Healthcare Preparedness Capabilities

National Guidance for Healthcare System Preparedness

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Office of the Assistant Secretary for Preparedness and Response
Hospital Preparedness Program

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Background and History

The threat of Mass Casualty Incidents (MCIs) or Medical Surges to the Nation's hospital and healthcare system has always been present. For many trauma systems and emergency departments, it is simply part of normal day-to-day operations. Preparing hospitals, healthcare systems and their ESF #8 partners to prevent, respond to, and rapidly recover from these threats is critical for protecting and securing our Nation's healthcare system and public health infrastructure.

The 2009 H1N1 influenza pandemic and Hurricane Katrina highlighted the importance of hospitals and healthcare systems being prepared for potential threats and the consequences that occur when a community is ill-prepared. The Office of the Assistant Secretary for Preparedness and Response (ASPR) plays a leading role in ensuring the healthcare systems in the Nation are prepared to respond to these threats and other incidents. Through the Hospital Preparedness Program (HPP) Cooperative Agreement, ASPR provides funding and technical assistance to state, local and territorial public health departments to prepare the healthcare systems for disasters. The HPP Cooperative Agreement funding provides approximately $350 million annually to 50 states, four localities, and eight U.S. territories and freely associated states for building and strengthening their abilities to respond to incidents.

Near-term Threats and Strengthening the Hospitals, Healthcare Coalitions and the Healthcare System

State, city, and territorial Departments of Public Health working in partnership with the hospitals and Healthcare Systems within their jurisdictions have made progress since 2001, as demonstrated in ASPR report: *From Hospitals to Healthcare Coalitions: Transforming Health Preparedness and Response in Our Communities*: http://www.phe.gov/Preparedness/planning/hpp/Documents/hpp-healthcare-coalitions.pdf

Trauma Centers, Hospitals, and Healthcare Systems face multiple challenges daily in addition to the growing list of man-made and natural threats. Emergency department overcrowding, the rising uninsured, and an aging population all inhibit the healthcare system's ability to respond effectively. Regardless of the threat, an effective medical surge response begins with robust hospital-based systems and effective Healthcare Coalitions to facilitate preparedness planning and response at the local level. Simply put, strong and resilient Healthcare Coalitions are the key to an effective state and local ESF #8 response to an event-driven medical surge.

In response to these challenges and in preparation for a new Hospital Preparedness Program and Public Health Emergency Preparedness aligned Cooperative Agreement that takes effect in July 2012, ASPR has used an aligned process for defining a set of Healthcare Preparedness Capabilities, in conjunction with the 15 PHEP Capabilities previously released in March 2011, to assist healthcare systems, Healthcare Coalitions, and healthcare organizations with preparedness and response.

The Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness will assist state, local, Healthcare Coalition, and ESF #8 planners identify gaps in preparedness, determine specific priorities, and develop plans for building and sustaining healthcare specific capabilities. These capabilities are designed to facilitate and guide joint ESF #8 preparedness planning and ultimately assure safer, more resilient, and better-prepared communities. ASPR has identified the following eight capabilities (shown with their aligned HPP/PHEP Capability numeric designation) as the basis for healthcare system, Healthcare Coalition, and healthcare organization preparedness:

1. Healthcare System Preparedness
2. Healthcare System Recovery
3. Emergency Operations Coordination
5. Fatality Management
6. Information Sharing
10. Medical Surge
14. Responder Safety and Health
15. Volunteer Management

Stakeholder Vetting and Engagement

A wide ranging and diverse group of stakeholders were engaged in developing, revising, and aligning the eight (8) Healthcare Preparedness Capabilities. This group included subject matter experts from within HHS as well as other national professional organizations within healthcare and public health. The Federal agencies actively involved in the alignment process included the HHS Office of the Assistant Secretary for Preparedness and Response, CDC's Office of Public Health Preparedness and Response (OPHPR) and Division of State and Local Readiness (DSLR), DHS Federal Emergency Management Agency (FEMA) and Office of Health Affairs (OHA), and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA). In addition, ASPR and DSLR collaborated with national partners such as the American Hospital Association (AHA), Association of State and Territorial Healthcare Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO) to engage the state and local healthcare and public health community. This dynamic and collaborative process began in 2011 when ASPR and CDC representatives and other subject matter experts began working closely together to develop aligned Healthcare Preparedness Capabilities, Functions, Tasks, and Resource Elements. ASPR and the CDC held weekly subject matter expert capability working groups to develop recommendations for the scope of the selected capabilities, capability functions, and resource elements for each capability. Their work was extensively vetted with many key stakeholders throughout the process.

Healthcare Preparedness Capabilities Planning Model

The Healthcare Preparedness Capabilities were based on common preparedness methodologies from the Federal Emergency Management Agency (FEMA) regarding whole of community planning and in accordance with Presidential Policy Directive/PPD – 8: National Preparedness (March 30, 2011).[1] This methodology is outlined in the FEMA document: *Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0*.[2] To assist healthcare systems, healthcare coalitions and healthcare organizations in using these new capabilities for planning, the Office of the Assistant Secretary for Preparedness and Response (ASPR) suggests using this document to assist them through the planning process. The integration with the Public Health Preparedness Capabilities and the Public Health Preparedness Capabilities Planning Model[3] should occur during common steps of jurisdictional emergency operations planning noted in the FEMA guidance.

Planning Fundamentals

Emergency Management is the lead agency for planning in local and state jurisdictions. Healthcare systems, healthcare coalitions, and healthcare organizations should follow Emergency Management's lead in jurisdictional emergency operations planning and provide input into the public health and medical (ESF #8) considerations of the plans and annexes. Planning is collaborative. It is imperative that plans for healthcare system emergency operations are not done in isolation from the community but are done in collaboration with the lead planning agency in coordination with the ESF #8 lead agency of the jurisdiction.

The following sections provide a summary of the fundamentals of planning as outlined by FEMA to assist healthcare disaster planners with an understanding of how to address the Healthcare Preparedness Capabilities. The complete text can be found in Chapter 1 of FEMA's *Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0*. This guidance provides the basic understanding of planning processes that healthcare planners should integrate with to achieve successful planning.

- **Planning Principles**: Applying the following principles to the planning process is key to developing an all-hazards plan for protecting lives, property, and the environment:
  - Planning must be community-based, representing the whole population and its needs
  - Planning must include participation from all stakeholders in the community
  - Planning uses a logical and analytical problem-solving process to help address the complexity and uncertainty inherent in potential hazards and threats
  - Planning considers all hazards and threats
  - Planning should be flexible enough to address both traditional and catastrophic incidents
  - Plans must clearly identify the mission and supporting goals (with desired results)
  - Planning depicts the anticipated environment for action

1 Presidential Policy Directive (PPD)8: http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm
2 Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2): http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf
3 Public Health Preparedness Capabilities: National Standards for State and Local Planning; CDC, Division of State and Local Readiness, March, 2011, pages 6-9: http://www.cdc.gov/phpr/capabilities/

- Planning does not need to start from scratch
- Planning identifies tasks, allocates resources to accomplish those tasks, and establishes accountability
- Planning includes senior officials throughout the process to ensure both understanding and approval
- Time, uncertainty, risk, and experience influence planning
- Effective plans tell those with operational responsibilities what to do and why to do it, and they instruct those outside the jurisdiction in how to provide support and what to expect
- Planning is fundamentally a process to manage risk
- Planning is one of the key components of the preparedness cycle

- **Strategic, Operational, and Tactical Planning**: There are three tiers of planning: strategic planning, operational planning, and tactical (incident scene) planning. Strategic planning sets the context and expectations for operational planning, while operational planning provides the framework for tactical planning. All three tiers of planning occur at all levels of government.
  - *Strategic plans* describe how a jurisdiction wants to meet its emergency management or homeland security responsibilities over the long-term. These plans are driven by policy from senior officials and establish planning priorities.
  - *Operational plans* provide a description of roles and responsibilities, tasks, integration, and actions required of a jurisdiction or its departments and agencies during emergencies. Jurisdictions use plans to provide the goals, roles, and responsibilities that a jurisdiction's departments and agencies are assigned, and to focus on coordinating and integrating the activities of the many response and support organizations within a jurisdiction.
  - *Tactical plans* focus on managing personnel, equipment, and resources that play a direct role in an incident response. Pre-incident tactical planning, based upon existing operational plans, provides the opportunity to pre-identify personnel, equipment, exercise, and training requirements. These gaps can then be filled through various means (e.g., mutual aid, technical assistance, updates to policy, procurement, contingency leasing).
- **Planning Approaches**: Planners use a number of approaches, either singly or in combination, to develop plans:
  - *Scenario-based planning*. This approach starts with building a scenario for a hazard or threat. Then, planners analyze the impact of the scenario to determine appropriate courses of action. Planners typically use this planning concept to develop planning assumptions, primarily for hazard- or threat-specific annexes to a basic plan.
  - *Function-based planning (functional planning)*. This approach identifies the common functions that a jurisdiction must perform during emergencies. Function-based planning defines the function to be performed and some combination of government agencies and departments responsible for its performance as a course of action.
  - *Capabilities-based planning*. This approach focuses on a jurisdiction's capacity to take a course of action. Capabilities-based planning answers the question, "Do I have the right mix of training, organizations, plans, people, leadership and management, equipment, and facilities to perform a required emergency function?" Some planners view this approach as a combination of scenario- and function-based planning because of its "scenario-to-task-to-capability" focus.

In reality, planners commonly use a combination of the three previous approaches to operational planning. This hybrid planning approach provides the basis for the planning process discussed in Chapter 4 of CPG 101 "The Planning Process."[4]

- **Planning Integration**: National guidance and consensus standards expect that a jurisdiction's plans will be coordinated and integrated among all levels of government and with critical infrastructure planning efforts. The NIMS and NRF support a concept of layered operations. They recognize that all incidents start at the local level, and, as needs exceed resources and capabilities, Federal, state, territorial, tribal, regional, and private sector assets are applied. This approach means that planning must be vertically integrated to ensure that all response levels have a common operational focus. Similarly, planners at each level must ensure that department and supporting agency plans fit into their jurisdiction's concept of operations (CONOPS) through horizontal integration. Planners must also appropriately integrate the community's nongovernmental and private sector plans and resources:
  - *Vertical integration* is the meshing of planning both up and down the various levels of government. It follows the concept that the foundation for operations is at the local level and that support from Federal, state, territorial, tribal, regional, and private sector entities is layered onto the local activities. This means that as a planning team identifies a support requirement from a "higher level" during the planning process, the two levels work together to resolve the situation.

4 Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2), Chapter 4: http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

- *Horizontal integration* serves two purposes. First, it integrates operations across a jurisdiction. Horizontal integration allows departments and support agencies to produce plans that meet their internal needs or regulatory requirements and still integrate into the EOP. Second, horizontal integration ensures that a jurisdiction's set of plans supports its neighboring or partner jurisdictions' similar sets of plans. A jurisdiction's plan should include information about mission assignments that it executes in conjunction with, in support of, or with support from its neighbors or partners.

- **Plan Synchronization:** The concept of sequencing creates effective EOPs that are synchronized in time, space, and purpose. Four planning concepts help sequence operations: phasing, branches, planning horizons, and forward and reverse planning.
  - *Phasing*. A phase is a specific part of an operation that is distinctly different from the ones that precede or follow. Planners often use the factors of time, distance, geography, resources, and critical events to define phase lengths.
  - *Branches*. A branch is an option built into an EOP. Planners use branches only for major, critical options and not for every possible variation in the response.
  - *Planning horizon*. A planning horizon is a point in time that planners use to focus the planning effort. Because no one can predict when most incidents will occur, planners typically use planning horizons expressed in months to years when developing EOPs. Since planners develop these plans with little or no specific knowledge of how a future incident will evolve, the plan must describe broad concepts that allow for quick and flexible operations. They must allow for several courses of action and project potential uses of organizations and resources during those operations. Planners should view plans as living contingency plans because they provide the starting point for response operations if and when an emergency occurs.
  - *Forward and reverse planning*. Forward planning starts with (assumed) present conditions and lays out potential decisions and actions forward in time, building an operation step-by-step toward the desired goal or objective. Conversely, reverse planning starts with the end in mind and works backward, identifying the objectives necessary and the related actions to achieve the desired end-state. When using reverse planning, it is essential to have a well-defined goal or objective. In practice, planners usually use a combination of the two methods: they use forward planning to look at what is feasible in the time allotted and use reverse planning to establish the desired goal (or end-state) and related objectives.

- **Common Planning Pitfalls**:
  - Development of lengthy, overly detailed plans that those responsible for their execution do not read
  - Failing to account for the community's needs, concerns, capabilities, and desire to help. The community must be engaged in the planning process and included as an integral part of the plan
  - Planning is only as good as the information on which it is based
  - Planning is not a theoretical process that occurs without an understanding of the community, nor is it a scripting process that tries to prescribe hazard actions and response actions with unjustified precision

- **Planning Considerations**: Emergency planning includes the key areas involved in addressing any threat or hazard: prevention, protection, response, recovery, and mitigation. Integrating the key areas as part of the overall planning effort allows jurisdictions to produce an effective EOP and advance overall preparedness.
  - *Prevention* consists of actions that reduce risk from human-caused incidents, primarily terrorism. Prevention planning can also help mitigate secondary or opportunistic incidents that may occur after the primary incident.
  - *Protection* reduces or eliminates a threat to people, property, and the environment. Primarily focused on adversarial incidents, the protection of critical infrastructure and key resources (CIKR) is vital to local jurisdictions, national security, public health and safety, and economic vitality.
  - *Response* embodies the actions taken in the immediate aftermath of an incident to save and sustain lives, meet basic human needs, and reduce the loss of property and the effect on critical infrastructure and the environment.
  - *Recovery* encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities.
  - *Mitigation*, with its focus on the impact of a hazard, encompasses the structural and non-structural approaches taken to eliminate or limit a hazard's presence; peoples' exposure; or interactions with people, property, and the environment.

The Planning Process[5]

The Healthcare Preparedness Capabilities planning model is based on a planning process that healthcare systems, healthcare coalitions and healthcare organization may wish to utilize to help determine their preparedness priorities and plan their preparedness activities. This process fits into the planning phase of the U.S. Department of Homeland Security preparedness cycle and is outlined in Chapter 4 of FEMA's *Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0*. This process is not intended to be a prescriptive methodology, but rather it is intended to describe a series of suggested activities for preparedness planning. Coordination with Emergency Management and ESF #8 planners during the following planning steps is imperative to ensure that healthcare organization priorities and needs are addressed in jurisdictional plans. The Healthcare Preparedness Capabilities provide guidance as to how this integration should occur. Ideally, public health and healthcare system preparedness will be integrated and coordinated with Emergency Management plans to develop appropriate public health and medical plans for jurisdictions.

Steps in the Planning Process (Healthcare system planners should coordinate with the jurisdictions planning processes. These are the recommended steps for collaborative planning):

- **Step 1: Form a Collaborative Planning Team**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 1: Develop Healthcare Coalitions)
  - Identify core planning team
  - Engage the whole community in planning
- **Step 2: Understand the Situation**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster; Function 3: Identify and prioritize essential healthcare assets and services; Function 7: Coordinate with planning for at-risk individuals and those with special medical needs)
  - Identify threats and hazards
  - Assess risk
- **Step 3: Determine Goals and Objectives**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster; Function 3: Identify and prioritize essential healthcare assets and services)
  - Determine operational priorities
  - Set goals and objectives
- **Step 4: Plan Development**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster; Function 3: Identify and prioritize essential healthcare assets and services; Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps)
  - Develop and analyze courses of action
  - Identify resources
  - Identify information and intelligence needs
- **Step 5: Plan Preparation, Review, and Approval**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster)
  - Write the plan
  - Review the plan
  - Approve and disseminate the plan

5 Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2), Chapter 4: http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

- **Step 6: Plan Implementation and Maintenance**
  (Addressed in Capability 1 — Healthcare System Preparedness; Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster; Function 5: Coordinate training to assist healthcare responders to develop the necessary skills in order to respond; Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation)
  - Training
  - Exercise the plan
  - Review, revise, and maintain the plan

The relationship between the 15 Public Health Preparedness Capabilities and the eight (8) aligned Healthcare Preparedness Capabilities

Within this capabilities guidance, immediately following every "Function," there is a section which notes the alignment of the Healthcare Preparedness Capabilities within or in alignment with the Public Health Preparedness Capabilities. It outlines the intersection by Capability, Function and Resource Element of how the Healthcare Preparedness Capabilities align with and work in conjunction with the Public Health Preparedness Capabilities.

Example for Capability 1: Healthcare System Preparedness, Function 1: Develop, refine, or sustain Healthcare Coalitions.

Function Alignment:

- PHEP Capability 1, Community Preparedness; Function 2: Build community partnerships to support health preparedness
- PHEP Capability 1, Community Preparedness; Function 3: Engage with community organizations to foster public health, medical, and mental/behavioral health social networks

Supported by:

- PHEP Capability 10, Medical Surge; Function 1, Resource P4: Engage in Healthcare Coalitions

The following sections provide brief descriptions of the intent of the Healthcare Preparedness Capabilities and the expectations for alignment with the Public Health Preparedness Capabilities.

Capability 1: Healthcare System Preparedness

The preparedness cycle is outlined in detail as it relates to healthcare preparedness. In the preparedness cycle, the required steps for planning, equipping, training, exercising, and evaluation activities are defined and by the objectives (tasks) and supporting resources that are needed to be prepared. Preparedness is defined as "a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response." This "preparedness cycle" is one element of a broader National Preparedness System to prevent, respond to, recover from, and mitigate against natural disasters, acts of terrorism, and other man-made disasters.[6] National health security is achieved when the Nation and its people are prepared for, protected from, respond effectively to, and are able to recover from incidents with potentially negative health consequences.[7]

Integration with public health aligns during the planning process. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed throughout all of the functions in the capability as a collaborative process. The role of the healthcare coalition is very specific in this capability addressing the first step of planning; forming a collaborative planning group. Public health agencies are intended to be a part of this collaboration. To integrate this capability, healthcare preparedness planners should strive to coordinate planning collaboratively throughout the planning process.

Capability 2: Healthcare System Recovery

Recovery encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities. Recovery planning builds stakeholder partnerships that lead to community restoration and future sustainability and resiliency.[8] Recovery planning must provide for a near-seamless transition from response activities to short-term recovery operations. Planners should design long-term recovery plans to maximize results through the efficient use of resources and incorporate national recovery doctrine as outlined in the

6 FEMA.gov; Preparedness: http://www.fema.gov/prepared/index.shtm
7 National Health Security Strategy, U.S. Department of Health and Human Services, Dec 2009, Page 2: http://www.phe.gov/Preparedness/planning/authority/nhss/Pages/default.aspx
8 Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2), page 1-9: http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

National Disaster Recovery Framework (NDRF).[9] Post-incident health recovery should be incorporated into planning and begins with response; the aim should be to leave individuals and communities at least as well off after an incident as they were before it.[10]

In this capability, integration with public health aligns during the planning process and response/recovery operations. This is done in coordination with Emergency Management and ESF #8 planners and responders and is specifically addressed throughout both functions as a collaborative process. To integrate this capability, public health and healthcare emergency planners should coordinate recovery plans that aim to revitalize and rebuild the public health and medical system of the community. Both functions in the Healthcare Preparedness Capabilities align with the processes in the Public Health Preparedness Capabilities.

Capability 3: Emergency Operations Coordination

Response embodies the actions taken in the immediate aftermath of an incident to save and sustain lives, meet basic human needs, and reduce the loss of property and the effect on critical infrastructure and the environment. Following an incident, response operations reduce the physical, psychological, social, and economic effects of an incident. Response planning provides rapid and disciplined incident assessment to ensure a quickly scalable, adaptable, and flexible response. It incorporates national response doctrine as presented in the NRF, which defines basic roles and responsibilities for incident response across all levels of government and the private sector.[11] Services provided by public health, health care delivery, and emergency response systems complement efforts to build community resilience. Such systems must themselves be resilient: durable, robust, responsive, adaptive to changing situations, efficient, and interoperable.[12]

Integration with public health aligns during the planning process and response operations. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed with planning that determines how healthcare organizations priorities and needs are represented in response. To integrate this capability, public health and healthcare emergency planners should coordinate response plans with Emergency Management and ESF #8 to ensure there is a united public health and medical response during incidents.

Capability 5: Fatality Management

Fatality management is a process that occurs in the community and is led by agencies dependent on the state in which the incident occurs. Fatality management needs to be incorporated in the surveillance and intelligence sharing networks, to identify sentinel cases of bioterrorism and other public health threats. Fatality management operations are conducted through a unified command structure.[13]

Integration with public health aligns during the planning process. This is done in coordination with Emergency Management and the lead Fatality Management planning agencies and is specifically addressed to manage in-facility death surges and the need for human remains temporary storage space. This capability also addresses surges of concerned citizens and the need for mental/behavioral health support. To integrate this capability, public health and healthcare emergency planners should coordinate planning according to the content in the functions of Capability 5 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Capability 6: Information Sharing

An effective intelligence/information sharing and dissemination system will provide durable, reliable, and effective information exchanges (both horizontally and vertically) between those responsible for gathering information and the analysts and consumers of threat-related information. It will also allow for feedback and other necessary communications in addition to the regular flow of information and intelligence.[14]

Integration with public health aligns during all phases of disaster planning. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed with the coordination of information that will be shared with incident management, responders, community stakeholders, and with public health and medical partners during response and recovery. To integrate this capability, public health and healthcare emergency planners should coordinate what information is shared, who needs it, how it is delivered and when it should be provided. Capability 6 aligns in these areas for both public health and healthcare preparedness.

9 National Response Framework, U.S. Department of Homeland Security; Jan 2008: http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf
10 National Health Security Strategy, U.S. Department of Health and Human Services, Dec 2009, Page 15: http://www.phe.gov/Preparedness/planning/authority/nhss/Pages/default.aspx
11 Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2), page 1-9: http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf
12 National Health Security Strategy, U.S. Department of Health and Human Services, Dec 2009, Page 6: http://www.phe.gov/Preparedness/planning/authority/nhss/Pages/default.aspx
13 Target Capabilities List, A companion to the National Preparedness Guidelines; U.S. Department of Homeland Security, Sep 2007. Page 519
14 Target Capabilities List, A companion to the National Preparedness Guidelines; U.S. Department of Homeland Security, Sep 2007. Page 69

Capability 10: Medical Surge
Medical Surge is the capability to rapidly expand the capacity of the existing healthcare system in order to provide triage and subsequent medical care. The goal is rapid and appropriate care for the injured or ill from the event and the maintenance of continuity of care for non-incident related illness or injury.[15]

Integration with public health aligns during planning and response. This is done in coordination with Emergency Management and ESF #8 planners and specifically addresses pre-hospital, affected hospital, and receiving hospital surge management. To integrate this capability, public health and healthcare disaster planners should coordinate efforts to maximize the use of resources that are available to facilities affected by surge. This includes public health operations outlined in PHEP Capability 10 to support surge operations. Primary areas of coordination include public health assistance with resources and integration with public health plans for alternate care sites. This coordination should assist with resources and space to alleviate surge or enhance operations at healthcare organizations affected by surge.

Capability 14: Responder Safety and Health
This capability identifies the critical resources needed to ensure that healthcare workers are protected from all hazards. The goal is to assist healthcare organizations ensure no illnesses or injury to any first receiver, medical facility staff member, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical and emotional stress after the initial incident or during decontamination and incident follow-up.[16]

Integration with public health aligns during planning. This is done in coordination with public health, Emergency Management and ESF #8 planners and specifically addresses support that can be provided to healthcare organizations during response to protect healthcare workers. To integrate this capability, public health and healthcare emergency planners should coordinate how best to address public health and healthcare worker safety needs during the development of strategically placed caches of equipment, supplies and pharmaceuticals that would provide timely resource assistance. This is specifically outlined in the functions of Capability 14 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Capability 15: Volunteer Management
Volunteer Management is the capability to effectively coordinate the use of volunteers in support of domestic incident management. The goal is to use volunteers to augment incident operations.[17]

Integration with public health aligns during planning. This is done in coordination with public health, Emergency Management and ESF #8 planners and specifically addresses support that can be provided to healthcare organizations during response to augment healthcare professional staff. To integrate this capability, public health and healthcare emergency planners should coordinate with healthcare organizations to determine when and why volunteers would be used to supplement staff at healthcare organizations and then work towards strategies for their effective use. This is specifically outlined in the functions of Capability 15 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Moving Forward

ASPR is committed to strengthening the Nation's healthcare system preparedness. *The Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness* will assist healthcare systems, Healthcare Coalitions and healthcare organizations through their health departments to develop annual and long-term preparedness plans to guide their preparedness strategies and investments. This guidance will be refined over time as emerging evidence becomes available to advance our preparedness knowledge.

In this document, the table of contents is hyperlinked to the respective Capability, Function, and Resources Element.

Each capability includes a definition and is followed by the associated functions, tasks, and resource elements.

The **Capability** is defined as it applies to healthcare organizations, healthcare systems, and Healthcare Coalitions.

The **Functions** describe the critical elements that need to occur to achieve the capability. The Tasks describe the steps that need to occur to complete the functions.

15 Target Capabilities List, A companion to the National Preparedness Guidelines; U.S. Department of Homeland Security, Sep 2007. Page 449
16 Target Capabilities List, A companion to the National Preparedness Guidelines; U.S. Department of Homeland Security, Sep 2007. Page 249
17 Target Capabilities List, A companion to the National Preparedness Guidelines; U.S. Department of Homeland Security, Sep 2007. Page 237

The **Resource Elements** section lists the resources that may be needed to successfully perform a function and the associated tasks. The resources are categorized into three elements:

1. Plans or Planning: Elements that should be included in existing operational plans, standard operating procedures, and/or emergency operations plans
2. Skills and Training: The competencies and skills that may be necessary for personnel and teams to possess to competently deliver a capability
3. Equipment and Technology: The equipment that may be needed to achieve the capability

The Healthcare Preparedness Capabilities

The Office of the Assistant Secretary for Preparedness and Response's (ASPR) healthcare preparedness capabilities provide guidance for healthcare systems, healthcare coalitions and healthcare organizations emergency preparedness efforts. The content is intended to serve as a planning resource that state and local public health preparedness staff, with their partners in healthcare systems, healthcare coalitions, and healthcare organizations, can use to assess and enhance their healthcare system preparedness. This guidance is available to support the Nation's healthcare and public health system in their planning efforts but with recognition that many jurisdictions across the country have already developed EOPs that address many emergency management operations. ASPR suggests that future planning follow this guidance to ensure the integration of healthcare organization priorities into these plans.

This guidance focuses on collaborative planning using healthcare coalitions to represent healthcare organizations during preparedness efforts. Public health is an essential partner in this collaboration. The following diagram portrays the healthcare coalition role through the phases of disaster.

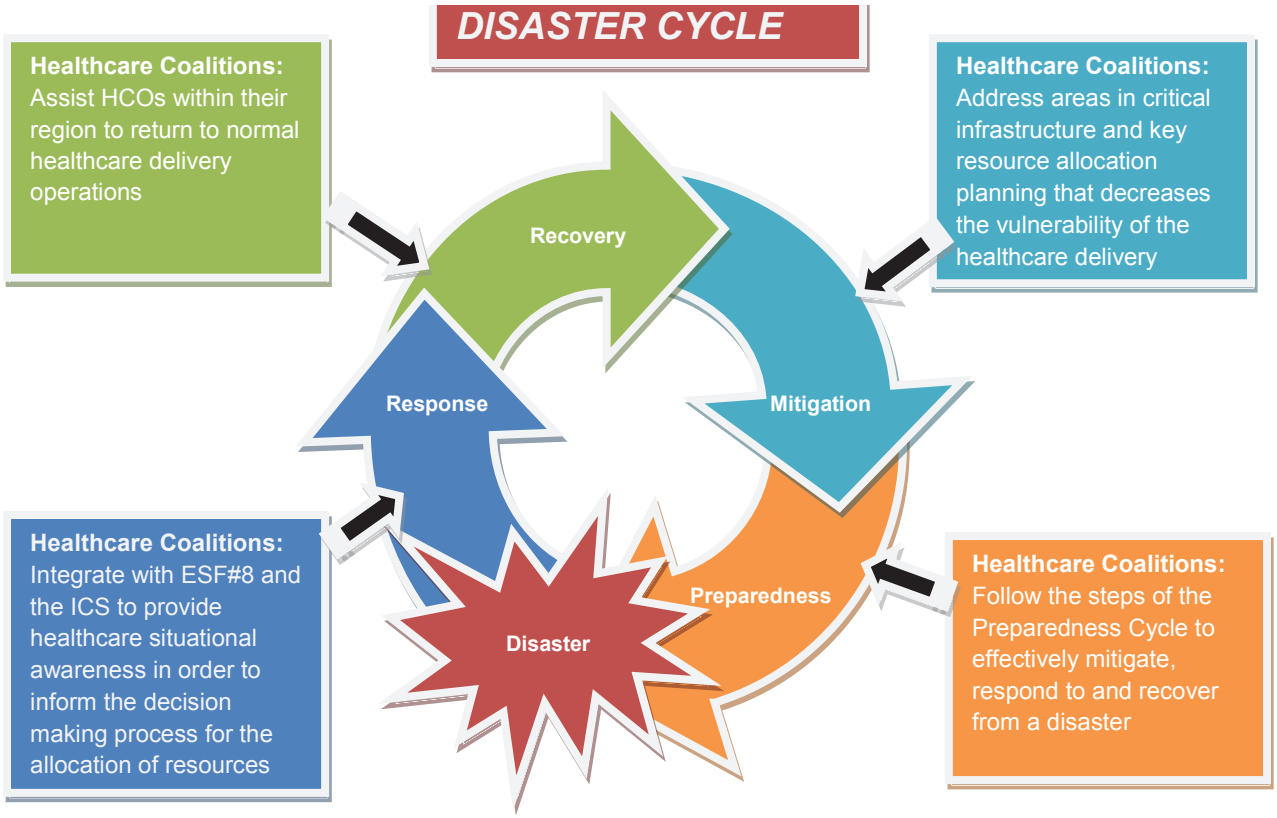

Figure 1: The Healthcare Coalition during Disaster

DISASTER CYCLE: The diagram on the previous page portrays the healthcare coalition role through the phases of disaster that form a repeating cycle.

- Mitigation: Healthcare Coalitions address areas in critical infrastructure and key resource allocation planning that decreases the vulnerability of the healthcare delivery
- Preparedness: Healthcare Coalitions: Follow the steps of the Preparedness Cycle to effectively mitigate, respond to and recover from a disaster
- Disaster occurs
- Response: Healthcare Coalitions integrate with ESF#8 and the ICS to provide healthcare situational awareness in order to inform the decision making process for the allocation of resources
- Recovery: Healthcare Coalitions assist HCOs within their region to return to normal healthcare delivery operations

CAPABILITY 1: Healthcare System Preparedness

Healthcare system preparedness is the ability of a community's healthcare system to prepare, respond, and recover from incidents that have a public health and medical impact in the short and long term. The healthcare system role in community preparedness involves coordination with emergency management, public health, mental/behavioral health providers, community and faith-based partners, state, local, and territorial governments to do the following:

- **Provide and sustain a tiered, scalable, and flexible approach to attain needed disaster response and recovery capabilities while not jeopardizing services to individuals in the community**
- **Provide timely monitoring and management of resources**
- **Coordinate the allocation of emergency medical care resources**
- **Provide timely and relevant information on the status of the incident and healthcare system to key stakeholders**

Healthcare system preparedness is achieved through a continuous cycle of planning, organizing and equipping, training, exercises, evaluations and corrective actions.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:

Integration with public health aligns during the planning process. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed throughout all of the functions in the capability as a collaborative process. The role of the healthcare coalition is very specific in this capability addressing the first step of planning; forming a collaborative planning group. Public health agencies are intended to be a part of this collaboration. To integrate this capability, healthcare preparedness planners should strive to coordinate planning collaboratively throughout the planning process.

Function 1: Develop, refine, or sustain Healthcare Coalitions

Develop, refine, or sustain Healthcare Coalitions consisting of a collaborative network of healthcare organizations and their respective public and private sector response partners within a defined region. Healthcare Coalitions serve as a multi-agency coordinating group that assists Emergency Management and Emergency Support Function (ESF) #8 with preparedness, response, recovery, and mitigation activities related to healthcare organization disaster operations. The primary function of the Healthcare Coalition includes sub-state regional, healthcare system emergency preparedness activities involving the member organizations. Healthcare Coalitions also may provide multi-agency coordination to interface with the appropriate level of emergency operations in order to assist with the provision of situational awareness and the coordination of resources for healthcare organizations during a response.

Function Alignment:

- PHEP Capability 1, Community Preparedness; Function 2: Build community partnerships to support health preparedness
- PHEP Capability 1, Community Preparedness; Function 3: Engage with community organizations to foster public health, medical, and mental/behavioral health social networks

Supported by:

- PHEP Capability 10, Medical Surge; Function 1, Resource P4: Engage in Healthcare Coalitions

Tasks

Task 1 Form a collaborative preparedness planning group that provides integration, coordination, and organization for the purpose of regional healthcare preparedness activities and response coordination

Task 2 Provide a regional healthcare multi-agency coordination function to share incident specific healthcare situational awareness to assist with resource coordination during response and recovery activities

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare Coalition regional boundaries

The State and Healthcare Coalition member organizations identify the geographic boundaries of the Healthcare Coalition. Healthcare Coalitions are developed around or within a functional service region/area based on unique needs of that region/area. The participation of the Healthcare Coalition is evidenced by written documents (e.g., charters, by laws or other supporting evidence based documents) that establish the Healthcare Coalition for the purpose of disaster preparedness. Examples of a region or area may include:

- Healthcare service catchment area
- Trauma region
- Emergency Medical Service (EMS) region
- Regional Coordinating Hospital region
- Public Health region/district
- County jurisdiction
- Emergency Management Agency (EMA) region
- Other type of functional service region

P2. Healthcare Coalition primary members

Healthcare organization participation in emergency management preparedness and planning may include formation of Healthcare Coalitions as a component of a larger planning organization or region (e.g., EMS or EMA regions). This may also include supporting the healthcare organizations to form Healthcare Coalitions around healthcare delivery areas (e.g., Regional Coordinating Hospital Region, etc.) and obtaining input for preparedness from relevant response organizations and stakeholders. The State role in Healthcare Coalitions is to form a partnership with or to provide support for healthcare organizations in the effort for multi-agency coordination for preparedness and response.

P3. Healthcare Coalition essential partner memberships

The State and Healthcare Coalition member organizations encourage the development of essential partner memberships from the community's healthcare organizations and response partners. These memberships are essential for ensuring the coordination of preparedness, response, and recovery activities. Memberships may be dependent on the area, participant availability, and relevance to the Healthcare Coalition. Prospective partners to engage (assuming they are not already members):

- Hospitals and other healthcare providers
- EMS providers
- Emergency Management/Public Safety
- Long-term care providers
- Mental/behavioral health providers
- Private entities associated with healthcare (e.g., Hospital associations)
- Specialty service providers (e.g., dialysis, pediatrics, woman's health, stand alone surgery, urgent care)
- Support service providers (e.g., laboratories, pharmacies, blood banks, poison control)
- Primary care providers
- Community Health Centers
- Public health
- Tribal Healthcare
- Federal entities (e.g., NDMS, VA hospitals, IHS facilities, Department of Defense facilities)

Note: Active membership from these constituencies are evidenced by written documents such as MOUs, MAAs, IAAs, letters of agreement, charters, or other supporting evidence documents

P4. Additional Healthcare Coalition partnerships/memberships

The State and Healthcare Coalition member organizations network with subject matter experts (SMEs) for improved coordination of preparedness, response, and recovery activities. These memberships may be dependent on the area, participant availability, and the Healthcare Coalition's unique needs. Examples of organizations that may be considered include but are not limited to:

- Local and state law enforcement and fire services
- Public Works
- Private organizations
- Non-governmental organizations
- Non-profit organizations
- Volunteer Organizations Active in Disaster (VOAD)
- Faith-based Organizations (FBOs)
- Community-based Organizations (CBOs)
- Volunteer medical organizations (e.g., American Red Cross)
- Others partnerships as relevant

Note: Active membership is evidenced by written documents such as MOUs, MAAs, IAAs, letters of agreement, charters, or other supporting documents. Evidence based documents demonstrate membership from healthcare subject matter experts or other healthcare organizations from both the public and private sector

Note: Additional supporting evidence based documents may include correspondence such as emails or meeting minutes but should clearly demonstrate that SME input has been coordinated

P5. Healthcare Coalition organization and structure

Healthcare Coalition members establish a collaborative oversight and coordination structure. At a minimum, the Healthcare Coalition oversight and structure should include:

- A Leadership structure determined and appointed by the Healthcare Coalition
- An advisory board-like function with multi-agency representation from members of the Healthcare Coalition
  - The advisory board should provide consultative and informed input into key decisions and ensure integrated planning similar to that of a multi-agency coordinating group
- A clear structure that can coordinate with the local and state emergency operations center
  - This includes a primary point of contact (POC) and/or a process that serves as the liaison/method to communicate with ESF#8 and Emergency Operations Centers (EOCs) during response
- Clearly defined roles and responsibilities for each participating member as it relates to disaster preparedness, response, and recovery
- Strategies to empower and sustain the Healthcare Coalition as an entity
  - Documents that outline the guidelines, participation rules, and roles and responsibilities of each agency in the Healthcare Coalition
  - Plans for the financial sustainability of the Healthcare Coalition in the absence of Federal funding
  - Processes to implement and document the administrative responsibilities needed to maintain the Healthcare Coalition

P6. Multi-agency coordination during response

The State and the Healthcare Coalition, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders develop a plan to ensure healthcare organizations are represented in incident management decisions during an incident. Multi-agency coordination will vary depending on the location of the Healthcare Coalition. Options for this type of representation may include either a response role as a part of Multi-Agency Coordination System (MACS) or by providing plans for incident management to guide decisions regarding healthcare organization support. Whether the coordination is done through actual response or by planning, the coordination should guide the protocols for:

- Healthcare organization coordination with ESF #8
- Healthcare organization coordination with incident management at the Federal, state, local, tribal, and territorial government levels
- Information sharing procedures between healthcare organizations and incident management
- Resource support to healthcare organizations

Suggested resources:

- Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery. U.S. Department of Health and Human Services: http://www.phe.gov/Preparedness/planning/mscc/healthcarecoalition/Pages/default.aspx
- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007: http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx
- Provisional Criteria for the Assessment of Progress toward Healthcare Preparedness. Center for Biosecurity of UPMC. Assessment Criteria | December 2009
- The Next Challenge in Healthcare Preparedness: Catastrophic Health Events. Center for Biosecurity of UPMC. Preparedness Report | January 2010: http://www.upmc-biosecurity.org/website/resources/publications/2010/pdf/2010-01-29-prepreport.pdf

Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster

Coordinate with emergency management to develop local and state emergency operations plans that address the concerns and unique needs of healthcare organizations. Plans should encompass the ability to deliver essential healthcare services during a response. This includes the assessment phases of planning to determine needs and priorities of healthcare organizations and the development of operational courses of action used during responses.

Function Alignment:
PHEP Capability 1, Community Preparedness, Function 1: Determine the risks to the jurisdiction

Tasks

Task 1 Engage relevant response and healthcare partners to assess the probability of hazards deemed likely to affect the healthcare delivery capability within a geographic area and prioritize response and mitigation activities given available resources

Task 2 Engage healthcare partners to coordinate healthcare planning efforts with local and state emergency operations planning to integrate healthcare organization priorities and unique needs into response and recovery operations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare system situational assessments

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, coordinate to develop a situational assessment of the local healthcare delivery areas that comprise the Healthcare Coalition regions. A coordinated healthcare situational assessment is adapted from the local hazard vulnerability assessments and risk assessments. The assessment includes a prioritization of threats to the community's ability to deliver healthcare during response. The assessment also includes estimates of casualties and fatalities based on the identified risks. The components of the situational assessment include:

Regional (planning area) characteristics such as:

- Demographics of the planning area including identification of at-risk individuals that may require special medical needs
- Specific characteristics regarding at-risk individuals and those with special medical needs (e.g., dialysis center locations and access, nursing home locations and access). For supporting information, please see Function 7 in this Capability
- Geographical characteristics that may impede healthcare delivery (e.g., flood plains, poor road conditions)

Coordination and integration of healthcare assessments with the appropriate local hazard vulnerability assessment (HVAs) and risk assessments should include:

- The following incident scenarios:
  - Local natural and human-caused hazards
  - Priority natural and human-caused catastrophic health incidents
  - Scenarios in which the community is cut off from outside support and/or the basic infrastructure is disrupted
- Integration with local HVA/risk assessment and include the needs of at-risk and vulnerable individuals
- Joint analysis and prioritization of the threats to the community using common healthcare planning assumptions from the State and healthcare organizations
- Identification and integration of the priority healthcare assets and essential services into the assessment (For supporting information, please see Function 3 in this Capability)
- Coordinate with ongoing public health risk assessment initiatives (For supporting information, please see PHEP Capability 1 — Community Preparedness)
- Estimates of the anticipated number of casualties that contribute to surge and fatality management planning (based on identified and prioritized risks).

Note: The situational assessment, which includes the risk assessment or HVA, casualty estimates, and the development of healthcare priorities, is used to determine future preparedness activities including planning, training, exercising and equipping

Suggested resources:

- Hazard Risk Assessment Instrument Workbook: http://www.cphd.ucla.edu/hrai.html
- FEMA: Understanding Your Risks: Identifying Hazards and Estimating Losses: http://www.fema.gov/library/viewRecord.do?id=1880

P2. Healthcare System disaster planning

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, collaborate to develop local and state all-hazards and ESF #8 plans. Plans should include, but are not limited to the following elements that:

- Include healthcare organizations objectives and priorities for response based on the HVA and risk assessment
- Assist healthcare organizations to perform capabilities required to prevent, protect against, respond to, and recover from all-hazards events when and where they are needed
- Coordinate vertically and horizontally with appropriate departments, agencies, and jurisdictions
- Provide a process to request local, state, and Federal assistance for healthcare organizations
- Provide the processes for requesting assistance from community partners and stakeholders and other healthcare organizations
- Coordinate healthcare organization operations with the local or state emergency operations center to assist with disaster response
- Define healthcare organization roles and responsibilities for response
- Coordinate the development of annexes that include specific healthcare delivery priorities including but not limited to:
  - Medical Surge Management
  - Information Management
  - Communications
  - Continuity of Operations
  - Fatality Management

Suggested resources:

- National Incident Management System. U.S. Department of Homeland Security. Dec 2008: http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- National Response Framework. U.S. Department of Homeland Security. Jan 2008: http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf
- Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2): http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf
- Presidential Policy Directive/PPD-8: http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

Function 3: Identify and prioritize essential healthcare assets and services

Identify and prioritize healthcare assets and essential services within a healthcare delivery area or region (Healthcare Coalition area). Coordinate planning to protect and enhance priority healthcare assets and essential services in order to ensure continued healthcare delivery to the community during a disaster.

Function Alignment:

Unique Function to HPP. Has similar objectives in PHEP Capability 1, Community Preparedness, Function 1: Determine the risks to the jurisdiction

Tasks

Task 1 Identify and prioritize the essential healthcare assets and services of the community

Task 2 Coordinate planning and preventative measures to assist with the protection of prioritized healthcare assets and essential services

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Identify and prioritize critical healthcare assets and essential services

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, perform community healthcare assessments to identify and prioritize healthcare assets and essential services that are vital for healthcare delivery. These assessments should identify the following critical services and key resources (not inclusive):

- Critical medical services (e.g., trauma, radiology, critical care, surgery, pediatrics, EMS, decontamination, isolation)
- Critical medical support services (e.g., patient transport services, pharmacy, blood banks, laboratory, medical gas suppliers)
- Critical facility management services (e.g., power, water, sanitation, generators, heating, ventilation, and air conditioning (HVAC), elevators)
- Critical healthcare information systems for information management/communications (e.g., failover and back up, remote site hosting)
- Key healthcare resources (e.g., staffing, equipment, beds, medical supply, pharmaceuticals)

P2. Priority healthcare assets and essential services planning

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain resource management processes to assist healthcare organizations with resources support. This support should assist healthcare organizations to maintain the priority healthcare assets and continue essential services during a response. Coordinated plans for resource assistance (e.g., space, staffing, equipment, supplies, services and systems) should include but is not limited to the following elements:

- Processes for healthcare organizations to quickly restore essential medical services in the aftermath of an incident
- Strategies for resource allocation that assist with the continued delivery of essential services during response
- Processes for healthcare organizations to request assistance and activate resource agreements to improve access to resources and emergency supply lines
  - The objective should be to extend operational ability well past the 96 hour standard (The Joint Commission EM.02.01.01 EP3) and if possible up to recovery
- Options for healthcare organizations to obtain assistance from a local or regional cache if available
- Processes to coordinate with healthcare organizations to assist with the movement of patients to alternate locations to receive critical medical treatment or evaluation (e.g., radiology, critical care)
- Processes to assist healthcare organizations with the decompression (clearing) of critical beds by assisting with the movement of patients to alternate facilities (For supporting information, please see Capability 10 — Medical Surge)
- Processes to assist healthcare organizations with the provision of special services/teams to support patient care and treatment (e.g., DMAT Teams, mobile radiology, mobile pharmacy, transportation, etc.)
- Processes to disseminate Federal-, state- and regional-based pharmaceutical caches and medical supplies

E1. Equipment to assist healthcare organizations with the provision of critical services

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, assess the need for equipment that can be used to assist healthcare organizations with essential services in a disaster. This equipment may include but is not limited to:

- Equipment that can provide specialty medical services (e.g., mobile pharmacy)
- Equipment that can deliver power, HVAC, potable water, provide food storage, or other equipment that sustain essential patient services
- Systems that can provide redundant communication and information management capability (e.g., failover and back up, remote site hosting)
- Medical equipment, medical supply, and pharmaceuticals
- Equipment to secure caches of critical medical supplies and pharmaceuticals and provide necessary environmental storage devices to maintain the appropriate environment (climate control)

Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps

Perform resource assessments and develop plans to assist healthcare organizations address gaps associated with planning, training, staffing, and equipping that improve resource availability during response and recovery. This is an ongoing process in the preparedness cycle guided by healthcare organization resource needs. These needs are based on the outcome of gap analysis, the evaluation of training, exercises, and actual incidents or events, and subsequent corrective actions.

Function Alignment:
Unique Function to HPP. Has similar objectives in PHEP Capability 3, Emergency Operations Coordination and Capability 10, Medical Surge

Tasks

Task 1 Perform a resource assessment by analyzing healthcare organization needs and evaluating exercises, training, and actual incidents or events to determine gaps and corrective action

Task 2 Deconflict resources by ensuring response resources are not over allocated to multiple stakeholders within the community

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare resource assessment

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, perform an healthcare organization resource assessment in order to identify:

- Healthcare organization resource gaps for incident response including those in:
  - Communication
  - Transportation
  - Manpower (e.g., stabilize/maintain staff after an event)
  - Equipment and supplies
  - Surge or alternate care space
  - Specialty services
  - Other resources identified by the gap analysis/corrective actions
- Categorization of the available assets within the region that could be used to address resource gaps
- Available resource assistance from accessible public or private caches
- Mutual aid agreements for resources from public and private sector (if the healthcare organization is willing to participate)
- Local, state, and Federal resources available through the appropriate request process
- Deconfliction of over allocated resources (competing priorities for the same resource at the same time)

Suggested resources:

- Agency for Healthcare Research and Quality, Emergency Preparedness Resource Inventory (EPRI): http://www.ahrq.gov/research/epri
- Agency for Healthcare Research and Quality, Hospital Surge Model. Pandemic, IED attacks, terrorism related to CBRNE: http://www.ahrq.gov/prep/hospsurgemodel
- Agency for Healthcare Research and Quality, Public Health Emergency Preparedness links, guides, models, other: http://www.ahrq.gov/prep
- CDC Division of Emergency Preparedness and Response, Community Assessment Tool for planners to use during a pandemic event and healthcare capability assessments in general: http://emergency.cdc.gov/healthcare/communityplanner.asp

P2. Healthcare resource coordination

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain coordinated resource processes that assist healthcare organizations to effectively obtain resources during response and recovery. This should include processes to assist healthcare organizations to:

- Immediately request and obtain resources from available caches
- Retain viable options for resource allocation and sharing that involves the community, private sector, and other stakeholders
- Request resources from the local, state, and Federal level of emergency operations (e.g., NDMS)

For supporting information, please see Capability 3 — Emergency Operations Coordination

P3. Address healthcare information gaps

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, and relevant response partners and stakeholders, develop, refine, and sustain plans that address information gaps in order to:

- Ensure communication and data interoperability for healthcare and response partners
- Assist with information sharing between local and state partners during an incident or event

For supporting information, Please see Capability 6 — Information Sharing

Function 5: Coordinate training to assist healthcare responders to develop the necessary skills in order to respond

Coordinate training for healthcare responders and supporting agencies in order to provide the required knowledge, skills, and abilities needed to prepare and respond to a disaster. Training curriculums are based on assessments, strategies, improvement plans, and ongoing evaluation efforts. Training is coordinated with ongoing training initiatives from healthcare and response partners. Training should include appropriate National Incident Management System (NIMS) or equivalent training.

Function Alignment:

PHEP Capability 1, Community Preparedness; Function 4: Coordinate training or guidance to ensure community engagement in preparedness efforts

Tasks

Task 1 Assist with the provision of National Incident Management System training for healthcare organizations in order to refine and improve response knowledge, skills, and abilities in accordance with the National Response Framework (NRF)

Task 2 Assist with the provision of training for healthcare organizations based on existing response gaps in order to improve and refine required response knowledge, skills, and abilities

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare organization — National Incident Management System (NIMS) training

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain healthcare strategies that assist healthcare organizations with NIMS training. This includes processes and strategies to:

- Promote NIMS adoption with healthcare organizations
- Support NIMS implementation with healthcare organizations
- Assist healthcare organizations to revise and update healthcare organization Emergency Operation Plans to incorporate NIMS and NRF components
- Assist healthcare organizations develop, refine, and sustain interagency mutual aid agreements, (e.g., agreements with public, private sector, and nongovernmental organizations)

- Assist healthcare organizations with FEMA 100, 200, and 700 level training or equivalent training
- Assist healthcare organizations with FEMA 800 level training or equivalent training
- Integrate NIMS concepts and principles into healthcare organization-related training and exercises
- Promote and encourage healthcare organization protocols, equipment, communication, and data interoperability to facilitate the collection and distribution of consistent and accurate information with state and local partners during an incident
- Promote the application of common and consistent terminology during response
- Ensure all emergency incidents, exercises, and preplanned (recurring/special) events are managed with a consistent application of ICS organizational structures, doctrine, processes, and procedures
- Assist healthcare organizations with adoption of the principle of Public Information, facilitated by the use of the Joint Information System (JIS) and Joint Information Center (JIC)

S1. Training to address healthcare gaps and corrective actions

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, provide training to address identified healthcare response gaps and corrective actions. Training should be based on the specific needs (i.e.,knowledge, skills, and abilities) identified by healthcare organizations

Suggested resources:

- NIMS Implementation Activities for Hospitals and Healthcare Systems http://www.fema.gov/pdf/emergency/nims/imp_hos.pdf
- National Incident Management System. U.S. Department of Homeland Security. Dec 2008: http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- National Response Framework. U.S. Department of Homeland Security. Jan 2008: http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf
- Homeland Security Presidential Directive 21: Public Health and Medical Preparedness, Sections 36-39: http://www.dhs.gov/xabout/laws/gc_1219263961449.shtm#1 (Note: National Center for Disaster Medicine and Public Health referenced in this document)

Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation

Coordinate an exercise, evaluation, and corrective action program to continuously improve healthcare preparedness, response, and recovery. Exercises should assess and validate the effectiveness and efficiency of capabilities and the adequacy of policies, plans, procedures, and protocols. Exercises should be coordinated vertically and horizontally with healthcare and emergency response partners. Evaluation and improvement planning should track corrective actions associated with identified healthcare capability deficiencies observed during exercises and incidents. Corrective actions provide the means to improve medical operational preparedness to perform critical healthcare response tasks. Corrective actions also contribute to the continuous preparedness cycle by ensuring updated strategies and plans are incorporated into new preparedness-building activities.

Function Alignment:

PHEP Capability 2, Community Recovery; Function 3: Implement corrective actions to mitigate damages from future incidents

Tasks

Task 1 Coordinate and implement capability based exercises that test disaster planning efforts

Task 2 Utilize a coordinated evaluation method to evaluate exercises and actual incident responses

Task 3 Address findings from gap analysis and subsequent corrective actions to revise planning, training, and exercises to minimize response gaps

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Exercise plans

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain coordinated exercise plans to guide exercise implementation. Coordinated exercise plans should include but are not limited to the following elements:

- An exercise schedule
- An annual update plan
- An approach for testing healthcare system capabilities
- Roles and responsibilities of the participating healthcare entities

P2. Exercise implementation and coordination

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, should exercise capabilities based on identified gaps and subsequent corrective actions. Exercise implementation and coordination should include:

- Exercises based on the guidance and concepts of HSEEP or equivalent program
- The encouragement of healthcare organization participation to address gaps in capabilities
- Horizontal and vertical coordination with relevant response partners and stakeholders to include Federal, state and local response teams. (i.e., DMATs)

Suggested Resource:

- Homeland Security Exercise and Evaluation Program (HSEEP) guidelines: https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

P3. Evaluation and improvement plans

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, implement evaluation methods to inform risk assessments, manage vulnerabilities, allocate resources, and guide the elements of preparedness. Evaluation methods should include but are not limited to:

- HSEEP, or equivalent, based capability assessment guidance
- The coordination of After Action Reports (AAR) for exercises/actual incidents
- The coordination of improvement plans for exercises/actual incidents
- The integration of findings from the improvement plan into the next planning, training, exercise, and resource allocation cycle

Suggested Resource:

- Homeland Security Exercise and Evaluation Program (HSEEP) guidelines: https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

P4. Best practice and lessons learned sharing

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a means to share best practices and lessons learned.

Suggested resource:

- FEMA Lessons Learned Information Site (LLIS) at https://www.llis.dhs.gov/dhs.gov/

S1. Exercise and evaluation training

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, provide exercise and evaluation training to assist healthcare organizations with the concepts of exercise coordination, implementation, and evaluation.

Suggested Resource:

- Homeland Security Exercise and Evaluation Program (HSEEP) guidelines: https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

Function 7: Coordinate with planning for at-risk individuals and those with special medical needs

Participate with planning to address at-risk individuals and those with special medical needs whose care can only occur at healthcare facilities. This includes coordination with public health and ESF#6 mass care planning to determine the transfer and transport options for individuals with special medical needs to and from shelters/healthcare facilities. It also includes continued involvement with public health planning initiatives for at-risk individuals with functional needs so that assistance or guidance can be provided to healthcare organizations regarding activity that may affect healthcare.

Function Alignment:
Unique Function to HPP. PHEP capabilities address At-Risk individuals in multiple capabilities

Tasks

Task 1 Participate in the planning process that identifies and determines multiple care options for individuals with special medical needs that are not suitable for mass care shelters and require care at medical facilities during incidents

Task 2 Participate in coordinated planning with public health and ESF#6 agencies to determine protocols for the transfer of patients between mass care and healthcare settings during a disaster

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare planning for at-risk individuals and functional needs

The State and Healthcare Coalitions, in coordination with healthcare organizations, ESF #6, public health, emergency management, ESF #8, relevant response partners, and stakeholders, participate in planning to determine the appropriate protocols regarding individuals with functional needs so that assistance and guidance can be provided to healthcare organizations upon request.

Suggested resources:

- ASPR Office for At-Risk Individuals, Behavioral Health, and Human Services Coordination (ABC), At-risk Individuals: http://www.phe.gov/Preparedness/planning/abc/Documents/AtRisk.pdf
- Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters: http://www.fema.gov/pdf/about/odic/fnss_guidance.pdf

P2. Special medical needs planning

The State and Healthcare Coalitions, in coordination with healthcare organizations, engage with the appropriate agencies and participate in planning for individuals having special medical needs and whose care can only occur at healthcare facilities. Plans should include:

- Courses of action to ensure individuals will be seen by the appropriate healthcare personnel during an incident
- Coordination with EMS to improve transport capabilities
- Coordination with alternative transportation capable of supporting individuals with special medical needs
- Coordination with public health and ESF#6 mass care planning to determine the transfer and transport options and protocols for individuals with special medical needs to and from shelters/healthcare facilities

Suggested resources:

- ASPR Office for At-Risk Individuals, Behavioral Health, and Human Services Coordination (ABC), Special Medical Needs: Definitions and Related Terms: http://www.phe.gov/Preparedness/planning/abc/Documents/SpecialMedicalNeeds.pdf
- Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters: http://www.fema.gov/pdf/about/odic/fnss_guidance.pdf

Healthcare system recovery involves the collaboration with Emergency Management and other community partners, (e.g., public health, business, and education) to develop efficient processes and advocate for the rebuilding of public health, medical, and mental/behavioral health systems to at least a level of functioning comparable to pre-incident levels and improved levels where possible. The focus is an effective and efficient return to normalcy or a new standard of normalcy for the provision of healthcare delivery to the community.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:
In this capability, integration with public health aligns during the planning process and response/recovery operations. This is done in coordination with Emergency Management and ESF #8 planners and responders and is specifically addressed throughout both functions as a collaborative process. To integrate this capability, public health and healthcare emergency planners should coordinate recovery plans that aim to revitalize and rebuild the public health and medical system of the community. Both functions in the Healthcare Preparedness Capabilities align with the processes in the Public Health Preparedness Capabilities.

Function 1: Develop recovery processes for the healthcare delivery system

Identify healthcare organization recovery needs and develop priority recovery processes to support a return to normalcy of operations or a new standard of normalcy for the provision of healthcare delivery to the community.

Function Alignment:
PHEP Capability 2, Community Recovery; Function 1: Identify and monitor public health, medical, and mental/behavioral health system recovery needs

Tasks

Task 1 Assess the impact of an incident on the healthcare systems ability to deliver essential services to the community and prioritize healthcare recovery needs

Task 2 Promote healthcare organization participation in state and/or local pre- and post-disaster recovery planning activities as described in the National Disaster Recovery Framework (NRDF) in order to leverage recovery resources, programs, projects, and activities

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare recovery planning

The State, in coordination with Healthcare Coalitions, healthcare organizations, emergency management, local, state, and Federal recovery coordinators, relevant response partners, and stakeholders, participate in the process to develop recovery plans that integrate healthcare recovery priorities. These plans should include but are not limited to the following elements:

- Assessment of the local healthcare system(s) to identify risks and vulnerabilities that may impede recovery (For supporting information, please see Capability 1 — Healthcare Preparedness)
- Identification of local, state and Federal disaster recovery coordinators that will provide recovery assistance
- A process to communicate needs with disaster recovery coordinators
- Identification of community and government partners for recovery support, resources, and systems
- Coordination with health licensing and regulation agencies for guidance with recovery processes
- Coordination with recovery partners and partner healthcare organizations to develop collaborative strategies for the continued delivery of essential healthcare services post-disaster (For supporting information, please see Capability 1 — Healthcare Preparedness)

Suggested resources:

- National Disaster Recovery Framework (NDRF): http://www.fema.gov/recoveryframework/index.shtm
- Continuity Guidance Circular 1 (CGC 1), Continuity Guidance for Non-Federal Entities (States, Territories, Tribal, and Local Government Jurisdictions and Private Sector Organizations), January 2009: http://www.fema.gov/pdf/about/org/ncp/cont_guidance1.pdf

Note: The continuation of private sector organization business functions (e.g., business continuity) is addressed within this document

P2. Assessment of healthcare delivery recovery needs post disaster

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, local, state, and Federal recovery coordinators, relevant response partners, and stakeholders, perform an assessment of healthcare organizations recovery needs post-disaster. This process should include but is not limited to the following elements:

- Coordination with healthcare organizations to identify immediate operating needs for the delivery of essential healthcare services
- Coordination with partner healthcare organizations to identify possible long-term healthcare recovery priorities
- Processes to communicate healthcare recovery priorities to the local and state agencies responsible for recovery

P3. Healthcare organization recovery assistance and participation

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, local, state, and Federal recovery coordinators, relevant response partners, and stakeholders, participate in the development of processes to provide assistance when available and requested by healthcare organizations to enable effective and rapid recovery support. This process may include but is not limited to the following elements:

- State promotion of the National Disaster Recovery Framework (NRDF) process
- Assistance to healthcare organizations to communicate recovery needs to the local, state or Federal disaster recovery coordinator
- Implementation of plans to assist healthcare organizations with the process to request and obtain resources (if available) and continue the delivery of essential services (For supporting information, please see Capability 3 — Emergency Operations Coordination)
  - The plan should encompass multiple sources of resource support until normal operations can be resumed. This should be based on the priorities of the healthcare system but may be unsupportable depending on the disaster impact (damage and cost)
- Provide guidance to healthcare organizations for the completion of the State and/or Federal processes for reimbursement, reconstitution, and resupply when requested. This does not imply a responsibility of reimbursement, reconstitution or resupply, but rather creates a process for it
- Development of risk mitigation strategies based on corrective actions

Note: An assistance process does not imply that the State or Healthcare Coalition is responsible for reconstitution of a healthcare organization. It only addresses assistance with the processes to recover.

Suggested resources:

- National Disaster Recovery Framework (NDRF): http://www.fema.gov/recoveryframework/index.shtm
- Presidential Policy Directive (PPD)8: http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

Function 2: Assist healthcare organizations to implement Continuity of Operations (COOP)

Maintain continuity of the healthcare delivery by coordinating recovery across functional healthcare organizations and encouraging business continuity planning. COOP guides how key resources from governmental, non-governmental, and private sector agencies can be used to support the sustainment and reestablishment of essential services for healthcare organizations. This coordination assists healthcare organizations to maintain their functional capabilities during, and after an all hazards incident and enables a rapid and more effective recovery.

Suggested resource:

- Continuity Guidance Circular 1 (CGC 1), Continuity Guidance for Non-Federal Entities (States, Territories, Tribal, and Local Government Jurisdictions and Private Sector Organizations), January 2009: http://www.fema.gov/pdf/about/org/ncp/cont_guidance1.pdf

Note: The continuation of private sector organization business functions (e.g., business continuity) is addressed within this document

Function Alignment:

PHEP Capability 2, Community Recovery; Function 1, Resource P3: Continuity of Operations Plans

Tasks

Task 1 Identify the healthcare essential services that must be continued to maintain healthcare delivery following a disaster

Task 2 Encourage healthcare organizations to identify the components of a fully functional COOP and develop corresponding plans for implementation

Task 3 If a disaster notice can be provided, alert healthcare organizations within communities threatened by disaster and if requested and feasible, assist them with the activation of COOP such that healthcare delivery to the community is minimally impacted

Task 4 Develop coordinated healthcare strategies to assist healthcare organizations transition from COOP operations to normalcy or the new norm for healthcare operations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. COOP planning assistance for healthcare organizations

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders participate with the development of coordinated plans to assist healthcare organizations with COOP plan development and COOP operations. These plans may include but are not limited to the following elements:

- Coordination with healthcare organizations to assess COOP capabilities
- Guidance to healthcare organizations for COOP planning
- Coordination of healthcare COOP plans with local and state emergency operation and ESF #8 plans
- Assistance to healthcare organizations for the development of COOP sites if requested
- Processes to request and obtain resources during COOP
- Communication protocols for healthcare organizations to communicate with the relevant response partners and stakeholders during COOP

P2. Healthcare organization COOP implementation assistance

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain processes to assist with the implementation of coordinated COOP strategies that assist activation, relocation and continuity of operations for healthcare organizations. These processes should include but are not limited to the following elements:

- Alert and notification procedures for COOP activation
- Monitoring COOP operations
- Processes to provide assistance to healthcare organizations during COOP operations when requested and available

- A means to recognize and understand healthcare organizations shelter-in-place operations and alternate care site operations plans including (assumes healthcare organization cooperation to share plans):
  - Orders of successions and delegations of authorities
  - Location of continuity facilities
  - Continuity communications plan
  - Continuity staffing plan (Human capital)
  - Reduced/altered operations for in-facility movement of service (devolution plan)
  - Plan for management of vital services
- Coordinated strategies for assisting healthcare organization during devolution operations if any can be provided

Suggested Resource:

- Continuity Guidance Circular 1 (CGC 1), Continuity Guidance for Non-Federal Entities (States, Territories, Tribal, and Local Government Jurisdictions and Private Sector Organizations), January 2009: http://www.fema.gov/pdf/about/org/ncp/cont_guidance1.pdf

P3. Healthcare organization recovery assistance

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, respective recovery coordinators, relevant response partners, and stakeholders, participate with the development of a plan to assist with recovery and reconstitution of healthcare essential services to the impacted region. COOP recovery plans should include but are not limited to the following elements:

- Identification of healthcare organizations healthcare recovery needs to move from COOP to normal operations
- Assistance to healthcare organizations for the return from continuity operations to normal operations if requested and available
- Guidance to assist healthcare organizations with the process for reimbursement, reconstitution, or resupply for the transition from COOP to normal operations

Suggested resources:

National Disaster Recovery Framework (NDRF): http://www.fema.gov/recoveryframework/index.shtm

Emergency operations coordination regarding healthcare is the ability for healthcare organizations to engage with incident management at the Emergency Operations Center or with on-scene incident management during an incident to coordinate information and resource allocation for affected healthcare organizations. This is done through multi-agency coordination representing healthcare organizations or by integrating this coordination into plans and protocols that guide incident management to make the appropriate decisions. Coordination ensures that the healthcare organizations, incident management, and the public have relevant and timely information about the status and needs of the healthcare delivery system in the community. This enables healthcare organizations to coordinate their response with that of the community response and according to the framework of the National Incident Management System (NIMS).

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:
Integration with public health aligns during the planning process and response operations. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed with planning that determines how healthcare organizations priorities and needs are represented in response. To integrate this capability, public health and healthcare emergency planners should coordinate response plans with Emergency Management and ESF #8 to ensure there is a united public health and medical response during incidents.

Function 1: Healthcare organization multi-agency representation and coordination with emergency operations

Coordinate the protocols and criteria for the multi-agency representation of healthcare organizations into local and state emergency operations during an incident response.

Suggested resources:
- National Incident Management System. U.S. Department of Homeland Security. December 2008: http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- National Response Framework. U.S. Department of Homeland Security. Jan 2008: http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf
- Presidential Policy Directive/PPD-8: http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

Function Alignment:
PHEP Capability 3, Emergency Operations Coordination; Function 2: Activate public health emergency operations

Tasks

Task 1 Determine the process for healthcare organizations representation with local and state emergency operations during an incident response

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare organization multi-agency coordination during response

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to determine how multi-agency coordination and representation for healthcare organizations should be activated and integrated into local and state emergency operations during an incident response. This plan should include, but is not limited to the following elements:

- Processes to determine healthcare organization representation in the local and state Emergency Operations Centers (EOCs). This may include:
  - Representation of the Healthcare Coalition on behalf of the healthcare organizations that integrates with Multi-Agency Coordination Systems (MACS) at the local and state EOCs upon request

  - Other methods of representation as decided by the individual healthcare organizations
- Identification of resource needs that require multi-agency coordination and representation of healthcare organizations
- Processes to request and activate multi-agency coordination

P2. Healthcare organization and emergency operations decision coordination

The State and Healthcare Coalition, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, determine how decisions regarding healthcare organization information and resource management are coordinated and integrated into emergency operations. This coordination is initiated by either multi-agency representation of healthcare organizations at the EOC or by plans and protocols that assist incident management with an incident response.

Function 2: Assess and notify stakeholders of healthcare delivery status

Assess the incident's impact on healthcare delivery in order to determine immediate healthcare organization resource needs and the status of healthcare delivery during an incident response. This includes assisting with the creation of the incident common operating picture and developing the processes for notification and information exchange between relevant response partners, stakeholders, and healthcare organizations.

Function Alignment:

PHEP Capability 3, Emergency Operations Coordination; Function 4: Manage and sustain the public health response

Tasks

Task 1 During an incident, implement information sharing processes that supports ongoing communication to inform local incident management of the operational status and resource needs of healthcare organizations

Task 2 During an incident, implement information sharing processes that supports ongoing communication to inform healthcare organizations about the status of the incident and of healthcare delivery in the community

Task 3 During an incident, implement coordinated information sharing processes that provide relevant and timely healthcare messages to the community and other stakeholders through a Joint Information System (JIS)

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare organization resource needs assessment

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a coordinated plan that can be used by emergency operations to quickly assess the status and needs of healthcare organizations within the community during an incident response. This plan should include, but is not limited to the following elements:

- Protocols to ensure appropriate multi-agency coordination for emergency response and recovery operations
- Protocols to communicate the operational status of healthcare organizations
- Protocols to communicate the resource needs of affected healthcare organizations at the outset of any emergency

For supporting information, please see Capability 6 — Information Sharing

P2. Incident information sharing

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, response partners, and stakeholders, develop, refine, and sustain a plan to provide healthcare organizations with relevant and timely incident information. The plan may include but is not limited to processes to communicate:

- The status of the incident
- The status of operations of partner healthcare organizations
- Availability of resources to perform response operations
- The level of healthcare organization activation that may be required to respond

P3. Community notification of healthcare delivery status

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan for communication that provides a unified message about the status of healthcare delivery through a Joint Information System (JIS) for dissemination to the community.

Note: This does not override a healthcare organizations ability to provide messages to the community but encourages "one voice" during public messaging as advocated by NIMS

Suggested resource:

- IS – 702.A NIMS Public Information: http://training.fema.gov/EMIweb/IS/IS702a.asp

Function 3: Support healthcare response efforts through coordination of resources

Coordinate resource allocation for healthcare organizations by assisting incident management with decisions regarding resource availability and needs. This process should continue throughout incident response and recovery; including ongoing coordination to track resources for decision-making and optimal resource allocation.

Function Alignment:

PHEP Capability 3, Emergency Operations Coordination; Function 4: Manage and sustain the public health response

Tasks

Task 1 Implement processes that assists local and state incident management to identify resource gaps and allocate available resources for healthcare organizations when requested during a response

Task 2 Implement the Healthcare Coalition's process to allocate resources, if any, and coordinate with emergency management and other response partners

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Identify available healthcare resources

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, determine resource availability to address resource gaps during response. This should include but is not limited to the following elements:

- Identification of available resources from accessible public or private caches
- Identification of mutual aid processes for resources from the public and private sector (assuming healthcare organizations would participate)
- Identification of local, state, and Federal resources through the appropriate request process
- Deconfliction of over allocated resources (competing priorities for the same resource at the same time)
- Identification of assets that the Healthcare Coalition has the authority to allocate
- Identification of regional mobile medical assets and caches of medical equipment and supplies
- Identification of processes to utilize the State's volunteer management system to identify trained, credentialed staff to assist with patient care or other duties during surge operations (Capability 15 — Volunteer Management)
- Identification of other regional resource management processes (redundant sources of supply)

For supporting information, please see Capability 1 — Healthcare Preparedness

P2. Resource management implementation

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, implement processes for resource management that include but are not limited to the following elements:

- Coordinate assistance for resources from locally available caches when requested and available
- Assist healthcare organizations with implementation of mutual aid processes upon request

- Allocate locally controlled assets through the Healthcare Coalition (if authorized)
- Assist local, state, and Federal incident management with coordination of resource requests from healthcare organizations
- Utilize alternate sources of resources (e.g., emergency supply chains and private vendor support for critical resources such as equipment, supplies, space or other resource) if requested and available

P3. Public health resource support to healthcare organizations

The State and Healthcare Coalition, in coordination with healthcare organizations, public health emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to coordinate with the State and local health departments in order to request support services, guidance and/or resources for public health related requirements. This should include but is not limited to the following elements:

- Surveillance services (e.g., daily monitoring and coordination with public health during incidents requiring bio-surveillance)
- Epidemiological investigation
- Public health laboratory services
- Guidance on prevention measures for injury, infectious disease, and other major health threats during an incident
- Alternate care sites
- Other requirements that necessitate support from the local and state health departments

P4. Managing and resupplying resource caches

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a coordinated plan that assists healthcare organizations by managing and resupplying caches. This should include but is not limited to the following elements:

- Processes to track, record, and effectively inventory available resources for healthcare organization use during emergency operations
- Coordination with the appropriate agencies for the resupply of specific caches (e.g., Strategic National Stockpile)
- Processes for the rapid resupply of depleted resources if and when available
- Processes to replace outdated supplies
- Financial processes for the reimbursement of depleted resources based on the type of incident (e.g., emergency declaration) or through routine processes
- A process to identify resource gaps and corrective actions for future improvement

E1. Inventory management system

The State and Healthcare Coalitions, in coordination with healthcare organizations, have or have access to a process and/or system with the ability to track and record resources that are available and shared among the healthcare community. This may be executed in coordination with agencies that have inventory systems.

Function 4: Demobilize and evaluate healthcare operations

The processes that assists healthcare organizations with the return of resources that are no longer required to support the incident. This includes the return of shared resources through incident management processes or directly to the providing healthcare organization. Following the return of assets, incorporate best practices and lessons learned into the continuous improvement process (after action reports/improvement plans/corrective actions).

Function Alignment:

PHEP Capability 3, Emergency Operations Coordination; Function 4: Manage and sustain the public health response

Tasks

Task 1 Develop a process to assist healthcare organizations with the return of shared healthcare owned resources to a condition of "the normal state of operations"

Task 2 Engage in evaluation processes that ensure the timely implementation of corrective actions and refine best practices to enhance preparedness for the healthcare delivery during response

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Resource demobilization

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a coordinated plan for demobilization procedures that assists healthcare organizations with returning resources or releasing staff. These procedures should include but are not limited to the following elements:

- Coordination with incident command
- Processes to provide healthcare organizations with general information regarding the demobilization effort
- Healthcare organization responsibilities/agreements for reconditioning equipment/resources
- Healthcare responsibilities associated with applying the demobilization plan
- Processes to provide healthcare organizations with information regarding general release priorities for resources (i.e., resource type or equipment)

P2. Evaluation and continuous program improvement

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, participate in coordinated process to evaluate response operations and incorporate best practices and lessons learned into the continuous improvement process for corrective action. This should include but is not limited to the following elements:

- Input into After Action Reports
- Development of corrective action plans
- Follow up on corrective actions for preparedness activities (planning, equipping, training, and exercising)
- Includes corrective actions during the course of an incident or event

For supporting information, please see Capability 1: Healthcare Preparedness

S1. Evaluation training

The State and Healthcare Coalitions, in coordination with healthcare organizations, coordinate training that provides the knowledge, skills, and abilities associated with the evaluation process. This training is determined by the unique needs of the individual healthcare organizations, the Healthcare Coalition, and the State.

Suggested Resource:

Homeland Security Exercise and Evaluation Program (HSEEP) guidelines: https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

Fatality management is the ability to coordinate with organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services for family members, responders, and survivors of an incident. Coordination also includes the proper and culturally sensitive storage of human remains during periods of increased deaths at healthcare organizations during an incident.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:
Integration with public health aligns during the planning process. This is done in coordination with Emergency Management and the lead Fatality Management planning agencies and is specifically addressed to manage in-facility death surges and the need for human remains temporary storage space. This capability also addresses surges of concerned citizens and the need for mental/behavioral health support. To integrate this capability, public health and healthcare emergency planners should coordinate planning according to the content in the functions of Capability 5 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Function 1: Coordinate surges of deaths and human remains at healthcare organizations with community fatality management operations

Coordinate with agencies responsible for fatality management (e.g., medical examiner, coroner's office, emergency management) to assist with the temporary storage of human remains during periods of death surges at healthcare organizations when morgue space is exceeded or unavailable.

Function Alignment:
PHEP Capability 5, Fatality Management; Function 2, Activate public health fatality management operations; Function 5, Participate in fatality processing and storage operations

Tasks

Task 1 Prior to an incident, assist healthcare organizations with determining the amount of morgue space that is available to them during periods of death surges and develop the processes to request support from local and state agencies.

Task 2 Prior to an incident, coordinate with healthcare organizations to identify alternate storage and disposal options for human remains

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Anticipate storage needs for a surge of human remains

The State and Healthcare Coalitions, in coordination with healthcare organizations, public health, and emergency management, participate in risk assessments to estimate the number of deaths that may occur during an incident, to anticipate the need for storage of human remains

Suggested resources:

- Hazard Risk Assessment Instrument Workbook: http://www.cphd.ucla.edu/hrai.html
- FEMA: Understanding Your Risks: Identifying Hazards and Estimating Losses: http://www.fema.gov/library/viewRecord.do?id=1880
- Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101, Version 2.0, November 2010 (CPG 101, V.2), pgs 4.7-4.11: http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

P2. Healthcare organization human remain surge plans

The State, in coordination with Healthcare Coalitions, healthcare organizations, local and state emergency management, ESF #8, and agencies responsible for fatality management, participate with the development of plans that assist healthcare organizations with the storage of human remains resulting from a surge of deaths during an incident. This plan should include but is not limited to the following elements:

- Protocols that coordinate the need for human remain storage with fatality management operations ongoing in the community
- Protocols for interaction with local fatality management authorities
- Coordination with lead and support agencies to assist with the immediate and temporary storage of human remains for healthcare organizations
- Development of resource request processes for alternate storage (e.g., use of alternate morgue locations within the local jurisdiction)
- Request and transportation processes for assets that provide additional storage (e.g., refrigerated trailers, mobile mortuary system)
- Resources available through mutual aid agreements
- Processes to request state and Federal resources (e.g., State/Disaster Mortuary Operational Response Teams)
- Protocols that ensure culturally sensitive and legal storage for human remains

E1. Mortuary storage equipment and supplies

The State, in coordination with Healthcare Coalitions, healthcare organizations, local and state emergency management, ESF #8, and agencies responsible for fatality management, assess the need for assets to store human remains. This should be based on anticipated death estimates identified during planning and risk assessment development. This type of equipment should comply with the requirements, regulations, and laws of the State and be able to provide culturally sensitive storage.

Function 2: Coordinate surges of concerned citizens with community agencies responsible for family assistance

Coordination with the agency responsible to provide assistance to the community regarding ante-mortem data to provide assistance to healthcare organizations for the processes to direct family and community members seeking information about missing family members to the right locations that are available in the community.

Function Alignment:

PHEP Capability 5, Fatality Management; Function 3, Assist in the collection and dissemination of ante-mortem data

Tasks

Task 1 Prior to an incident, assist healthcare organizations by coordinating options for surges of concerned citizens and their direction to the appropriate location for family assistance when these surges arrive at the facility seeking family member information

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Procedures for a surge of concerned citizens

The State, in coordination with healthcare organizations, Healthcare Coalitions, Emergency Management, and agencies responsible for providing family assistance during mass fatalities, participate in planning to develop a plan that can assist healthcare organizations in the case of a surge of concerned citizens requesting information about missing family members. Consideration should be given to the inclusion of the following elements:

- Obtain guidance from the responsible agency for family support in the community that can provide the following information:
  - Locations of family assistance centers (as related to mass fatality) or coordination with family reception centers (if no FAC is operational)
  - Protocols to ensure healthcare organizations can connect with family assistance centers

Function 3: Mental/behavioral support at the healthcare organization level

Coordinate with the lead jurisdictional authority and jurisdictional and regional mental/behavioral health partners to assist healthcare organizations with the processes to solicit support for the provision of non-intrusive, culturally sensitive mental/behavioral health support services to family members of the deceased, incident survivors, and responders, if requested.

Function Alignment:
PHEP Capability 5, Fatality Management; Function 4, Participate in survivor mental/behavioral health services

Tasks

Task 1 Coordinate the options for mental/Behavioral support for healthcare organizations during disasters which cause a death surge involving a large amount of human remains

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Mental/behavioral health support

The State, in coordination with healthcare organizations and the agencies responsible for mental/behavioral health, participate in coordinated planning to develop processes for healthcare organizations that would assist them with the procedures to request mental/behavioral health support that could be made available to responders, survivors, and families. This is for assistance beyond that of a healthcare organizations ability to provide. This could include but is not limited to the following elements:

- The processes for healthcare organizations to interact with mental/behavioral health professionals of the community and request support to assist with the mental/behavioral needs of their staff including psychological first aid
- A contact list of pre-identified resources that could provide mental/behavioral health support to responders and families according to the nature of the incident. Consideration should be given to the inclusion of the following elements:
  - Mental/behavioral health professionals
  - Spiritual care providers
  - Hospice
  - Translators
  - Embassy and Consulate representatives when international victims are involved

CAPABILITY 6: Information Sharing

Information sharing is the ability to conduct multijurisdictional, multidisciplinary exchange of public health and medical related information and situational awareness between the healthcare system and local, state, Federal, tribal, and territorial levels of government and the private sector. This includes the sharing of healthcare information through routine coordination with the Joint Information System for dissemination to the local, state, and Federal levels of government and the community in preparation for and response to events or incidents of public health and medical significance.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:

Integration with public health aligns during all phases of disaster planning. This is done in coordination with Emergency Management and ESF #8 planners and is specifically addressed with the coordination of information that will be shared with incident management, responders, community stakeholders, and with public health and medical partners during response and recovery. To integrate this capability, public health and healthcare emergency planners should coordinate what information is shared, who needs it, how it is delivered and when it should be provided. Capability 6 aligns in these areas for both public health and healthcare preparedness.

Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture

Provide situational awareness regarding the status of healthcare delivery into the ongoing flow of information to assist with the creation of an incident common operating picture. This includes providing information to the full spectrum of healthcare partners. This encompasses the real time sharing of actionable information between healthcare organizations and incident management to assist decision makers with resource allocation and provide healthcare organizations with incident specific information.

Function Alignment:

- PHEP Capability 6, Information Sharing; Function 2, Identify and develop rules and data elements for sharing and Function 3, Exchange information to determine a common operating picture
- PHEP Capability 10, Medical Surge; Function 2, Resources: P3. Access to jurisdictional bed tracking system S2. Utilization of bed tracking information
- PHEP Capability 10, Medical Surge; Function 3, Resource: P6. Coordinate patient tracking efforts emergency medical services and 911 authorities

Tasks

Task 1 Before an incident, identify the essential elements of incident specific healthcare information that are timely, relevant, actionable, and can be reasonably delivered during the response

Task 2 Before, during, and after an incident, utilize coordinated information sharing protocols to receive and transmit timely, relevant, and actionable incident specific healthcare information to incident management during response and recovery

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare information sharing plans

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain coordinated and integrated information sharing plans. Coordinated information sharing plans should include processes to:

- Identify protocols for healthcare organizations to provide multi-agency coordination of information to and from the ESF #8 liaison/ incident management (e.g., Healthcare Coalition assistance or some other process to represent healthcare organizations)

- Establish the protocols for healthcare organizations to provide and receive timely, relevant, and actionable information that can be used to:
  - Assist with the creation of an incident common operating picture that provides information about the operating status of healthcare organizations and their immediate resource needs
  - Inform local, state and/or the Federal incident management and other relevant response partners about healthcare organization resource needs to assist with the decisions regarding resource allocation
  - Inform healthcare organizations with relevant incident information and status of healthcare delivery operations within the community(e.g., available resources)

P2. Healthcare essential elements of information

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, determine reportable healthcare incident specific information to be used during the response. This information identifies the essential elements of information that can be reasonably shared during an incident. The process should enable the sharing of timely, relevant and actionable information during response that assists incident management with decisions to provide healthcare organizations with immediate resource needs. This information should be coordinated and agreed upon by healthcare organizations and local, state and Federal response partners. Guidelines for these elements should ensure information is incident specific, timely, relevant, actionable, and flexible enough so that appropriate response decisions can be executed.

Minimal information requirements should include but are not limited to the following elements:

- Elements of information that is coordinated and agreed upon by healthcare organizations and local, state, and Federal response partners
- The types of information that can be shared
- The frequency that information should be shared
- Participants authorized to receive and share data
- Data use and re-release parameters
- Data protections
- Legal, statutory, privacy, and intellectual property considerations
- Information system security (ISS)

Examples of types of information to consider when defining reportable elements can include:

- Facility operating status
- Facility structural integrity
- The status of evacuations/shelter in-place operations
- Critical medical services (e.g., trauma, critical care)
- Critical service status (e.g., electric, water, sanitation, heating, ventilation, and air conditioning)
- Critical healthcare delivery status (e.g., surge status, bed status, deaths, medical and pharmaceutical supplies, and medical equipment)
- Staffing status
- Emergency Medical Services (EMS) status involving patient transport, tracking, and availability
- Other information as applicable or determined through coordination

P3. Healthcare incident information validation

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to validate healthcare incident information according to requested response needs. Coordinated information sharing plans should identify an active validation process to confirm healthcare organization status and requests during an incident. Validation procedures should occur when inconsistencies with established reporting mechanisms have been identified (e.g., no report when expected, rumors of distress, etc.). The validation is completed by a process or system as a redundant situational awareness mechanism to confirm the status of the healthcare organizations' needs.

P4. Healthcare information sharing with the public

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to coordinate relevant healthcare information for public information sharing. Information sharing processes should coordinate relevant healthcare information with the Joint Information System (JIS) to ensure public information is disseminated and accurate (e.g., "one voice"). This type of information includes but is not limited to the following elements:

- The effects of the incident on the healthcare delivery system
- The current status of healthcare organizations
- Healthcare service messages to the public (e.g., where outpatient services are located, hours of operation, emergency department wait times, alternate facility options)
- Other appropriate information

For supporting information, please see PHEP Capability 4 — Early Public Information and Warning.

Suggested resource:

- IS-702.A - NIMS Public Information: http://training.fema.gov/EMIweb/IS/IS702a.asp

E1. Healthcare information systems

The State and Healthcare Coalitions, in coordination with healthcare organizations, should have or have access to information sharing system(s) that assist with the creation of an incident common operating picture. These systems should have the ability to:

- Integrate with local or state emergency operations information systems used for response
- Provide timely, relevant, and actionable healthcare information to the incident common operating picture
- Provide multijurisdictional and multidisciplinary incident related information to healthcare organizations
- Adhere to applicable local and state information technology regulations regarding the receipt and transmittal of information

Examples of information sharing systems that contribute to the incident common operating picture include but are not limited to the following:

- Bed tracking systems
- EMS information systems
- Health alert networks
- Patient tracking systems
- 911 call centers and systems
- Web-enabled emergency management communications systems
- Credentialing systems

P5. Bed tracking

The State and Healthcare Coalitions, in coordination with healthcare organizations, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain processes to electronically track bed status from healthcare organizations. These processes should:

- Provide information on the bed status of the healthcare delivery system
- Provide insight into the ability of the healthcare organization to accept a surge of patients (This is dependent on preplanning accuracy of surge and capacity estimates and current available data from healthcare organizations [e.g., number of available beds, number of beds that can be used based on resources, and contingency plans for surge that are in effect])
- Bed tracking processes may be an automated electronic system with the redundant system being a manual reporting process
- Integrate information into the incident common operating picture
- Assist incident management and healthcare entities with decisions regarding resource allocation, anticipated requests for assistance, and transport decisions

E2. Bed tracking system

The State and Healthcare Coalitions, in coordination with healthcare organizations, relevant response partners, and stakeholders, should have or have access to a bed tracking system. Systems should have the ability to:

- Provide information on the availability of bed status
- Provide a picture of the healthcare delivery area surge status
- Update bed status based on the situation and availability
- Report aggregate bed tracking data
- Report on pre-identified bed categories*

Suggested resource:

- National Hospital Available Beds for Emergencies and Disasters (HAvBED) System information: http://archive.ahrq.gov/prep/havbed/ Website: https://havbedws.hhs.gov/

S1. Bed tracking system training

The State and Healthcare Coalitions, in coordination with healthcare organizations, provide bed tracking system training. System training should be based on the identified needs of the healthcare organizations.

Suggested resource:

- National Hospital Available Beds for Emergencies and Disasters (HAvBED) System information: http://archive.ahrq.gov/prep/havbed/ Website: https://havbedws.hhs.gov/

P6. Patient tracking

The State and Healthcare Coalitions, in coordination with EMS, healthcare organizations, and emergency management, develop, refine, and sustain a process to track patients and/or have access to an electronic patient tracking system during an incident. This should include but is not limited to the ability to:

- Identify system users that have the appropriate authority/access permissions for electronic systems
- Access relevant and available aggregate patient tracking data from EMS and healthcare organizations (e.g., number of patients requiring receiving facilities, requiring transfer services)
- Integrate the aggregate patient tracking data into the local, state and/or Federal incident common operating picture
- Adhere to mandatory patient confidentiality regulations
- Integrate with the Federal patient tracking system of record

Note: "…Electronic exchange of personal health information should meet applicable patient privacy-related laws and standards, including state or territorial laws. These include the Health Insurance Portability and Accountability Act, the Health Information Technology for Economic and Clinical Health Act, and standards from the National Institute of Standards and Technology and the Office of the National Coordinator for Health Information Technology of the U.S. Department of Health and Human Services."

Suggested Resource:

- Joint Patient Assessment and Tracking System (JPATS) used by the National Medical System (NDMS) patient movement system

E3. Patient tracking system

The State and Healthcare Coalitions, in coordination with EMS and healthcare organizations, should have or have access to a patient tracking system. The system should have the ability to:

- Maintain operational status during an incident
- Integrate with the Federal patient tracking system of record
- Satisfy regulatory/confidentiality requirements
- Track patients from entry into the healthcare system (EMS or facility level) through discharge
- Integrate data into the local, state and Federal incident common operating picture

P7. Patient record tracking

The State, in coordination with Healthcare Coalitions, healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a process to access an information infrastructure and exchange system that provides electronic medical healthcare information during response, if available and authorized. This process should include but is not limited to the following elements:

- Guidance that ensures information is available to assist with the continuity of care for patients immediately post-incident
- Identification of those who have authority/permissions to use the information during an incident
- Methods that ensure providers can access relevant electronic medical healthcare information, when it is available

Note: "…Electronic exchange of personal health information should meet applicable patient privacy-related laws and standards, including state or territorial laws. These include the Health Insurance Portability and Accountability Act, the Health Information Technology for Economic and Clinical Health Act, and standards from the National Institute of Standards and Technology and the Office of the National Coordinator for Health Information Technology of the U.S. Department of Health and Human Services."

Function 2: Develop, refine, and sustain redundant, interoperable communication systems

Communications interoperability enables healthcare organization emergency communication systems to communicate with existing incident management emergency communications systems. With these systems in place, healthcare organizations can communicate with multiple agencies, relevant response partners, stakeholders, and other healthcare systems through radio and/or associated communications systems permitting an exchange of information in real time, when needed, and when authorized.

Function Alignment:

- PHEP Capability 6, Information Sharing
- PHEP Capability 3, Emergency Operations Coordination

Tasks

Task 1 Before, during, and after an incident or event, have redundant processes and systems to communicate with the appropriate multijurisdictional and multidisciplinary emergency responders

Task 2 Before, during, and after an incident or event, have redundant processes and systems to communicate the status of the incident and the status of the community healthcare delivery to healthcare organizations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Interoperable communications plans

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain coordinated communications plans. These plans should include processes to:

- Provide interoperable communications
- Communicate between healthcare organizations and on-scene incident management
- Communicate between healthcare organizations and local, state, and Federal ESF #8 and emergency operation centers
- Enable healthcare organizations to communicate with other healthcare entities' communication systems (e.g., hospitals, EMS, Long-Term Care)
- Provide redundant communications
- Restore emergency communications
- Contact the ESF #8 liaison and incident management when electronic systems are inoperable
- Include legal, statutory, privacy, and intellectual property considerations
- Include information system security (ISS)
- Coordinate healthcare organization(s) emergency communications with statewide interoperability coordination and regional emergency communications coordination
- When appropriate, incorporate alternate forms of communication (e.g., social media)

Suggested resources:

- Statewide Interoperability Coordinators: http://www.dhs.gov/files/programs/gc_1286986920144.shtm
- Regional Emergency Communications Coordination Working Group: http://www.fema.gov/about/regions/regioniii/councils.shtm

E1. Interoperable communication system

The State and healthcare organizations, in coordination with Healthcare Coalitions, relevant response partners, and stakeholders, have or have access to redundant, interoperable communications systems. These systems must be capable of communicating vertically with local, state, and Federal incident management and ESF #8, and horizontally with critical healthcare response partners in the community. Communication upgrades should be based on the most current Federal Communications Commission regulations: http://www.fcc.gov/topic/emergency-communications

Examples of redundant communications include but are not limited to:

- Landline and cellular telephones
- Satellite telephones
- Two-way VHF/UHF radio
- Amateur (HAM) radio

Consider the use of emergency restoration programs. Examples of these include but are not limited to:

- Emergency Telecommunications Programs: http://transition.fcc.gov/hspc/emergencytelecom.html
- Priority Communication Services: http://transition.fcc.gov/pshs/emergency/priorityservices.html
- Telecommunication Service Priority (TSP): http://transition.fcc.gov/pshs/emergency/telecom.html
- Government Emergency Telecommunications Service (GETS): http://transition.fcc.gov/pshs/emergency/gets.html
- Wireless Priority Services (WSP): http://transition.fcc.gov/pshs/emergency/wps.html
- Fact sheets: http://transition.fcc.gov/hspc/factsheets.html

S1. Communication training

Communication training should be coordinated by the State, Healthcare Coalition, and the healthcare organization with the appropriate input from communication subject matter experts. Training curriculums should be based on:

- Communication training needs of the healthcare organization
- Emergency communication systems provided to the healthcare organization (both the primary and redundant systems)
- Information exchange protocols related to the exchange of information during emergency communication and the legal restrictions that are applicable to the State

The Medical surge capability is the ability to provide adequate medical evaluation and care during incidents that exceed the limits of the normal medical infrastructure within the community. This encompasses the ability of healthcare organizations to survive an all-hazards incident, and maintain or rapidly recover operations that were compromised.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for those healthcare organizations within the State.

Capability Alignment:

Integration with public health aligns during planning and response. This is done in coordination with Emergency Management and ESF #8 planners and specifically addresses pre-hospital, affected hospital, and receiving hospital surge management. To integrate this capability, public health and healthcare disaster planners should coordinate efforts to maximize the use of resources that are available to facilities affected by surge. This includes public health operations outlined in PHEP Capability 10 to support surge operations. Primary areas of coordination include public health assistance with resources and integration with public health plans for alternate care sites. This coordination should assist with resources and space to alleviate surge or enhance operations at healthcare organizations affected by surge.

Function 1: The Healthcare Coalition assists with the coordination of the healthcare organization response during incidents that require medical surge

Develop, refine, and sustain processes to ensure incident management decisions during medical surge incidents are coordinated through multi-agency collaboration representative of the community healthcare organizations' priorities and needs. Coordination is achieved by ensuring that there are plans and protocols in place to guide the decisions made by incident management. It may also be achieved through real time multi-agency coordination by healthcare organizations during a response.

Suggested resources:

- Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery. U.S. Department of Health and Human Services: http://www.phe.gov/Preparedness/planning/mscc/healthcarecoalition/Pages/default.aspx
- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007: http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx
- Provisional Criteria for the Assessment of Progress toward Healthcare Preparedness. Center for Biosecurity of UPMC. Assessment Criteria | December 2009
- The Next Challenge in Healthcare Preparedness: Catastrophic Health Events. Center for Biosecurity of UPMC. Preparedness Report | January 2010: http://www.upmc-biosecurity.org/website/resources/publications/2010/pdf/2010-01-29-prepreport.pdf

Function Alignment:

PHEP Capability 10, Medical Surge; Function 2, Resource P4, Engage in healthcare coalitions

Tasks

Task 1 Provide healthcare coordination for healthcare emergency preparedness activities and surge planning that guide incident management decisions during response

Task 2 Develop, refine, and sustain a method to ensure that healthcare organizations are adequately represented during medical surge incidents in order to provide incident management with information and assist with decisions regarding the allocation of resources to healthcare organizations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare Coalition preparedness activities

The Healthcare Coalition, in coordination with the State, healthcare organizations, emergency management, Emergency Support Function (ESF) #8, relevant response partners, and stakeholders, develop, refine, and sustain medical surge plans for healthcare system preparedness. These plans should include, but are not limited to the following elements:

- Multi-agency coordination between healthcare organizations and emergency management to ensure healthcare organization medical surge priorities and needs are addressed in local and state all-hazards plans
- Coordination and integration of medical surge preparedness activities with healthcare organizations, relevant response partners, and stakeholders
- Coordination of medical surge training and exercises planned at the local or regional level by the Healthcare Coalition
- Coordination of regionally controlled surge resources if available
- Assistance with improvement planning for healthcare organizations' medical surge preparedness, response, and recovery capabilities
- Development of processes to enhance the regional surge capacity and capability of the healthcare delivery system
- Development of information and resource assistance strategies with the State and other partners to assist healthcare organization surge operations during a response

For supporting information, please see Capability 1 — Healthcare Preparedness

P2. Multi-agency coordination during response

The State and the Healthcare Coalition, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to ensure healthcare organizations are represented in incident management decisions during medical surge incidents. These plans should have processes that:

- Guide healthcare organization coordination and integration with ESF #8
- Guide healthcare organization coordination and integration with incident management at the Federal, state, local, tribal, and territorial government levels
- Assist with healthcare organization information sharing procedures during medical surge operations (For supporting information, please see Capability 6 – Information Sharing)
- Assist with healthcare organization resource coordination during medical surge operations (For supporting information, please see Capability 3 – Emergency Operations Coordination)

Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations

Coordination between the State, healthcare organizations, and Healthcare Coalitions with EMS operations and medical oversight to develop, refine, and sustain protocols for information sharing and communications. These protocols should assist with the coordination of transport decisions and options during a medical surge incident. These protocols also assist healthcare organizations understand the EMS disaster triage, transport, documentation, and CBRNE treatment methodologies during mass casualty incidents resulting in medical surge.

Function Alignment:

PHEP Capability 10, Medical Surge; Function 3, Resource: P6. Coordinate patient tracking efforts emergency medical services and 911 authorities

Tasks

Task 1 Promote information sharing processes that enable healthcare organizations to track the status and transport of patients (situational awareness) from EMS during medical surge incidents

Task 2 Provide training and guidance to encourage healthcare organizations to understand EMS disaster triage protocols and CBRNE treatment protocols that assist with the transition of disaster patients from the field to the facility

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare organization coordination with EMS during response

The State and Healthcare Coalitions, in coordination with public and private EMS, healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan that includes processes to coordinate information sharing and surge resources. These processes should ensure the ability to:

- Provide ongoing communication to healthcare organizations about EMS activity during surge operations
- Coordinate transport decisions vertically and horizontally during medical surge incidents
- Provide healthcare organizations with situational awareness about the status of the transport and tracking of patients from EMS
- Provide situational awareness of healthcare organizations' patient receiving status that assists with coordination for pre-hospital transport decisions (e.g., primary and alternate facility receiving status/availability)
- Assist healthcare organizations to notify local, state or regional (Healthcare Coalition) personnel to request support
- Contact relevant EMS agencies within the region
- Inform EMS of bed status when requested (if not electronically available)
- Assist EMS and healthcare organizations make decisions to divert en route EMS facilities with the equivalent levels of care based on bed status and patient tracking information
- Provide equal access for the transport of at-risk individuals and those with special medical needs
- Assist with the implementation of existing statewide mutual aid plans to deploy EMS units in jurisdictions/regions they do not normally cover, in response to a mass casualty incident

P2. Coordinated disaster protocols for triage, transport, documentation, CBRNE

The State and Healthcare Coalitions, in coordination with public and private EMS, healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to assist with training and guidance to understand the local disaster EMS protocols for triage, transport, documentation, and decontamination. Plans may include but are not limited to the following elements:

- Coordination with local and/or state EMS medical direction/oversight to ensure the most current guidance regarding EMS disaster triage, transport, and CBRNE treatment is provided to healthcare organizations to include:
  - Triage methodologies
  - Protocols for:
    - > Transport of mass casualties during medical surge (e.g., transport patients from an incident scene or from local hospitals to healthcare facilities in adjacent jurisdictions within or near the affected jurisdiction, and to nearby staging areas for transport to more distant healthcare facilities)
    - > Disaster documentation during incident
    - > CBRNE exposure care
- A process for the promotion and dissemination of EMS protocols and methodologies to healthcare organizations
- Development of coordinated training and exercises between EMS and healthcare organizations

Suggested resources:

- In A Moment's Notice: Surge Capacity for Terrorist Bombings: http://www.bt.cdc.gov/masscasualties/pdf/CDC_Surge-508.pdf
- Mass Casualty Event Preparedness and Response: http://www.bt.cdc.gov/masscasualties/
- Terrorism Injuries Information, Dissemination and Exchange (TIIDE) Project: http://www.bt.cdc.gov/masscasualties/blastinjuryfacts.asp
- Disaster Med Public Health Prep. 2011 Jun;5(2):125-8., Model Uniform Core Criteria for Mass Casualty Triage

S1. Training on local EMS disaster triage methodologies

The State and Healthcare Coalitions, in coordination with public and private EMS, healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, assess the need to provide training for healthcare organizations that includes the local EMS disaster triage methodology. Training should focus on developing a common understanding of critical operations between the healthcare organization and EMS.

S2. Coordinated CBRNE training

The State and Healthcare Coalitions, in coordination with public and private EMS, healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, assess the need to provide training for healthcare organizations that includes the local EMS CBRNE protocols. Training should focus on developing a common understanding of critical operations between the healthcare organization and EMS.

Suggested resources:

- Standards for Personal Protective Gear for first Responders: http://www.dhs.gov/files/programs/gc_1218226975457.shtm#0
- NFPA 472: Standards for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2008
- NIOSH Personal Protective Equipment for Emergency Response: http://www.cdc.gov/niosh/topics/emres/ppe.html

Function 3: Assist healthcare organizations with surge capacity and capability

The rapid expansion of the capacity and capability of the healthcare system to provide the appropriate and timely clinical level of care in response to an incident that causes increased numbers (capacity) or special types of patients (capability) that overwhelm the day-to-day acute-care medical resources. This encompasses the appropriate decisions regarding patient care that require multi-agency coordination between healthcare organizations and incident management during medical surge operations.

Supported by:

PHEP Capability 10, Medical Surge

Tasks

Task 1 Assist healthcare organizations with decisions regarding surge management by ensuring processes exist to provide healthcare organizations with ongoing communication regarding the status of the incident and the status of medical surge operations when requested

Task 2 Develop a process for healthcare organizations to provide multi-agency coordination regarding resource decisions during medical surge operations

Task 3 Develop, refine, and sustain processes that assist healthcare organizations to maximize medical surge capacity and capability during response operations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Medical surge planning

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, coordinate plans to ensure the priorities and needs of healthcare organizations are addressed in the local and state emergency operations plans. Coordinated medical surge plans should include but are not limited to the following:

- Processes to assess and maximize surge capability and capacity of healthcare organizations in the community (For more information, please see Capability 1 — Healthcare Preparedness)
- Strategies for surge planning, training, exercising, and securing equipment to assist healthcare organizations respond to a medical surge incident
- Validation of healthcare organization surge plans operability
- Processes to shorten response times to assist healthcare organizations with activation of medical surge plans
- Processes to ensure multi-agency coordination of resource decisions during medical surge operations

- Protocols for the sharing of medical surge specific information between incident management, healthcare organizations, and stakeholders in the community
- Protocols for the management of assistance with healthcare organization surge resources should include:
  - Resource request process from local incident management
  - Processes to allocate locally or regionally controlled assets if available
  - Assistance with the implementation of other resource processes when requested
- Crisis standards of care guidance for healthcare organizations to assist with treatment decisions for a surge of casualties during periods of minimal or scarce resources (For supporting information, please see Function 4 — Crisis Standards of Care)
- State led processes to contact the local, state or Federal volunteer agencies, the ESF#8 liaison and incident management to coordinate volunteer assistance, including those involving health professionals (For supporting information, please see Capability 15 — Volunteer Management) and Federal NDMS teams.

Suggested resources:

- Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery. U.S. Department of Health and Human Services: http://www.phe.gov/Preparedness/planning/mscc/healthcarecoalition/Pages/default.aspx
- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007: http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx
- In A Moment's Notice: Surge Capacity for Terrorist Bombings: http://www.bt.cdc.gov/masscasualties/pdf/CDC_Surge-508.pdf
- Mass Casualty Event Preparedness and Response: http://www.bt.cdc.gov/masscasualties/
- Conventional, contingency and disaster operations – *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

P2. Medical surge emergency operations coordination

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan for healthcare organizations to provide multi-agency coordination for information sharing and resource decisions that assist healthcare organizations during surge operations. These decisions require real-time, multi-agency coordination that represent healthcare organizations, or by plans that ensure incident management is informed before making resource decisions affecting healthcare organizations.

For supporting information, please see Capability 3 — Emergency Operations Coordination

P3. Assist healthcare organizations maximize surge capacity

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners and stakeholders, develop, refine, and sustain a plan to maximize surge capacity for medical surge incidents. This plan may include but is not limited to the following elements:

- Surge Assessment:
  - Pre-incident assessment of normal operating capacity for healthcare organizations within the healthcare delivery area
  - Pre-incident estimate of surge casualties (i.e., medical casualties, mental/behavioral health casualties)[estimates are based on the risk assessment — For more information, please see Capability 1 – Healthcare Preparedness]
  - Pre-incident assessment of available resources to address surge estimates
  - Development of surge capacity indicators that would trigger different aspects of the medical surge plan (e.g., surge in place strategies; early discharge, cancelled elective surgeries; augmented personnel; extra shifts, volunteers; established alternate care sites or activated mobile units; requested mutual aid)
  - Processes to immediately identify an increase in medical surge status during an incident (e.g., medical, mental/behavioral health, concerned individuals)
- Decompression (clear) of critical beds:

- Develop, refine, sustain, and implement processes that assist healthcare organizations with daily, continuous, triage of admitted patients and discharge planning to permit the safe discharge of less acute patients, ensuring twenty percent acute bed availability in the event of a disaster
- Coordination with non-acute care facilities to accept patients to clear beds (e.g., Community Health Centers, SNFs, and home healthcare)
- State led coordination with Veterans Health Administration and Department of Defense to establish options for assistance with patient care, transfer of patients, and additional assistance during medical surge operations
- Development of viable options to share healthcare assets (e.g., beds, staffing, equipment) between healthcare organizations
- Protocols to request immediate resources needed to decompress beds (e.g., transport, staffing, space, equipment and supply needs)
- Develop, refine, and sustain patient movement options to address psychiatric beds, involuntary holds, and patients with exposure to CBRNE

■ Locally available resource assistance (mobile equipment and caches of supplies):
- Implementation of state or regional resource assistance (if available) to include plans to deploy mobile medical assets and utilize caches of medical supplies

■ Alternate surge sites (healthcare organization or Healthcare Coalition):
- Protocols to assist with activation of alternate surge sites if requested by the healthcare organization. This may include the following elements:
  > Processes to supply surge tents or trailers and equipment to serve as additional treatment areas for patients when available (e.g., mobile hospital)
  > Processes to assist healthcare organizations request staffing to operate surge sites when requested and available (e.g., mobile medical team)
  > Coordination of alternate surge sites with state and local EMS authorities to ensure these sites can receive and transfer EMS ambulance patients
  > Coordination of assets requested through the Emergency Management Assistance Compact
  > Coordination of Federal assets (e.g., Federal Medical Stations, Disaster Medical Assistance Team)

■ Alternate care sites:
- Coordination with alternate care sites developed at non-healthcare facilities for the surge of individuals that do not require care at healthcare organizations' surge sites

■ Mass death in healthcare facilities:
- Coordination with fatality management planning to address mass deaths and the ability to store human remains that occur at healthcare facilities (For supporting information, please see Capability 5 – Fatality Management)
- Coordination of planning to address surges of concerned citizens at healthcare facilities that may occur during community mass fatalities (For supporting information, please see Capability 5 – Fatality Management)

■ Volunteers and other staff resources:
- Develop, refine, and sustain processes that assist healthcare organizations to share staff during medical surge operations. This includes the credentialing process prior to an incident
- Implementation of plans to utilize the local volunteer management process to gain access to trained, credentialed staff to assist with patient care and other duties during surge operations (For more information, please see Capability 15: Volunteer Management)

■ Crisis standards of care:
- State led processes to guide healthcare organizations during crisis standards of care when resources are scarce and when requested (For supporting information, please see Function 4 in Capability 10)

Suggested resources:

- Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery. U.S. Department of Health and Human Services: http://www.phe.gov/Preparedness/planning/mscc/healthcarecoalition/Pages/default.aspx
- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007: http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx
- In A Moment's Notice: Surge Capacity for Terrorist Bombings: http://www.bt.cdc.gov/masscasualties/pdf/CDC_Surge-508.pdf
- Mass Casualty Event Preparedness and Response: http://www.bt.cdc.gov/masscasualties/
- Conventional, contingency and disaster operations – *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx
- Public Health Preparedness Infrastructures: Comparing Israel to the United States: http://www.cjgsu.net/initiatives/IsraelReport.pdf

Note: Maximum facility surge capacity is the provision the highest level that can be provided to patients in the available beds that can be staffed and also have the required resources for care. This is guided by risk assessments and gap analysis regarding the estimated surge.

P4. Assist healthcare organizations maximize surge capability

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan to maximize surge capability for medical surge incidents. This plan should include but is not limited to the following elements:

- Processes for providing specialized medical evaluation and care:
  - Assistance to healthcare organizations with the management of patients requiring unusual or specialized medical evaluation and care. This may include:
    - > Process to obtain specialized resources that are not routinely available to the healthcare organization (e.g., burn, pediatric, trauma resources)
    - > Coordination with healthcare organizations to identify subject matter expertise (e.g., pediatric, neurology, trauma) that would be requested to assist with special medical evaluation and care
    - > Coordination with healthcare organizations to identify services or supplies that would be requested to assist with identified bottlenecks for care such as:
      - Radiology services
      - Critical care services
      - Surgical services
      - Special medical support (e.g., pharmacy, blood)
    - > Coordinated processes to request specialty medical teams and equipment (e.g., state and local medical assistance teams, National Disaster Medical Assistance (NDMS) Teams, and Federal Medical Stations)
- Processes to provide assistance with decontamination, isolation, and quarantine:
  - Processes to assist healthcare organizations with special interventions to protect medical providers, other patients, and the integrity of the healthcare organization when there is a surge of patients with conditions that require decontamination, isolation or quarantine. These interventions may include (if available and requested):
    - > Coordination for extra Personal Protective Equipment (PPE)
    - > Coordination for extra decontamination resources
    - > Coordination for state or regionally located caches of pharmaceuticals
    - > Processes to contact the responsible public health agency tasked with isolation and quarantine when there is a surge of patients requiring these interventions

Suggested resources:

- Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery. U.S. Department of Health and Human Services: http://www.phe.gov/Preparedness/planning/mscc/healthcarecoalition/Pages/default.aspx
- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007: http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx
- In A Moment's Notice: Surge Capacity for Terrorist Bombings: http://www.bt.cdc.gov/masscasualties/pdf/CDC_Surge-508.pdf
- Mass Casualty Event Preparedness and Response: http://www.bt.cdc.gov/masscasualties/

P5. Medical surge information sharing

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a process to provide healthcare organizations with ongoing communication regarding the status of medical surge operations. This includes incident status, surge status (e.g., bed availability, patient tracking, and surges of concerned individuals), availability of resources, and healthcare organization operating status.

For more information, please see Capability 6 — Information Sharing

P6. Healthcare organization patient transport assistance

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain patient transport processes for medical surge incidents. These processes address patient transport needs above routine healthcare organization transport agreements due to the number and severity of patients. The methods used to transport may vary, however, the medical and legal obligations for patient transport should be considered and factored into transportation processes. The coordination of multiple transport options include but are not limited to following considerations:

- Air, ground, and sea options
- Public and private options
- National guard collaboration
- Federal Coordinating Centers (FCC) and National Disaster Medical System collaboration (e.g., coordination with FCC to establish patient movement protocols between the private sector and the Federal patient movement system)
- Volunteer agencies
- Family members
- Additional innovative options (just-in-time options)

Transportation processes should adhere to the appropriate regulatory guidance:

- Emergency Medical Treatment and Active Labor Act (EMTALA) and
- The Health Insurance Portability and Accountability Act of 1996 (HIPPA)
- Other medical and legal guides to transporting patients and transferring care

Suggested resources:

- National Disaster Medical System (NDMS): http://www.phe.gov/preparedness/responders/ndms/Pages/default.aspx
- IS-1900 NDMS Federal Coordinating Center Operations Course: http://training.fema.gov/EMIWeb/IS/is1900.asp
- Emergency Medical Treatment and Labor Act of 1986 (EMTALA): http://emtala.com/law/index.html

P7. Medical surge considerations for at-risk individuals and those with special medical needs

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, participate in planning for at-risk individuals and those with special medical needs for medical surge incidents. This includes those at-risk patients requiring medical treatment at a healthcare facility that may contribute to medical surge (e.g., dialysis patients, home care ventilator patients).

Suggested Resource:

- ASPR Office for At-Risk Individuals, Behavioral Health, and Human Services Coordination (ABC), Special Medical Needs: Definitions and Related Terms: http://www.phe.gov/Preparedness/planning/abc/Documents/SpecialMedicalNeeds.pdf
- ASPR Office for At-Risk Individuals, Behavioral Health, and Human Services Coordination (ABC), At-risk Individuals: http://www.phe.gov/Preparedness/planning/abc/Documents/AtRisk.pdf

E1. Specialty equipment to increase medical surge capacity and capability

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, assess the need for equipment to assist with the existing capacity and capability. This type of equipment may include but is not limited to:

- Equipment and supplies, including operational plans, that assist healthcare organizations to manage increased number of patients (medical surge capacity) such as:
  - Equipment to expand space (e.g., tents, mobile medical assets)
  - Medical equipment to support a surge of patients
  - Additional patient care supplies
- Equipment, including operational plans, that assists with the provision of specialized medical evaluation and care (medical surge capability) such as:
  - Specialty care equipment (e.g., pediatric, burn, and trauma care equipment and supplies)
  - Mobile assets to supply services (e.g., radiology, pharmacy)
  - Additional types of equipment and supplies for specialized surge services

Suggested Resource:

- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007, pg 1-5 and pg 1-6 http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx

S1. Special training to maximize medical surge competency

The State and Healthcare Coalitions, in coordination with healthcare organizations, provide training to develop, refine, and sustain medical surge capabilities. This may include training that is a based on an existing need and determined by pre-defined priorities of the healthcare organizations and the State. Examples of this type of training may include:

- Burn, trauma, and pediatric training to enhance the specialty capabilities for providers in facilities that do not regularly care for these types patients
- Additional types of training to enhance the specialty capabilities to treat types of patients not routinely cared for but encountered during a disaster

Suggested Resource:

- Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies, 2007, pg 1-5 and pg 1-6 http://www.phe.gov/preparedness/planning/mscc/handbook/pages/default.aspx

P8. Mobile medical assets for surge operations

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain plans for using mobile medical assets during medical surge operations. These plans should include but are not limited to the following elements:

- Operational plans for mobile medical assets to include:
  - The parameter of care delivered in the mobile platform (e.g., acute vs. non-acute; pediatric vs. adult)
  - Location (e.g., healthcare organization, local, and regional)
  - Operational timeframe
  - Required resources (equipment, staffing, supplies, transportation, and utilities)

  - Movement procedures of assets during an incident or event
  - Maintenance of assets
  - Supply and resupply of assets
  - The management of staff during a surge incident
  - Training
  - Communications
  - Additional relevant resources to include Federal NDMS teams.
- Protocols to request mobile medical assets from the local, state or Federal incident management

E2. Mobile Medical Assets

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, assess the need for the procurement and use of mobile medical assets to be strategically located in the local or regional area, for use by healthcare organizations. These assets should have the ability to increase medical surge capacity and capability and include an operational and sustainment plan. Types of mobile medical assets may include but are not limited to:

- Mobile staff (mobile teams of healthcare professionals)
- Mobile caches of equipment and/or supplies
- Mobile trailers or shelters to provide:
  - Space for treatment of patients (e.g., mobile hospital, Federal Medical Stations)
  - Space for storage of surge equipment
  - Resources for emergency communications
  - Other viable surge uses

P9. Decontamination assistance to healthcare organizations

The State and Healthcare Coalitions, in coordination with healthcare organizations, Hazardous Materials (HazMat) response authorities, ESF #8, and relevant response partners, develop, refine, and sustain decontamination plans to provide assistance during incidents that overwhelm the existing decontamination ability of the healthcare organization. Plans should include but are not limited to the following elements:

- Assessments of the decontamination capability of healthcare organizations
- Assessments of the anticipated number of casualties resulting from a CBRNE exposure that are expected to seek treatment at healthcare organizations without prior decontamination (based on local risk assessments)
- Develop, refine, and sustain strategies to provide assistance to healthcare organizations with decontamination planning, equipping, or training to meet the anticipated need
- Processes to request decontamination assets during response, if available
- Coordination with local EMS decontamination units and HazMat units to support decontamination surges that overwhelm healthcare organizations
- Processes to coordinate healthcare organization decontamination procedures with state, regional and local HazMat response teams
- Processes for healthcare organizations to return assets that were provided (e.g., cleaning, resupply)

Suggested resources:

- OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances: http://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html
- CDC: Preparing for and Responding to Specific Hazards: http://www.bt.cdc.gov/hazards-specific.asp

E3. Decontamination assets

The State and Healthcare Coalitions, in coordination with healthcare organizations, and HazMat response authorities, assess the need for the use of decontamination assets and strategically locate them in the local or regional area, for use by healthcare organizations. These assets should have the ability to :

- Decontaminate more than one patient simultaneously
- Decontaminate both ambulatory and stretcher patients
- Include provisions for at-risk individuals and those with special medical needs

Decontamination assets should have operational plans that include:

- Request processes
- Location of assets (e.g., healthcare organization, local, or regional [Healthcare Coalition])
- Operational timeframe to deploy
- Movement procedures of assets during an incident or event
- Required resources (equipment, staffing, supplies, transportation, and utilities)
- Maintenance of assets
- Supply and resupply of assets
- The management of staffing during a surge incident
- Training plans including just-in-time training plans for new healthcare workers assigned to use the asset
- Additional relevant resources

S2. Decontamination training

The State and Healthcare Coalitions, in coordination with healthcare organizations and HazMat response authorities, provide decontamination training that may include but is not limited to the following elements:

- Training of the local or state approved decontamination methodology
- Decontamination training that has been coordinated through the appropriate subject matter expert agencies
- Assistance to healthcare organizations in the proper use of their decontamination equipment
- Training on decontamination equipment that may be available for healthcare organization response operations (i.e., training should include procedures for implementation, maintenance, and operational guidance to help healthcare personnel use the asset)

P10. Mental/Behavioral health support

The State, in coordination with healthcare organizations and the agencies responsible for mental/behavioral health, participate in coordinated planning to develop processes for healthcare organizations that would assist them with the procedures to request mental/behavioral health support during medical surge incidents that could be made available to responders, survivors, and families. This is for assistance beyond that of a healthcare organizations ability to provide. This could include but is not limited to the following elements:

- The processes for healthcare organizations to interact with mental/behavioral health professionals of the community and request support to assist with the mental/behavioral needs of their staff including psychological first aid
- A contact list of pre-identified resources that could provide mental/behavioral health support to responders and families according to the incident. Consideration should be given to the inclusion of the following elements:
  - Mental/behavioral health professionals
  - Spiritual care providers
  - Hospice
  - Translators
  - Embassy and Consulate representatives when international victims are involved

Function 4: Develop Crisis Standards of Care guidance

Provide State guidance and protocols on crisis standards of care in order to enable a substantial change in routine healthcare operations including delivery of the optimal level of patient care for a pervasive (e.g., pandemic influenza) or catastrophic (e.g., earthquake, hurricane) disaster. The need for crisis standards is justified by specific circumstances and may or may not be triggered by the formal declaration of emergency, disaster, or public health emergency (with input from local, Healthcare Coalition, and regional authorities), in recognition that crisis operations will be in effect for a sustained period. If an emergency declaration is made, it changes the legal environment and enables specific legal and regulatory powers and protections for public health and healthcare providers concerning their actions and omissions associated with allocating and utilizing scarce medical resources and implementing crisis standards of care. This guidance provides a delineated continuum of care from normal operations to eventual crisis standards of care. The continuum involves the scarcity of all other resource options until it is no longer feasible to provide normal care, including strategies to reduce demand, optimize existing resources, and augment existing resources.

Note: Utilizing a crisis standard of care mode may not be optional — as it could be a forced choice based on the emerging situation. Under such circumstances, failing to make substantive adjustments to healthcare operations, that is; not to adopt crisis standards can result in increased morbidity and mortality.

Suggested resources:

- Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

2012 IOM Report: document reference placeholder

Function Alignment:

PHEP Capability 10, Medical Surge; Function 1, Resource: P5. Indicators for standards of care levels

Tasks

Task 1 Identify the current status of crisis standards of care planning to determine the future implementation requirements for use by the healthcare organizations

Task 2 Identify the guidelines for crisis standards of care, including the effective allocation of scarce resources

Task 3 Identify the appropriate legal authorities and protections for healthcare providers and institutions for implementation of crisis standards of care

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. State crisis standards of care guidance

States should develop collaborative crisis standards of care guidance by actively engaging Healthcare Coalitions, healthcare organizations, healthcare practitioners, and local and state medical and public health authorities. There are five key elements to include in the development the guidance:

- A strong ethical grounding
- Integrated and ongoing community and provider engagement, education, and communication
- Assurances regarding legal authority and environment
- Clear indicators and roles and responsibilities
- Evidenced-based (informed) clinical processes and operations

Suggested resource:

- IOM (Institute of Medicine). 2012. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response. Washington, DC: The National Academies Press.
- Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

P2. Indicators for crisis standards of care

The State, in coordination with healthcare organizations, Healthcare Coalitions, and public health and medical authorities, provides guidance to assist healthcare organizations with crisis standards of care plan development to include indicators for crisis standards of care. Components to consider in the guidance include:

- Identification of the progressive indicators that lead to crisis standards of care (these are general and will vary state by state, use Institute of Medicine (IOM) guidance for assistance):
  - Recognition of a surge above the normal operating capacity of the healthcare system during a disaster
  - Recognition of a depletion of the healthcare system's resources to a pre-identified critical threshold of resource availability that warns of impending resource exhaustion including but not limited to:
    - > Critical Infrastructure (essential services) availability
    - > Equipment and supply availability
    - > Staffing availability
    - > Patient care space availability
  - A plan to discontinue specific patient care services or optimize existing services before resources are at critical levels or exhausted (e.g., elective procedures, primary care)
  - A plan to implement crisis standards of care operations and begin the discontinuation of critical services when resources are no longer available

Suggested resource:

- IOM (Institute of Medicine). 2012. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response. Washington, DC: The National Academies Press.
- Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

P3. Legal protections for healthcare practitioners and institutions

The State, in coordination with healthcare organizations, Healthcare Coalitions, and public health and medical authorities, identifies the legal protections for public health and healthcare practitioners prior to crisis standards of care implementation. These may include the following (dependent on the State government):

- The scope and breadth of emergency declarations and ensuing powers to respond
- Medical and legal standards of care
- Legal authorization to allocate personnel, resources, and supplies
- Licensure reciprocity and scope of practice limitations
- Risks of liability and available liability protections (e.g., Federal PREP Act) for public health and healthcare practitioners and institutions
- Legal issues related to the deployment and use of volunteer health practitioners
- Special waivers (e.g., 1135) of key regulatory requirements pursuant to emergency declarations
- FDA issuance of emergency use authorizations for non-approved drugs or devices

Suggested Resource:

- Public Readiness and Emergency Preparedness Act (PREP Act): http://www.flu.gov/professional/federal/prep_act.html

P4. Provide guidance for crisis standards of care implementation processes

Crisis standards of care processes and/or plans should include but are not limited to the following elements:

- Indicators for crisis standards of care
- Implementation criteria for elements such as:
  - Triage operations
  - Clinical care in disasters
  - Disaster mental/behavioral health
  - Palliative care planning
  - Pre-requisite command, control, and coordination elements
  - Decision tools and resource use guidance

Suggested resource:

- IOM (Institute of Medicine). 2012. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response. Washington, DC: The National Academies Press.
- Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

P5. Provide guidance for the management of scarce resources

Crisis standards of care resource allocation planning should be coordinated by the State, the Healthcare Coalition, and local medical and public health authorities to develop guidance based on state laws and regulations. This guidance should assist healthcare organizations to develop strategies for resource management during crisis standards of care. Recommended strategies may include but are not limited to processes that:

- Reduce resource demand such as:
  - Cancelling elective surgeries and outpatient appointments
  - Directing public to shelter-in-place locations
- Optimize existing resources such as:
  - Use of non-healthcare providers for certain roles
  - Adjusting triage techniques
  - Balancing and re-distributing patient loads across the different healthcare organizations
  - Re-purposing existing resources
- Augment existing resources such as:
  - Substituting effective alternatives
  - Implementing mutual aid agreements
  - Utilizing alternate care sites
  - Utilizing volunteers
- Provide guidance for palliative care such as:
  - Means to provide pain management and comfort to those dying during a disaster
  - Reassessment protocols for palliative care patients to determine if resources can be made available for their care
- Include strategies to address specific types of resource shortages such as:
  - Ventilators and components
  - Oxygen and oxygen delivery devices
  - Vascular access devices
  - Pediatric equipment and supplies
  - Intensive care unit (ICU) beds
  - Healthcare providers, particularly critical care, burn, pediatric, surgical/ anesthesia staff (nurses and physicians), and respiratory therapists
  - Hospitals (due to infrastructure damage or compromise)
  - Specialty medications or intravenous fluids (sedatives/analgesics, specific antibiotics, and antiviral)
  - Vasopressors/inotropes
  - Medical transportation
- Example strategies to address resource shortages include: Substitution (e.g., narcotic substitution)
  - Conservation (e.g., oxygen flow rates titrated to minimum required)
  - Adaptation (e.g., anesthesia machines used for mechanical ventilation)
  - Reuse of supplies (e.g., reuse nasogastric tubes and ventilator circuits after appropriate disinfection)
  - Reallocation (e.g., relocates oxygen saturation and cardiac monitors for use with multiple patients with critical illness or those patients with borderline conditions to ensure their condition does not worsen; remove patients from ventilators who are unlikely to survive and use the ventilator for patients with the greatest chance of survival)
- Example strategies for EMS agencies to address shortages:
  - Alternate dispatch options (e.g., assign EMS to only life-threatening calls by pre-determined criteria; no response to cardiopulmonary resuscitation-in-progress calls)

- Staffing adjustments (e.g., adjust shift length and the number of individuals who will respond)
- Response alternatives (e.g., decline service to non-critical, non-vulnerable patients)

Suggested resource:

- IOM (Institute of Medicine). 2012. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response. Washington, DC: The National Academies Press.
- Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: http://iom.edu/Reports/2009/DisasterCareStandards.aspx

S1. Crisis standards of care training

The State, in coordination with healthcare organizations, Healthcare Coalitions, and public health and medical authorities, provide training for crisis standards of care that should include but is not limited to following elements:

- Multi-agency coordination of planning efforts related to crisis standards of care and the allocation of scarce resources
- The legal protections specific to local or state healthcare
- Training aids for Healthcare Coalitions and healthcare organizations related to crisis standards of care

Function 5: Provide assistance to healthcare organizations regarding evacuation and shelter in place operations

Support healthcare organizations during evacuation and shelter in place operations in which no warning or ample warning is received prior to the occurrence. This assists healthcare organizations with the safe and effective care of patients, use of equipment, and utilization of staff during relocation to another facility within a region or outside of the region in response to an incident. This includes the provision of assistance to healthcare organizations that have decided to shelter-in-place during the incident.

Function Alignment:

Unique HPP Function

Tasks

Task 1 Before, during, and after an incident ensure there are processes to provide resource assistance to healthcare organizations and providers for evacuation and shelter-in-place operations

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Healthcare organization evacuation and shelter-in-place plans

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain a plan for large scale (multiple healthcare organizations and multiple local jurisdictions/regions) evacuation and sheltering-in-place operations. Plans should include but are not limited to the following elements:

- Coordination of healthcare organization plans with the local and state evacuation plans
- Identification and coordination of the roles and responsibilities of each partner healthcare organization, their activation procedures, communication plans, and resource sharing/request plans for evacuation
- Identification of the evacuation resources that are available to the healthcare organizations (For supporting information, see Capability 1 — Healthcare Preparedness)
- Processes to request resources (For supporting information, please see Capability 3 — Emergency Operations Coordination)
- Regional resource support (from Healthcare Coalition) to healthcare organizations undergoing evacuation and shelter-in-place operations (if requested and available)
- Strategies that assist healthcare organizations return to their facilities after evacuation including but not limited to (For further information, please see Capability 2 — Healthcare System Recovery):
  - Resource assistance (if requested and available)
  - Assistance with resource reconstitution if available
  - Assistance with reimbursement processes

- Coordination of information between the healthcare organizations and appropriate state/local early warning agencies on the advisability of shelter-in-place or evacuation operations
- State coordination of processes to keep communication and resource request processes open, efficient, and redundant during shelter-in-place operations
- State coordination with interstate Emergency Management Assistance Compact requests (EMAC) and Federal (DHHS Regional Emergency Coordinators) for assistance
- State coordination with Federal Coordinating Centers (FCC) and National Disaster Medical System (e.g., coordination with FCC to establish patient movement protocols between the private sector and the Federal patient movement system)

Note: Evacuation plans are required by The Joint Commission standards for Hospitals, Critical Access Hospitals, LTC, Home Care, Ambulatory Care, Behavioral Health Care, Labs EM.02.01.01 EP 2

P2. Healthcare organization preparedness to receive evacuation surge

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop a plan for receiving a large scale (multiple healthcare organizations and multiple local jurisdictions/regions) evacuation in other regions of the state or other states. This plan should include strategies to coordinate evacuation plans with the appropriate healthcare organizations that are most likely to receive the patients of an evacuation. The plan should also include processes to assist these healthcare organizations with resources if requested and available.

P3. Transportation options for evacuation

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, ESF #8, relevant response partners, and stakeholders, develop, refine, and sustain patient transport processes for evacuation. The coordination of multiple transport options include but are not limited to following considerations:

- Air, ground, and sea options
- Public and private options
- National guard collaboration
- Federal Coordinating Centers (FCC) and National Disaster Medical System collaboration (e.g., coordination with FCC to establish patient movement protocols between the private sector and the Federal patient movement system)
- Volunteer agencies
- Family members
- Additional innovative options (just-in-time options)

Transportation processes should adhere to the appropriate regulatory guidance:

- Emergency Medical Treatment and Active Labor Act (EMTALA) and
- The Health Insurance Portability and Accountability Act of 1996 (HIPPA)
- Other medical and legal guides to transporting patients and transferring care

Suggested resources:

- National Disaster Medical System (NDMS): http://www.phe.gov/preparedness/responders/ndms/Pages/default.aspx
- IS-1900 NDMS Federal Coordinating Center Operations Course: http://training.fema.gov/EMIWeb/IS/is1900.asp
- Emergency Medical Treatment and Labor Act of 1986 (EMTALA): http://emtala.com/law/index.html

E1. Specialized equipment needed to evacuate patients

The State and Healthcare Coalitions, in coordination with healthcare organizations, assess the need for a local or regional cache of evacuation equipment for use by healthcare organizations to assist with evacuation or shelter-in-place operations (e.g., evacuation chairs, transport ventilators). This type of equipment should include a process to request the resources and operational guidelines.

CAPABILITY 14: Responder Safety and Health

The responder safety and health capability describes the ability of healthcare organizations to protect the safety and health of healthcare workers from a variety of hazards during emergencies and disasters. This includes processes to equip, train, and provide other resources needed to ensure healthcare workers at the highest risk for adverse exposure, illness, and injury are adequately protected from all hazards during response and recovery operations.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:
Integration with public health aligns during planning. This is done in coordination with public health, Emergency Management and ESF #8 planners and specifically addresses support that can be provided to healthcare organizations during response to protect healthcare workers. To integrate this capability, public health and healthcare emergency planners should coordinate how best to address public health and healthcare worker safety needs during the development of strategically placed caches of equipment, supplies and pharmaceuticals that would provide timely resource assistance. This is specifically outlined in the functions of Capability 14 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Function 1: Assist healthcare organizations with additional pharmaceutical protection for healthcare workers

Develop, refine, and sustain processes to assist healthcare organizations to provide the timely distribution of critical medication such as prophylaxis or immediate treatment for healthcare workers and their families during an exposure incident (e.g., CBRNE).

Function Alignment:
Has connections to PHEP Capability 8, Medical Countermeasures

Tasks

Task 1 Identify the pharmaceuticals needed to safeguard healthcare workers and their families when indicated by a biological infectious disease or during a likely exposure incident identified through risk assessments, hazards vulnerability assessments (HVAs), and resource needs

Task 2 Assess the need for developing pharmaceutical caches that can be accessed by healthcare organizations when requested and available during an exposure/incident

Task 3 Establish the appropriate processes to deliver caches of pharmaceuticals to healthcare organizations during an exposure requiring prophylaxis and treatment when requested and available

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Pharmaceutical needs assessment

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and other stakeholders (e.g., Schools of Pharmacy, State Boards of Pharmacy, pharmacy organizations, and academia) perform a needs assessment to determine the types of pharmaceuticals that may be needed in an area to protect healthcare workers from priority threats. This includes an assessment of the threats, vulnerabilities, and consequences of a CBRNE exposure to provide risk informed medical measures and ensures healthcare responders are protected. Hazard identification is performed to provide guidance when developing strategies to store, rotate, replace, and distribute pharmaceuticals at the local or regional level and/or healthcare organization specific level.

P2. Pharmaceutical cache storage, rotation, replacement, and distribution

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and other stakeholders (e.g., Schools of Pharmacy, State Boards of Pharmacy, pharmacy organizations, and academia) develop, refine, and/or maintain pharmaceutical caches. Caches of pharmaceuticals should include an operational plan that includes but is not limited to the following elements:

- Pharmacy oversight (agreements with pharmaceutical agencies addressing storage, rotation and replacement procedures or modalities)
- Placement of caches in strategic locations
- Emergency contact information for personnel with access to the cache
- Processes for the timely access to the cache for identified healthcare organizations
- A contingency access plan
- Procedures and agreements for distribution
- Coordination with emergency management, private transport agencies, security agencies and/or public safety to address:
  - Security measures for the integrity of the supply chain
  - Supply chain management during an incident
- Maintenance and rotation schedules
  - Storage in appropriate conditions to maximize pharmaceutical shelf life
  - Protocols to rotate pharmaceutical stock and/or processes for return management of stock
  - Handling and administration protocols for each type of pharmaceutical in the stock such as:
    - > Antibiotic drugs for prophylaxis and post-exposure prophylaxis to biological agents
    - > Nerve agent antidotes
    - > Antiviral drugs
    - > Medications needed for exposure to other threats (e.g., radiological events)
    - > Coordination of planning to address options or the need for additional pharmaceuticals for healthcare workers families

P3. Medical Countermeasure dispensing

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and other stakeholders, develop, refine, and sustain a plan to provide medical countermeasures to treat or provide prophylaxis to the affected healthcare worker population in accordance with public health guidelines and/or recommendations. This includes healthcare coordination with Federal countermeasure programs such as the Strategic National Stockpile program and other relevant programs.

Suggested resources:

- Public Health Emergency Medical Countermeasures Enterprise Review: http://www.phe.gov/preparedness/mcm/pages/default.aspx
- Strategic National Stockpile: http://www.cdc.gov/phpr/stockpile/stockpile.htm
- Biodefense and related programs: http://www.niaid.nih.gov/topics/biodefenserelated/Pages/default.aspx

For Supporting information, see PHEP Capability 8 – Medical Countermeasure Dispensing

E1. Pharmaceutical cache protection

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health and other stakeholders, assesses the need for additional pharmaceutical caches to include the appropriate security and environmental protection systems that protect medical supplies and pharmaceuticals. This type of equipment should include but is not limited to:

- Appropriate security for the pharmaceutical caches and medical supplies
- Appropriate environmental storage devices to maintain the appropriate climate control for the caches
- Operational plans to maintain the caches

S1. Pharmaceutical cache training

The stockpiling of pharmaceutical caches in any location should include plans for associated training. Training curriculums may include information regarding how to access the cache such as where it is located, request processes and contact information. Training for healthcare organizations should include the coordination of just-in-time training (e.g., how it works, when and how to administer, and precautions and follow-up).

Function 2: Provide assistance to healthcare organizations with access to additional Personal Protective Equipment (PPE) for healthcare workers during response

Assist healthcare organizations with the ability to access the appropriate types of caches of Personal Protective Equipment (PPE) needed for the safety of healthcare responders based on incident/event-specific conditions.

Suggested resources:

- NIOSH, Emergency Response Resources: http://www.cdc.gov/niosh/topics/emres/responders.html
- OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances: http://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html

Function Alignment:

PHEP Capability 14, Responder Safety and Health; Function 1, Identify responder safety and health risks; Function 2, Identify safety and personal protective needs; Function 3, Coordinate with partners to facilitate risk-specific safety and health training

Tasks

Task 1 Identify the PPE required to protect healthcare workers during exposure incidents based on risk assessments, HVAs, and resource needs

Task 2 Establish processes to access personal protective equipment by healthcare organizations when requested and available during an exposure incident

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Personal protective equipment needs assessment

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and other relevant stakeholders, perform a needs assessment to determine additional levels and types of PPE to protect healthcare workers based on the risk assessments, casualty estimates, level of decontamination expected, and isolation or quarantine planned in the affected areas.

P2. Personal protective equipment caches

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and other relevant stakeholders, assess the need for additional caches of PPE based on estimated resource needs. This should include but is not limited to the following elements:

- Coordination across a region so that training programs are consistent and pertain to the equipment that will be used
- Placement of PPE caches in strategic locations based on where the cache will be most effective
- Storage in appropriate conditions to maximize shelf life
- Protocols to rotate stock as needed
- Protocols for return management of stock as needed
- Instructions for use of all PPE in the cache
- Cache inventory that is consistent with local brands used by healthcare organizations (e.g., precludes the need for fit testing for N95 during disaster situations)

P3. Personal protective equipment supply and dispensing

The State, in coordination with healthcare organizations, Healthcare Coalition, emergency management, public health, and other relevant stakeholders develop, refine, and sustain a plan to assist healthcare organization with PPE when requested and available. These processes should include but is not limited to the following elements:

- Processes to assist healthcare organizations implement emergency supply plans or activate MOUs with vendors that can supply PPE resource support (e.g., private vendor support)
- Processes to access a local or regional cache if available
- Processes to request PPE from local or state incident management
- Processes to resupply local and regional caches of PPE

E1. Personal Protective Equipment for healthcare workers

Have or have access to PPE consistent with the identified risks of the local jurisdiction and the PPE needs of response personnel across varying job functions. The type of PPE that is procured for local or regional caches should be consistent with the type of PPE used locally to promote interoperability and inter-facility sharing. Equipment should meet nationally recognized standards as defined by the OSHA, CDC, FDA, and or Interagency Board for Equipment Standardization and Interoperability (https://iab.gov).

S1. Personal protective equipment training

The State, in coordination with healthcare organizations, Healthcare Coalition, emergency management, public health, and other relevant stakeholders, develop, refine, and sustain processes to provide coordinated training to healthcare organizations when additional PPE caches are developed. The training for the use of supplemental caches of PPE should include coordination with healthcare organization specific training programs, and compliance with Federal or state OSHA regulations.

Suggested resources:

- NIOSH, Emergency Response Resources: http://www.cdc.gov/niosh/topics/emres/responders.html
- OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances: http://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html

Volunteer management is the ability to coordinate the identification, recruitment, registration, credential verification, training, engagement, and retention of volunteers to support healthcare organizations with the medical preparedness and response to incidents and events.

Note: For the purposes of this document, the State — unless otherwise noted — refers to the organization and its partners that represent the interests of healthcare preparedness or hospital preparedness for healthcare organizations within the State.

Capability Alignment:
Integration with public health aligns during planning. This is done in coordination with public health, Emergency Management and ESF #8 planners and specifically addresses support that can be provided to healthcare organizations during response to augment healthcare professional staff. To integrate this capability, public health and healthcare emergency planners should coordinate with healthcare organizations to determine when and why volunteers would be used to supplement staff at healthcare organizations and then work towards strategies for their effective use. This is specifically outlined in the functions of Capability 15 from the Healthcare Preparedness Capability and cross-referenced to the Public Health Preparedness Capability.

Function 1: Participate with volunteer planning processes to determine the need for volunteers in healthcare organizations

Participate with volunteer planning to assess the situations in which volunteers may be needed by healthcare organizations to determine the type and quantity of volunteers that may be used by healthcare organizations during a response. The coordinated planning involves medical considerations for the recruitment, identification, and training of volunteers that can support a healthcare organization response.

Function Alignment:
PHEP Capability 15, Volunteer Management; Function 1, Coordinate volunteers

Tasks

Task 1 Assess which situations would necessitate the need for the use of volunteers in healthcare organizations during response and participate in the planning that would provide this as an option when needed

Task 2 Identify the type and quantity of volunteers most likely needed to support healthcare response based on the risk assessments, hazard vulnerability assessments, resource assessments and other data that may provide clarity into anticipated needs (For supporting information, please see Capability 1 — Healthcare Preparedness).

Task 3 Prior to an incident or event, participate with volunteer planning for pre-incident screening and verification of volunteers' credentials for healthcare professionals that may be used in healthcare organizations

Task 4 Prior to an incident or event, participate with training initiatives for the planning of initial and ongoing emergency response training for registered volunteers that may be used in healthcare organizations during response

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Volunteer needs assessment for healthcare organizations response

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and the appropriate volunteer organizations, perform a volunteer needs assessment. The volunteer needs assessment should include but is not limited to the following elements:

- Identification of situations that would necessitate the need for volunteers in healthcare organizations
- Estimation of the anticipated number of volunteers based on identified situations and resource needs of healthcare organizations
- Identification of the health professional roles that may be needed by healthcare organizations in these situations
- Identification of the volunteer liability issues and scope of practice issues that may deter volunteer use by healthcare organizations

P2. Collect, assemble, maintain, and utilize volunteer information

The State coordinates with healthcare organizations to develop volunteer management guidelines to facilitate the use of volunteers to support specific healthcare roles. These guidelines should ensure following aspects of volunteer management can be achieved:

- Information must be controlled and managed by authorized personnel responsible for the data
- Volunteer information is collected, assembled, maintained, and utilized in a manner consistent with Federal, state, and local laws governing information security and confidentiality
- Credentials and qualifications of health professionals are collected, registered, and verified with the issuing entity or appropriate authority
- Credentials and qualifications of professions consistent with current guidance from the HHS ESAR-VHP program are registered, collected, and verified
- Volunteers are assigned to credential levels consistent with current guidance from the HHS ESAR-VHP program. Assignments are based on the credentials and qualifications that the State has collected and verified with the issuing entity or appropriate authority
- Volunteer health professional/emergency preparedness affiliations are recorded (individual, including local, state, and Federal entities)
- Volunteers willing to participate in a federally coordinated emergency response are identified
- Volunteer recruitment and retention strategies are implemented

E1. Electronic volunteer registration system

Have or have access to an electronic registration system for recording and managing volunteer information that is compliant with the current guidelines of the HHS ESAR-VHP program.

Suggested resource:

- Emergency System for Advance Registration of Volunteer Health Professionals: http://www.phe.gov/esarvhp/pages/about.aspx

Function 2: Volunteer notification for healthcare response needs

Initiate the volunteer request process so that prospective volunteers are mobilized in the appropriate health professional role for the healthcare organization's response.

Function Alignment:

PHEP Capability 15, Volunteer Management; Function 2, Notify volunteers

Tasks

Task 1 At the time of an incident, determine the volunteers needed to assist the healthcare organization response including the role and quantity of volunteers needed; communicate requests using the established volunteer request process

Resource Elements: Plans (P), Equipment (E), Skills (S)

P1. Process to contact registered volunteers

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate volunteer organizations, develop a process with the applicable lead jurisdictional agency to contact registered volunteers and identify those willing and available to participate in the healthcare response operation.

P2. Process to confirm credentials of responding volunteers

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate volunteer organizations, develop a process to confirm credentials of responding volunteers that have been requested for healthcare organizations.

P3. Volunteer request process

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate volunteer agencies, identify the processes to request volunteers that are to be utilized in healthcare organizations.

Function 3: Organization and assignment of volunteers

Identify the process for allocating volunteers that are needed simultaneously across several healthcare organizations. This process should include the placement of volunteers through the appropriate deployment channels and match the assignment of volunteers to the needs of the requesting healthcare organizations (i.e., based on volunteer availability).

Function Alignment:
PHEP Capability 15, Volunteer Management; Function 3, Organize, assemble, and dispatch volunteers

Tasks

Task 1 Develop a process to assist healthcare organizations with volunteer placement during an incident that includes multi-agency coordination between healthcare organizations in order to deconflict the needs of multiple healthcare organizations with the availability of volunteers

Task 2 Develop a process to assist healthcare organizations with the provision of deployment briefings, tracking and rotation of volunteers, spontaneous volunteer management, safety and incident-specific training

P1. Volunteer deployment protocols

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate local volunteer organizations, develops a plan to assist healthcare organizations with the deployment management of volunteers during a response. This coordinated planning should include but is not limited to the following elements:

- Protocols for deploying and tracking public health professional roles
- Protocols for maintaining a history of volunteer deployments
- Protocols for maintaining the security of volunteers' personal information provided from another jurisdiction
- Protocols for returning or destroying information no longer needed

P2. Briefing template for healthcare volunteers

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate local volunteer organizations, coordinate for the use of a template that can be provided to healthcare organizations for briefing volunteers on the current incident conditions and response operations. The template should include but is not limited to the following elements:

- Instructions on the current status of the emergency
- Volunteer health professional role
- Just-in-time training
- Safety instructions
- Any applicable liabilities related to the incident and the volunteers' roles, psychological first aid, and/or volunteer stress management

P3. Volunteer support services

The State, in coordination with healthcare organizations, Healthcare Coalitions, emergency management, public health, and the volunteer organizations, develop a process to coordinate with emergency management or other jurisdictional lead agencies to ensure response requirements (e.g., housing, feeding and mental/behavioral health needs) for healthcare volunteers are supported.

Function 4: Coordinate the demobilization of volunteers

Coordinate the release of volunteers based on evolving incident requirements or incident status. This includes coordination with the appropriate partner agencies to ensure provision of medical and mental/behavioral health support needed for the volunteers' physical and mental well-being.

Function Alignment:
PHEP Capability 15, Volunteer Management; Function 4, Demobilize volunteers

Tasks

Task 1 Coordinate with incident management and the appropriate jurisdictional volunteer organizations to ensure the proper out-processing of volunteers

Task 2 Coordinate with incident management and the appropriate jurisdictional volunteer organizations to identify community resources that can support volunteer post-deployment medical screening, stress, well-being assessments and, when requested or indicated, have a process to refer volunteers to medical and mental/behavioral health services

P1. Volunteer Release Processes

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate local volunteer organizations, coordinate the processes for releasing volunteers from healthcare organizations. This coordination should include but is not limited to the following:

- Demobilization of volunteers in accordance with protocols for demobilization from the appropriate level of incident management
- Ensure the assigned tasks are completed, and/or replacement volunteers are informed of the task status
- Determination of whether additional volunteer assistance is needed
- Ensure equipment is returned by volunteers
- Confirmation of the volunteer's follow-up contact information

P2. Volunteer exit screening protocols

The State, in coordination with healthcare organizations, Healthcare Coalitions, public health, and the appropriate local volunteer organizations, develop a process to ensure volunteers provide accurate and complete information during out-processing. Documentation should include but is not limited to the following:

- Identification of injuries and illnesses acquired during the response
- Identification of mental/behavioral health needs due to participation in the response
- When requested or indicated, referral of volunteers to medical and mental/behavioral health services

APPENDIX

Acronyms

Acronym	Definition
EMR	Electronic Medical Record Systems
EMS	Emergency Medical Services
ICS	Incident Command System
JIS	Joint Information System
JPATS	Joint Patient Assessment and Tracking System
NDMS	National Disaster Medical System: Includes Disaster Medical Assistance Teams (DMATs), Disaster Mortuary Operational Response Teams (DMORTs), International Medical Surgical Response Team (IMSURT), National Veterinary Response Team (NVRT)

Terms

Term	Definition
At-Risk Individuals	At-Risk Individuals are defined as those having needs in the following functional areas: communication, medical care, maintaining independence, supervision, and transportation. In addition to those individuals specifically recognized as at-risk in the Pandemic and All-Hazards Preparedness Act (i.e., children, senior citizens, and pregnant women), individuals who may need additional response assistance include those who have disabilities; live in institutionalized settings; are from diverse cultures; have limited English proficiency or are non-English speaking; are transportation disadvantaged; have chronic medical disorders; and have pharmacological dependency. (b) AT-RISK INDIVIDUALS.—Section 2814 of the Public Health Service Act (42 U.S.C. 300hh-16) is amended— "The Secretary, acting through such employee of the Department of Health and Human Services as determined by the Secretary and designated publicly (which may, at the discretion of the Secretary, involve the appointment or designation of an individual as the Director of At-Risk Individuals), shall— "(1) monitor emerging issues and concerns as they relate to medical and public health preparedness and response for at-risk individuals in the event of a public health emergency declared by the Secretary under section 319;''; and "(2) oversee the implementation of the National Preparedness goal of taking into account the public health and medical needs of at-risk individuals in the event of a public health emergency, as described in section 2802(b)(4); "(3) assist other Federal agencies responsible for planning for, responding to, and recovering from public health emergencies in addressing the needs of at-risk individuals; "(4) provide guidance to and ensure that recipients of State and local public health grants include preparedness and response strategies and capabilities that take into account the medical and public health needs of at-risk individuals in the event of a public health emergency, as described in section 319C–1(b)(2)(A)(iii); "(5) ensure that the contents of the strategic national stockpile take into account at-risk populations as described in section 2811(b)(3)(B); "(6) oversee the progress of the Advisory Committee on At-Risk Individuals and Public Health Emergencies established under section 319F(b)(2) and make recommendations with a focus on opportunities for action based on the work of the Committee; "(7) oversee curriculum development for the public health and medical response training program on medical management of casualties, as it concerns at-risk individuals as described in subparagraphs (A) through (C) of section 319F(a)(2);

Term	Definition
At-Risk Individuals (cont.)	"(8) disseminate and, as appropriate, update novel and best practices of outreach to and care of at-risk individuals before, during, and following public health emergencies in as timely a manner as is practicable, including from the time a public health threat is identified; "(9) ensure that public health and medical information distributed by the Department of Health and Human Services during a public health emergency is delivered in a manner that takes into account the range of communication needs of the intended recipients, including at-risk individuals; and "(10) not later than one year after the date of enactment of the Pandemic and All-Hazards Preparedness Act, prepare and submit to Congress a report describing the progress made on implementing the duties described in this section."
Common Operating Picture	A common operating picture offers a standard overview of an incident, thereby providing incident information that enables the Incident Commander/Unified Command and any supporting agencies and organizations to make effective, consistent, and timely decisions. Compiling data from multiple sources and disseminating the collaborative information COP ensures that all responding entities have the same understanding and awareness of incident status and information when conducting operations. FEMA Communications and Information Management: http://www.fema.gov/emergency/nims/CommunicationsInfoMngmnt.shtm
Crisis Standards of Care	The level of care possible during a crisis or disaster due to limitations in supplies, staff, environment, or other factors. These standards will usually incorporate the following principles: (1) prioritize population health rather than individual outcomes; (2) respect ethical principles of beneficence, stewardship, equity, and trust; (3) modify regulatory requirements to provide liability protection for healthcare providers making resource allocation decisions; and/or (4) designate a crisis triage officer and include provisions for palliative care in triage models for scarce resource allocation (e.g., ventilators) (Chang et al., 2008). Crisis standards of care will usually follow a formal declaration or recognition by state government during a pervasive (pandemic influenza) or catastrophic (earthquake, hurricane) disaster which recognizes that contingency surge response strategies (resource-sparing strategies) have been exhausted, and crisis medical care must be provided for a sustained period of time. Formal recognition of these austere operating conditions enables specific legal/regulatory powers and protections for healthcare provider allocation of scarce medical resources and for alternate care facility operations. Under these conditions, the goal is still to supply the best care possible to each patient.
Emergency Support Function (ESF) #8	Emergency Support Function (ESF) #8 – Public Health and Medical Services provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated Federal response, and/or during a developing potential health and medical emergency. The phrase "medical needs" is used throughout this annex. Public Health and Medical Services include responding to medical needs associated with mental health, behavioral health, and substance abuse considerations of incident victims and response workers. Services also cover the medical needs of members of the "at risk" or "special needs" population described in the Pandemic and All-Hazards Preparedness Act and in the National Response Framework (NRF) Glossary, respectively. It includes a population whose members may have medical and other functional needs before, during, and after an incident.

Term	Definition
Healthcare Coalition	The Healthcare Coalition is a collaborative network of healthcare organizations and their respective public and private sector response partners that serve as a multi-agency coordinating group to assist with preparedness, response, recovery, and mitigation activities related to healthcare organization disaster operations. The primary function of the Healthcare Coalition includes sub-state regional, healthcare system emergency preparedness activities involving the member organizations. This includes planning, organizing and equipping, training, exercises and evaluation. During response, Healthcare Coalitions should represent healthcare organizations by providing multi-agency coordination in order to provide advice on decisions made by incident management regarding information and resource coordination for healthcare organizations. This includes either a response role as part of a multi-agency coordination group to assist incident management (area command/unified command) with decisions, or through coordinated plans to guide decisions regarding healthcare organization support.
Healthcare Organization	The component(s) of a community's healthcare delivery system to primarily include hospitals, Emergency Medical Services (EMS), primary care, long term care, mental/behavioral health systems, specialty services (dialysis, pediatrics, woman's health, stand alone surgery, urgent care, etc.), support services (laboratories, pharmacies, blood banks, poison control, etc.), private entities associated with healthcare delivery (Hospital associations, regulatory boards, etc.) May or may not include components of public health, Tribal healthcare, Federal: VA hospitals, IHS facilities, etc., Community Health Centers, volunteer medical organizations (e.g. ARC.), DOD healthcare, Health services in city/county/State jails, prisons, penitentiaries and others not noted.
Healthcare System	A Collection of a community's healthcare organizations
Situational Awareness	Is the ability to identify, process, and comprehend the essential information about an incident to inform the decision making process in a continuous and timely cycle and includes the ability to interpret and act upon this information

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