Capability 10: Medical Surge

Definition: Medical surge is the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of the health care system to endure a hazard impact, maintain or rapidly recover operations that were compromised, and support the delivery of medical care and associated public health services, including disease surveillance, epidemiological inquiry, laboratory diagnostic services, and environmental health assessments.

Functions: This capability consists of the ability to perform the functions listed below.

- **Function 1**: Assess the nature and scope of the incident
- **Function 2**: Support activation of medical surge
- **Function 3**: Support jurisdictional medical surge operations
- **Function 4**: Support demobilization of medical surge operations

Summary of Changes: The updates align content with new national standards, updated science, and current public health priorities and strategies. Listed below are specific changes made to this capability.

- Emphasizes the need to define public health agency lead and support roles within medical surge operations
- Eliminates use of the term “HAvBED” because the term is no longer promoted by the Hospital Preparedness Program (HPP), and focuses instead on “situational awareness” and “health care systems tracking” as an overarching theme
- Emphasizes the need to identify and clarify the jurisdictional Emergency Support Function (ESF) #8 response role in medical surge operations based on jurisdictional role and incident characteristics

For the purposes of Capability 10, partners and stakeholders may include the following:

- ambulatory care providers
- clinical
- emergency management agencies
- emergency medical services (EMS)
- environmental health
- fire departments
- health care coalitions
- health care organizations
- health professional volunteer entities
- law enforcement agencies
- long-term care agencies
- mental/behavioral health pharmacies
- poison control centers
- public health agencies
- public works
- social services
- stand-alone emergency rooms
- state hospital associations
- tribes and native-serving organizations
- urgent care
- volunteer organizations

---

8 Subject matter experts from the HHS Office of the Assistant Secretary for Preparedness and Response Hospital Preparedness Program made significant contributions to the updates for Capability 10: Medical Surge

9 For example, the National Voluntary Organizations Active In Disaster (NVOAD), and the National Disaster Medical System (NDMS)

10 For example, the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP), and the Medical Reserve Corps (MRC)
Function 1: Assess the nature and scope of the incident

Function Definition: Coordinate with Emergency Support Function (ESF) #8 partners, the jurisdiction’s health care response, and other partners and stakeholders to define incident needs and available health care personnel and resources through the collection and analysis of data, including resource tracking data, data resulting from mutual aid agreements, such as the Emergency Management Assistance Compact (EMAC), disease surveillance data, and other applicable health data.

Tasks

Task 1: Define the role of the public health agency in medical surge. Identify jurisdictional public health medical surge lead or support roles and responsibilities in coordination with other jurisdictional authorities and partners.

Task 2: Evaluate the structural needs of the jurisdictional incident management system. Support the jurisdictional incident management system to determine the public health medical surge role within the Incident Command System (ICS).

Task 3: Complete incident assessments. Assess and document initial needs and availability of resources, including personnel, facilities, logistics, and other health care resources.

Task 4: Exchange data with jurisdictional health care organizations or health care coalitions. Provide public health data to jurisdictional health care organizations or health care coalitions to support activation of plans, if required, to maximize scarce resources and prepare for shifts into and out of conventional, contingency, and crisis standards of care.

Preparedness Resource Elements

P1: (Priority) Personnel trained and assigned to fill public health incident management roles, as applicable, to a medical surge response to include emergency operations center (EOC) staffing at agency, local, and state levels as necessary.  
(See Capability 3: Emergency Operations Coordination)

P2: (Priority) Procedures in place to ensure coordination with jurisdictional partners and stakeholders for emergency incidents, exercises, and pre-planned (recurring or special) events in accordance with ICS organizational structures, doctrine, and procedures, as defined by the National Incident Management System (NIMS).

P3: Bidirectional situational awareness system between public health and health care organizations to assess and maintain visibility of emergency surge resources. Situational awareness system activities may include:
  • Regularly assessing staffing surge across facilities and locations
  • Routinely tracking bed availability including specialty beds across facilities, as necessary
  • Continually tracking, allocating, and comprehensively managing medical materiel
  • Sharing ongoing epidemiological and surveillance data that may impact resource use
  • Sharing ongoing findings from community and environmental assessments

P4: **(Priority)** Procedures in place for public health to engage the health care system and health care coalitions to collect, provide, and receive situational awareness in alignment with health care system institutional and jurisdictional expectations. Jurisdictional health care system or coalition responsibilities may include

- Including health care system emergency response planning into jurisdictional and state response plans
- Preparing to address the needs of communities and at-risk individuals who may be disproportionately impacted by a public health incident or event, including children, pregnant women, older adults, and others with access and functional needs, as defined by the Communication; Maintaining Health; Independence; Support, Safety and Self-determination; Transportation (CMIST) framework.
- Minimizing duplication of effort by supporting coordination among federal, state, local, tribal, and territorial planning, preparedness, response, and demobilization activities
- Coordinating with jurisdictional emergency management organizations and assisting the health care system at the level necessary to maintain continuity of operations if standard operations are overwhelmed and disaster operations become necessary
- Supporting jurisdiction-wide situational awareness to ensure the maximum number of people requiring care receive safe and appropriate care, including facilitating triage and directing people to appropriate facilities and providing facility support

P5: Procedures in place to define when the jurisdiction’s health care system and health care coalitions transition into and out of conventional, contingency, and crisis standards of care during an incident based on the level of stress on the health care system. This may include assessing risks to formalize strategies that define transition processes and indicators in coordination partners and stakeholders.

*(See Capability 1: Community Preparedness)*

P6: Procedures in place for the inclusion of partners to assist in the effective management of medical surge needs, such as balanced use of population-based interventions.

P7: Ongoing communications, community messaging, and data sharing with the health care system, health care coalitions, public safety answering points, such as 911 emergency medical dispatch systems, poison control centers, and EMS organizations. This may include requesting and using National Emergency Medical Services Information System (NEMSIS) data elements.


**Skills and Training Resource Elements**

S/T1: Personnel trained to use NEMSIS and 911 data.

S/T2: Personnel trained to use the jurisdictional bed-tracking system to obtain data for jurisdictional situational awareness activities.

S/T3: Personnel trained for the role of the public health agency programs in incident response requiring medical surge. Training materials may include

- ESF #8—Public Health and Medical Services (IS-808)
- Introduction to Incident Command System (IS-100.b)
- Incident Command System for Single Resources and Initial Action Incidents (IS-200.b)
Capability 10: Medical Surge

- National Incident Management System, An Introduction (IS-700.a)
- National Response Framework, An Introduction (IS-800.b)

Equipment and Technology Resource Elements

E/T1: Primary and backup Internet connection to access local and state NEMSIS, 911 data, or access bed-tracking data.

E/T2: Jurisdictional situational awareness system coordinated with the health care system and health care coalitions as necessary.

Function 2: Support activation of medical surge

Function Definition: Convene subject matter experts to discuss incident-specific changes to clinical care in protracted incidents, such as pandemic influenza, and expand access to health care services, such as call centers, alternate care systems, EMS, inpatient services, pharmacies, and occupational health clinics, during a surge on the jurisdiction’s health care system from an incident or event. Support the health care system, health care coalitions, and response partners based on identified public health response role(s), including providing recommendations for allocation of scarce resources.

Tasks

Task 1: Mobilize medical surge personnel. Support mobilization of incident-specific medical and mental/behavioral treatment personnel, public health personnel, and support personnel.

Task 2: Activate alternate care facilities. Assist health care organizations and health care coalitions with monitoring and activating alternate care facilities, as requested.

Task 3: Support additional health care services. Assist with the surge of the health care system through coordination with health care coalitions, including hospitals and non-hospital entities.

Task 4: Ensure situational awareness. Support situational awareness by using real-time information exchange among response partners, the health care system, and health care coalitions.

Task 5: Coordinate public education opportunities. Provide information to educate the public regarding available health care services, and adapt messaging for populations that may be disproportionately impacted by the incident, including individuals with access and functional needs.

Preparedness Resource Elements

P1: (Priority) Procedures in place that indicate how the jurisdictional public health agency will access volunteer resources through ESAR-VHP, the MRC health professional volunteer entities, such as NVOAD, and other personnel resources.  
(See Capability 15: Volunteer Management)

P2: (Priority) Procedures in place that indicate how the public health agency will engage with health care coalitions and other response partners in the development and execution of health and medical response plans, integrating the access and functional needs of at-risk individuals who may be disproportionately impacted by a public health incident or event to meet incident and medical surge needs. Procedures may include
Capability 10: Medical Surge

- Written list of health care organizations, coalitions, and human services providers that can support the access and functional needs of at-risk individuals
- Communication strategies for coalitions, including health care organizations and human services providers, in advance of an event
- Current (up-to-date) list of available human services organizations that provide support and services to address the access and functional needs of at-risk individuals
- Pre-identified site(s) that have undergone an initial assessment to determine their adequacy to serve as an alternate care facility

P3: (Priority) Jurisdictional procedures in place to identify critical information sharing requirements (situational awareness information) for partners and stakeholders. Procedures for characterizing critical information requirements may include
  - Identifying, defining, and establishing essential information and requirements
  - Determining elements of information needed to establish a common operating picture
  - Identifying data owners
  - Validating data with stakeholders

(See Capability 6: Information Sharing)

P4: (Priority) Procedures in place to document participation from jurisdictional and regional pediatric and geriatric providers, trauma centers, and burn centers in a variety of settings, such as maternal and child health programs, clinic-based, hospital-based, long-term care, and rehabilitation within jurisdictional response planning. Recommended procedures may include
  - Identification of gaps in the provision of pediatric and geriatric care
  - Coordination of pediatric and geriatric care within the jurisdiction
  - Coordination with jurisdictional trauma and burn centers

(See Capability 1: Community Preparedness, Capability 2: Community Recovery, and Capability 4: Emergency Public Information and Warning)

P5: Procedures in place to connect health care organizations and providers with additional volunteers or other personnel through volunteer or staffing programs, such as ESAR-VHP, MRC, and the National Disaster Medical System (NDMS), if necessary.

(See Capability 15: Volunteer Management)

P6: Procedures in place to provide support for the integration of MRC units with local, regional, and statewide infrastructure. Recommended procedures may include
  - Supporting MRC personnel or coordinators for the primary purpose of integrating the MRC structure with the state ESAR-VHP program or other volunteer management process
  - Including MRC volunteers in trainings and exercises that are integrated with other regional, state, local, tribal, territorial assets, health care systems, or volunteers through the ESAR-VHP program

(See Capability 15: Volunteer Management)

P7: Written agreements, such as contracts or memoranda of understanding MOUs, with partner agencies, if needed, to create formal and informal partnerships with jurisdictional volunteer sources.

(See Capability 15: Volunteer Management)
**P8**: Pre-identified potential locations for Federal Medical Stations (FMSs) and potential alternate care sites that have been assessed for environmental suitability in partnership with the applicable U.S. Department of Health and Human Services (HHS) Regional Emergency Coordinator(s) (RECs).

**P9**: Partnership with the applicable HHS RECs to address the need for wrap-around services, such as facility security, biomedical, and medical waste disposal, or provide information regarding accessing other services, such as food service at projected FMS locations.

**P10**: Procedures in place to staff call centers with volunteer resources to manage increased call volumes at health care organizations and health care coalitions.

*(See Capability 15: Volunteer Management)*

**P11**: Procedures in place to create, clear or approve, and disseminate medical surge guidance to inform the population of where and when to seek care as well as the appropriate use of 911 and acute care health systems during an incident or event. Considerations for making messages accessible for individuals with access and functional needs may include

- Developing translated materials or resources that are accessible for people with limited English proficiency and that are linguistically appropriate, culturally sensitive, and account for varied literacy levels
- Developing materials or resources that are accessible for people who are blind, have low vision, are deafblind, or have other visual disabilities
- Developing materials or resources that are accessible for people who are deaf, hard of hearing, deafblind, or have other hearing disabilities

*(See Capability 1: Community Preparedness and Capability 4: Emergency Public Information and Warning)*

**P12**: Procedures in place for the local EMS system to request additional resources, such as specialty equipment and personnel, for the needs of pediatric cases as part of the jurisdictional ESF #8 annex or other documentation.

**P13**: Legal and regulatory mechanisms to support surge activities at the jurisdictional level and identification and engagement of the health care workforce to execute the mechanisms. Recommended considerations may include

- Liability protections for providers or facilities
- Allowances and limitations for Health Insurance Portability and Accountability Act (HIPAA) compliance
- Ability to commandeer resources
- Ability to change regulations to support emergency and alternate systems of care

**Skills and Training Resource Elements**

**S/T1**: Personnel trained and knowledgeable on the Strategic National Stockpile (SNS) formulary and trained on FMS implementation.

**S/T2**: Personnel trained on providing care to pediatric patients and using pediatric equipment.

**Equipment and Technology Resource Elements**

**E/T1**: *(Priority)* Incorporation of equipment, communication, and data interoperability into the health care organizations’ acquisition programs.

*(See Capability 6: Information Sharing)*
Function 3: Support jurisdictional medical surge operations

Function Definition: Coordinate health care resources in conjunction with response partners, including the tracking of patients, medical personnel, equipment, and supplies from intra- or inter-state and federal partners, if necessary, in quantities needed to support medical response operations.

Tasks

Task 1: Maintain communications and continuity of services. Coordinate and maintain communications per jurisdictional authority or jurisdictional incident management structure with partners and stakeholders to maintain situational awareness, account for jurisdictional needs, and maintain continuity of medical response operations.

Task 2: Coordinate with partners to provide required resources. Assess resource requirements during each operational period and coordinate with partners, including those able to provide mental/behavioral health services for the community, to obtain necessary resources and to support medical surge.

Task 3: Track patients impacted by the incident. Coordinate with jurisdictional partners and stakeholders to facilitate patient tracking during the incident response and recovery.

Preparedness Resource Elements

P1: (Priority) Procedures in place to collect, communicate, and share situational awareness information, including number and types of patients seen by location, to partners and stakeholders through jurisdictional emergency management procedures.

(See Capability 6: Information Sharing and Capability 13: Public Health Surveillance and Epidemiological Investigation)

P2: (Priority) Procedures in place that detail jurisdictional public health agency participation in the development and execution of health and medical response and recovery plans that integrate the access and functional needs of populations at risk of being disproportionately impacted by the incident or event.

(See Capability 1: Community Preparedness and Capability 2: Community Recovery)

P3: (Priority) Procedures in place to support or implement family reunification.

P4: (Priority) Public health and health care system coordination procedures that account for public health and medical materiel management, inventory assessments, and personnel and equipment resource requests from jurisdictional and other ESF #8 partners as the incident evolves. Recommended considerations may include

- Management of available medical supplies, medications, and vaccines
- Use of jurisdictional medical caches
- Processes for requesting additional supplies
- Availability of ventilators (portable or otherwise) within the jurisdiction
- Management of laboratory diagnostic services, for example equipment and supplies
- Field- and facility-based epidemiological tracking

P5: Jurisdictional patient-tracking and disease surveillance systems operated in conjunction with state and local emergency management, EMS, health care organizations, and other jurisdictional partners. Recommended considerations for patient-tracking systems may include

- Close coordination with state government systems
- Interoperability with relevant state and national patient-tracking systems and registries
- Consistency with federal and state-approved privacy protection, regulations, and standards for patient-tracking systems and registries

(See Capability 6: Information Sharing and Capability 13: Public Health Surveillance and Epidemiological Investigation)

P6: Procedures in place to coordinate with the jurisdiction’s patient-tracking system, including immunization information systems (IISs), local and state EMS, and 911 authorities, as applicable.

(See Capability 6: Information Sharing)

Equipment and Technology Resource Elements

E/T1: Electronic or other data storage systems to inform situational awareness, such as the jurisdiction’s IIS and Joint Patient Assessment and Tracking System (JPATS), in accordance with national standards.

(See Capability 6: Information Sharing)

**Function 4: Support demobilization of medical surge operations**

**Function Definition:** In conjunction with jurisdictional partners, return the health care system to pre-incident operations by incrementally decreasing surge staffing, equipment needs, alternate care facilities, and other systems and transitioning patients from acute care services into their pre-incident medical environments or other applicable medical settings.

**Tasks**

**Task 1:** Assist in the return movement of patients. Assist or coordinate with partners to return patients to their pre-incident medical environments, such as prior medical care provider, skilled nursing facility, or place of residence, or other applicable medical settings.

**Task 2:** Assist the health care system in the demobilization of resources. Coordinate with partners to demobilize health care resources including facilities, personnel, and equipment according to incident needs. Ensure effective discharge planning for people with disabilities and other access and functional needs to avoid inappropriate placement, and maintain independent living in the least restrictive environment.

**Task 3:** Demobilize alternate care facilities and mutual aid resources. Coordinate with partners to demobilize alternate care facilities and resources obtained through mutual aid, EMAC, and other means of assistance, as appropriate for the incident.

**Preparedness Resource Elements**

P1: (Priority) Procedures in place to coordinate with state EMS to demobilize transportation assets used in the incident.
P2: **(Priority)** Procedures in place to demobilize surge personnel, including state medical personnel, such as MRC, and federal medical personnel, such as NDMS, and to use thresholds and indicators to detect the need for further demobilization of personnel and other medical surge resources.

*(See Capability 15: Volunteer Management)*

P3: Communication between public health and the health care system, health care coalitions, and community partners to maintain situational awareness of health care system impacts that may inform demobilization priorities.

P4: Procedures in place to coordinate case management or other support to assist in the transition to pre-incident medical environments or other applicable medical settings, as requested by health care organizations based on the public health lead or support role.

*(See Capability 2: Community Recovery)*

P5: Coordinated procedures to communicate with HHS Regional Health Administrators (RHAs); regional directors; state, local, tribal, territorial, or county agencies; and HHS RECs to address the access and functional needs of patients during the demobilization of medical surge efforts.

P6: Coordination of jurisdictional authorities and partner groups to support volunteer and other personnel post-deployment medical screening, stress and well-being assessment, and, when requested or indicated, referral to medical and mental/behavioral health services.


P7: Procedures in place to release volunteers and other personnel when the public health agency has the lead role or supporting role in the coordination of volunteers or other personnel. Recommended procedures may include

- Demobilizing volunteers and other personnel in accordance with the incident action plan
- Completing all assigned activities or informing replacement volunteers of the activities' status
- Determining additional assistance needed from volunteers or other personnel
- Returning equipment used by volunteers or other personnel
- Recording follow-up contact information for volunteers and other personnel

*(See Capability 3: Emergency Operations Coordination and Capability 15: Volunteer Management)*

P8: Exit screening procedures for out-processing activities. Screening elements may include

- Injuries and illnesses acquired during the response
- Mental/behavioral health needs resulting from the response
- Referral of volunteers to medical and mental/behavioral health services, as requested or indicated
