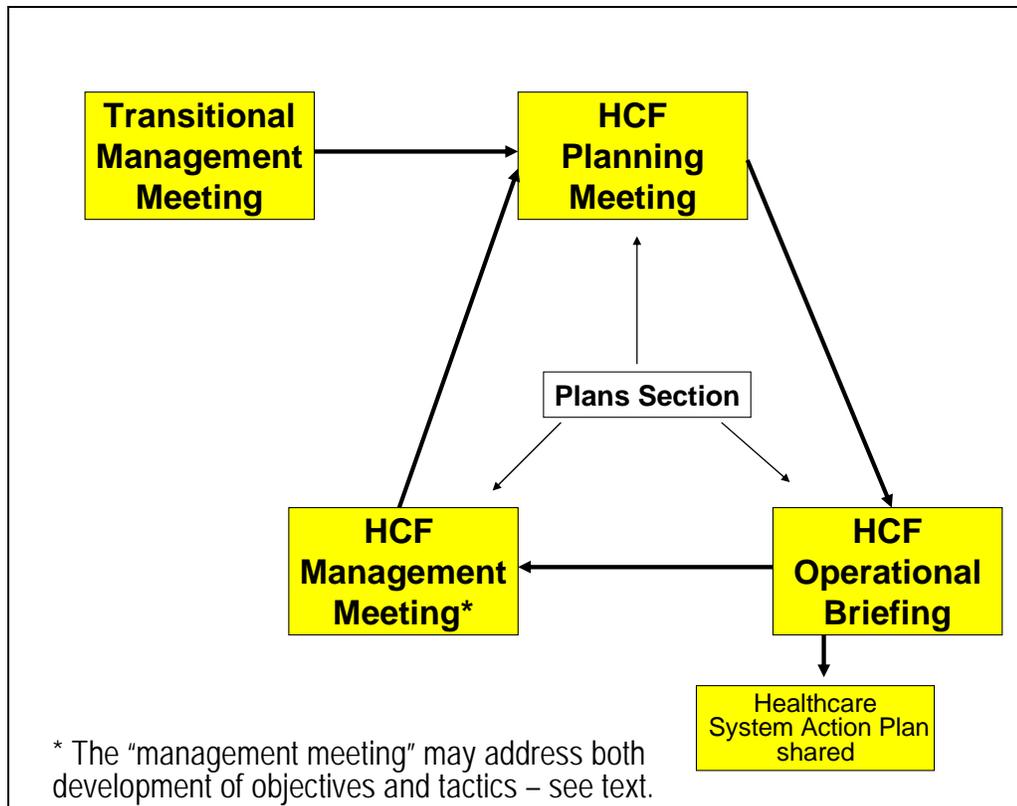
included with the incident action plan, highlighting relevant incident-specific hazards for healthcare facility personnel. For example, Management may wish to highlight the importance of appropriate PPE during response to a communicable disease outbreak. Documenting this type of information emphasizes its importance to response personnel, and provides a mechanism (when incident action plans are shared external to the facility) to promote consistent protective tactics in managing responder safety issues across the participating healthcare facilities (ICS 202 and 208 as needed).

- Communications plan: Key personnel (Command and General Staff and leaders/supervisors of key operating units) are listed, with preferred and alternate contact methods (ICS 205). The communications plan may also list other pertinent positions, such as branch directors and unit leaders. Functional areas contact information is also listed, so that telephone, e-mail, and any other preferred contact information is current and immediately available.
- “Medical” plan: Even though healthcare facilities are in the “business” of caring for people, they ironically tend to focus less than public safety agencies on responder well-being and treating injured or ill responders, even when hazardous conditions are possible. The incident action plan should provide guidance for supporting responder health (some of this may be included in the safety message), and the strategy and tactics for caring for injured or ill healthcare system responders (ICS 206). It is advisable that a capability be established to “care for your own” separate and distinct from that for general victim care. In very high-risk areas, such as the decontamination (DECON) facility, the set-up should support rapid DECON and doffing of PPE and immediate medical intervention for compromised DECON staff.
- Supporting information: Other details as deemed relevant are included (e.g., maps of buildings that demonstrate the high-risk areas where an infectious agent was detected).
- ICS forms for information capture and processing: The critical information from these planning activities, therefore, is captured in the aggregate of ICS forms 202, 203, 204, 205, and 206.
- Organized and sequential planning steps: Defined steps are essential to the development of an incident action plan, and the

Plans Section is responsible for conducting meetings and assuring that planning actions are accomplished within the defined schedule.

- **Transitional Management Meeting:** The initial Transitional Management Meeting defines the command structure, the command and general staff assignments, and establishes the timing of the operational periods and planning cycle. Incident goals and control objectives are established, as well as objectives for the upcoming operational period. Major tactics to achieve the operational period objectives may also be determined here, in a separate “tactics meeting” for very complex incidents (see the “Planning P” in Exhibit 2.1.2.2 in the preceding unit), or in the Planning Meeting while assigning resources (see Exhibit 3.3.6.2). The follow-on sequential steps (see Exhibit 3.3.6.1) should then be accomplished under the supervision of the Plans Section.

Exhibit 3.3.6.1: The planning cycle for healthcare facilities.



Strategies are established and resources assigned during Planning Meetings.

- Planning Meeting:
 - Who attends: Command and General Staff, with others as indicated and approved by the healthcare organization's incident commander. The list of attendees usually includes:
 - Healthcare System Commander
 - Command staff members
 - General staff members
 - Resource Unit Leader
 - Situation Unit Leader
 - Operations Branch Directors and possibly key Operations Unit Leaders
 - Communications Unit Leader
 - Technical/Specialists (as indicated)
 - Outside Agency Representatives (as indicated)
 - Information specialists to record meeting findings.
 - What occurs: **General tactics and assignments are established to achieve the response objectives developed in the preceding Transitional or regular Management Meeting** (see Exhibit 3.3.6.2). These are developed by the Operations Chief and the Healthcare System Commander, and the Planning Meeting is facilitated by the Plans Section Chief. Each Section Chief is given a brief interval to comment on major issues related to the development of the Healthcare System Incident Action Plan. **During each Planning Meeting, Section Chiefs confirm assignments and sign off that the assigned resources are adequate to meet response needs for the upcoming operational period.** In some ICS practices, "pre-planning meetings" are held to define most of the tactics and assignments, and the planning meeting is used to bring this work together and assure all IAP development tasks have been completed.
 - Meeting outputs: Information is formally captured and processed by the Plans Section into the written incident action plan for the upcoming operational period.

Exhibit 3.3.6.2: Planning meeting general agenda.

Planning Meeting

Traditional ICS*

- Brief on situation and resource status (Plans)
- Set/review incident objectives (IC)
- Plot control lines and geographic boundaries (Operations)
- Specify tactics for each Division/Group (Operations)
- Specify safety measures for identified hazards
- Specify resources needed (Operations/Plans)
- Specify facilities and reporting locations (Operations, Plans, Logistics)
- Place resource and personnel orders (Logistics)
- Consider communication, medical, and traffic plan requirements (Plans, Logistics)
- Finalize, approve, and implement IAP (IC, Plans, Operations)

Hospital ICS

- Brief on situation and resource status (Plans)
- Review/set control objectives and operational period objectives (Hospital IC)
- Specify tactics for each Operations element: Branch/Division/Group (Operations)
- Specify resources needed (Operations)
- Review facilities and reporting locations (Operations, Plans, Logistics)
- Place resource and personnel orders (Logistics)
- Consider communication, medical, and other supporting plans (Plans, Logistics)
- Finalize, approve, and implement IAP (Hospital IC, Plans, Operations)

*National Wildfire Coordinating Group, available at:
<http://www.nwccg.gov/pubs/410-1/chapter11.pdf>

Relevant personnel are given a situation update and briefed on the incident action plan during Operations Briefings.

- Operations Briefing:
 - Who attends: Command, General Staff, specific branch directors, and unit leaders (per Healthcare System IC). For some incidents requiring close coordination with external agencies, the healthcare facility may wish to invite a liaison (an “Agency Representative”) from that entity. For example, if an unusual outbreak has been confined to one hospital, local or Federal health officials may be invited to attend the Operations Briefing (or listen in via teleconference).
 - What occurs: **The next IAP is presented to key leaders within ICS and to liaisons from agencies that aren’t within the IC structure.** The Plans Section Chief establishes the agenda, with IC approval (see Exhibit 3.3.6.3), and facilitates the meeting. A brief situation update is provided, usually by the Plans Chief, followed by a briefing (i.e., summary) of the incident action plan to attendees. Command staff (e.g., Safety, PIO), section chiefs and pre-designated leaders of key functions are given the opportunity to provide comments relative to their responsibilities. Liaisons from external agencies (“Agency Representative”) are also provided a short interval to succinctly describe activities relevant to their agency. A well-run Operations Briefing should be concluded within 30 minutes.
 - Meeting output: Hardcopies of the incident action plan should be available for dissemination to operations briefing participants prior to the briefing. The information conveyed in the meeting, and in the incident action plan itself, should be disseminated by the Section Chiefs to personnel within their respective sections.

Exhibit 3.3.6.3: Template for Operations Briefing.

<h2>Operations Briefing</h2>	
Traditional ICS*	Hospital ICS
<ul style="list-style-type: none"> • Review objectives and changes to IAP (Plans) • Discuss current response actions and last shifts achievements (Operations) • Review weather forecast (Situation) • Division/Group assignments (Operations) • Trajectory analysis (Situation) • Transport, communication, supply updates (Logistics) • Safety Message (Safety) • IAP approval and motivational comments (IC) 	<ul style="list-style-type: none"> • Brief on situation and resource status (Plans) • Review control and operational period objectives and changes to IAP (Plans) • Trajectory analysis – include weather forecast if appropriate (Plans) • Discuss current response actions and last shifts achievements (Operations) • Operations elements (Branches, Divisions, Groups) assignments (Operations) • Transport, communication, supply, care for personnel updates (Logistics) • Safety message (Safety) • IAP approval and motivational comments (Hospital IC)
<p>* Adapted from: US Coast Guard Field Operations Guide (FOG). 2000 Edition Available at http://www.uscg.mil/hq/g-m/nmc/response/fog.pdf, accessed Jan 11, 2006</p>	

- Management meeting.⁵⁰
 - Who attends: Command Staff and Plans Section Chief, with additional staff only at the direction of the Healthcare System Commander.
 - What occurs: **During each management meeting, Incident response objectives for the upcoming operations period are established. Command confirms that the current**

Management Meetings start the operations cycle all over again with the review and revision (as necessary) of organizational objectives.

⁵⁰ Though NIMS/ICS does not refer specifically to “Management Meetings,” these have traditionally been and are still utilized in many ICS incidents to provide a small select forum for the establishment of incident objectives. They should be considered for use by healthcare systems.

organizational structure is adequate to meet response needs.

If a change in structure is indicated, this is agreed upon and documented for the next incident action plan. For example, patient tracking may take on such complexity and management attention that it is re-defined as a separate and distinct branch within the Operations Section, with its own Branch Director focused solely on patient tracking.

- Meeting outputs: Overall control objectives and specific operational period objectives are established, and the current response structure is confirmed or revised. If General Staff is included in the meeting membership, the major tactics for the upcoming operational period may also be established in this meeting. Alternatively, a follow-on “tactics meeting” may be conducted for this purpose.
- Conduct of all meetings: It is important that all meetings be conducted in the most efficient manner possible. Textbox 3.3.6.1 presents standard practices to accomplish this.

Textbox 3.3.6.1

Management of Meetings/Teleconferences

It has been a perennial challenge for public health and medical personnel to conduct efficient meetings and teleconferences during Incident Operations. Observations during major exercises (TOPOFF 1-3⁵¹ and others) and actual incidents (anthrax 2001) demonstrated health and medical meetings without clear purpose (i.e., objectives), firm facilitation, or formal agenda. This resulted in prolonged discussions, difficult decision processes, and no clear process for disseminating the results of these meetings. The following factors, validated through extensive incident command system experiences, maximize the efficiency of the meeting process:

- Establish a clear purpose for the meeting: No meeting is called without a clear goal (usually indicated by the meeting name) and so the meeting output is automatically understood by all. For example, Planning Meeting participants understand that strategy, major tactics, and resource assignments will be established by the meeting conclusion.

⁵¹ Author observations and: Inglesby, T.V.; Grossman, R.; O'Toole, T. A Plague on Your City: Observations from TOPOFF. *Clinical Infectious Disease* (February 1, 2001);32(3):pp.436-45.

- Firm meeting facilitation: One pre-designated individual, trained on incident meeting rules, facilitates the meeting. This person is usually responsible for establishing the agenda and so is familiar with the meeting agenda and goals. For the primary incident planning meetings, the Plans Section Chief assumes the facilitation role.
- Meeting discipline is enforced: Meeting “rules” are established and disseminated before the meeting (it may be helpful for the facilitator to briefly review the rules with participants at the beginning of the meeting):
 - Meetings start and end on time.
 - Participants (except the IC) speak only when recognized by the facilitator.
 - Strict time limits are enforced for oral reporting.
 - Prolonged discussion or controversy is generally discouraged (the planning process should identify and resolve most of these prior to large meetings); contentious issues are assigned to specific parties to resolve “offline” and the resolution is reported at the next meeting.
 - Outside distractions are limited (e.g., cell phones and pagers must be silenced or on “vibrate”).
 - The meeting/teleconference is not the appropriate forum for sharing contact information between individual participants (this is not only inefficient but rude to delay proceedings while information is exchanged. The activity should only occur outside the meeting context).
 - For teleconferences, all participants’ phones should be muted except when speaking.
- Establish and disseminate meeting agenda: A brief agenda outlining discussion topics should be developed (a standard template for each common type of meeting should be used). Persons responsible for speaking to specific topics should be listed and notified of this task so they can prepare. The facilitator assures tight adherence to the agenda.
- Select individual to capture proceedings: For most major meetings, one Plans Section worker should capture information exchanged and major decisions concluded. This documentation may serve as an important reference for the development of the incident action plan or for other Incident Response activities.

Completion of the Incident Action Plan

The Healthcare System Incident Action Plan (IAP) must then be completed:

- **IAP document:** The series of meetings and other planning activities allow completion of the appropriate ICS forms that make up the IAP. These are then collated, approved by the incident commander (IC) and any members of a unified command, and prepared for dissemination. The collated forms represent the core of the IAP.
- **Supporting plans:** These planning documents (see terminology textbox) are completed by the designated position for each plan within the ICS. It is the responsibility of Plans to assure they are completed, approved by the IC, and incorporated into the IAP.

Terminology alert!

Supporting plans: Supplemental sections of the incident action plan that provide additional information related to action planning. These generally are plans that address the response-generated demands during an incident. Standard supporting plans include the Safety Plan, Medical Plan, Communications Plan, and others.

Other planning activities related to comprehensive Action Planning are also the responsibility of the Plans Section, and the outputs from these activities should be included in the IAP as supporting plans. Depending on the nature of the incident, these may include:

- **Alternative plans:** In some instances, providing alternatives to the currently selected strategies and tactics can be valuable to Command. In particularly complex events, careful development of alternatives can be essential, allowing the exceptionally focused managers to “step back” and consider a change in operations that could be beneficial. Experienced personnel within the Plans Section should be assigned specifically to this task. For example, the Plans Section may wish to develop several alternative strategies to the implementation of an employee prophylaxis program and provide the alternatives (with pros and cons) to Command during the Planning Meeting.
- **Long-term planning:** For any lengthy incident, establishing a long-term planning capability is essential. This assures that complex

The Healthcare System Plans Section provides other important considerations for Command decision-making.

decisions, scarce resources, personnel relief, and other issues that will arise in later operational periods have been considered in time for organized planning to address the needs. Plans personnel should therefore perform a projection analysis and delineate issues, needs, and questions that could present as the incident evolves through multiple operational periods. As with alternative planning, long-term focus rarely occurs within the cadre with responsibility to “manage the moment.” An example that highlights the importance of long-term planning was experienced during the anthrax 2001 dissemination event in the National Capitol Region: Exposed victims were started on six-week antibiotic prophylaxis regimens, but planning for how to address the prescription refills was not comprehensively addressed.⁵²

- Demobilization planning: Early consideration and development of procedures for deliberate, efficient disengagement from incident response should be accomplished. This guidance material should be ready for the earliest demobilization actions, promoting rapid return to readiness and resumption of regular healthcare system functions.
- Contingency planning: Many incidents may have sudden changes in their parameters that, while unexpected, are not entirely unpredictable. Examples include severe aftershock following an earthquake or emergence of the contagious disease being addressed (e.g., SARS) in the healthcare worker population. Effective incident management requires the system to be prepared to rapidly respond if these events transpire. Contingency planning develops action plans in case the potential circumstance occurs. Though many of these plans are never utilized, pre-planning initial actions may be critical to successful response.

Planning Section – Other Duties

The remaining responsibilities of the Plans Section during Incident Operations stage relate to information management, establishing reporting requirements, and obtaining expert information as it is needed (from Technical Specialists).

- Maintaining a common operating picture through situation assessment: As described in Lesson 3.2.2, the Situation Unit

⁵² Authors' observations

The Plan Section Chief in conjunction with the IC should determine appropriate timing, dissemination, and recipients of Situation Updates (ICS 209).

captures information in relation to the hazard and its impact as well as community response information (to include patient tracking information). During public health emergencies, the Situation Unit should be the repository for information regarding public health recommendations (from liaisons), which then should be incorporated into the appropriate incident action planning considerations.

- Tracking incident resources: The Resources Unit captures information on personnel, supplies, and facilities related to the healthcare system's response, as well as other response entities working closely with the ICS assets. The use of ICS forms, adapted to the specific environment of the healthcare facility, can provide adjuncts in collecting and processing this information.
- Developing incident summaries: The Plans Section may also be responsible for developing summaries of the incident and the healthcare organization's response. The frequency and timing of these reports should be determined by the Plans Section Chief in conjunction with the Commander. Traditional ICS utilizes an ICS 209 form (Incident Status Summary) as a template for information included in these reports. This information can be shared (as appropriate) within the facility, as well as with external agencies and healthcare organizations. The information contained in this report differs from the incident action plan in that it contains summarized information on the hazard impact (e.g., patients presenting to the hospital for care) and the organizational response (e.g., numbers of patients treated, discharged, and admitted).
- Accessing expert information: If additional expertise is needed to address incident issues, the Plans Section is tasked with obtaining this outside expertise and providing a conduit for the technical experts to provide their input. This may occur within the Plans Sections, or the technical expert may be assigned to operations, management (as a senior advisor), or other appropriate area within ICS.

Lesson 3.3.7 Concept of Operations for Healthcare Emergency Response and Recovery: Incident Operations Stage – Logistics Section & Finance/Administration Section

Lesson objectives

- *Describe the basic functions of the Logistics Section during response to “traditional” events requiring surge capacity and capability.*
- *Describe convergence issues for volunteers (external and internal) and basic management concerns for each.*
- *Describe surge capacity issues for security services during incident operations.*
- *Describe the major functions of the Finance and Administration section.*
- *Describe obstacles to healthcare systems related to financial reimbursement during response and list potential Federal reimbursement mechanisms for hospitals providing emergency response.*

Logistics Section

The Logistics Section supports the ICS organization with “people, places, and things.” Traditionally, the healthcare industry has viewed facilities personnel, security personnel, and others as exclusively belonging in the Logistics Section of the organization under ICS. This concept is not correct since incident parameters and organizational objectives may dictate otherwise, and hospital day-to-day operations that are not impacted remain the same. For example, during loss of a mission critical system, such as occurs with a power failure, incident objectives focus response on restoring power to critical areas, as well as augmenting patient care services to address issues created by loss of electrical power. Consequently, facilities personnel (engineering and others) are appropriately situated in the Operations Section and that is addressed in Lesson 3.3.5. For the remainder of the discussion related to the Logistics Section presented here, it is assumed that the organization is responding to a traditional event primarily involving patient surge capacity or surge capability. The following Logistics functions and activities may be important during the healthcare organization’s Incident Operations:

- Supplies unit:
 - Management of requests: For efficient resource supply or re-supply in the hectic atmosphere of incident response, a structured

A defined methodology is necessary for the Logistics Section to adequately manage resource requests.

methodology for managing requests should be followed, whether for personnel, supplies, or services. Requests should ideally be made on paper or through electronic media, particularly for unusual items where the acquisition process is prolonged or includes seeking outside assistance. Having only one form for requesting a resource (e.g., a modified ICS 213) can make the process more uniform. Submission of the requests should also follow a standardized process, and a method for tracking requests for accountability and assuring expedient answers should be established.

- Resource assistance from outside the ICS organization: Strategies for where to seek outside resources should also be well worked out ahead of time. When a particular resource is not available internal to the organization, the Logistics Section should (in conjunction with Command) seek the most appropriate solution external to the facility, utilizing Mutual Aid, initiating emergency contracts, seeking governmental assistance, or obtaining help from a parent organization. For requests from within the ICS for assets that are unusual, expensive, or difficult-to-support, approval from ICS management may be required before seeking outside assistance. In requesting outside assistance, careful attention must be paid to the way in which the requests are developed and submitted. Federal assistance rules, and some State and local assistance procedures, expect the request to be shaped in terms of the “need” as opposed to requesting a specific asset. For example, rather than requesting a Disaster Medical Assistance Team (DMAT) or other specific resource to assist with Emergency Department activities, the request should accurately define the need for which assistance is requested. The assisting government agency will then offer the most appropriate available assets that can address the defined need.
- Accountability for resource acquisition: Methods for requesting, tracking, approval, transport, and receipt of resources should be clearly defined. The standardized request process should be described in a Support Annex to the EOP (see Lesson 3.5.1).
- Tracking of resources: Critical supplies within the response system should be tracked during response to assure adequate amounts at all times. The ability to anticipate shortages and re-supply ahead of time is a critical focus of Logistics during their incident planning activities. Some hazards produce very predictable resource shortages, and anticipating this can avoid severe impact on the organization’s response. For example, a

very frequent problem noted after hurricanes is shortage of fuel for generators that must run throughout the prolonged interruption of the electrical power grid. Acquiring a large fuel cell during the pre-impact period may avoid this occurrence.

- Supporting requested resources: If outside personnel are requested, the Supply Unit may have additional responsibilities for processing and supporting these assets. Receiving them, confirming identities and credentials, and connecting them with their assigned supervisors should be addressed. Providing sleeping quarters, food, and other support may also be necessary.
- Volunteers: As previously discussed, specific attention must be paid to the management of volunteers.
 - External volunteers: Volunteers commonly present with good intentions to assist a healthcare facility during its response. Security personnel should control the influx and direct them to a secured volunteer reception area for processing (see Textbox 3.3.7.1). Alternatively, if instructed by Command and the Supply Unit, security officers may inform them that assistance is not requested and decline their offer. If this alternative is selected, a printed declination (developed during preparedness) should ideally be provided to the volunteers, thanking them for their offer, and declining it in a gracious manner. In this example, security falls under the Operations Section, while those staffing the volunteer reception and processing area are within the Logistics Section. Potential volunteers are under the supervision of Logistics until processed, accepted, and assigned.

Some requested resources (e.g., personnel) require specific types of support that the Logistics Section is responsible for establishing.

Textbox 3.3.7.1

Unsolicited Volunteers at the Healthcare Facility⁵³

Volunteers must be processed through an organized volunteer management center, so that healthcare system administrators can meet their ethical and legal responsibility of assuring qualified service providers. Volunteer registration includes the collection of name, address, contact information, qualifications and certifications, and professed professional abilities. Verification of identity and credentials should be accomplished through a pre-determined process, commensurate with the trust level in each volunteer's potential assignment.⁵⁴

Credentialed volunteers are either released (if no actual or anticipated need for their services exists at that time), sent to staging (if there is a potential need for their services), or provided an assignment. Those given assignments should receive just-in-time training about their supervised role, their responsibilities, and any general safety measures. Volunteers should then receive a second, more job-related briefing when they report to their assigned supervisor.

All volunteers who register should be given a written briefing that includes:

- "Thank you for coming and volunteering your services"
- Brief explanation of current incident status
- Explanation that an incident management system is in place, volunteers work within this system under supervision, and that freelancing can be disruptive and possibly dangerous to both the freelancers and/or the accepted responders.
- If there is no current or anticipated need for assistance from the volunteers, an explanation is provided that states they are released and will be called if needed, through the contact method they provided. It describes the need for unequivocal credentials of professional capacity if called. In clear terms, it

⁵³ Adapted from: Barbera J.A., Macintyre A.G. *Medical and Health Incident Management (MaHIM) System: A Comprehensive Functional System Description for Mass Casualty Medical and Health Incident Management* (October 2002). Institute for Crisis, Disaster, and Risk Management, The George Washington University, available at: www.seas.gwu.edu/~icdrm/, last accessed February 16, 2006.

⁵⁴ Adapted from Barbera, J.A.; Macintyre, A.G.; Shaw, G.L.; Westerman, L.; Seefried, V.; de Cosmo, S. Arlington County Public Health Volunteer Management System, available at: <http://www.gwu.edu/~icdrm/projects/VMS/index.htm>, accessed February 4, 2006.

states they should not re-attempt to access patient care areas, as unauthorized entry is considered criminal trespass subject to prosecution.

A common motivation that moves unsolicited volunteers to converge on hospitals is the desire to donate blood. A plan should therefore be pre-established that diverts these well-intentioned individuals to an appropriate blood bank resource, preferably one that is physically distant from the healthcare facility. Hospitals should work with blood banks to assure they have effective plans in place for large surge donation offers. The plan should include written public information and a system for staging donor volunteers to provide blood at a designated time in the future rather than immediately. This will avoid the glut of blood products that occurred in the U.S. after the September 11, 2001, terrorist attacks and maintain the goodwill of the donor population.

Additional volunteer processing and management details are available through the above referenced documents.

- **Internal volunteers:** This is essentially the role that the personnel/labor pool plays during the mobilization and operations stage of incident response: regular personnel who are released by their supervisors to volunteer for new roles within the incident response. Issues may arise, however, with internal “volunteers” who do not follow the defined labor pool methods: It is common for healthcare facility personnel to gravitate toward “the action” during times of Incident Operations, even if they have no specified role or it is not their assigned area. This can be particularly problematic in hectic, critical areas, such as the Emergency Department where organization and assignment of resources must be tightly managed (see Textbox 3.3.7.2). Assignment of security to screen personnel before admittance to these areas may ensure that only those with assigned roles are admitted.

Textbox 3.3.7.2

**Convergence of Internal Volunteers:
A Hospital Example**

During mobilization for the Pentagon terrorist attack on 9/11/01, multiple personnel were appropriately requested and arrived in the Emergency Department of a local hospital. Unfortunately, healthcare facility staff that did not have a direct role self-dispatched

to this area as well. Self-dispatched personnel included pulmonologists with bronchoscopes, Critical Care Nursing staff, and an administrator with multiple medical students in tow. These personnel were cleared from the ED as they posed the potential to disrupt operations in that area. They were instructed to remain available through the Labor Pool, so that they might be dispatched as indicated.

- **Facilities Unit:** This logistics unit is responsible for providing and directly supporting incident facilities during response and recovery, such as the Healthcare System Command Post and Emergency Operations Center, decontamination area, staging areas, discharge areas, and patient family assistance area.
- **Communications Unit:** In addition to supporting the communication needs of the hospital, an important consideration for the Healthcare System Communications Unit during Incident Operations would be the development and submission of a Communications Plan (modeled on an ICS Form 205/205T). In its simplest form, this would entail a list of names, response positions, and telephone/cellular numbers. This form should be submitted to the Plans Section for further dissemination, either independently or with the incident action plan, and updated regularly.
- **Medical Unit:** Activities undertaken to support the health and welfare of staff may require external coordination with other agencies or organizations. This can become critical in an effort to provide a consistent approach in the community towards protection of healthcare staff. For instance, working with public health on recommendations for staff prophylaxis can be important to prevent the perception of inadequate attention to staff needs.
- **Transportation and Food Units:** These units should be staffed based upon incident needs. The Food Unit may simply be the facility's usual meal service, with Logistics Section oversight to meet incident support needs.

Healthcare Systems have very different reimbursement mechanisms for emergency response than most other response entities.

Finance/Administration Section

A distinction for many healthcare facilities from traditional public safety agencies is the financial payment methods for services rendered. Though there are, in many instances, opportunities to recuperate some costs through traditional third party payer coverage, many incident-generated activities will not be adequately covered through these

means. In other cases, the necessary documentation and other regulatory requirements for compensation may not be possible to accomplish during Incident Operations. As an example, the costly activity of decontaminating a patient is not billable as a pass-through cost via traditional healthcare reimbursement mechanisms. Accounting for incident related expenditures is vital for the continued viability of the healthcare system.

- Cost-recovery issues: The cost for many incident activities may be reimbursable through other mechanisms (see below), particularly during officially declared incidents. For this to occur, however, these expenditures must be tracked closely and carefully documented by the Finance/Administration Section during Incident Operations. Otherwise, expenditure accounting must be reconstructed from scattered data after a response, and this may be problematic both in timeliness and accuracy. Some of these potentially reimbursable costs include:
 - Extra staffing or holdover staffing (overtime pay) that is committed to assist with “surge,” whether or not an actual surge of patients materializes.
 - Postponement or cancellation of elective procedures (diagnostic and therapeutic), which traditionally are significant revenue generators for healthcare facilities.
 - Use of disposable supplies that are not covered under traditional reimbursement mechanisms, such as PPE for decontamination.
 - Prophylaxis or vaccination of staff that is only for the purpose of safety during incident response.
 - Supplies and personnel time devoted to pre-hospital or community issues, such as re-supply of EMS units.
 - Supplies and equipment that cost more to acquire than normal due to the incident-generated urgency and scarcity.
 - Volunteer staffing costs associated with Mutual Aid or processing and supervising solicited volunteers.
- Out-processing and return to readiness costs: In addition, Finance/Administration personnel should be capable of projecting the costs associated with post-incident issues, such as the out-processing of the response staff (e.g., health monitoring, debriefing

A range of options may be available for emergency response reimbursement, but all require meticulous planning and attention to detailed cost accounting.

sessions, and other costs) and return to readiness of healthcare facilities.

- **Potential cost-recovery sources:** The Finance/Administration Section should understand the mechanisms available to the healthcare system for cost reimbursement, even though the actual submission of compensation requests for these unusual activities and expenditures may not occur until the recovery phase. This may impact the types of data collected during Incident Operations and how it is formatted.

For other private sector facilities, a summary of potential reimbursement mechanisms is provided in Textbox 3.3.7.3.

Textbox 3.3.7.3

Potential Reimbursement Mechanisms for Hospitals

Disaster Recovery Assistance for Healthcare Facilities from FEMA and SBA

If your healthcare facility is located in a declared disaster area and has suffered any disaster-related damage, the facility may well be eligible for Federal disaster assistance. The two main entities offering disaster assistance to government, non-profit, and private businesses are the Federal Emergency Management Agency (FEMA) and the United States Small Business Administration (SBA).

How to Apply for SBA Disaster Loan Assistance After a Declared Disaster

Any business or nonprofit - regardless of size - that is located in a declared disaster area can apply for SBA disaster assistance. The agency has two types of loans: physical disaster loans and economic injury disaster loans. Physical disaster loans cover all types of physical loss, including uninsured or underinsured damage to structures, equipment, and inventory. Economic injury disaster loans typically cover unmet financial obligations and are only available to small businesses (small business size standards vary according to NAICS code and are available at www.sba.gov). SBA may loan a maximum of \$1.5 million to businesses with rates starting as low as 4 percent at terms of up to 30 years. If a healthcare facility qualifies as a major source of employment in a disaster struck zone, the SBA can waive this statutory lending limit.

Applications are available online, by calling, or at any Disaster Recovery Center (DRC) or Business Recovery Center in the disaster impacted area. It is not necessary to wait for insurance

settlements before applying for an SBA loan. However, any eventual insurance proceeds that duplicate SBA coverage must go toward repaying the loan. Information about SBA's Disaster Loan Program is available at www.sba.gov/disaster or by calling 1-800-659-2955.

FEMA's Public Assistance Grant Program

The Public Assistance Grant Program provides supplemental Federal disaster grant assistance to help State and local governments and certain Private Non-Profit (PNP) organizations rebuild after a disaster. The program provides for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) that are considered a critical part of a community's infrastructure. While these grants are aimed at governments and organizations, their final goal is to help a community and all its citizens recover from devastating natural disasters. Eligible PNP facilities must be open to the public and perform essential services of a governmental nature. Emergency medical facilities and other healthcare facilities, such as hospitals, outpatient, and rehabilitation facilities, qualify to be considered as critical PNP facilities.
<http://www.fema.gov/rrr/pa/overview.shtm>

To be eligible, the repair and recovery work to be done must be a direct result of the disaster, be located within the designated disaster area, and be the legal responsibility of an eligible applicant. Work that is eligible for supplemental Federal disaster grant assistance is classified as either emergency work or permanent work. Emergency work includes debris removal and emergency protective measures, while permanent work addresses buildings and equipment. The Federal share of assistance is not less than 75% of the eligible cost for emergency measures and permanent restoration. The State determines how the non-Federal share (up to 25%) is split with the applicants.

Note: *It is very important for healthcare facility officials to set up legal agreements with local government partners that stipulate that emergency services are critical services performed on behalf of State/local government. This should be done **before** a disaster during emergency preparedness planning and will greatly facilitate the certainty and speed of reimbursement.*

FEMA Special Community Disaster Loans Program

The FEMA Special Community Disaster Loans Program was designed to provide loans for essential services to local governments that have experienced a loss in revenue due to a major disaster. This program was initiated on October 18, 2005.

For further information contact: James A. Walke, FEMA, 500 C Street, S.W., Washington, DC 20472, or call (202) 646-2751, or e-mail: james.walke@dhs.gov

- Difficulties in re-capturing incident expenses: Though these formal mechanisms exist as potential avenues for healthcare systems, it should be noted that none are guaranteed.
 - Past experience: In many past incidents, challenges were regularly encountered in obtaining financial assistance or reimbursement for healthcare systems in a timely and equitable fashion. This experience spans the time period before and during 9-11⁵⁵ and continued during the Hurricane Katrina experience.
 - Future considerations: For non-governmental healthcare systems that are working closely with their local and State jurisdictions on emergency preparedness, exploring reimbursement mechanisms that provide real-time payment during the response may be beneficial. In declared incidents, well-documented expenses that are paid through local and State governments are eligible for Federal reimbursement to those governments through Stafford Act⁵⁶ and other mechanisms
- Additional financial issues during mass effect and mass casualty incidents: During large-scale events that significantly impact the local community, additional financial considerations may be important for the healthcare organization and must be addressed by this ICS section. These include:
 - Payroll: If the hazard impact is extensive, the payroll mechanism may be affected (contractors enlisted for payroll, the postal system, and others). In order to optimally support staff during prolonged Incident Operations, it may become necessary to seek novel solutions to maintain payroll delivery, such as partial cash payments or handwritten corporate checks.
 - Local banking systems: Even if payroll can be sustained, additional consideration should be given to the financial

Local infrastructure impact can affect the financial operations of the Healthcare System.

⁵⁵ 1: Proceedings for the National Symposium on Hospital Disaster Readiness. American Hospital Association, February 15, 2002, available at: http://www.hospitalconnect.com/aha/key_issues/disaster_readiness/, accessed January 11, 2006.

⁵⁶ The Robert T. Stafford Act, as amended, provides the primary method for federal financial support to State and local jurisdictions during presidentially declared disasters and emergencies.

infrastructure impact. If the banking system is disrupted, employees may not be able to deposit or cash checks, and so personal financial tasks could contribute to work absenteeism. Additional employee assistance may be required to sustain the workforce, such as assistance with food or shelter for family members.

- **Purchasing:** Given the nation's reliance on fiber-optic transmissions for the transfer of funds, there could be physical impediments to paying for goods and services vital to Incident Operations. Contingency contracts that allow delayed payments (with interest if necessary) and other mechanisms should be in place for these types of issues encountered during large-scale incidents.
- **Contingency contracts:** During the Incident Operations stage, the Finance/Administration Section is responsible for execution of contingency contracts as required by the Logistics Section to obtain critical resources. Contracts should ideally be in place pre-incident for some of the following:
 - **Potable water:** To be used not only for patient and staff hydration but also for important medical activities such as hemodialysis.
 - **Food:** In the event that hazard impact delays the usual mechanisms for food delivery to the healthcare facility.
 - **Fuel:** For generators or for staff vehicles in severe events in which the local infrastructure is impacted.
 - **Additional staffing:** These may be acquired through commercial staffing resources.
 - **Materials to support the facility infrastructure:** For example, fans and portable air conditioning units, portable generators, and others.
 - **Materials to support the medical mission:** pharmaceuticals, ventilators, private ambulance services, medical gases, sterile supplies, and others.
 - **Specific expertise:** Such as building engineers, hazardous materials contractors, or structural specialists who can rapidly certify a facility's structural integrity, clean-up, or other after-hazard impact.

Pre-existing emergency ('contingency') contracts can be invaluable to sustaining Healthcare System operations.

**Healthcare System
Regulatory relief
may be necessary
during Incident
Operations.**

- Accounting for donated assistance: In addition to the above resource costs, the Finance/Administration Section should maintain records of all Mutual Aid/Cooperative Assistance/intergovernmental assistance to support reimbursement requests.
- Regulatory compliance: As noted in the Systems Description, the Finance/Administration Section also carries the responsibility for monitoring regulatory compliance. As a component of “managed degradation” strategy, situations may arise in which the Finance/Administration Section could develop requests for regulatory relief from appropriate agencies (ideally, through pre-arranged processes and pre-determined options) so that surge capacity and capability can be achieved. Some examples include:
 - Licensed bed limitations: Total admitted patient number may exceed the maximum number of licensed beds, and temporary relief from the licensing agency may be indicated.
 - Decontamination wash water: Disposition of wash water from decontaminating patients may be regulated by local, State, and Federal agencies. Though the U.S. Environmental Protection Agency has released statements that exclude healthcare facilities from everyday hazardous materials containment regulations for the purpose of “life saving” interventions⁵⁷, local and State regulatory agencies may have specific notification requirements or other procedures requiring variance from regular hazardous material wash water disposal.
 - Privacy of medical information: Federal restrictions such as HIPAA severely restrict the everyday sharing of patient information. Currently, no variances are clearly defined in the HIPAA⁵⁸ regulations for extreme emergencies, although exceptions are provided for financial, operational, and public health purposes. Healthcare organizations should work with their legal experts and with local and State public health authorities to define the “public health emergency powers” that will clearly cover release of pertinent information, at the request or direction of public health authorities, to appropriately manage a healthcare-related incident.

⁵⁷ EPA Alert 2000. Available at:

[http://yosemite.epa.gov/oswer/CEppoweb.nsf/vwResourcesByFilename/onepage.pdf/\\$File/onepage.pdf](http://yosemite.epa.gov/oswer/CEppoweb.nsf/vwResourcesByFilename/onepage.pdf/$File/onepage.pdf), accessed January 11, 2005.

⁵⁸ Health Insurance Portability and Accountability Act of 1996, Public Law 104-191, 104th Congress.

Lesson 3.3.8 Concept of Operations for Healthcare Emergency Response and Recovery: Demobilization Stage and Transition to Recovery

Lesson objectives

- *Describe critical factors related to demobilization of the healthcare incident command system.*
- *Describe the purpose of the Incident Review and explain how it differs from the After Action Report process.*
- *Describe the importance of the management structure during the transition to recovery stage.*

Demobilization Stage of Response

Demobilization for the healthcare facility begins as incident objectives are met and follow-on objectives are more focused upon recovery. Given the current financial constraints within the healthcare industry, it is advantageous for the healthcare functions to return to regular operations at the earliest possible time. The demobilization of resources no longer needed for Incident Operations should occur rapidly and efficiently, and many healthcare assets may be demobilized while Incident Operations are still underway. For example, the additional staff and other resources assigned to the Emergency Department may be demobilized earlier than other assets that address in-patient surge capacity. The defined demobilization process could be available as an EOP Support Annex.

Demobilization of the healthcare facility incident command system has traditionally received little preparedness attention. Several factors are critical and so should be addressed during EOP development:

- The decision to demobilize - defining the end of Incident Operations: In many instances, the decision to demobilize the partially or fully activated healthcare response is relatively straightforward (e.g., the jurisdiction announces that no more incident victims are expected, and the current load can be handled through normal procedures). In other instances, the decision is more complex (for example, if no official incident-site information is available). Healthcare facilities may wish to maintain some emergency response capability at a reduced level (such as maintaining a partially staffed command post) while awaiting confirmation of incident resolution from authorities. During incidents with ongoing, formal incident action planning, the demobilization decision is incorporated into the planning process.

Demobilization management includes specific considerations such as appropriate notifications to outside agencies and authorities.

- Management of demobilization: The incident management structure and process established during response are maintained through the demobilization process, as response resources are out-processed, and continued well into the recovery phase. The objectives of the organization may change from response objectives to those focused on recovery. Position assignments may also change to reflect the recovery focus, but the ICS-based planning and management structure and process should continue. When remaining tasks can be adequately managed through usual management methods and normal positions in the organization (as determined through the incident planning process), the incident command transitions the tasks to their new supervisory resources and then demobilizes. For healthcare systems, recovery tasks will likely include addressing backlogs of procedures, clinic visits, and other important patient care tasks. Ideally, the incident action planning processes should be used to resolve these backlogs as rapidly and safely as possible. The final ICS functions to demobilize are the Command and Plans Sections. This allows efficient response wrap-up, including document collection and archiving for the After-Action Report process (see Unit 4).
- Announcement of demobilization: Relevant parties (the jurisdictional authorities, response personnel, and non-response personnel in the facility) should receive notice prior to healthcare facility demobilization. In some instances, this notification should also be extended to the public. The healthcare organization should also expect to receive notification before the “standing down” or demobilization of any major jurisdictional incident response efforts.
- Managing the public perception of demobilization and recovery: In some incidents, appropriate healthcare system demobilization, while the jurisdiction continues with an ongoing incident response, may be perceived unfavorably by the public. It may be important to make the public demobilization announcement jointly with jurisdictional authorities, where the healthcare organization is thanked for its services. It may also be very important to avoid business loss by publicizing that the healthcare organization has fully recovered and returned to its normal business, that scheduled appointments and services will be honored, and that hazard contamination has been removed or safely contained. Measures taken to resolve backlogs, changes in usual service locations, or other variances should be clearly explained to the public.
- Equipment rehabilitation and restocking: Early restoration of equipment (both regular and incident-specific equipment) should be

addressed during demobilization and completed as early as possible in the recovery phase.

- Financial accounting: As presented in the preceding lesson, the Finance/Administration Section should complete tallies of incident expenditures and recovery actions related to reimbursement, and financial restoration should commence.
- Staff relief, rehabilitation, and health concerns: Addressing staffing requirements during demobilization can be challenging. Providing for continuity of operations can also be challenging during this stage. Rehabilitation and health concerns should be expeditiously addressed during demobilization. For example, after response to a contaminated patient event, it is important to have personnel performing decontamination in PPE undergo a medical evaluation and record findings in an incident log. This may assist in recognizing delayed complications and may serve to address concerns about potential exposure.
- Documentation: Incident-related paperwork should be completed and secured according to established mechanisms. In the healthcare business, attention is usually focused on patient charting. Other important incident documentation, such as ICS forms (e.g., 214s or unit logs), should also be high priority. The Plans Section is responsible for ensuring that appropriate documentation is completed and submitted.
- Release/return of outside resources: It may be important to rehabilitate or return outside resources, whether Mutual Aid, commercial, or loaned assets. Used mutual aid or loaned equipment should be replaced or rehabilitated in a timely fashion. For personnel who have assisted the healthcare facility during Incident Operations, individual or organizational expressions of gratitude are important to the individual responders and to maintaining good will for future assistance.
- Rescheduling of regular activities: Healthcare facilities must address the complexities of rescheduling regular activities, such as operating suite appointments and outpatient procedures.
- Rescheduling of regular staffing: Staffing patterns are commonly disrupted by incident response, and attention may be required to confirm adequate staffing during the immediate post-incident period. Providing funded time off after a lengthy incident to allow responders to address personal business or to allow rest and rehabilitation may also be important (this has become a standard

The Incident Review does not provide evaluation of response or identify corrective actions, but instead is designed to convey a comprehensive situational awareness for all organizational responders.

expectation in many public safety agencies). Overtime and other excessive costs incurred to accomplish this should be documented as legitimate incident-related expense.

- **The Incident Review:** Early in the demobilization stage, response personnel should be brought together to conduct a review and explanation of the incident and response actions. This is referred to as an “Incident Review” (IR), and it is important to conduct after every major response by the healthcare facility. This activity differs significantly in purpose from the After Action Report meetings (see Unit 4), which are primarily intended for evaluation. It is also distinct from stress debriefing sessions, which are intended to address personnel feelings and concerns. In an IR (see Textbox 3.3.8.1), personnel are brought together to review the timeline of the event not for purposes of discovering potential improvements to the systems response but for the purpose of clarifying the event and presenting the details as they occurred. This should resolve any confusion that can result over what occurred and why certain decisions were made during Incident Operations. Even a brief review of the timeline can clarify many misunderstandings. The Incident Review is usually managed by the personnel who were assigned to the Plans Section, whereas After Action Report meetings are managed through EM program mechanisms. The best timing for an Incident Review is at the completion of other Demobilization activities but before releasing responders or returning them to their regular work assignments. Though this may appear to be a challenging timeframe, the early timing is critical to avoiding misperceptions becoming “perceived realities” within the organization. For a large-scale incident, IRs may be conducted within response areas or units if bringing all organizational responders together is not feasible. A suggested template for an Incident Review is presented below:

Textbox 3.3.8.1

Suggested Template for an Incident Review (IR)

- Welcoming remarks and appreciation expressed for the response efforts by staff (Plans Section Chief)
- Describing the IR purpose (Plans Section Chief)
- Describe ground rules, including that comments are “not for attribution,” remarks should not be personal, and this is not a critique (Plans Section Chief)
- Review of timeline according to stages of response:
 - Incident Recognition: specific personnel as appropriate (Command)

- Activation/Notifications: specific personnel as appropriate (Command)
- Mobilization: specific personnel as appropriate (Section Chiefs)
- Incident Operations: specific personnel as indicated (Section Chiefs)
- Demobilization: specific personnel indicated (Section Chiefs)
- Closing remarks (Command)
- Announcements regarding After Action Report meetings and other planned activities (Plans Section Chief)
- Documentation of all of the above (Situation Unit Leader).

- Performance evaluations: Traditional ICS provides mechanisms for staff to receive performance evaluations based upon the work performed in the incident response position. The evaluation is usually conducted by immediate supervisors, such as Section Chiefs, Branch Directors, or Group Leaders. This type of evaluation can be critical to improving overall EM program success, since aggregation of evaluation reports can be used in evaluating training and other preparedness activities (see Unit 4). In more sophisticated systems, position evaluations can be used to evaluate the defined **position qualifications** (i.e., competencies for response positions). To keep the process objective, forms should be developed during preparedness and be immediately available during response. These forms should promote documentation of objective measures of job performance and adherence to EOP processes and procedures.

Incident-related activities by the healthcare organization subsequent to response demobilization are considered part of evaluation and organizational learning (see unit 4) or incident recovery (see unit 1).

Transition to Recovery

This stage, Transition to Recovery, is defined as a separate task interval where the primary focus is on transitioning management from demobilization of response to a focus on return to readiness and other recovery activities. This stage contains several important considerations for the healthcare system:

- Management structure: A range of management constructs may be available to address ongoing recovery activities. Many options may be acceptable, but it is critical that the selected management

Incident response performance evaluations are a vital part of maintaining overall EM program effectiveness.

structure is defined and publicized within the organization. The response structure will continue to evolve and is phased out only when no longer needed. Two illustrating examples are provided below:

- Response structure demobilized all at once: Depending on the incident needs and timing, the specific organizational structure used for response and recovery may be fully demobilized. For example, in low intensity events (e.g., partial activation of the EOP in response to a threatened hazard impact that never materializes), the remaining responsibilities of the incident activation can be reasonably transferred to non-response positions. The emergency program manager may be designated as the point person for this responsibility. Another example might be the response to a limited event with a few contaminated patients. If demobilization activities have been accomplished, all normal healthcare system activities could resume and final decontamination area cleanup can be accomplished through normal, non-response positions in facilities management.
- Transition to ICS-based recovery structure: Some events require long-term, complex recovery effort, such as clearing debris and re-building. An ICS-based management entity should be maintained, separate from the day-to-day structure, to address the identified issues. This management structure would have the more specific objective of recovering the healthcare system, and the objectives should delineate the state when recovery can be judged complete. The day-to-day management structure continues normal healthcare system operations, with the recovery management structure reporting its progress at regular intervals. Thus is addressed in greater detail in the next lesson.
- Clearly defining roles and responsibilities: Both of the above examples require formal decisions about the management structure for recovery. The decisions must be followed by a clear delineation of the responsibilities transferred to regular day-to-day management and the responsibilities retained by ICS management.

Lesson 3.3.9 Healthcare System Concept of Operations for Emergency Response and Recovery: Recovery Activities

Lesson objectives

- *Explain the purpose of recovery in relation to the continuity of patient care and the other phases of comprehensive emergency management (mitigation, preparedness and response).*
- *Describe the major classes of recovery activities.*
- *Describe the purpose of the Emergency Operations Plan as the primary document for guiding initial recovery related activities, including the application of ICS management process.*

Introduction

The **recovery phase** of comprehensive emergency management (CEM) for healthcare systems follows response and focuses upon returning organizations and community to their baseline levels of functioning. It denotes the time and function period that extends from demobilization until return to either the pre-incident function/capacity or to a defined “new normal.”

Well-executed recovery activities can significantly improve the function of the recovering organization or system compared with its pre-incident condition. Improvements may be related to hazard/risk reduction or elimination (through concomitant mitigation actions). Improvements may also be made in every-day operations of the recovered organization, or in establishing a base for long-term growth. In some cases, recovery must accomplish new building construction, geographic re-location, radical change in methods for conducting business, more stringent security arrangements or other drastic measures. These may create such a change from the “pre-incident state” that it is referred to as “the new normal.”

Aspects of the Recovery Phase include:

- **Starting point for recovery:** The planning for incident recovery begins early in response, as soon as the response management is organized. The demarcation between the response phase and recovery phase is rarely obvious, and so the distinction should be conveyed through public pronouncement. Recovery activities begin well before most response assets are demobilized and grow in importance as response objectives are accomplished. A transition period is therefore recognized: in this text, a stage is included in a response system’s Concept of Operations titled “transition to recovery” described in the preceding lesson. The

The focus of recovery is to return organizations to their baseline levels of function.

In some instances, the endpoint of recovery may be difficult to clearly identify.

ICS-based procedures and processes outlined in the EOP are used for many recovery activities to ensure efficiency and effectiveness. The EOP may therefore be utilized well into the recovery phase as noted below.

- Endpoint to recovery: The point when the recovery phase is complete can be similarly difficult to recognize, so it must be addressed through a formal process. The recovery phase can extend for very prolonged periods of time, even years in some cases. As an example, a community impacted by a large earthquake may require years to recover to its pre-event status. Though the organization may have reverted to its day-to-day organizational structure, components of the EOP can be continued to manage specific residual recovery activities and to objectively define the endpoint of recovery.
- Organizing recovery tasks: Recovery activities are less likely than response to be organized around a distinct 'scene' that inherently provides distinct borders of time, geography and jurisdiction. It is therefore important that these factors be clearly defined by the recovery management process.
- Return to readiness: As noted earlier, for organizations with emergency response roles, the completion of "return to readiness" tasks must be expeditiously completed during recovery.
- Recovery as part of a larger effort: Recovery for an organization is rarely conducted in isolation. Frequently, recovery is impacted by the larger community at the local, State, and Federal levels. Organizational recovery should be coordinated with this larger system, and the community authorities should be notified when the healthcare system is recovered. This may be simple (e.g. an organization officially notifying the jurisdiction that it has achieved baseline status) or complex (e.g. extensive interaction required for allocation of Federal resources in a post-event environment).

It is therefore helpful to consider the Recovery phase in terms of **required functions and activities to return to a pre-incident status with achievable improvements.**

Recovery Planning Documentation

The EM program recovery planning, established during preparedness, is an extension of the EOP. It provides priorities for recovery of mission-critical systems and guidance for actions related to physical and financial

restoration that extends beyond the response phase. A stand-alone recovery plan that is separate from the EOP may therefore not be helpful, given the overlap of the response and recovery phases. Important considerations for the recovery planning are presented here:

- Recovery planning and ICS: Recovery planning should acknowledge the use of ICS structure and process, and assume this is a continuation from effective IMT structure and process in place for response. The EOP, therefore, continues to guide ICS process until remaining recovery activities are transitioned to everyday organizations and operating units.
- Recovery management by objective: The implementation of recovery planning should be guided by both strategic and tactical objectives, using ‘management by (recovery) objective.’ These objectives will necessarily require periodic evaluation and adjustment (and so operational periods and a planning cycle should be established for recovery). The recovery objectives should be achievable and measurable, and provide metrics that indicate when recovery is complete.
- Anticipating transition to recovery: This may best be initiated by incorporating a separate unit into the Incident Plans Section that focuses, from the outset of response, on recovery planning. The unit’s efforts may be termed “recovery action planning.”
- Transition to recovery and action planning: The “transition to recovery” is accomplished by evolving the incident action plan’s objectives for the upcoming operational periods from response objectives to objectives primarily addressing recovery.
 - The beginning of the recovery phase can therefore be defined as the point where the predominant incident objectives have transitioned from response and demobilization issues to recovery.
 - The onset of the recovery phase should not only be consciously determined, but also widely announced in advance. This is a task for the incident management team that is managing the incident response.
 - This transition of objectives may be accompanied by a change in command and general staff, and other personnel assignments for the incident management team to reflect the change in primary objectives. It is important to recognize, however, that the new leaders are still operating within ICS and not simply within their key operating unit or other day-to-day management position. For

The methodology of management by objective should be extended through recovery.

ICS consistent organizational structures may be utilized to manage an organization's recovery.

example:

- If recovery is primarily a financial objective, the healthcare system's finance personnel may assume the manager or operations sections chief role;
 - If recovery is focused upon deconstruction of impacted buildings and rapid reconstruction, administrators in charge of facility engineering and construction may assume the manager or operations chief role.
- Throughout recovery, the need for continued IMT structure and processes is reassessed during management and planning meetings. This should be clearly defined in any formal recovery plan.
 - For recovery from some complex events, the IMT may remain, in a contracted form with a smaller cadre for extended periods. For clarity, it may become known as the "recovery management team."
 - IMT responsibilities will transition, as the complexity of recovery management and the number of recovery tasks recedes, to regular day-to-day key operating unit managers or other management positions within the recovering organization. At some point, the regular administrative structure will reassume management of the healthcare system, but components of the recovery management structure may remain in place to continue managing specific issues.
 - The strategic recovery plan for the incident provides an "endpoint" at which recovery is considered complete. This is defined by the achievement of key recovery objectives.
- Recover and pre-plans: Recovery planning should provide processes and 'pre-plans' (or Standard Operating procedures – SOPs) that guide restoration of services (see activities below for examples of activities to address). Some of these may take the form of 'tools,' such as checklists, that are contained within EOP incident annexes.
 - Recovery and mitigation: The motivation (and therefore the ability) to perform large-scale mitigation such as structural improvements is often greatest immediately after an incident and recovery planning should capitalize on this. Considerations include:

- Re-evaluation of the latest HVA for mitigation activities that had originally been ranked as too cost-prohibitive to implement (e.g. using funds provided for recovery reconstruction to also change design and achieve hazard/risk reduction).
- Identification of unexpected or underestimated hazards and vulnerabilities encountered during the incident that should be addressed in a priority fashion.
- Identification of external sources of funding in the post-event environment (see below-activities)
- Recovery and organizational learning: The link between recovery and organizational learning (or systems improvement) should be well delineated so that important data elements are captured during recovery and used to drive, in a documented fashion, the organizational learning process (see Unit 4).
- Short- and long-term recovery planning: Recovery is both a short-term and potentially a long-term process and the plan should reflect this.
 - Short-term Recovery is necessarily focused on vital services in the organization and 'return-to-readiness' of emergency response capability and capacity. Suggested activities (listed below) to accomplish these key tasks may require prioritization according to the organization's recovery objectives.
 - Long-term recovery focuses on restoring the organization and the community to their normal or pre-disaster condition, or to a 'new normal' state.

Recovery planning actions: a synopsis

Recovery actions may be facilitated by Support Annexes or Incident Annexes (recovery pre-plans or Standard Operating Procedures similar to response pre-plans). Activities that recovery planning should address include:

- Personnel recovery:
 - Completion of activities initiated during demobilization such as out-processing of personnel:
 - Accountability of personnel

An organization should consider specific recovery issues in the Support and Incident Annexes.

- Debriefings as necessary
- Ensuring adequate rehabilitation time and actions for those participating in the response
- Rescheduling as necessary for shift workers
- Documentation of potential exposures (as appropriate)
- Attending to acute and long-term physical and psychological health effects incurred by healthcare system personnel during response (e.g., conducting long-term health surveillance for exposed staff, or providing counseling services).
- Non-personnel resources: Recovery of mission critical systems and return to readiness of response resources.
 - Physical structure recovery:
 - Evaluating, cleaning, repairing damage to the facilities or rebuilding.
 - Rehabilitation of incident facilities, such as cleaning the DECON areas, or returning to normal function the area used to support the Healthcare System Command Post.
 - Recertification of facilities that have received hazard impact (e.g. professional evaluation of a facility in a post-earthquake environment to certify structural integrity for occupation and use, certification that a contaminated area is clean, and others).
 - Equipment and Supply Cache recovery:
 - Replacing or servicing equipment used during response
 - Inventory of supplies and replacement of expended materials
 - Financial recovery:
 - Accounting accurately for all costs incurred as a result of a hazard impact and incident response and recovery. For healthcare systems, this may include:
 - Loss of normal business revenue due to the voluntary suspension of certain services in order to provide incident services (e.g. cancellation of elective procedures or surgeries)
 - Overtime staff costs
 - Loss of durable equipment
 - Structural impact
 - Loss of business due to patients avoiding an 'impacted facility'
 - Others.
 - Application for reimbursement of costs from appropriate

- resources.
- Tracking of costs and reimbursements and impact on regularly budgeted operations.
- Business systems recovery:
 - Re-establishing normal operations
 - Recovery of infrastructure necessary to resume normal operations
 - Notification to community authorities and the public that normal healthcare system operations are resuming, and any changes (location, contact information for re-scheduling, security procedures, and others) that are pertinent
 - Rescheduling of canceled or postponed activities
 - Addressing the backlog of urgent and elective cases in an expedited manner
 - Evaluation of the public's perception of the system's response, with public information interventions as indicated.
- Coordination with external systems: Recovery activities should be coordinated with other healthcare facilities and the community response system. This might include:
 - Notification when baseline operations have been achieved.
 - Sharing particular hazard or vulnerability information that was developed during response and recovery and that may impact other HCFs or the community.
 - Coordinating the application for and for allocation of financial resources (as described above) in an objective and fair manner, as well as other resources (e.g. re-supply of medications from an arriving shipment, or resumption of the normal blood supply for the region).
- Organizational learning/Systems improvement: As noted earlier, the Recovery plan should address the critical activities that initiate the organizational learning process.
 - Recovery efforts should include a thorough evaluation of how the response system performed under stress (see Unit 3 for descriptions of Incident Review and After Action Review).
 - Specific strengths, weaknesses, and strategies to both lessen vulnerability and improve the system's ability to respond to future emergencies and disasters should be captured and tracked.
 - This information is analyzed, formatted and entered into the EM program process for organizational learning (See Unit 4) and should also be noted and considered during the HVA

revision process.

- Community recovery activities:
 - Active participation in planning and implementing initiatives that return the community itself to normal or to the defined 'new normal.' Some of this may be done urgently through the community-wide incident command system structure, and some may be accomplished through more normal business routes of administration as the community undertakes reconstruction.

Module 3.4

Healthcare System Emergency Operations Plan: Support and Incident Specific Annexes

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Lesson 3.4.1 Healthcare System Emergency Operations Plan: Support Annexes

Lesson objectives

- *Describe the purpose and construct of EOP Support Annexes for healthcare systems.*
- *List key examples of support annexes that are beneficial to healthcare systems.*
- *Describe the important response and recovery procedures that ensure continuity planning for the healthcare system.*
- *List worker safety considerations for healthcare system emergency response and recovery.*

Introduction

The final components of the EOP that must be discussed in detail are the Support Annexes and the Incident Annexes. Both are very important to the overall EM program as well as response and recovery, since they provide the mechanism for capturing details developed during preparedness and formatting the information in a way that it is useful during response and recovery.

The EOP Support Annexes describe common support processes and administrative requirements applicable to all response and recovery functions and that support successful implementation of the EOP. The concepts covered in the support annex vary from organization to organization, and all are not necessarily applicable to every incident. The common principle uniting these concepts is that they apply to functions across the EOP, though the primary responsibility may rest with one function or section within the activated ICS construct.

The support annexes each have implications for the entire organization but many commonly assign specific responsibilities to defined positions. To provide clarity and ease of use for each support process or administrative requirement in this annex, a standardized template may be helpful, with defined purpose, roles, and responsibilities presented in a uniform fashion. A suggested template, adapted for healthcare systems from the Federal health-related support annexes in the National Response Plan,^{59,60} is presented below:

⁵⁹ DHS. National Response Plan Support Annexes. Available at http://www.dhs.gov/interweb/assetlibrary/NRP_FullText.pdf, accessed January 3, 2006.

⁶⁰ OSHA: Worker Safety and Health Support Annex. U.S. Department of Labor Occupational Safety and Health Administration (December 2004). Available at

Support Annexes provide incident response guidance that is relevant across multiple functions in the organization.

Standardizing the format of Support Annexes can facilitate their use during response.

- Title of Support Process or Administrative requirement: A brief title should accurately reflect the focus of the support document.
- Purpose: A brief description of the purpose of the annex should be listed. This is typically achieved by describing the issue that the annex is designed to address and its relationship to successful EOP implementation.
- Scope: This summarizes (often in bulleted format) the key requirements and processes contained in the document. It should clearly delineate situations in which the process or administrative guidance is or is not applicable.
- Policies: Any applicable policies, regulations, or other authoritative basis for the support annex should be listed.
- Concept of Operations: In a succinct format, this section should present organization of personnel and their roles (system description). Specific functional or positional responsibilities should be described for the indicated process or administrative procedure. In addition, the process' pertinent mobilization, implementation, incident operation, demobilization, and recovery actions are described specific to each stage of emergency response and recovery. This conveys a clear understanding of how the process is executed or how the pertinent regulation is applied. Many Federal and other documents list this by the categories "initial actions, ongoing actions, and demobilization actions,"⁶¹ but a more stage-specific description is recommended in this text (see Unit 2).
- Responsible Parties: Administrative positions or other entities responsible for managing and supporting this annex are listed.
- Attachments: If there are forms or other tools applicable to the support annex document, they may serve as attachments.⁶²

http://www.osha.gov/SLTC/emergencypreparedness/nrp_work_sh_annex.html, accessed January 3, 2006.

⁶¹ DHS. Logistics Management Support Annex, National Response Plan (December 2004). Department of Homeland Security/Emergency Preparedness & Response/Federal Emergency Management Agency. Available at http://www1.va.gov/EMSHG/docs/national_response_plan/files/Logistics.pdf, accessed January 3, 2006.

⁶² DHS. Financial Management Support Annex, National Response Plan (December 2004) U.S. Department of Homeland Security/ Emergency/ Preparedness and Response/Federal Emergency Management Agency. Available at http://www.dhs.gov/interweb/assetlibrary/NRP_FullText.pdf, accessed January 3, 2006.

Multiple topics should be addressed through support annexes. To illustrate the range of topics, Textbox 3.4.1.1 presents the titles of support annexes for the National Response Plan (NRP).

Textbox 3.4.1.1

National Response Plan (NRP) Support Annex Documents⁶³

- Worker Safety and Health Support Annex
- Financial Management
- International Coordination
- Logistics Management Support Annex
- Private-Sector Coordination
- Public Affairs
- Science and Technology
- Tribal relations
- Volunteers and Donations Management

Healthcare System EOP Support Annexes

Specific examples of support annexes that could be beneficial for healthcare systems to develop are included below:

- Continuity planning processes: The core principles and requirements for continuity planning have been outlined in unit 1. After reviewing these, it becomes evident that much of this is addressed by the EOP Base Plan and Functional Annexes. For example, the first three elements of COOP as described by FPC #65 (plans and procedures, essential functions, and delegations of authority) are addressed through the adequate development, implementation, and use of an EOP Base Plan. Specific components of continuity planning, however, may require further description and detail and these would most appropriately be established as support annexes. These could include:
 - Order of succession: This annex should include a listing of the order of succession to senior management posts within the organization, such that critical management positions are covered when individuals normally assigned to these positions are

Many of the activities in the Base Plan address continuity planning issues, but Support Annexes should be established that specifically address mission critical systems and their vulnerabilities.

⁶³ DHS. National Response Plan Support Annexes. Available at http://www.dhs.gov/interweb/assetlibrary/NRP_FullText.pdf, accessed January 3, 2006.

unavailable to serve in their intended roles. Orders of succession should delineate whether they are applicable to regular management structures or only to emergency response and recovery responsibilities.

- Alternate facilities: A list of critical facilities that need to be maintained, as well as their specific locations, should be outlined. It may be beneficial to also list the support requirements that must be available to the alternate facilities (e.g., electrical power with emergency back-up, information technology infrastructure, air conditioning, telephone access, etc.). Specific guidance for facility evacuation and other considerations are more appropriately listed as a separate support annex (see below). Examples of other facilities for healthcare organizations to consider include not only clinical care areas but also Healthcare System Command Posts, Patient Family Assistance Areas, and personnel rehabilitation areas.
- Defining essential services: Specific services the healthcare organization provides should be identified and prioritized for emergency response and recovery circumstances where managed/engineered degradation is indicated (see Lesson 3.5.2). The necessary support to maintain these essential services should be established. The VHA presents the following essential services list to prioritize its continuity planning (see Textbox 3.4.1.2).

Textbox 3.4.1.2

Essential Services Listed in VHA COOP⁶⁴

- Provide healthcare services.
- Ensure the safety of patients, staff, and visitors.
- Protect legal and financial records.
- Maintain documentation necessary for reconstitution.
- Support requests for assistance by the community.

- Protection of essential assets: Assets such as certain types of equipment, vital business and patient records, and other assets may require specific actions. Healthcare systems should have

⁶⁴ *Emergency Management Program Guidebook*, Department of Veterans Affairs, Washington, D.C., available at: <http://www1.va.gov/emshg/page.cfm?pg=114>, accessed June 6, 2006.

detailed, reliable procedures for preservation of these assets in the face of any hazard type. This generally requires a records back-up system that maintains a secondary location offsite, usually through electronic methods.

- Prioritization for reconstituting normal operations: Everyday organizational operations that provide essential outputs should be listed and their priority indicated so that recovery planning can proceed in an organized, pre-established manner as the response objectives are met.
- Worker Safety and Health Support Annex: Given the importance of worker safety and health and its direct relation to organizational response objectives, it is advisable for healthcare systems to develop a support annex. This document should provide detailed guidance for rendering medical care to affected workers during incident response. The annex contains more detail than that outlined in the Safety Officer Position Description and Concept of Operations (i.e., the Safety Officer input into the Healthcare System Action Plan). **The annex should explain how to access medical care in a manner that is understandable to all healthcare system personnel, since the site of personnel who become injured or ill during response may not be the primary site of incident action.** It should address issues such as:
 - Applicable regulations: The attachment section may provide outlines of applicable regulations, such as those established by OSHA or others, and the necessary forms for documentation and claims submission.
 - Variances from regular occupational health procedures: Any variance from regular procedures should be carefully detailed in this annex. For example, variances in how to document injury or illness, in how to access medical care if the occupational health clinic is closed (without having to get into the queue with incident patients), and how to arrange follow-up care and claims submission.
 - Worker health risk exposures: Given the unusual hazards that may occur during incident response, guidance for handling actual or potential exposures should be provided for specific hazards. These include needle and sharps injuries, infectious disease exposure, radiation, and chemical exposure. While some of these exposures require specific antidotes, prophylactic medications and immunizations (see below), or directed lab evaluation, the majority require a generic approach to decontamination and

documentation of exposure details for later follow-up and long-term monitoring (see next bullet). These contingency measures should be clearly stated so that health interventions are provided to the affected personnel and the response is minimally impacted.

- Medical surveillance and monitoring: Specific processes for enrolling personnel in long-term surveillance monitoring (psychological as well as physical) could be described. This annex should include an attached form or other instrument that prompts collection of accurate exposure information and formally documents the collected information.
- Personal Protective Equipment (PPE): This annex may be the most appropriate place for general “universal precautions” protocols for unusual hazard agents, along with descriptions of the available personal protective equipment (PPE). Limitations of the equipment and preparatory requirements for using the equipment could be listed as well, for refresher (not primary training) purposes.
- Mental health: This annex could be used to describe protocols for intervention (as warranted) in workers suffering unusual as well as pathological mental health consequences from incident response.
- Immunization and prophylaxis: This support annex could include decision-support tools for worker immunization and prophylaxis, methods for delivering these interventions, and other relevant guidance.
- Occupant Emergency Procedures: These are procedures that must be emergently and immediately executed in response to life safety threats to protect personnel, patients, and the facility. Since the activities may be complex, they are presented in a support annex that integrates emergent safety procedures across the EOP. Examples of events where these procedures would apply include:
 - Facility impact requiring evacuation or shelter in place (see example below).
 - Internal Hazardous Materials release within the facility.

An abbreviated example of a support annex for facility evacuation is presented below.

Example Support Annex: Facility Evacuation/Shelter-in-Place

- **Purpose:** To provide guidance to healthcare system personnel to allow orderly and safe evacuation or shelter-in-place for the facility.
- **Scope:** This support annex is designed to be utilized when appropriate personnel (see below) determine that the facility must be evacuated, or if the facility's fire alarm system has been activated. It is intended to be applicable to events in which immediate and rapid evacuation must take place, as well as situations in which a more delayed evacuation may occur. This annex is consistent with material presented in other support annexes. This support annex complies with pertinent regulatory guidance, including U.S. Code 29 CFR Part 1910.38 (OSHA)⁶⁵ and U.S. Code 41 CFR Part 101–20.103–4 Occupant Emergency Program (GSA).⁶⁶
- **Concept of Operations:** Specific responsibilities should be delineated according to functions and positions. As noted above, pre-constructed organizational charts (based on ICS) may be useful for delineating considerations for how the response should be structured. For these procedures, responsibilities for delineation can include:
 - Addressing hazard impact on facility
 - Staff, visitor, patient evacuation
 - Staff, visitor, patient accountability
 - Coordination with external organizations
 - Essential equipment recovery
 - Vital records recovery
 - Shut down of equipment, medical gases, and other infrastructure

Facility evacuations can be both rapid or can occur over a protracted period.

⁶⁵ Any annex should fully comply with these regulations: U.S. Code 29 CFR Part 1910.38 Emergency Action Plans. A useful explanation is provided by OSHA at: <http://www.osha.gov/SLTC/etools/evacuation/eap.html>, accessed February 14, 2006.

⁶⁶ The annex should also comply with General Services Administration Occupant Emergency Program in the cited regulation, available at: <http://64.233.161.104/search?q=cache:j2ZOdD9QdkJ:www.usdoj.gov/jmd/ps/epr/tab6.pdf+%22GSA%22+%C2%A7+101%E2%80%9320.103%E2%80%934+Occupant+Emergency+Program&hl=en&gl=us&ct=clnk&cd=5>, accessed June 3, 2006.

A critical responsibility is the determination of when the facility should be evacuated. Persons responsible and decision making processes should be included in the Support Annex.

as appropriate.

The assignment of these responsibilities should be consistent with the Base Plan construct. For instance, it is intuitive that most of the activities listed above would be considered a part of the Operations Section for annex activation.

The Concept of Operations for this annex should include the procedures that guide personnel to achieving their assigned responsibilities. Consideration should be given to the fact that electricity may not be working during an evacuation and job aids as well as other tools should be located on hard copy in convenient-to-access locations:

- Incident Recognition: The decision to evacuate the facility can in some instances be made deliberately over a period of time or, in other instances, must be rapidly accomplished with little time for deliberation. Multiple evacuation strategies are possible (see Textbox 3.4.1.3). For example, during a large fire, decisions must be made quickly. When there has been severe infrastructure impact but the structure is still safe, a decision may be made over a period of hours (e.g., post hurricane impact). In some rare instances, the decision point for evacuation of the facility may actually be during the pre-impact phase. The authority for this decision must be clearly assigned to appropriate position(s). In delineating this decision-making authority, it should be recognized that agencies external to the healthcare facility may have superseding authority to order an evacuation (e.g., fire departments and public health authorities can mandate a facility evacuation in certain extreme circumstances in many jurisdictions). In the development of this annex, it is advisable to engage community response organizations to establish how these decisions will be made prospectively.

Textbox 3.4.1.3

Types of Facility Evacuation Response

- Partial evacuation: In many instances, only specific areas within the facility require evacuation. This may be “horizontal evacuation,” where patients and staff are moved to safer areas on the same floor, or “vertical evacuation,” where patients and personnel are moved between floors. The differentiation is made due to the major impediment of moving patients between floors, particularly without the use of elevators.

- Full standard evacuation: In this instance, the entire facility is evacuated in a standard fashion in response to fires and similar hazards.
- Full guided evacuation: Procedures should also be developed for a full guided evacuation, where the facility is evacuated through incident-specific routes to keep staff and patients away from special hazards (suspected explosive device, armed intruders, a chemically contaminated area, and others).
- Shelter-in-place: In response to some hazard threats and/or impact, the most advisable course of action can be to shelter in place, including moving to an internal “refuge area.”⁶⁷ Procedures to rapidly implement this action should be delineated.

- Notification/Activation: As the notification and activation of the emergency evacuation procedures may vary significantly from the regular EOP, these procedures should be well delineated. More importantly, the competencies for “all personnel” should stipulate an operational level of proficiency for all personnel to understand how they will be notified of a facility evacuation. The methodology for making this announcement should be reliable, with permeation to all areas of the facility, and should have back-up mechanisms in place (this may entail reliance on runners). In addition, an initial notification should also be made to the community as well as to other healthcare facilities in the jurisdiction/region. This will help in obtaining transfer locations for patients as well as provide other forms of assistance in a rapid timeframe.
- Mobilization: The mobilization for a rapid evacuation will be relatively quick and simple. For evacuations that allow for some pre-planning, mobilization may allow for some more deliberate decision making to adequately address some of the issues listed under Incident Operations.
- Incident Operations:
 - Specific procedures that vary from the Base Plan should be outlined. These could include:

Immediate evacuation of areas where patient procedures are being conducted should have pre-established protocols. Legal and ethical review of these protocols is necessary.

⁶⁷ From U.S. Code 29 CFR Part 1910.38 Emergency Action Plans (OSHA) available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9726, last accessed February 14, 2006.

Rally points serve as a temporary staging point for staff and patients prior to further movement to a more definitive location. Accountability is addressed before further movement.

- Procedures specific to given geographic areas. For instance, some areas may require the shut down of certain equipment before evacuation. Most importantly, specific consideration should be given to areas where patient procedures are conducted. For instance, Operating Rooms and Cardiac Catheterization Labs should have policies in place that facilitate decision making during an emergency (thus obviating independent action and protecting employees). What specific parameters would indicate an immediate evacuation? The decision process should be reviewed by facility ethicists and legal counsel prior to inclusion in the annex.
- Patient evacuation procedures should be clearly delineated. This should include a methodology for prioritizing patients (who is evacuated first for both rapid and delayed evacuations – the methodology may vary for the two types of incidents). In addition, how the patients are evacuated (walk, carried, use of specific equipment) should be delineated.
- Critical equipment that should be evacuated with patients should be delineated. This will vary by geographic area and whether the evacuation is emergent or is conducted over time.
- Similarly, patient records to be taken with the patient will vary depending on whether the evacuation is emergent or not. This necessitates adequate continuity planning to consider having these records available in some format offsite. In addition, procedures for keeping the records with the patient during evacuation should be addressed.
- Routes of evacuation, which will also vary by geographic area, should be well described with alternatives listed. This will require coordination among different areas to prevent “bottleneck” phenomena from occurring. In instances in which facility infrastructure is not impacted, elevators may be reserved for non-ambulatory patients while ambulatory patients may be assisted down stairs.
- Rally points for different geographic areas (with alternates) should be clearly delineated and provided in a map as an attachment to this support annex. These locations may differ from ultimate destination and are meant to merely provide a chance for accountability prior to moving to a

more definitive evacuation location.

- Accountability procedures for all patients, staff, and visitors should be addressed. This can be challenging and should include accountability for patient families, residents, medical students, private physicians, administrators, housekeeping staff, as well as many others. Some facilities have utilized methods in which doors to rooms are visibly marked after they have been cleared of all persons.
- Alternate sites for staff and patients should be established. This may include the use of adjacent facilities or outdoor areas. Weather conditions are an important consideration for staging patients and staff outdoors.
- Procedures for coordinating with community assets (private and public sector) should be established in advance. For example, how will patient transportation occur if this becomes necessary?
- Final destinations for patients may require the activation of jurisdictional, regional, or State mutual aid systems. These procedures should be established in advance with the appropriate authorities. Issues such as the transfer of responsibility of caring for patients, third-party payer coverage, and others should be included.
- In specific instances, some personnel may be designated to stay behind in the facility. Specific guidelines for when they, too, should leave are important to have developed and clearly communicated.
- Announcements to the general public (usually through the media) should be developed to clearly communicate the status of the facility, its personnel, and patients. This can be helpful to prevent self-referral of patients who are unaware of events at the facility.
- Announcements to patient emergency contacts can be made in several manners. For instance, direct contact can be made or, alternatively, a call center could be established.
- Demobilization: Specific procedures for demobilization will often be difficult to ascertain, since the duration of evacuation from the facility can vary. The restoration actions necessary to resume

normal healthcare services can also vary over a very wide range, from very little action to complete hospital rebuilding.

- Transition to recovery: Recovery in this situation is the restoration of the healthcare facility so that patients and staff may return and resume normal healthcare services. This will require a complex series of actions
- Recovery: The facility must be restored to a fully functional status, patients and staff returned and backlogs addressed. The public must be made aware of the resumption of healthcare services, public confidence must be restored, and levels of patient activity should return to at least the pre-incident level. Special attention should also be given to the financial considerations for the facility, including pursuit of potential avenues for financial assistance. The value of having pre-plans for restoring mission critical services and assets, having a list of priorities for recovery actions, and other guidance becomes clear.
- Attachments: Some attachments may serve as helpful tools for this annex. Examples include:
 - Evacuation maps
 - Rally point maps
 - Locations of specific equipment (e.g., flashlights, evacuation equipment, such as stair chairs).

Lesson 3.4.2 Healthcare System Emergency Operations Plan: Incident Annexes

Lesson objectives

- Describe the purpose of an EOP incident annex for a healthcare system.
- Describe the template for an EOP Incident Annex.
- List examples of specific incidents for consideration in incident annexes.

Introduction

While the support annexes provide guidance that crosses most functions in the EOP, **the incident annexes are concise guides for response and recovery considerations for specific hazards and/or incident situations.**

The priority hazards and incident situations that are addressed are based upon the findings in the HVA. The guidance, however, prompts actions that would be accomplished within the all-hazard response context delineated in the EOP Base Plan and functional annexes, so **they do not constitute separate, stand-alone plans for each hazard type.** At the same time, the annexes may contain “pre-plans” or “standard operating procedures” (SOPs)⁶⁸ that present organizational charts, lists of planning considerations specific to a particular hazard, operating procedures for assets only used for that hazard type, triage or patient care protocols, and other information that could be useful for planning and executing actions that are specific to only certain hazard responses. To be maximally useful during response, the incident annexes should focus on emergency response and recovery actions (see suggested format below), while preparedness for each hazard type is contained in separate documents.

Each incident annex may contain its own unique **response assumptions** (see Lesson 3.1.1) that must be evaluated at the incident outset. The selection of hazard types for inclusion in the incident annexes should be based upon the HVA process (see Unit 1) conducted by the healthcare system. Examples include:

Incident Annexes provide material that builds upon the Base Plan for response to specific events.

⁶⁸ A term used by VHA and other organizations, based upon terminology in: FEMA. *State and Local Guide (SLG) 101: Guide for All-Hazard Emergency Operations Planning*, available at: <http://www.fema.gov/plan/gaheop.shtm>, accessed April 30, 2006.

- Hazardous materials incident annex: This incident annex should address situations with patients contaminated by chemicals, biologicals (e.g., powder), or radioactive substances that present a threat to the patient and personnel within the healthcare system.⁶⁹ The annex actions are intended to remove or render harmless the contaminants prior to patient entry into the healthcare facility. The stated primary objectives for this annex are the protection of the healthcare facility, the staff, and other patients, and limiting the exposure injury to the contaminated patient. Utilizing ICS principles outlined in the Base Plan, personnel, and other resources should be appropriately organized (e.g., a decontamination [strike] team). Major activities described in the annex include:
 - Decision support tool for whether patient decontamination is necessary.
 - Ability to isolate patients prior to patient decontamination.
 - Special triage considerations for contaminated patients.
 - Management of patient belongings (presumably contaminated) and chain of evidence protocols (in the event a patient is a perpetrator).
 - Operational procedures for the decontamination facility (mobilization, use, demobilization, cleanup, and return-to-readiness).
 - PPE considerations (use, limitations, etc.).
 - Decontamination process for patients (both ambulatory/self-decontamination and non-ambulatory/assisted decontamination procedures).
 - Contingency considerations (e.g., for a patient acutely decompensating during the decontamination process, for provider exposure, and for contaminated patient entry into the healthcare facility prior to decontamination).
 - Protocols or procedures for unusual medical interventions (prolonged eye irrigation, the use of topical anesthetics to assist patients through the decontamination process, and other considerations).

⁶⁹ Macintyre, A; Barbera, J; Christopher, G.; et al. *Weapons of Mass Destruction Events with Contaminated Casualties*. JAMA Vol. 283, No. 2, January 12, 2000: 242-249.

- Post-incident medical surveillance of providers (both those in PPE and those not in PPE).
- Unique considerations related to coordination with jurisdiction or other relevant external entities.
- Resources (informational) that may be accessed for expert advice during incident response.
- Biologic diseases of concern annex: Similarly, this annex could provide specific considerations that build upon the Base Plan. As an example, individuals from infectious disease may serve as senior advisors to the Healthcare System Command/ Management staff. This annex would have to necessarily address both contagious and non-contagious biological disease.
- Special security annex: This annex might contain several pre-plans related to the following types of events:
 - High-level protectee: Persons requiring unusual security protection while receiving medical care at the healthcare facility.
 - Infant abduction: Neonates taken from the healthcare facility's nursery.
 - Civil unrest: Procedures for protecting the facility when there is civil unrest in the immediate proximity.
- Business and reputational crisis: Certain situations may pose a risk to the administrative or business side of healthcare system operations and require coordinated management similar to the more commonly considered emergency hazards. Guidance for managing public relations crises, major regulatory or medical-legal difficulties (such as an adverse medical outcome in a celebrity), and similar rapidly evolving, complex scenarios can be invaluable to the healthcare system response and survival.

Incident Annex Format

The format for incident annexes is similar to that used for the support annexes as described above, but is as concise as possible: Title, Purpose, Scope, Policies, Concept of Operations, Responsible Parties, and Attachments.

Emergency Management Academy

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