2011

Missouri Hospitals’ Emergency Preparedness: ACCOMPLISHMENTS AND NEXT STEPS
The Missouri Hospital Association extends its gratitude to the U.S. Department of Health and Human Services’ Office of the Assistant Secretary of Preparedness and Response for the allocation of the Hospital Preparedness Program and its appreciation to the Missouri Department of Health and Senior Services for its continued stewardship of the Hospital Preparedness Program.

This report highlights the achievements in emergency preparedness throughout Missouri’s hospitals and other health care systems and providers. It is important to note that MHA works collaboratively with the following organizations.

- U.S. Department of Health and Human Services, Region VII
- Missouri Department of Health and Senior Services
- Missouri Department of Mental Health
- Missouri Primary Care Association
- Missouri-1 Disaster Medical Assistance Team
- Mid-America Regional Council
- St. Louis Area Regional Response System

MHA was able to provide the services and support described and highlighted in this report through a subcontract with the Missouri Department of Health and Senior Services with funds from the U.S. ASPR Hospital Preparedness Program, CFDA 93.889.

Hospitals in planning regions A and C of the Missouri State Highway Patrol Troops may have received services and support not included in this report. This support was provided through MARC and STARRS using the Hospital Preparedness Program.

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Executive Summary
Because immediate challenges face health care organizations every day, disaster preparedness planning often is shifted to a secondary priority. However, unprepared organizations delay at their own peril. Although emergency response plan activation occurs infrequently, it is central to high risk situation management.

Since 1953, the federal government has declared 1,946 disasters throughout the nation and its territories; 637 of those have been declared since 2000. In Missouri, 56 federal disaster or emergency declarations have been issued since 1957; 27 have occurred since January 2000.

Most federal disaster and emergency declarations are caused by severe weather. Flooding, ice, snow, tornadoes, hurricanes and earthquakes continue to be the hazards most likely to require a community-based emergency response. However, acts of violence and terrorism are also a reality for our nation, including attacks in schools, hospitals, workplaces and public settings. Hospitals and communities must be ready to respond immediately to the unexpected.

Successful hospitals integrate emergency preparedness into the organizational culture. Hospital leaders must encourage and support participation in planning, education and exercises among all staff levels, including management and medical staff. Knowledge of emergency management systems is central to developing a sustainable plan. Whether or not an organization has dedicated emergency preparedness staff, it is important that all hospital employees have a basic understanding of their roles and responsibilities during a disaster. Emergency preparedness and management is complex and challenging. To be effective, hospitals must develop formal partnerships with other community health, public safety and emergency management entities.

The consequences of being unprepared are significant. Emergency preparedness is a requirement and expectation for hospital licensure in Missouri, Medicare Conditions of Participation and Joint Commission accreditation. Moreover, history demonstrates that failure to prepare and execute your emergency operations plan can provide a strong case for litigation against hospitals and their leaders.

Hospital leaders must encourage and support participation in planning, education and exercises among all staff levels, including management and medical staff.
Executive Summary

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

Planning
✓ 96% use a planning committee and formal process for emergency preparedness planning
✓ 95% participate in regional planning activities
▲ 70% activated the Incident Command System during the past 12 months

Communication Interoperability
✓ 93% have dedicated and redundant communications capability
✓ 90% demonstrated this capability during an exercise or incident
▲ 74% monitor daily the EMSystems® for regional and statewide awareness

Safety and Security
▲ 88% incorporated their risk assessment into their emergency operations plan
! 41% have a structured decontamination program

Medical Surge
▲ 72% have an approved, comprehensive evacuation and transport plan
! 44% have an approved, comprehensive mass fatality plan

Evaluation of Emergency Preparedness
351 hospital-specific exercises were conducted or are scheduled between July 1, 2010, and June 30, 2012

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Hospital emergency preparedness plans should provide for the following.

- a safe environment
- continuity of operations
- management of a sudden or sustained influx of patients requiring medical assessment and care
- identification of organizational capabilities and limitations
- coordination with other community and regional partners

There are numerous barriers to effective emergency preparedness and response including operational capacity, staffing, emergency department overcrowding, an aging workforce and population, considerations for obese patients and limited mental health services.

Since 2002, the Missouri Hospital Association has coordinated federal funds for hospital preparedness through the Hospital Preparedness Program of the U.S. Department of Health and Human Services’ Office of the Assistant Secretary of Preparedness and Response. MHA subcontracts with the Missouri Department of Health and Senior Services to administer approximately 50 percent of the funds Missouri receives to provide direct and indirect services to hospitals.

Although in aggregate the funds are significant, the total spending since the program’s inception equals only $10.50 per Missourian ($5.67 per citizen for funds managed through MHA). The funds managed by MHA have expanded access to expertise and education, increased readiness through the purchase of equipment and provided opportunities to test and evaluate planning through exercises. These efforts have significantly strengthened health care emergency readiness and response.

MHA supports the ASPR’s Hospital Preparedness Program and will continue to lead and facilitate Missouri health care emergency preparedness based on continued federal funding and allocation from the DHSS. Although there has been important progress in the initial planning, allocation of equipment, education and exercises, the need to further develop, refine and test these plans is critical to providing a safe environment among Missouri hospitals and communities.

This report highlights progress in the areas of planning, communications interoperability, resources, safety and security, utilities, staffing, volunteers, medical surge capacity and program evaluation. It represents areas of accomplishment and identifies opportunities for continued investment.
Health Care System
Emergency Management
Architecture
Two overarching structures, the tools used through EMSystems® and the development of formalized local and regional health care coalitions, provide the architecture for statewide health care system emergency management. This architecture provides the framework for developing a sustainable emergency management system for hospitals and communities.

**EMSYSTEMS’ PROGRAMS IN MISSOURI**

The need for one system to communicate alerts, provide situational awareness, manage resources and coordinate an overall emergency response among Missouri health care providers has been a key objective of this program. Early in the implementation of the HPP, DHSS approved EMSystems® as that system. This system previously was adopted in the Kansas City and St. Louis metropolitan areas to communicate and manage ambulance diversion. However, as the HPP program evolved, so did the EMSystems® tools.

Today, EMSystems® provides a set of data management tools for health care providers to assist in emergency management. The two EMSystems® products used in Missouri are EMResource® and EMT rack®.

**EMResource®**

EMResource® is an interoperable, emergency communications web-based program that facilitates communications required to prepare, respond and recover from any size incident across the entire health care emergency services continuum. EMResource® is intended to be used during routine operations and disasters for the exchange of information among emergency medical service providers, hospitals, community health centers and 911 dispatch centers. Local public health agencies and emergency operations centers also benefit from read-only access to the information that can be collected and disseminated, including the following examples.
Health Care System Emergency Management Architecture

Alerts
- health alerts, including new outbreaks of communicable diseases
- federal or state changes in guidance or regulations during a disaster
- local, regional or state incidents that may require additional resources and coordination, such as a bus accident or chemical spill

Queries
- bed availability (by type of bed)
- ability to accept mass casualty patients
- service limitations
- critical infrastructure limitations or failures

EMResource® was used extensively during the 2009 H1N1 outbreak to monitor influenza activity and resource needs. It also was used to communicate situational awareness and changes in federal and state guidance.

**EMResource® — Hospital ICS**
In response to suggestions from Missouri hospital disaster response contacts, MHA partnered with EMSystems® to enhance the existing system to manage documents and contacts needed to plan, respond and evaluate disaster events. This new program, EMResource® — Hospital ICS, is now available to current Missouri EMResource® hospitals that receive and care for patients. It includes hospital incident command system forms, a call notification system and all-user and organization-specific libraries.

**EMTrack®**
EMTrack® is a patient and evacuee tracking system that helps hospitals manage medical surge, evacuations and alternate site locations. Authorized users can securely view, search, report and manage transport activities on a need-to-know basis. EMTrack® can be used daily for routine care and during emergencies involving mass casualties or evacuation.
HEALTH CARE SYSTEM EMERGENCY PREPAREDNESS COALITIONS

Formal partnerships and health care coalitions are a cornerstone of all health care emergency preparedness. Local and regional coalitions provide a sustainable and reliable structure.

The development and refinement of coalitions is a major construct of the HPP and a performance measure within the Joint Commission Emergency Management chapter. To integrate into the overall Missouri emergency management system, DHSS uses the nine state Highway Patrol Troop regions as the planning regions for emergency preparedness. Each region differs in geography, population and resources. The unique characteristics of each region require each Missouri region to develop partnerships and coalitions that will match their specific needs to ensure a coordinated emergency preparedness plan and response.

Despite the differences, each coalition’s goals and objectives follow evidence-based guidance from the Medical Surge Capacity and Capability tier structure. This model, adopted by HPP, enables coalitions to define their specific structure yet coordinate resources and response throughout Missouri during an emergency.

The development of the health care coalitions has been facilitated by MHA, MARC and STARRS. MHA has provided the support and guidance for Regions B, D, E, F, G, H and I. MARC has provided support and guidance to Region A while STARRS has provided those services to Region C. MHA, MARC and STARRS all work with other statewide partners, including DHSS, the Missouri Department of Mental Health, MO-1 DMAT and the Missouri Primary Care Association, to develop an integrated system of planning and response.

MEDICAL SURGE CAPACITY AND CAPABILITY TIER STRUCTURE

Accomplishments and Next Steps

The following sections highlight Missouri hospitals’ accomplishments and work-in-progress through support of MHA and ASPR HPP funds. Hospitals are better prepared to plan and respond to any disaster and demonstrate compliance with federal, state and accrediting bodies. The following sections are arranged according to the Joint Commission Emergency Management standards but include information to support most licensure and accrediting requirements.
The Planning Process and Development of the Emergency Operations Plan

**JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS**

**EM.01.01.01** The hospital engages in planning activities prior to developing its written Emergency Operations Plan.

**EM.02.01.01** The hospital has an Emergency Operations Plan.

Emergency preparedness begins with leaders’ commitment and an understanding to address planning from an all-hazards approach.

Planning begins with assessing current capabilities, resources and potential hazards and risks. The hazard vulnerability assessment identifies potential internal (organizational) and external (community) threats and risks to guide emergency preparedness planning, training, exercises and purchases.

Government entities use the National Incident Management System to provide an overarching structure to unify local, state and federal responses. As defined by the Federal Emergency Management Agency, “NIMS is a set of principles that provides a systematic, proactive approach guiding government agencies at all levels, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment.”

**EMSSystems® as a Planning Tool**

- includes the Kaiser Permanente Hazard Vulnerability Assessment and the hospital incident command forms in EMResource® Hospital-ICS
- includes planning guidance and templates for hospital EOPs
- uses the EMResource® Hospital-ICS library to store and share planning documents internally, track changes to these documents to show ongoing improvements and shares documents with their external partners
- includes coalition-specific tools and structure in EMResource® Hospital-ICS

There are four critical components to emergency preparedness planning.
- engage leaders
- conduct a hazard vulnerability assessment
- adopt and implement an incident command system
- participate in local and regional planning; seek to formalize roles and responsibilities
Within the NIMS is the Incident Command System, an integrated management structure established to respond to emergencies of any size and complexity. It is a flexible and scalable system that must be incorporated into the emergency preparedness plan. Hospitals may choose to adopt the NIMS — ICS tools or a variation, the Hospital Incident Command System, a system developed specifically for health care organizations.

The planning process must result in a flexible, scalable organizational EOP that will provide guidance for all-hazards. Further, it is critical the hospital EOP be communicated and incorporated into the larger community emergency operations plan and system. A coordinated local response requires developing sustainable partnerships that clearly define the roles and expectations of health care and public safety partners.

Coalitions’ Role in Organizational Planning

- house and maintain the regional response plan
- promote consistent strategies among partnering agencies, facilitate the coordination of incident response actions for their members
Through HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- provide extensive education for emergency preparedness leadership, including an annual statewide conference
- facilitate regional collaboration
- provide leadership and technical expertise to develop and refine local and regional coalitions in outstate Missouri
- develop and implement the Missouri Mutual Aid Agreement
- provide technical assistance and review of organizational EOPs
- provide and disseminate NIMS and ICS education and guidance

**2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report**

- **96%** use a planning committee and formal process for emergency preparedness planning
- **42%** have a stand-alone emergency preparedness committee
- **86%** renew EOPs through committee structure
- **91%** completed a hospital-specific hazard vulnerability assessment
- **88%** incorporated the hazard vulnerability assessment into their EOP
- **84%** fully implemented the 14 National Incident Management System elements into their emergency operations plans (See Page 15.)
- **94%** address incident command activation in their EOP
- **70%** activated ICS during the past 12 months
- **92%** report their EOP allows for a flexible and scalable activation
- **95%** participate in regional planning activities

*Source: 2011 MHA Emergency Preparedness Capacity Assessment*
In addition to past education and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with emergency preparedness planning. The following will be important next steps.

- ongoing competency-based education to ensure knowledge of emergency preparedness and the ICS for hospital leaders and staff
- provide additional consultative support to enhance planning, including integration of the hazard vulnerability assessment into the EOP and emergency preparedness education and exercise priorities
- continue technical and consultative support to refine existing and develop new regional coalitions
- ensure EOPs are revised based on exercise and real-incident after action reports
Missouri Hospitals’ Adoption of 14 NIMS Elements

- **93%** adopt NIMS throughout the organization
- **100%** ensure federal awards (grant money) received support NIMS
- **94%** revise and update disaster plans and protocols to include NIMS and the National Response Framework components
- **90%** participate in interagency mutual aid agreements including public health and nongovernmental agencies
- **93%** train appropriate personnel in ICS 100, 200, 700 or equivalent courses
- **84%** train leadership and disaster response staff in ICS 800 or an equivalent course
- **94%** promote NIMS concepts in all organization disaster-related trainings and exercises
- **92%** promote and ensure communication and data equipment purchased for the organization strengthens and enhances interoperability
- **97%** apply common and consistent terminology in communication plans and standards
- **96%** utilize systems, tools, and processes to collect and distribute accurate information during an incident or event
- **93%** manage all events and incidents in accordance with the ICS organizational structure and procedure
- **94%** include Incident Action Planning and common communication plans in the organizational ICS structure
- **92%** adopt public information principles, including joint information systems, during an incident or event
- **94%** ensure public information officer procedures gather, verify, coordinate and disseminate information during an event or incident

* MHA, MARC and STARRS manage this NIMS element.

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Communication

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.01 As part of its Emergency Operations Plan, the hospital prepares for how it will communicate during emergencies.

Communication is both a strategic focus of emergency planning and a tactical means of promoting a coordinated regional plan and response during an emergency.

In this era of social media and immediate global dissemination of information, the message conveyed during a disaster is immediately two-directional. The message can no longer be controlled by the organizations and entities managing the disaster. This requires hospitals to be prepared and respond immediately to coordinate information with other involved entities through the joint information center.

As a tactical component of planning and response, the ability to communicate is the leading indicator of the success or failure of an emergency operations plan. Emergency communication protocols should be well-defined for all staff. Redundant forms of communication equipment

EMSystems® as a Tool for Communication

EMResource®
• during small local, state and national incidents, provide situation awareness updates, including status, needs and available resources, to enhance a coordinated response among all partners
• includes tactical communication information, including HEAR call signs, amateur radio call signs and satellite phone numbers for immediate access by appropriate partners
may be used regularly for daily operating procedures to increase staff competence.

Through HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- EMSystems®, EMTrack® (MARC and STARRS support the EMTrack® license for Regions A and C, respectively.)
- A comprehensive communication assessment of current and needed communication equipment, programming and education needs (MARC provided the assessment for the Kansas City metropolitan hospitals.)
- HEAR radios — Hospital Emergency Administrative Radio located within emergency departments for communication with local and incoming ambulances
- Handheld VHF HT1250 radios for point-to-point communication within and around hospital campuses
- Reimbursable stipend for purchase of hospital-based amateur (HAM) radios
- 17 mobile communication assets provide mobile capabilities for on-the-scenes or remote communication redundancy to include radio, satellite and Internet capabilities
- Extensive competency-based education on use of available communication systems
- Technical assistance for developing integrated communication protocols among various health, emergency and public safety entities

Sources for Incoming Information During an Emergency
- First responders
- Volunteers and voluntary agencies
- Government assessment teams
- Community leaders
- First informers
- New media such as Facebook, Twitter and blogs
- Online news sites
- Traditional media such as print, TV, radio

Sources for Outgoing Media
- Traditional media
- New media
- Neighborhood communication networks

Adapted from Introduction to Emergency Management, Haddow G.D. et.al., 2011

Coalitions’ Roles in Communications

- Facilitate information sharing and promote situational awareness
- Use EMResource® for regional communication updates, alerts, advisories and activations
- Encourage participation and coordinate coalition-based drills
- Promote integration of existing local and regional communication systems
In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with emergency preparedness planning. The following will be important next steps.

- evaluate existing communication technology and possible replacement or upgrades as identified
- conduct regular communication drills across Missouri regions testing all major equipment
- provide guidance and funding to reprogram all HEAR and HT1250 radios to meet the new, narrow bandwidth requirements
- continue competency-based education on use of available communication systems
- continue technical assistance for developing integrated communication protocols among various health, emergency and public safety entities

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

- **93%** have dedicated and redundant communications capability
- **90%** have demonstrated this capability during an exercise or incident
- **78%** demonstrated two way communications capability between their incident command and their Tier 2 health care response partners during an exercise or incident
- **74%** monitor the EMSSystems® for regional and statewide tests, HAvBED and MCI queries daily

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Resources and Assets

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.03 As part of its Emergency Operations Plan, the hospital prepares for how it will manage resources and assets during emergencies.

Critical to any response is the availability of resources. The emergency planning process should include an inventory of critical supplies, which are intended to maintain continuity of operations for at least 96 hours. Plans should include conservation of supplies, redundant and back-up sources for supplies and processes to secure resources from partners. The Missouri Mutual Aid Agreement is one system to assist hospitals with resource sharing and acquisition during an emergency.
Accomplishments and Next Steps

Through the HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- develop and implement the Missouri Mutual Aid Agreement
- organization-specific equipment, including:
  - personal protective equipment caches
  - burn caches
  - oxygen caches
- regional caches for basic medical and shelter supplies that may be requested through emergency operation centers for use throughout Missouri during an emergency (Note: These caches have been provided through HPP funding from MHA, MARC, STARRS and the MO-1 DMAT.)
  - mass casualty trauma supply trailers
  - medical surge supplies
  - shelter supplies
  - pediatric supplies
  - pharmaceutical caches
  - respiratory caches
  - mobility caches
  - 50-bed mobile medical unit

In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with the management of emergency preparedness resources and assets. The following will be important next steps.

- sustainability of existing caches to include inventory management
- technical assistance and guidance for inventory rotation and maintenance
- the evaluation and possible addition of respiratory caches in outstate Missouri

Coalitions’ Roles in Managing Resources and Assets

- facilitate resource support through mutual aid process among members
- provide a benchmark for inventory tracking and resource typing

EMSSystems® Role in Managing Resources and Assets

- communicate the availability or need for resources through EMResource®
Safety and Security

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.05 As part of its Emergency Operations Plan, the hospital prepares for how it will manage security and safety during an emergency.

First and foremost, a hospital has an obligation to provide a safe environment for its employees, patients and visitors. This responsibility includes the following.

- a secure environment
- management of hazardous waste and materials
- isolation and decontamination of biological, chemical and radiological agents

Through HPP funds, MHA has been able to provide many resources to Missouri hospitals, including the following.

- hospital and regional equipment for decontamination, including:
  - hazmat suits
  - personal protective equipment
  - decontamination tents and systems
- evacuation equipment
- hazardous material training and resources
- online decontamination training
- workplace violence and intruder response training
- hospital-specific ICS activation and response training for an active shooter
- dissemination of guidance and templates

In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with emergency preparedness planning. The following will be important next steps.

- ongoing training and train-the-trainer programs
- development of structured hospital and regional decontamination systems
- development of additional guidance and templates

Coalitions’ Roles in Safety and Security

- facilitate and complete a regional HVA to assess collective risks and threats based on available resources and current response plans
Accomplishments and Next Steps

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

✓ 91% completed a hospital-specific hazard vulnerability analysis

▲ 88% incorporated the HVA into their EOP

▲ 72% have an approved comprehensive policy or plan that addresses medical evacuation

▲ 73% identified an alternate care site for purposes of full hospital evacuation

! 41% have a structured decontamination program

852 hospital-based lab personnel are trained in the protocols for referral of clinical samples and associated information to public health labs

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Utilities

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.09 As part of its Emergency Operations Plan, the hospital prepares for how it will manage utilities during an emergency.

During past weather-related emergencies, utility failures have proven to intensify and prolong the impact, complexity and response needed from hospitals and communities. Limitations or losses of water, electricity and medical gasses severely restrict hospital operations. Utility failures typically rank as the top or second greatest risk in a hazard vulnerability assessment.

Through HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- development and implementation of the Missouri Mutual Aid Agreement
- technical support and guidance to increase resiliency

In addition to past support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with utility emergency preparedness planning. An important next step will be ongoing technical assistance and guidance to increase resiliency.

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

36% utility failure, including power, water, sewer, HVAC and medical gas, as their number one internal risk

3 most common internal risks — fire, technology/communication failure and power failure

3 most common external risks — natural disasters, primarily tornadoes, winter weather, and mass casualty incidents involving hazardous materials

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Accomplishments and Next Steps

Staffing

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

**EM.02.02.07** As part of its Emergency Operations Plan, the hospital prepares for how it will manage staff during an emergency.

Perhaps there is no greater need during an emergency than staff. Plans, equipment and systems will not ensure an effective emergency response without staff. However, securing adequate staff to manage patient care and respond to an emergency is perhaps most difficult during an emergency.

For planning purposes, assess whether organizational policies enable leaders to enact the following during an emergency.

- extend the length of shift times
- mandate rest time
- cancel scheduled time off, including vacation time
- suspend noncritical services
- redirect staff to work in different areas to ensure critical services are provided

During an emergency, it is critical that the roles and responsibilities of staff are clearly defined and understood. This includes the implementation of the Incident Command System. The following is the most current guidance from the Federal Emergency Management Agency for the level of ICS training based on normal duties and responsibilities and possible duties and responsibilities during a disaster.

EMSytems® Role in Staffing

- use EMResource® Hospital-ICS to notify staff of the emergency event, inquire about their availability to respond and track staff time

Missouri Hospitals’ Emergency Preparedness
Through the HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- the development and implementation of the Missouri Mutual Aid Agreement
- emergency staffing guidance
- technical support and consultation during actual events

In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with emergency preparedness staffing considerations. The following will be important next steps.

- ongoing technical support and guidance
- further development of strategic solutions using EMSystems® and coalitions
- further education on use of EMSystems® and coalitions as a resource for emergency preparedness and response

Coalitions’ Roles in Staff Development

- ongoing networking between health care partners, in addition to coalition-level training and education as identified by the region
### Accomplishments and Next Steps

**FEDERAL EMERGENCY MANAGEMENT AGENCY RECOMMENDATIONS FOR ICS TRAINING:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Audience</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IS-700.a</strong></td>
<td>Introduces the National Incident Management System. Individuals with emergency management responsibilities, including any role in emergency preparedness, response, recovery and mitigation, should take the course.</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td><strong>ICS-100.HC and the update IS-100.HCb</strong></td>
<td>Introduces the Incident Command System and provides the foundation for higher level ICS training. ICS-100.HC and IS-100.HCb should be completed by hospital staff who would have a direct role in emergency preparedness, incident management and/or emergency response during an incident, including personnel designated to fulfill ICS roles. Additional participants may include the following staff members from hospital and health care systems. • physicians • nursing • ancillary • materials/resource management • security/safety • laboratory • radiology • inter-facility transport</td>
<td>Completion of IS-700 is recommended.</td>
<td></td>
</tr>
<tr>
<td><strong>IS-200 and the updated IS-200b</strong></td>
<td>Are designed to enable staff to operate efficiently during an incident or event within the Incident Command System. ICS-200 provides training on and resources for staff who will likely assume a supervisory position within the ICS.</td>
<td>Completion of IS-100 and IS-700 is required.</td>
<td></td>
</tr>
<tr>
<td><strong>IS-800.B</strong></td>
<td>Introduces participants to the concepts and principles of the National Response Framework.</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

*Source: www.fema.gov*
Volunteers

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.13 During disasters, the hospital may grant disaster privileges to volunteer licensed independent practitioners.

EM.02.02.15 During disasters, the hospital may assign disaster responsibilities to volunteer practitioners who are not licensed independent practitioners but who are required by law and regulation to have a license, certification or registration.

DHSS developed the Show-Me Response system to register, query and deploy health care volunteers during an emergency requiring additional staff. Any person with a valid Missouri license in good standing with the Missouri Division of Professional Registration may consider registering in the system.

Through HPP funds, MHA has been able to support DHSS and encourage hospital participation in the Show-Me Response.

MHA will continue to use available HPP grant funds to assist DHSS and hospitals with the integration of the Show-Me Response and hospital EOPs.

**DID YOU KNOW?**

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

71% have a policy in place to screen and accept potential and willing health volunteers during emergencies when the facility needs staff.

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Accomplishments and Next Steps

Medical Surge

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.02.02.11 As part of its Emergency Operations Plan, the hospital prepares for how it will manage patients during emergencies.

Developing flexible organizational EOPs and community-based plans that can effectively identify and respond to sudden or gradual and sustained medical surge is remarkably difficult. Missouri hospital emergency preparedness staff has spent a considerable amount of time and effort to build realistic plans based on organizational and regional capacity. Despite this progress, ongoing work still needs to be accomplished.

The clarification of roles and responsibilities among government and private entities during catastrophic events remains somewhat unclear. The process for determining hospital actions when patient care under current standards can no longer be provided is daunting. Despite federal and peer-reviewed guidance, providers nationwide continue to struggle with these issues.

Further complicating medical surge is the challenge of managing mass fatalities. History suggests hospitals will be a location for receiving and storing many of the deceased. Yet, hospitals no longer have adequate space to convert into temporary morgue space.

**Coalitions’ Roles in Medical Surge**

- facilitate the interface between health care coalition members and relevant jurisdictions to establish support for system resiliency and medical surge
- determine triggers and provide perspective

**EMSystems® Role in Medical Surge**

EMResource®

- provides a mechanism to respond to staffing queries and communicate staffing issues and enables hospitals to communicate patient load, acuity and ability to accept patients based on triage status. The system also enables hospitals to respond to state or regional queries for patient movement and coordination during an emergency.

EMTrack®

- provides hospitals and emergency medical services the ability to track specific and aggregate patient movement from one point of care to another
Through HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- regional caches of medical and basic shelter supplies
- extensive consultation, technical support and guidance

In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with emergency preparedness planning. The following will be important next steps.

- help hospitals and statewide development of triggers for conventional, contingency and crisis surge capability
- provide additional consultative support and assistance to develop and refine organizational and regional medical surge and mass fatality plans
- evaluate the need and possible purchase of additional equipment to manage mass fatalities

**STRATEGIES FOR CONCEPTUALIZING MEDICAL SURGE**

In an effort to estimate a hospital’s medical surge capacity, MHA uses a nationally recognized framework that categorizes surge capacity into phases that can be identified with preset hospital-specific parameters. The definitions used to describe conventional, contingency and crisis capacities are as follows.

- **Conventional Capacity** — The spaces, staff and supplies used are consistent with the daily practices within the institution. These spaces and practices are used during a major mass casualty incident that triggers activation of the facility emergency operations plan.

- **Contingency Capacity** — The spaces, staff and supplies used are not consistent with daily practices but maintain or have minimal impact on usual patient care practices. These spaces or practices may be used temporarily during a major mass casualty incident or on a more sustained basis during a disaster when the demands of the incident exceed community resources.

- **Crisis Capacity** — Adaptive spaces, staff and supplies are not consistent with the usual standards of care but provide sufficient care in the setting of a catastrophic disaster.

Accomplishments and Next Steps

**2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report**

▲ 60% have identified an alternate care site to provide medical surge care while the hospital is still fully operational

▲ 72% an approved comprehensive evacuation and transport plan is included in their EOP

! 44% an approved comprehensive mass fatality plan is included in their EOP

! 53% have no morgue capacity

! 44% an approved comprehensive policy or plan that addresses mass fatality management is included in their EOP

55% are part of a larger health system that would be able to provide assets and/or accept patient transfers during a surge event

Source: 2011 MHA Emergency Preparedness Capacity Assessment
Evaluation

JOINT COMMISSION EMERGENCY MANAGEMENT STANDARDS

EM.03.01.01 The hospital evaluates the effectiveness of its emergency management planning activities.

EM.03.01.03 The hospital evaluates the effectiveness of its Emergency Operations Plan.

EMSystms® Role in Evaluation

- develop reports on EMResource® to identify, track and trend hospital response activities including incident command activation

An Emergency Operations Plan can only be effectively evaluated and improved when it has been activated. The EOP can be used to manage internal issues, such as power outages during construction activities, to conduct root cause analysis. There is no comparison to real-world emergency activation. However, well-planned and executed exercises provide meaningful assessment. Information gathered during a real-world emergency or planned exercise should be used to strengthen and refine the EOP.

The U.S. Department of Homeland Security Exercise Evaluation Program provides specific, comprehensive guidance for designing, conducting and evaluating exercises. HSEEP compliance currently is required for exercises supported with ASPR grant funds.

Real-world events, such as the H1N1 pandemic in 2009, provide opportunities to evaluate the intersection and coordination of multiple organizational EOPs. Fortunately, the pandemic impact was relatively mild and still provided the opportunity to test plans, share best practices and identify how to make improvements to prepare for the next real event.

Through HPP funds, MHA has been able to provide the following resources to Missouri hospitals.

- support at least two regional exercises each year
- provide education for HSEEP compliance
- train evaluators for exercises
Accomplishments and Next Steps

In addition to past equipment purchases and support, MHA will continue to use available HPP grant funds for Missouri hospitals to assist with evaluation of emergency preparedness planning. The following will be important next steps.

- develop three-year exercise schedules
- provide ongoing technical assistance to implement changes into hospital EOPs and regional plans identified during exercise evaluation
- continue to provide technical assistance and exercise guidance

2011 Missouri Hospital Emergency Preparedness Assessment: Hospitals Report

- From July 1, 2010, through June 30, 2011, hospitals report 351 hospital-specific and 169 community regional exercises have been conducted or scheduled.
- 95% report the development and implementation of written improvement plans based on after-action reports from either incidents or exercises.
- 78% use their after action report and improvement plans after each exercise or event to update their facility’s disaster response plan.

Source: 2011 MHA Emergency Preparedness Capacity Assessment


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Missouri Hospitals’ Emergency Preparedness: ACCOMPLISHMENTS AND NEXT STEPS