

## FY 2007 HOSPITAL PREPAREDNESS APPLICATION NARRATIVE

Submitted to:

Department of Health and Human Services Assistant Secretary for Preparedness and Response Office of Preparedness and Emergency Operations Division of National Healthcare Preparedness Programs

CFDA Number 93.889

August 6, 2007

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## Section I Summary

Texas is a large and diverse state. During the past six years, Texans have come together to build capabilities to prevent, protect against, respond to, and recover from man-made and natural disasters. In the fall of 2005, after three years of capacity building, Texas encountered Hurricanes Katrina and Rita, which required a large-scale health and medical response. These storms, occurring in tandem, required an unprecedented statewide response effort.

The mission of Department of State Health Services (DSHS) is to promote optimal health for individuals and communities while providing effective health, mental health, and substance abuse services to Texans. DSHS, along with the Department of Family and Protective Services (DFPS), the Department of Aging and Disabilities (DADS), and the Department of Assistive and Rehabilitative Services (DARS), is under the umbrella of the Texas Health and Human Services Commission (HHSC). A primary role of the Community Preparedness Section (CPS), located within the Prevention and Preparedness (PnP) Division of DSHS is to coordinate prevention, preparedness, response, and recovery activities, and to assist local jurisdictions prepare for, respond to, and recover from emergencies and disasters in a manner that will protect property and safeguard lives. Within the CPS, the Public Health Preparedness Unit (PHPU) strives to work with communities to protect residents by preparing for and responding to man-made and naturally occurring public health emergencies in Texas. Specific services include planning and implementing programs to ensure preparedness and rapid response to bioterrorism, natural epidemics, and other public health and environmental threats and emergencies through work with Local Health Departments (LHDs), Health Service Regions (HSRs), Regional Advisory Councils (RACs) hospital/health-care systems, and other state, regional and local entities.

As part of the planning process, DSHS, in working with health and medical partners, determined that a comprehensive assessment of health and medical preparedness in the state and a strategic vision were needed to help guide the agency, public health partners, and other health and medical stakeholders in preparing for future disasters. The results were used as a basis for determining objectives, strategies, and activities for the Hospital Preparedness Program. In addition to this process, a stakeholder process was initiated in February 2007 to obtain input from our preparedness partners regarding priorities for SFY 08. Meetings with stakeholders will continue as health and medical partners begin to continue work to operationalize these priorities.

For federal fiscal year (FFY) 2007, Texas will continue to use the regional approach in managing and meeting the goals of the Texas Hospital Preparedness Program (THPP). DSHS recently completed a competitive Request for Proposal (RFP) process for Hospital Preparedness Program funding for the project period beginning in FFY 07. The purpose of the RFP was to provide for the regional coordination and collaboration of preparedness activities and response planning and to enhance the ability of hospitals and supporting health-care systems to prepare for and respond to terrorism and other health-care emergencies within the Trauma Service Area (TSA) jurisdiction. As a result of this RFP process, 18 RACs and the Hospital Preparedness Council of North Texas will be awarded OASPR funds.

Texas has strengthened its health and medical response capabilities statewide due largely to federal funding. Funding from U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Health Resources and Services Administration (HRSA) helped facilitate public health preparedness and improved the ability of hospital/health-care systems and emergency medical services to provide care during a response to a disaster. Texas' response to Hurricanes Katrina

and Rita highlighted the positive aspects of the state's recent health and medical capacity building. Texas has received federal funding for the Hospital Preparedness Program (HPP) for the past five years and provided funding during SFY07 to approximately 570 participating hospital/health-care systems serving the 254 counties of Texas and a population of approximately 24 million. Great strides have been achieved over this five-year period to enhance medical surge capability showing that progress was made toward achieving the sub-capabilities referred to the HPP guidance.

During this past year, two major processes were conducted to determine the specific needs/gaps/opportunities to be addressed to achieve optimal progress toward meeting a satisfactory level of preparedness throughout Texas. First, DSHS commissioned the Litaker Group to assist DSHS in determining the current status of health and medical preparedness and to develop a strategic vision for health and medical preparedness in Texas by 2010. To determine the current status, data obtained from various sources was evaluated to determine the presence of readiness activities from calendar years 2004 through 2006 based on a framework of 26 health and medical areas. This framework was adapted from the 36 capabilities developed by the U.S. Department of Homeland Security and reported in the Target Capabilities List, Draft Version 2.0. The 26 areas assessed in this report represent functions that a health and medical response would likely need to include. An Assessment of Current Health and Medical Capabilities in Texas: A State-Level Review (Litaker 2007) documented that there is evidence of reported readiness activity for 14 of the 26 health and medical areas examined. The remaining 12 health and medical areas had minimal evidence of reported readiness activity within this same time period. This could be due to a lack of documentation or data collection, or it could be that these areas were not directly targeted for improvement during the past five years.

Outlined in the document 2010 Strategic Vision – Health and Medical Preparedness in Texas (Litaker, 2007) are the eight strategic focus areas for health and medical preparedness by 2010 in Texas. The goals of these strategic areas are: 1) Human resources. To have appropriately trained and qualified individuals available to provide medical and mental health care to Texans during and after a disaster; 2) Material resources. To have material resources available to support the health and medical needs of individuals during a disaster; 3) Persons with special needs. To provide effective, efficient, and compassionate treatment to individuals who require special accommodation or specialized care during a disaster; 4) Physical infrastructure. To have an appropriate physical infrastructure available to decontaminate, treat, and transport individuals who require medical care due to a disaster; 5) Public Information. To provide accurate, reliable, and informative public information regarding health and medical issues related to potential, imminent, or actual disasters; 6) Systems interoperability. To allow voice and data systems to effectively exchange information across multiple platforms with minimal disruption caused by a lack of interoperability; 7) Funding. To optimize the allocation and use of all financial resources to support health and medical preparedness, response, and recovery activities; and 8) Leadership and direction. To promote a positive, efficient public health preparedness program capable of meeting the health and medical needs of all Texans.

The second process included a stakeholder process to solicit input from various state, regional, and local preparedness partners to finalize a list of health and medical priority areas to be addressed during SFY 2008. The main purpose for prioritizing activities is to achieve better integration of health and medical preparedness activities. In addition, focusing efforts on a limited number of areas will allow DSHS and preparedness partners to develop specific strategies to achieve a higher level of preparedness within those areas. It was determined that this

process was not to preclude the maintenance/enhancement and sustainability of any other area, nor will it change the need to continue focusing on all activities as indicated in the public health and medical work plans. Seven priorities have been established for SFY 08: leadership and direction; community engagement and citizen participation; epidemiology surveillance and detection; behavioral health to include disaster mental health; mass care to include mass prophylaxis and mass fatality plans; medical surge and triage; and sustain and enhance traditional public health activities and deliverables. Objectives and activities within each of these priorities are being used to address the required activities for both the CDC and OASPR cooperative agreements.

In support of above health and medical preparedness goals for Texas as well as to improve surge capacity and enhance community and hospital/health-care system preparedness for public health emergencies, the overall goal of the Texas Hospital Preparedness Program for SFY 08 is to strengthen an integrated health and medical response capability statewide. This will be accomplished by: 1) addressing the activities needed to complete all level one sub-capabilities related to interoperable communications, bed tracking, Texas Disaster Volunteer System, fatality management and hospital evacuation planning; 2) supporting regional planning efforts through maintenance or enhancement of locating and supplying alternate care sites, and obtaining, storing, and mobilizing medical assets, pharmaceutical caches, personal protective and decontamination equipment; 3) fostering an integrated response environment that is National Incident Management System (NIMS) compliant; 4) encouraging and supporting integrated regional planning, education, and training efforts; 5) improving the level of preparedness and response through continual testing, exercising and evaluating of all aspects; and 6) continually involving public health and medical preparedness partners at the state, regional, and local levels, to include special interest groups such as the elderly, Tribal Nations, at-risk population, public and private entities in all planning efforts. In concurrence with HPP guidance, DSHS has determined that all level-one sub-capabilities need to be addressed to reach an optimal level of preparedness. In addition, all of the level two sub-capabilities, to include laboratory and radiological emergency preparedness will be included in the work plan activities during SFY 08 to sustain/enhance current level with the understanding that all level one sub-capabilities would be met by August 8, 2008. Since DSHS supports regional planning efforts and Texas is a diverse state with varying levels of needs and levels of preparedness, not all activities will be conducted at the same level in each trauma service area during this year. However, all trauma service area contractors will be required to report on all sub-capabilities for overall levels of preparedness.

Approximately 90% of the HPP funding identified as direct costs is allocated to contractors. The contractors sign a contract detailing the activities to be completed, applicable federal and state laws, rules and regulations, performance measures, the approved contract budget and equipment, the contract term, DSHS contract general provisions and any special provisions which amend, expand or exclude any of the contract general provisions. A contract may be amended during its term to further define and refine activities, amend the budget, add or remove equipment, or add activities and funding at the request of the contractor or DSHS. Contract requirements and performance reports are submitted to DSHS in accordance with the contract document. Once received, the requirements and reports are reviewed for format, completeness and content. Contractors are provided feedback and technical assistance regarding areas needing changes or improvement and are requested to submit revised information as needed. Once finalized, the requirement/deliverable is accepted by DSHS. The requirements and deliverables are tracked to ensure that all items due are submitted and contractors with missing

or overdue items are contacted. Failure to submit required items, including requested revisions, can place a contractor on temporary payment hold until the items are received.

The HPP contracts are subject to programmatic and financial monitoring. Programmatically, a yearly risk assessment determines the contractors who will receive an onsite quality assurance visit to assess programmatic activities and progress toward meeting performance measures using a standard on-site monitoring tool. Additionally, desk reviews may be conducted to augment on-site monitoring or seek further information about reported or suspected issues. Financially, DSHS Contract Oversight and Support conduct a yearly agencywide financial risk assessment to prioritize financial reviews of contracts, including HPP contracts. Reviews of HPP contractors may also be requested based on questions or reports coming from the program. Each sub-recipient contractor is subject to periodic review by both state and federal auditors.

DSHS program staff ensures that Hospital Preparedness Program activities meet any related federal and state requirements, the program cooperative agreement guidance, and DSHS agency guidelines. Processes have been developed and implemented to evaluate the program to ensure key activities are completed within the specified time frame. Database systems are in place to collect and analyze quantitative information submitted by the contractors. State level performance trends are determined by assessing this information in combination with submitted narratives outlining any issues and concerns expressed by the contractors. Strategies to improve performance are then determined and technical assistance is given to the contractors if needed. The Public Health Preparedness Unit's Community and Regional Coordination Branch serves as a liaison between DSHS, the regions, public health, and health system partners to address priority concerns and provide advanced consultative and technical assistance services as needed. These program staff members assist with coordination of regional and local resources to support the achievement of targeted outcomes as specified in the guidance.

### Section II Applicant Organization

Texas is a large and diverse state. During the past six years, Texans have come together to build capabilities to prevent, protect against, respond to, and recover from man-made and natural disasters. In the fall of 2005, after three years of capacity building, Texas encountered Hurricanes Katrina and Rita, which required a large-scale health and medical response These storms, occurring in tandem, required an unprecedented statewide response effort.

Since 2002, Texas has received funding from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Health Resources and Services Administration (HRSA) to augment health and medical capacity building at the local, regional, and state level. As the coordinator for public health preparedness in Texas, the Department of State Health Services (DSHS) is responsible for administering funding to the local level and for providing strategic leadership related to public health preparedness, bioterrorism, epidemics, and other public health threats and emergencies in Texas.

The mission of DSHS is to promote optimal health for individuals and communities while providing effective health, mental health, and substance abuse services to Texans. DSHS, along with the Department of Family and Protective Services (DFPS), the Department of Aging and Disabilities (DADS), and the Department of Assistive and Rehabilitative Services (DARS), is under the umbrella of the Texas Health and Human Services Commission (HHSC). Within DSHS there are five divisions: Regulatory Services, Mental Health and Substance Abuse Services, Family and Community Health Services, Regional and Local Services, and Prevention and Preparedness Services (Appendix B – Organizational Chart – DSHS).

In addition to the DSHS Central Office in Austin, DSHS has 11 Health Service Regions (HSR) with offices located in Lubbock (HSR 1), Arlington (HSR 2 and 3), Tyler (HSR 4 and 5N), Houston (HSR 5S and 6), Temple (HSR 7), San Antonio (HSR 8), El Paso (HSR 9 and 10), and Harlingen (HSR 11) (Appendix B – Map of Health Service Regions). The regions serve Texans by providing needed services close to where people live and alleviating duplication of effort and waste that can occur when service delivery is not coordinated within a specific area. Of the state's 24 million people, 25 percent are not served by any local health department (LHD). Therefore, a physician with expertise in both medicine and public health heads each health service region and, along with regional staff, provides local public health services for counties that do not have a LHD. Regional staff also assists in building and maintaining capacity in essential public health services to include providing direction and coordination for public health preparedness activities within their regions.

A primary role of the Community Preparedness Section (CPS), located within the Prevention and Preparedness (PnP) Division of DSHS, is to coordinate prevention, preparedness, response, and recovery activities, and to assist local jurisdictions prepare for, respond to, and recover from emergencies and disasters in a manner that will protect property and safeguard lives. Within the CPS, the Public Health Preparedness Unit (PHPU) strives to protect citizens by preparing for and and responding to manmade and naturally occurring public health emergencies in Texas. Specific services include planning and implementing programs to ensure preparedness and rapid response to bioterrorism, natural epidemics, and other public health and environmental threats and emergencies through work with LHDs, HSRs, RACs hospital/health-care systems, and other state, regional and local entities. **Decision-Making Authority and Organizational Structure.** Reporting to the Commissioner of DSHS, the Assistant Commissioner for Prevention and Preparedness (PnP) has responsibility for the execution of the majority of health and medical preparedness activities within DSHS. Under the direction of the Assistant Commissioner, the Director of the Community Preparedness Section supervises three areas: the Public Health Preparedness Unit (PHPU), the Infectious Disease Control Unit (IDCU), and the Strategic Preparedness Branch. There are approximately 60 personnel who report to the Director of the Public Health Preparedness Unit. In order to enhance the full spectrum of preparedness and disaster response activities required to integrate the coordination and planning efforts, the PHPU completed a reorganization in the fall of 2006. There are four branches within the PHPU: the Development and Evaluation Branch; the Emergency Preparedness and Response Branch; and two Community and Regional Coordination Branches.

The Development and Evaluation Branch serves as the unit liaison with the PnP Contract Management Unit (CMU); conducts Quality Assurance activities with contractors receiving federal preparedness funds; coordinates budgets and monitors expenditures; and conducts programmatic management to include establishing and tracking of performance measures which provides an overview of current preparedness level status and gaps. The Emergency Preparedness and Response Branch is responsible for coordinating with federal, state, and other stakeholders on state health and medical all hazards preparedness, response, and recovery activities. They develop policies and procedures for and write the health and medical portions of the State Emergency Management Plan, develop policies and procedures for the HHSC Enterprise Multi-Agency Coordination Center (MACC), coordinate statewide health and medical exercises, review local and regional exercise after-action reports and corrective action plans, and develop and implement strategic plans for health and medical preparedness workforce development. Critical Incident Stress Management and Crisis Counseling at the local level are offered through this branch as well as radiological preparedness operations. The two Community and Regional Coordination Branches' primary responsibilities include continuously working with regional and local governments to facilitate and further the concepts of integration of planning, preparedness activities and the leveraging of funds to achieve the highest level of preparedness possible at the regional and local level. They research and synthesize all available assessment data to determine regional and local level preparedness levels and potential gaps, make recommendations on how any issues can be corrected, and identify best practices to share with critical preparedness partners; and provide support for regional health and medical leadership to coordinate with local partners. These branches also provide disaster mental health preparedness activities and crisis counseling services.

Coordination with staff from other areas within PnP Division ensures access to the resources and experience necessary to provide rapid and effective use of resources needed to conduct comprehensive preparedness activities. In addition to PHPU, the Strategic Preparedness Branch in the Community Preparedness Section researches trends and best practices; provides subject matter expertise on health and medical preparedness and infectious disease; makes policy recommendations; informs strategic direction of health and medical activities; and provides as scientific expertise for the CPS. The Infectious Disease Control Unit (IDCU) is responsible for assisting local or regional public health officials in investigating outbreaks of acute infectious disease or any report of isolated cases of rare or unusual disease, such as plague, cholera, or botulism. The program conducts routine and special morbidity surveillance of diseases designated by the Board of Health as reportable.

Under the direction of the Assistant Commissioner for the PnP Division, the Laboratory Services Section provides comprehensive laboratory services for human, animal, and environmental specimens to include testing diagnostic/infectious agent samples and provides professional expertise and consultation. The Pharmacy Section assists in ordering of antiviral and pharmaceutical caches. The Public Health Information Network (PHIN) ensures that all local health departments and other entities have access to the technology needed for rapid communications, disease reporting, and the dissemination of preparedness education and training. Lastly, the Contract Management Unit is responsible for executing, managing, and monitoring contracts for services to include those for preparedness activities.

Other areas within DSHS significantly contribute to preparedness activities. The Office of Border Health promotes and protects the health of border residents by reducing community and environmental health hazards along the Texas-Mexico border, in collaboration with communities and U.S. and Mexican local, state, and federal entities. Under the direction of the Regulatory Services Division, EMS/Trauma Systems regulate Emergency Medical Services (EMS) and trauma systems in Texas by facilitating development, implementation, and evaluation of 22 regional systems identified as Trauma Service Areas (TSAs) (Appendix B – map of TSAs) that integrate into a statewide system and designate trauma facilities at four levels. The Radiation Control Program is also within the Division for Regulatory Services. Its mission is to protect and promote the physical and environmental health of the people of Texas by preventing unnecessary radiation exposure to the public through effective licensing, registration, inspection, enforcement, and emergency response. Radiological Preparedness Operations staff, under the Emergency Preparedness and Response Branch, interacts with this group on a continual basis. The Mental Health and Substance Abuse Division is an integral part of the State's response to assist local governments with disaster mental health needs after a disaster. Combining the urgency of disaster communication with the need to communicate risks and benefits to stakeholders and the public is under the responsibility of the Office of Risk Communications. As stated above, staff located within the regions also support preparedness activities. It is also the expectation that most of the DSHS staff and some of the HHSC enterprise staff will be available to respond during an emergency.

**Strategic Vision for health and medical preparedness.** As part of the planning process, DSHS, working with health and medical partners, determined that a comprehensive assessment of health and medical preparedness in the state and a strategic vision were needed to help guide the agency, public health partners, and other health and medical stakeholders in preparing for future disasters. Through a competitive bidding process, DSHS commissioned in May 2006 the Litaker Group, an Austin-based research consulting firm, to conduct this assessment and to develop the 2010 strategic vision for health and medical preparedness. This process contained four phases: determination of current health and medical capacity; determination of future health and medical capacity; development of a strategic vision for 2010; and development of an implementation plan for DSHS.

Phase I included obtaining, classifying, and assessing over 700 documents from LHD, RACs, and Councils of Governments (COGs) to include review and assessment of data from DSHS LHD quarterly reports and the *2005 Hospital Bioterrorism Survey* (Litaker 2005). In addition, information on current levels of preparedness and brainstorming for what level of preparedness should be in place by 2010 was obtained from over 400 participants at 19 workgroup sessions held throughout Texas. Information was assessed from all collected data to

determine the current capacity for each of 26 health and medical capabilities. In-depth reports describing current capacities for each of 26 health and medical capabilities for each DSHS health service region was created and, from these documents, a state-level overview was developed, describing current capacities for each of 26 health and medical capabilities. Phase II used the information obtained from the 400 participants to develop a thematic matrix of all proposed preparedness ideas to be used in developing the strategic vision. The "2010 Strategic Vision – Health and Medical Preparedness in Texas" was developed in Phase III and is currently in the final approval stage. This document includes an overall vision and specific goals to be attained by the year 2010. Phase IV created specific strategies and suggested activities to support goals outlined in the strategic vision and have been presented to PHPU staff for use.

Stakeholder Involvement. DSHS involves stakeholders at various levels of state, regional, and local levels as well as requires contractors who work on the project to include stakeholders as outlined below. The DSHS Emergency Preparedness and Response Steering Committee serves as a planning and coordination committee regarding health and medical roles and responsibilities in Texas. Members of this committee include the DSHS Associate Commissioners, Deputy Commissioner, Chief Operating Officer, Chief Financial Officer, the State Epidemiologist, and the Assistant Commissioners from the five Divisions of DSHS (prevention and preparedness, regulatory, family and community health, regional and local health, and mental health and substance abuse), as well as an intra-governmental Liaison. This committee provides the agency a forum for discussing and remaining up to date on preparedness and response activities. The Preparedness Coordinating Council (PCC) was established as the DSHS Commissioner's statewide preparedness advisory committee as the result of state and federal recommendations and guidelines. The purpose of the PCC is cited in Appendix 6 to Annex H of the State of Texas Emergency Management Plan: The PCC provides supplemental preparedness assistance and advice. The Council will facilitate the development and implementation of training and awareness campaigns, programs to ensure that Texans involved in bioterrorism response and recovery operations understand their roles and responsibilities, and operating guidelines for integrating the private sector in response activities. The PCC currently includes representatives from the Texas Hospital Association, the Governor's Division of Emergency Management, the Governor's EMS and Trauma Advisory Council (GETAC), the Eagle Pass Fire Department, the Texas Society of Infection Control Practitioners, the Texas Medical Association, the National Association of Social Workers, the Texas Nurses Association, the Texas Tech University Health Sciences Center, the Texas Association of Local Health Officials, the Texas Army National Guard, the University of Texas Health Science Center at San Antonio, the Texas Association of Regional Councils (TARC), and the Texas American Indian Information and Resource Network. The PCC meets quarterly to discuss issues and concerns and provide advice to DSHS regarding health and medical preparedness. The PCC also oversees three workgroups: the Connectivity Work Group, which serves as the official advisory group for the implementation of Texas ESAR-VHP; the Pharmaceutical Blue Ribbon Task Force, which serves to integrate/coordinate public/private sectors for the enhanced delivery of pharmaceuticals, medical supplies and needed equipment during disaster response; and the most recent subcommittee, the Pandemic Influenza Subcommittee, which is the advisory group that will provide DSHS assistance in developing policies and procedures for response to a possible pandemic.

The Public Health Preparedness Unit (PHPU) acts as the DSHS point of coordination with state and federal agencies with the goal for integration of health and medical preparedness, response, and recovery activities. PHPU participates in federal planning meetings with the Governor's Division of Emergency Management and other state agencies to include ongoing discussions on the needs of the state during a major hurricane response. PHPU participates in a bimonthly conference call with the Department of Health and Human Services regional office and the five state preparedness directors from the HHS Region VI states. In addition, they participate in numerous meetings of work groups with other state agencies, volunteer organizations, and private business partners to continuously update preparedness activities within the state. PHPU is an active member of the Texas, Oklahoma, Louisiana, Arkansas, and New Mexico (TALON) Coalition that meets through quarterly conference calls, periodic meetings, and an annual workshop to further collaboration and coordination of regional partnerships and interstate preparedness activities.

A stakeholder process to determine health and medical priorities for the state fiscal year 2008 began in February 2007. The purpose of the meetings was to bring health and medical preparedness stakeholders together to share information and to provide an opportunity for input and dialogue regarding several topics, including: SFY 08 cooperative agreements from Center for Disease Control and Prevention (CDC) and the Office of Assistant Secretary for Preparedness and Response (OASPR); SFY 08 application development; the competitive process for Texas Hospital Preparedness Program (THPP) SFY 08 funds; and the state match requirement in the recently passed Pandemic and All Hazards Preparedness Act (PAHPA). Several meetings have occurred since that initial meeting for the purpose of including regional and local preparedness partners in the development of state-level priorities and to provide input into the development of both CDC and OASPR applications. Seven priorities have been established for SFY 08. These include: leadership and direction; community engagement and citizen participation; epidemiology surveillance and detection; behavioral health to include disaster mental health; mass care to include mass prophylaxis and mass fatality plans; medical surge and triage; and sustaining and enhancing traditional public health activities and deliverables. Objectives and activities within each of these priorities are being used to address some of the required activities in both the CDC and OASPR cooperative agreements. Meetings with stakeholders will continue as health and medical partners begin to operationalize these priorities.

**Texas Hospital Preparedness Program (THPP).** As might be expected, the larger metropolitan areas of Texas contain the largest concentrations of medical capability and capacity, leaving access to trauma care in the rural and frontier areas of the state generally time intensive and, in many instances, difficult to obtain. In many rural counties, it is not uncommon for ambulances to take 90 minutes or more to transport a patient to a facility with an emergency room. The distances between rural hospitals and their relatively small size (the average size of a Texas hospital is fewer than 50 beds) makes creating surge capacity statewide challenging. To help address these limitations, for the past five years DSHS has used a regional approach to meet the goals of the HPP.

In 1989, Texas developed and implemented a statewide emergency medical service (EMS) and trauma care system, designated trauma facilities, and developed a trauma registry. The Texas Board of Health adopted rules for implementation of the trauma system in 1992. These rules divided the state into 22 regions called trauma service areas (TSAs) and provided for

the formation of a Regional Advisory Council (RAC) in each region to develop and implement a regional trauma system. These non-profit entities coordinate planning for emergency services in each TSA. In the past, DSHS has established through a competitive process contracts with the RACs and Dallas/Fort Worth Hospital Council to coordinate health and medical emergency response efforts in each of the TSAs.

For federal fiscal year (FFY) 2007, Texas will continue to use the regional approach in managing and meeting the goals of the THPP. DSHS has recently completed a competitive Request for Proposal (RFP) process for Hospital Preparedness Program funding for the project period beginning in FFY 07. The purpose of the RFP was to provide for the regional coordination and collaboration of preparedness activities and response planning and to enhance the ability of hospitals and supporting health care systems to prepare for and respond to terrorism and other health-care emergencies within the TSA jurisdiction. As a result of this RFP process, 19 TSA contractors will be awarded OASPR funds. Three contractors will each cover 2 TSAs.

Each of the TSA contractors has a hospital planning group/steering committee with representation from local hospitals/health-care systems and other response partners in their respective TSAs. Over the past five years, most hospitals/health-care systems have moved from separate entities having their own internal emergency plan to a coordinated regional planning and response effort. These TSA hospital planning groups have expanded their efforts in reviewing, sharing, and coordinating emergency operations plans with the broader response community and regional partners. For SFY 08, the THPP requires each TSA contractor to establish a steering committee within its TSA jurisdictions. These committees will be an expansion of the hospital planning groups and will include additional partners representing emergency management, law enforcement, fire department, EMS, public health, COGs, and the private sector. Coordination will be conducted in accordance with the Texas Homeland Security Strategic Plan and the tiered response outlined in the Medical Surge Capacity and Capability (MSCC) Management System Handbook. Preparedness and planning efforts will be based on local and regional Hazard Vulnerability Analysis (HVA) and the level of threat or risk that is probable in relation to hospitals/health-care systems and HHS regions. Regional contractors will ensure that public health departments, in conjunction with hospitals/health-care systems and other health-care entities, law enforcement, and other first responders, engage in active planning and information-sharing around HVAs that have been conducted to ensure that response plans are in accordance with identified and predictable scenarios.

## Section III Current Status of Sub-capabilities

Texas strengthened its health and medical response capabilities statewide due largely to federal funding. Funding from CDC and HRSA helped facilitate public health and medical preparedness and improved the ability of hospital/health-care systems and emergency medical services to provide care during a disaster. Texas' response to Hurricanes Katrina and Rita highlighted the positive aspects of the state's recent health and medical capacity building (Litaker, 2007).

<u>Level One Sub-Capabilities.</u> Texas received federal funding for the Hospital Preparedness Program (HPP) for the past five years and provided funding during SFY07 to approximately 570 participating hospital/health-care systems serving the 254 counties of Texas and a population of approximately 24 million. Great strides have been achieved over this fiveyear period to develop medical surge capability, demonstrating that progress was made toward achieving the sub-capabilities referred to the HPP guidance.

**Interoperable Communications.** This capability encompasses the ability to use equipment and systems to exchange information with one another during all phases of an emergency response. It also encompasses the ability to ensure appropriate intra- and inter-agency communication. In Texas, health and medical responders have communication equipment available to use in an emergency situation. Over the past five years, the Trauma Service Area (TSA) contractors have been working to provide interoperable communication systems within their HPP-participating hospital regions. This has included work towards the attainment of Level-4 radio communications interoperability within their jurisdictions, as well as work towards utilization of emergency management software. Communication systems purchased within the TSAs include ham radios, virtual private networks, hand-held radios, fiber optics, satellite phones, and Health Alert Network (HAN) equipment. As indicated in the mid-year report, of the approximately 570 participating hospital/health-care systems statewide, 83 percent have redundant communication systems that can communicate with public health; 84 percent can communicate with local emergency operations centers; 88 percent can communicate with EMS; 87 percent can communicate with law enforcement agencies, and 84 percent can communicate with emergency management agencies. Other sections of this application contain detailed descriptions of the statewide deployment of EMSystem<sup>®</sup>, used for communication regarding hospital ER status and diversion as well as health and medical volunteer credentialing. DSHS also purchased and is implementing the WebEOC<sup>®</sup> system statewide as another major system for statewide communication. This emergency management software is available at DSHS, LHDs, RACs, and emergency operations centers across the state. The statewide WebEOC® project allows Texas hospitals access to WebEOC<sup>®</sup> and provides dual connectivity to the TSA contractors and the emergency operations centers.

**Bed Tracking System.** Over the past two years, DSHS procured EMSystem<sup>®</sup> with HPP funds to provide all hospital/health-care systems with the capability to communicate real-time status of all regional emergency resources to support informed patient transport decisions and prepare for incoming patients. During mass casualty incidents, hospital capacity is queried by

triage category and inpatient bed capacity. Secure, redundant servers are reliably accessed 24/7, providing an excellent communication infrastructure for emergency management personnel, acute health-care providers, and public health officials. The State of Texas has 23 EMSystem<sup>®</sup> administrators with the ability to create an alert to hospital/health-care systems around the state and to access hospital HAvBED data during a large-scale public health disaster. The primary administrator for this system in Texas is the Public Health Information Network (PHIN) Program. Currently, 524 of the approximately 570 HPP-participating hospital/health-care systems have a system capable of reporting bed categories that are consistent with HAvBED requirements/definitions (including the hospital name, contact name, street address, city, state, zip code, area code, local telephone number and county) by direct entry to EMSystem<sup>®</sup> or WebEOC<sup>®</sup>. During a disaster the DSHS MACC can access the hospital bed capacity data within 60 minutes of an event. Hospital/health-care systems can report updates as needed during emergencies, when requested by DSHS MACC and the TSA regional  $EMSystem^{\textcircled{R}}$ administrators. The EMSystem<sup>®</sup> module for bed tracking uses the HAvBED definitions and other hospital identifying information. This system was exercised during floods that occurred in 51 Texas counties during June and July 2007. The DSHS MACC staff obtained the number of available hospital beds using EMSystem<sup>®</sup> and was able to report the number to the Governor's Division of Emergency Management (GDEM).

**Emergency Systems for Advance Registration of Volunteer Health Professionals** (ESAR-VHP). Since 2004, DSHS has worked collaboratively with key statewide medical and health-care partners to build the foundation for a Texas ESAR-VHP. These key partners include the following: (1) for physicians, the Texas State Board of Medical Examiners, the Texas Medical Association, and the Texas Osteopathic Medical Association; (2) for nurses, the Texas Board of Nurse Examiners and the Texas Nurses Association; (3) for pharmacists, the Texas Board of Pharmacy and the Texas Pharmacy Association; (4) for social workers, the Texas Chapter of the National Association of Social Workers; (5) the Texas Military Forces, including the Texas Medical Rangers (now called the Texas Medical Brigade); and (6) the licensing boards, regulated by DSHS, for social workers, Emergency Medical Technicians (EMTs) and paramedics, family and marriage therapists, and professional licensed counselors. In April 2007, DSHS procured EMCredential, the EMSystem<sup>®</sup> volunteer management tool, to provide the technological support for the Texas Web-based system. The Texas Disaster Volunteer Registry when fully operational, will be available to all local jurisdictions through their local health department, the DSHS Health Service Regions, or emergency operations centers. EMCredential<sup>®</sup> is currently in the process of engineering linkages to each of these entities' databases, in order to provide real-time verification of professional licensure. In addition, EMCredential is currently engineering linkages with national credentialing entities, such as the American Board of Medical Specialties, to validate medical-related credentials and establish the NIMS-compliant resource typing function for physicians and other disciplines. DSHS worked with SUMA/Orchard Social Marketing; the Connectivity Work Group, which serves as the official Texas ESAR-VHP advisory council; and key partners to develop recruitment materials. The Texas Disaster Volunteer Registry will be built in phases, with Phase One now in progress. Per federal requirements and lessons learned from experiences with Hurricanes Katrina and Rita, DSHS identified the following key professions for Phase One: physicians and physician assistants; registered nurses, licensed vocational nurses, and nurse practitioners; pharmacists;

EMTs and paramedics; social workers, and marriage and family therapists, and licensed professional counselors. Phase One will include the "beta testing" of the registry's licensure, credentialing, and recruitment efforts with state-level partners. Phase Two will begin following the implementation of Phase One objectives and will include the expansion of the registry to include additional disciplines, per federal ESAR-VHP guidelines, and the implementation of the registry on local and regional levels.

**Fatality Management Plans.** From a health and medical perspective, fatality management is the management of deceased individuals during and after a disaster. Available evidence suggests that some areas of the state have agreements with vendors to provide refrigeration trucks, and that ice rinks have been considered as temporary storage places for corpses. One DSHS HSR reported having a fatality management plan in place but has not tested it. Currently, DSHS is having ongoing discussions with the Texas Funeral Service Commission to develop plans to handle mass fatalities associated with pandemic influenza (Litaker 2007) and other mass casualty events. On the local level, most after-needs assessments have concluded that mass fatality management is an issue that needs to be addressed at the regional level, since many hospital/health-care systems do not have the resources to independently respond to such an event. Many Trauma Service Areas (TSAs) are currently working with their regional partners, such as local emergency management officials and funeral directors, to plan from a multi-disciplinary, region-wide prospective. Some TSAs have purchased caches of body bags for their hospital/health-care systems and made arrangements with local retailers for the use of refrigerated trucks.

Hospital Evacuation Plans. Trauma Service Area RACs report that 97 percent of the HPP-participating hospital/health-care systems have evacuation plans that meet requirements set out by The Joint Commission, formerly known as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Texas has a variety of hazards that do not necessarily affect all hospital/health-care systems in the same manner. For example, hospital/health-care systems located in the Texas Panhandle do not have the same evacuation issues of hospital/health-care systems built in hurricane surge zones, along the Gulf Coast. Hospital evacuation plans vary from the use of hospital parking lots, to moving patients over a long distance to another city. Most hospitals have effective plans, however, in the coastal region, evacuations of entire hospitals to another city present special challenges. In the coastal region known as TSA R (Galveston), there are a total of 19 participating hospital/health-care systems. Eighteen of these participating hospital/health-care systems have enhanced their evacuation plans. Of those, 15 have an alternate evacuation site already identified. Sixty-eight percent of the participating hospital/health-care systems within this region report they have the resources needed to carry out their evacuation plan. One innovative approach to hospital evacuation is in place in Beaumont, Texas, where Christus St. Elizabeth Beaumont Hospital used hospital preparedness funds to acquire special transport facilities for critical-care patients. The hospital constructed a 12-patient transport module from a regular shipping container that was transformed into an air-conditioned, 12-patient care unit. The module is lifted onto a flatbed trailer and hauled like a regular container. During evacuations, critical patients can be loaded into the module, along with caregivers, and transported to safety with minimal disruption of care and minimal stress on the patient. During SFY 07, DSHS adopted new state rules for hospitals that required increased planning for catastrophic events. These rules require HFPA-99 compliance and also require

hospitals to better plan for patient evacuation to include transferring patient medical records and staff to accompany patients to their evacuating destination. DSHS is collaborating with the Texas Hospital Association, hospitals, and RACs to develop procedures for movement of patients when a hospital's local plan fails or transportation assets become unavailable. Recently, DSHS conducted a survey of the hospitals that would be most impacted by a Category 4 or 5 hurricane. Only nine of the smaller hospitals in the impact areas indicated that no hospital- to-hospital destination agreement was in place. The survey also requested gaps in transportation assets available for patient evacuation. To address those transportation gaps, DSHS has signed Memoranda of Understandings (MOUs) with 160 ambulances, and PHPU is currently working on MOUs with the State of Oklahoma to provide an additional 200 ambulances. The Governor's Division of Emergency Management has contracted with commercial buses to move citizens during a hurricane evacuation. Fifty to 100 of these buses have been identified for movement of ambulatory hospital patients, long-term-care customers, and home-bound individuals. DSHS has purchased medical supplies and equipment for use on the buses during movement. PHPU is currently in the process of developing MOUs for emergency medical technicians and nurses to staff these buses.

<u>Level Two sub-Capabilities</u>. Over the past five years, the TSA contractors have been able to address and meet most of the identified level two sub-capabilities performance measures. In addition, Texas added two additional areas for consideration: laboratory capacity and radiological emergency preparedness.

Alternate Care Sites (ACS). Appropriate physical infrastructure must be in place at locations expected to support patient care activities during surge conditions. This includes consideration for acute and long-term-care facilities, medical shelters, reception/triage centers, areas requiring decontamination, and methods for patient transportation. Alternative-care site development was added to the HPP activities in SFY 07. TSA contractors have been working in collaboration with local hospital planning groups and local and regional health departments to identify alternative care sites around the state. Many member hospital/health-care systems in association with local response partners, including public health and school systems, have identified temporary alternate-care sites to continue care of patients when facility evacuations have been ordered. Sites include city and county buildings and buildings located at college campuses. Rural area hospital/health-care systems have partnered with community centers, churches, and schools to pre-identify possible alternate care sites.

**Mobile Medical Assets.** Material resources are needed to provide medical care during a disaster. Such resources may range from basic medical supplies (e.g., bandages and over-the-counter medications) to durable medical equipment. Similarly, these resources must be available in the right quantity at the right place and at the right time. For material resources to be available, coordination, pre-planning, and logistical management are required. Medical-supplies management and distribution involves procuring and maintaining pharmaceuticals and medical supplies prior to an incident and obtaining additional supplies during an incident, if needed. It also involves transporting, distributing, and tracking pharmaceuticals and medical supplies during an incident. Findings indicate that Texas has capacity in place to obtain and distribute medical supplies. Local jurisdictions have MOUs in place to share supplies during a disaster. Hospitals that are subsidiaries of larger hospital networks can tap parent company resources

during an emergency. As reported by work group participants for the Litaker assessment, some hospitals also have contracts with medical supply wholesalers and distributors to acquire supplies during an emergency. DSHS has contracts in place with medical supply companies such as McKesson Drug, Inc. that will be able to provide us with supplies and medicines within 24 hours of request. In addition, the State of Texas is in the process of signing contingency contracts with medical supply business partners to provide oxygen supplies and medical equipment and supplies for use during catastrophic evacuations. DSHS recently purchased shelter packs that will provide basic medical supplies for use with medical special-needs persons in shelters.

Pharmaceutical Caches. In the event of a large-scale bioterrorism or pandemic event, it is crucial that the loss of health-care personnel be minimal to none, as hospital/health-care system staff and hospital-based emergency first responders will be needed to treat those affected by the event and maintain hospital surge capacity. Therefore, it is imperative that these individuals receive prophylactic medication as soon as possible after the threat is realized. A forward-placed pharmaceutical cache within each hospital/health-care system would most effectively meet this need. At present, only 54 percent of the hospital/health-care systems in Texas have access to a pharmaceutical cache sufficient to provide prophylaxis to hospital/healthcare system staff and their family members for a 72-hour time period. However, DSHS recently purchased a \$1.2 million cache (2.4 million 3-day courses) of prophylactic medication to be distributed to the remaining 46 percent of the hospital/health-care systems without access to a cache. In addition, the State will purchase in SFY08 \$10 million of antivirals for use during a pandemic. Local governments, organizations, state agencies, and hospitals have also been offered the opportunity to purchase antivirals through the HHS subsidized purchase offered in FY 07. Several local governments and agencies have taken advantage of this opportunity. A total of \$2.55 million has been or is in the process of being purchased.

**Personal Protective Equipment (PPE).** First responders must be protected from injury or harm during a disaster response. A primary measure of preparedness for responder health and safety is the availability of PPE; however, PPE availability for first responders in Texas varies. Hospital/health-care systems provide PPE to their employees, while city and county governments provide PPE to emergency response staff and EMS employees. Work group participants reported during the assessment of current preparedness levels (Litaker 2007) that most urban departments have adequately outfitted their staff members with appropriate PPE, but that volunteer and rural departments often lack funds to purchase even basic PPE. Based upon the most recent report from TSA contractors, 86 percent of participating hospital/health-care systems has appropriate PPE for staff and volunteers, and 74 percent have written plans in place for disseminating PPE to essential staff. Many TSA regions have developed regional plans and purchased supplies of masks, gowns, etc., and purchased equipment such as mobile contamination trailers that will be used to enhance hospital/facility capability within a TSA region. DSHS is purchasing some PPE for HHSC Enterprise employees for use during a pandemic event.

**Decontamination.** Over the past five years, as required by previous hospital preparedness guidance, the Priority Area 2 - Surge Capacity which includes the minimal level of readiness for decontamination #2.7 is defined as maintaining sufficient numbers of portable or fixed decontamination systems exist for managing adult and pediatric patients as well as health-care personnel exposed during a chemical, biological, radiological, or explosive incident. In

Texas, a total of 30,388 ambulatory and non-ambulatory persons can be decontaminated within a three-hour period. In two areas of the state with large population centers – Houston and Dallas – the minimal level of readiness increased over the past five years. In East Texas, the Trauma Service Area (TSA) Q includes the city of Houston, where a total of 3,087 ambulatory persons and 1,050 non-ambulatory persons can be decontaminated within a three-hour period. In North Texas TSA E, where Dallas is located, 6,448 ambulatory and 2,524 non-ambulatory persons can be decontaminated within a three-hour period. Participating hospital/health-care systems have practiced setup and use of the decontamination equipment available at their facilities every six months.

**Laboratory Capacity**. The DSHS laboratory, the Texas Laboratory Response Network (LRN) laboratories, and Texas hospital laboratories continue to strengthen their partnerships and work together in providing training and education programs for laboratorians. The DSHS Laboratory Services Section and the Texas LRN laboratories have trained 331 hospital/health-care system personnel from 110 hospital laboratories on sentinel LRN protocols and proper specimen collection, packaging, and shipping of diagnostic and infectious specimens. Ten Texas LRN personnel have become certified trainers for infectious goods packaging and shipping, allowing hospital laboratory personnel greater opportunities to access this training. An assessment tool was developed to measure the proficiency of the sentinel laboratories in adherence to LRN protocols for rule out testing and proper specimen packaging and shipping. The number of these biannual proficiency tests increased to 460, with approximately 70 percent participation. In addition, DSHS personnel, in conjunction with Texas LRN personnel, have conducted 51 hospital laboratory site visits in order to access training needed for meeting preparedness goals.

**Radiological Emergency Preparedness.** Over the past five years the Radiological Emergency Preparedness Program primarily focused on minimizing the effects of catastrophic exposure of radiation as well as limiting the effects of all radiological disasters on the population of Texas. This is being accomplished by maintaining the existing state-owned radiological detection equipment currently issued to local emergency responders and health-care providers and by providing and/or supporting various radiological training and exercises to all local emergency responders and health-care providers throughout Texas. During the past 15 months, 43 courses for 901 students and more than 1,252 state-owned radiation detection instruments have been provided to and maintained for local emergency responders and health-care providers. In addition, during SFY 07, DSHS provided training to hospitals on radiological response and decontamination procedures.

<u>Over-arching Sub-Capabilities</u>. Each of the following sub-capabilities has been incorporated into the development and maintenance of all HPP activities.

**NIMS.** Hospital/health-care systems are in a two-year phase-in process to comply with local emergency planning NIMS-compliant activities. Hospital/health-care systems have until September 30, 2007, to comply with four of the NIMS Implementation Activities (IAs), #7, #9, #10, and #11. Based upon the most recent report from TSA contractors, 85 percent of participating hospital/health-care systems have emergency operating plans that incorporate

NIMS-compliant principles and policies (IA 7. A letter assuring OASPR that all hospital/healthcare systems will be in compliance by September 30, 2007, is included in Appendix C.

Education and Preparedness Training. Training is the ability to educate and prepare individuals to respond to an emergency. Throughout Texas, findings suggest that both the public and private sectors have embraced the need to train employees on how to respond to all-hazards emergencies. Training is available in different parts of the state year round and is often coordinated among several entities within a region (e.g., independent school districts, LHDs, hospitals, RACs, emergency management). Recent training sessions have included the following: Basic and Advanced Disaster Life Support; Biological response; Evacuation; Hazmat; Hospital Incident Command System (HICS); Incident Command System (ICS); Mass care; Mass prophylaxis; National Incident Management System (NIMS); and public health leadership training. The focus of the education and training efforts involves providing local hospital/healthcare system staff with the funds to prepare and attend these preparedness activities, workshops, and conferences that pertain to any sub-capability. Texas hospitals are providing competencybased training to appropriate hospital/health-care system personnel on how to respond to bioterrorism incidents and other public health threats. Many TSA contractors also have developed education and training plans. During SFY 07, training related to pandemic influenza was conducted throughout the state. TSA contractors and hospital staff have been made aware of the training opportunities and have attended.

**Exercises, Evaluation and Corrective Actions.** In addition to the numerous capacity and capability building activities conducted within each TSA, funding for various exercise activities was expanded to test capacities/sub-capabilities and to assess current levels of preparedness. Exercise activities and types included planning, training, tabletop exercises, drills, seminars, functional exercises, and full-scale exercises. After-action reviews (AARs), conducted after each exercise, documented the findings of the exercise and provided the feedback required to initiate modifications to the applicable planning and response plans. Based upon the most recent reports submitted by the TSA contractors, 95 percent of participating hospital/health-care systems can demonstrate redundant communication; 73 percent have exercised an ICS component; 88 percent can test and verify internal and external communications systems at least once per month; and 67 percent have conducted and/or participated in at least two exercises. During SFY 07 each hospital was required to conduct or participate in two exercises; one to test internal processes within their hospital and one to test processes/procedures with an external stakeholder, such as a LHD, HSR, or their local emergency management.

**Needs of At-Risk Populations.** At-risk individuals are a significant consideration during any preparedness, response, and recovery activity. Some TSA regions report progress in identifying at-risk individuals and including the individuals' unique considerations in the plan development process. Some hospital/health-care systems are proactive in their coordination with area partners such as emergency management (for medical special-needs shelters), clinics, and mental health facilities. Public health and emergency management officials already address special-needs populations in their respective plans and standard operating guidelines, and the definition of special needs in either arena is more extensive than it is for the purposes of this contract. Hospital/health-care systems should, therefore, partner with these other two disciplines and integrate response plans. During SFY 06, DSHS, in preparation for hurricane evacuations,

defined six levels of special needs populations. They are: Level 0 – Persons with no medical special needs but needing transportation during an evacuation; Level 1 – Persons dependent on others or in need of others for routine care and children under 18 without adult supervision; Level 2 – Persons with physical or developmental disabilities such as blindness, significant hearing impairment, amputation, deafness or blindness, and mental retardation; Level 3 – Persons requiring assistance with medical care administration monitoring by a nurse or depending on equipment (including dialysis), assistance with medications, and mental health disorders; Level 4 – Persons outside an institutional facility care setting who require extensive medical oversight; and Level 5 – Persons in institutional settings such as hospitals, long-term-care facilities, assisted-Oliving facilities, and state schools. These definitions allow the State and local governments to quickly triage individuals for transporting and sheltering of individuals during hurricane evacuations.

## Section VI Needs Statement

During this past year, two major processes were conducted to determine the specific needs/gaps/opportunities to be addressed to achieve optimal progress toward meeting a satisfactory level of preparedness throughout Texas.

First, DSHS commissioned the Litaker Group to assist DSHS in determining the current status of health and medical preparedness. Data obtained from various sources were evaluated to determine the presence of readiness activities from calendar years 2004 through 2006 based on a framework of 26 health and medical areas. This framework was adapted from the 36 capabilities developed by the U.S. Department of Homeland Security and reported in the Target Capabilities List, Draft Version 2.0.<sup>1</sup> The 26 areas assessed in this report represent functions that a health and medical response would likely need to include.

An Assessment of Current Health and Medical Capabilities in Texas: A State-Level Review (Litaker 2007) documented that there is evidence of reported readiness activity for 14 of the 26 health and medical areas examined. The remaining 12 health and medical areas had minimal evidence of reported readiness activity within this same time period. This could be due to a lack of documentation or data collection, or it could be that these areas were not directly targeted for improvement during the past five years. Obtained from the Litaker report, Figure 1 shows the health and medical functions categorized by level of reported evidence provided.

The 14 Health and Medical Areas with Reported Evidence	The 12 Health and Medical Areas with Minimal Reported Evidence
Communications	Animal health emergency support
Emergency public information and warning	Chemical, biological, radiological, nuclear, and explosive (CBRNE) detection
Epidemiological investigations	Citizen protections: evacuation and/or in-place protection
Exercises	Critical resource logistics and distribution
Isolation and quarantine	Economic and community recovery
Laboratory testing	Environmental health and vector control
Mass care capacity	Fatality management
Mass prophylaxis	Food and agriculture safety and defense
Medical supplies management and distribution	Hazard and vulnerability analysis
Medical surge	Information gathering and recognition of indicators and warnings
Planning	Intelligence analysis and production
Responder health and safety	Intelligence/information sharing and dissemination
Training	
Triage and pre-hospital treatment	

Figure 1: Health and medical areas categorized by evidence of reported readiness activity between calendar years 2004 and 2006.

<sup>&</sup>lt;sup>1</sup> Target Capabilities List, Draft Version 2.0. U.S. Department of Homeland Security. Date published not available.

Litaker (2007) concluded that there is evidence of reported readiness activity for 14 health and medical areas; however, additional work remains to be done in these areas to attain optimal preparedness. For example, while technological advances have improved the ability of stakeholders to both provide and access critical information during a disaster, voice communication interoperability is not yet in place in all parts of the state. Therefore, specific gaps addressed in this report should be used to help further strengthen capacity building efforts for these 14 areas.

Similarly, the 12 areas with minimal reported evidence have yet to achieve optimal preparedness. Litaker (2007) noted that unlike the 14 areas noted above, capacity building for these 12 areas often occurred as specific circumstances warranted. For example, the need to augment the fatality management area intensified due to high mortality estimates associated with a potential pandemic influenza outbreak. Specific gaps addressed in this report should be used as a starting point to strengthen capacity building efforts for these 12 areas.

Second, a stakeholder process was conducted to solicit input from various state, regional, and local preparedness partners to finalize a list of health and medical priority areas to be addressed during SFY 2008. The main purpose for prioritizing activities is to achieve better integration of health and medical preparedness activities. In addition, focusing efforts on a limited number of areas will allow DSHS and preparedness partners to develop specific strategies to achieve a higher level of preparedness within those areas. It was determined that this process was not to preclude the maintenance/enhancement and sustainability of any other area, nor will it change the need to continue focusing on all activities as indicated in the public health and medical work plans. An initial meeting was held in May to draft an initial list of priority areas. During that meeting, approximately 60 people representing state, regions, local health departments (LHDs), Texas Hospital Association, hospital Regional Advisory Councils (RACs), the Governor's Division of Emergency Management (GDEM), and the Preparedness Coordinating Council (PCC) initially reviewed information from multiple sources: ESF-8 target capabilities; strategic vision document for public health and medical preparedness (draft) prepared by Litaker Group; objectives outlined in the Texas Homeland Security Strategic Plan 2005-2010), and quarterly reports submitted by current public health (regions and LHDs) and medical (RAC) contractors. This group drafted an initial list of 11 priority areas which was reduced to the final seven in subsequent meetings:

Priority Area	Strategies
1. Leadership/Direction	<ul> <li>Procedures needed for optimal interaction during response to disasters will be developed.</li> <li>Standard Operating Guidelines outlining roles and responsibilities of Department of State Health Services (DSHS) during a disaster will be developed.</li> <li>Standard Operating Guidelines outlining roles and responsibilities of each of the eight Health Service Regions (HSR) will be developed.</li> </ul>
	• Integrated approach to disaster response between state, regional, and local response efforts will be determined.

rigure 2. riearun anu metrical priority areas for SFT 00	Figure 2:	Health and	medical	priority	areas f	for SFY 08
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	• Greater understanding of the roles and responsibilities of health and medical preparedness partners will be enhanced with the State Operations Center (SOC).
2. Community Engagement/Citizen Participation	<ul> <li>Public awareness and promote personal preparedness through a comprehensive, statewide campaign will be enhanced.</li> <li>Texas Cooperative Extension Agents will be trained in how to educate the public about family isolation and quarantine for infectious diseases including pandemic influenza.</li> </ul>
3. Sustain and enhance traditional public health activities and deliverables	<ul> <li>Ensure the essential public health functions related to public health preparedness are sustained.</li> <li>Based on changing threat assessments and improvements in technology, there may be a need to increase capacity to respond to new public health threats in the future.</li> <li>Implementation of National Incident Management (NIMS) – compliant incident management principles in responding to various types of levels of traditional public health and medical events.</li> </ul>
4. Behavioral Health (includes disaster mental health)	<ul> <li>An assessment of existing disaster mental/behavioral health response resources will be conducted.</li> <li>State-level behavioral health response plan (Appendix 5 to Annex H) will be created.</li> <li>A planning guidance document to assist local governments in drafting disaster mental/behavioral response plans/Standard Operating Guidelines (SOGs) will be produced.</li> <li>Public and private providers of behavioral health services will collaborate to coordinate the delivery of services during an emergency.</li> <li>Behavioral health competencies for emergency preparedness and response will be developed.</li> <li>Information and resources regarding workplace disaster psychosocial issues will be available.</li> </ul>
5. Medical Surge/Triage	• Texas Disaster Volunteer Registry will be implemented.

	• Development of EMSystem® for the
	implementation of the statewide operational bed
	data standards and definitions will be completed
	• The location, set-up, staffing, and operation of alternate care sites will be identified.
6. Epidemiological	• Use of disease surveillance and early event
surveillance/Detection	<ul><li>detection systems will increase.</li><li>The time for state public health agoney to petify</li></ul>
	local public health agency, or local to notify
	state, following receipt of a call about an event
	that may be of urgent public health consequence will be decreased to less than 60 minutes
	<ul> <li>The percent of Pulsed Field Gel Electrophoresis</li> </ul>
	(PFGE) sub-typing data results submitted to the
	PulseNet national database within 96 hours of
	maintained at 90%.
	• Epidemiological investigations and surveys will
	be conducted as surveillance reports warrant.
7. Mass Care	Plans and Standard Operating Guidelines
	(SOGs) in coordination with health and medical
	of health and medical services during response
	<ul> <li>Plans and Standard Operating Guidelines</li> </ul>
	(SOGs) in coordination with health and medical
	preparedness partners that describe sufficient
	an event will be developed.
	Scalable Strategic National Stockpile (SNS)
	plans and Standard Operating Guidelines (SOGs)
	medications during an event to the entire
	population within 48 hours will continue to be
	developed and augmented.

The stakeholder group stressed that the following elements should be included when outlining activities within these priorities: planning, training, exercises, systems interoperability, human and material resources, sustainability, and communications.

Through these two processes, it was determined that all level-one sub-capabilities needed to be addressed with HPP funding to reach optimal level. In addition, all of the level two sub-capabilities, to include laboratory and radiological emergency preparedness would be included in

the HPP work plan activities during FY08 in order to sustain/enhance current level with the understanding that all level one sub-capabilities would be met by August 8, 2008.

#### Level One Sub-Capabilities

### Interoperable Communications.

Communications involves an exchange of information among various agencies and entities during all phases of an emergency response. Despite the wide range of communication equipment and systems available in Texas, not all of these systems are interoperable, thereby limiting information exchange during an emergency response. Many localities request state guidance to improve communication interoperability. Another concern is that communication between and within agencies needs to be improved. These agencies need open channels of communication during an event to promote an efficient response (Litaker). Radio interoperability in Texas is particularly challenging because of size, geographic and demographic diversity. Radio communications interoperability could be achieved through the acquisition of entire new radio systems. However, this approach would be costly and time consuming to implement and is not necessary with today's integration technology.

The Texas plan employs a network approach using the demonstrated leadership at the regional level through Texas Councils of Governments (COGs) and adherence to the Department of Homeland Security's (DHS) national technical requirements for wireless public safety communications and interoperability. This plan leverages existing radio systems rather than the costly replacement of the existing public safety radio infrastructure in Texas. It was developed with substantial assistance from two industry leaders that possess the technical expertise necessary to validate the efficacy of this plan.

The 24 COGs in Texas have the responsibility of developing and implementing regional strategies to provide Level-4 radio communications interoperability within their regions in accordance with the technical requirements of the *Texas Immediate Radio Interoperability Communications Plan*, a high-level roadmap issued by the Texas Office of Homeland Security. This plan has been in existence for the past four years, and the regional strategies are in compliance. This will result in first responder interoperability within and across COG regions that have also achieved Level-4 interoperability.

During SFY 06 and 07, Interoperable Communications was identified as a priority for the 24 Councils of Governments working with local governments and emergency responder communities. Much of the DHS Homeland Security Grant Funds was leveraged for this priority. The Governor's Division of Emergency Management reports that all 24 COGs met Level-4 Interoperability requirements in January of SFY 07.

Emergency management software availability is also vital in order to react to emergencies using near real-time data. This will be of enormous benefit to all of the agencies that rely on making large ranging decisions in very short amounts of time.

Support and configuration of WebEOC<sup>®</sup> and specific boards contained therein given to all of the Regional Advisory Councils (RACs) that either own or are principal partners in a WebEOC<sup>®</sup> server for their Trauma Service Area (TSA) is needed in order to provide a standardized method for data collected via WebEOC<sup>®</sup>. Further, this will allow each region and city to monitor and track its own emergent health and medical issues as well as allow the regions to be aware of issues in other bordering areas. Additionally, the State Operation Center and the DSHS Multi-Agency Coordination Center will be appraised of situations at all times and will be in a better position to react to any problems that individual areas might not otherwise be able to overcome.

The goal for Interoperable Communications is to allow voice and data systems to effectively exchange information across multiple platforms with minimal disruption caused by a lack of interoperability by: 1) promoting communication device interoperability to enable information exchange between health and medical responders during an emergency response; 2) developing professional relationships with appropriate individuals at local, state, and federal agencies to enhance communication ties during an emergency response; and 3) documenting vulnerabilities that are likely to occur during a disaster by conducting exercises or through real events (Litaker 2007).

**Bed Tracking System.** The Texas hospitals have expressed concern that as bed availability is reported to the State Operations Center, the DSHS Multi-Agency Coordination Center, and the Health and Human Services Operations Center, these entities would inadvertently send patients for admission to hospitals and bypass the local emergency operations system. At this time, the Trauma Service Area Regional Advisory Councils are working with both EMSystem<sup>®</sup> and WebEOC<sup>®</sup> companies to create the ability for bed availability to be transferred seamlessly from EMSystem<sup>®</sup> and entered into WebEOC<sup>®</sup>, which address the issue raised by hospitals. Both the State Operations Center and the federal emergency operations centers would be provided aggregate bed availability information for Texas.

Currently, Texas can maintain funding for this capability with OASPR funds. DSHS will continue to fund EMSystem<sup>®</sup> statewide with OASPR funds. Additional staff training for the DSHS MACC on the use of EMSystem<sup>®</sup> and WebEOC<sup>®</sup> is needed to obtain the appropriate data, and this sub-capability will continue to be exercised during SFY 08.

The goal for the bed tracking system is to track and report available beds to meet surge capacity anywhere throughout the state as needed.

**Emergency Systems for Advance Registration of Volunteer Health Professionals** (ESAR-VHP). Findings from the Litaker (2007) Assessment suggest that Texas hospitals have developed plans to augment staffing during an emergency. These include developing databases of available personnel, developing callback lists, and working with state medical and nursing organizations to identify and recruit individuals who are available during an emergency. In Texas, 65.9 percent of hospitals reported having a database of credentialed clinicians while 52.8 percent reported having a database of other health professionals to contact during a surge event. These databases, however are only for local/regional use and do not meet the staffing demands across the state. There is also a concern about being able to meet staffing demands over the long term. Likewise, there are concerns about having appropriate staff (e.g., physicians and nurses) available to treat specific patient populations (e.g., children and the elderly). The Medical Reserve Corps has been identified as a potential resource for augmenting personnel; however, it is considered only a local asset. The ability to provide staffing will be a limiting factor in being able to meet surge demands during a health and medical emergency.

Challenges or potential barriers to the effective implementation and utilization of the Texas Disaster Volunteer Registry (a.k.a. ESAR-VHP) include the following: 1) the numerous autonomous or independent licensing and regulatory entities over which DSHS has no authority; 2) existing policies and/or procedures of key partners (for example, the Texas Medical Association has a policy that prohibits the sharing of personal and contact information outside the association); 3) local autonomy (Texas is a home-rule state), which means that local volunteer groups, such as Medical Reserve Corps units, are under the control and jurisdiction of city mayors or county judges; 4) the existence of local and regional volunteer management systems, some of which were established years ago to meet local/regional needs; 5) the reluctance of local/regional jurisdictions to become integrated into a statewide system; 6) personnel or staffing issues, such as the loss of DSHS technology support staff at the state level and the loss of volunteer coordinators at the local and regional levels; and 7) possible budgetary restraints as each technological linkage to a licensing or regulatory board for the verification of licensure has a cost, as do linkages to some of the credentialing entities.

The goal is to have appropriately trained and qualified individuals available to provide medical and mental health care to Texans during and after a disaster. To this end, Texas will establish a statewide Texas Disaster Volunteer Registry that will provide: 1) an integrated, coordinated system for the registration of medical/health-care volunteers, as well as lay individuals to support medical tasks, to enhance response capabilities and maximize the use of medical volunteer assets; 2) the verification of professional licensure; 3) the credentialing and resource-typing of medical/healthcare professionals; and 4) a volunteer management tool for local and regional jurisdictions as well as the State.

**Fatality Management Plans.** Preparing for a mass fatality event will take extensive planning, training, and exercising by many partners, since the resources needed for a mass fatality event are extensive and unique. Since most hospitals do not have the resources to independently respond to such an event, they cannot manage a mass fatality event alone, which makes this an issue that needs to be addressed at the regional level. Provisions with partners should be made for issues such as increased refrigerated storage capacity, cultural difference in burial practices, and the disposal of human remains. The need to augment the fatality management area intensified due to high mortality estimates associated with a potential pandemic influenza outbreak.

The uniqueness and scope of a mass fatality event present challenges not seen with other types of incidents, thus creating the necessity of plan development with a vast array of partners. Some recommended participants for a mass fatality planning workgroup are individuals from the funeral industry; counseling experts, justices of the peace; county judges; mayors; medical examiners; grocery retailers; truck leasing companies; public health, hospital, emergency management, police, fire, and EMS officials.

While most Trauma Service Areas (TSAs) report meeting with partners to discuss mass fatality plans, only one TSA reports having a plan in place. Another TSA purchased a cache of body bags for its hospitals and made arrangements with a regional grocery supplier for refrigerated trucks. All TSAs recognize the value of a needs assessment for mass fatality events, which they can then use for their plan development.

Additional efforts are needed to make certain that all participating hospitals in each TSA develop and exercise well-integrated mass fatality plans. Plans should be built upon jurisdictional mortality estimates to assure adequate resources are secured in advance. Plans should address issues such as the need for expanded refrigerated storage capacity and body bags for deaths occurring in hospitals, and they should also delineate roles and responsibilities of other agencies involved in mass fatality management.

The goal is to have mass fatality management plans in place in every TSA, which support hospital/health-care systems within their area during a mass fatality event by developing plans

and procedures for handling large numbers of fatalities that address body identification, local and religious burial service traditions, transport availability, short-term storage of remains, and public health measures. In addition, DSHS will work with state and local partners to put into place a state mass fatality plan.

**Hospital Evacuation Plans:** The Governor's Division of Emergency Management (GDEM) and the DSHS Emergency Preparedness and Response Branch continue to work together to further enhance the hospital evacuation process in Texas. More work needs to be done for facilities to have written evacuation plans in place for a catastrophic event, such as a Category 4 or 5 hurricane. Another challenge is identifying enough resources within the State to provide transport for hospital evacuations along the Texas Gulf Coast. In addition to hospital evacuation, preparedness partners need to develop plans with GDEM for evacuation of medical special needs populations in these areas. Identification of transportation resources for the medical special needs population is an ongoing process and presents challenges for Texas. Some of these challenges include staffing and equipping the buses that might be used for transportation of people in wheelchairs or litters. The number of hours to drive from Brownsville/Harlingen to San Antonio presents special challenges for medical special-needs populations, in particular the long hours spent sitting in a bus. In addition, confined work areas for staff to assist people on a bus present special problems.

While the coastal areas of Texas are a major focus for hospital evacuation, other areas of the state face potential hazards as well. Hospitals located in Tornado Alley and near chemical plants present special evacuation issues for Texas. Unlike hurricanes where evacuation can be anticipated, these circumstances do not allow time for evacuation in most instances. So, shelter-in-place plans must be refined.

A number of challenges related to providing evacuation may involve recognizing the needs of specific patient populations. Such populations include the elderly, children, people with mental health and substance abuse issues, people with disabilities, and medical special-needs patients. These populations are likely to require specialty care, age-appropriate supplies and medication, and personal assistance. A second challenge involves the need to make medical care decisions when resources are limited. During a disaster, normal community care standards may not be able to be maintained. DSHS and other stakeholders are currently developing alternate standards of care for use in an emergency response.

The goal for this sub-capability is to develop plans that will address catastrophic events as well as adequately addressing the needs of specific patient populations who will require treatment.

#### Level Two Sub-Capabilities

Alternate Care Sites (ACS). Some of the needs for this sub-capability include staffing issues in certain scenarios, such as pandemic influenza. Many health-care facilities in Texas are part of a corporation, but there are several facilities that are not linked to a parent company and, therefore, do not have the corporate assets, such as alternative sites identified within their company or transportation available to them. Other needs for this capability include the challenge of purchasing a medical supply cache to supplement any regional alternate-care site and to find resolutions for the storage and delivery of equipment and supplies without incurring annual costs. Tasks for achieving this goal may include establishing contracts with suppliers pre-

event, creating pre-positioned supply caches around the state, and establishing an emergency fund to be tapped during an emergency.

The goal for this sub-capability is to strengthen public health emergency medical management and treatment capabilities with respect to public health emergencies by identifying alternate-care sites.

**Mobile Medical Assets**. To support resource availability, work group participants reported that some hospitals and Regional Advisory Councils (RACs) are creating or contracting with distributors to create equipment and supply caches. Similarly, a number of hospitals have pre-purchase contracts in place to deliver specified supplies within 72 hours of a disaster in the event communication systems are disrupted. However, Texas faces several challenges with regard to medical supplies management and distribution. One such challenge is the need to obtain supplies for mass care or medical shelters during an emergency. During recent events, such supplies were obtained ad hoc. While this may suffice for an emergency of limited-duration, potential long-term disasters will require pre-planning. A second challenge is the ability to obtain specialized medical equipment. This would include ventilators, portable oxygen tanks, and wheelchairs. Identifying potential needs and executing contracts with vendors pre-event to provide these goods during a disaster can likely address both of these challenges. Findings also suggest that there is a concern that supply lines may not be maintained during a disaster. Geographically remote areas or those at the end of the distribution chain may have difficulty obtaining supplies if transport routes are hindered or blocked during a disaster (Litaker, 2007).

The RACs agree that being able to have ample supplies/equipment and personnel to provide necessary treatments are critical to maintain the vital health and medical services during a surge event or a public health emergency. However, several barriers exist. Storage and delivery of medical assets without incurring annual costs is a concern in several areas. Surplus public and private mobile medical assets are not a luxury found in most areas. Hospitals/health-care systems need to increase efforts to secure mutual-aid agreements or MOUs between other preparedness partners who may have assets for use during a public health emergency.

The goal for this sub-capability is provide adequate medical assets to areas of the states during an event.

**Pharmaceutical Caches.** A forward-placed cache of prophylactic medication reserved solely for use by hospital staff is needed to keep healthcare personnel lose to a minimum in the event of a public health emergency incident. Moreover, these staff members' immediate family members (those living in the same household) also should be provided prophylactic medication. The idea behind this is to assuage staff members' anxieties about their families' safety so that they may remain working at the hospital and focused on the task at hand.

An on-hand cache of prophylactic medication is useless if there is not a plan in place to distribute it in an effective and timely manner. Hospital staff needs to know when, how, and to whom these medications are distributed. The less time that is taken to prophylax staff and their families is that much more time spent treating affected patients. If a large scale public health emergency occurs, it is likely that resource needs will surpass those that can be met by the 72-hour hospital pharmaceutical caches. Resources such as medical supplies and additional prophylactic medication will be needed in mass volume. The Strategic National Stockpile (SNS), a federal repository of life-saving medications and medical supplies, is designed to meet this need. These supplies can be delivered to anywhere in the United States within 12 hours of a

federal disaster declaration. It is imperative that hospital staff have a clear understanding of the SNS Program and, more importantly, how to request SNS assets. While the contents of the Strategic National Stockpile are vast, it is possible that material will be needed that cannot be found in its inventory and will have to be secured elsewhere.

In May 2007, DSHS purchased a cache of ciprofloxacin and doxycycline for all hospitals in Texas that do not currently have a sufficient supply of prophylactic medication for hospital staff and their family members. It has taken nearly a year to secure these pharmaceuticals. There were many obstacles to overcome, primarily vendors wanting to sell medications with shelf lives of less than six months. In the end, DSHS purchased nearly 2.4 million three-day courses of prophylaxis with shelf lives ranging from 24 to 36 months. This cache currently resides at DSHS Central Office in Austin and will need to be distributed to hospitals, HSR, LHD, and first responders.

The goal for this sub-capability is to access and provide prophylactic medication to all hospital personnel and their families for a 72-hour period.

**Personal Protective Equipment (PPE).** The state, through the activities of individual hospitals and TSA regions, has made great strides in increasing the inventory of PPE for essential personnel. Based upon the most recent report, 86 percent of the participating hospitals have adequate PPE for staff and volunteers and 74 percent of participating hospitals have written plans in place to disseminate PPE within their facility. Many of our TSA regions have purchased an additional cache of supplies and equipment that will be used to supplement all hospitals within a TSA region.

TSA contractors need to purchase additional PPE to meet the goal of adequate PPE for all participating facilities. Additional PPE will need to be purchased in FY 08 for the following reasons: PPE used for training and exercises that would no longer be available for disaster response; PPE will need to be replaced due to shelf-life expiration or disposed of due to use during an actual disaster response; and PPE will be needed for new hospitals as they become participating facilities. Regional summaries of inventories at each participating hospital and regional caches should be established in all TSA regions, to include volunteer and rural departments that may not be able to afford PPE. All facilities and TSA regions should have written plans in place for the dissemination of PPE.

Training in the use of PPE is a concern. Hospitals reported that not all employees are trained properly to wear and use PPE. Training for public health preparedness staff on how to use PPE varies across the state.

The goal for this sub-capability is to assure that all hospital personnel who are first responders have appropriate personal protective equipment and are trained on their use. This may be accomplished by ensuring that all participating hospitals have adequate PPE for staff and volunteers and written plans are in place to disseminate the PPE to essential hospital personnel.

**Decontamination.** In the future, as equipment and supplies for decontamination are used or reach their useful life, this equipment will need to be upgraded or replaced. One area of Texas, located in "Tornado Alley," is considering purchase of one or two fully equipped decontamination trailers for use in rural areas. There are no plans to upgrade or replace large quantities of equipment in Texas this coming year. The goal for this sub-capability is to maintain current equipment and supplies for decontamination until such time as replacement is necessary.

**Laboratory Support**. Although many hospitals possess equipment for radiation and nuclear exposure detection, recognition of and response to biological and chemical agent exposure still requires coordination with and confirmation by partner LRN laboratories. The National Response Plan defines basic capabilities for facilities to perform confirmatory testing, if trained to do so. If these facilities do not have personnel capable of performing the testing, then they must ensure that the specimens are sent to a facility that does have this capability. Both private testing and hospital laboratory personnel are typically at the forefront of possible biological agent exposure detection. These personnel require rule-out testing training to recognize agents of interest in the specimens that cross their bench. In addition, certified training is required to package and ship these specimens to LRN reference laboratories for confirmation. However, high turnover of laboratory staff can inhibit rapid detection and response to these agents due to lack of training. A survey of hospital laboratories indicates that a high staff turnover rate is the number one reason for lack of rule-out testing capabilities and certified shippers within their facility. There also is concern within the laboratory profession about the high average age of professional laboratorians and that younger workers are not entering the profession. This will lead to a shortage of qualified laboratorians over time if workforce development is not encouraged for this profession.

The goal for the sub-capability is to promote workforce development of the laboratory profession to recruit and train individuals to become professional laboratorians.

**Radiological Emergency Preparedness.** Interest and and the demand for radiological training for health care providers and emergency responders has increased and continues to grow. DSHS anticipates receiving additional requests for training as more and more information becomes available to health care and local emergency response officials regarding the use of "dirty bombs" and other radiological terrorist events. This course is offered on location and provides state approved continuing education credits to health-care workers. This eight-hour performance-based (hands-on) course is designed for health-care providers to safely respond to an incident involving radioactive material. Topics include a review of radiation fundamentals, dirty bombs, radiation detection instruments, survey techniques, radiological protective actions, transportation index, radiological hazards, patient handling, pre-hospital practices, national incident command system, mass casualty incidents, decontamination and disposal procedures, nuclear terrorist threats, and first responder actions. This class includes a basic radiological patient decontamination exercise.

Additional identified needs have been to provide refresher training for hospitals, which have already received training, and to also offer training to the other 350-plus participating hospitals throughout the state. The radiological response training is also offered as a four-hour refresher class and an advanced 32-hour class. The effectiveness of this course is evaluated by providing the students with a comprehensive test at the end of each class. Students are then given the opportunity to evaluate the class instructor and the course contents on a form provided with the test. In addition, students participate in a basic patient decontamination exercise. The student evaluation forms are reviewed by the course instructor and by the program manager. The course instructors are required to provide the program manager a manager's report, which addresses any concerns or comments regarding each class. All class tests, evaluations, and reports are maintained on file at the program's headquarters in Austin for reference and audit purposes. The training material provided for this class is reviewed and approved by the Department of Energy and the Federal Emergency Management Agency's Emergency Preparedness training section.

Students who successfully complete the class and test are issued a certificate within two weeks of each class. There is currently a major need for training to health care provider for all hazards training. This class includes a basic radiological patient decontamination exercise.

In addition, a large number of local jurisdictions have received federal funds to purchase commercial grade radiation detection equipment for use by their first responders, EMS, and emergency hospital staff. The program continues to receive requests for guidance and training regarding the use and operation of this equipment.

The primary goal for this sub-capability is to provide radiological emergency response training to all 210-plus Texas trauma hospitals throughout the state.

#### **Overarching Sub-Capabilities**

**NIMS Compliance.** The state, through the activities of individual hospitals and TSA regions, have made strides in enhancing the preparedness of health and medical professionals through increasing staff training in NIMS curricula and revising emergency operations plans to incorporate NIMS components, principles and policies. Many of the TSA regions have offered technical assistance to hospitals and health care systems to revise Emergency Operation Plans (EOPs) and have contracted to provide ICS courses in their regions. More work is needed for the hospitals/health-care systems to meet the goal of NIMS compliance for the remaining implementation activities as required by the HPP guidance. Entities need to increase their effectiveness by evaluating their status with regard to NIMS compliance activities that would be needed to coordinate with Federal, State, local, and tribal responders involved in public health emergencies.

Texas needs to increase the effectiveness of the preparedness response capability and surge capacity of hospitals and to ensure coordination between, Federal, State, local, and tribal planning, preparedness, and response and recovery activities. Some TSA regions, including San Antonio, Houston and Dallas-Fort Worth have incorporated regional medical operations centers (RMOCs) to increase their response effectiveness by integrating the ESF-8 health and medical response with that of the local councils on government and other responders into the multi-agency coordination system for the region. The Governor's EMS and Trauma Advisory Committee (GETAC) Disaster Task Force recommends that an RMOC be established in each multi-TSA region for multi-agency coordination. DSHS supports this concept, as long as the RMOC is integrated fully into the existing state emergency management structure, but cannot mandate that RMOCs be developed nor how they should operate if they are developed.

We need to establish adequate tracking systems. This can be done by determining the most feasible and efficient system to report these figures either via current electronic tracking systems such as the TRAIN Texas Learning Management System for training and exercises or by use of quarterly reports.

Between now and August 8, 2008, the goal for this area is to ensure that all participating hospitals can demonstrate the presence and use of NIMS compliant systems that involve incident command (IC), multi-agency coordination, public information (PI), NIMS implementation tracking and others; programs for exercising plans and preparedness procedures; and the use of tools for resource management and acquisition, all composed of standard and consistent terminology in their preparedness and response systems.

**Education and Preparedness Training.** Information from work group participants during the Litaker assessment indicates that there are opportunities for improvement within this health and medical function. Another area for improvement is to promote cross-training so that individuals can perform duties other than their own if needed during a disaster response. There is a need to enhance the integration of public and private medical capabilities with public health and other first responders to minimize duplication of education and training activities by topic and ensure coordination between hospitals and other health and medical entities. Because exercise is a logical process following education and training, there is a need for all responders to be involved in exercises as well as participating in an ongoing review of plans and procedures.

An ongoing challenge for many small hospitals, clinics, and EMS agencies is that releasing their staff to attend training and participation in exercises leaves them vulnerable and short-staffed for real-life events and impedes their ability to provide everyday services. The rural and frontier counties also encounter a challenge with access to the availability of training. Other ongoing challenges that were encountered while conducting Quality Assurance (QA) program reviews were how to provide training in an effective and efficient manner. An additional challenge involves how entities can collaborate to provide effective and efficient coordination for employees to train and exercise together.

Education and training opportunities will continue to be offered to support all of the subcapabilities. Opportunities currently exist to teach hospital staff about communication devices and what types of equipment to purchase that will ensure interoperability both horizontally and vertically. TSA contractors have received instruction on using EMSystems® and WebEOC® to track bed availability. Technical assistance has been provided by DSHS staff in fatality management and hospital evacuation planning. Strategic National Stockpile (SNS) Coordinators, located within each of the eight Health Service Region offices, conduct training regarding SNS assets, how to request, and information regarding pharmaceutical caches. TSA contractors provide and support training in appropriate use of personal protective equipment and provide fit-testing. All of the hospital staff members who are responsible for decontamination have received training.

The goal for this cooperative agreement period is to continue to coordinate, integrate, and make accessible educational and training opportunities available statewide by: 1) continuing to provide health and medical preparedness training to all appropriate stakeholders; 2) developing methods to provide training opportunities that are inclusive of all communities throughout Texas; and 3) promoting cross-training as an essential part of future training activities.

**Exercises, Evaluation and Corrective Actions**. During FY 07, one of the goals of the Texas HPP program was to increase coordination of exercises with CDC grant participants and other emergency response partners. Having realized varying degrees of success throughout the state, it is the intent of DSHS to require an enhanced degree of cross-cutting activity and coordination between the HPP, CDC, and other preparedness funding activities with respect to exercises, training, and joint coordination activities.

During the health and medical assessment, suggested recommendations by work group participants for improving future exercises included: 1) exercises should test vulnerabilities that are likely to occur during a disaster (for example, exercises should test how hospitals will handle the loss of electricity or air conditioning under multiple illness/injury scenarios); and 2) exercises should seek to test known gaps in a community's ability to meet the health and medical needs of citizens during a disaster.

Regional planning and execution of multi-agency and multi-jurisdictional exercises will be required. Hospitals/health-care systems will be required to conduct/participate in at least two exercises in SFY 08. These exercises will require evaluation of most of the sub-capabilities, to include interoperable and redundant communications, request of SNS assets, mobilizing medical assets; locating and setting up alternate care sites. Components of the Emergency Operations Plan, which includes fatality management and hospital evacuation, will also be evaluated through exercises.

It is anticipated that exercise planning will require a concerted effort on the part of the TSA, stakeholders, and partnering agencies. The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program that provides a standardized policy, methodology, and language for designing, developing, conducting, and evaluating all exercises. In addition to providing a standardized exercise policy, HSEEP also facilitates the creation of self-sustaining, capabilities-based exercise programs by providing tools and resources such as guidance, training, technology, and direct support. An exercise of this magnitude will involve regional cooperation and planning between several jurisdictions including but not limited to counties, municipalities, agencies, TSAs, participating hospitals, COGs, and Health Service Regions. Coordination of other additional exercises will be required that will allow the HPP contractor to determine the needs of the participating hospitals at the local or TSA level.

The goals during this fiscal year will be to build upon and increase present capacities to better prepare the healthcare communities to cope with an all-hazards scenario. This in part will be accomplished by requiring that each Trauma Service Area contractor or contracting entity coordinate at least one multi-jurisdictional exercise, involving multiple emergency support functions (ESFs), to encourage participation by all health and medical stakeholders in exercises that include a health and medical component. This would build and strengthen relationships with other health, medical, and emergency management stakeholders. The SFY 08 State Preparedness and Response Exercise Plan will be submitted as required at a later date.

**Needs of at-risk population**. Citizen protection involves implementing measures that will allow safe and effective medical care given to a population at risk during a man made or natural disaster. From the health and medical standpoint, individuals at risk of being affected by a disaster will likely require medical care for acute or chronic illnesses and injuries during the event. An opportunity exists to better develop plans and procedures prior to a disaster that will in turn support the health and medical needs of evacuees and hospital patients during a disaster.

TSA regions should encourage their hospitals to consider all aspects of at-risk populations, especially during plan development. The term "at-risk individuals," for the purposes of this contract, means children, pregnant women, senior citizens, and other individuals who have special needs in the event of a public health emergency. Those with mental health and substance abuse issues also should be considered. Planning for the consideration of at-risk individuals will take extensive collaborative efforts with local/regional partners since in some areas hospitals may be called upon to assist with medical special needs individuals in shelters. Hospitals should take advantage of the fact that emergency management and public health have made great strides in planning for special-needs populations and should continue or begin a dialogue with them to provide for strong collaborative planning efforts that are of benefit to the entire community. Hospitals already have in place plans that address at-risk individuals as defined for this program, so the task for the TSA will be to facilitate meetings between their hospitals and the entities listed above. These meetings should be used as a venue to promote the integration of plans and definition of roles and responsibilities for all entities involved in the care of at-risk individuals.

TSA regions will be tasked with identifying those hospitals that have not met with local and/or regional emergency management and public health officials, and encourage the hospitals to begin meeting with those officials to accomplish integrated planning and response activities for at-risk populations. TSA regions will report quarterly the total number of hospitals that have met at least once during that quarter with their emergency management and public health partners to address the needs of at-risk populations.

The goal in this area is to increase the collaboration between hospitals, the public health community, and emergency management on the provision of care for at-risk individuals.

## Section V Program Outcome Objective

Texas outlined eight strategic focus areas for health and medical preparedness by 2010 in Texas. The goals of these strategic areas are:

1) Human resources. To have appropriately trained and qualified individuals available to provide medical and mental health care to Texans during and after a disaster

2) Material resources. To have material resources available to support the health and medical needs of individuals during a disaster.

3) Persons with special needs. To provide effective, efficient, and compassionate treatment to individuals who require special accommodation or specialized care during a disaster.

4) Physical infrastructure. To have an appropriate physical infrastructure available to decontaminate, treat, and transport individuals who require medical care due to a disaster.

5) Public information. To provide accurate, reliable, and informative public information regarding health and medical issues related to potential, imminent, or actual disasters.

6) Systems interoperability. To allow voice and data systems to effectively exchange information across multiple platforms with minimal disruption caused by a lack of interoperability.

7) Funding. To optimize the allocation and use of all financial resources to support health and medical preparedness, response, and recovery activities.

8) Leadership and direction. To promote a positive, efficient public health preparedness program capable of meeting the health and medical needs of all Texans.

In support of above health and medical preparedness goals for Texas as well as to improve surge capacity and enhance community and hospital/health-care system preparedness for public health emergencies, the overall goal of the Texas Hospital Preparedness Program for SFY 08 is to strengthen an integrated health and medical response capability statewide. This will be accomplished by:

1) addressing the activities needed to complete all level one sub-capabilities related to interoperable communications, bed tracking, Texas Disaster Volunteer System, fatality management and hospital evacuation planning.

2) supporting regional planning efforts through maintenance or enhancement of locating and supplying alternate care sites, and obtaining, storing, and mobilizing medical assets, pharmaceutical caches, and personal protective and decontamination equipment.

3) fostering an integrated response environment that is National Incident Management System (NIMS)-compliant.

4) encouraging and supporting integrated regional planning, education, and training efforts.

5) improving the level of preparedness and response through continual testing, exercising, and evaluating of all aspects.

6) continually involving public health and medical preparedness partners at the state, regional, and local levels, to include special interest groups such as the elderly, tribal nations, atrisk population, and public and private entities in all planning efforts.
#### **Goals and Objectives of Sub-Capabilities**

Each sub-capability will be addressed during this fiscal year. Since DSHS supports regional planning efforts and Texas is a diverse state with varying levels of needs and level of preparedness, not all activities will be conducted at the same level in each trauma service area during this year. All trauma service areas contractors will be required to report on all areas for overall levels of preparedness. Reference made to hospitals/health-care systems should assume those participating in the Texas Hospital Preparedness Program.

#### **Level One Sub-Capabilities**

#### Interoperable communication.

**Goal:** To allow voice and data systems to effectively exchange information across multiple platforms with minimal disruption caused by a lack of interoperability:

1) promote communication device interoperability to enable information exchange between health and medical responders during an emergency response;

2) develop professional relationships with appropriate individuals at local, state, regional and federal agencies to enhance communication ties during an emergency response; and

3) document those minimal vulnerabilities that are likely to occur during a disaster by conducting exercises or through real events.

#### **Objectives**

**SC-1.1.** By August 8, 2008, 95% of Hospital Preparedness Program (HPP) participating hospitals/health-care systems will develop interoperable communication systems that have redundant communications systems connected with public health, local emergency operations centers, Emergency Medical Services (EMS), law enforcement, and emergency management agencies.

DSHS will establish contracts with Regional Advisory Councils (RAC)/Trauma Service Area (TSA) contractors to continue promoting efforts within TSAs in Texas for implementing regional strategies to provide Level-4 radio communications interoperability. Evidence of completion will include documentation on quarterly reports of number of participating hospitals/health-care systems with level-4 radio communications interoperability.

SC-1.2. By August 8, 2008, increase from 55% (12/22) to 90% (20/22) the number of TSAs in Texas using WebEOC<sup>®</sup> emergency management software.

DSHS will continue to support and configure WebEOC<sup>®</sup> and specific boards contained therein for all TSA contractors that either own or are principal partners in a WebEOC<sup>®</sup> server TSA. Evidence of completion will include documentation of support and development of specific boards.

#### **Bed Tracking System**

**Goal**: To track and report available beds to meet surge capacity anywhere throughout the state as needed.

#### **Objectives**

SC 2.1. By August 8, 2008, all participating hospital/health-care systems will report bed availability by the HAvBED definitions within 60 minutes to the DSHS MACC.

DSHS will verify that 100% of the Texas HPP participating hospital/health-care systems have the ability to report HAvBED bed capacity via EMSystem<sup>®</sup> and/or WebEOC<sup>®</sup>.

DSHS will establish contracts with TSA contractors to assist participating hospital/health-care systems in reporting bed availability using HAvBED definitions. TSA contractors will test the capability of hospital/health-care systems within their TSA to report bed availability within 60 minutes. Documentation on quarterly reports will include the number of participating hospital/health-care system able to report bed availability.

Each hospital/health-care system will be required to test its capability and submit results to the TSA contractor on the quarterly report. TSA contractors will be required to ensure that hospitals/health-care systems within their TSA have the ability to report within 60 minutes. Participating hospitals/health-care systems will participate in the nationwide exercise and document participation in quarterly report.

SC 2.2. By August 8, 2008, the DSHS MACC will report to the HHS SOC within four hours of request the number of available hospital beds statewide by the HAvBED definitions.

DSHS will complete development of the operational bed tracking system by linking to the web-based HAvBED system at HHS SOC.

DSHS will participate in the nationwide exercise involving HAvBED reporting ability. Verification will be obtained that information is being received by HHS SOC.

SC 2.3. By June 30, 2008, all DSHS MACC staff responsible to report bed availability will be trained and have access to EMSystem<sup>®</sup> and WebEOC<sup>®</sup> bed data.

DSHS staff identified as having responsibility to report bed availability will receive training on how to access data using EMSystem<sup>®</sup> and WebEOC<sup>®</sup>. Documentation of training will be tracked. DSHS staff identified as having responsibility to report bed availability will be able to report the information to the Texas State Operations Center and the HHS SOC as requested within four hours of the initial request. Their ability to report bed availability will be documented.

#### Texas Disaster Volunteer Registry (aka Emergency Systems for Advance Registration of Volunteer Health Professionals [ESAR-VHP])

**Goal:** To have appropriately trained and qualified individuals available to provide medical and mental health care to Texans during and after a disaster.

#### **Objectives**

**SC 3.1.** By December 31, 2007, linkages to key Texas licensing and regulatory boards to provide real-time verification of professional licensure (and to verify the licenses of spontaneous medical and healthcare volunteers) will be completed.

DSHS will contract for the construction of linkages to provide data sharing capabilities and reduce the effort and time needed for professionals to register as volunteers. Data fields, such as personal and contact information and professional license numbers, will be pre-filled. Quarterly reports will be generated to assess the effectiveness of the registry's licensure verification function.

**SC 3.2.** By March 31, 2008, linkages to national credentialing entities, such as the American Board of Medical Specialties, for the credentialing and resource typing of physicians and other professionals will be completed upon receipt of further guidance from OASPR.

DSHS will contract for the construction of linkages to provide data sharing capabilities that provide verified credentialing information and resource typing capabilities (re: NIMS compliance). Data fields with information regarding education, specialties, and other abilities will be pre-filled. Quarterly reports will be generated to assess the effectiveness of the registry's licensing verification function and the credentialing function.

**SC 3.3.** By March 31, 2008, roles and responsibilities of key statewide medical/ health-care partners will be established for the operation of the registry.

DSHS and partners will identify state-level administrators who will have administrative access to the system and its capabilities. Statewide training will be provided for local and regional administrators, statewide. The Connectivity Work Group, official advisory group for Texas ESAR-VHP, will provide methodology for identifying, training of state-level partners, and assessment of system's state-level operability.

SC 3.4. By March 31, 2008, the Texas Disaster Registry icon will be placed on key statelevel partners' Web sites and materials.

DSHS will contract with a social marketing firm to produce profession-specific recruitment materials. Texas Disaster Volunteer Registry icon will be placed on key partners' Web sites, providing a direct link to the registry. Quarterly reports will be generated to assess the effectiveness of recruitment with state-level partners.

SC 3.5. By March 31, 2008, statewide recruitment will be initiated in coordination with key statewide partners.

DSHS will contract with a social marketing firm to provide statewide recruitment by disseminating information through partners' existing Web sites, newsletters, and other

communication means. Quarterly reports will be generated to assess effectiveness of the statelevel recruitment strategy (assessed by numbers and ease of registration).

SC 3.6. By March 31, 2008, key state-level partners will be included registry in drill or test of system.

DSHS and preparedness partners will utilize the registry in actual events or as component of exercises to determine strengths, needs, areas for improvement. After-action report of drill or exercises will be used to evaluate strengths and areas of needs for registry.

**SC 3.7.** By August 8, 2008, the registry will be expanded to include other medical and health-care professions such as dentists, veterinarians, psychologists, respiratory therapists, and radiological technicians.

Per ESAR-VHP guidelines, DSHS will contract for the construction of technological linkages to add additional licensing and regulatory boards as well as credentialing entities to include additional disciplines or professions. Quarterly reports will be generated to assess the registry's licensure verification capabilities with additional disciplines.

SC 3.8. By August 8, 2008, the registry will be expanded to local and regional levels. DSHS and partners will identify and train local and regional administrators to integrate local/regional systems. Quarterly reports will be generated to assess local and regional utilization of registry.

SC 3.9. By August 8, 2008, minimal training standards and competencies will be incorporated into the registry.

DSHS Workforce Development Team will identify minimal training standards that will be incorporated in the system. Quarterly reports will be generated to assess training standards and accessibility of training for volunteers.

SC 3.10. By August 8, 2008, registry exercise plan will be established.

DSHS and partners will include the registry in existing statewide exercise plans or assess capability of registry through use in actual events. After-action reports will be generated to evaluate registry's functions and use.

**SC 3.11.** By August 8, 2008, a reporting system for the registry will be established.

DSHS and partners will coordinate quarterly reports on all functions into overall yearly reporting plan that allows for enhanced operation of registry. A yearly report will be generated from quarterly reports and utilization of registry in exercises and actual events.

#### **Fatality Management Plans**

**Goal:** To have mass fatality management plans in place in every TSA, which support hospital/health-care systems within their area during a mass fatality event by developing plans and procedures for handling large numbers of fatalities that address body identification, local and religious burial service traditions, transport availability, short-term storage of remains, and public health measures.

#### **Objectives**

**SC-4.1**. By August 8, 2008, the State will have a written mass fatality plan in place that was developed in collaboration with state, local, and regional partners.

DSHS will work with state, regional, and local partners to coordinate a fatality plan that is integrated into the State Emergency Management Plan. The plan will have been evaluated as part of the annual State Hurricane Exercise.

**SC-4.2.** By August 8, 2008, 82% of hospital/health-care systems will have written mass fatality plans in place that were developed as a part of a local or regional planning effort.

DSHS will establish contracts with TSA contractors to assist hospitals/health-care systems to work with their local and/or regional partners in development of well-integrated plans that consider the contributions to a mass fatality event of all their partners. Plans will be evaluated regarding the level of integration with partners and whether the plan increases hospital/health-care systems response capabilities during a mass fatality event. Plans contribution to the jurisdiction's response capabilities will also be evaluated. Documentation on quarterly report will require the total number of hospital/health-care systems within their region that have completed plans in place.

TSA contractors will identify hospital/health-care systems that do not have written mass fatality management plans and aid them in the development of such plans by sharing best practice plans or examples of mass fatality management plans that other hospital/health-care systems have developed.

TSA contractors will encourage hospital/health-care systems' participation in local and/or regional mass fatality planning efforts by sponsoring and/or facilitating meetings with other partners. The number of meetings attended with partners to develop mass fatality plans will be documented on quarterly report.

**SC-4.3.** By August 8, 2008, 90% of hospital/health-care systems will complete an assessment of the estimated number of fatalities that their community can expect during a mass fatality event.

DSHS will establish contracts with TSA contractors to encourage integration and coordination by hospitals/health-care systems to partner with other community entities to assess the estimated number of fatalities that can be expected during a catastrophic event.

TSA contractors will identify hospitals/health-care systems that do not have a written community assessment of the estimated number of fatalities possible during a catastrophic event.

TSA contractors will encourage the development of mass fatality assessments, in coordination with local and/or regional partners. The total number of hospital/health-care

systems that have written mass fatality assessment in place will be documented on quarterly report.

## **Hospital Evacuation Plans**

**Goal:** To adequately address the needs of specific patient populations who will require treatment.

#### **Objectives**

**SC 5.1.** By August 8, 2008, an inventory of statewide transportation needs for hospital/health-care system evacuations and evacuation of medical special-needs populations will be developed.

DSHS and GDEM will collaborate to identify solutions and alternatives for hospital/health-care system evacuations to include evacuation of medical special-needs populations.

DSHS will establish contracts with TSA contractors. A TSA contractor who's TSAs is located in water surge zones will provide the number of hospital/health-care systems with evacuation plans and transportation needs to DSHS. Documentation of the identified transportation needs will possible solutions will be documented on the quarterly report.

SC 5.2. By March 31, 2008, 80% of the TSAs will have hospitals/health-care systems identified that will shelter in place during a large scale public health disaster.

DSHS will establish contracts with TSA contractors to identify and provide the number of hospital/health-care systems that will shelter in place. Documentation of the number will be required on quarterly report.

<u>Level Two Sub-Capabilities.</u> TSA contractors are required to prioritize all Level One Sub-capabilities to ensure their completion by August 8, 2008. Some of the TSA contractors have almost completed all Level One Sub-capabilities and will be able to focus on the objectives and activities as listed below for Level Two Sub-capabilities. Therefore, the objectives outlined in all Level Two Sub-capabilities reflect an estimated level of achievement.

## Alternate Care Sites (ACS)

**Goal:** To strengthening public health emergency medical management and treatment capabilities with respect to public health emergencies by identifying alternate care sites.

## **Objectives**

SC 6.1. By August 8, 2008, 80% of the TSAs will identify potential locations to support an event involving need for surge capacity.

DSHS will establish contracts with TSA contractors to continue to identify potential locations for alternative care sites with other preparedness partners. TSA contractors will partner with other preparedness partners to identify appropriate staffing for alternative care sites.

Activities will be documented on quarterly report.

**SC 6.2.** By August 8, 2008, 80% of the TSAs will have plans and procedures to obtain supplies, pharmaceuticals, and equipment to support a disaster-related health and medical response. Activities will be documented on quarterly report.

DSHS will establish contracts with TSA contractors to collaborate with other preparedness partners to allocate funds to the purchase of equipment and supplies to support alternative-care sites. Purchases will be documented on quarterly report.

#### **Mobile Medical Assets**

# Goal: To provide adequate mobile medical assets to areas of the states during an event.

#### **Objectives**

**SC 7.1.** By August 8, 2008, 80% of TSAs will have mechanisms in place to obtain medical care, supplies, and equipment during times of emergency.

DSHS will contract with TSA contractors to identify medical care, medical supplies, and equipment needed to respond to an emergency within their TSA. TSA contractors will obtain needed medical care, supplies, and equipment.

TSA contractors will assist in mobilizing medical assets as needed. Activities will be documented on quarterly report

**SC 7.2.** By August 8, 2008, plans will be developed to provide medications and supplies to any area of the state that may face disruption in the delivery of supplies during an emergency.

DSHS, in conjunction with GDEM and other partners, will develop/review and revise as necessary plans to provide medications and supplies to any in the state as needed.

#### **Pharmaceutical Caches.**

**Goal:** To access and provide prophylactic medication to all hospital/health-care system personnel and their families for a 72-hour period.

#### **Objectives**

**SC 8.1.** By August 8, 2008, 85% of hospital/health-care systems will have access to a pharmaceutical cache sufficient to provide prophylaxis to hospital/health-care system staff and their family members for a 72-hour time period.

DSHS Pharmacy Manager will review, fill, and ship the orders directly to the hospital/health-care systems.

TSA contractors will document on quarterly report that hospital/health-care systems have received their cache.

**SC 8.2.** By August 8, 2008, 70% of hospital/health-care systems will have a plan to disseminate prophylactic medication to essential hospital/health-care system personnel and their family members.

The DSHS Central Office will provide a distribution plan template to all DSHS HSRs for distribution to the TSA contractors. Template will provide clear instruction and examples of what must be contained in the plan, so that should a bioterrorism event occur, prophylactic medication will be distributed to hospital/health-care system staff and their family members in a timely and effective manner.

DSHS will document when the template has been provided to TSA contractors for distribution. TSA contractors will document on quarterly report the number of hospital/health-care systems within their TSA that have received and completed the plan.

**SC 8.3.** By August 8, 2008, 60% of hospital/health-care systems will receive training on the Strategic National Stockpile (SNS) Program.

Health Service Region (HSR) Strategic National Stockpile (SNS) coordinators will provide training to hospital/health-care system staff on the SNS Program.

Training will be documented.

**SC 8.4.** By August 8, 2008, 40% of hospital/health-care systems will be able to effectively demonstrate their ability to request any and all emergency material.

DSHS will contract with TSA contractors to assist hospitals/health-care systems to conduct an exercise of their ability to use their internal procedures to request any and all emergency material.

TSA contractors will assist DSHS in testing hospitals'/health-care systems ' ability to use internal procedures to request material. The results of the test will be documented either on the quarterly report or if tested during a drill or exercise submitted using the After-Action Report (AAR).

#### **Personal Protective Equipment (PPE)**

**Goal:** To assure that all first receiver hospital/health-care system personnel have appropriate personal protective equipment and are trained on their use.

#### **Objectives**

**SC 9.1.** By August 8, 2008, 90% of hospitals/health-care systems will have an appropriate PPE for staff.

DSHS will contract with the TSA contractors to identify individual hospital/health-care systems that do not report appropriate PPE (at least 12 sets of Level-C PPE).

TSA contractors will assist the hospitals/health-care systems within their TSA to obtain the required amount of PPE.

The number of facilities that have achieved the minimum level of PPE will be documented on the quarterly report.

**SC 9.2.** By August 8, 2008, 80% of hospitals/health-care systems will have written plans in place to disseminate appropriate PPE to their essential staff.

DSHS will contract with the TSA contractors to identify hospitals/health-care systems that do not have written PPE dissemination plans and assist in the development of those plans in hospital/health-care systems by sharing best practice documents or examples of dissemination plans from other hospitals/health-care systems.

The number of facilities that have developed written PPE dissemination plans will be documented on the quarterly report.

## Decontamination

**Goal:** To maintain current equipment and supplies for decontamination until such time as replacement is necessary.

#### **Objectives**

**SC 10.1.** By December 31, 2007, 100 of all decontamination equipment available within each TSA will be identified.

DSHS will contract with TSA contractor to conduct an inventory of all decontamination equipment available for use in their respective TSA.

TSA contractors will assist any hospital/health-care system who has identified any additional needs for decontamination.

TSA contractors will submit this inventory list to DSHS.

SC 10.2. By August 8, 2008, 80% of hospital staff who have been identified as needing to use decontamination equipment will be proficient using decontamination equipment.

TSA contractors will assist participating hospitals/health-care systems in gaining proficiency.

Documentation that each hospital/health-care system conducted a drill/exercise every six months will be completed. After-Action Report (AAR) will be required.

#### Laboratory Support.

Goal: To promote workforce development of the laboratory profession to recruit and train individuals to become professional laboratorians.

#### **Objectives**

**SC 11.1.** By June 30, 2008, 90% of Laboratory Reference Network (LRN) laboratories will be able to provide certification in these protocols to hospital/health-care system personnel.

LRN personnel will renew trainer certifications in protocols for infectious-goods packaging and shipping protocols.

Renewal of certifications and certified training classes provided will be documented on a quarterly report.

SC 11.2. By August 8, 2008, the number of hospital/health-care system laboratory staff trained on proper collection, packaging, and shipment of specimens and LRN sentinel protocols for rule-out testing will increase by 50%.

The DSHS Laboratory Services Section and Texas LRN laboratories will continue assisting with education and training of hospital/health-care system laboratory personnel in sentinel LRN rule-out testing protocols and certification in the proper collection, packaging, and shipment of diagnostic and infectious specimens. Proficiency tests will be administered during the second and fourth quarters of the grant period to determine the ability of the hospital/health-care system laboratory to follow LRN sentinel rule-out protocols. A minimum of two site visits per month will be conducted by DSHS to the LRN laboratories. DSHS will provide a written report of the site visit to the sentinel laboratory within 30 days of the visit. Reports of site visits will incorporate feedback for training delivery.

DSHS will contract with TSA contractors to assist hospitals/health-care system in coordinating exercises within the TSA with the Texas LRN laboratory located in that region. LRN laboratories will provide free packaging and shipping training to hospital/health-care system laboratory personnel. Hospital/health-care system laboratories receiving this training will participate in a shipping exercise with their local LRN to show competency in packaging and shipping procedures. Hospital/health-care system personnel will coordinate with their local LRN in developing a shipping scenario for the exercise.

The hospital/health-care system certified packager will package a sample and will ship it to the LRN laboratory according to the developed scenario. LRN personnel will examine the package and a report detailing any problems will be sent to the submitting hospital/health-care system within 30 days. The exercise will be conducted within 120 days of receiving the training. A corrective action plan will address needs in order to bring the submitting hospital/health-care system into compliance.

DSHS laboratory staff will address requests for facilitation between the laboratory and the preparedness staff within 30 days.

DSHS and Texas LRN reference laboratories will continue to offer opportunities for hospital/health-care systems laboratory personnel to receive training based on the most appropriate delivery method possible. DSHS personnel will meet with hospital/health-care system laboratory personnel to determine the best method for them to receive training (e.g., onsite, Web-based or other media). Documentation of training to include number of hospital/healthcare system personnel trained, type of training, and hospital/health-care system affiliation will be reported to DSHS from the LRN laboratories on a quarterly basis.

#### **Radiological Emergency Preparedness**

**Goal:** To increase health care workers employed in trauma hospital/health-care system and local emergency responders knowledge and ability to prepare for and respond to a radiological emergency.

#### **Objectives**

**SC 12.1.** By August 8, 2008, a minimum of 800 health-care workers employed in trauma hospital/health-care systems and local emergency responders will have completed education and training for radiological emergency preparedness and response.

DSHS will develop, conduct, and assist in emergency preparedness training to enhance local health care provider's radiological health, medical and recovery capabilities. The eight-hour Basic Hospital Radiological Preparedness course, the four-hour refresher course or an advanced 32-hour class will be offered and conducted for trauma hospital/health-care system and local emergency responders. Documentation of student learning through completion of a comprehensive test and student course evaluations will be completed.

Successful participation in a basic patient decontamination exercise will be documented.

SC 12.2. Throughout SFY 2008, DSHS will provide assistance in responding to a radiological event as requested by local jurisdictions or care providers.

DSHS will provide assistance to local jurisdictions and/or local health-care providers with potential or actual radiological incidents by providing technical advice and support with emergency plans and procedures. Assistance will be provided upon request to hospital/health-care systems and local officials regarding updating and maintaining their radiological emergency plans.

DSHS will provide briefings upon request to local governments and hospital/health-care system officials regarding radiological training requirements and procedures for local emergency responders.

DSHS radiological emergency staff is accessible to provide 24/7 on-site support during an actual radiological emergency or disaster.

DSHS will distribute program handouts to all 210 plus Texas trauma hospitals/healthcare system which describes Radiological Emergency Preparedness, what training is available to health care providers and contact information.

All activities will be for assistance/briefings provided; number of mailings sent will be documented.

**SC 12.3**. Throughout SFY 08, facilities that currently do not have their own inventory of personal radiological protection equipment or currently have a limited amount available for emergency use will be able to obtain equipment from the State.

DSHS will distribute, calibrate, and maintain additional radiological emergency response detection equipment.

DSHS will issue personal radiological monitoring devices to emergency responders and health care providers as requested.

DSHS will test the equipment issued to health-care facilities and tested for reliability every four years as needed.

Documentation is equipment issuance and testing will be maintained.

**SC 12.4**. Throughout SFY 08, DSHS radiological program staff will continue to gain knowledge regarding concerns and resources available to better provide services to health-care providers throughout the state.-Conduct and/or develop and participate in FEMA, DOE, CDC, and/or OASPR emergency preparedness exercises.

DSHS staff will apply knowledge gained from these workshops and conferences to the development of exercises provided in the radiological emergency preparedness classes for health-care providers.

DSHS will participate in a FEMA graded radiological exercise.

DSHS will provide/support full-scale radiological exercises at locations and facilities where previous classes were held.

Documentation of demonstrated knowledge and abilities regarding proper exercise techniques, participation in exercises, and support will be maintained.

## **Overarching Sub-Capabilities**

## National Incident Management System (NIMS)

**Goal:** To ensure that all participating hospital/health-care systems can demonstrate the presence and use of NIMS compliant systems that involve incident command (IC), multi-agency coordination, public information (PI), a NIMS implementation tracking system, programs for exercising plans and preparedness procedures, and the use of tools for resource management and acquisition, all composed of standard and consistent terminology in their preparedness plans and response systems.

## **Objectives**

**SC. 13.1.** By August 8, 2008, all hospitals/health-care systems will have adopted NIMS at the organizational level. They will work with associations, utilities, partners, and suppliers to encourage them to adopt the NIMS within their organizations.

DSHS will contract with TSA contractors ensure that hospitals/healthcare systems adopt NIMS.

Documentation will be required on quarterly report regarding the number of participating hospitals/health-care systems who have adopted NIMS.

TSAs will submit a letter annually verifying that participating hospitals/health-care systems have met NIMS compliance standards.

**SC 13.2.** By August 8, 2008, 100% of hospitals/health-care systems will have an integrated NIMS compliant Emergency Operation Plan (EOP) written in accordance with Texas state guidelines that includes:

a. An integration of their Emergency Operations Plans (EOP) with key response partners to include the local emergency management office to indicate expected roles during a response

b. Incorporation of the NIMS compliant principles and policies;

c. Designation of a Public Information Officer (PIO) and coordinate dissemination of public health and clinical threat information with partner agency PIOs and Joint Information Center (JIC);

d. Protocols to gather, collate and communicate public health and clinical threat information to key response partners in accordance with NIMS;

e. Evacuation plans for a catastrophic event (such as Category 4 or 5 hurricanes for those in coastal regions) that includes arrangement for transportation assets and staff to assist and accompany clients to the evacuation location;

f. Integrated preparedness and response activities with public health, public and private medical capabilities, federally qualified health care centers, mental health facilities, local emergency management offices, Councils of Government (COGs), Health Service Regions (HSRs), and other first responder systems

DSHS will contract with TSA contractors to identify participating hospitals/healthcare systems that do not have a coordinated NIMS compliant emergency operations plan and provide assistance in developing that document.

TSA contractors will assist hospitals/healthcare systems to develop and coordinate response capabilities with emergency operations centers and with other local responders.

TSA contractors will review participating hospitals/healthcare system EOPs to ensure:

1) All emergency incidents and exercises are managed in accordance

with ICS organizational structure, policies, and procedures;

2) Emergency incident and event management is coordinated and supported

through the development and use of an integrated multi-agency coordination system; and

3) A common communications process that it includes partners and processes for timely communication of accurate public information.

Documentation on quarterly report will include the number of participating hospitals/healthcare systems that have updated their EOP within the past calendar year.

SC 13.3. By August 8, 2008, 100% of hospitals/health-care systems will have an implementation plan that specifies how they will utilize grant funds to ensure they meet NIMS compliance standards.

DSHS will contract with TSA contractors to assist hospitals/health-care systems to develop an NIMS implementation plan.

TSA contractors and/or hospitals/health-care systems will participate in and promote appropriate interagency mutual aid agreements.

TSA contractors will provide quarterly document on number of mutual aid agreements established.

**SC 13.4.** By August 8, 2008, 95% of participating hospital/health-care systems personnel will complete training for IS- 700, 800a, ICS 100 and 200 as required by hospital's employee training plan

DSHS will contract with TSA contractors to provide support to participating hospitals/health-care systems to continue to ensure staff complete appropriate level of ICS training that meets NIMS curriculum standards.

DSHS will contract with TSA contractors to assist each participating hospital/health-care system to track completion of IS-700, IS-800a, ICS100 and 200 or equivalent.

Required quarterly report documentation will include the number of staff trained and the number of staff needing training for each ICS course

**SC 13.5.** By August 8, 2008, 100% of hospital/health-care systems will incorporate NIMS/ICS into all-hazards internal and external preparedness exercises that involve responders from multiple disciplines, multiple agencies and organizations.

DSHS will contract with TSA contractors to assure NIMS/ICS structure has been incorporated into all exercises pertaining to preparedness.

Documentation on quarterly reports will require the number of hospitals/health-care systems that have conducted or participated in an exercise. TSA will be required to submit After Action Reports (AARs) to DSHS and ensure that modifications have been incorporated into the hospital/health-care system's EOPs.

SC 13.6. By August 8, 2008, 100% of hospitals/health-care systems will maintain an inventory system to track all response assets

DSHS will require all contractors to maintain a list of all assets purchased with HPP funds. In addition, TSA contractors will require all participating hospitals/health-care systems maintain an inventory list of all of their response assets.

TSA contractors will report directly into the Texas Resource Response Network (TRRN) all equipment valued at or above \$5,000 purchased for regional use that could be used either intra-regionally or statewide in a response.

Completion of the inventory list of equipment purchased with the HPP grant funds will be submitted semi-annually to DSHS.

**SC 13.7.** By August 8, 2008, 100% of TSAs will ensure that national and state standards and guidance to achieve equipment, communication and data interoperability are incorporated into acquisition programs.

TSA contractors require and verify that regional and local response equipment, communications, and data systems are interoperable with the equipment of external partners.

Documentation on quarterly report will include the number of hospitals/health-care systems that have redundant communication systems in place.

SC 13.8. By August 8, 2008, 100% of TSAs will apply standardized and consistent terminology across the TSA and ensure hospitals/healthcare systems use plain English during an emergency

DSHS will contract with TSA contractors to ensure that hospital/health-care system EOPs reflect an emphasis on the use of plain English by staff during emergencies.

#### **Education and Preparedness Training.**

**Goal:** Continue to coordinate, integrate, and make accessible educational and training opportunities available statewide.

#### **Objectives**

**SC 14.1.** By August 8, 2008, 90% of TSA will ensure hospitals/health-care system develop an education /training program for their hospital/health-care system staff.

DSHS will contract with TSA contractor to ensure hospitals/health-care systems develop an emergency preparedness and response education /training program for their staff which has been based on identified needs, and current programs for adult and pediatric pre-hospital, hospital, and outpatient health-care personnel. TSA contractors will establish a system to track all required elements of the training opportunities offered in their TSA, to include subject matter, date of training, objectives of the training, and number trained by health-care specialty/hospital affiliation.

Documentation of all training offered/provided by each facility within the TSA verified during Quality Assurance visits by DSHS.

SC 14.2. By August 8, 2008 90% of hospital/health-care system personnel will be trained based on an individually identified need that will allow them to respond to an event or other public health emergency.

DSHS will contract with TSA contractors to assist hospitals/health-care system in developing an education and training plan for each individual staff member that addresses one or more of the following capabilities:

- 1) strengthen information sharing and collaboration;
- 2) interoperable communication;
- 3) chemical, biological, radiological/nuclear, and explosive detection, response, and
- 4) decontamination;
- 5) medical surge; and
- 6) mass prophylaxis.

Required documentation on the quarterly report will include the number of hospital/health-care system personnel with established training plans, the number of hospital/health-care system personnel needing to complete the capabilities listed, and number of hospital/health-care system personnel receiving training/education for each type of course.

**SC 14. 3.** Throughout SFY 08, all hospital/health-care systems personnel will have ready access to possible education and training activities.

DSHS will provide on its Community and Preparedness Web page a current list of available statewide education and training activities.

Maintenance of web site with updates will be provided at least two times per month.

**SC 14.4**. By August 8, 2008, the number of learning opportunities will be increased by 10% for rural and frontier-like communities.

DSHS will identify alternative learning delivery systems, e.g., e-learning or distance learning opportunities.

DSHS will contract with TSA contractors to encourage rural and frontier-like community hospital/health-care systems to access alternate training delivery systems.

Documentation will be required on quarterly reports of the number of alternative learning delivery systems accessed. Documentation on quarterly reports will also include the number of hospital/health-care system/preparedness personnel who were able to access training by these alternative systems.

#### **Exercises, Evaluation, and Corrective Actions.**

**Goal:** To build upon and increase present capacities to better prepare the health-care communities to cope with an all-hazards scenario.

#### **Objectives**

SC 15.1 By August 8, 2008, 95% of participating hospitals/health-care systems will demonstrate redundant communication ability.

DSHS will contract with TSA contractors to assist hospitals/health-care systems in testing once per quarter their communication systems for redundancy.

TSA contractors will identify those entities that have not demonstrated redundant communication and will assist them by employing best practices of other stakeholders in the TSA.

Documentation of testing by each facility will be required on a quarterly report.

**SC 15.2.** By August 8, 2008, 90% of participating hospitals/health-care systems will have incorporated NIMS/ICS into internal and external, local and regional, emergency management exercises.

DSHS will contract with TSA contractor to assist hospitals/health-care systems in conducting drills/exercises that reflect the use of NIMS/ICS.

TSA contractors will schedule an exercise for those hospitals identified as not having achieved this objective and will request technical assistance from DSHS as necessary.

Documentation of compliance will be required on quarterly report.

SC 15.3. By August 8, 2008 95% of participating hospitals/health-care systems will test and verify internal and external (interoperability) systems at least once per quarter.

DSHS will contract with TSA contractors to organize a communications drill within their trauma service area at least once per quarter.

Activity will be documented on the quarterly report.

**SC 15. 4.** By August 8, 2008, 90% of participating hospitals/health-care systems have conducted and/or participate in at least two exercises.

DSHS will contract with TSA contractors to ensure that each participating hospital/health-care system will conduct or participate in two exercises; one of which is a multi-agency/multi-jurisdictional exercise involving several emergency support functions (ESF).

TSA contractors will assist in facilitation and coordination of one multi-agency/multijurisdictional exercise within the TSA with technical assistance from DSHS.

These planned exercises and preparatory trainings and tabletop exercises will be tailored to strengthen health-care medical surge capacity and to incorporate elements of the five mandated sub-capabilities:

1) interoperable communication system.

- 2) bed tracking system.
- 3) ESAR-VHP system.
- 4) fatality management plans.
- 5) hospital evacuation plans.

DSHS will provide technical assistance as needed to effect the desired activities and to assist in planning and brokering arrangements within the preparedness communities and to ensure that quality exercises are planned and executed in accordance with the HSEEP guidelines.

TSA contractors will encourage participating hospital/health-care systems to take advantage of other exercise offerings conducted in their respective regions that may assist them in meeting the FY 08 exercise requirements.

All exercise activity will be documentation on quarterly reports. In addition TSA contractors will complete or ensure completion and submission of After-Action Reports and corrective action plans as required.

#### Needs of at-risk populations.

**Goal:** Increase the collaboration between hospitals, the public health community, and emergency management on the provision of care for at-risk individuals.

#### **Objectives**

**SC 16.1**. SC 16.1 By August 8, 2008, 75% of participating hospitals/health-care systems will have plans in place that describe the integration of their responsibilities related to at-risk individuals with local public health and emergency management plans.

DSHS will contract with TSA contractors to facilitate meetings between hospitals, the public health community, and emergency management to identify any overlaps or gaps in planning for at-risk populations, and develop integrated plans, if necessary, to bridge the gaps.

The total number of hospitals/health-care systems that have met at least once during the quarter with their emergency management and public health partners will be documented on quarterly reports.

# Section VI Workplan and Timetable

*Key: Estimated Completion Date – ECD; State Resource – SR; Achievement Level - AL* 

## **Interoperable Communications**

**SC 1.1:** *Who* –TSA contractors/participating hospitals/health-care systems ; *What*- Develop interoperable communication systems that have redundant communications systems connected with Public Health, local emergency operations centers, EMS, law enforcement, and emergency management agencies; *Estimated Completion Date* - 08/8/081; *Where*- Statewide; *Why* - Continuation of efforts in TSAs to provide Level-4 radio communications interoperability; *How* – Contract; *AL* - 95%

**SC 1.2:** *Who* – DSHS/TSA contractors/participating hospitals/health-care systems ; *What* -Use of EOC emergency management software; *ECD* - 08/8/08; *Where*- Statewide; *Why* -Consistency and applicability; *How* – SR/contract; *AL* -90%

## **Bed Tracking System**

**SC 2.1:** *Who* - DSHS/TSA contractors/participating hospitals/health-care systems *What* - Report bed availability by the HAvBED definitions within 60 minutes; *ECD* - 08/8/08; *Where* - TSAs to the DSHS MACC; *Why* - Track medical surge capability; *How* – contract; *AL* - 100%

**SC 2.2**: *Who* - DSHS MACC; *What* - Report to the HHS SOC within 4 hours of request with the number of available hospital beds statewide by the HAvBED definitions; *ECD* - 08/8/08; *Where* - Statewide; *Why* - Track medical surge capability; *How* - SR; *AL* - 100%

**SC 2.3**: *Who* - DSHS MACC staff responsible to report bed availability; *What* - Trained and have access to EMSystem<sup>®</sup> and WebEOC<sup>®</sup> bed data; *ECD* - 06/30/08; *Where* – DSHS; *Why* - Timely reporting of bed availability; *How* – SR; *AL* -100%

## Texas Disaster Volunteer Registry (ESAR-VHP)

**SC 3.1**: *Who* –DSHS; *What* - Complete linkages to key Texas licensing and regulatory boards; *ECD* - 09/30/07; *Where* –Statewide; *Why* - Provide real-time verification of professional licensure (and to verify the licenses of spontaneous medical/healthcare volunteers); *How* – SR/contract; *AL* - 100%

**SC 3.2**: *Who* – DSHS; *What* - Complete linkages to national credentialing entities, such as the American Board of Medical Specialties; *ECD* - 09/30/07; *Where* – Statewide; Why - Credentialing and resource typing of physicians and other disciplines; *How* – SR/contract; *AL* - 100%

**SC 3.3**: *Who* - DSHS and medical/healthcare partners; *What* - Establish roles and responsibilities of state-level partners for the operation of the registry; *ECD*- 12/31/07; *Where* –

Statewide; *Why* - Delegation of administrative roles and responsibilities regarding state-level partners and the statewide volunteer system; How - SR; AL - 100%

**SC 3.4**: *Who* – DSHS; *What* – Place icon on key state-level partners' Web sites and materials; ECD - 12/31/07; *Where* – State-level partners' Web sites; *Why* – To provide Phase One awareness and recruitment of prospective statewide volunteers by establishing a direct Web link to their respective supportive associations and licensing or regulatory boards; How – contract; AL - 100%

SC 3.5: *Who* - DSHS and key statewide partners; *What* - Initiate statewide recruitment in coordination with state-level partners; *ECD* - 12/31/07; *Where* – Statewide; *Why* –To raise awareness and to begin recruitment for the population of the registry with state-level partners' constituencies; *How* – SR; *AL* – 100% of state-level, Phase One partners

**SC 3.6**: *Who* - DSHS and key statewide partners; *What* – Use the registry in actual events or as a component of exercises to evaluate functions; ECD - 08/08/08; Where – Statewide; *Why* – To "beta test" registry's key functions and to identify strengths, needs, improvements; *How* – SR; *AL*- 100% of Phase One state-level partners

**SC 3.7:** *Who* - DSHS and key statewide partners; *What* – Expand registry to include additional disciplines per ESAR-VHP Guidelines; *ECD* - 08/08/08; *Where* – Statewide; *Why* – To expand registry to include additional critical disciplines; *How* – SR; *AL* – 100% of disciplines noted in ESAR-VHP Guidelines

**SC 3.8:** *Who* – DSHS; *What* – Identify and train local and regional administrators; ECD - 08/08/08; *Where* – Statewide; *Why* – All disasters start at local level; registry will provide local/regional jurisdictions with pre-registration, verification of licensure and credentialing capabilities; How - SR;

AL - 75% of local/regional jurisdictions

**SC 3.9:** *Who* – DSHS; *What* – Identify and incorporate minimal training standards; ECD - 08/08/08; *Where* – Statewide; *Why* – To provide core competencies and standard training for all volunteers; *How* – SR; AL - 75% of volunteers

SC 3.10: *Who* – DSHS; *What* – Include registry in existing statewide exercise plans or assess in actual events; ECD - 08/08/08; *Where* – Statewide; *Why* – To evaluate or assess registry's key functions; *How* – SR; *AL* – 100% of functions

**SC 3.11:** *Who* – DSHS; *What* – Establish reporting system; ECD - 08/08/08; *Where* – Statewide; *Why* – To assess or evaluate strengths and gaps in registry; to identify areas for improvement; *How* – SR/contract; AL - 100% of registry's functions.

## **Fatality Management Plans**

**SC 4.1:** *Who* – DSHS and other state, regional and local partners; *What* – Develop written mass fatality plan as part of the State Emergency Management Plan; ECD - 08/08/08; *Where* – statewide; *Why* – No state plan is currently approved; *How* – Workgroup;

**SC 4.2:** *Who* – DSHS/TSA contractors/participating hospitals/health-care systems ; *What* – Develop written mass fatality plans as a part of a local or regional planning effort; *ECD* - 08/08/08; *Where* – Statewide: *Why* - Integration of regional planning: *How* – contract; *AL* - 82%

**SC 4.3**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Complete an assessment of the estimated number of fatalities that their community can expect during a mass fatality event; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Pre-planning required in anticipation for mass fatality events; *How* – contract; *AL* - 90%

## **Hospital Evacuation Plans**

SC 5.1: *Who* - DSHS/GDEM; *What* – Develop an inventory of statewide transportation needs for hospital evacuations and evacuation of medical special need populations; ECD - 08/08/08; *Where* – Statewide; *Why* - Pre-planning required for hospital/medical special need population evacuations; How - SR; AL - 100%

SC 5.2: *Who* – TSA contractors/participating hospitals/health-care systems ; *What* – Identify facilities that will shelter in place during a large scale public health disaster; *ECD*- 02/28/08; *Where* – Statewide; *Why* - Pre-planning required for hospital/medical special need population evacuations; *How* – contract; *AL* - 80%

#### Alternate Care Sites (ACS)

**SC 6.1:** *Who* – TSA contractors/participating hospitals/health-care systems ; *What* - Secure additional bed and physical infrastructure; *ECD* - 08/08/08; *Where* - Statewide; *Why* - Support a surge capacity event; *How* – contract; *AL* - 80%

SC 6.2: *Who* – TSA contractors/participating hospitals/health-care systems ; *What* – Written plans and procedures to obtain supplies, pharmaceuticals and equipment; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Support a disaster-related health and medical response; *How* – contract; *AL* - 80%

#### **Mobile Medical Assets**

**SC 7.1**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* – Identify mechanisms to obtain medical care, supplies, and equipment; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Pre-planning for need during times of emergency; *How* – contract; *AL* - 80%

**SC 7.2:** *Who* - DSHS/GDEM; *What* – Develop plans will be developed to provide medications and supplies to any area of the state; *ECD*- 08/08/08; *Where* – Statewide; *Why* - Pre-planning

needed to minimize disruption in the delivery of supplies during an emergency; How - SR; AL - 100%

## **Pharmaceutical Caches**

**SC 8.1**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Access to a pharmaceutical cache; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Protect health care workers and health care first responders from workplace exposures during a public health emergency; *How* – contract; *AL*- 85%

**SC 8.2:** *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Disseminate prophylactic medication to essential hospital personnel and their family members; *ECD* - 08/08/08; *Where* - Statewide; *Why* - Rapid distribution and administration of medical countermeasures to hospital-based healthcare workers and their family member; *How* - contract; *AL* - 70%

**SC 8.3:** *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Receive training on the Strategic National Stockpile (SNS) Program; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Effective use of any available public mobile medical assets and integration of other Federal assets; *How* – contract; *AL* - 60%

**SC 8.4**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Effectively demonstrate ability to request any and all emergency material; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Effective use of any available public mobile medical assets and integration of other Federal assets; *How* – contract; *AL* - 40%

## **Personal Protective Equipment (PPE)**

**SC 9.1:** *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Have an appropriate level of PPE for staff; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Hospital preparedness response capability and surge capacity; *How* – contract; *AL* - 90%

**SC 9.2**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Written plans in place to disseminate appropriate PPE to their essential staff; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Hospital preparedness response capability and surge capacity; *How* – contract; *AL* - 80%

## Decontamination

**SC 10.1**: *Who* – TSA contractors/participating hospitals/health-care systems ; *What* – Identify decontamination equipment that is available; *ECD* - 12/31/08; *Where* – Statewide; *Why* – Integration of medical capabilities; *How* – contract; *AL* – 100%

**SC 10.2**: *Who* - TSA contractors/participating hospitals/health-care systems ; *What* - Proficient use of decontamination equipment; *ECD* - 12/31/08; *Where* – Statewide; *Why* - Hospital preparedness response capability; *How* – contract; *AL* - 80%

## Laboratory Support

**SC 11.1**: *Who* - DSHS Laboratory Services Section and Texas LRN Reference Laboratories: *What* - Provide certification in these protocols to hospital personnel; *ECD* - 06/30/08; *Where* – Statewide; *Why* - Address hospital capacity to meet laboratory testing requirements as identified in the NRP; *How* – SR/contract; *AL* – 80%

**SC 11.2**: *Who* – Texas Hospital Laboratory Personnel: *What* - Trained on proper collection, packaging and shipment of specimens and LRN sentinel protocols; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Increase proficiency of laboratorians for rule out testing; *How* – SR; *AL* – 80% passing.

## **Radiological Emergency Program**

**SC 12.1:** *Who* - DSHS/Radiological Emergency Preparedness; *What* - Provide education and training to health care workers in trauma hospitals and local emergency responders regarding radiological emergency preparedness and response; *ECD* - 08/08/08; *Where* - Texas Trauma hospitals/EMS/local emergency responders; *Why* - Provide health care responders education and training regarding radiological emergency preparedness & response; *How* – SR; *AL* - Approx 800 plus emergency responders/40 classes

**SC 12.2**: *Who* - DSHS/Radiological Emergency Preparedness; *What* - Provide assistance in responding to a radiological event as requested by local jurisdictions or care providers; *ECD*-Throughout SFY08; *Where* - Texas Trauma hospitals/EMS/local emergency responders; *Why* - Provide 24/7 on-site support for radiological incidents & exercises, Information briefings; *How* – SR; *AL* - 100%

**SC 12.3**: *Who* - DSHS/Radio-logical Emergency Preparedness; *What* - Distribute, calibrate and maintain radiation detection equipment; *ECD* - Throughout SFY08; *Where* - Texas Trauma hospitals/EMS/local emergency responders; *Why* - Provide radiological detection equipment to health care facilities if requested; *How* – SR; *AL* - As requested

**SC 12.4**: *Who* - DSHS/Radio-logical Emergency Preparedness; *What* - Develop, conduct and provide guidance support for radiological exercises; *ECD* - 08/08/08; *Where* - Texas Trauma hospitals/EMS/local emergency responders; *Why* - To provide and practice knowledge and skills of healthcare providers and emergency responders; *How* – SR; *AL* - Minimum of 40 practical exercises/one major exercise

## **NIMS Compliance**

**SC 13.1:** *Who* – Participating hospitals/health-care systems ; *What* - Adopt NIMS at the organizational level; *ECD* - 08/08/08; *Where* – Statewide; *Why* - A consistent approach for Federal, state, and local governments to work effectively and efficiently together; *How* – contract; *AL* - 100%

**SC 13.2**: *Who* – Participating hospitals/health-care systems ; *What* - An integrated NIMS compliant Emergency Operation Plan (EOP) written in accordance with Texas state guidelines; *ECD* - 08/08/08; *Where* – Statewide; *Why* - A consistent approach for Federal, state, and local governments to work effectively and efficiently together; *How* – contract; *AL* - 100%

**SC 13.3**: *Who* –Participating hospitals/health-care systems ; *What* – Have an implementation plan that specifies how they will use grant funds; *ECD* - 08/08/08; *Where* – Statewide; *Why* – Ensure entities meet NIMS compliance standards; *How* – contract; *AL* - 100%

**SC 13.4**: *Who* – Participating hospitals/health-care systems personnel; *What* - Complete and continue training for IS- 700, 800, 100 and 200 as required by the agency EOP; ECD - 09-30-07 Continuation of training through 08/08/08; *Where* – Statewide; *Why* - A consistent approach for Federal, state, and local governments to work effectively and efficiently work together; *How* – contract; *AL* - 100%

**SC 13.5**: *Who* - Participating hospitals/health-care systems; *What* - Incorporate NIMS/ICS into all-hazards internal and external preparedness exercises that involve responders from multiple disciplines, multiple agencies and organizations; *ECD* - 08/08/08; *Where* – Statewide; *Why* - A consistent approach for Federal, state, and local governments to work effectively and efficiently work together; *How* – contract; *AL* - 100%

**SC 13.6**: *Who* – Participating hospitals/health-care systems ; *What* - Maintain an inventory system to track all response assets; *ECD* - 8/08/08; *Where* – Statewide; *Why* - Prepare for, prevent, respond to and recover from events; *How*- contract; *AL* - 100%

**SC 13.7**: *Who* – TSA contractors; *What* – Ensure that national standards and guidance are incorporated into acquisition programs to achieve interoperability of equipment, communication systems, and data reporting software or web access; *ECD*- 8/08/08; *Where* – Statewide; *Why* – Prepare for, prevent, respond to and recover from events; *How* – Contract; *AL* - 100%

**SC 13.8:** *Who* – TSA contractors; *What* - Apply standardized and consistent terminology across the public safety sector; *ECD* - 08/08/08; *Where* – Statewide; *Why* - A consistent approach for Federal, state, and local governments to work effectively and efficiently work together; *How* – contract; *AL* - 100%

## **Education and Preparedness Training**

**SC 14.1**: *Who* - TSA contractors; *What* – Ensure hospitals/health-care systems develop an education/training program for their staff; *ECD* - 08/08/08; Where – Statewide; *Why* - Increase level of education and ability to respond; *How* – contract; *AL* - 90%

**SC 14.2**: *Who* - Participating hospitals/health-care systems personnel; *What* - Receive training based on an individually identified need; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Allow personnel to respond to a terrorist incident or other public health emergency; *How* – contract; *AL* - 90%

**SC 14.3**: Who - Participating hospitals/health-care systems personnel; What - Access to possible education and training activities; *ECD* - Throughout FY2008; Where – Statewide; Why - Integration of public and private medical capabilities with public health and other first responders; How – contract; AL - 100%

**SC 14.4**: *Who* – DSHS; *What* - Increase the number of learning opportunities; *ECD* - Throughout FY2008; *Where* – Statewide; *Why* - Integration of public and private medical capabilities with public health and other first responders in rural and frontier communities; *How* – SR; *AL* - Increase by 10%

## **Exercises, Evaluation and Corrective Actions**

**SC 15.1:** *Who* - Participating hospitals/health-care systems ; *What* - Demonstrate redundant communication ability; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Evaluation of State and local preparedness and response capabilities through drills and exercises; *How* – contract; *AL* - 95%

**SC 15.2**: *Who* - Participating hospitals/health-care systems ; *What* - Incorporated NIMS/ICS into internal and external, local and regional, emergency management exercises; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Evaluation of State and local preparedness and response capabilities through drills and exercises; *How* – contract; *AL* - 90%

**SC 15.3**: *Who* - Participating hospitals/health-care systems ; *What* - Test and verify internal and external (interoperability) communications systems at least once per quarter; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Evaluation of State and local preparedness and response capabilities through drills and exercises; *How* – contract; *AL* - 95%

**SC 15.4:** *Who* - Participating hospitals/health-care systems ; *What* - Conduct and/or participate in at least two exercises; *ECD* - 08/08/08; *Where* – Statewide; *Why* - Evaluation of State and local preparedness and response capabilities through drills and exercises; *How* – contract; *AL* - 90%

## **Needs of At-risk Populations**

**SC 16.1:** *Who* - Participating hospitals/health-care; *What* - Written plans that describe the integration of responsibilities related to at-risk individuals with local public health and emergency management plans; ECD - 08/08/08; *Where* – Statewide; *Why* - Emergency management and public health plans address medical special needs populations. Hospital plans address at-risk populations. Collaboration is needed for delivery of services to both of these populations; *How* – contract; *AL* - 75%

#### **Budget Justification**

Work plan objectives listed above have funds allocated which support all of the activities that will need to be completed to accomplish the objectives.

Salaries and fringe in the amount of \$2,241,687 is budgeted to pay for 35.2 full time equivalents (FTE's) that work on the cooperative agreement objectives through out the year.

Travel in the amount of <u>\$236,720</u> is budgeted so that staff may travel through out the state to\_provide technical assistance to our regional offices and contractors, to attend hospital preparedness meetings, conferences and trainings, to conduct quality assurance reviews, to provide legal trainings and conferences, to conduct hospital emergency response training, to provide laboratory training and technical assistance for sentinel and level 2 laboratories, and conduct other hospital preparedness program activities. Out of state travel is necessary for staff to attend conferences and meetings to discuss best practices and lessons learned and for training purposes.

Equipment, supplies and other operating expenses in the amount of <u>\$351,683</u> is budgeted to support the staff and accomplish the objectives laid out in the work plan. This includes general office supplies, laboratory packing and shipping material, training material, software licenses, Department of State Health Services required phone, postage and State Office of Risk Management charges, registration fees, copier charges and communication devices monthly service charges.

Approximately <u>90%</u> of direct costs are allocated to contractors.

- Regional Advisory Councils (22) receive <u>\$24,202,227</u> to work with approximately <u>600</u> hospitals to complete activities associate with level one capabilities. Once these activities have been performed to obtain the pre-determined level of performance, funds will be used to conduct level two activities and also laboratory and radiation response training activities.
- Laboratory Response Networks (LRN's) (8) receive <u>\$376,289</u> to provide training activities and evaluate capabilities of regional hospital laboratories by performing drills, site visits, and other activities that will ensure that the hospital laboratories are competent in following LRN protocols for rule out procedures for bio-threat agents, collection and handling of specimens for chemical threat agents and proper packaging and shipping of infectious and diagnostic specimens.
- EMSystems® receives <u>\$1,210,529</u> to provide hospital status and diversion status for all Texas hospitals and dialysis centers and an additional <u>\$400,000</u> to provide a compliant ESAR-VHP application (EMCredential) for tracking and credentialing health professionals and lay personnel as volunteers.
- Suma/Orchard Social Marketing receives <u>\$100,000</u> to continue with the development, facilitation and support of the Preparedness Coordinating Council (PCC) and its work groups in developing a statewide medical/healthcare volunteer system, replicate Connectivity and Pharmaceutical/Durable Goods partnerships; pilot volunteer outreach, recruitment and registration project, maintain distribution system and recruitment materials and enhance web links for training stakeholders and assist with advance registration and accreditation issues for medical and health care providers.
- Texas Forest Service receives <u>\$100,000</u> to conduct National Incident Management System (NIMS) compliant Incident Command System (ICS) interactive training modules.

- Texas Engineering Extension Services receives approximately <u>\$615,173</u> to develop and implement multiple local and state level joint exercises with preparedness partners, to include special needs populations, conducted to evaluate the activities listed in the sub-capabilities. At least one functional exercise will be conducted.
- Critical Incident Stress Management (contractors to be determined) receives <u>\$9,998</u> to hire approved International Critical Incident Stress foundation trainers to conduct training classes for hospital staff and emergency responder based staff.

#### **Maintenance of Effort**

The state of Texas did not appropriate or spend any state money in federal fiscal years 2005 and 2006 for health care preparedness activities. For the Maintenance of effort requirement of this announcement the State of Texas' maintenance of effort for federal fiscal year 2007 is zero.

## Section VII Evaluation

#### **Contract Management and Monitoring**

Funding for administration of Texas Hospital Preparedness Program (THPP) across the state is awarded to entities through a competitive or non-competitive process conducted in accordance with state procurement laws, rules and regulations. For the contract year beginning 9/1/2007, approximately 37 agencies will be awarded one-year contracts. Nineteen of these contracts are awarded to agencies conducting HPP activities within the trauma service area which are subject to renewal for up to 4 additional years at the discretion of DSHS. Awards were made based on the outcome of DSHS Request for Proposal (RFP) CPS/HOSP 02181 issued March 15, 2007, and closing May 15, 2007. Responses were evaluated by external evaluators with experience in the areas of planning and preparedness. Additional contracts will be awarded for specific aspects of the project for a period of one year or less.

The contractors receive a contract detailing the activities to be completed, applicable federal and state laws, rules and regulations, performance measures, the approved contract budget and equipment, the contract term, DSHS contract general provisions and any special provisions which amend, expand or exclude any of the contract general provisions. A contract may be amended during its term to further define and refine activities, amend the budget, add or remove equipment, or add activities and funding at the request of the contractor or DSHS.

Contractors request reimbursement for allowable expenses incurred during the contract term for services/activities specified in the contract and contract work plan. To receive reimbursement, the contractor submits a request for reimbursement along with supporting documentation detailing the costs incurred for that month and what activities were conducted. The documentation is reviewed by the Contract Management Unit. If documentation is complete and reconciles to the reimbursement request, the request is approved and sent to DSHS Fiscal for processing. For requests for which the documentation is missing, incomplete or not in agreement with the requested amount, DSHS contacts the contractor to request missing items or provide technical assistance as needed. Payments for these requests are approved once the reimbursement request and supporting documentation are in agreement.

Contract requirements and performance reports are submitted to DSHS in accordance with the contract document. Once received, the requirements and reports are reviewed for format, completeness and content. Contractors are provided feedback and technical assistance regarding areas needing changes or improvement and are requested to submit revised information as needed. Once finalized, the requirement/deliverable is accepted by DSHS. The requirements and deliverables are tracked to ensure that all items due are submitted and contractors with missing or overdue items are contacted. Failure to submit required items, including requested revisions, can place a contractor on temporary payment hold until the items are received.

The THPP contracts are subject to programmatic and financial monitoring. Programmatically, a yearly risk assessment determines the contractors who will receive an onsite quality assurance visit to assess programmatic activities and progress toward meeting performance measures using a standard on-site monitoring tool. Additionally, desk reviews may be conducted to augment on-site monitoring or seek further information about reported or suspected issues. Financially, DSHS / Contract Oversight and Support conduct a yearly agencywide financial risk assessment to prioritize financial reviews of contracts, including HPP contracts. Each contractor is subject to periodic review by both state and federal auditors.

Both renewing and non-renewing THPP contracts are subject to close-out procedures to ensure that all contract requirements and deliverables have been received and accepted and that reported costs and payments are in agreement. For non-renewing contracts, contractors are also provided with instructions for disposition of equipment and retrieval of data, final reporting requirements, and surviving contract terms.

#### **State-Level Management and Monitoring of Financial and Performance**

DSHS program staff ensures that Hospital Preparedness Program (HPP) activities meet any related federal and state requirements, the program cooperative agreement guidance, and DSHS agency guidelines. Processes have been developed and implemented to evaluate to ensure key activities are completed by the contractor within the specified time frame. Database systems are in place to collect and analyze quantitative information submitted by the contractors. State level performance trends are determined by assessing this information in combination with submitted narratives outlining any issues and concerns expressed by the contractors. Strategies to improve performance are then determined and technical assistance is given to the contractors if needed.

DSHS' internal accounting system is capable of tracking budgets and expenditures at the categorical level (Salaries, Fringe, Travel, Supplies, Equipment, Contractual, Other Operating, and Indirect Cost). Budgets are created in DSHS's accounting system to reflect the budget submitted on the Form 424 of the hospital preparedness application. Categorical expenditures and obligations are capped at the categorical budget level to conform to the budget submitted on the Form 424. Expenditure and obligation reports are generated from this data by the grant reporting section of DSHS for official reporting on form 269 (FSRs) required by the issuing federal agency. Expenditures and obligations are constantly monitored by the Development and Evaluation Branch of the DSHS Public Health Preparedness Unit to ensure conformity to the requirements of the cooperative agreement.

Public Health Preparedness Unit Community and Regional Coordination Branch serve as a liaison between DSHS, the regions, public health, and health system partners to address priority concerns and provide advanced consultative and technical assistance services as needed. These program staff members assist with coordination of regional and local resources to provide support and assistance to contractors so that they are better posed to in achieve targeted outcomes as specified in the guidance.

# References

Litaker JR, Chou JY, Morrill JB. An Assessment of Current Health and Medical Capabilities in Texas: A State-Level Review. April 2007.

Litaker JR, Chou JY, Morrill JB. 2010 Strategic Vision – Health and Medical Preparedness In Texas. April 2007.

State of Texas Immediate Radio Communications Interoperability Plan, url: http://www.prpc.cog.tx.us/state%20of%20texas%20comm%20plan.pdf

**APPENDIX A** 

**Exercise Plan** 

(to be submitted upon request)

Appendix B



#### **COMMUNITY PREPAREDNESS SECTION**





Source: Health Quality Section/Office of EMS, March 2007 Created by: GIS Team, Center for Health Statistics, March 2007

# ASSURANCES


## **TEXAS DEPARTMENT OF STATE HEALTH SERVICES**

DAVID L. LAKEY, M.D. COMMISSIONER 1100 West 49th Street • Austin, Texas 78756 P.O. Box 149347 • Austin, Texas 78714-9347 1-888-963-7111 • <u>www.dshs.state.tx.us</u> TDD: 1-800-735-2989

August 2, 2007

Melissa Sanders U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response 330 C. Street NW Washington, D. C, 20201

Dear Ms. Sanders,

Hospital/healthcare systems are in a two-year phase-in process to catch up with local emergency planning NIMS compliance activities. Hospital/healthcare systems have until September 30, 2007 to comply with four of the NIMS Implementation Activities (IAs), #7, 9, #10 and #11. This letter is to assure the Assistant Secretary for Preparedness and Response that following the September 30, 2007 deadline, the Texas Department of State Health Services will verify compliance of all participating hospitals with NIMS elements 7, 9, 10 and 11 according to the prescribed guidelines.

Sincerely,

to LPawel

Denita Powell, Preparedness Unit Director Community Preparedness Section