

Emergency Management Principles and Practices for Health Care Systems

Unit 2:
Incident Command System
(ICS) and the Application of
Strategic ICS Principles

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 2.

Incident Command System (ICS) and the Application of Strategic ICS Principles

Unit Summary

This unit presents basic Incident Command System (ICS) principles and their application to the healthcare system setting, and extrapolates beyond the tactical scene to strategic levels, including all echelons that manage incident-related health and medical issues. An understanding of basic ICS and the National Incident Management System (NIMS) is a prerequisite for this chapter- ICS 100, 200, and 700. Using the model presented in Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, the unit presents a tiered description of management during large-scale or complex health and medical response, and demonstrates how incident management processes achieve integration within and across the levels of government and the private sector organizations. This approach has been adopted by the National Bioterrorism Hospital Preparedness Program (Health Resources and Services Administration/HHS) guidance for 2006.

Module 2.1

Introduction to the Incident Command System

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Lesson 2.1.1 Overview, Concepts, and Principles: An ICS System Description

Lesson Objectives

- *Describe the rationale for using the Incident Command System (ICS) for events that could exceed the effectiveness of everyday management methodology.*
- *List the concepts upon which ICS is based.*
- *Explain an ICS system description and concept of operations.*
- *Explain how ICS organizational elements may be modified to promote flexible adaptation of response to the scale and type of incident.*

Introduction

Traditional health and medical training for emergency response focuses upon medical knowledge and healthcare skills. This emphasis addresses operational (tactical) knowledge and skills required by individuals to respond. For example, recognizing and confirming the diagnosis of unusual disease, performing standard triage, practicing patient decontamination, and providing trauma care under surge conditions are commonly addressed, whereas practicing protective actions for personnel and mission critical systems, assuring effective incident management process, establishing very close coordination among local hospitals, and performing other non-clinical and management functions receive less attention.

It is equally important to develop an operational level of proficiency with **the management system within which these tactical knowledge and skills are applied under emergency or disaster conditions.** This management system will deviate significantly from that used to manage everyday healthcare system practice. In fact, **the potential need to transition from day-to-day management to ICS as the management method is a common trigger for activating the organization's emergency operations plan.**

- Management objective: In emergency or disaster response, the primary objective of a management system should be to organize and coordinate disparate response assets to effectively address the incident issues, while at the same time minimizing risks (physical, psychological, financial, and others) to responders and victims. This was a primary motivation for the development of the original Incident Command System (ICS) for wildland firefighting in the 1970s.
- Incident Command System as the management method: Incident

ICS addresses traditional challenges for Healthcare Systems, such as effective management of incident information.

Common terminology for the management of Healthcare System response has, until recently, been poorly defined.

Command System (ICS) refers to the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure and designed to aid in the management of resources during incident response.¹ A hierarchical organizational structure establishes individual responsibility, lines of authority, effective span of control of resources, and defined paths for information flow. These have all been traditional challenges for healthcare systems during emergency and disaster response.

ICS Principles

ICS incorporates eight concepts that contribute to the successful application of this management system:

- Common terminology: The use of similar terms and definitions for resource descriptions, organizational functions, and incident facilities across disciplines.
- Integrated communications: The ability to send and receive information within an organization, as well as externally to other disciplines.
- Modular organization: Response resources are organized according to their responsibilities during the incident. Assets within each functional unit may be expanded or contracted based on the requirements of the event.
- Unified command structure: Multiple disciplines and response organizations work through their designated managers within ICS to establish common objectives and strategies that prevent conflict and duplication of effort.
- Manageable span of control: The response organization is structured so that each supervisory level oversees an appropriate number of assets (the number varies based on size and complexity of the event) such that effective supervision is maintained. Traditional ICS defines this as supervising no more than 3-7 entities. This quantitative measure, however, may be less important than a realistic assessment of the management tasks for that position, and assuring that they are attainable **under incident circumstances**.

¹ NIMS, Appendix A: The Incident Command System, p. 63; available at: <http://www.fema.gov/emergency/nims/index.shtml>, accessed April 13, 2006.

- **Consolidated incident action plans:** A single, formal documentation of incident goals, objectives, strategies, and major assignments that are defined by the incident commander or by unified command.
- **Comprehensive resource management:** System processes are in place to describe, maintain, identify, request, and track all resources within the system during an incident.
- **Pre-designated incident facilities:** Assignment of locations where expected critical incident-related functions will occur. These must have adequate space and technical support for the assigned function.

The above concepts translate into specific and tangible ICS benefits during emergency response that include:

- Common objectives and priorities
- Organization and coordination across the incident response
- Enhanced collective security
- Increased information sharing
- Optimal responder and public understanding of incident actions, their individual and collective responsibilities, and other critical information.

This occurs because the ICS structure and functions are specifically designed to address not just the **hazard-generated demands** created by the hazard agent and its impact, but also to address the **response-generated demands** created by a large or disparate collection of personnel and/or organizations responding to the incident (see Textbox 2.1.1.1 and Exhibit 2.1.1.1).

Textbox 2.1.1.1

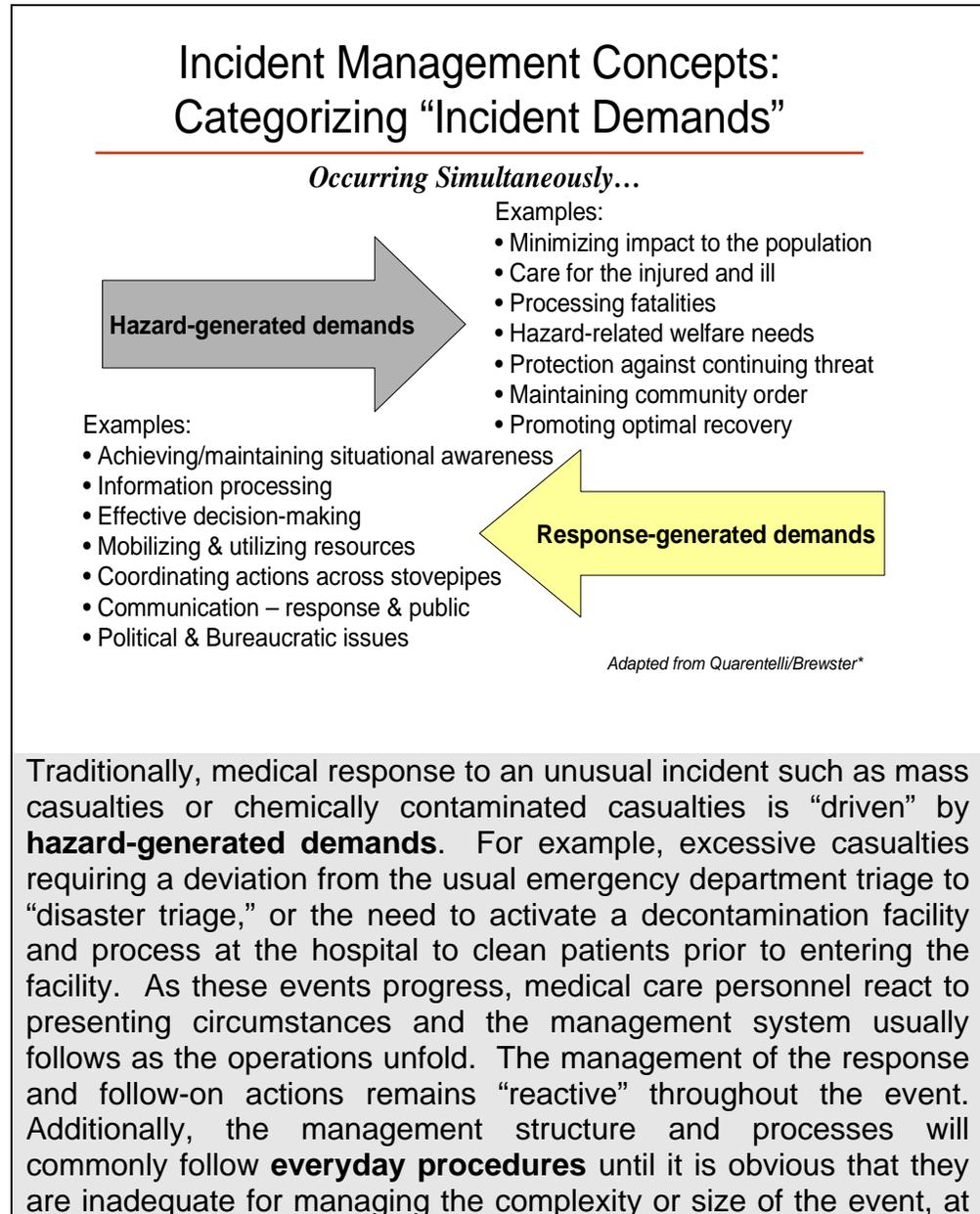
Categorizing Incident Response Needs

The “tasks” necessary to effectively manage a large, complex, or very unusual medical incident may be separated into two distinct categories, an observation first presented by the disaster researcher Quarantelli (see Exhibit 2.1.1.1).

ICS highlights the importance of documenting and sharing organizational structure, objectives, strategies, and tactics through “Action Plans.” This has tremendous value to Healthcare Systems during emergency response.

The response to any hazard impact can itself create demands that need to be addressed. For example, information processing amongst responders requires specific processes and procedures regardless of hazard type.

Exhibit 2.1.1.1: Demands encountered in Incident Response by categories of Hazard versus Response generated.²



² Adapted from:

- Quarentelli, EL. Major criteria for judging disaster planning and managing and their applicability in developing societies (1998). Disaster Research Center, University of Delaware; Newark, Delaware. Available at: <http://www.udel.edu/DRC/preliminary/268.pdf>; accessed June 1, 2006.
- Brewster, P. Standards of practice for delivering emergency health and medical services. Presented June 25, 2003 at the Working Group meeting for the project: Medical Surge Capacity, The CNA Corporation, Arlington, Virginia.

which point a transition to more effective management is late. Hazard-generated demands vary greatly from incident to incident.

Response-generated demands, on the other hand, are created when the size and complexity of the response exceed the usual management capacity of the involved organizations. These issues are predictable and very similar across all incidents. Without effectively meeting these demands, the responders are unlikely to adequately meet the original hazard-generated demands in a timely and efficient manner. It is notable that the “failures” noted in most after-actions reports are directly related to the suboptimal management of response-generated demands. While the specific details vary from incident-to-incident, response-generated demands may be addressed with standardized processes. The mechanisms for accomplishing this have been delineated within ICS, and therefore the structure and processes may be implemented before the need is apparent. This allows prompt, “proactive” management of these issues.

- **ICS – “Command” versus “Management”:** One of the significant issues that non-fire service disciplines have with “incident command” is whether the term mandates a “command” relationship between successive levels of the incident command system. This approach is especially problematic for disciplines such as medicine and public health, where command authority does not exist in any comprehensive fashion, and where the culture of the discipline is more conducive to “management” rather than “command.” Upon careful analysis, the following considerations provide insight into this issue:
 - **“Command” application:** At the scene-level of a fast-moving, dangerous, and/or life-threatening incident, “command” is commonly the most appropriate terminology, with precise orders coordinating the assets under direct supervision of incident commanders. Analogy to this in everyday medical experience is found in trauma resuscitations or in “running a code.” As with the examples, “command” can be applied within a tactical scene where relatively direct oversight is provided by the command element being personally present.
 - **“Management” application:** As the “scene” expands, or as levels of response develop beyond a physically defined “scene,” management rather than command is more commonly applied. This can be effectively accomplished through the following steps:
 - Assets are assigned to a position within the ICS according to the tasks they are to accomplish. They report to the

supervisory position immediately above them.

- The assigned resources are given objectives to achieve and parameters within which to operate (overall strategy and priorities, geographic area of operation, and tactics).
- Within these parameters, the assigned assets manage their individual assignments.
- Specific reporting requirements are used to maintain adequate situational awareness for the incident command staff.
- Management doctrine and ICS: Analytical review of ICS publications and guidance reflect these management concepts within the doctrine of ICS. Examples include:
 - ICS is referred to as “Incident Management” by the U.S. Coast Guard.³
 - The Standardized Emergency Management System (SEMS) that regulates major incident response in California (and is described later in this unit) refers to “management” beyond the incident scene.⁴
 - NIMS speaks specifically to this issue:

Chapter II - A. Incident Command System.

The ICS is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to enable effective and efficient domestic incident management.”⁵ At the same time, this chapter uses “command” in reference to authority rather than specific management style.

³ U.S. Coast Guard *Incident Management Handbook*, U.S. Coast Guard COMDTPUB P3120.17, April 11, 2001. Available at <http://www.uscg.mil/hq/nswfweb/download/IMH/IMH-2001.pdf> , accessed November 13, 2005.

⁴ CA OES, Standardized Emergency Management System (SEMS) Guidelines at: <http://www.oes.ca.gov/Operational/OESHome.nsf/Content/B49435352108954488256C2A0071E038?OpenDocument>, last accessed June 25, 2005.

⁵ From National Incident Management System (March 2003), Chapter II NIMS - Command and Management. Available at: http://www.fema.gov/txt/nims/nims_doc2.txt, accessed January 12, 2006. The text underlines are author-added highlights.

ICS System Description: The Organizational Structure

- **Consistent organization:** The advantage of using ICS is that the steps and processes for organizing the management of an incident are consistent and reproducible across all types of incidents. Assets are organized using a consistent logic that groups tasks with similar objectives and assigns assets into these functions. This represents a “systems description” for ICS.
- **Functional alignment of assets:** ICS organizes all response assets into five sections, or functional areas: Management, Operations, Planning, Logistics, and Finance/Administration. Exhibit 2.1.1.2 highlights the five sections and their primary functional roles.
 - **Grouping by function:** In developing the ICS organizational structure, responsibilities and tasks necessary for accomplishing incident objectives are listed and grouped according to similarity of purpose, and then further placed under one of the five ICS sections according to each position’s functions.
 - **Scalable to incident needs:** The sections are expanded and contracted with additional positions that are organized through branches or other organizational elements according to incident needs. As ICS explains, not all functions or positions are staffed individually in all incidents. Staffing decisions are based upon the size, nature, and complexity of the incident. **In events where no individual is assigned to a position, the responsibility for accomplishing the function or task is assumed by the immediate supervisory position.**
 - **Assigning authority and responsibility:** ICS effectiveness and efficiency is achieved by its processes that **appropriately distribute authority and responsibility** for specific incident tasks, while maintaining management and coordination through the issuance of operational parameters (objectives, strategies, and tactics). Disciplined reporting by response elements, with the Plans Section processing the reported data into immediately useful knowledge, enhances this process. ICS management can therefore maintain adequate situational awareness and conduct an informed decision-making process, without directly controlling every action.
 - **ICS and its relationship to jurisdictional response:** The point of reference for ICS is the system’s local jurisdiction. Based

The ICS System Description organizes response personnel into 5 functions: Command, Operations, Plans, Logistics, and Finance/Administration.

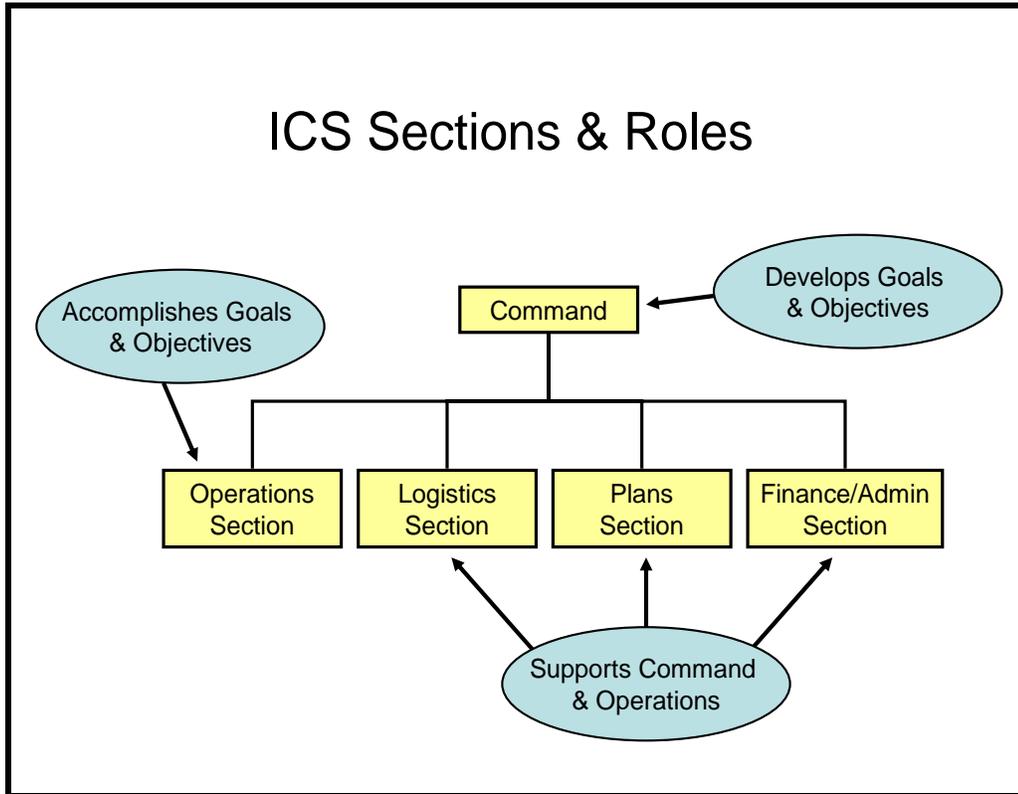
Not every position or function needs to be staffed during responses to each event. When personnel are not assigned, the responsibilities for that unassigned position or function revert to the immediate supervisor.

upon the concept of Federalism and a longstanding U.S. tradition, the authority for managing any event that extends beyond a single organization usually rests with the local community.⁶ Therefore, the “Incident Commander” for any incident that is larger than the healthcare system location is typically a jurisdictional authority. For healthcare systems, this becomes relevant to the use of ICS terminology. Qualifiers should be added to designate healthcare system positions and documents, such as “Hospital X Incident Commander,” to prevent confusion and conflict when integrating with jurisdictional response. Another example would be the use of “Hospital Y Operational Action Plan” to distinguish a healthcare system’s response document from the jurisdiction’s Incident Action Plan.

- Line authority: While this is clearly delineated in most fire department and law enforcement organizations, it is less clear across disciplines and organizations within a jurisdiction. It becomes even less clear when incident management involves private sector resources without a clearly defined contractual relationship. This is important to address during preparedness planning.

⁶ This authority may be abdicated to a higher authority (e.g. to a State, or by a State to the federal government). In some incidents (including some public health emergencies) this local authority may be superseded by State authority, through State law or regulation, or by federal authority because of the threat of inter-State spread of diseases.

Exhibit 2.1.1.2: ICS Sections and their primary functional roles.



An easy way to conceptualize the ICS Systems Description is to think of the Operations Section as dedicated to accomplishing organizational goals and objectives. The other three sections support Command and Operations.

- **Command:** Provides overall direction of the response by establishing response objectives for the system. This functional area includes specific “Command Staff” positions with responsibilities critical to effective incident management.
 - **Incident Commander:** Retains overall responsibility for effective performance of the Incident Command System for the evolving incident, and is even more specifically responsible for the performance of the Command/Management Staff actions.
 - **Unified Command:** In certain circumstances, there may be a need for Unified Incident Command/Management (see Textbox 2.1.1.2).

Textbox 2.1.1.2

Unified Incident Command

Multiple organizations may have leadership responsibilities during a mass casualty or complex event. ICS has a designated model, Unified Command (UC), which allows multiple stakeholders to

actively participate in incident management. When this occurs, the resulting Unified Incident Command promotes cohesive action within the response system, and provides a uniform interface for integration with other levels of government.

The concept of Unified Command is critically relevant for participation by public health agencies, since they bear a primary responsibility for the well-being of the general population during emergencies or disasters. The unified management model provides a mechanism for direct input from health and medical practitioners at the strategic decision-making level.

UC brings together lead personnel of each major organization involved in the incident to coordinate an effective response, while allowing each commander to carry out his/her own jurisdictional or discipline responsibilities. UC links response organizations at the leadership level, thus providing a forum for these entities to make joint decisions. Under UC, various jurisdictions and/or agencies and non-government responders may work together throughout the incident to create and maintain an integrated response system. UC may be established to overcome divisions from:

- Geographic boundaries
- Government levels
- Functional and/or statutory responsibilities
- Some combination of the above.⁷

Unified, proactive incident command is accomplished through joint decision making that establishes common incident objectives (i.e., management by objectives). During an incident, clearly delineated goals and objectives are agreed on and formally documented. These goals and objectives form the basis of the incident action plan. To accomplish this strategic guidance throughout an incident, unified management must entail:

- A single integrated management structure for the emergency response
- Shared or co-located management facilities
- A single planning process and IAP (single set of goals and objectives)
- A coordinated process for requesting and managing resources.

⁷ Adapted from: U.S. Coast Guard Incident Management Handbook, April,2001, U.S. Coast Guard COMDTPUB P3120.17.

- Command Staff: Command Staff positions, other than the “Incident Commander,” are designated as “officers.” They include:
 - Public Information Officer (PIO): Manages information released to media and therefore the public; in many discussions of ICS, this is commonly presented as primarily a public relations function, shaping the public assessment of the quality of the incident response. In NIMS/ICS, it is also presented as a public information position. Robust older versions of ICS, such as the 1994 National Training Curriculum,⁸ recognized a more comprehensive role of conveying information “to the news media, to incident personnel, and to other appropriate agencies and organizations.” Appropriate information dissemination is now recognized as a critical tool in the actual success of any incident response, and has a wider scope than merely “public information.” A recent incident command guide describes the PIO role beyond that described in NIMS as “...responsible for developing and releasing information about the incident to the news media, to incident personnel, and to appropriate agencies and organizations.”⁹ This is particularly important in events with large populations at risk, since guiding appropriate population behavior is important to minimizing human impact.
 - Risk Communication: The modern discipline of **Risk Communication** best describes this critical role of informing the public with actionable information that appropriately shapes behavior and addresses the physical, psychological, political, and economic risks created by a hazard impact. This function produces timely, structured information, approved by the incident commander, for use in briefing the media and the public. The messages serve multiple purposes: provide general incident information and incident context, guide public actions, reassure the public, and prevent/address speculation and rumors.

Public Information Officers manage the media message to inform the public and guide appropriate population behavior. The position also assures that adequate information is transmitted to responders.

⁸ National Wildfire Coordinating Group. Incident Command System National Training Curriculum: ICS Position Descriptions and Responsibilities (October 1994). National Interagency Fire Center, Boise, CO.

⁹ FIRESCOPE California: Field Operations Guide ICS 420-1 Incident Command System Publication, June 2004, p. 5-3; available at <http://www.firescope.org/ics-big-fog/ICS420-intro.pdf>, accessed November 13, 2005.

The Safety Officer identifies and manages risks to responders and oversees the implementation of processes to ensure responder safety.

The Liaison Officer maintains communication and coordination with organizations involved in the response that are external to the organization's incident command system.

Terminology alert!

Risk Communication: the process of providing concise, comprehensible, credible information, as needed to make effective decisions regarding risks. In incident command, risk communication is generally considered to provide this service to those outside of the incident command system.¹⁰

- **Safety Officer:** Assesses the incident site/s and circumstances for hazardous and unsafe conditions, identifies these risks, and develops measures to ensure responder safety. While traditionally the safety function has been narrowly focused upon “workplace safety,” the safety officer function is now recognized as a critical management activity that provides oversight for **all issues related to responder safety**, including personal protective equipment, preventive medicine, and “security safety,” during incident response. This function manages very active processes, which execute overall strategic and administrative tasks as well as individual field monitoring activities. The Safety Officer provides direct input into command decision making through contributions to the incident action plan (see below) as well as direct interventions, if indicated, at the worksite.
- **Liaison Officer:** Commonly referred to as a “Senior Liaison Officer” to distinguish this position from tactical level liaisons, this role ensures high-level (strategic) coordination with agencies not within the ICS. The Liaison Officer is responsible for coordinating with major organizations outside the response system but involved in the response (e.g., Federal law enforcement, the U.S. military, etc.). Incident Command may also assign a liaison to political leaders, though the incident commander may elect to retain this role and directly brief the political leadership. If an outside agency supplies personnel to the ICS as their liaison, this position is designated in ICS as an **Agency Representative** (see Terminology Textbox).

¹⁰ Adapted from: Baruch Fischhoff. Risk Perception and Risk Communication, in D. Kamien (ed) *The McGraw-Hill Handbook of Terrorism*, August 11, 2004.

Terminology alert!

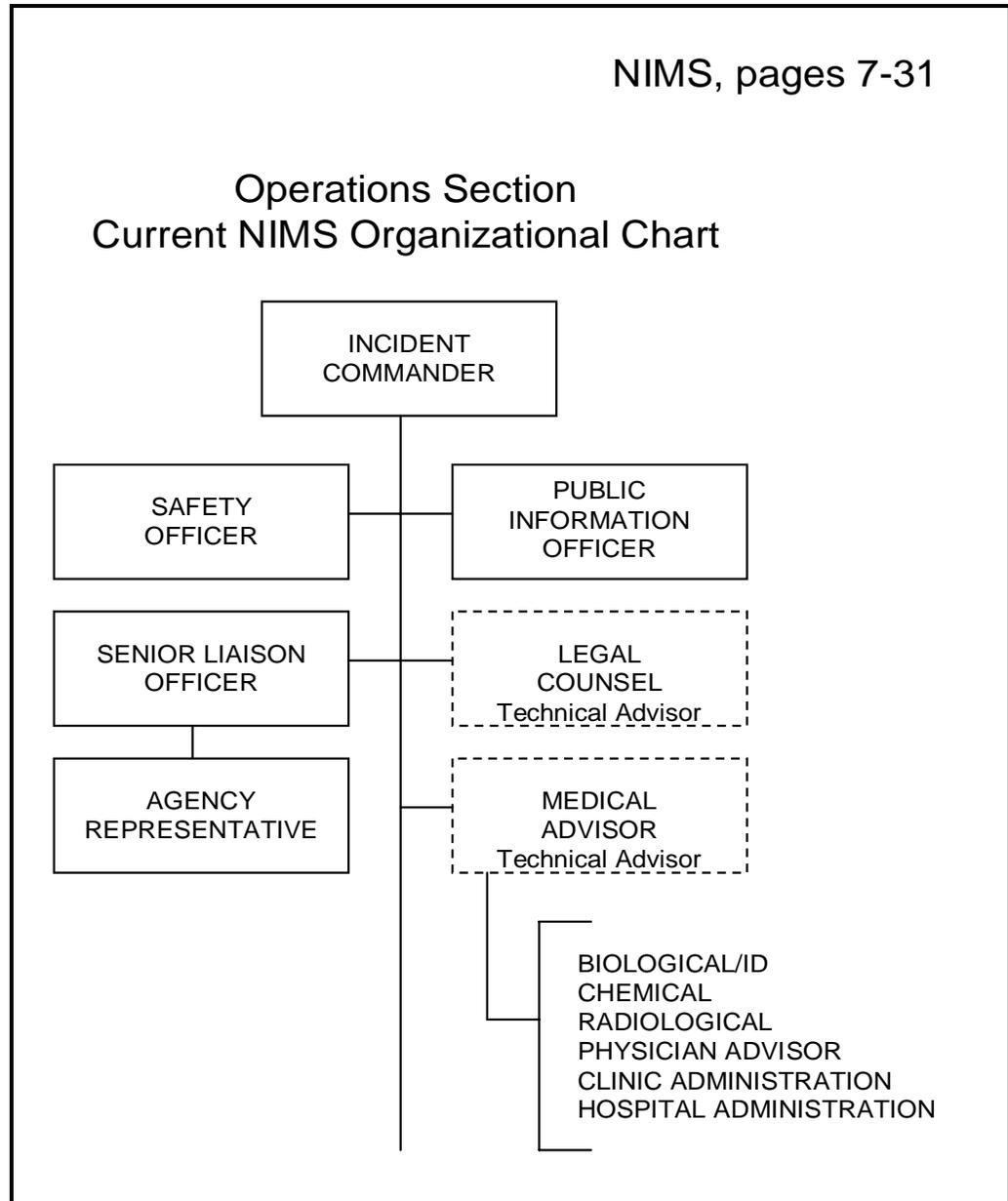
Agency Representative: A person assigned by a primary, assisting, or cooperating Federal, State, local, or Tribal government agency or private entity that has been delegated authority to make decisions affecting that agency's or organization's participation in incident management activities following appropriate consultation with the leadership of that agency.¹¹

- **Senior Advisor/Technical Specialist:** Presented in NIMS/ICS as a Technical Specialist position on the Command Staff, ICS commonly describes the role of a Senior Advisor as one that provides **strategic advice** to the command/management group. This assistance is distinguished from the usual “technical specialist,” which is a position in the Plans Section or attached directly to the Operations Section and provides tactical-level advice. Examples cited in NIMS include legal counsel and medical advisor positions (see Exhibit 2.1.2.3).

Senior Advisors are often included in the Command Staff. These individuals are selected only when needed to provide strategic advice to the Command Group.

¹¹ NIMS Glossary of Key Terms, p. 174; available at: http://www.nimsonline.com/nims_3_04/glossary_of_key_terms.htm, accessed June 8, 2006.

Exhibit 2.1.2.3: NIMS Command Staff with two designated senior advisors positions (dotted lines), with the “reach-back” capability of the Medical Advisor noted.¹²



Individual organizational elements (Task Forces, Groups, and others) within an ICS may have their own internal ICS structure and function. Their leader is not referred to as an “incident commander,” but rather is

¹² NIMS, Appendix A: The Incident Command System, p. 7-31; available at: <http://www.fema.gov/emergency/nims/index.shtm>, accessed April 13, 2006.

designated according to the functional role of the element within the specific ICS (for example, a Task Force, Unit, or Strike Team Leader). The terminology provided by ICS/NIMS for these designated positions that supervise organizational elements in ICS is presented in NIMS and reproduced below (see Exhibit 2.1.1.4).

Exhibit 2.1.1.4: NIMS/ICS Leadership position titles by organizational element.¹³

Organizational Element	Leadership Position
Incident Command	Incident Commander (IC)
Command Staff	Officer
Section	Section Chief
Branch	Branch Director
Division and Groups*	Supervisors
Unit**	Unit Leader

*The hierarchical term supervisor is only used in the Operations Section.

**Unit leader designations apply to the subunits of the Planning, Logistics, and Finance/Administration Sections.

Table A-1: ICS Organization

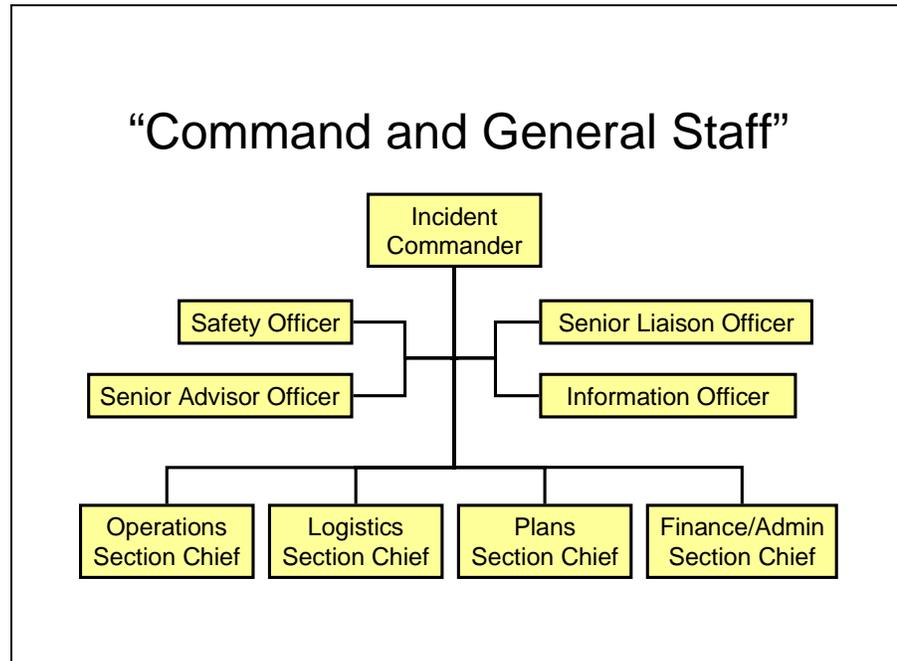
“**Command and General Staff**” refers to the group of positions that includes the Command positions listed above plus the Section Chiefs for the four major functions within ICS (see Exhibit 2.1.1.5).

¹³ From NIMS Appendix A Incident Command System: 66; available at http://www.fema.gov/pdf/nims/nims_appendix.pdf, accessed November 14, 2005.

“Command and General Staff” refers to all positions within the Command group plus the Section Chiefs.

The structure for the Operations Section may vary (even for the same organization responding to different events). Standard organizational elements (branches, divisions, units, etc.) are used in organizing sections to provide consistent relational concepts.

Exhibit 2.1.1.5: The standard Command and General Staff positions in ICS.



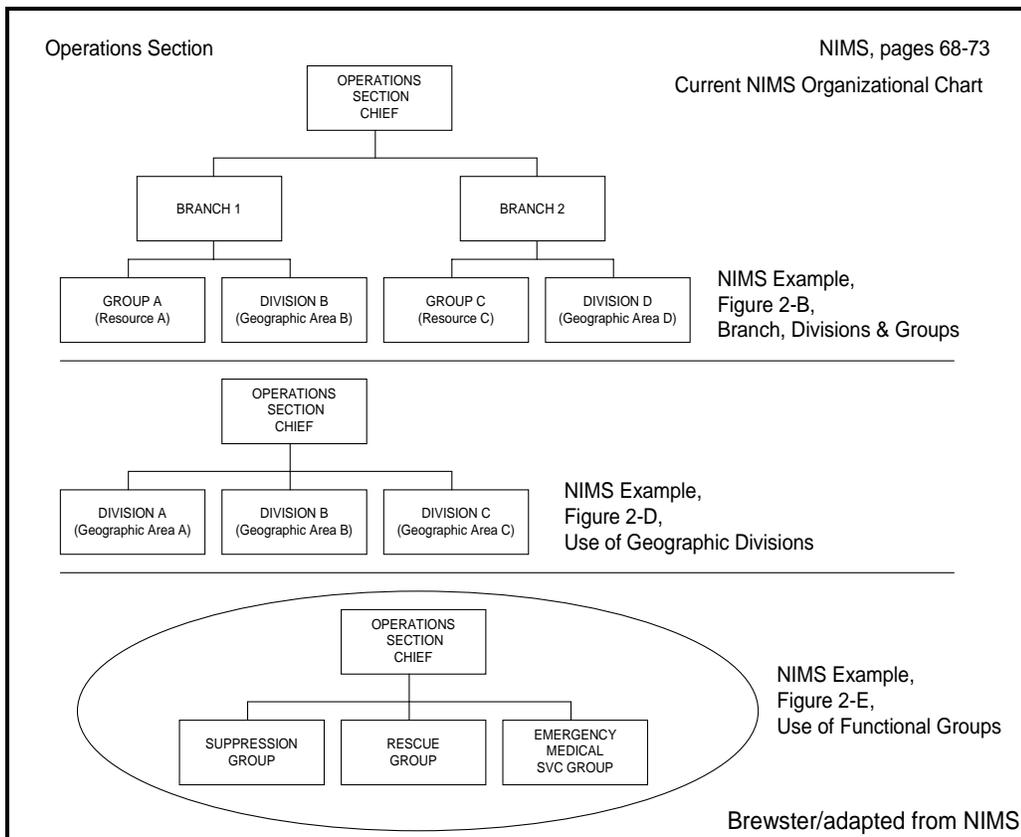
- **Operations Section:** Responsible for managing the tactical operations that achieve the incident objectives, which were defined by the command function. Actions under this section are guided by the Operations Section Chief through directed strategies, specific tactics, resource assignments, and direct supervision for each operational period. The Operations Section may be organizationally sub-divided through the use of branches, with divisions (for geographic organization) or groups (for functional organization) (see Exhibit 2.1.1.6). Terminal management at the resource level is depicted by the use of task forces, strike teams (or “teams”), and individual resource units (see Exhibit 2.1.1.7). These elements are designated according to the discretion of the Operations Sections Chief. Leadership terms for these elements are presented in NIMS (page 66) and other ICS guidance. Operations Section Staging is an additional area to examine, since this can be a confusing for healthcare organizations (see Textbox 2.1.1.3).

Textbox 2.1.1.3

The Relationship Between Staging Areas and a Personnel Pool

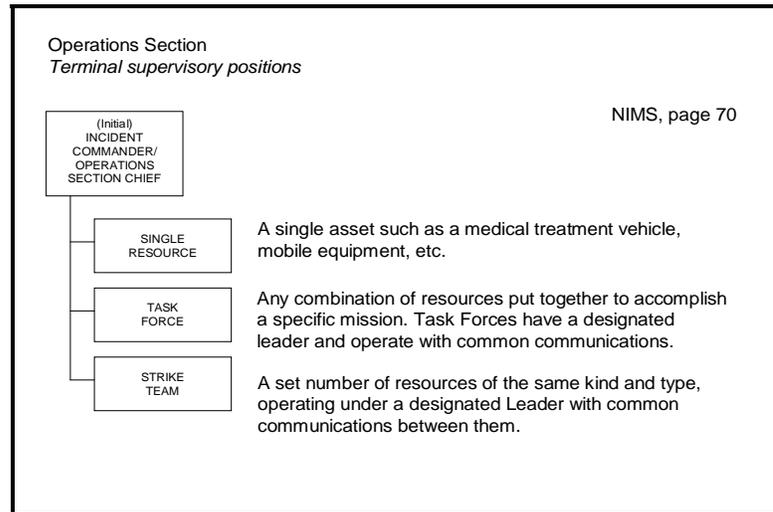
In classic ICS, “staging” is where personnel, equipment, and supplies that have been ordered by the Operations Section are collected. Staging is under the direct supervision of the Operations Section since resources have already, through the ordering process, been assigned to the Operations Section to await specific task assignment within other Sections. This should be distinguished from any “personnel pool” or other term in healthcare system emergency management, which is a Logistics function that identifies and rosters personnel who are available but not yet assigned a task or an ICS section staging area.

Exhibit 2.1.1.6: NIMS Operations Section sub-division strategies.¹⁴



¹⁴ NIMS, Appendix A: The Incident Command System, p. 68-73; available at: <http://www.fema.gov/emergency/nims/index.shtml>, accessed April 13, 2006.

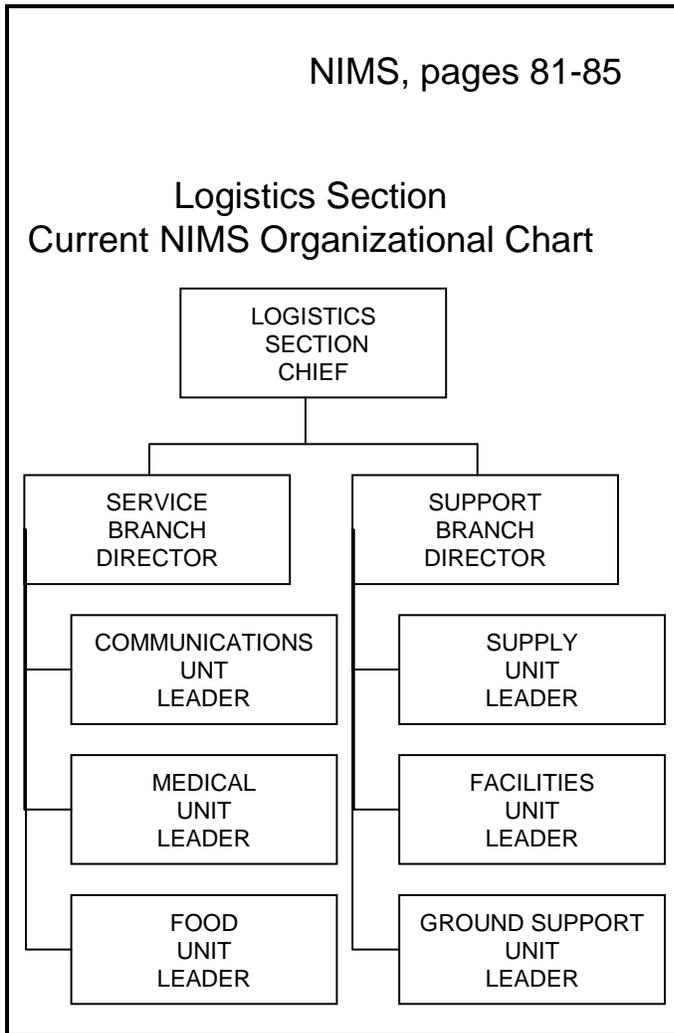
Exhibit 2.1.1.7: NIMS-designations for terminal management positions within the operations section.¹⁵



- **Logistics Section:** According to NIMS/ICS, “the Logistics Section is responsible for all support requirements needed to facilitate effective and efficient incident management, including ordering resources from off-site locations. It also provides facilities, transportation, supplies, equipment maintenance and fuel, food services, communications and information technology support, and emergency responder medical services....” The Logistics Section may be sub-divided into branches, usually a Support Branch and a Services Branch according to NIMS/ICS, to maintain effective span of control (see Exhibit 2.1.1.8).

¹⁵ NIMS, Appendix A: The Incident Command System, p. 70; available at: <http://www.fema.gov/emergency/nims/index.shtm>, accessed April 13, 2006.

Exhibit 2.1.1.8: NIMS-designations for terminal management positions within the Logistics Section when divided by branches.¹⁶



- **Planning Section:** According to NIMS/ICS, “the Planning Section collects, evaluates, and disseminates incident situation information and intelligence¹⁷ to the IC or UC and incident management personnel; prepares status reports; displays situation information; maintains status of resources assigned to the incident; and develops and documents the IAP...” As noted, an important responsibility of this section is processing incident information. Since information accuracy is a combination of both factual correctness and

ICS typically only discusses “branches” for the Operations and Logistics Sections. For particular events, branches may be important for the two remaining support sections as well (this would be consistent with the inherent flexibility of NIMS/ICS).

¹⁶ NIMS, Appendix A: The Incident Command System, p. 81-85; available at: <http://www.fema.gov/emergency/nims/index.shtml>, accessed April 13, 2006.

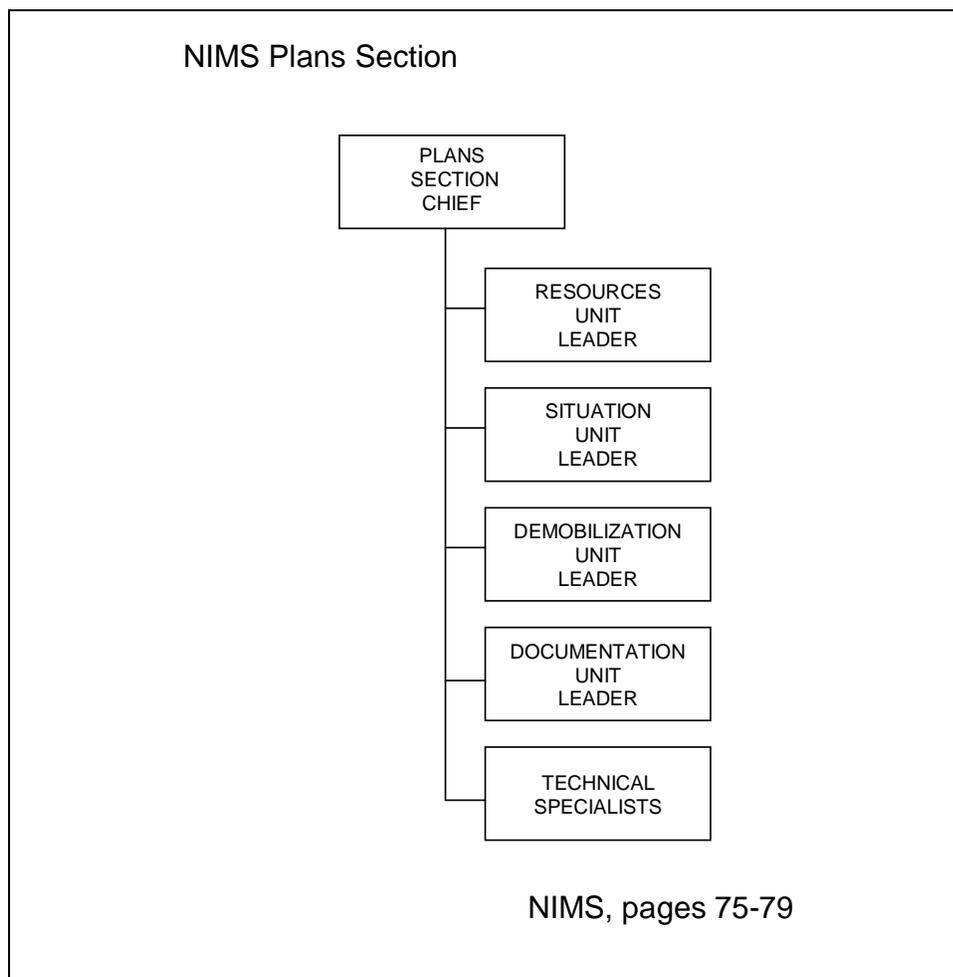
¹⁷ In NIMS, “intelligence” generally refers to law enforcement and security/counter-terrorism information.

The Plans Section collects, processes, and maintains incident information relevant to action planning, and accomplishes the action planning steps that produce the Incident Action Plan and supporting documents.

appropriate level of detail, significant attention must be focused upon acquiring, verifying, and processing data to meet the information needs. For example, this information managed by the Plans Section would be used by the Management and Operations Sections when establishing response objectives, strategies, tactics, and assignments:

- NIMS-designated components of the ICS Plans Section (see Exhibit 2.1.1.9) include:
 - Resource Unit or equivalent: Tracking of the status of resources.
 - Situation Unit or equivalent: Maintains current updates of the incident details.
 - Demobilization Unit: Early and ongoing development of demobilization plans.
 - Documentation Unit: Processing through to completion of incident action plans and planning support documents; archiving while maintaining the availability of incident action plans, their supporting components, and all other incident-related documents.
 - Technical Specialists: Personnel with specialty expertise to provide advice at various levels within the organization's ICS sections.

Exhibit 2.1.1.9: NIMS-designations for terminal leader positions within the Plans Section when divided into Units.¹⁸



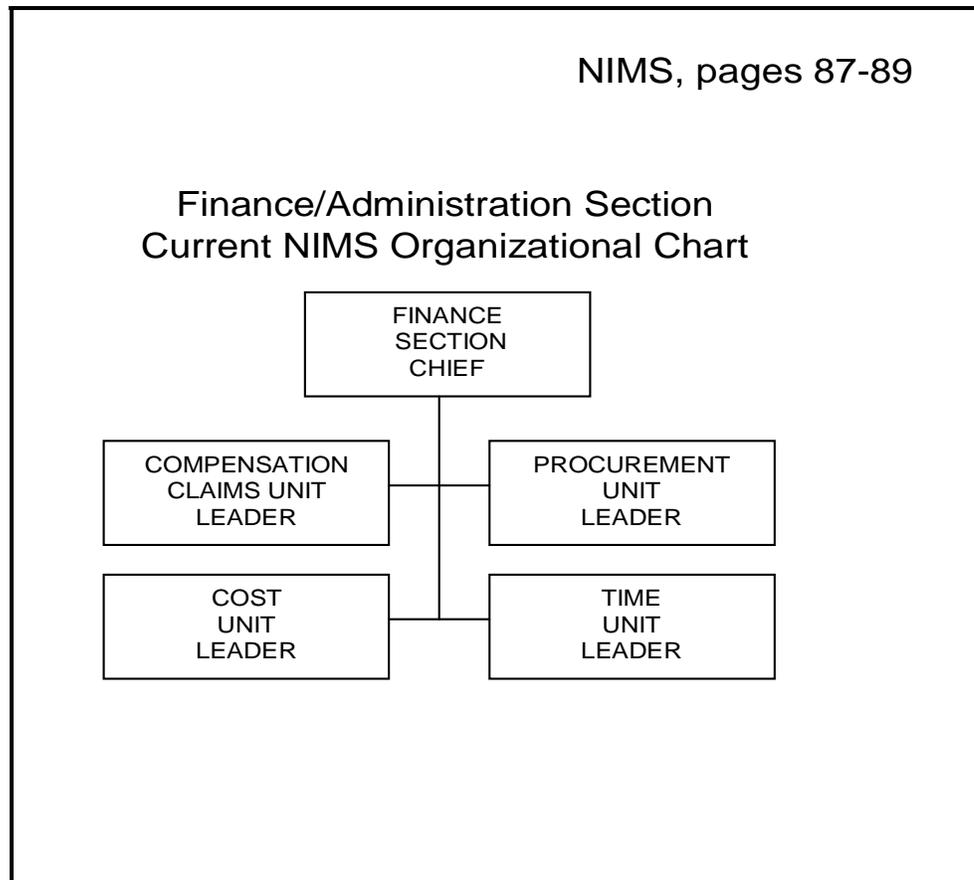
- **Administration/Finance:** This section of ICS (see Exhibit 2.1.1.10) supports management and operations by addressing, according to NIMS/ICS, any “specific need for financial, reimbursement (individual and agency or department), and/or administrative services to support incident management activities...”¹⁹ This section may be particularly important in health and medical response. Activities may vary widely, from tracking of such issues as reimbursement to monitoring and addressing regulatory compliance. These issues are extensively addressed later in this Unit.

The Finance/ Administration Section oversees administrative issues for the ICS, and provides the financial accountability services.

¹⁸ NIMS, Appendix A: The Incident Command System, p. 75-79; available at: <http://www.fema.gov/emergency/nims/index.shtm>, accessed April 13, 2006.

¹⁹ NIMS, Appendix A: The Incident Command System:.. 87, available at http://www.fema.gov/nims/nims_compliance.shtm#nimsdocument, accessed February 6, 2006.

Exhibit 2.1.1.10: NIMS-designations for terminal management positions within the Finance/Administration Section when divided into Units.²⁰



The Role of the Organization's Regular Leadership in Relation to ICS

It is very important for the senior leadership of each organization involved in ICS to understand how ICS relates to the usual administrative structure within the organization.

- Co-existence of ICS and normal administration: The normal administrative structure must continue to operate within an organization, even as the organization mobilizes and responds using its EOP and ICS. Non-incident operations must continue to be managed by the usual administrative system, and so the two management systems exist in parallel within the organization.

²⁰ NIMS, Appendix A: The Incident Command System, p. 87-89; available at: <http://www.fema.gov/emergency/nims/index.shtm>, accessed April 13, 2006.

- **Senior executive and incident commander relationship: It is important to understand that the senior executive remains in charge of the entire organization, and therefore the incident response, even if he/she is not the Incident Commander (IC)** (see Textbox 2.1.1.4). In many, or even most incidents, it may be best for the senior executive not to assume the IC position.

Textbox 2.1.1.4

Issues of Concern to Executives²¹

There are at least three issues that concern Executives relative to their responsibilities and roles at incidents.

A. What are the implications of an incident to my organization and to myself?

Any incident can have a mix of political, economic, social, environmental, and cost implications with potentially serious long-term effects. Also, more and more incidents are multi-agency and/or multijurisdictional. ICS, as a management system, helps to mitigate the risks by providing accurate information, strict accountability, planning, and cost-effective operations and logistical support for any incident. By your support to planning, preparedness, and training activities, the potential implications can be minimized.

B. How do I maintain control when incidents occur?

As the Executive, you establish the policy and provide guidelines on priorities, objectives, and constraints to a qualified Incident Commander. In many agencies this is done as a matter of policy through a written delegation of authority to your designated Incident Commander.

C. Where do I fit in the incident management process?

ICS has a hierarchy of command. Once you have clearly articulated the policy you wish followed, and delegated certain authorities, the Incident Commander who reports to you will have the necessary authority and guidance to manage the incident. The Incident Commander is the primary person in charge at the incident. In addition to managing the incident scene, he or she is trained to keep you informed and up-to-date on all important matters pertaining to the incident. Your task is to ensure that you are

²¹ National Wildfire Coordinating Group. Incident Command System, National Training Curriculum Module 17: ICS for Executives Instructor Guide, October 1994: pp.17-5 to 17-7. Available at: http://www.nwcg.gov/pms/forms/ics_cours/ics_courses.htm#I-402, accessed January 20, 2006.

informed and that your Incident Commander is functioning in a responsible manner.

Role of the Executive

The Executive is the administrator, chief executive officer, or designee of the agency or political subdivision that has responsibility for the incident. The title also includes Executives from the private sector. Executive and agency administrator are synonymous terms as used in this text.

In ICS, the Executive establishes policy, direction, and allocates authority to the Incident Commander. Generally, the Executive is not at the scene of the incident, but must have the ability to communicate and meet with the Incident Commander as necessary.

Depending on the nature of the incident or level of the overall emergency, the Executive could function from the following locations:

- The agency or jurisdiction offices
- An Emergency Operations Center (EOC)
- A Multi-agency Coordination Group (either as a functional agency representative, or representing a political subdivision).

- Policy guidance during incident response: The senior authorities in a political jurisdiction, a governmental agency, or a non-governmental organization may wish to establish a formal response role where they provide policy guidance and oversight to the ICS. This is commonly accomplished with a “Senior” or “Emergency Policy Group”²² or other terminology for this arrangement, such as “Emergency Policy Team.”²³ Healthcare organizations/systems may elect to establish a similar structure.
- Providing clear authority to the IC: Per the ICS for Executives noted above, “It is very important that the Executive provide the Incident Commander with clear authority, direction, and the support necessary to accomplish agency goals related to management of the

²² Multiple examples may be found for this – a representative private organization example is from University of Southern California Policies, available at: <http://policies.usc.edu/policies/protocol110105.pdf>, last accessed January 21, 2006.

²³ Arlington Virginia Emergency Operations Plan (May 2005). Available at: <http://www.arlingtonva.us/departments/EmergencyManagement/pdf/EOP.pdf>, accessed January 22, 2006.

incident or event. In some agencies and for some incidents the delegation of authority is required in writing.”

ICS Organizational Elements and Positions

NIMS/ICS provide guidelines for the flexible breakdown of sections as dictated by incident needs. The guidelines (as noted above) include organizational elements such as branches, divisions, groups, task forces, strike teams, and units.

- Sectoring of functions and/or geographic area to maintain span of control: With branches, divisions, and groups to organize elements within ICS sections, it is easy to sector the “incident scene” geographically if it is too large, or functionally if it is too complex for effective management.
- Flexibility in organizing ICS sections: In NIMS, the Operations Section is the only section that typically has described “Branches” whereas the “support” sections of ICS (Logistics, Plans, Finance/Admin) are depicted as having a section chief and then devolving immediately to the “units” level of organization. This is because of the historical experience in wildland ICS, where the support sections became standardized due to the relatively predictable support needs. This allowed a relatively small organizational footprint to address support issues while maintaining the manageable span of control principle, but may need to be altered in health and medical response:
 - Logistics: NIMS/ICS recognizes that Logistics may become too complex for unit-level organization, and therefore mentions that branches may be used (NIMS Appendix A, Tab 4).
 - Planning & Admin/Finance: In large, complex health incidents, adhering to a “span of control” doctrine may require Planning and Admin/Finance sections to also expand their organizational structures to include branches, divisions, and groups. This expansion would be determined by the section chief, with approval by the incident commander, and is consistent with the stated “flexibility” of NIMS/ICS.
 - As an example, the traditionally described Plans Units are generally focused upon information management (except for the Demobilization Unit). In a complex incident with the need for extensive long-range, contingency, and alternate planning as well as the demobilization plan development, an “Incident

The traditional ICS Plans Section has multiple units focused upon information management. Given the complexity of the action planning process, two branches might be warranted to adequately manage these important activities.

The System Description should present details about the response structure and positions, including position descriptions and required qualifications.

Action Planning” Branch may be important to accomplish adequate planning while maintaining span of control.²⁴ This branch could co-exist with an Information Processing Branch under which the information units would be placed.

- Similarly, in a complex incident the “Situation Unit” may require a significant expansion and compartmentalization in order to track all of the parameters. The use of divisions (geographic designator) or groups (functional designator) may be necessary to maintain effective span of control.
- **ICS Positions:** ICS Systems Descriptions include detailed information on key positions throughout the organizational structure. As with any customized emergency operations plan using ICS, healthcare systems should develop specific descriptions for the commonly expected and the critical positions that could be activated during emergency response and recovery.
 - **Position Descriptions (PDs):** A position description outlines the roles and responsibilities as well as reporting requirements for a specific response position. At a minimum, the Command and General Staff positions should have clear position descriptions written into the Systems Description. Other positions may require documented PDs depending upon the organization.²⁵

Terminology alert!

Position Description (PD): Position description is a written summary of the critical features of an emergency response or recovery job, including the nature of the work performed and the specific duties and responsibilities. It is intended to help assigned personnel understand their specific role and to clarify relationships between positions.

- **Position Requirements or Qualifications (PQs):** Position

²⁴ For further discussion of this issue, see Barbera, JA; Macintyre, AG. Medical and Health Incident Management System: a comprehensive functional system description for mass casualty medical incident management. A report for the Alfred P. Sloan Foundation grant, November 2002. Available at: <http://www.gwu.edu/~icdrm/>, accessed January 11, 2006.

²⁵ For Command and General Staff positions, deputies are often assigned so that staffing may be maintained 24 hours a day onsite.

qualifications should be similarly listed in the Systems Description. PQs essentially present the knowledge, skills, and abilities (i.e., the emergency response and recovery competencies) needed by an individual to effectively perform in the incident position. The PQs may attempt to describe these by outlining the necessary training certifications (see terminology textbox) and/or experience indicated for key positions, but they are most accurately described by developing actual competencies (see lesson 1.1.3). PQs are intended to prevent the assignment of personnel to positions where they are ill prepared or inherently not capable of performing the specific tasks of that position. This becomes particularly critical for healthcare Command and General Staff. It should not be assumed that any individual can fill a particular position just by referring to a job action sheet. **Demonstrated competencies (through training, education, drills, certifications, qualifications, etc.) are essential. The concepts of certification, qualification, credentialing, privileging, and accreditation (see terminology textboxes) are important concepts related to competencies and the determination of “competent” personnel.**

Terminology alert!

Certification: Certification “entails authoritatively attesting that individuals meet professional standards for the training, experience, and performance required for key incident management functions.” (NIMS, p. 46). “Certification, in other words, involves measuring an individual’s competence through a testing or evaluation process. Personnel are certified by their discipline’s relevant certifying authority.”²⁶

²⁶ Credentialing the Nation’s Emergency Responders: Working Group Guidelines – Draft Version 1.6 (November 2005), NIMS Integration Center, Federal Emergency Management Agency, Washington D.C.

Terminology alert!

Qualification: A term indicating that an individual has met all the requirements of training plus the requirements for physical and medical fitness, psychological fitness, strength/agility, experience, or other necessary requirements/standards for a position. **“Qualification” therefore indicates that the individual possesses all the competencies required for the response position. In some job categories, qualification is demonstrated by obtaining a professional license.**^{27, 28, 29}

[Note: See Glossary for NIMS definition of “Qualification and Certification.”]

Terminology alert!

Credentialing: According to the NIMS: “Credentialing involves providing documentation that can authenticate and verify the certification and identity of designated incident command staff and emergency responders. This system helps ensure that personnel representing various jurisdictional levels and functional disciplines possess a minimum common level of training, currency, experience, physical and medical fitness, and capability for the incident management or emergency responder position they are tasked to fill.”³⁰

²⁷ National Society of Professional Engineers. Licensure and Qualification for Practice, available at <http://www.nspe.org/govrel/gr2-ps1737.asp>, accessed January 11, 2006.

²⁸ American Society for Clinical Laboratory Science (ASCLS). Personnel Licensure, available at http://www.ascls.org/jobs/grads/personnel_licensure.asp, accessed January 11, 2005.

²⁹ Federation of State Medical Boards. About State Medical Boards, available at: http://www.fsmb.org/smb_overview.html, accessed January 11, 2005.

³⁰ Credentialing the Nation’s Emergency Responders: Working Group Guidelines – Draft Version 1.6 (November 2005), NIMS Integration Center, Federal Emergency Management Agency, Washington D.C.

Terminology alert!

Privileging: The process where appropriately credentialed personnel (see credentialing) are accepted into an incident to participate as an assigned resource 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.

Terminology alert!

Accreditation: Empowerment provided to an organization through legislation, statute, or regulation from an appropriate local, State, Tribal, or Federal government agency authorizing the organization to credential personnel for incidents in which the organization participates. According to the NIMS Integration Center, accreditation refers to the "empowerment of certifying/qualifying organizations with the authority to declare an individual capable of performing critical tasks and capabilities."³¹

³¹ Credentialing the Nation's Emergency Responders: Working Group Guidelines – Draft Version 1.6 (November 2005), NIMS Integration Center, Federal Emergency Management Agency, Washington D.C.

Lesson 2.1.2 Incident Management: An ICS Concept of Operations

Lesson Objectives

- *Explain the concept of “management by objective” and how it applies to incident management.*
- *Describe the incident action planning process considerations used for achieving incident objectives.*
- *Describe the key components of the planning cycle and its products that serve to accomplish effective incident management.*
- *Explain the use of ICS forms to facilitate information exchange and to drive the planning process.*
- *Describe the life-cycle stages of emergency response and the process of incident management through those successive stages.*

ICS Concept of Operations: The Incident Management Process

A critical advantage provided by ICS is that the system consistently provides a “Concept of Operations,” or a description of how the components operate in a coordinated manner during successive stages of a response. ICS also provides consistent processes and procedures for use in all types of incidents. These are particularly valuable for addressing the “response generated demands” noted in Exhibit 2-1. If carefully addressed in emergency operation plan (EOP) development, this consistent concept of operations greatly assists with training requirements, evaluation during exercise and post response, and implementing organizational change to improve the EOP. Unfortunately, the incorporation of ICS process into organizational EOPs has been only superficially addressed in many disciplines, including many healthcare organizations.

- Incident management process: Within the Concept of Operations, an **incident management process** (“management by objectives”) is described, presenting an ordered sequence of actions that conduct comprehensive management. The methodology therefore has critical importance for the overall success of the organization and is presented below:
 - Establish incident goals or “control objectives” (NIMS terminology): “The control objectives are not limited to any single operational period but will consider the total incident situation” (*NIMS Appendix A: The Incident Command System*). These objectives equate to where the system wants to be at the end of response (see Terminology Textboxes for objectives).

The Concept of Operations provides consistent processes and procedures that coordinate the different components listed in the Systems Description. For clarity, it ideally examines these through the successive stages of incident response and recovery.

Terminology alert!

Control Objectives: These are broad organizational objectives (goals or desired end states) that change little during the response. “The control objectives are not limited to any single operational period but will consider the total incident situation” (*NIMS Appendix A: The Incident Command System*). An example would be to “provide adequate care to all patients who present as a result of the hazard impact” or to “provide for the safety and welfare of healthcare facility personnel.”

- Establish operational period objectives: These objectives (see terminology textbox) are interim steps to achieve the control objectives, designed to be tangible and measurable and accomplished within defined operational periods.

Terminology alert!

Operational Period Objectives: More specific objectives (compared to control objectives) for the organization that are more relevant to a specific operational period. They must be measurable and attainable within the operational period. These may also be called “operational objectives.” An example would be to “establish procedure to provide prophylaxis of hospital staff.”

- Management by objectives: By clearly delineating both control and operational period objectives, direction is provided for the organization and, simultaneously, measures of effectiveness can be established. This management methodology (**management by objective**) has its inception in the business world and has been effectively adapted by many different response disciplines.³² To ensure that useful objectives are developed for the response organization, the following attributes are provided in Textbox 2.1.2.1.

³² Drucker, PF. *The Essential Drucker*, (2001). Chapter 8: “Management by Objectives and Self-Control”; Harper Collins.

Textbox 2.1.2.1

Writing "SMART" Objectives³³

The following attributes are important in developing maximally useful objectives:

Specific: Is the wording precise and unambiguous?

Measurable: How will achievements be measured?

Action-oriented: Is an action verb used to describe expected accomplishments?

Realistic: Is the outcome achievable with given available resources?

Time-sensitive: What is the time frame (if applicable)?

Managing an event by establishing objectives has multiple advantages, including the establishment of measures of effectiveness. This type of management is consistent with the ICS incident action planning process.

- Incident action planning: “Management by objective” in ICS is accomplished through a process known as **incident action planning**. This process addresses the multiple considerations necessary for establishing and efficiently achieving incident objectives. Important steps include:
 - Understanding the incident situation: Available information must be obtained and processed to adequately understand the incident details. Achieving this critical understanding is referred to as having “situational awareness.” (see terminology textbox). This is accomplished through a situation assessment (see terminology textbox), which can occur at the beginning of an incident or throughout the life cycle of an incident. (See Textbox 2.1.2.2 and 2.1.2.3). The situation assessment is disseminated through a situation report (see Terminology Textbox).

³³ ICS-300: Intermediate ICS for Expanding Incidents. Unit 5: Planning (September 2005). FEMA Emergency Management Institute, Emmitsburg, Maryland.

Terminology alert!

Situational awareness: A person's state of knowledge or mental model of the situation around the individual and/or his/her operating unit, including an understanding of the evolving state of the environment.

Terminology alert!

Situation assessment: An assessment produced during emergency response and recovery that combines incident geography/topography, weather, hazard, hazard impact, and resource data to provide a balanced knowledge base for decision making. Adequate situation assessment and dissemination of a comprehensive situation assessment (through situation reports and other means) creates the "common operating picture."

Textbox 2.1.2.2

Situation Assessment

The situation assessment includes basic categories of information that, if available, should be collected at designated time intervals to assist decision makers during the incident response and recovery. Each situation assessment should therefore be date and time stamped.

What (incident characteristics)

- Hazard type and impact
- Magnitude of known impact
- Expected duration (if the primary hazard impact is ongoing)
- Likely secondary hazards and hazard impacts
- Weather and geophysical conditions

When (timing of hazard and impact)

- Warning period and length
- Impact timing and duration (day and time of onset)
- Response onset if applicable

Where

- Location and scope of impact
- Predicted expansion and/or migration of impact area
- Specifics of impact by location (e.g., patient census/occupancy, activities affected, essential resources compromised)

Resource Needs

- Specific needs – type, amount, location
- Priority of resource needs if indicated

Textbox 2.1.2.3

Essential Elements of Information³⁴

Federal Emergency Response Team (ERT) guidance provides specific information elements to be collected for situation assessment to be used by the Planning section. They are listed here as an example of relevant types of information. Note the lack of human injury and death categories.

Essential Elements of Information

- Boundaries of the disaster area
- Social/economical/political impacts
- Jurisdictional boundaries
- Status of transportation systems
- Status of communication systems
- Access points to the disaster area
- Status of operating facilities
- Hazard-specific information
- Weather data affecting operations
- Seismic or other geophysical information
- Status of critical facilities
- Status of aerial reconnaissance activities
- Status of key personnel
- Status of Emergency Support Function (ESF) activation
- Status of disaster or emergency declaration
- Major issues/activities of ESFs
- Resource shortfalls
- Overall priorities for response
- Status of upcoming activities

³⁴ Adapted from: FEMA. Federal Response Plan, Emergency Support Function #5 Information and Planning Annex (April 1999), p. ESF#5-12.

- Donations
- Historical information

Terminology alert!

Situation report (SITREP): A document that is developed and distributed during response as a means for disseminating a current situation assessment.

- Defining incident response strategy: Once objectives are established, the approaches (strategies) for achieving them are outlined. Strategy (see Terminology Textbox) may include starting points, priorities, the sectoring of scene management or functional tasks, and other approaches as indicated to achieve the objectives.

Terminology alert!

Strategy: The general direction selected to accomplish incident objectives set by the IC (*NIMS*), or the approach to how a goal and objectives are to be achieved.

- Defining the response structure: An ICS consistent organizational chart is developed with personnel and resources assigned to positions and sections. This should be developed in a fashion that allows the organization to accomplish the objectives through the outlined strategies. It is important to note that the organizational structure is constantly re-evaluated throughout the life cycle of the incident to ensure that it is adequate. Changes can be made, but should be well documented and disseminated.
- Adequately disseminating information: Information must be effectively conveyed through formal incident documents, as well as informally through meetings, discussions, and liaison activities. The following are some of these mechanisms (explained in more detail below) that promote coordination throughout the response organization and with external organizations:
 - Incident action plan
 - Situation update reports
 - Operations briefings

- Public information releases.
- Effectively guiding incident actions: In addition to objectives and strategies, tactics (see Terminology Textbox) need to be developed. Tactics are incorporated into supporting plans, procedures, incident assignments, and protocols that establish parameters within which assigned resources operate.

Terminology alert!

Tactics: Tactics in incident management are specific actions, sequence of actions, procedures, tasks, assignments, and schedules used to fulfill strategy and achieve objectives.

- Evaluating and monitoring effectiveness³⁵: Good management processes dictate the constant monitoring of strategies and tactics for effectiveness in achieving objectives. In ICS, this is easily done by assessing operational period objectives and assuring they are achieved in a safe and timely manner.
- Revising incident plans as indicated: Incident action plans are kept current and relevant through a cyclical process of re-evaluation and revision. By revising the objectives, strategies, and tactics as indicated by successful actions and evolving incident circumstances, management maintains proper focus on priorities. Because event parameters, resource availability, and incident information all change through progressive stages of an incident, the incident objectives will necessarily have to change. This has been problematic for health and medical responders in the past (see Textbox 2.1.2.4), but should be effectively addressed through a formal incident management process.

³⁵ Effective is defined as achieving the established organization-wide and/or unit-level strategic and tactical objectives.

Textbox 2.1.2.4

Revising/Changing Plans as an Incident Evolves

Promulgating incident-specific plans has caused discomfort for some health and medical incident managers, who feel that they must “be exactly right very quickly” and that a logical change in the plan constitutes failure.³⁶ This has caused delay in critical guidance during public health and medical incidents such as the anthrax 2001 dissemination event.³⁷ Incident action planning addresses this issue by providing a method for making incident decisions in a timely fashion and revising them at expected intervals as the incident evolves. Action planning also addresses the special considerations necessary for implementing decisions that carry a high degree of uncertainty.

- **Deliberate management:** The incident management process provides guidance on how management methodologies can transition rapidly from the early reactive process to a more deliberate approach to managing the incident. Organizations are most effective when they 1) provide clear guidance for personnel during the early, reactive phase of incident response (e.g., using EOP checklists and job action sheets); 2) transition early from “reacting” to “proactively managing” the incident response actions (see below); and 3) maintain proactive management that coordinates effective action across the incident.
 - **Reactive guidance:** Actions during the initial (reactive) phase of incident response are guided by checklist procedures established in the EOP. These actions may include initial reporting requirements, initial mobilization activities, or other specific tasks. Additionally, specific tactical activities may occur that are dictated by reaction to the evolving incident circumstances. The knowledge and skills used to address these activities are ideally achieved through adequate preparedness (i.e. education and training).

³⁶ Gursky, E.; Inglesby, T.V.; O’Toole, T. Anthrax 2001: Observations on the Medical and Public Health Response. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*; 1(2) 2003; pp. 97-110. Available at <http://www.liebertonline.com/doi/pdf/10.1089/153871303766275763?cookieSet=1>, accessed January 11, 2006.

³⁷ Gursky, E.; Inglesby, T.V.; O’Toole, T. Anthrax 2001: Observations on the Medical and Public Health Response. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*; 1(2) 2003; pp.97-110.

The Incident Planning Cycle provides a structured series of meetings in which organizational objectives are established and re-evaluated after defined periods (hence allowing the organization to proactively manage the event).

- Proactive guidance: As response progresses beyond the initial hectic moments and the ICS structure is implemented, management transitions from the purely “reactive phase” described above to a method of “proactive” management. This is accomplished by **establishing incident objectives, strategies, tactics, and resource assignments that are focused forward in time rather than upon meeting only immediate tactical incident needs**. In an incident of prolonged duration, this **management-by-objective** is extended further by implementing formal incident action planning and developing a written incident action plan. It is the responsibility of the Incident Commander to determine whether formal documentation of an incident action plan is warranted.
- Incident planning as the driving force: The flux in incident and response conditions is best managed using a formal incident action planning process that is based on regular, cyclical reevaluation of the incident information, incident objectives, strategies, tactics, and assignments. Commonly known in ICS as the Planning Cycle (see Exhibit 2.1.2.2), this iterative process can enhance the integration of health and medical organizations with other response agencies that also conduct action-planning cycles.
- Sectoring incident time into specified intervals for effective incident action planning: One of the difficult coordination issues during incident response is “getting everyone into synch” so that all are working from the same objectives during the same time period. This is accomplished in ICS by defining specific time intervals where the operational period objectives, strategy, and tactics are applicable. This time interval is known as an **operational period** (see below).
- An early important action for any IC is to establish the timing of the operational periods (see Terminology Textbox).

Terminology alert!

Operational period: A designated time interval during incident operations in which organizational strategies and tactics are guided by specific response objectives for that period. Tactical objectives are to be accomplished and re-evaluated. Operational period objectives are reviewed and revised (as necessary) before the subsequent operational period.

- The operational period can be of any length, although rarely longer than 24 hours except in low grade or chronic incidents (see Module 3.3).
 - The operational period is not necessarily related to any particular shift length, although coordinating the operational period to start at the outset of at least one workforce shift may maximize efficiency.
- **Incident action planning cycle:** As described, incident action planning is an iterative process, continuously occurring throughout all stages of an incident. It is accomplished through a series of specific meeting types (see Exhibit 2.1.2.1). The timing of the planning cycle is tied to the designated operational period. For example, if the IC has designated an operational period of 12 hours, then the processes outlined below all occur within a time frame where the Operations Briefing immediately precedes the onset of the next operational period.
 - **Variations in incident action planning descriptions:** **A wide variation exists in how the planning cycle is described**, and the NIMS/ICS was not specific in addressing these variations. The specific meetings in the planning cycle that accomplish the incident action planning steps vary widely between ICS descriptions and between ICS organizations. This is discussed in Textbox 2.1.2.5, and the rationale for selecting the description in this text is presented.

Textbox 2.1.2.5

Published Variations on the Planning Cycle

The multiple agencies and organizations that utilize ICS and “management by objectives” are all concordant in the need for objectives to be established at the outset of the planning cycle. The actions that consistently follow the establishment of objectives are devoted to developing suitable strategies and tactics to meet those objectives. How this is presented varies widely in terminology and exact methods, particularly as they relate to “meetings,” the number and titles of meetings, and hence the exact description of the planning cycle.

NIIMS³⁸ and NIMS³⁹ both list only Planning Meetings and Operational Briefings that occur during the planning cycle. Though planning activities are described, these are primarily related to the Plans Section Chief. The incident objectives, strategies, and tactics are therefore implied to be “set” during the Planning Meeting.

Many other agencies and organizations have discovered the utility of establishing objectives and strategies (and in some instances, tactics) through separate meetings that occur before the larger Planning Meeting. This allows the Planning Meeting to be more focused on establishing specific tactics, designating resources, listing reporting locations, placing orders for other resources, and other important considerations. This approach is reflected in the statement from the National Wildfire Control Group (NWCG):⁴⁰

“Incident Objectives and Strategy should be established before the planning meeting. For this purpose, it may be necessary to hold a strategy meeting prior to the planning meeting.”

The U.S. Coast Guard (USCG) documents are consistent with this approach and is the most detailed. It establishes both a “IC/UC Objectives Meeting” and a “Tactics Meeting” prior to the Planning Meeting in its “Planning Cycle P” model (see Exhibit 2.1.2.2 in this text).⁴¹

Other organizations establish meetings with similar purposes that occur prior to the Planning Meeting. They may be referred to as Management Meetings (objectives and strategies) and “Pre-Planning” Meetings (tactics and even some assignments are developed prior to the Planning Meeting – covered by the USCG in Preparing for the Planning Meeting in Exhibit 2.1.2.2).

This text recognizes the importance and efficiency gained by establishing objectives, strategies, and general tactics before the Planning Meeting and therefore refers to these in this manner: Management Meetings are used to set objectives and strategies. Pre-planning meetings are not discussed in depth but may occur as

³⁸ NIIMS: National Interagency Incident Management System, available at: <http://www.fs.fed.us/fire/operations/niims.shtml>, accessed April 12, 2006.

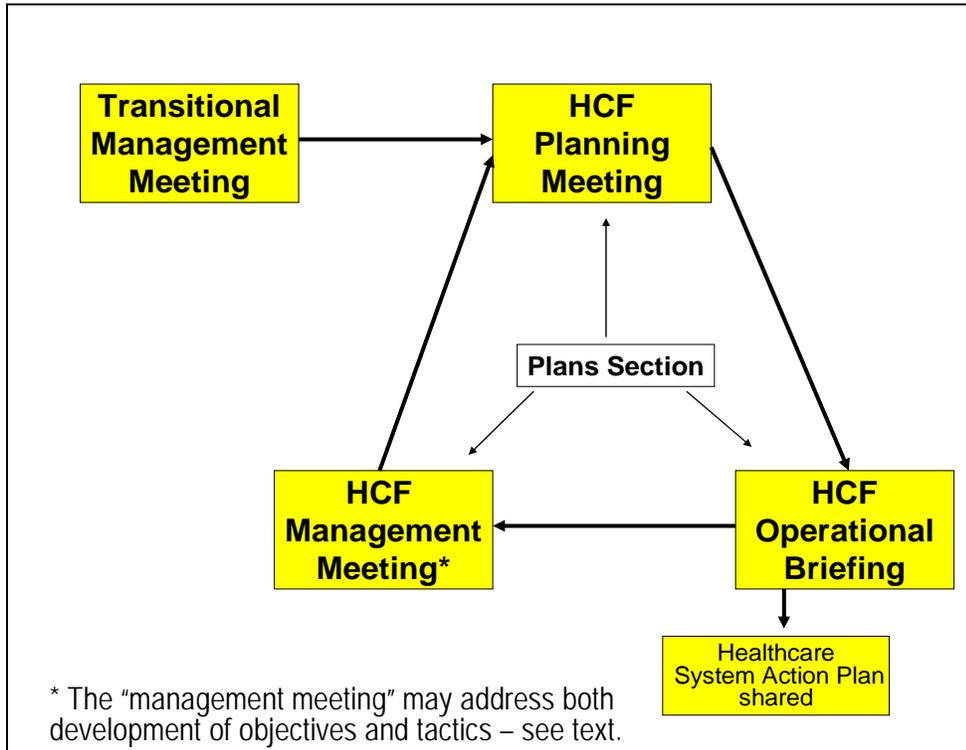
³⁹ NIMS: National Incident Management System, available at <http://www.fema.gov/nims/>, accessed January 16, 2006.

⁴⁰ NWCG: National Wildfire Coordinating Group, available at: <http://www.nwcg.gov/pms/pubs/410-1/chapter11.pdf>, accessed April 12, 2006.

⁴¹ USCG: U.S. Coast Guard, available at: <http://www.uscg.mil/hq/gm/nmc/response/fog.pdf>, last accessed April 12, 2006.

needed to begin the process of establishing tactics and assignments prior to the Planning Meeting.

Exhibit 2.1.2.1 The Formal Incident Planning Cycle



○ Planning cycle steps: As shown in Exhibit 2.1.2.1, the key steps in the planning cycle are:

- Transitional management meeting: This marks the initial transition in incident response from reactive to proactive incident management. The transitional meeting brings together the leadership of key response disciplines, **defines the primary ICS structure and key position assignments**, and allows managers to be briefed on the known incident parameters. The **timing of the Planning Cycle is defined, and the managers set initial incident objectives** moving the planning cycle process forward. The transitional management is designated differently by some response organizations, but the purpose and activities remain the same. For example, in the U.S. Coast Guard Operational Period Planning Cycle, it is

The Transitional Management Meeting allows an organization to define its initial response structure and to set initial response objectives.

referred to as an “Initial Unified Command Meeting.”⁴² A very detailed Planning Cycle is presented from ICS-300 (see Exhibit 2.1.2.2).

Terminology alert!

Transitional Management Meeting: The initial meeting (preferably in person) in which the IC is determined. Staff that participated in the initial reactive activities should brief the selected IC on incident parameters as they are known. Initial organizational decisions and assignments to Command and General Staff are made, and initial response objectives are established.

⁴² U.S. Coast Guard Incident Management Handbook, U.S. Coast Guard COMDTPUB P3120.17, April 11, 2001: 8-12. Available at: <http://www.uscg.mil/hq/nsfweb/download/IMH/IMH-2001.pdf>, accessed November 13, 2005.

Exhibit 2.1.2.2: Depiction of the planning cycle with detailed activities.⁴³



- Planning meeting: Using incident objectives set during the transitional (or a subsequent) management meeting, the Command and General Staff decides upon strategies, general tactics (if not already accomplished), and the **incident assignments** (the primary purpose of the planning meeting). These are documented by the Plans Section and become a

⁴³ ICS-300: Intermediate ICS for Expanding Incidents. Unit 5: Planning, September 2005;16. FEMA Emergency Management Institute, Emmitsburg, Maryland.

The Operations Briefing is an important event that allows the sharing of critical organizational objectives, assignments, and tactics. It is often attended by representatives from supporting organizations or from different levels of government.

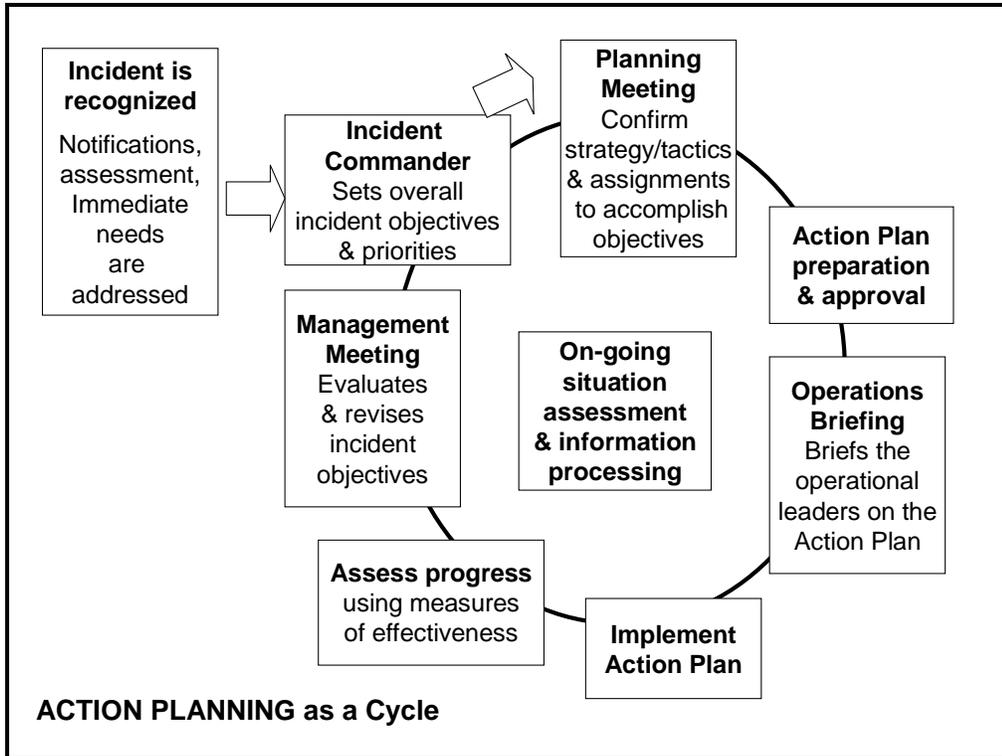
central component of the IAP. The addition of supporting plans (safety plan, medical plan, communication plan, and others) completes the IAP for the upcoming operational period.

- Operations briefing: All components of the response system are briefed on the incident objectives, strategies, and tactics. The purpose of the operational briefing is to impart information and to raise emergent issues, not to discuss alternative plans, debate choices made in the planning process, or undertake extensive problem solving. In traditional descriptions of ICS, the operational briefing occurs in person, but it may also occur telephonically or through electronic communications. A defined briefing process imposes discipline for the operational briefings so that time constraints are met, distractions are limited, and questions are kept to a minimum. The next operational period begins at the conclusion of the operations briefing.
- Management meeting: This marks the onset of the next planning cycle. Incident managers reevaluate operational period objectives and progress made towards achieving them, based upon information collected throughout the operational period. Objectives are revised and new ones are established as indicated. The general ICS structure is reevaluated and changes made as indicated to meet the objectives.⁴⁴
- Variances in describing the Planning Cycle:
 - In NIMS, the management meeting appears to be incorporated as a component of the Planning Meeting. In many presentations of ICS, however, the management meeting is separated from the planning meeting because a smaller core of personnel is involved in developing objectives (traditionally only Command and General staff). Alternatively, the transitional management meeting might not occur (particularly in incidents where a clear incident commander [IC] is established at the outset). The IC may set the initial objectives and ICS structure and assignments (see example in exhibit 2.1.2.3). In the U.S. Coast Guard Operational Period Planning Cycle, the Management Meeting is not explicitly established but this important activity still occurs as a distinct step (IC/UC

⁴⁴ As with the Transitional Management Meeting, the Management Meeting is not explicitly described in NIMS/ICS. Instead, it is included in the Planning Meeting. In many presentations of ICS, the Management Meeting is separated because a smaller number of personnel are involved in setting objectives (traditionally only Command and General Staff).

Sets Objectives see Exhibit 2.1.2.2).⁴⁵

Exhibit 2.1.2.3: Incident action planning, depicted as a cycle,⁴⁶ with the Incident Commander accomplishing the transition to formal planning.



- Timing of the Planning Cycle between responding organizations: The timing of the development of incident action plans should be coordinated among different agencies so that updated information and updated “control objectives” (the overall objectives for the incident) may be shared before operational objectives, strategies, and tactics for each participating organization are established.
- Incident action planning responsibilities: Responsibility for contributing to the comprehensive incident action planning is distributed among the Command and General Staff, with the Plans Section personnel coordinating the process and assembling the data. The responsibilities are summarized in Textbox 2.1.2.6.

The coordination of the timing of Planning Cycles within and across different levels of government or response can provide a critical means for coordinating these entities.

⁴⁵ U.S. Coast Guard Incident Management Handbook, U.S. Coast Guard COMDTPUB P3120.17, April 11, 2001; pps. 8-12, available at: <http://www.uscg.mil/hq/nswfweb/download/IMH/IMH-2001.pdf>, accessed November 13, 2005.

⁴⁶ Adapted from Mr. Pete Brewster (VA EMSHG) slide presentation on incident management.

Command and General Staff personnel all have distinct responsibilities in contributing to the incident action planning process.

Textbox 2.1.2.6

IAP Responsibilities

Incident Commander

- Provide general control objectives, operational period objectives and major strategy (priorities, etc.)
- Activate ICS positions, as needed
- Establish policy for resource orders
- Approve initial actions and completed IAP

Planning Chief

- Prepare for the Planning Meeting, including developing supporting plans such as Demobilization and Contingency Plans
- Conduct the Planning Meeting
- Coordinate preparation of the IAP
- Advise Incident Commander on ICS Units needed in Plans

Operations Chief

- Determine area(s) of operation
- Advise Incident Commander on ICS Branches/Divisions/Groups/Units needed in Operations
- Determine tactics
- Determine work assignments
- Determine resource requirements

Logistics Chief

- Ensure resource ordering procedures are developed
- Advise Incident Commander on ICS Units needed in Logistics
- Ensure the IAP can be supported
- Develop IAP Supporting Plans such as the Communication and Transport Plans

Finance/Administration Chief

- Provide cost implications of control objectives, as required
- Ensure the IAP is within the cost limitations established by Management
- Advise Incident Commander on ICS Units needed in Admin/Finance

- Planning cycle critical teaching points:
 - The value of a documented IAP: For health and medical disciplines, documentation of an incident action plan has not commonly been viewed as an essential action during response, and yet it is one of the most effective means for coordinating between multiple locations, resources, and levels of government.
 - Frequent Planning Meetings during the reactive phase: In the early stages of an incident, especially a sudden onset impact with no-prior notice, the Command and General Staff will need to meet frequently to accomplish incident action planning: compare information, discuss objectives, strategy, and major tactics. In addition, this helps to ensure that all Officers and Section Chiefs maintain adequate situational awareness. This is accomplished in the early stages of an incident by conducting “Planning Meetings” at regular and more frequent intervals, as indicated.
 - Planning Meetings as a coordinating mechanism: The above-described meetings allow the Command and General Staff the opportunity to develop a “common operating picture” (i.e., situational awareness). The meetings also assure adequate support from Logistics, Plans, and Finance/Administration by providing them information so they can anticipate support requirements well ahead of when they are needed.
 - Meeting discipline is critical: All incident planning related meetings and briefings should be short, very tightly structured, and adhere to an agenda. They must avoid lengthy problem solving by identifying issues and assigning parties to resolve them. The issues should be tracked and their resolution reported at the next planning meeting or through incident messages as indicated.
 - Setting operational tactics: The Operations Section Chief is generally responsible for the tactics to accomplish the operational objectives. The Plans Section captures these for incorporation into the incident action plan.
 - Monitoring effectiveness of the ICS organization: Incident Command must continually evaluate the response structure and span-of-control, and make urgent changes even before the next Management Meeting.
 - Span-of-control strategies: Strategies to address span-of-control issues include adding more units and therefore supervisory personnel, or sectoring a large or complex

All incident planning cycle meetings should be brief and concise. Templates as to who is responsible for presenting specific material are often used in ICS. As an example, Operations Briefings should not last longer than 30 minutes.

- Plans section as the steward: Throughout the incident action planning process, the Plans/Information function plays a critical role by stewarding the planning activities and by processing data into information that is relevant to incident decision-making.
- ICS Forms: The planning process is facilitated in a coordinated and deliberate manner through use of **ICS forms** (Exhibit 2.1.2.5). The Plans Section establishes early reporting requirements (when forms need to be submitted) to effectively manage the Incident Planning Cycle.
 - Timing: The proper use of the forms at the indicated time phases will actually drive the planning process forward (see Exhibit 2.1.2.6). Completion and processing of the forms, in basic ICS, develops the incident action plan.
 - Healthcare Systems ICS forms: Many different forms are commonly utilized in ICS. Exhibit 2.1.2.5 lists ICS forms that are very useful when adapted for the healthcare system use. An explanation of each form follows the exhibit.

ICS has established pre-numbered forms that are used to facilitate information management and drive the incident action planning process. The numbered forms commonly relevant to the IAP are Forms 202-206.

Exhibit 2.1.2.5: ICS forms for adaptation and use by healthcare systems

ICS Forms					
Initial Phase	Planning Meeting	Incident Action Plan	Executive Summary	Resource Tracking	Misc.
201: Incident Briefing	215: Planning Worksheet	202: Incident Objectives	209: Incident Status Summary	210: Status Change	213: General Message
	215A: Safety Analysis	203: Organization List		211: Check-in List	214: Unit Log
		204: Assignments		219: T cards	230: Meeting Schedule
		205: Comm Plan		221: Demob Checkout	
		206: Medical Plan			
		207: Org Chart			
		208: Safety Plan			

ICS Form 206, the Medical Plan, is used to outline medical care if needed by responders. It is not the operational plan for providing care to incident victims.

- Commonly Used ICS Forms:
 - 201, Incident Briefing: Designed for the early stages of an event to capture essential initial information as it is known. This form carries the title “briefing” since it is intended for use by initial response personnel to brief the Commander assuming control of the incident.
 - 215, Planning Worksheet: Used to match resources with needs prior to and during incident Planning Meetings (updated as needed).
 - 215A, Safety Analysis: Used to assess safety for responders during a specific incident response. The form promotes a detailed and organized evaluation of risks that may be present, and prompts considerations for reducing or eliminating those risks. The information developed may be transmitted to responders through Form 208 and/or the safety message in the body of the IAP.
 - 202, Incident Objectives: Used to list organizational objectives. May list overall objectives and specific objectives for an operational period. Usually contains a summary safety message as well (updated during each operational period).
 - 203, Organization List: Contains list of organization response and recovery positions with names of persons assigned to each (updated during each operational period).
 - 204, Assignment List: Specific tasks with assigned tactics and resources listed to meet objectives documented on the 202 (updated during each operational period). Several 204s may be filled out, depending upon the complexity of the incident and the number of tactical assignments within the Operations Section.
 - 205, Communications Plan: Listing of key personnel with contact methods (updated each operational period).
 - 206, Medical Plan: Step-by-step instructions for emergency care of injured or ill **response** personnel (updated each operational period).
 - 207, Organizational Chart: Presents a one-page

organizational chart for listing personnel assigned to specific positions. In essence, it presents in a visual format the same information provided on the 203.

- 208, Site Safety Plan: Safety considerations for response personnel to consider, and is used for non-routine incidents or those with complex safety issues. This document will often list both hazards and protective actions (updated each operational period). In simple incidents, a Safety Message within the body of the IAP (on form 202) may substitute for a 208.
- 209, Incident Status Summary: Brief review of hazard impact on organization (and community as appropriate), response efforts/achievements, intended actions, and special concerns (updated as often as requested by management/command). This form serves as valuable update mechanism internally (e.g., for PIO) and externally.
- 211, Check-in List: Used to document the arrival of key response personnel.
- 213, General Message: Used to formally document any important communications between one component of the response system to another. In ICS, this form can also be used to document resource requests.
- 214, Unit Log: Used to document activities of a particular unit during each operational period.
- 221, Demobilization Checklist: Used to track the out-processing of response personnel at the completion of an event. This form includes checklist items such as the return of response specific equipment.
- 230, Meeting schedule: Listing of times, purpose, and locations of various meetings important to management of system (updated each operational period).
- Customizing ICS forms: ICS forms were originally developed for the wild land firefighting environment. The exact content and the format of the standard forms reflect the wild land fire experience. They may therefore require adjustment by other disciplines so that they are optimally useful to their incident response situation. The intent of each form and the designation responsibility for individual forms should remain consistent with standard ICS. An

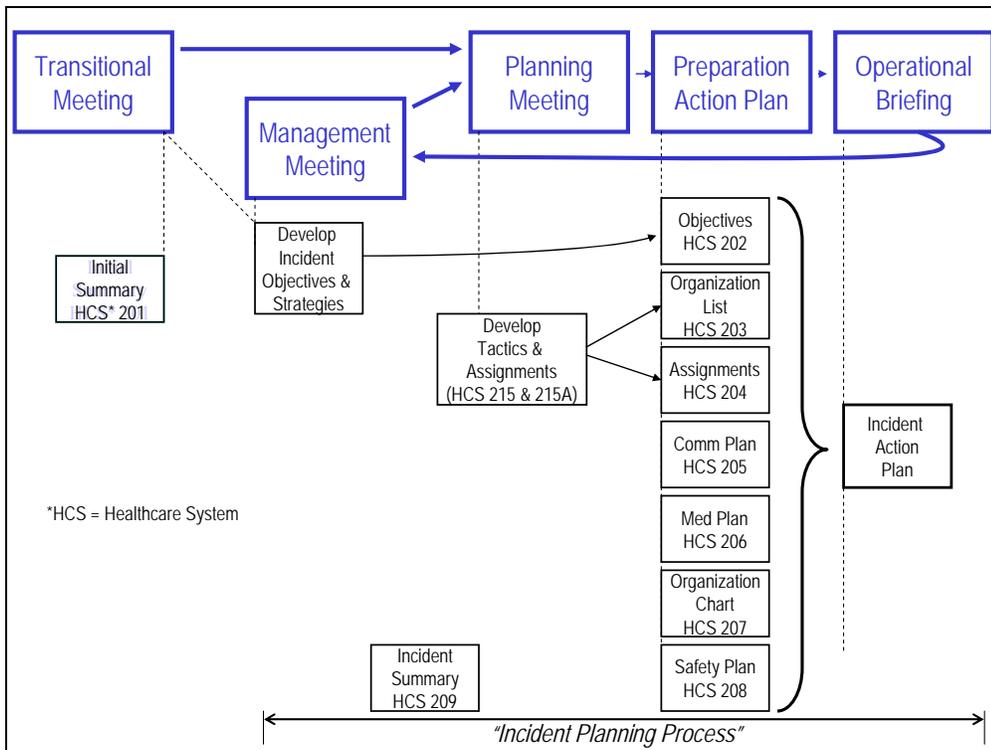
In traditional ICS, the Incident Action Plan is merely a compilation of the ICS forms appropriate to the specific incident and its current operational period.

excellent example of this adaptation while remaining consistent with ICS is the U.S. Coast Guard.⁴⁸ See Unit 3 for healthcare examples.

- ICS forms as the IAP: In traditional ICS, the incident action plan is merely a compilation of the ICS forms appropriate to the specific incident and its current operational period. Forms 202-206 serve as the primary component of an IAP, with other forms added as needed (and approved by the Incident Commander). Exhibit 2.1.2.6 depicts the use of ICS forms in driving the incident action planning process and forming the IAP.
- Additional forms developed within the ICS: As each organization develops its EOP using the ICS framework, they may recognize the need for additional forms that are not standard within ICS in order to manage their information. For example in healthcare, forms related to patient tracking or forms to manage a personnel pool within the hospital may be necessary. These generally are assigned as subsets to standard ICS forms and are numbered accordingly to reflect that. A patient tracking form, for instance, may be considered a subset of the Situation Report/Incident Status Summary (ICS-209) and therefore could be designated "Hospital ICS-209T."

⁴⁸ U.S. Coast Guard electronic forms available at <http://www.uscg.mil/hq/g-m/mor/articles/ics.htm>, accessed November 24, 2005.

Exhibit 2.1.2.6: The use of ICS forms in driving the planning process to an IAP.



- Additional ICS Concept of Operations issues: Other system management issues can become important during emergencies, and so are best considered and addressed when delineating the Concept of Operations. They include:
 - Incident Recognition: Incident recognition is the point in time when a response agency becomes aware that a significant event (i.e., one requiring emergency response beyond baseline operational capability) is imminent or occurring (see Unit 1 and 3). This is not always obvious (e.g., for Healthcare Systems with the onset of an insidious infectious agent). For example, one or two patients presenting to scattered healthcare facilities with progressive paralysis indicating botulism may not be immediately recognized as a major public health problem until they are linked to a single toxin source. Because of this potential ambiguity, the process used to move from an early suspicion to recognizing that incident response is indicated should be carefully considered (see Textbox 2.1.2.7):
 - Prompt assembling of command personnel: Early convening of an organization’s multi-disciplinary command personnel (an

It can be difficult to recognize that evolving event parameters constitute a potential incident for the organization. Processes to facilitate the incident recognition and activation decision-making process may be important, especially for Healthcare Systems.

authority from each lead agency or from key operating units within a healthcare system, for example) may provide the necessary understanding of any health impact associated with an event, and it may clarify whether an event needs to be formally declared an emergency or some component of EOP activation is warranted.

- **Standardized convening process:** A process must be in place to quickly bring together (physically or virtually) the key decision makers within the organizational tier to discuss whether this is an incident, provide a balanced picture across multiple disciplines, and determine the next steps. This “planning meeting” may be accomplished, for example, through group paging and a conference call line reserved for this critical group, and a designee position within this group to facilitate the meeting.

Textbox 2.1.2.7

When Do “Circumstances” Become an “Incident”?

A set of circumstances becomes an “incident” when the system managers decide that the ICS processes within its EOP are needed, and so the EOP is partially or fully activated.

Initial incident parameters may be very subtle, and it is only later that it is obvious they were indicators that the EOP should be activated. Conversely, the findings may be obvious at the outset. In healthcare systems, these indications may arise from within the organization (e.g., identification of an infectious agent in a patient that has already been admitted) or externally (e.g., an explosion and notification via EMS or the media).

The initial “incident” could therefore be *“determining if an incident (for the healthcare system) exists, and what to do if it does.”* The primary resources activated may only be assigned to monitor the media or other reports, and to develop contingency plans (through assigned Plans Section personnel) in case the concern becomes a reality.

Similarly, an “imminent threat” can be the incident. For example, with an approaching hurricane, the EOP is activated to manage “incident” activities, such as “hardening” the physical plant (hurricane shutters if indicated, preparing for flooding, checking the electrical generators), and managing personnel availability (rostering

personnel for the impact and immediate post-impact period, relieving them of duty to prepare their families, and others).

- Establishing incident command authority: For certain types of incidents, the lead management authority and how management will be conducted are relatively straightforward (e.g., local fire service usually manages an explosion at a shopping mall), and a decision support tool should be developed to address the majority of incident types (see Exhibit 2.1.2.7). Management authority is more ambiguous in events that extend across jurisdictional boundaries or authorities (e.g., bombing at a Federal facility) or when the impact is diffuse (e.g., disease outbreak in multiple State jurisdictions). **For most major incidents, tradition (and successful previous experience) dictates that local jurisdictional authorities and their designated public safety leaders are responsible for incident management. For a diffuse impact scenario, State public health authorities (in a unified management model similar to “area command” described in NIMS) might assume the lead role in unified incident management** and coordinate the incident response across the affected jurisdictions. Jurisdictional authority as established in public law is the basis for determining whether local versus State public safety agencies are the incident command authority and which specific agency is lead authority. This can vary by State. If the authority is unclear, the decision may be made by agreement between the parties or by decree by the controlling political authority.

Clear delineation of Command organizations and locations is a vital initial response activity outlined in the Concept of Operations.

Exhibit 2.1.2.7: Decision Support Tool example: Lead Agency Designation for Arlington County, Virginia⁴⁹

Hazard Type	Lead Incident Command Agency(s)
Aircraft Incident	Fire Department or Police Department
Building Collapse	Fire Department
Earthquakes	Fire Department/Office of Emergency Management
Epidemics, Diseases, and Health Threats	Department of Human Services
Explosion	Fire Department or Police Department
Fire	Fire Department
Floods	Fire Department/Office of Emergency Management
Food contamination	Department of Human Services
HAZMAT Incidents	Fire Department
Jail (Riot/Hostage)	Sheriff's Office
Nuclear Attack	Fire Department
Radiation Incident	Fire Department
Pipeline Spill, Fire, or Explosion	Fire Department
Riots, Civil Disturbances, Mass Arrest	Police Department
Terrorism Crisis and Hostage Situation	Police Department
Tornado, Hurricanes, and Severe Storms	Fire Department/Office of Emergency Management
Train Derailment	Fire Department
Water Contamination – Human Threat	Department of Human Services
Water Quality/Quantity	Department of Environmental Services or Department of Human Services
Water Supply Distribution System	Department of Environmental Services
Winter Storm	Department of Environmental Services
Resource Shortage	Emergency Management

Lead Agency designation for Incident Command and Unified Incident Command, listed by hazard type. For some hazards, multiple lead agency possibilities exist, depending upon the specific incident circumstances.

⁴⁹ Arlington Virginia Emergency Operations Plan, May 2005: 27, available at <http://www.co.arlington.va.us/Departments/EmergencyManagement/pdf/EOP.pdf>, accessed January 15, 2006.

- Establishing the Incident Command Post: The site where the primary management team will function must be rapidly established and publicized across the response system. During any sudden onset or large-scale incident, several initial management sites are often established and operated by the various response disciplines and across the range of government tiers. The terminology used to designate them may not reflect their actual roles. Thus, identifying and publicizing the primary management site and how it integrates the other sites is a critical task in organizing incident-wide, proactive management. As soon as possible in the incident planning process, an overall incident command structure should be established and publicized, so that the relationship between the various command, support, and operations centers are understood.
- Other early activities in the Concept of Operations: Multiple other actions are important to accomplish in this early stage of incident response. Exhibit 2.1.2.8 provides a summary example of these items.

Exhibit 2.1.2.8: Early actions in a no-notice sudden onset incident.

Events without Warning
(Explosion, shooting, fire, hostage, chemical spill,
structural collapse, tornado strike, IT failure, other)

Employees/Supervisors initiate the response:

- **Someone Takes Charge ('assumes command')!**
- Conduct size-up
- Establish a Command Post
- Establish communications & effect notification to the organization and public safety as indicated
- Develop an "initial attack" strategy
- Resource analysis
- Designate an Operations Chief
- Designate a Safety Officer
- Secure the scene
- Deploy responders
- Designate a Planning Chief
- Designate other functions, as needed
- Reassesses response organization & management

Adapted from Brewster

- Ongoing activities in the Concept of Operations: As the incident continues to unfold and data is accumulating from initial response actions, the Command moves towards more organized

management structure and formal incident action planning.

- Follow-on stages of response: The ICS Concept of Operations is enhanced if specific stages of emergency response and recovery (as presented in Textbox 2.1.2.8 and presented in great detail in Module 3.3) are delineated. This allows better focus on the important issues for the management system. While stages of response overlap and vary widely, each has critical tasks that must be accomplished. For this text, the stages of emergency response and recovery are defined in Textbox 2.1.2.8.

Textbox 2.1.2.8

Life Cycle Stages of Emergency Response and Recovery

- Incident recognition
- Incident notification/activation
- Mobilization
- Incident Operations
- Demobilization
- Transition to recovery
- Recovery and return to readiness, including post-incident “Organizational Learning”

Additional activities relevant to specific stages of emergency response and recovery should be considered. These are discussed in relation to Healthcare Systems in detail later in this Unit.

“Using” ICS for Incident Response

It is important to emphasize that an organization “uses” ICS during an incident because ICS has been incorporated into its emergency operations plan (EOP). ICS is then “used” through the activation and use of the EOP. The EOP’s guidance, forms, and other job aids all should have incorporated ICS principles in a consistent manner. The EOP activation threshold should therefore be clearly described, and should be set so that if ICS principles provide a more effective management of the evolving event compared to normal management methods, the EOP activation is triggered.

Organizations should distinguish between “emergencies” that occur on a day-to-day basis and “emergencies” that trigger EOP activation. One terminology approach to defining these is presented in Textbox 2.1.2.9.

Textbox 2.1.2.9

**“Event” Versus “Incident”
Differentiated in Terms of the Response Needs**

- **Everyday event:** The usual organizational functions accomplish the expected outcome using everyday management and operations. Even if an organization considers its everyday operations as “emergency response,” these everyday activities are distinct from the emergency management definition of true emergencies.
- **Urgency event:** Stepped up everyday response to accomplish the expected outcome; these are events where the organization and its personnel “work very hard” to accomplish the expected outcome using everyday management and operational procedures. Under the right circumstances, these may qualify as “proxy events” (see below).
- **Emergency incident:** Incident-level response to accomplish the expected outcome. These are circumstances where incident management and incident level response, accomplished through partial or full activation of the EOP, is necessary to achieve the expected outcome.
- **Disaster incident:** Incident-level response that is unable to meet incident demand and the outcome is less than expected. A goal of emergency management is to transform potential “disaster” incidents into “emergencies.”
- **Proxy events:** Actual experiences that, while not true emergencies or disasters, have characteristics that provide valid insight into the adequacy of response system components. They may therefore provide some predictive value for system performance in future incidents. Exercises may be considered to be constructed proxy events.

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Module 2.2

Strategic Application of ICS Concepts and Principles

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Lesson 2.2.1 Overview, Concepts, and Principles: Strategic Coordination in Healthcare Emergencies

Lesson Objectives

- *Describe some of the major obstacles that interfere with effective coordination of healthcare systems and healthcare organizations during rapidly evolving medical and public health incidents that cross jurisdictional boundaries and levels of government.*
- *Describe the general concept of a “tiered” organizational structure presented in the Medical Surge Capacity and Capability handbook,⁵⁰ and how this organizational approach may be used to establish strategy and tactics (activities, processes, and procedures) to accomplish a coordinated response.*
- *Describe how individual resources participate in this management construct, and how they benefit by participating.*

Background and Introduction

To adequately address the many issues presented in the preceding section, healthcare response must be organized beyond the single healthcare system or the local jurisdiction. Developing optimal medical surge capacity and capability, as well as maximum healthcare system resiliency, requires an organized preparedness strategy based upon an effective, comprehensive response model. Using the NIMS/ICS principles, this module presents a six-tiered model, and an accompanying strategy to achieve medical surge and healthcare system resiliency. This is useful for understanding the many current medical preparedness activities within the larger picture, and for focusing upon priority issues that develop a coordinated, community-wide response for health and medical emergencies. The model organizational structure demonstrates the relational arrangement of individual response assets with the local, State, regional, and Federal government levels.

- **Strategies for continuity of operations:** Effective strategies for maintaining mission-critical systems for the healthcare organization during these extreme events. The strategy must incorporate the preservation of quality medical care and maintaining the integrity of the healthcare system.

Though local resources are the primary response intervention, efficient mechanisms for integrating outside resources must exist.

⁵⁰ Barbera J.A., Macintyre A.G. *Medical Surge Capacity and Capability: A management system for integrating medical and health resources during large-scale emergencies.* CNA Corporation under contract to the U.S. Department of Health and Human Services (August 2004), available at: http://www.hhs.gov/ophep/mscc_handbook.html, accessed November 10, 2005.

- Strategies for medical surge: Any strategy to address healthcare issues in a mass casualty and/or mass effect incident must recognize that the **required emergency interventions are time sensitive and must be based primarily at the local level**. This urgency limits the ability of the Federal government to independently establish, stockpile, or own/control all resources necessary for immediate primary intervention. At the same time, the strategy should allow optimal integration of outside resources, whether Federal, State, local mutual aid, non-governmental organizational, or private sector assistance.
- Universally applicable strategies: Additionally, the strategies employed must permit healthcare systems **of all types within a community** to become integrated into the management of the local response. In fact, because most medical assets in the United States are privately owned, response strategies must also specifically bridge the public-private divide. In the “public safety” roles that healthcare systems perform during emergencies,⁵¹ the healthcare organizations must be prepared to provide patient care and other pre-determined services for the response. In return, they should be confident of adequate support to perform their function while remaining a viable critical infrastructure within the community. This support includes appropriate information, supplies, equipment, and continuity of operations interventions, such as priority utility restoration and financial reimbursement.
- Coordination across jurisdictional borders: Any local response system that addresses health and medical issues must be coordinated with neighboring jurisdictions and with higher levels of government in a manner that provides effective support to healthcare systems under response conditions. The result should be an overarching **system for organizing and managing the many diverse medical and public health entities involved in mass casualty response**, and their integration with other disciplines involved in incident response. This will most likely NOT be a single incident command system that is organizing all aspects of the response, but rather a “system of systems” (see Lesson 1.2.2) that

⁵¹ Barbera, Joseph A., MD; Anthony G. Macintyre, MD; and Craig A. DeAtley, PA-C. Ambulances to Nowhere: America's Critical Shortfall in Medical Preparedness for Catastrophic Terrorism. BCSIA Discussion Paper 2001-15, ESDP Discussion Paper ESDP-2001-07, John F. Kennedy School of Government, Harvard University, October 2001. Available at <http://ksgnotes1.harvard.edu/BCSIA/ESDP.nsf/www/Research>, accessed January 15, 2006

coordinates the multiple incident response systems at the various levels of government and across jurisdictional boundaries.

- Efficient coordination of resources: This larger construct should provide management processes that facilitate coordination of resources at each individual level and the integration of “outside” assistance in a timely and efficient manner. In this way, healthcare systems can more rapidly transition from baseline operations to incident surge capacity and capability while preserving continuity of operations, and then demobilize to baseline and effect a rapid “return-to-readiness.”
- Management coordination in mass casualties: As presented in Unit 1, a comprehensive plan for addressing response requirements must incorporate a **system description** (i.e., how the different response components are organized and managed) and a **concept of operations** (i.e., how the system components function and interact through successive stages of emergency response and recovery). This lesson presents key considerations in a medical surge capacity and capability system design. The overall system description is presented in lesson 2.2.2. The concept of operations to maximize integration between response components across all levels of government and private industry is presented in lesson 2.2.3.

Medical Surge Capacity and Capability: A Conceptually “Tiered” Organizational Structure for Mass Casualty Medical Response

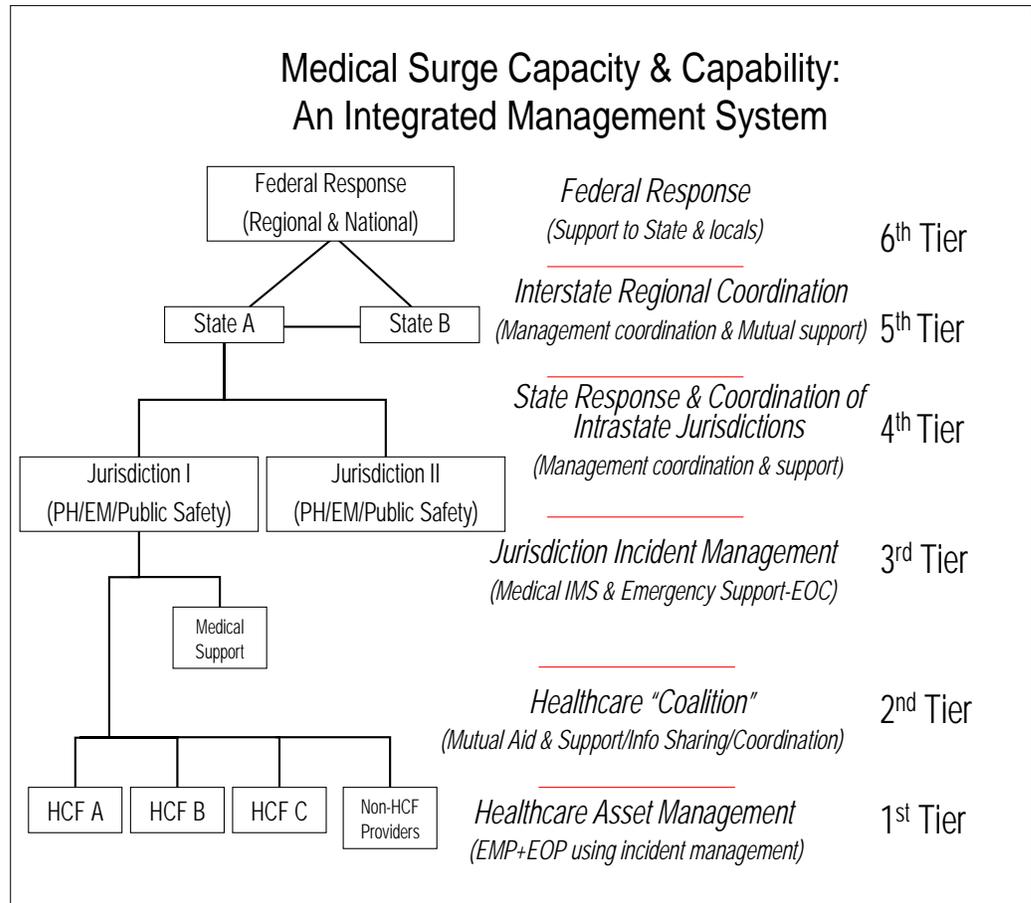
- Management-coordination construct: The Medical Surge Capacity and Capability (MSCC) Management System⁵² describes a system of interdisciplinary, intergovernmental, and public-private coordination for major incidents.
- Addresses the range of response levels: The six-tier construct (Exhibit 2.2.1.1) depicts the various levels of health and medical asset management during response to mass casualty incidents or other complex incidents with mass effect on healthcare systems (e.g., the 2005 Hurricane Katrina, the 2001 Houston Floods, and others). The tiers span the range from the individual healthcare facility (HCF) and its integration into a local healthcare coalition, to

MSCC provides the construct to integrate multiple levels of health and medical response, from the individual facility to the federal level.

⁵² Barbera, JA; Macintyre, AG. Medical Surge Capacity and Capability: A management system for integrating medical and health resources during large-scale emergencies. CNA Corporation under contract to the U.S. Department of Health and Human Services (August 2004). Available at: http://www.hhs.gov/ophep/mscc_handbook.html, accessed November 10, 2005.

the coordination of Federal assistance.

Exhibit 2.2.1.1 The “tiers” of the management layers in MSCC.



Each tier has the primary responsibilities of managing its response, supporting its response management, and integrating with lower and/or higher tiers (as appropriate).

- Tiered management and authority:** This management construct, which is consistent with the concepts in NIMS, emphasizes both **responsibility** and **authority** at each level and for incident tasks. In other words, the issue of “Who’s in charge?” is subsumed to the more important questions of: **“Who is responsible? For what? and Has the authority been distributed/delegated to the responsible party?”** The levels recognize authority, while grouping resources and actions that are responsible for addressing incident needs. For example, each health and medical asset is responsible for managing its own operations (Tier 1), as well as integrating with other response entities in the second level (Tier 2) of the tiered framework. This provides a template for response assets to coordinate in a defined manner that is more effective than the individual, ad hoc relationships that otherwise develop during a major emergency or disaster (see Textbox 2.2.1.1).

- Internal coordination and external integration: For this construct to effectively operate, **each tier must be effectively managed internally in order to coordinate and integrate externally with other tiers. Conversely, it is the responsibility of a higher tier to assist its next lower tier, not just with response resources, but also with management services if the tier assets are severely challenged.** This is presented in detail in Lesson 2.2.3.
- Defining coordinating mechanisms: Established principles of incident command and incident support are used to define coordination mechanisms within and between the tiers of MSCC, even where a direct line of authority is absent:
 - Support from beyond the ICS: Per the basic ICS principles presented earlier, Command/Management and the Operations Section receive their primary support through the three support sections internal to the organization's ICS structure: Logistics, Plans, and Administration/Finance. However, in large-scale or complex events, incident management may require additional support from entities outside the primary ICS response system.
 - Methods for acquiring outside support: This "outside" incident support is provided through established principles described in Standardized Emergency Management Systems (SEMS),⁵³ NIMS and other valid ICS models. For the additional support to occur efficiently and with minimal administrative burden, it should be accomplished through pre-established relationships and procedures that are consistent with ICS.
 - Use of the multi-agency coordination for obtaining support: The intra-tier support to the entity responsible for managing the incident at that tier occurs most commonly through a **Multiagency Coordination (MAC) system**.⁵⁴ NIMS defines a MAC system as having "**MAC Centers**," where "resource coordination" takes place, and "**MAC Entities**" that establish "priorities among incidents and associated resource allocation" and provide "strategic guidance and directions to support incident management activities."⁵⁵ For example, a common MAC Center

Support to a response organization comes from primarily within the tier. If this is inadequate, assistance is typically sought from a higher tier.

⁵³ CA OES, Standardized Emergency Management System (SEMS) Guidelines at: <http://www.oes.ca.gov/Operational/OESHome.nsf/Content/B49435352108954488256C2A0071E038?OpenDocument>, accessed June 25, 2005.

⁵⁴ NIMS. Chapter 1 NIMS - Introduction and Overview, B. Multiagency coordination systems. Available at http://www.fema.gov/txt/nims/nims_doc1.txt, accessed January 15, 2006.

⁵⁵ DHS. *National Incident Management System*, March 2004, Glossary of Key Terms, p.133, available at: <http://www.fema.gov/nims/>, accessed January 16, 2006.

Processes and procedures that integrate disciplines during preparedness (such as committees) are not commonly useful for coordinating actions during response.

- is the Emergency Operations Center (EOC) at the jurisdiction level, supervised by the jurisdiction's emergency manager. The MAC Center may obtain the additional support for the incident command system through organizations within its tier, or appeal to resources from a higher (or in some instances lower) tier if necessary. If resource allocation must be prioritized between incidents, the EOC leadership may participate in a MAC entity, such as a regional senior policy group, that determines the allocation priorities.

Textbox 2.2.1.1

The Case for Better Integration of Healthcare Assets into the Overall Emergency Management Framework

Mass casualty response is rarely isolated to the medical and health sector. Rather, it occurs in the context of a broader local or regional governmental emergency response. Healthcare assets, therefore, must be recognized as critical infrastructure in any community, and planning should address management of response in this larger context. A community's emergency management and public safety incident management must be intertwined with the medical and health planning and response. Medical and health support needs (security, transportation, etc.) should be identified and assured through existing local and regional emergency constructs (Logistics function of an emergency management agency, security/protection by local law enforcement, etc.) rather than through health systems trying to develop independent, stand-alone capabilities for each support function. This is, in fact, the conceptual basis for current National Incident Management System (NIMS) and National Response Plan (NRP). As medical preparedness for mass casualty and mass effect incidents becomes increasingly recognized as both a public safety function and a governmental responsibility, the need for a fully integrated emergency management system that includes medical managers is becoming more recognized at the local, State, and Federal government levels, as well as in non-governmental organizations.

- **The preparedness versus the response platform:** Across the United States, many response systems currently are involved in initiatives that enhance preparedness within and across the levels of government. Most of these initiatives use committee meetings, teleconferences, regular e-mail, and other normal administrative

methods to develop preparedness. The management mechanisms utilized to enhance **mitigation** and **preparedness** in this manner necessarily must differ from the management mechanisms used during **response and recovery**. This is consistent with basic Comprehensive Emergency Management (CEM) principles but is not always well recognized.

- Tier 2 example: As locales develop their healthcare coalition, various options are available for healthcare organizations to use to meet and exchange ideas. For example, hospital associations, EMS councils, independent non-profit organizations, and public health/public safety agencies can all serve as the appropriate coordinating mechanisms for preparedness. **Many of these very effective preparedness platforms are problematic as the response platform, given their non-operational nature, lack of 24/7/365 availability, other priorities during response, or other limitations.** It is important to develop a response platform for Tier 2 that can become immediately operational at all times, can focus upon the Tier 2 tasks, and can sustain the operations over time.
- Transition from preparedness to response mode: This is another important issue to examine in developing the preparedness platform. For example, many jurisdictions are using hospital associations as the preparedness platform to develop coordination mechanisms between healthcare facilities and other disciplines. The preparedness activities are accomplished using meeting space and conference call lines that are available through normal scheduling during weekday business hours. Without careful attention to how coordination will occur during the early stage of incident response, the “preparedness committee approach” will become the default methodology, even though it is problematic and inefficient.

Lesson 2.2.2 Medical Surge Capacity and Capability: A Tiered System Description

Lesson Objectives

- *Describe the six tiers in the MSCC organizational structure and what comprises each tier.*
- *Explain how the agencies, organizations, and individual resources are organized within each tier.*
- *Describe the responsibilities that each tier has for intra- and inter-tier management.*

Emergency response and recovery tiers were developed to reflect long-standing emergency management and Federal Response Plan guidance, all consistent with the more recently released (December 2004) National Response Plan (NRP) construct. The only Medical Surge Capacity and Capability (MSCC)⁵⁶ “tier” not formally represented in the NRP is Tier 2, but it is encompassed by the Multi-Agency Coordination Center concept presented in NIMS.

The tiers respect legal and political boundaries, regulatory and legislated mandates, and fiduciary responsibilities of non-governmental organizations, following the layers of constitutional and legislated authority for **response** (see Exhibit 2.2.2.1):

1. Agency/organization with direct responsibility to address the emergency situation
2. Local jurisdiction⁵⁷
3. State jurisdiction
4. Interstate region
5. Federal jurisdiction

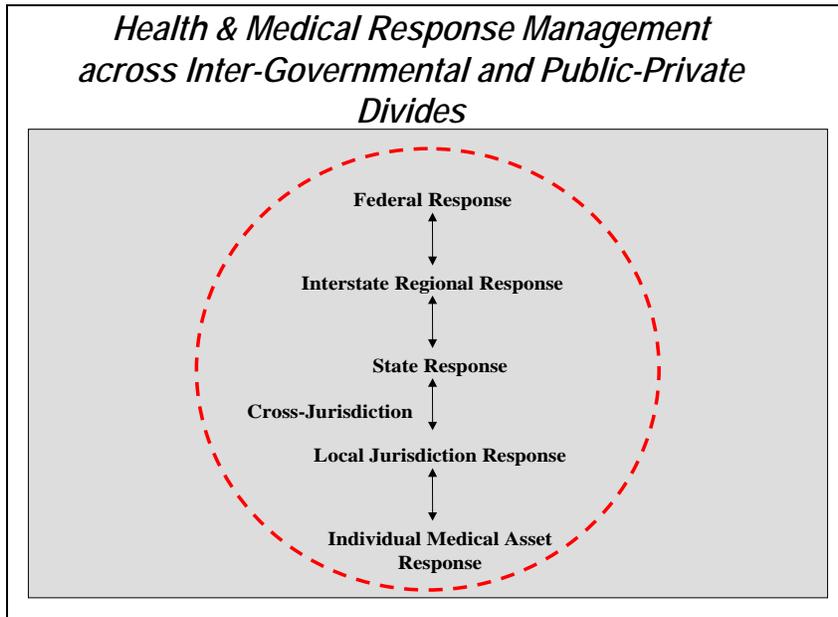
This ICS-based tiered strategy to coordinate the local, State, regional, Federal, and non-governmental healthcare resources during emergency response and recovery has now been adopted into the HHS Health Resources Services Administration (HRSA) 2006 guidance for the National Bioterrorism Preparedness program.⁵⁸

⁵⁶ Barbera, JA; Macintyre, AG. Medical Surge Capacity and Capability: A management system for integrating medical and health resources during large-scale emergencies (2004). CNA Corporation for the U.S. Department of Health and Human Services. Available at: http://www.hhs.gov/ophep/mscc_handbook.html, accessed April 24, 2006

⁵⁷ A “jurisdiction” is a political subdivision (federal, State, county, parish, and/or municipality) with the responsibility for ensuring public safety, health, and welfare within its legal authorities and geographic boundaries.

⁵⁸ HHS Health Resources Services Administration (HRSA) National Bioterrorism Preparedness program, information available at: <http://www.hrsa.gov/>, accessed June 8, 2006.

Exhibit 2.2.2.1: The levels of authority and responsibility boundaries that must be respected when constructing a layered response.



- **“Management by objectives”**: The basic ICS principle that drives a consistent coordination process within each tier, and then across the levels of healthcare organizations and government, is management by objectives. The control objectives of the management foci at each tier may be grouped into three categories:
 - **Incident Management**: This is the functional structure that is managing the direct effects of the incident. For some tiers, the incident may be defined by the objective of “support to the lower tiers.” For many healthcare organizations, the hospitals may be intended to manage not just the hospital response, but also all the hospitals’ affiliated outpatient clinics.
 - **Coordination of support to incident management**: This is the functional structure that provides support to the Incident Command System **at the same tier/level**, beyond the internal ICS support from Logistics, Plans, and Finance/Administration.
 - **Management of separate but incident-related issues**: This function manages incident-related issues that are outside the incident objectives of the ICS, but require complex management beyond the capability of the continuing everyday organizational management.
- **Conducting “management” at each tier**:

Each tier can be viewed as having 3 overriding control objectives during response:

- 1) Incident management (at their respective levels),**
- 2) Support to incident management within that tier,**
- 3) Management of separate but incident related issues.**

- How incident management is provided at each level: The Incident Command System (ICS) is used by the Incident Management Team (IMT) at that tier level to **directly manage the central “incident” as defined for each level**. ICS sets its incident objectives and thereby defines the “incident” that it is managing (see Lesson 2.1.2). Additionally, each ICS establishes its structure and function, and obtains its primary support through its ICS support sections (Logistics, Plans, Admin/Finance) or directly through tactical mutual aid.⁵⁹ Its next source for support comes from its Multi-Agency Coordination (MAC) Center.
- How support to Incident Command is provided at each level: According to NIMS, support to the IMT that comes from outside the ICS structure and direct mutual aid is provided through a Multiagency Coordination (MAC) System (see terminology Textbox), consisting of one or several Multiagency Coordination Centers and possibly also a “MAC Entity”. A MAC Center is the body that **coordinates direct support to its ICS** for any indicated additional assistance per pre-plans or through requests from ICS. At the local jurisdiction and State jurisdiction levels, the MAC Center is commonly an EOC. It arranges assistance through its own resources (in most EOCs, this occurs through emergency support functions). If unable to meet the requests in this manner, the MAC Center is the portal from which requests for assistance are sent to higher levels, and through which the resources are obtained to meet the requests. The management organization for this important tasking varies: it may be a full EOC or a subdivision of the EOC such as a task force or group or emergency support functions. The support may also be assigned by the EOC to a departmental operations center or other extension of the MAC Center.

⁵⁹ Tactical mutual aid is assistance obtained through standing Mutual Aid Agreements between like services (such as fire departments, EMS, or healthcare facilities) that are usually from adjacent or regional jurisdictions (see glossary for Mutual Aid and Mutual Aid Agreements). Tactical mutual aid should be guided by Strategic Mutual Aid instruments.

Terminology alert!

Multiagency Coordination Systems: Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of multiagency coordination systems include facilities, equipment, emergency operation centers (EOCs), specific multiagency coordination entities, personnel, procedures, and communications. These systems assist agencies and organizations to fully integrate the subsystems of the NIMS. (NIMS)

- How to manage separate but incident-related issues: In addition to incident support, either the MAC/EOC or some other entity designated by the MAC/EOC must be assigned to **manage incident-related issues within its “jurisdiction” that are not being managed by the ICS. If supporting multiple incidents becomes complex, a MAC Entity (see Terminology Textbox) is established to provide strategic guidance and decision-making regarding resource allocation.**

Terminology alert!

Multiagency Coordination Entity: A Multi-Agency Coordination Entity functions within a broader multi-agency coordination system. It may establish the priorities among incidents and associated resource allocations, deconflict agency policies, and provide strategic guidance and direction to support incident management activities. (NIMS Glossary)

Individual Healthcare Assets (Tier 1)

Tier 1 is composed of the cohort of individually operating hospitals, integrated healthcare systems, private physician offices, outpatient clinics, and other resources that provide “**point of service**” **medical care** and other medically related services that address mass casualty or mass effect incident issues (see Lesson 3.2.1). Emergency Medical

Tier 1 focuses on point-of-service healthcare organizations.

Services (EMS) may be included in Tier 1 if called upon to provide field-based medical care in an emergency. Typical field EMS, however, is usually distinct from Tier 1 since in the traditional role EMS is integrated through jurisdictional management systems overseeing field response.

- Incident Management at each individual healthcare system or individual healthcare asset:

- Control objectives: The control objectives for each asset in Tier 1 should include maximizing healthcare system resiliency and medical surge capacity and capability, while ensuring the safety of personnel and other patients.

- ICS process: This control objective is best accomplished by each organization through an adequate Emergency Operations Plan (EOP), effectively using ICS to manage internal resources and to obtain outside assistance as required. This tiered construct, therefore, highlights the importance of ICS-consistent processes within the EOP that facilitate coordination with other response assets in community. In particular, a robust information processing capability is required within each resource, to acquire and provide internal data beyond the usual “total casualties” and “bed counts” that are the common focus. Additional information to share includes:

- Situation status reporting
- Expansive resource status reporting
- Patient tracking data
- The individual organization’s ICS structure and key ICS assignments for the specific response
- The individual organization’s strategies and tactics being utilized.

In addition, the Liaison and Plans functions must also be able to receive outside data and rapidly disseminate it where needed within the organization.

See Module 3.1 for extensive detail on healthcare system management during emergency operations.

- Coordination of support to Tier 1 Incident Management: Resource and other assistance within the individual healthcare asset includes:

- **Internally arranged support:** In Tier 1 assets, most support is directly provided **within the organization's ICS** through its support sections (Logistics, Plans, and Administration/Finance). That support may include:
 - Mobilization of healthcare facility staff and stored supplies/equipment by the ICS.
 - Pre-arranged vendor contracts activated by ICS Logistics.
- **Support from beyond the ICS:** If additional support is indicated for the circumstances, this is sought **through outside sources**. The EOC-like function to accomplish this may be co-located within the healthcare organization's incident command post, and may even use command staff to accomplish it. Alternatively, additional staff may be designated for this tasking, and a separate EOC location utilized, particularly if this becomes a time-consuming task. Methods to rapidly obtain assistance through the EOC function include:
 - Rapidly established new contracts with outside vendors to meet needs (such as staffing agencies or supply vendors)
 - Individually arranged outside support from neighborhood, non-medical organizations (such as arranging loan of generators)
 - Mutual aid obtained from similar organizations. This could, for example, be accomplished between two healthcare facilities that are geographically close, with a direct mutual aid arrangement that is independent of any jurisdiction-wide agreements.
 - Directly obtaining resources from medical organizations such as a local Medical Reserve Corps⁶⁰ or Disaster Medical Assistance Team⁶¹

At the healthcare facility level, support to the hospital ICS can be internal or external through a variety of mechanisms.

⁶⁰ U.S. Department of Health and Human Services. "About the Medical Reserve Corps." Medical Reserve Corps is an HHS/Office of the Surgeon General-sponsored initiative that establishes "teams of local volunteer medical and public health professionals who can contribute their skills and expertise throughout the year as well as during times of community need." Available at <http://www.medicalreservecorps.gov/page.cfm?pageID=5>, accessed November 22, 2005.

⁶¹ U.S. Department of Homeland Security. "What Is a Disaster Medical Assistance Team (DMAT)?" Available at <http://oep-ndms.dhhs.gov/dmat.html>, accessed November 22, 2005.

- Seeking assistance through a formal request to Tier 2.
- Management of separate but incident-related issues: In any major or prolonged incident, incident-related issues may arise. They must be recognized and assigned to appropriate personnel if not being addressed through the ICS. These may be assigned to non-incident staff, or a separate task group may be developed. Example issues include arranging for pre-scheduled patients to be re-scheduled for care at a sister or distant facility, or addressing the construction schedule for a major project that was disrupted by the incident. Some of these issues may require significant attention from senior executives, bolstering the case for personnel within the organization other than the chief executive to be trained to function as the organization's incident commander in their ICS.

Healthcare Coalition (Tier 2)

The healthcare coalition organizes the individual Tier 1 healthcare assets into a single functional unit, connecting them through an effective communication system that allows robust sharing of information, discussion of individual objectives and strategies, mutual aid between the parties, and a unified front when coordinating with jurisdictional authorities. The Tier 2 goal (control objectives) includes maximizing medical continuity of operation and surge capacity/capability across the coalition of Tier 1 assets. This is addressed through mechanisms such as the coordination and management of information and through mutual aid or cooperative assistance.

Tier 2 can be regarded as a coalition of healthcare assets at the local level that serves mainly to coordinate management between healthcare facilities and promote assistance between them.

- Management principles: Essential concepts for the Tier 2 organization include:
 - Appropriate control: Tier 2 is a functional structure that is entirely controlled by the healthcare assets themselves, and so assures that it will have their priorities as a primary focus. This contrasts with a jurisdiction ICS or EOC, which may have multiple priorities competing with healthcare response during a large-scale or complex incident.
 - Information processing: The coalition platform provides a means to share incident information and coordinate operational objectives, strategy, and concerns among healthcare organizations without depending upon other response entities. For example, information gathered by the coalition is aggregated and returned to the partners at the same time it is transmitted to jurisdictional authorities.

- **Mutual aid:** The coalition provides a means for establishing a mutual aid and/or cooperative assistance mechanism that will be effective during mass casualty and mass effect incidents. It addresses the range of assistance, from rapid accepting of patients from another institution to sending staff and equipment/supplies to a site needing additional surge capacity.
- **Span of control:** Properly constructed, it provides a span of control functional structure that both the jurisdiction and the healthcare organization can rely upon to gather and disseminate information, public health advisories/directives, and other incident related activities.
- **Incident Management by Tier 2:** While incident management at each healthcare organization is independently conducted by the organization, **coordination of management** across healthcare systems and individual healthcare assets is the focus of Tier 2.
 - **Clearinghouse function:** Tier 2 may effectively operate as a Multiagency Coordination (MAC) System. The coalition does not generally have a firm command function, but rather achieves its control objectives (coordinating information such as management objectives and coordinating resource support) through information aggregation and dissemination and via consensus-building among participating Tier 1 entities. This is consistent with the methods and functions described in NIMS for Multi-Agency Coordination Centers.⁶² If major decisions must be made by the coalition of healthcare organizations, a MAC Entity may be established, consisting of the senior executive or the incident commander from each of the participating healthcare organizations.
 - **Cooperative incident action planning:** Tier 2 promotes the sharing of individual control and operational objectives and strategies from each healthcare organization, to assure consistency across all healthcare organizations (as much as possible given individual circumstances related to the hazard impact). This also allows recognition of potential conflicts in time to resolve them or to prepare an explanation for responders and the public as indicated. For example, different levels of personal protective

Tier 2 does not impose a firm command function but coordinates management among participating healthcare organizations.

⁶² National Incident Management System. Chapter 2, Section B: Multiagency Coordination Systems, p. 26; available at: http://www.fema.gov/nims/nims_compliance.shtm#nimsdocument, accessed February 9, 2006.

Tier 2 also provides an efficient method for the medical organizations to interface with the jurisdiction.

equipment utilized by response personnel at different Tier 1 entities may be indicated since they have different tasks or are receiving different types of patients. This reasoning may not always be obvious to emergency workers and, if recognized, can be explained to prevent confusion or conflict.

- Information sharing: The coalition ensures that health and medical assets have the information and data they need at a level of detail that will enable them to optimally provide medical surge capacity and capability. This information sharing can in some instances extend beyond hospitals to include long-term care or alternative treatment facilities, private physician offices, clinics, and any other health or medical asset that may be brought to bear during major medical response. Its reach may also, in some instances, extend beyond the geographic area of the primary responding jurisdiction (Tier 3), especially in rural settings. For instance, in some rural areas, Tier 2 information sharing can extend to facilities that exist in neighboring jurisdictions (as there may only be one or two facilities in each).
- Streamlined, more effective interface with Tier 3: This is accomplished by providing a platform for cooperative interface with the jurisdiction's incident management (Tier 3). The coalition establishes a planning process **for this purpose** that is equal and fair to all participants, giving each the opportunity for input during preparedness planning, response, and recovery. This platform allows Tier 1 partners to coordinate with the jurisdiction and public safety agencies as a single body, more effectively addressing difficult issues than can be accomplished on an individual basis. This is especially important when addressing financial, liability, regulatory concerns, and incident information issues exacerbated by the public-private gap. In some very large healthcare systems, an internal component of the system may serve in an internal Tier 2 functional capacity. For example, in the VHA the Veterans Integrated Service Network (VISN) serves as a Tier 2 coalition with internal authority for its VA Medical Centers.
- Coordinating Mutual Aid and Cooperative Assistance: Tier 2 strengthens each organization's medical surge capacity and capability, as well as each healthcare system's resiliency, beyond the sum of each individual asset. Through effective mutual aid, Tier 2 establishes the **ability to move medical resources (e.g., personnel, facilities, equipment, supplies) to sites of greatest need**, as well as moving patients to locations of stable, available medical care. This is accomplished through mutual aid and cooperative agreements (see Textbox 2.2.2.1). Beyond the

primarily medical assets, logistical **assistance** can occur between otherwise independent healthcare assets. For example, support arranged by one institution (a bottled water cache, a contingency contract for portable generators from a neighborhood supplier, and others) could potentially be shared with other institutions and coordinated by Tier 2 as appropriate. Additionally, Tier 2 could assist with the distribution of resources from higher tiers into the community.

Textbox 2.2.2.1

Mutual Aid and Reimbursement

California Master Mutual Aid Agreement,⁶³ which has been in effect since 1950, differentiates between mutual aid, which is without reimbursement, and other assistance that by prior agreement will be reimbursed by the receiving jurisdiction. The Master Mutual Aid Agreement does not preclude this reimbursable assistance, which in California has been commonly referred to in the past as “cooperative assistance” provided through agreements, generally after the first 12 hours of assistance through un-reimbursed mutual aid. The NRP refers to this as “reimbursed” support when describing Federal-to-federal support.⁶⁴ Providing guidelines for reimbursement of assistance is important for multiple reasons:

- Assistance, when requested, is usually urgent, and so cost issues should already be resolved.
- Critical assistance is more likely to be rapidly offered if reimbursement can be assured.
- Recovering costs of response from FEMA and other sources requires documented expenses. Free mutual aid may be difficult to submit for reimbursement.

In developing mutual aid arrangements, healthcare organizations should address this important issue.

⁶³ California Disaster and Civil Defense Master Mutual Aid Agreement available at: [http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/\\$file/CAMasterMutAid.pdf](http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/$file/CAMasterMutAid.pdf), accessed November 21, 2005.

⁶⁴ Financial Management Support Annex, National Response Plan, December 2004: p. FIN-11, available at http://www.dhs.gov/interweb/assetlibrary/NRP_FullText.pdf, accessed November 21, 2005: “B. Operating Procedures 1. Federal agencies participating in the NRP may request and provide federal-to-federal support by executing inter-agency or intra-agency reimbursable agreements, in accordance with the Economy Act (31 U.S.C. §1535) or other applicable authorities.”

- Coordination of support to Tier 2 incident management: This involves resource assistance from beyond the coalition partners and their direct support across healthcare systems and individual healthcare assets. This is primarily achieved through the common interface between the coalition and the jurisdictional ICS that is managing the jurisdiction's incident and therefore supporting the healthcare coalition and the overall healthcare response.
- Management of incident-related issues for healthcare organizations: In a major incident, issues may arise that are significant for healthcare facilities and their normal operations, but are not directly related to the central incident response. They may therefore not be directly managed by the incident ICS.

- Patient care issues: Usual patient care patterns may be disrupted. For example, normal EMS patient distribution may be affected, and non-incident patients normally transported directly to tertiary care facilities, or transferred from smaller healthcare organizations, may need alternate interim destinations. Hospital-deployed personnel from the VA medical center, special needs shelters, and others need to be supported during their missions. Deploying medical personnel from the hospital to assist with patient care needs elsewhere may be an important subset that should receive careful attention if anticipated.
- Non-patient issues: Road closures and other issues could affect the normal re-supply processes. Delivery of medical gases, blood products, and other critical resources could be disrupted, affecting normal operations within healthcare facilities.

Though not directly incident issues, the management coordination mechanisms within the Tier 2 coalition should be configured to address these concerns in a consensus fashion, with participation by jurisdictional authorities (public health, healthcare regulators, EMS managers, and others) as indicated or required by law or regulation.

- Development issues related to Tier 2: Many locales are developing some version of this coalition, and several areas of concern should be addressed:

- Consistency with NIMS: In the larger scheme of ICS, Tier 2 may be viewed as a "MAC System" as described in NIMS, where the majority of the "agencies" may be non-governmental

The development of a Tier 2 coalition is consistent with NIMS guidance.

organizations or “cooperating agencies” (FIREScope definition⁶⁵ - see Terminology Textbox) providing healthcare services. The MAC System interfaces with the jurisdiction’s IMT or EOC as indicated by Tier 3 construct and incident circumstances. Alternatively, this coalition could become a branch or group within the overarching jurisdictional ICS, coordinating medical care services and receiving support directly from the ICS support sections (see Lesson 2.2.3 for further discussion of this).

Terminology alert!

Agency. A division of government with a specific function, or a nongovernmental organization (e.g., private contractor, business, etc.) that offers a particular kind of assistance. In ICS, agencies are defined as jurisdictional (having statutory responsibility for incident mitigation) or assisting and/or cooperating (providing resources and/or assistance). See Assisting Agency, Cooperating Agency, and Multi-agency. (FIREScope/NIIMS 1999)

Agency, Cooperating. An Agency supplying assistance, including but not limited to direct tactical or support functions or resources to the incident control effort (e.g. Red Cross, law enforcement agency, telephone company, etc.). (FIREScope/NIIMS 1999)

Jurisdiction Incident Command/Management (Tier 3)

The Tier 3 is the local jurisdictional management function that provides incident management and incident support at the local level. It is this level that directly integrates healthcare response with other response disciplines (e.g., public safety, emergency management) to maximize jurisdictional medical surge and healthcare system resiliency. This is the most critical tier for integrating the full range of disciplines that may be needed in a mass casualty or complex medical event, since it is the management level closest to the incident itself that has comprehensive authority. **The control objectives for Tier 3 (in most local jurisdictions’ emergency operations plans) include preservation of life and property and, thus, a focus should be the management of**

The jurisdictional response at the local level should provide the services that integrate medical (often private sector) assets with the public sector response. This critical responsibility is commonly overlooked.

⁶⁵ FIREScope California: Glossary of Terms ICS-010-1 Incident Command System Publication October 15, 1999; available at <http://www.firescope.org/ics-big-fog/ICS420-intro.pdf>, accessed November 13, 2005.

the diverse jurisdictional disciplines in support of medical surge and healthcare system resiliency.

- Incident Management by Tier 3 (jurisdictional response):
 - Management through ICS: In a large-scale incident where the jurisdiction is primarily responsible for addressing the emergency situation, the local jurisdiction will have an IMT and an EOC. Commonly, the incident commander and lead agency are from the public safety sector, although public health or the emergency manager may have these roles.
 - Managing the primary incident at the local level: The IMT provides direct management of the incident as defined by its control objectives and strategy. Alternatively, if several distinct ICS structures are deployed to manage separate scenes or manage distinct functional aspects of the same event (for example, an IMT to manage a hazardous materials release scene and a separate IMT to manage the medical needs of the mass casualties), the jurisdictional “ICS” may in fact be an “area command” as defined by NIMS (see below). The Area Command mission would include coordinating the multiple incident command structures within the jurisdiction.

When more than one incident command structure is utilized in managing an incident, an Area Command may be established to coordinate overall management.

Terminology alert!

Area Command: An organization established (1) to oversee the management of multiple incidents that are each being handled by an ICS organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed... Area Command may be established at an emergency operations center facility or at some location other than an incident command post (*NIMS Glossary*).

- Participation by medical organizations in local ICS: Mass casualty incidents commonly have incident management issues that require healthcare assets to be recognized as integral members of the ICS, and fully participate in management, operations, and support activities even though they are primarily private sector

assets. This is important to recognize, since the public health and medical response may not always operate effectively from their traditional roles in jurisdictional response: a) as independent resources operating “outside” the jurisdiction’s ICS structure and function, or b) in a support relationship through an Emergency Support Function (ESF). This is especially important during events that are primarily health and medical in nature, such as mass casualty or infectious disease epidemics, where healthcare response is a primary operational objective. In these situations, healthcare organizations should either be directly integrated into the jurisdiction’s IMT (for example, as a Medical Services Branch under the Jurisdiction’s Operations Section), or the ICS should have an objective of directly supporting the healthcare response (for example, “directly supporting the healthcare coalition of Tier 2”). Having representatives from the healthcare sector acting in a Senior Advisor Role on the Command Staff may also be an effective method to assure that the jurisdiction’s response is optimally supporting healthcare system continuity of operations as well as critical surge capacity and capability. Tier 1 assets may still be represented in the EOC (see below) by Tier 2 representatives ensuring comprehensive support to the involved healthcare systems and individual healthcare assets.

- Coordination of support to Tier 3 Incident Management: Support requested by the jurisdictional IMT or a jurisdictional Area Command from outside the ICS (i.e., unavailable through ICS support sections – Logistics, Plans, and Admin/Finance – or tactical mutual aid) is primarily provided and/or coordinated through the local EOC. This is a traditional function of the EOC, and is well described in the emergency management literature. Most EOCs are now organized using ESFs to group together resources that provide assistance. NIMS, however, has prompted the development of ICS organization and processes for managing the support to the ICS and directing the activities of the ESFs (see Textbox 2.2.2.2).

- Management of incident-related issues within the jurisdiction:

The EOC, in addition to providing direct support to the IMT, manages the incident-related issues in the jurisdiction that are outside the scope of the IMT. This may require a very robust management capability that integrates health and medical services into the overall EOC management and operations section as well as the support sections. This is commonly problematic for public health and medicine, since addressing incident-related health and medical issues usually is conducted through the narrow confines of a ESF #8,

Tier 1 assets may be represented in the Tier 3 organizational chart in several fashions, depending on the event. One of the more critical considerations may be representation at the Tier 3 level as a senior medical advisor.

The traditional ESF construct in an EOC may not be an effective means of managing the complex assistance needed by the medical sector. A more NIMS/ICS consistent method would be the use of a branch under EOC operations to coordinate the multiple ESFs involved in addressing complex needs.

Public Health and Medical Services in an EOC. Obtaining non-medical support for these issues requires working across the stovepipes of the multiple ESFs, a very inefficient and problematic management method. To effectively address complex public health and medical issues, consideration should be given to establishing an additional branch, task group, or similar configuration within the EOC Operations Section (see Textbox 2.2.2.2). **This is an important issue for public health and medical organizations to address during planning, since many issues facing public health and medicine during large-scale incidents are of a complexity that exceeds the management capacity of a public health and medical ESF.**

An effective EOC is essential for successful local response to large and/or complex incidents.

Terminology alert!

Emergency Operations Center (EOC): An emergency operations center (EOC) is a location from which centralized **emergency management** can be performed during response and recovery. The use of EOCs is a standard practice in emergency management, and is one type of **multiagency coordinating entity described in NIMS**. Local governments should have designated EOCs. The physical size, staffing, and equipping of a local government EOC will depend on the size and complexity of the local government and the emergency operations it can expect to manage. The level of EOC staffing will also vary with the specific emergency situation.

A local government's EOC facility should be capable of serving as the central point for:

- coordination of all the jurisdiction's emergency operations.
- information gathering and dissemination.
- coordination with other local governments and the operational area (SEMS description of an EOC)⁶⁶ - see also the glossary in Unit 5 for NIMS definition of EOC.

⁶⁶ SEMS Part I. Section C, p. 2. Local Government Level available at <http://www.oes.ca.gov/Operational/OESHome.nsf/0/B49435352108954488256C2A0071E038?OpenDocument>, accessed November 21, 2005.

Textbox 2.2.2.2

EOC Organization: The SEMS Model Versus the FEMA EST/NRCC Model.

Emergency Operations Center Functional Organization:

Many EOCs in the U.S., both at the local and State levels of government, are modeled upon the FEMA Emergency Support Team (EST) concept from the Federal Response Plan,⁶⁷ which was recently replaced in the NRP by the National Resource Coordination Center (NRCC). Many EOCs consequently organize their functional resources under Emergency Support Functions (ESFs), and have only a small management/administrative team that directs the ESFs and directly manages support to the IMT and separate but incident-related issues. An alternative organizational approach to the EOC is presented by California's Standardized Emergency Management System (SEMS), where the EOC functions under the tenets of ICS, and is organized with the usual five SEMS functions/organizational elements: "management, operations, planning/intelligence, logistics, and finance/administration." "These functions should be the basis for structuring the EOC organization."⁶⁸ For the complex management of health and medical issues faced by an impacted jurisdiction, this SEMS-style approach is much more effective for developing and managing actions. This configuration is also more consistent with NIMS guidance for ICS implementation at all levels of response.

State Response and Coordination of Intrastate Jurisdictions (Tier 4)

Tier 4 describes how State-level actions support the jurisdictional incident management and support (Tier 3) responsibilities and promote coordination among multiple affected jurisdictions. In some events,

In some incidents, the responsibility for incident command may rest at the state (Tier 4) level.

⁶⁷ FEMA. The Federal Response Plan (FRP). Washington, D.C. This plan has been replaced by the National Response Plan. The Emergency Support Team (EST) in the FRP had a small management component because most of the complex management of federal support to the incident authorities was accomplished by the deployed Emergency Response Team (ERT), which then sent straightforward requests to the EST for assignment to the ESFs. The EST EOC model did not account for the management function of the ERT.

⁶⁸ SEMS Part I. Section C, p. 3. Local Government Level available at <http://www.oes.ca.gov/Operational/OESHome.nsf/0/B49435352108954488256C2A0071E038?OpenDocument>, accessed April 12, 2006.

particularly those with Statewide involvement and no discrete “scene” (such as a widespread infectious disease outbreak), the State may in fact be the primary incident command authority.

- Incident Management of the State response: coordination of ICS between affected local jurisdictions. This may be accomplished through several configurations:
 - “Area Command” (see preceding terminology textbox)
 - Coordinating management between affected jurisdictions without the formal structure of a Area Command
 - Assuming primary responsibility for directly managing the incident. If this option is imposed, the State’s ICS structure developed for this incident should clearly indicate how the local ICS are integrated – this would usually be through assigned positions within the operations section as geographic branches or divisions.
 - In each of these configurations, the State has the responsibility to:
 - Define incident objectives and strategy: Set overall incident objectives and strategy for the State, and coordinate the incident objectives and strategy across the affected jurisdictions. This should promote balanced and comprehensive incident management and reduce the likelihood of conflicting strategy or tactics across jurisdictional borders.
 - Define allocation priorities: Establish priorities for allocation of outside resources according to the overall incident needs.
 - Promote sharing of incident information: This is important to accomplish across the entire operational area and with the general public. It includes addressing rumor and misinformation, assuring consistency of the public message, and addressing other important information needs presented in Lesson 2.1.1.
- Incident management of the State response: Providing assistance to affected local jurisdictions is accomplished by coordinating with the local EOC, and through them, the local ICS. The model for delivering this type of assistance was provided by the Federal-to-State mechanisms developed in the 1990s. The Emergency Response Team (ERT) under the FRP provided assistance through the State

EOC, and processed requests that could be transmitted to the Federal EOC (formerly the Emergency Support Team) to act upon. The complex objectives for this State-level ICS include:

- Assuring that needed advice and other technical expertise is provided to all affected areas within the State.
- Accepting the local jurisdictions' requests for assistance, approving or modifying the requests as indicated, acquiring the appropriate resources, and managing them until assigned to the requesting jurisdiction. These actions may include:
 - Promoting tactical mutual aid through actions such as guaranteeing reimbursement to assisting organizations
 - Coordinating Statewide mutual aid and cooperative assistance from areas of the State or from disciplines not covered by tactical mutual aid agreements with the affected jurisdictions
 - Providing State-based resources to assist the local affected jurisdictions
 - Directly providing State services and supplies in parallel with the local IMTs, including in-State National Guard assistance
 - Serving as the primary interface for requesting and receiving Federal assistance, both civilian and military.
- Coordination of support to Tier 4 Incident Management: resource assistance to the State ICS may have several configurations:
 - If the State is the primary ICS: If the State is providing the primary ICS for the incident, the State EOC must function similar to a jurisdictional EOC in supporting the jurisdictional ICS.
 - If the State is supporting a local primary ICS: In the usual configuration, the State EOC must be prepared to provide additional, outside assets for the State ICS to adequately perform its management functions throughout the incident. If the State is supporting the local response as its primary mission, the State EOC is tasked with acquiring assistance that has been requested through the local EOCs to the State ICS, and aren't available through the State ICS assets. For example, this may require the recruitment, through Emergency Management Assistance Compact (EMAC), of skilled State-level managers from other

States to supplement or relieve State ICS personnel during a prolonged incident.

- Management of incident-related issues at the State level:
 - Addressing State-wide incident related issues: Similar to the task description for a local EOC above, the State EOC must also 1) support the State-level incident response, and 2) address Statewide incident-related issues not being managed by the affected local jurisdictions. These may include minimizing impact of the incident on sectors of the economy (tourism, for example), or assistance in maintaining supply chains for industry that is otherwise uninvolved in the emergency. For health and medical incident where widespread geographic isolation or quarantine has been imposed, these issues will be very significant.
 - Development issues related to Tier 4: The following could be addressed during preparedness planning for State agencies to facilitate arrangements between jurisdictions and to coordinate response assets.
 - Mutual aid and cooperative agreements: The use of strategic mutual aid agreements and/or cooperative agreements may standardize the implementation of tactical mutual aid between jurisdictions and individual agencies, including healthcare resource mutual aid/cooperative assistance discussed in Tier 2. This would promote a cohesive response strategy during a widespread incident. California provides an excellent example of a Statewide Master Mutual Aid Agreement, which has been in place since 1950.⁶⁹
 - Intrastate regional jurisdictions: A State may also develop intrastate regional “jurisdictions” to promote coordination and resource assistance during large-scale incidents. This adds a layer of complexity to Tier 4, but has been found beneficial in high-frequency disaster event States such as California and Florida. The relationship between intrastate regions should be determined through a Statewide emergency management system and established through State regulations and legislation. This must be distinguished from interstate regional management coordination described in Tier 5.

Tier 4 should be an effective platform for examining intra-State mutual aid and cooperative agreements.

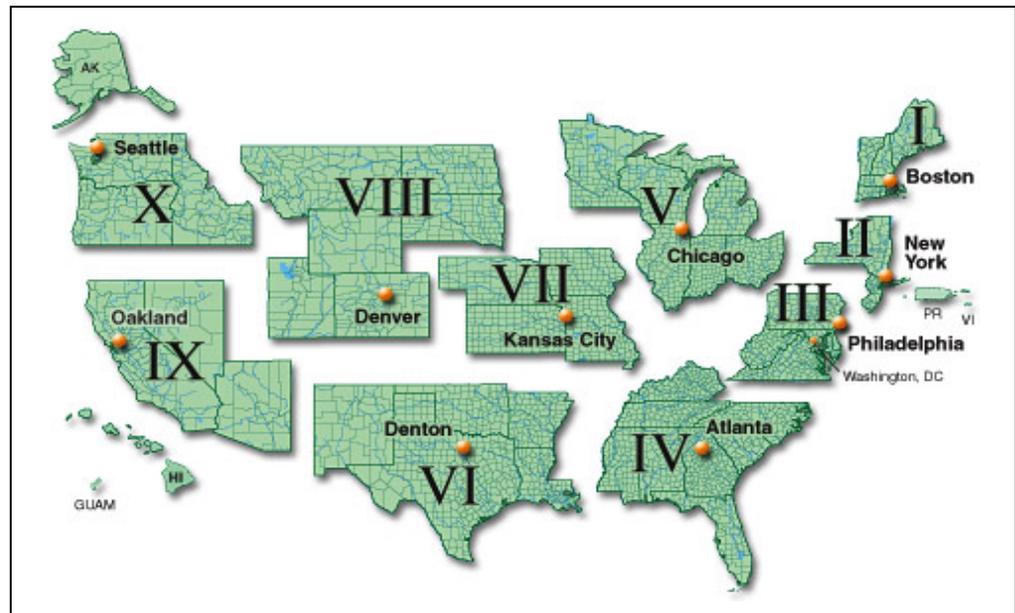
⁶⁹ California Disaster and Civil Defense Master Mutual Aid Agreement, available at [http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/\\$file/CAMasterMutAid.pdf](http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/$file/CAMasterMutAid.pdf), accessed November 21, 2005.

Interstate Regional Management Coordination (Tier 5)

Tier 5 describes the function that maximizes interstate coordination to support incident response. This tier focuses on how to manage interstate medical and health assistance and examines how mutual aid, cooperative assistance, incident management coordination, and information sharing can enhance medical surge capacity and capability as well as promote healthcare system resiliency.

- Basis for cooperation between States: The basis for regional coordination and cooperation must be mutual self-interest, assuring that the sum of the regional assets creates a stronger overall capacity and capability, as well as strengthening each individual jurisdiction. Regional management coordination may therefore be legally and conceptually based upon mutual aid and cooperative assistance concepts.
- Incident management of interstate coordination between affected States:
 - Political and legal boundaries: Interstate regional coordination must recognize and respect the individual legal and political responsibilities of each individual “State” (Washington, D.C. and U.S. territories are treated as “State” jurisdictions). Each political jurisdiction has primary legal and political responsibility to its own citizenry such that it is unlikely to abrogate that responsibility or subrogate to other State jurisdictions, to a “region,” or to a Federal response agency. Because “unified management” between jurisdictions of an interstate region cannot override the jurisdictional command responsibility, regional management has historically been limited to strategic issues that traverse jurisdictional boundaries. The underlying key concept for regional response, therefore, is **management coordination**: identifying the inter-jurisdictional issues and addressing the management coordination (objectives and strategies) required for these issues.
 - The Federal regionalization concept: The development of Federal Administrative regions (see Exhibit 2.2.2.2) in the 1990s, with the subsequent regionalization of the U.S. Department of Health and Human Services (see Tier 6 description) and other Federal departments, has promoted this interstate regional coordination.

Exhibit 2.2.2.2: FEMA Regions. FEMA has ten regional offices and two area offices: A Pacific Area Office in Region IX (Honolulu) serving Hawaii and the U.S. Pacific territories, and a Caribbean Area Office in Region II (Puerto Rico) serving Puerto Rico and the U.S. Virgin Islands. Each region serves several States, and regional staff members work directly with the States to help plan for disasters, develop mitigation programs, and meet needs when major disasters occur.⁷⁰



- Promoting regionally coordinated management decisions: Interstate regional emergency management may be conceptualized as a “system” for a fully integrated master mutual aid plan that includes information management. Equally available, openly shared, trusted information will enhance the ability to make regionally coordinated management decisions. The management decision process for priority assignment of resources in a region may best be determined as the one with the bulk of the jurisdictional responsibility (i.e., the jurisdiction most affected if it is a multiple jurisdictional issue) or by the bulk of the specific need (potentially more law enforcement in one jurisdiction, more medical needs in another). This decision-making process would be consensual as opposed to command.

⁷⁰ FEMA regions are delineated at <http://www.fema.gov/regions/>, accessed November 21, 2005.

- Coordination of support at the interstate (Tier 5) level:
 - Emergency Management Assistance Compacts: In the past, coordination of interstate resource assistance generally depended on ad hoc arrangements, goodwill at the time of an incident, and other less-than-predictable mechanisms. This less-than-satisfactory approach was formally supplanted when Congress enacted the Emergency Management Assistance Compact in 1996 (Public Law 104-321). EMAC,⁷¹ as it is commonly known, provides the framework for this State-to-State mutual aid, and has now been accepted by all States. It provides legal authority, financial mechanisms, and operational guidance to establish the ability to request and receive emergency assistance from other States. The hurricanes of 2004 and 2005 provided opportunities to demonstrate this capability.⁷²
 - Federal entities that may provide interstate coordination of support to healthcare system response: The U.S. Department of Health and Human Services (HHS) has established Regional Emergency Coordinators,⁷³ under the HHS Office of Public Health Emergency Preparedness,⁷⁴ for each of the Federal regions (they may also be referred to as Regional Emergency Preparedness Coordinators). Their roles include regional health resource coordination during preparedness as well as response and recovery. Both the Federal Regional Resource Coordination Center and Joint Field Office (see Tier 6), while primarily Tier 6 focused, may act as MAC Centers to coordinate regional as well as national and Federal resource support during a major incident. The VHA Veterans Integrated Service Network (VISN), mentioned in Tier 2 support, may also provide regional support through the coordination of VHA resources from multiple States to address the incident needs requests.
 - Contiguous international jurisdictions: For the purposes of this

⁷¹ Further information on EMAC is available through <http://www.emacweb.org/>, accessed November 21, 2005.

⁷² The *EMAC 2004 Hurricanes After Action Report* and information on Hurricanes Katrina and Rita (2005) are available at <http://www.emacweb.org/>, accessed November 21, 2005.

⁷³ Fowler E. Office of Public Health Emergency Preparedness, April 19, 2005 (slide presentation for Association of State and Territorial Health Officers conference call, available at: <http://www.astho.org/pubs/ASTHOFederalResourcesConferenceCall.pdf>, accessed June 5, 2006.

⁷⁴ HHS Office of Public Health Emergency Preparedness, information available at: <http://www.hhs.gov/ophep/>, accessed June 3, 2006.

type of coordination, cross-border coordination between the U.S. States and contiguous jurisdictions in Canada or Mexico has been treated as a Tier 5 activity.

- Management of incident-related issues at the interstate level: These are commonly issues at the State level also, and require coordinated actions to effectively address. Interstate commerce within the affected region is an example.

Federal Support to State and Local Jurisdiction Management (Tier 6)

The Federal government maintains health and medical resources to support State and local jurisdictional authorities during a mass casualty or complex incident. The goal of the Federal government is to maximize medical surge and healthcare system resiliency. This is provided during non-response periods through guidance and training in mitigation, preparedness, response, and recovery. During an incident, it is accomplished through support to State, local, and non-governmental healthcare resources, and by establishing optimal integration and management of Federal health and medical assets needed for the incident.

- Incident Management in Federal response: The National Response Plan and the NIMS provide the controlling operational guidance for Federal action.
- Coordination of support (resource assistance):
 - ESF #8: In the NRP, the Emergency Support Function #8 – Public Health and Medical Services Annex⁷⁵ provides the coordinating authority and mechanisms for Federal health and medical assistance to State, local, and Tribal authorities.
 - The Regional Response Coordination Center (RRCC): This is the organizing entity delineated in the NRP that is designed to provide regional assistance through FEMA supervision (with HHS participating through its ESF #8 responsibility) until a Joint Field Office is established in the area of the disaster.
 - HHS regional preparedness and response: HHS has a strongly

⁷⁵ National Response Plan (NRP) page ESF #8-1, available at http://www.dhs.gov/interweb/assetlibrary/NRP_FullText.pdf accessed February 3, 2006.

developed regional presence, with a Regional Health Administrator and, very recently, the appointment of Regional Emergency Coordinators⁷⁶ to promote regional emergency response coordination in health and medical arenas.

- Federal authorities: Activation of Federal assistance may occur through implementation of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (424 USC 5121, et seq.) or through independent authority of the HHS to declare a public health emergency or disaster. These authorities, and the Federal resources available through them, are presented in the NRP, and are also nicely summarized in a HHS publication: *Terrorism and Other Public Health Emergencies: A Reference Guide for the Media, The Role of the Federal Government.*⁷⁷

⁷⁶ HHS Regional Emergency Coordinators, now also called Regional Emergency Preparedness Coordinators, have contact information available at <http://directory.psc.gov/os/729.html>, accessed June 5, 2006.

⁷⁷ U.S. Department of Health and Human Services. *Terrorism and Other Public Health Emergencies: A Reference Guide for the Media, The Role of the Federal Government*, available at <http://www.hhs.gov/emergency/mediaguide/PDF/08.pdf>, accessed January 23, 2006.

Lesson 2.2.3 Medical Surge Capacity and Capability: A Concept of Operations for Management Coordination

Lesson Objectives

- *Explain ICS-based strategy, principles, and management processes for coordinating across the jurisdictional, intergovernmental, and public-private boundaries.*
- *Describe the responsibilities that each tier has for inter-tier management coordination.*
- *Describe the management capability required by each participating organization and resource so that they are fully integrated into the overall management process.*

Introduction

The MSCC framework provides a strategy to integrate the many medical capabilities and coordinating mechanisms that have already been established in most localities, such as medical case reporting to public health and syndromic surveillance programs. This is accomplished by coordinating their individual management to create more powerful tools for overall medical incident management. The underlying capability that powers this single system construct is adequate sharing of incident information and coordination of incident planning efforts.

- ICS principles between tiers: The operation of the overall MSCC Management System Template⁷⁸ is dependent upon incident management system applications that coordinate organizations within and across the multiple tiers of a major medical response. For example, in the aftermath of a major hurricane impact, the same ICS principles (management by objectives, incident action planning, and others) used by individual healthcare facilities may be used to coordinate with the local jurisdiction (usually a city, county, or parish) authorities, between local and State medical authorities, and between State and Federal medical response authorities.
- ICS principles within tiers: MSCC becomes effective if key ICS principles are logically and consistently applied within all layers of response: individual healthcare assets and systems; a healthcare

Incident action planning is a critical process that helps to coordinate across the tiers.

⁷⁸ Barbera, JA; Macintyre, AG. Medical Surge Capacity and Capability: A management system for integrating medical and health resources during large-scale emergencies (2004). CNA Corporation for the U.S. Department of Health and Human Services. Available at: http://www.hhs.gov/ophep/mscc_handbook.html, accessed April 24, 2006.

coalition; and local, State, and Federal levels of governments. In the preceding hurricane example, individual healthcare organizations may effectively coordinate their individual strategy and tactics and have resources assigned equitably according to their need. This coordination can be efficiently accomplished by sharing incident information and incident action plans developed and documented through ICS process.

- Incident action planning as the key to coordination: The controlling ICS principle is “**Action Planning**” at all levels of incident command and incident support, and thus applying “**Management by Objectives**” at each management node. This will establish a consistent coordination process across the levels of government.

The use of “Action Plans”⁷⁹: Action planning is best accomplished at this level of complexity through the use of written documents rather than only oral reporting of action plans (see Textbox below). Textbox 2.2.3.1 reflects the longstanding concept of incident action plans at both the ICS and the MAC entity. Exhibit 2.2.3.1 provides a composite presentation of these applied action planning concepts.

Textbox 2.2.3.1

Action Planning (SEMS)⁸⁰

Action planning should be used at all SEMS levels. There are two types of action plans in SEMS:

- Incident action plans: At the field response level, written or verbal incident action plans contain objectives reflecting the overall incident strategy and specific tactical action and supporting information for the next operational period. Incident action plans are an essential and required element in achieving objectives under ICS.
- EOC Action Plans: At local, operational area, regional, and State levels, the use of EOC action plans provide designated

SEMS distinguishes between the action planning conducted at the field response level and that which is conducted within EOCs.

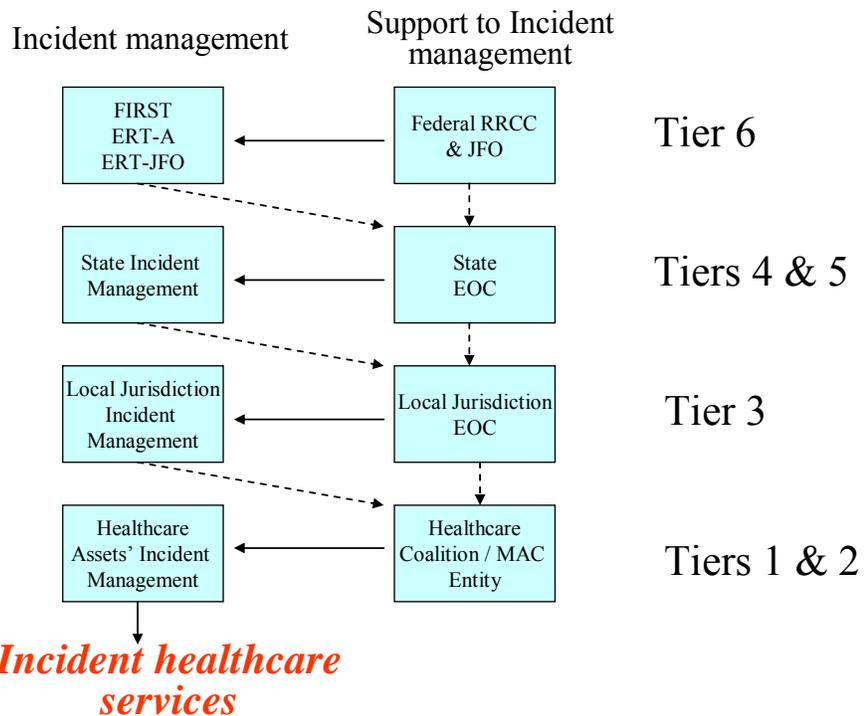
⁷⁹ In this text, the terms “action plan” and “action planning” refer specifically to the principles and process of incident action plans presented in ICS. Since an “incident” has only one “incident action plan” for each operational period, other action plans may be qualified by the organization or function (e.g., “Hospital X Action Plan” or “medical care action plan” or some other qualifier that differentiates it from “the” action plan.

⁸⁰ From: Standardized Emergency Management System (SEMS) Guidelines, Part I. System Description: 5.

personnel with knowledge of the objectives to be achieved and the steps required for achievement. Action plans not only provide direction, but they also serve to provide a basis for measuring achievement of objectives and overall system performance. Action plans can be extremely effective tools during all phases of a disaster.

Exhibit 2.2.3.1: Conceptual action planning relationship between Federal, State, local jurisdictions, and healthcare organizations during large-scale incident response. (FIRST: Federal Incident Response Support Team; ERT-A: Emergency Response Team – Advanced; RRCC: Regional Response Coordination Center; JFO: Joint Field Office; EOC: Emergency Operations Center; MAC Entity: Multi-Agency Coordination Entity.

Management of a large-scale medical incident *The conceptually layered approach*



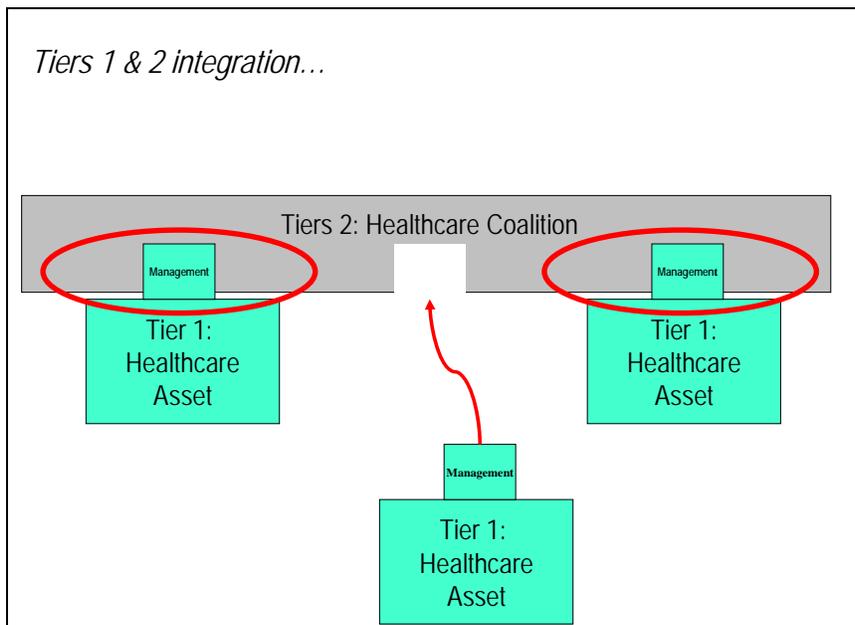
- Understanding incident command resource management issues for

public health and medicine: Traditional descriptions of emergency management and ICS organize their assets around a defined scene. For healthcare response, these concepts must be adapted and defined to be more applicable to large-scale medical response where there is no defined scene, or where multiple incident scenes may exist (e.g., infectious disease outbreaks). Health and medical professionals must understand the utility of emergency management and incident command/management concepts as they relate to public health and medical disciplines. To achieve this conceptual integration and assure that all tasks in the three key management objective categories above are accomplished, each layer must have an assigned entity to accomplish the three management objective categories described in the preceding lesson

Tiers 1 and 2 Integration:

- ICS within each participating entity: Healthcare organizations and individual healthcare systems must have an inherent incident command capability within each independent healthcare resource. For these healthcare organizations, the outside support is primarily provided by other individual healthcare facilities and other healthcare assets via their “Multi-Agency Coordination Entity,” the Tier 2 coalition of healthcare systems (see Exhibit 2.2.3.2).

Exhibit 2.2.3.2: The Relationship Between Tiers 1 and 2



Tier 2 can be considered the Multi-Agency Coordination Entity for healthcare assets in a jurisdiction.

- The healthcare coalition as the healthcare multi-agency coordinating

(MAC) System: In the usual response, this MAC System organizes the otherwise independent healthcare resources to coordinate strategy, tactics, requesting and receiving assistance, and other key tasks while maintaining “sovereign” control of their individual organizations. As described in the preceding lesson, it contains an MAC Entity function and an MAC/EOC function to address Tier 2 management and support, respectively. If the jurisdiction is primarily providing this service to the healthcare organizations, the coalition’s service mandate shrinks to being a coordinator of information sharing and cooperative planning described in Lesson 2.3.2. While hospital associations and other organizations may host the healthcare coalition, it is important that the control of the MAC System be maintained directly by the healthcare organizations.

Local Jurisdiction Integration

Tier 3 is the management level that can most effectively coordinate across multiple disciplines.

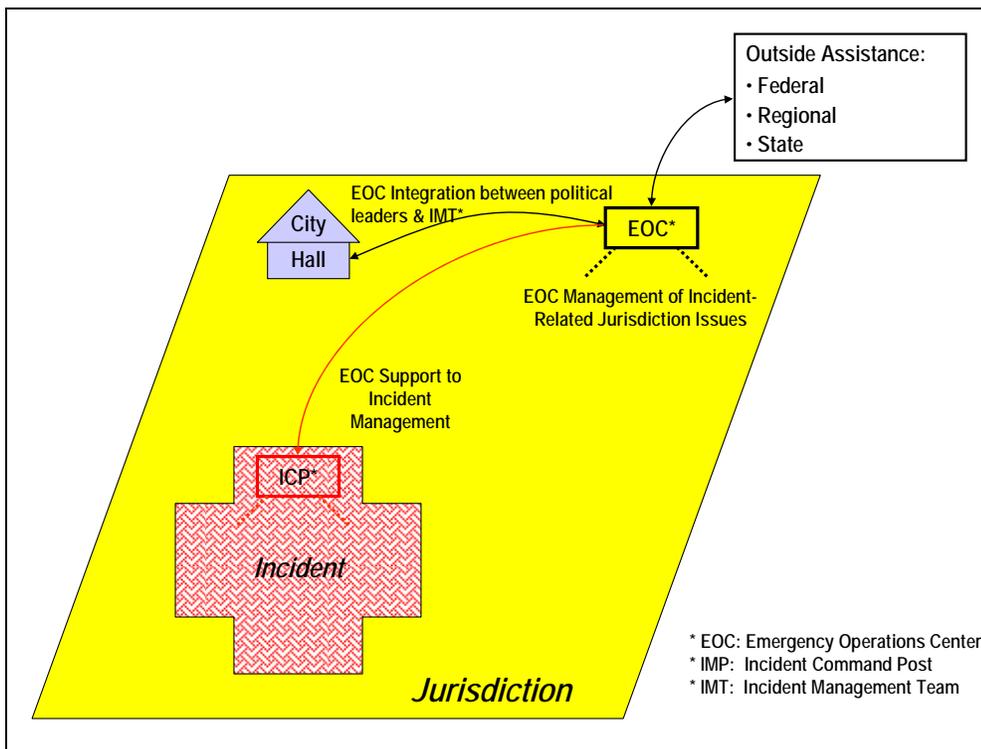
- Critical role of the local jurisdiction’s ICS: The effectiveness of jurisdictional incident command system and its emergency operations support (Tier 3) in establishing management processes is centrally important to the overall system. As presented in Lesson 2.3.1, the local jurisdiction is commonly in the best position for defining incident objectives and the parameters of the response, and for timely application of resources to support urgent medical interventions. Even more important, Tier 3 is the management level that can most effectively coordinate across the many disciplines needed in a complex medical incident. The actual hands-on medical evaluation and intervention occurs primarily in private medical facilities in Tier 1, and the individual management of each unit must be adequate to maximize its individual resources and to request, receive, and manage support provided by Tier 2 and Tier 3.
- The county or city EOC as the local MAC System: In the local Jurisdictional response (Tier 3), the term “Emergency Operations Center” is applied to the Multi-Agency Coordination Center that functions as primary support to the “incident command system” or the IMT at the jurisdictional level (See Exhibit 2.2.3.3).
 - Outside assistance: This includes coordinating assistance from outside resources (Federal, State, and other jurisdictions) that cannot be obtained through tactical mutual aid.
 - Incident-related issues: The EOC directly manages emergency issues related to the incident, but that are outside the scope of the incident as defined by the IMT at their level. This may be determined geographically (outside a scene perimeter) or

functionally (beyond the scope of the IMT objectives when no single scene exists or when the impact is diffuse). These include:

- Providing integration between political leaders at that level and the IMT at that level.
- Addressing traffic management issues outside the IMT's control perimeter.
- Addressing disruptions to tourism and other critical jurisdictional businesses, resumption of public schooling, and others.

EOCs typically manage issues that may be incident related but that are outside the scope of the incident as defined by the IMT at their level.

Exhibit 2.2.3.3: The Jurisdiction's IMT at the ICP is supported by the Jurisdiction's EOC.



- The ICS configuration of support to the healthcare coalition: The direct support to Tier 2, conceptually presented in Exhibit 2.2.3.4 below, could be functionally configured in multiple ways:
 - Integrated branch or group: Tiers 1-3 could be viewed as an integrated branch or group under a Jurisdiction's ICS Operations Section (as a Medical Services Branch or Group), if the

Different ICS configurations demonstrating the role of the healthcare coalition are presented for consideration.

jurisdiction committed to fully supporting the healthcare assets and they in turn agreed to “be managed” within the parameters of ICS (see Exhibit 2.2.3.5).

- Functionally separate: The ICS remains functionally separate from the healthcare coalition, which performs as its own MAC System for the healthcare organizations. It is connected through a liaison function with jurisdiction’s ICS Command Staff, or through another designated liaison within the ICS Operations, Logistics, or Plans Section (see Exhibit 2.2.3.6).
- Completely distinct: With the ICS/IMT completely separate from the coalition, which is performing as a MAC System that is connected through only a weak liaison function with ICS and the primary support to the coalition is provided through the EOC (see Exhibit 2.2.3.7). The usual point of contact for healthcare within the EOC is through an ESF #8 functional position. While this may be enough to provide straightforward assistance, it is preferable to have the healthcare organizations connected to a management function within the EOC that can manage complex issues requiring significant financial support.

Exhibit 2.2.3.4: Conceptual Integration of Tiers 1, 2, and 3

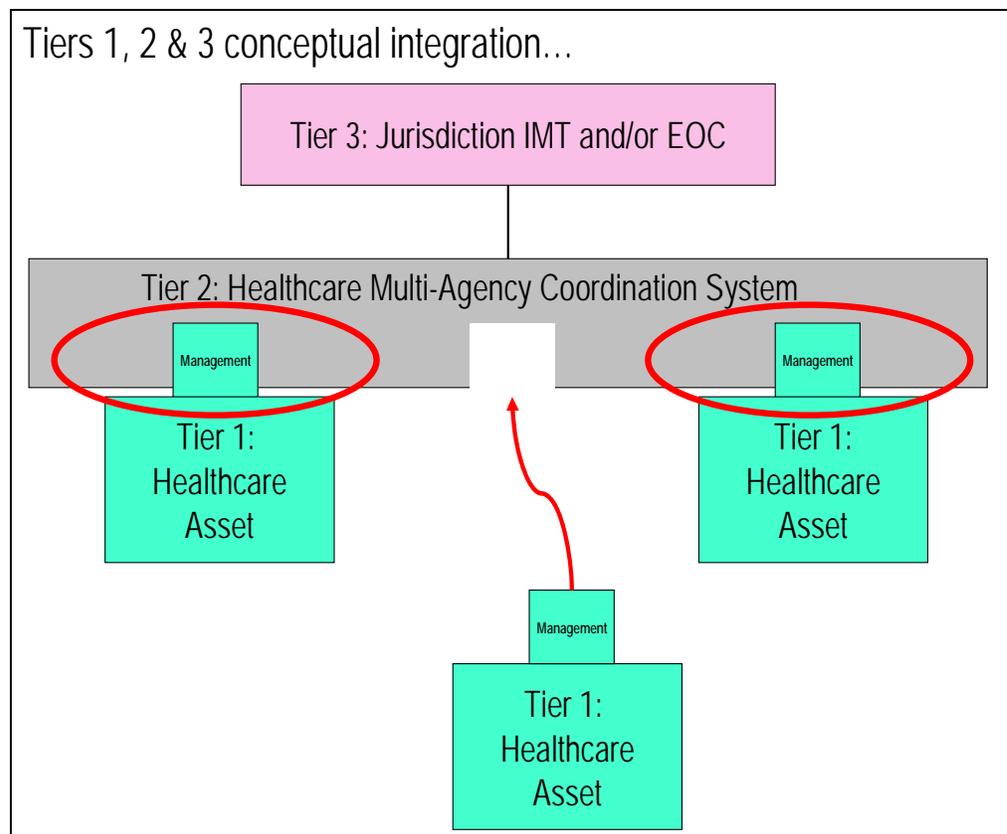


Exhibit 2.2.3.5: Tiers 1 & 2 integrated into the Tier 3 Incident Management Team.

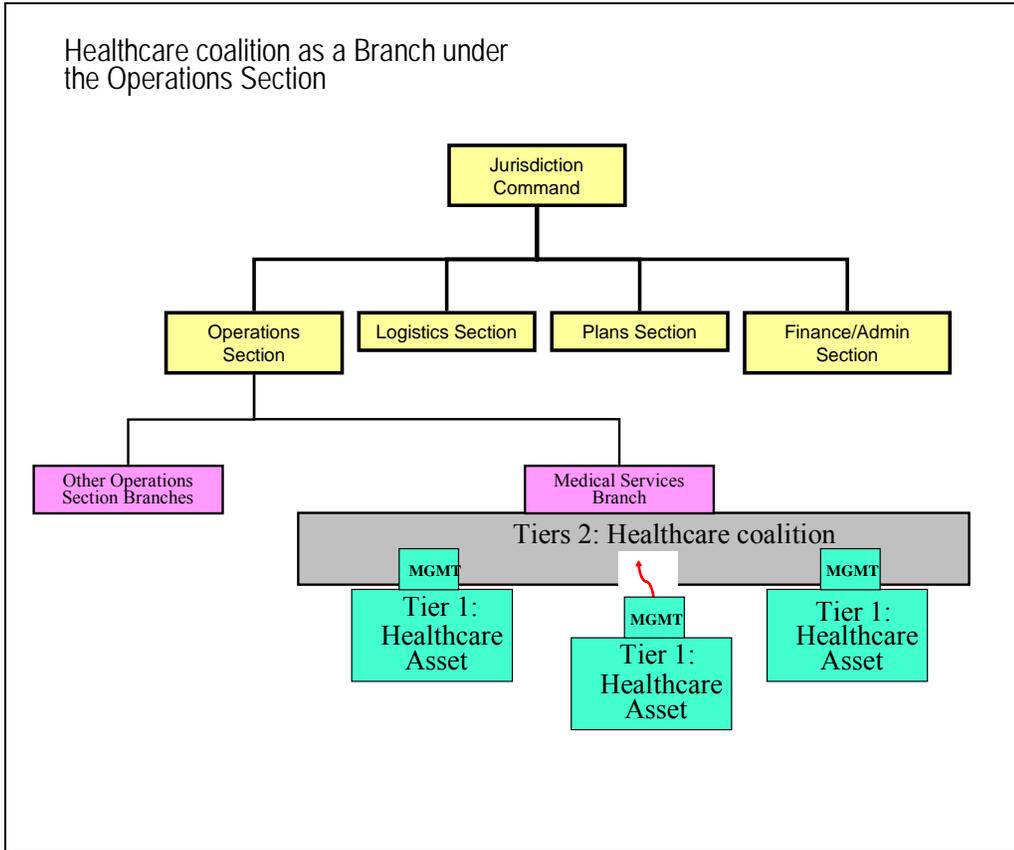


Exhibit 2.2.3.6: Tiers 1 & 2 as a Multi-Agency Coordination Entity, coordinating with the Command Staff (Senior Liaison) or Operations Section (tactical liaison) of the Tier 3 Incident Management Team.

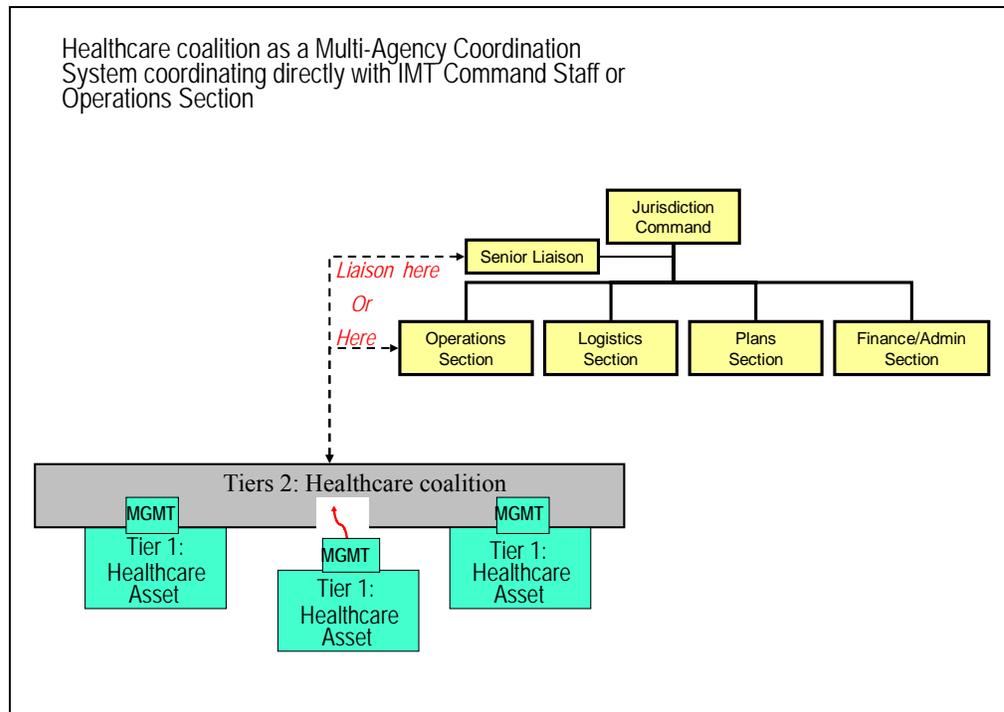
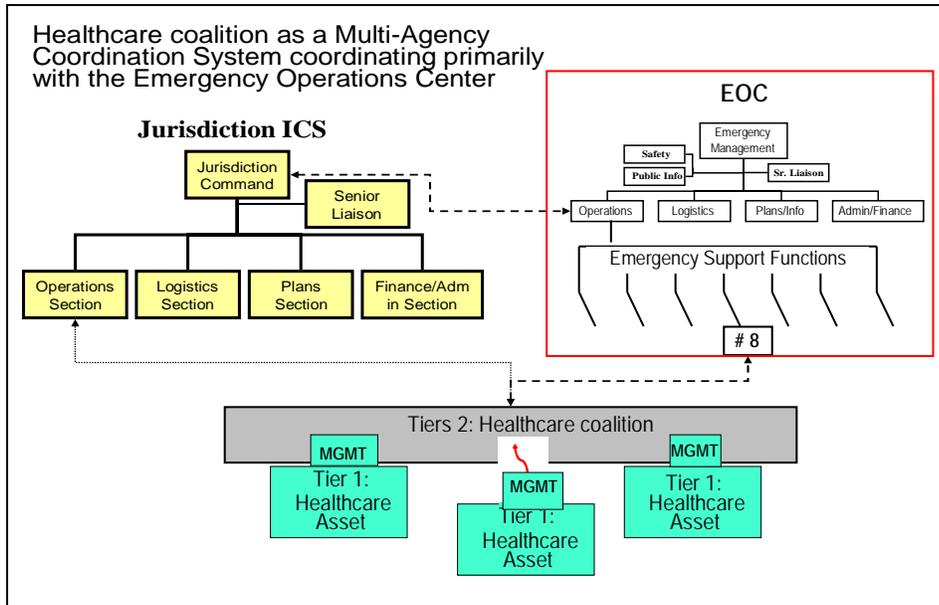


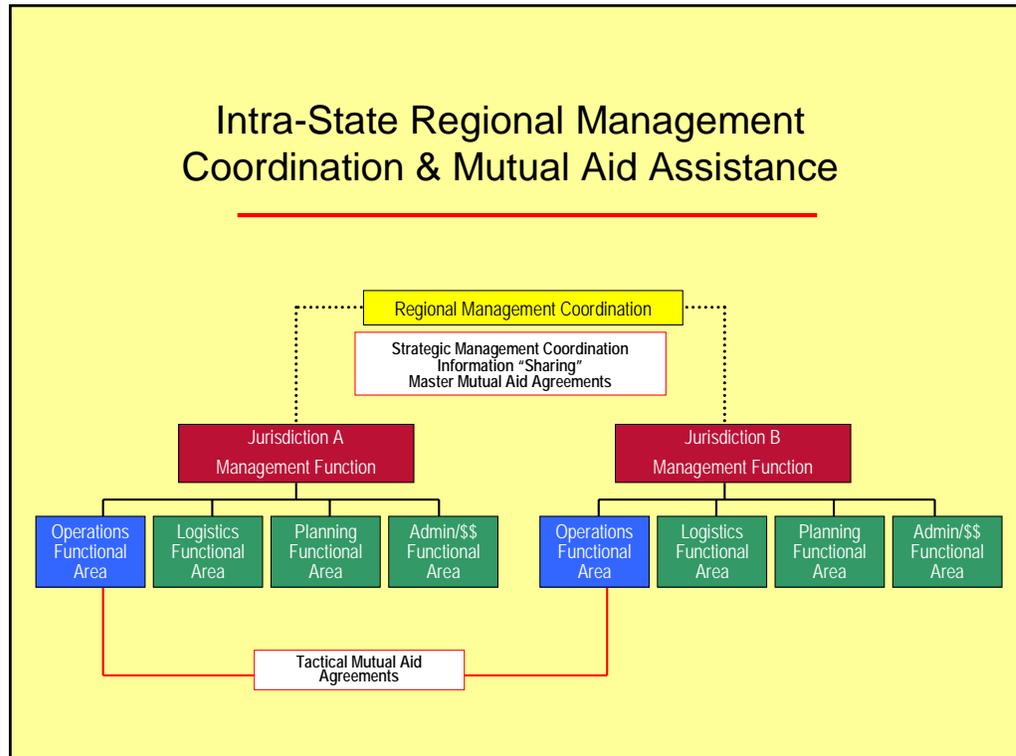
Exhibit 2.2.3.7: The Healthcare coalition with primary interface with the EOC (ESF #8), and a secondary (tactical) operational interface with the Jurisdiction's ICS Operations Section.



State Management Integration

- ICS plus EOC at the State level: The State-based response should have a similarly defined incident command/incident management function as well as an EOC support function. The State ICS manages:
 - State resources support: Provided to affected local jurisdictions, usually through the local EOCs.
 - Intrastate regional coordination: Achieved through mechanisms defined by the individual State (see Exhibit 2.2.3.8 for a conceptual depiction).
 - State-level incident-related issues not managed by the local jurisdictions: For example, the management of the EMAC process is becoming an increasingly important and complex task, in order to prevent unneeded and unqualified resources from self-deploying or deploying after seeking a verbal request from individuals who work for impacted local jurisdictions.

Exhibit 2.2.3.8: State level tasking that promotes intrastate regional coordination and effective local mutual aid.



Intra-State regional coordination may facilitate rapid surge capacity.

- **Intrastate regional coordination:** Intrastate **regional** coordination may facilitate rapid surge capacity for management assets to assist impacted jurisdictions (this has been a longstanding, very successful concept for California public safety response). Since each local jurisdiction will have its own management as well as response system, each region will have “redundant” management personnel within each region of a State that can be used for management surge capacity. It is beneficial if State planners promote the development of local management with similarities between their capacities, systems, equipment, and procedures across each jurisdiction in the region. Standardization promotes regional coordination and more-effective **management mutual aid**, as well as more cost-effective resource acquisition, training, and exercises. This is particularly important for public health and healthcare management personnel, who are usually thinly staffed in each jurisdiction.

Interaction between Operational Assets from Different Levels

- **Mutual Aid strategy:** Mutual aid is commonly used to develop surge and specialized capacity in EMS and other traditional public safety disciplines. It is much less common in medical, public health, and

health-related services. This must be addressed, since mutual aid and cooperative assistance (reimbursed mutual aid) is the single most available and cost-effective way to obtain surge capacity after maximizing the output of individual assets. Because mass casualty injury profiles commonly include a significant number of patients with medical conditions where time-to-adequate-medical-treatment is of the essence, mutual aid strategy should first emphasize a local sharing of assets. Subsequently, regionally based capabilities are emphasized (intrastate through the State IMT/EOC; interstate through EMAC mechanisms), and then finally a national mutual aid system through the NRP.

- Master mutual aid strategic direction: Lower level (tactical) inter-facility and inter-jurisdictional coordination and resource sharing may be accomplished through function or organization-specific mutual aid agreements, but these should follow the strategic direction delineated by a master mutual aid plans (see Lesson 3.3.2). Mutual aid may be coordinated from multiple possible positions (see Textbox 2.2.3.2).

Textbox 2.2.3.2

Coordination of Mutual Aid (SEMS)⁸¹

Mutual aid coordinators may function from an EOC, their normal departmental location, or other locations depending on the circumstances. Some incidents require mutual aid but do not necessitate activation of the affected local government or operational area EOCs because of the incident's limited impacts. In such cases, mutual aid coordinators typically handle requests from their normal work location. When EOCs are activated, all activated discipline-specific mutual aid systems should establish coordination and communications with the EOCs... Mutual aid system representatives at an EOC may be located in various functional elements (sections, branches, groups, or units) or serve as an agency representative depending on how the EOC is organized and the extent to which it is activated.

- Assignment of assets between tiers: Assets from one management level may be assigned to work for another asset, even in a different "tier" to promote the delivery of quality and timely medical care (see

⁸¹ From: *Standardized Emergency Management System (SEMS) Guidelines*, Part I. System Description, p. 10.

Exhibit 2.2.3.9 below).

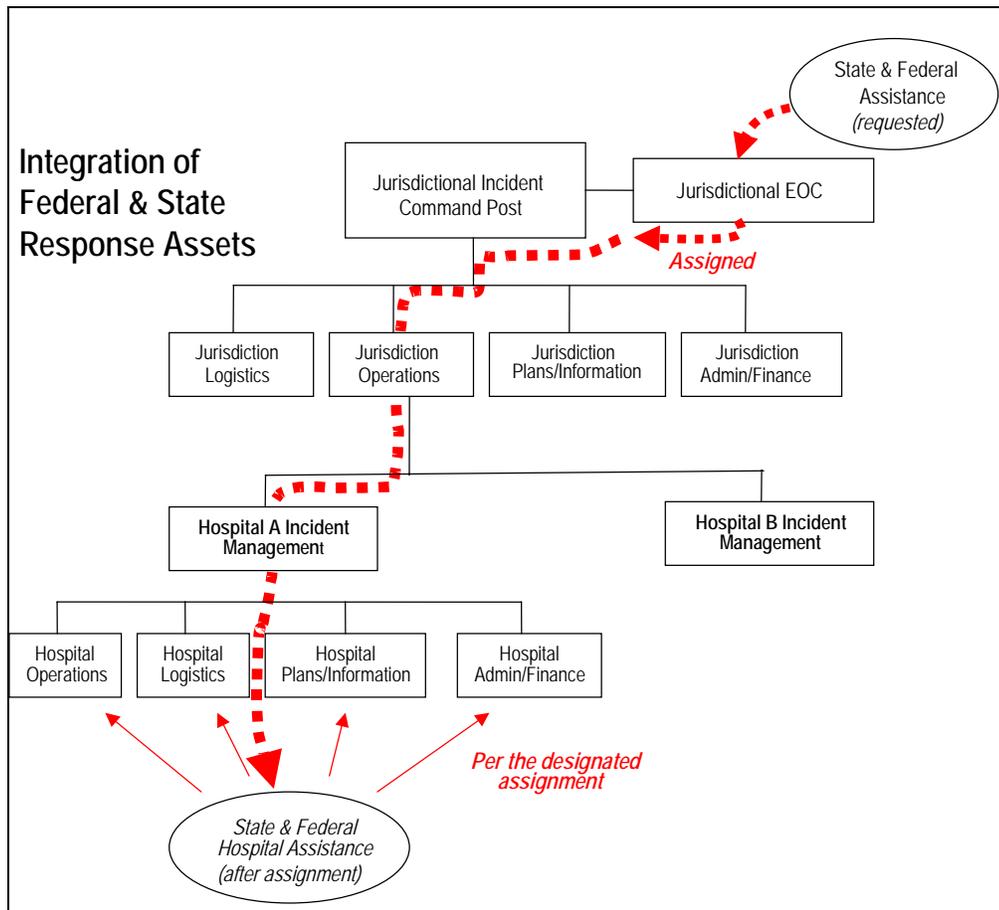
- Example: Federal assets, such as Disaster Medical Assistance Teams (DMATs), may be assigned to support medical care within severely challenged hospitals to address shortages of specific skilled personnel (e.g., ICU nurses during the 2001 Houston floods, burn nurses after the 9-11 Pentagon attack).
- Example: Field-deployed healthcare assets such as special needs shelters supplied by Federal agencies (through the Stafford Act), other States (through EMAC), or within the State (through State processes) should be assigned to a position within the tier structure. **This assignment would be based upon whom the asset reports to operationally (i.e., at the tactical level) in the incident (this reporting may be different from whom they report to administratively based upon their origin) and on where their direct incident support and service integration occurs.**
- Example: A similar situation would be represented by a healthcare facility mutual aid system providing clinicians to work at an individual facility. **Traditionally, the tactical management of the assigned Federal medical assets has been transferred to the unit where it is assigned (e.g., to a jurisdiction if an intact DMAT is operating on-scene, or to a hospital IMT if directly assigned to the hospital's clinical services).**

Although tactical management may be transferred, administrative and financial management of the asset remains with the home agency at that level of government or non-governmental organization.

- Guidelines: Similar guidelines usually exist for State assets. However, individual consultants from health agencies, such as the CDC, may operate differently, so the operational management and reporting assignment of all outside assets should be determined during their introduction (i.e., initial assignment briefing) to the activated incident command system.

Administrative and financial management of an asset remains with the home agency.

Exhibit 2.2.3.9: Integration of outside Federal and State assets into the tactical ICS structure of the response.



Configuring the Management Scheme in Each Local Jurisdiction

- **Defining incident-specific organizational relationships:** Exactly how the resources used to respond to an incident are structured into ICS will vary widely from jurisdiction to jurisdiction, and within a jurisdiction may vary from incident to incident within the parameters of the jurisdiction's template.
 - **Incident factors:** Factors such as incident circumstances, how and where the incident started, local and State traditions and laws/regulations, jurisdictional capacity to manage, and others.
 - **Response decisions:** An "incident" may not even be considered a single incident. It may have begun as several incidents, and so could have multiple incident management teams that should be coordinated through an area command or Multi-Agency Coordination Entity.

- Local versus State authority: As discussed earlier, incident management and emergency management support for emergencies and disasters is traditionally based at the local level (county or municipality) with State assistance. Public health, however, has often been constructed with State authority overriding local jurisdictions. These digressing lines of authority and reporting between public health and emergency management/public safety must be specifically addressed and resolved within each State and its local jurisdictions.

Most of these decisions are beyond the control of healthcare system leaders and the healthcare system emergency managers, but may be influenced by good-faith participation in community preparedness planning.

- The assignment of patient care within the local ICS structure: It is sobering to note that patient care, once transferred to healthcare facilities, has not generally been considered a jurisdictional or other governmental ICS responsibility in most mass casualty and mass effect incidents in the recent past (Oklahoma City Bombing, 9-11 events, 2001 anthrax incident in the national capital area, Hurricane Katrina). In all of these events, healthcare facilities operated outside any formal local incident command system, essentially on their own during the critical early periods of patient surge and mass effect.
- Understanding the potential ICS configurations: It is imperative, therefore, that healthcare system managers understand the various ICS arrangements in which their organization could participate, and prepare to maximally benefit from available choices. **Recognize that healthcare systems working together based upon mutual aid, cooperative assistance, coordination of management strategies, and seeking jurisdictional support through a cohesive Tier 2 platform is very attractive, providing a more powerful method to influence how medical care services are incorporated into the jurisdictional ICS.**
- Example ICS configurations involving healthcare organizations: As noted above, a range of possibilities exists for how healthcare systems participate in incident management in a specific incident. The bullets below provide examples of effective healthcare system participation in ICS configurations. These should ideally be available as optional configurations within a jurisdiction's template decision-support tool, presenting options for the configuration of ICS as it is implemented during incidents. The tools should be developed with full input from the healthcare coalition:

Healthcare System managers must understand the various ICS arrangements in which their organizations may participate.

- Small incident within the healthcare system itself: the entire ICS management is provided by healthcare system personnel and other assets.
- Larger hazard impact or threat to the facility itself: This type of incident (such as a fire, infant abduction, and others) involves major responsibility on the part of public safety agencies as well as the healthcare organization. These incidents may best be managed in a unified command arrangement. This is much more appropriate than the failed models of the past, where public safety “took over” the incident, or where healthcare system response operated independently of the public safety actions.
- Community-wide incident: Several configurations can be appropriate.
 - Healthcare organizations operate completely independent from the jurisdiction’s incident command system and from other healthcare organizations, receiving casualties through EMS, walk-in, and civilian transportation. Communication comes almost entirely from EMS, and is focused on patients that they intend to deliver to the healthcare facility. This has, unfortunately, been the common practice in most jurisdictions in the past. In many, the formal management connection to the jurisdiction ICS has been nonexistent, or very weakly allied with the emergency support function in the EOC, not directly with the ICS management or operations section leadership. This should be addressed at least through a **direct liaison relationship** between the jurisdiction’s ICS and the incident command for the healthcare system (the healthcare organization itself if it is the only healthcare facility involved in the response, or through the coalition if multiple organizations are involved).
 - Healthcare organizations operate in a coordinated arrangement with each other, and within the **Operations Section of jurisdiction’s ICS**. Management direction is provided by the incident command Operations Section Chief, and support provided through the incident command Logistics Section. In this arrangement, the hospital coalition could be designated a branch or a group, with the individual healthcare organizations treated as a resource or a task force.
 - For medical and other healthcare resources that are independent of the normal public safety response system

(hospitals, independent healthcare systems, medical practices, healthcare supply corporations, and others) their primary day-to-day responsibility is to current patients, clients, shareholders, and others. This responsibility cannot be subrogated to public safety concerns and public management without prior arrangements that protect the primary stakeholders. Systems that incorporate private, voluntary, health and medical resources must address this issue and may need to assure information and resource support to those organizations if they become part of the formal response system.

- Healthcare organizations work in a coordinated arrangement with each other (through the healthcare coalition) but **outside the jurisdiction's ICS**. They coordinate with the ICS through a **single liaison to jurisdiction's ICS Command Staff (their senior liaison) or Operations Section**. Alternatively (and less desirable), the primary coordination could be through the EOC, usually through an ESF #8 liaison. In these arrangements, the healthcare system coalition would function as a Multiagency Coordination System under the NIMS classifications.
- Configuration determinants: For many of these scenarios, achieving optimal management participation is largely dependent upon the management capability of the healthcare system and how they interact with the outside agency commanders during the very early stage of response. Competent management of the healthcare system, and confident understanding of management roles, promotes optimal involvement at the appropriate level of participation.

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