Mississippi State Department of Health

Emergency Preparedness

Overview and Response Efforts

2017

Mississippi State Department of Health

Public Health Emergency Preparedness and Response

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What is a Public Health Emergency?

A public health emergency can range from a disease outbreak to natural disasters such as tornadoes, hurricanes, wildfires and ice storms. It could also include man-made disasters such as a biological incident involving anthrax, plague, tularemia or smallpox; or a weapon of mass destruction event such as a bomb, chemical or nuclear attack. Ultimately, there is not a disaster that occurs that does not affect the health of the community.

Another important aspect of emergencies is that they are unpredictable. No one knows when one will occur. While weather advances allow us to better predict a specific weather pattern such as a tornado or hurricane, we still don't know exactly when such a disaster will occur or the subsequent level of devastation. As we learned from Hurricane Katrina, large scale natural disasters can have a huge impact on public health. Why? Because of:

- Large numbers of ill and deceased people
- The potential for spread of diseases
- Water quality concerns
- Food quality issues
- Access to health care issues
- Mental health issues
- The potential for hazardous material spills

Preparedness Goals

The national preparedness goal is to have "a secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk." Unfortunately, Mississippi has had to respond to numerous events over the years. Because Mississippi has responded so frequently to multiple disasters, we are better prepared as a state.

Mississippi follows national guidelines including the National Response Framework, the National Incident Management System and the Homeland Security Exercise and Evaluation Program to ensure that all entities responding to an emergency are equipped and prepared to do so.

The Mississippi Emergency Management Agency (MEMA) is responsible for the Governor's Comprehensive Emergency Management Plan (CEMP). The CEMP outlines the 16 emergency support functions (ESFs). ESFs provide a mechanism for coordinated state assistance in response to all-hazards events. ESF-8 is responsible for Public Health and Medical Services. The Mississippi State Department of Health (MSDH) is the coordinating agency for ESF-8, sharing the responsibility with the University of Mississippi Medical Center (UMMC) of being the primary ESF-8 agencies. Many state agencies are support agencies in ESF-8. ESF-8 is activated whenever the state emergency operations center is activated for an emergency. However, not all ESFs are activated for each emergency; it depends on the disaster at hand.








Emergency Support Functions (ESFs) as defined by National Response Framework Guidelines	
ESF 1	Transportation
ESF 2	Communication
ESF 3	Public works and engineering
ESF 4	Firefighting
ESF 5	Emergency management
ESF 6	Mass care, housing, human services
ESF 7	Resource support
ESF 8	Public health and medical services
ESF 9	Urban search and rescue
ESF 10	Oil and hazmat response
ESF 11	Agriculture and natural resources
ESF 12	Energy
ESF 13	Public safety and security
ESF 14	Long-term recovery
ESF 15	External affairs
ESF-16	Military Support

Public Health Domains

The Centers for Disease Control and Prevention (CDC)'s National Standards for State and Local Planning provide a description of domains needed for achieving public health preparedness. This description serves as a planning resource that public health preparedness staff uses to assess their jurisdictional preparedness.
There are six total capabilities, and their descriptions are as follows:

Domain/Strategy	Health Care Preparedness and Response Capabilities	Public Health Preparedness Capabilities
Strengthen Community Resilience	**Capability 1:** Foundation for Health Care and Medical Readiness • Objective 1: Establish a Health Care Coalition (HCC) • Objective 2: Identify Risks and Needs • Objective 3: Develop an HCC Preparedness Plan • Objective 4: Train and Prepare the Health Care and Medical Workforce • Objective 5: Ensure Preparedness is Sustainable	**Capability 1:** Community Prepared **Capability 2:** Community Recovery
Strengthen Incident Management	**Capability 1:** Foundation for Health Care and Medical Readiness • Objective 4: Train and Prepare the Health Care and Medical Workforce **Capability 2:** Health Care and Medical Response Coordination • Objective 1: Develop and Coordinate Health Care Organization and HCC Response Plans • Objective 3: Coordinate Response Strategy, Resources and Communication **Capability 3:** Continuity of Health Care Services Delivery • Objective 2: Plan for Continuity of Operations • Objective 7: Coordinate Health Care System Recovery	**Capability 3:** Emergency Operation Coordination
Strengthen Information Management	**Capability 2:** Health Care and Medical Response Coordination • Objective 2: Utilize Information, Sharing Procedures • Objective 3: Coordinate Response Strategy, Resources, and Communications	**Capability 4:** Emergency Public Information and Warning **Capability 6:** Information Sharing

Public Health Domains (cont'd)

Domain/Strategy	Health Care Preparedness and Response Capabilities	Public Health Preparedness Capabilities
Strengthen Countermeasures & Mitigation	**Capability 1:** Foundation for Health Care and Medical Readiness • Objective 2: Identify Risks and Needs **Capability 3:** Continuity of Health Care Services Delivery • Objective 3: Maintain Access to Non-Personnel Resources during an Emergency • Objective 5: Protect Responder Safety and Health	**Capability 8:** Medical Countermeasure Dispensing **Capability 9:** Medical Material Management and Distribution **Capability 11:** Non-Pharmaceutical Interventions **Capability 14:** Responder Safety and Health
Strengthen Surge Management	**Capability 3:** Continuity of Health Care Services Delivery • Objective 6: Plan for and Coordinate Health Evacuation and Relocation Plans **Capability 4:** Medical Surge • Objective 1: Plan for a Medical Surge • Objective 2: Respond to a Medical Surge	**Capability 5:** Fatality Management **Capability 7:** Mass Care **Capability 10:** Medical Surge **Capability 15:** Volunteer Management
Strengthen Biosurveillance		**Capability 12:** Public Health Laboratory Testing **Capability 13:** Public Health Surveillance and Epidemiological Investigation

Preparedness Actions

On the federal level, Congress has approved funding for public health preparedness through state health departments to plan and prepare for any type of disaster that might occur.

What is the Mississippi State Department of Health doing to be prepared?

This book is designed to give the reader an overview of all of the activities and programs that have been established to help Mississippi be prepared, including core public health areas such as epidemiology, public health lab, and environmental health, which play a vital role in emergency response planning.

Mississippi ESF-8 planning works toward securing the capability and resources to respond to any hazard. A common acronym used in emergency preparedness planning is CBRNE. CBRNE stands for:

C-Chemical
B-Biological
R-Radiological
N-Nuclear
E-Explosives

Mississippi ESF-8 planning includes developing capabilities and resources according to the National Planning Scenarios located in the National Response Framework. These scenarios depict a diverse set of high-consequence threats with both natural disasters and potential terrorist attacks. The scenarios develop the basis for a coordinated federal planning, training and exercise program. The scenarios are listed below:

Scenario 1: Nuclear Detonation – 10-Kiloton Improvised Nuclear Device
Scenario 2: Biological Attack – Aerosol Anthrax
Scenario 3: Biological Disease Outbreak – Pandemic Influenza
Scenario 4: Biological Attack – Plague
Scenario 5: Chemical Attack – Blister Agent
Scenario 6: Chemical Attack – Toxic Industrial Agents
Scenario 7: Chemical Attack – Nerve Agent
Scenario 8: Chemical Attack – Chlorine Tank Explosion
Scenario 9: Natural Disaster – Major Earthquake
Scenario 10: Natural Disaster – Major Hurricane
Scenario 11: Radiological Attack – Radiological Dispersal Devices
Scenario 12: Explosives Attack – Bombing Using Improvised Explosive Devices
Scenario 13: Biological Attack – Food Contamination
Scenario 14: Biological Attack – Foreign Animal Diseases (Foot and Mouth Disease)
Scenario 14: Cyber Attack

As you review the many MS ESF-8 capabilities, resources and programs found in this ESF-8 book, reflect on the various scenarios or CBRNE events and how this multitude of resources will assist the citizens of Mississippi in a time of need.

Response Efforts

MSDH transport teams practice using protective equipmment.

Ebola Virus Disease 2014-2015

In 2014 the largest Ebola outbreak in history occurred in three West African countries. Imported cases and locally acquired cases in a healthcare setting occurred in the United States. The ongoing outbreak and potential for imported cases resulted in the need to have a unified response to address surveillance, laboratory detection, infection control outreach with providers, effective public and healthcare communication strategies and the enhanced monitoring of travelers.

On October 20, 2014, the Mississippi State Department of Health (MSDH) activated the Ebola Response Team to address Ebola virus planning and response in Mississippi. The response team successfully utilized the Incident Command Structure to manage all aspects of the response.

MSDH utilized the Concept of Operations Plan (CONOPS) to provide timely, relevant and actionable information to update the Mississippi ESF-8 Healthcare Coalition (MEHC) and other ESF-8 partners. MSDH communicated with hospitals' emergency responders and healthcare providers to assess readiness and to reinforce infection control protocols established during the response.

MSDH's Office of Epidemiology developed plans and effectively monitored and identified international travelers who recently returned from Liberia, Guinea or Sierra Leone. By incorporating iPhone technology such as FaceTime, MSDH was able to monitor individuals for signs and symptoms of Ebola Virus Disease while limiting direct contact during the 21-day monitoring period.

The Mississippi Public Health Laboratory developed guidelines for Mississippi laboratories that may perform routine diagnostic testing on specimens from patients who are EVD suspects. These guidelines include proper personal protection equipment, collection of specimens, and packaging and shipping.

Transportation plans were developed to safely and effectively manage the movement of EVD patients to appropriate healthcare facilities. MSDH Transportation Team members are well trained and are continuously exercised in infectious disease prevention procedures.

Through MSDH's relationship with the University of Mississippi Medical Center (UMMC), the state was able to utilize UMMC's resources as an Ebola assessment hospital to operate the Ebola Hotline.

The MSDH has used this same response method through the Incident Command Structure to address response activities around other events and emerging infectious diseases, most recently Zika Virus Disease in 2016-2017.

Response Efforts

2016 – 2017 MSDH Responses

During March and April 2016, the MSDH assisted in the severe storms and river flooding response by monitoring and providing public health resources to the affected areas. The flooding caused the evacuation of approximately 100 people in the Delta, including a nursing home in Clarksdale. The MSDH assisted in the evacuation of health care facilities (nursing homes). As part of the response effort, the MSDH monitored and provided situational awareness for health care facilities that were in danger of flooding. Daily situational awareness calls and briefings were conducted to inform ESF-8 partners, including government and non-government agencies.

On October 31, 2016, the MSDH Emergency Response Coordinators responded to a Newton County Hay Ride Incident in Chunky, Miss., to provide coordination of ESF-8 resources between the Chunky Fire District, MEDCOM, Air Care, hospitals, and ground transportation of patients to the helicopter landing zone. Seven accident victims required transportation to medical facilities.

In January, the MSDH Emergency Response Coordinator for the Hattiesburg area, working with other State and local responders, responded to a Category 3 Tornado that ripped through parts of Hattiesburg and surrounding communities in the pre-dawn hours. The Emergency Response Coordinator provided coordination of public health related resource requests and situational awareness to MSDH staff. Four people were killed and hundreds of homes, office buildings, and schools, including the campus of William Carey University, sustained substantial damage.

The City of Jackson's water was shut down due to three breaks in one of the city's main water lines in March 2017, impacting approximately 40,000 households for roughly 30 hours. The MSDH conducted pre-incident planning and outreach to stakeholders in preparation for a possible crisis-level disruption of water services. Approximately 600 restaurants and manufacturing sites were contacted. The MSDH provided oversight to healthcare facilities and to local and state emergency response personnel.

On May 17, 2017, the City of Vicksburg declared an emergency after the line carrying water from the city's water plant to approximately 30,000 customers broke, leaving residents without water for several days. The MSDH Environmental Office's Food Protection Teams issued special permits to restaurants during the water outage. Emergency Response Coordinators and other emergency response staff maintained operational oversight and provided liaison assistance to the city and county emergency officials during the event.

Epidemiology

The Office of Epidemiology conducts surveillance and investigates occurrences of reportable diseases and outbreaks in Mississippi. Through routine surveillance, and the implementation of active surveillance as needed, the Office of Epidemiology identifies diseases and conditions of public health concern, investigates to determine the causes and modes of transmission, and puts in place public health control measures to limit the impact and transmission of the disease or outbreak. In the event that prophylaxis is necessary through vaccine or antibiotic, appropriate preventive countermeasures are obtained and distributed.

The Office of Epidemiology works closely with the local epidemiology and emergency preparedness staff to direct surveillance and investigation activities. Epidemiology also works closely with healthcare providers in the state to provide expert consultation of disease incidence, provide laboratory support through the Public Health Laboratory, and communicate with providers in the event of a statewide or local incident of public health concern. Epidemiology also works closely to collaborate with other offices with the MSDH and with federal partners.

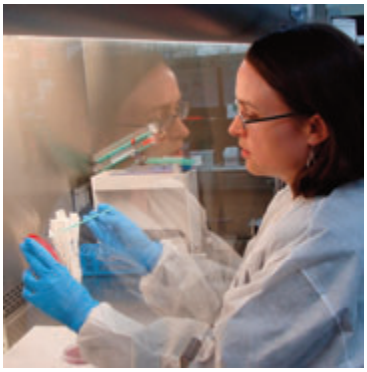
In 2009, the Office of Epidemiology implemented Epi-Tracks, an electronic disease investigation and reporting system. Users of this system can share disease case and investigation information in real time and can edit and review disease cases electronically. This system can receive electronic laboratory reports and online reports. Stakeholders are able to report diseases and conditions electronically and receive electronic laboratory reports.

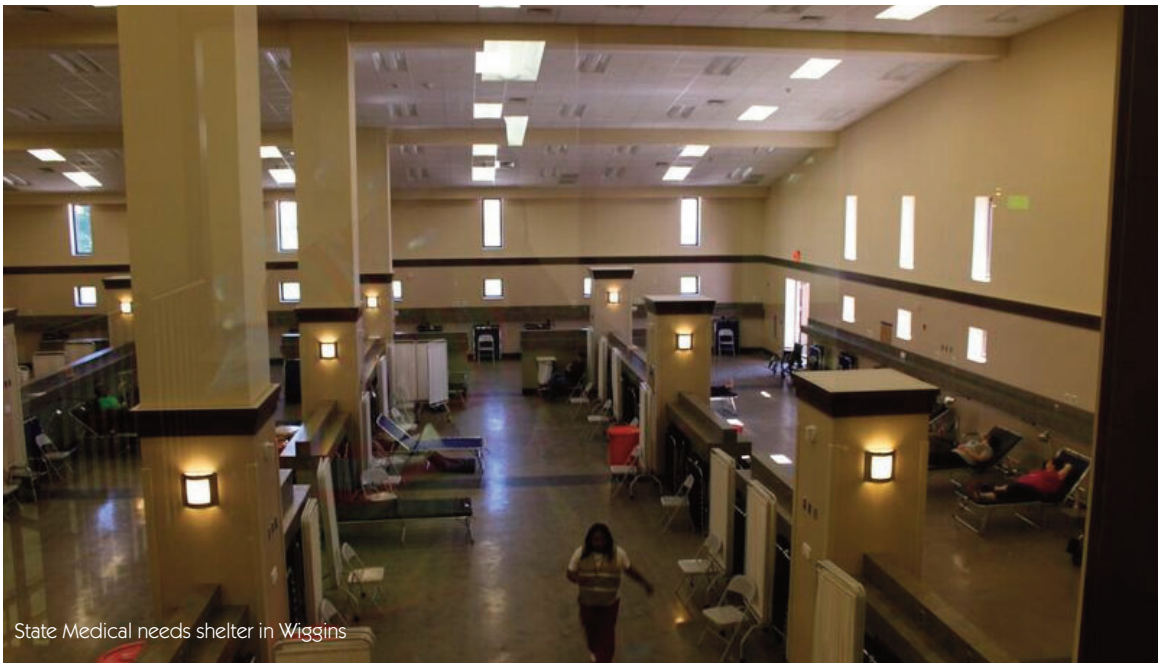
Public Health Laboratory

The Dr. F.E. "Ed" Thompson, Jr. State Public Health Laboratory currently has a 64-member staff that performs approximately 125 tests on more than 400,000 specimens a year of blood and body fluids collected from patients, as well as on drinking water and food. The lab provides results that help assess the health of newborns and mothers, and confirm outbreaks of sexually-transmitted diseases, influenza, tuberculosis, vaccine-preventable diseases, West Nile virus, foodborne illness and rabies.

The facility is also a first responder for terrorism events, being a Level 2 chemical terrorist response laboratory, and the state's only Laboratory Response Network (LRN) reference laboratory for biological threats. The lab also tests all of the state's drinking water, raw milk, and dairy products for bacterial and chemical agents.

Chemical, radiological and biological agents causing or having the potential to cause widespread illness or death are rapidly detected and accurately identified by the public health laboratory through collaboration with other federal, state and local laboratories. The public health laboratory, working in close partnership with public health epidemiology, environmental health, law enforcement, agriculture and veterinary officials, hospitals, and other appropriate agencies, produces timely and accurate data to support ongoing public health investigations and the implementation of preventive or curative countermeasures.





State Medical needs shelter in Wiggins

State Medical Needs Shelter (SMNS)

The National Response Framework (NRF) and the Comprehensive Emergency Management Plan (CEMP) task ESF-8 to assist ESF-6 with sheltering individuals with special medical needs. A special medical needs shelter is also known as a "Functional Needs Shelter for the Medically Fragile." The MSDH Office of Emergency Planning and Response (OEPR) is responsible for operating state and regional shelters for the medically fragile. MSDH has trained teams, which are MSDH employees, ready to respond in any event.

A State Medical Needs Shelter (SMNS) is a shelter of last resort during emergency conditions for persons requiring limited medical and nursing oversight who cannot be accommodated in a general population shelter.

A SMNS is designed to care for people with medical needs including:

- People with minor health or medical conditions that require professional observation, assessment and maintenance who cannot be served by the congregate shelter staff or that exceed the capability of the congregate shelter;
- People with chronic conditions who require assistance with activities of daily living or more skilled nursing care but do not require hospitalization;
- People who need medications or vital sign readings who are unable to receive such services without professional assistance;
- People with physical or cognitive disabilities including those that require the assistance of service animals; and
- People with other disabilities who cannot be sheltered at a general population shelter.

The MSDH has a Memorandum of Agreement with several colleges to provide facilities for SMNS shelters. MSDH collaborates with several state agencies including the University of Mississippi Medical Center, the Mississippi Department of Mental Health, and the Mississippi Board of Animal Health to provide support services for the shelters, including telehealth, mental health services, and pet sheltering.

MMRT Full Scale Exercise

Mississippi Mortuary Response Team (MMRT)

The Mississippi Mortuary Response Team (MMRT) was established to address the reality that, in the event of a catastrophic event or public health crisis, local mortuary resources and services may be damaged or unavailable.

The teams are comprised of mortuary science practitioners and technicians, mental health providers, logisticians, administration assistants and other specialists.

The MMRT is equipped and trained to provide support and assistance to local authorities with recovery and storage of deceased individuals. Each team has a fully equipped trailer that has the capability of processing 100 individuals.

In 2015, the MMRT became the first mortuary medical reserve corps in the country.

Public Health Volunteer Coordination

The MSDH acknowledges that the coordination and training of public health volunteers to support first responders during disasters and "all-hazards" emergencies is one of the most important aspects of emergency response. During an emergency or crisis, the services that volunteers can provide are crucial. In some cases, many volunteers will be needed to help local public health professionals respond to public health emergencies. Being able to efficiently utilize the capabilities of volunteers in an emergency often presents a major challenge.

Immediately after the terrorists attack in New York City on September 11, 2001, thousands of people arrived at ground zero to volunteer their assistance. Many of those who arrived wanted to provide medical assistance to the victims of the attack. In most cases, one could not distinguish qualified volunteers from unqualified. There was no mechanism for coordination; therefore response effectiveness was reduced. Advance registration of non-healthcare and healthcare volunteers provides public health and emergency authorities immediate access to personnel that may be needed in an emergency.

Because of these concerns, MSDH uses an electronic system based on the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) for registration, credentialing, deployment and demobilization of medical and non-medical volunteers in the event of a large scale emergency. The Mississippi Responder Management System (MRMS) plays an important role in emergency response, especially in the public health sector.

MSDH is looking for individuals who enjoy working with others to make a difference in the health of our community. We seek volunteers to register with the MRMS and to join or establish teams such as Medical Reserve Corps units in their own communities. These volunteers could be individuals with healthcare backgrounds and experience, and non-medical individuals with varying skills and experiences interested in volunteering during emergencies. Register with MRMS at www.signupms.org.

At-Risk Population Identification

Disasters impact all Mississippians and are particularly difficult for our most vulnerable populations, including those who are challenged whether physically or mentally (vision impaired, cognitive disorders, mobility limited), limited or non-English speaking, geographically or culturally isolated, frail elderly, pregnant women, and children.

The Public Health Emergency Preparedness Program and the Hospital Preparedness Program work with organizations and agencies that represent these vulnerable populations to ensure that they receive information necessary to prepare for their unique needs during a disaster or public health emergency in Mississippi. Before, during, and after an incident, members of at-risk populations may have additional needs including communication, medical care, maintaining independence, supervision and transportation.

The MSDH At-Risk Workgroup meets twice a year to review state plans to ensure that the needs of all at-risk groups are considered and addressed.

The MSDH Office of Communications recently held a messaging workshop with representatives from various at-risk groups to determine how messages would best be received during an emergency. The workshop focused on identifying the best communication tools and avenues for each group, as well as credible, trustworthy sources who could share the information with the intended audience. During the workshop, participants strengthened relationships with partnering organizations who could assist and share resources during a disaster or emergency.

Health Alert Network

The Health Alert Network (HAN) ensures that each community has rapid and timely access to emergent health information. The HAN functions as the Public Health Information Network's Health Alert component. This includes collaborating with federal, state and city/county partners to develop protocols and stakeholder relationships that will ensure a robust interoperable platform for the rapid exchange of public health information.

The CDC and state-level HAN is a nationwide project that links public health agencies at the local, state and federal levels to other organizations critical for preparedness and response via continuous, high-speed connection to the Internet, broadcast communications, satellite and web-based information distribution, and organizational infrastructure for defense against bioterrorism and health threats. MSDH is able to issue public health notices to hospitals, clinics, doctors, media and emergency services using fax, email, voice and other electronic communication methods 24/7/365.

To register for HAN, visit **https://hanms.org** and click Register Now.

Ambus

Ambus, short for ambulance bus, is a school bus retrofitted with a steel frame to hold stretchers and is used for the transport of nonambulatory individuals. During a declared state of emergency, ambulance buses provide evacuation and transport of special needs populations, mass casualties, and others who require transportation. Each ambus can hold up to 12 stretchers.

It is the goal of ESF-8 for each county to have an ambus. A spare bus can be used exclusively for ambus purposes or the steel frame can be installed when the buses are needed. Mississippi currently has 50 ambuses available for use in the event of an emergency. The use of ambuses is a key element of many preparedness plans.

Emergency Operation Plans (EOPs)

The Centers for Medicare and Medicaid Services (CMS) issued an Emergency Preparedness Rule on November 15, 2016, effective November 16, 2017, regarding healthcare facilities and their new requirements. The purpose of this rule was to establish national emergency preparedness requirements to ensure adequate planning for both natural and manmade disasters and coordination with federal, state, tribal, regional, and local emergency preparedness systems.

The MSDH has developed the following Emergency Operation Plan (EOP) templates to assist healthcare facilities in complying with the new CMS requirements:

- Hospital
- Long Term Care
- Home Health
- Hospice (Inpatient and Outpatient)
- Personal Care
- Ambulatory Surgical
- Rural Health/Federally Qualified Health
- Prescribed Pediatric Extended Care
- End Stage Renal Disease
- Organ Procurement Organizations
- Comprehensive Outpatient Rehabilitation
- Psychiatric Residential Treatment
- Outpatient Physical Therapy
- Community Mental Health
- Intermediate Care Facilities for Individuals with Intellectual Disabilities
- Transplant Centers
- Abortion Centers

Having these EOPs in place improves the capacity of healthcare organizations to identify, prepare for, detect, respond to, recover from, and mitigate the negative outcomes of multiple potential emergency events.

State Medical Response System

The State Medical Response System (SMRS) of Mississippi is a collaborative effort of response and support assets designed to aid local efforts requiring emergency patient care. The system comprises participating Mississippi hospitals and EMS providers as well as various state-level response teams to provide disaster medical care. The SMRS is a tiered response system designed to allow asset allocation to reflect the scope and scale of an incident, providing the appropriate level of support in the most efficient manner possible.

Forward Assessment and Scene Triage (FAST) Teams

In order to provide rapid support and scene assessment, the Forward Assessment and Scene Triage Team (FAST) concept was developed. First deployed in the 2010 tornado response, FAST teams assist local EMS and healthcare providers with field triage and support at the casualty collection point(s), as well as relay real-time information back to the MSDH for determination of additional support needed.

The teams include paramedics, nurses and other disaster response professionals. FAST teams have been deployed by helicopter and by boat as part of response efforts to support the lower Mississippi Delta in the 2011 Mississippi River event.

State Medical Assistance Team (SMAT)

The State Medical Response System (SMRS) has mobile field hospital capability designed to provide emergency medical care to patients. Mississippi currently has three SMAT-II units, each a 50-bed mobile hospital. One mobile field hospital unit has acute medical surge capacity, one is primarily tasked to assist with special medical needs sheltering, and one is used as a ready reserve.

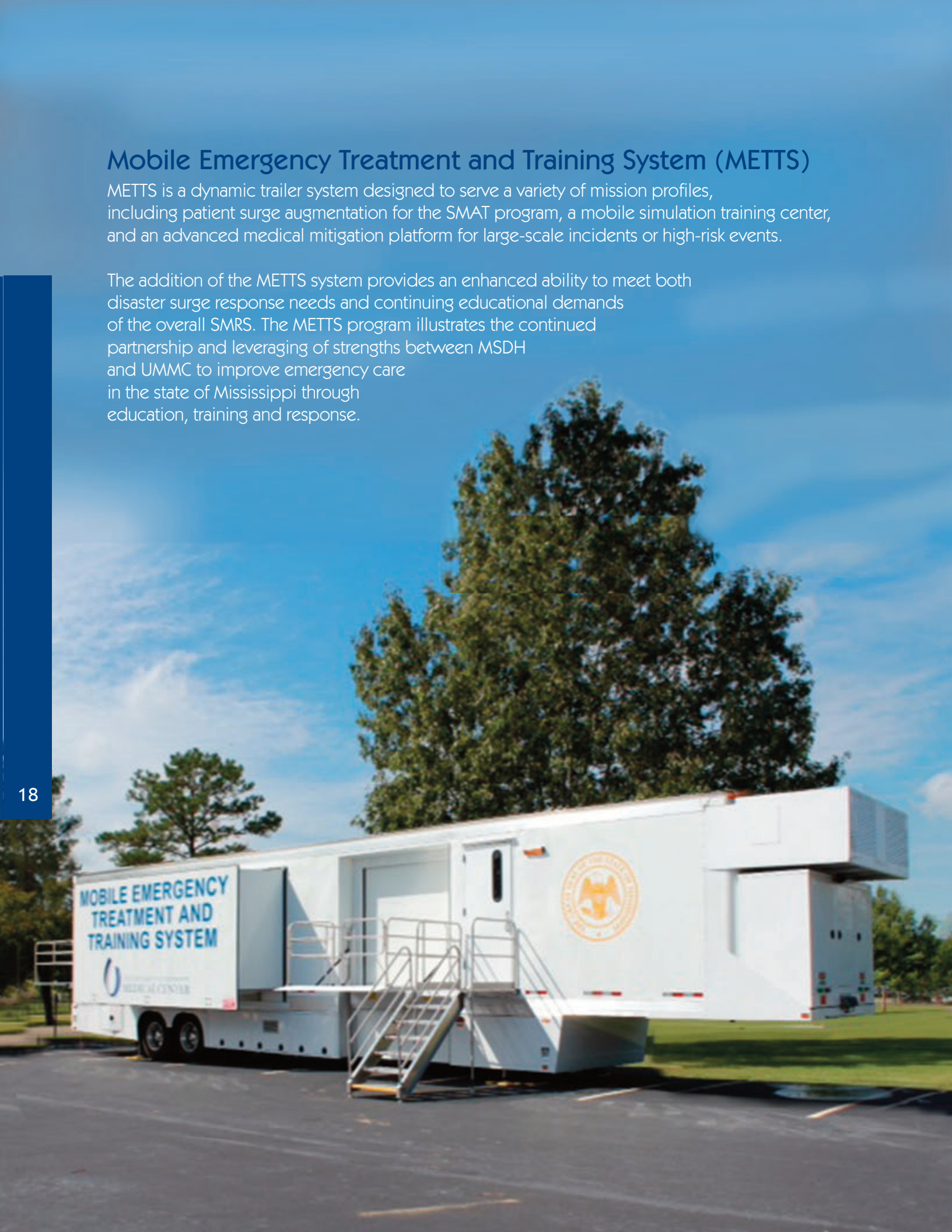
The statewide State Medical Assistance Team (SMAT) is made up of physicians, registered nurses, paramedics, emergency medical technicians, licensed practical nurses, pharmacists, firefighters, laboratory specialists, mental health specialists, HAZMAT technicians, law enforcement/protection officers, logistics specialists, respiratory therapists, communications and IT specialists, environmental health specialists, and support personnel. This model provides for uniform training and the ability to draw staff from multiple locations allowing unaffected areas to provide the lion's share of manpower in an event.

Mission profiles (or tasks) for SMATs could include medical surge care, patient post-decontamination medical support, mass medical care, alternate care facilities, mass drug distribution points, and various other duties.

Mobile Emergency Treatment and Training System (METTS)

METTS is a dynamic trailer system designed to serve a variety of mission profiles, including patient surge augmentation for the SMAT program, a mobile simulation training center, and an advanced medical mitigation platform for large-scale incidents or high-risk events.

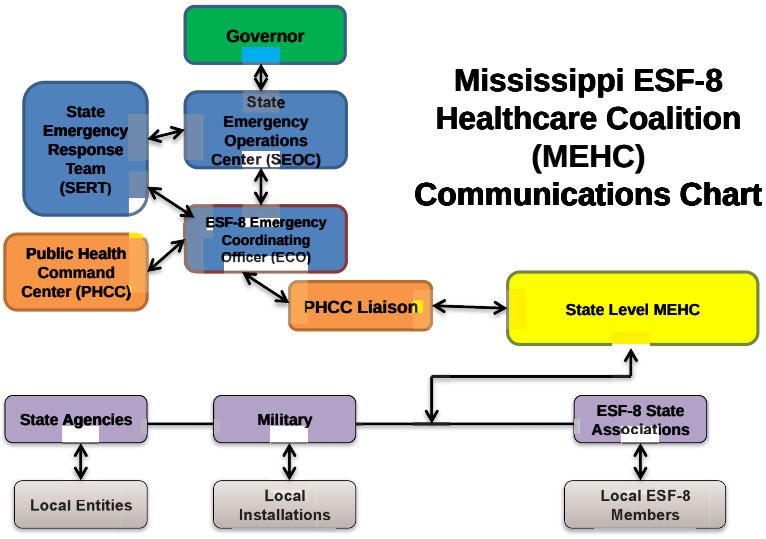
The addition of the METTS system provides an enhanced ability to meet both disaster surge response needs and continuing educational demands of the overall SMRS. The METTS program illustrates the continued partnership and leveraging of strengths between MSDH and UMMC to improve emergency care in the state of Mississippi through education, training and response.



MEHC meeting

The Mississippi ESF-8 Healthcare Coalition

The primary purpose of the Mississippi ESF-8 Healthcare Coalition (MEHC) is to facilitate two-way communications and information sharing between state-level partners in order to identify any unmet needs and to propagate a current, accurate, common operating picture during emergency responses. The MEHC membership is comprised of state agencies, state associations, the military and others. The MEHC is activated whenever the MSDH Public Health Command Center is activated during an emergency response or when preempting a potential threat (i.e., Ebola) that impacts public health and medical services. During such events, the MEHC conducts a 15 +/- minute conference call every morning when there is new and pertinent information to share with our ESF-8 partners. Minutes from the call, along with detailed information and graphs, are emailed to all MEHC members, who in turn, email it to their local partners to aid in decision making and to anticipate requests for resources from local emergency managers.



Mississippi ESF-8 Healthcare Coalition (MEHC) Communications Chart

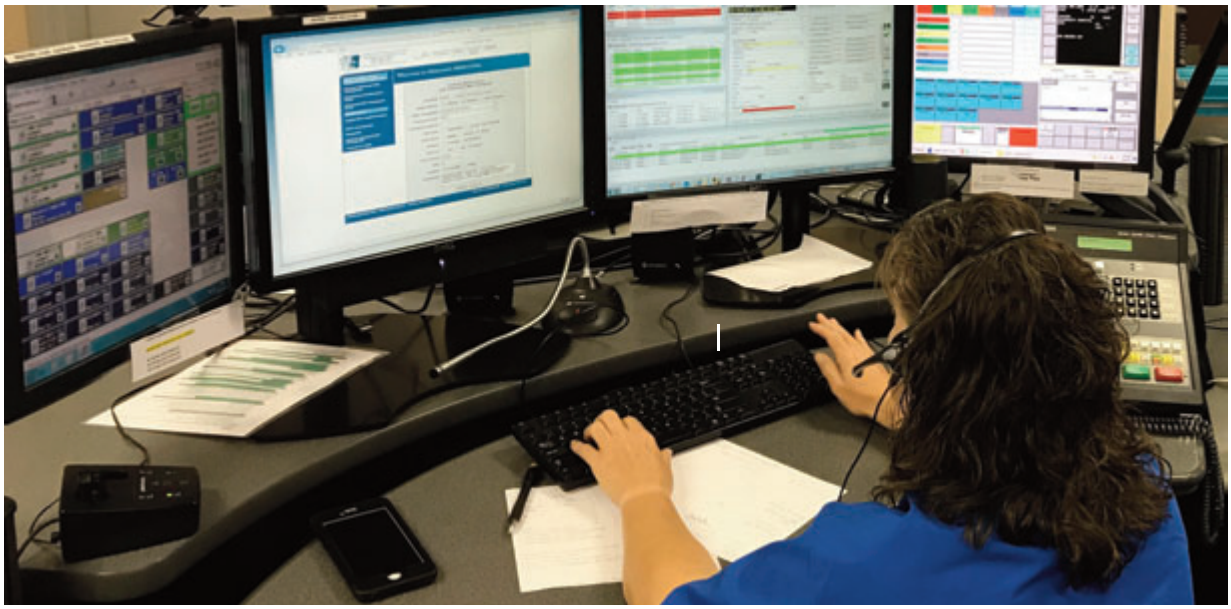
District III Planning Coalition meeting

Partner Support Network

The primary purpose of the Partner Support Network PSN is to provide businesses, faith-based and community organizations and others with the opportunity to support those communities impacted during an emergency response. Prior to an emergency, interested organizations notify the MSDH Healthcare Coalition Coordinator (HCCC) of the type of support they may be able to provide during a response. When MEHC members (state agencies, associations, etc.) report any unmet needs from their local partners, the HCCC will make these needs known to PSN partners, giving them an opportunity to offer support.

District Planning Coalitions

The primary purpose of the District Planning Coalitions (DPC) are to provide local ESF-8 partners, businesses, faith-based and community organizations, the military and others with an opportunity to build new relationships, and conduct planning, training and exercise activities in preparation for future emergency responses. These DPCs are led by local partners and supported by the MSDH Office of Emergency Planning and Response District Public Health Emergency Preparedness teams.



Mississippi Med-Com

Mississippi Med-Com is an advanced communications center providing support services to emergency response agencies, hospitals and first responders. This state-of-the-art communications center is located on the campus of UMMC and serves many functions. Med-Com is staffed 24 hours a day, seven days a week with experienced paramedics and emergency medical technicians ready to serve the needs of emergency responders and healthcare providers statewide during routine operations and in disasters.

Med-Com was designed to support the MSDH based on lessons learned from Hurricane Katrina in 2005. Initial grant funding was provided through the U.S. Health and Human Services Assistant Secretary for Preparedness and Response to purchase the communication equipment and infrastructure for the center. Med-Com is self-supported operationally through funding provided by the University of Mississippi.

Med-Com was one of the first users of the Mississippi Wireless Information Network radio system used by state agencies and public safety groups in emergencies. The system provides seamless interoperable emergency communication coverage throughout the state. Mississippi Med-Com works to ensure that all public health and safety providers have access, resources and support as they treat and care for patients throughout Mississippi.

"The work we've done with the Department of Health, the Mississippi Emergency Management Agency and the Mississippi Wireless Commission in the wake of Hurricane Katrina and during subsequent training and disaster drills really improved our response efforts."-Jonathan Wilson, UMMC Chief Administrative Office

Med-Com responds to an average of 50 inbound ambulance calls per day and is the communication center for one of the busiest medical heliports in the southeastern United States. Med-Com averages over 9,000 calls for assistance a month and provides a single point of contact for more than 1,600 emergency transfers into UMMC and tertiary care facilities in Mississippi and neighboring states. Med-Com has strategically placed emergency direct-dial phones across the state in hospitals and dispatch centers for use in day-to-day operations as well as for disaster support. By incorporating this disaster system into day-to-day operations, users become familiar with the system and facilitate its use during disasters.

Med-Com also monitors radio frequencies of EMS, fire departments, law enforcement and other state agencies on both a local and statewide level, which enables first responders to have access to UMMC's AirCare helicopters and enables the Med-Com center to provide early notification to emergency departments. This allows for better continuity of care, and assurance that patients are transported to services and hospitals that can manage their injuries in a quicker, more efficient manner.

SNS POD Drill

Strategic National Stockpile (SNS)

The mission of the Strategic National Stockpile (SNS) is to deliver critical medical assets to the site of a public health emergency severe enough to cause local supplies to run out. This is necessary since an act of terrorism or a large scale natural disaster targeting the U.S. population will require rapid access to large quantities of pharmaceuticals and medical supplies. Therefore a national stockpile has been created as a resource for all.

During a national emergency, state, local and private stocks of medical materiel will be depleted quickly. The SNS is designed to supplement and resupply state and local public health agencies in the event of a national emergency anywhere and anytime within the U.S. or its territories.

The SNS program has established minimum standards for facilities serving as receipt, store and stage (RSS) sites and requires states to coordinate with local jurisdictions and Cities Readiness Initiative (CRI) area planners to develop distribution strategies for medical countermeasures.

Hurricane Katrina remains the third deadliest hurricane in the U.S., marking a defining moment in emergency response history with unprecedented numbers of federal resources being deployed to disaster areas. It was during this event that Mississippi requested the SNS 12-hour Push Package (PPG), and to date is the only state to ever receive and distribute those assets during a disaster. Other than the nationwide Push Package to all states and territories during the 2009 H1N1 influenza outbreak, this real-world test of response capabilities was invaluable in the maturation of the state emergency management processes and SNS operations. Mississippi continues to maintain and build on its current level of readiness to receive,manage and distribute SNS materiel.

RSS Training with Push Package Containers

Chempack Program

Intentional or inadvertent releases of chemicals could cause a large-scale public health emergency. In order to prepare for such an incident, Mississippi participates in the federal Chempack program. The Chempack program is a part of the CDC's Strategic National Stockpile program. Its mission is to forward-place a sustainable resource of nerve agent antidotes throughout the United States so that it can be rapidly available to state and local emergency responders and enhance their capability to respond quickly to a large-scale nerve agent exposure. A deliberate or accidental nerve agent/organophosphate release can occur anywhere and any major release will require large supplies of nerve agent/organophosphate antidotes.

In Mississippi, there are 13 cache site hospitals that have Chempack assets. These are strategically located resources that are available for rapid response during times of need and have been placed to maximize coverage. Because hospitals carry limited supplies of nerve agent antidotes, the Chempack program provides this much-needed resource for our state. Also, state and local governments generally have limited or no chemical/nerve agent antidote stocks, and the Chempack program provides this resource. To minimize morbidity and mortality, cache site points of contact or designees will have authority to use Chempack assets if conditions warrant, as determined by medical professionals at the Chempack site. There are two versions of the Chempack available: a Hospital Chempack and an Emergency Medical Services Chempack.

Radiological Health Program

The Division of Radiological Health (DRH) is responsible for responding to all emergencies involving radioactive materials. The Division maintains 24-hour radiological emergency response capabilities in the event of an incident/accident involving the release or potential release of radioactive materials. Besides responding to an actual emergency at Grand Gulf Nuclear Plant, staff responds to: transportation accidents involving radioactive materials; radiation alarms at scrap metal facilities; lost, stolen, or abandoned nuclear gauges; and the recovery of damaged nuclear devices at work locations. Additionally, DRH is responsible for responding to suspected radiological events where sources of radiation must be identified quickly in order to make protective action decisions

The DRH is responsible for protecting the public from unnecessary radiation exposure from sources such as industry, research, educational institutions, medical treatment, healing arts, and the environment.

On July 1, 1962, the State of Mississippi entered into an agreement with the U.S. Nuclear Regulatory Commission to assume responsibility for the regulation, licensing and inspection of all radioactive materials in our state not under federal jurisdiction. There are approximately 300 radioactive material licenses active in Mississippi that are inspected by the Radioactive Materials Branch.

The Division is responsible for the registration, inspection and certification of X-ray machines. There are approximately 7,500 X-ray machines registered. The division is under contract with the Food and Drug Administration (FDA) to inspect all Mississippi mammography facilities annually. Standards for these inspections are set in part by The Mammography Quality Standards Act of 1992 (MQSA).

This branch collects and analyzes environmental samples in the vicinity of the Grand Gulf Nuclear Station and at the Salmon Test Site in Lamar County. Environmental samples including air, water, milk, soil, and vegetation are analyzed for the presence of radioactivity.

Cities Readiness Initiative (CRI)

In 2004, the U.S. Department of Health and Human Services created the Cities Readiness Initiative (CRI) as part of the Cooperative Agreement on Public Health Emergency Preparedness to help the nation's largest metropolitan regions develop the ability to provide life-saving medications in the event of a large-scale public health emergency, either man-made or natural.

CRI guidance is administered by the CDC Division of State and Local Readiness. CRI seeks to help respond to large-scale public health emergencies by providing life-saving medical supplies to 100 percent of a specific population within a 48-hour time frame. The program includes 72 metropolitan regions and covers an estimated 57 percent of the U.S. population.

The Jackson, Mississippi Metropolitan Strategic Area (MSA) includes the counties of Copiah, Hinds, Madison, Rankin, Simpson, and Yazoo contained within West Central Public Health District V. The Mississippi portion of the Memphis, Tennessee MSA includes the four Mississippi counties of DeSoto, Tate and Tunica contained within Northwest Public Health District I, as well as Benton and Marshall County in Northeast Public Health District II. CRI focuses specifically on urban areas and provides assistance in the distribution of medications and medical supplies at Point of Dispensing (POD) sites within 48 hours of activation.

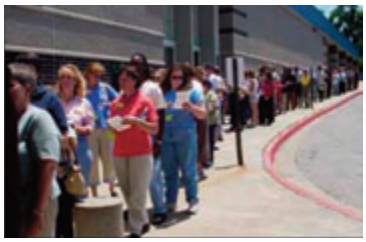
Response Efforts

District II
Open Point of Dispensing (POD) Drive-Thru Exercise

The District II Health Department staff participated in one of the Cities Readiness Initiative (CRI) drills by setting up their mass prophylaxis drive-thru site. This is a required exercise to demonstrate readiness to deliver medication to the citizens of this area in case of an anthrax attack or other bioterrorism act in the North Mississippi CRI area.

Closed Point of Dispensing (CPOD) Recruitment

Imagine this scenario . . .



Whether by accident or as part of a terrorist attack, a biological agent such as anthrax has been released and millions of people across the nation are at risk, including those in your community. People need preventive medications immediately, so the Centers for Disease Control ships supplies from its Strategic National Stockpile to local public health agencies.

These agencies activate long-standing and well-rehearsed plans to dispense the medicine at special sites. But even with extensive preparation there are long lines at every site as tens of thousands of people wait in line for their pills. People are stressed about missing work, trying to calm their children as they endure long waits, and tempers are starting to flare.

But not for you and your employees. You planned ahead, and are activating your CLOSED Dispensing Site. Your employees know that they and their families can avoid the public dispensing sites and get their medications at work. With important paperwork already on file, the process is quick and easy. Your employees and their families are protected from harm, and your business keeps running smoothly.

The Strategic National Stockpile (SNS) is a national supply of medications and medical supplies to be used for emergency situations such as a bioterrorism attack, disease outbreak, or natural disaster. Within 12 – 24 hours, the CDC can deploy a large shipment from the SNS, known as a "push pack", anywhere in the United States or its territories, to supplement and resupply state and local health and medical resources.

State and local health agencies must have plans in place to receive shipments from the SNS and distribute their contents to the community quickly and efficiently. The use of Closed Point of Dispensing (POD) sites is just one of many dispensing methods planned to deliver medication to 100 percent of the population within 48 hours. Mississippi has plans in place to use Open (public) POD sites as well as Closed (private) POD sites to ensure that pills or vaccines can be dispensed rapidly.

Closed POD sites will play an important role in any situation where it is necessary to provide emergency medications to the entire population. Traditional medical providers, such as hospitals and medical clinics, will likely be overwhelmed during a large-scale public health emergency. Open POD sites will also be highly stressed in a situation where the entire population needs to be given medications in a short time. Closed POD sites will help relieve some of the pressure on Open POD sites by reaching portions of the population independently.

As a result, long lines and public anxiety can be reduced and resources will be used more efficiently. Closed POD sites can also help the first responder community, businesses, faith-based organizations, government agencies, etc., ensure that they and their family members are protected – and therefore able to continue working or return to work more quickly.

Currently, Mississippi has enrolled more than 669 facilites into the Closed POD program. This is equivalent to approximately 1.2 million of its 2.9 million population. The goal is to enroll as many Mississippians into the Closed POD system as possible, thereby reducing lines in Open (public) POD sites.

A final advantage of Closed PODs is the ability to preplan for a disaster with multiple partners across the state. The ability to educate, plan, train and exercise will ultimately assist in reducing loss of life if Mississippi ever has to implement the Closed POD process.

Pandemic Influenza

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new virus emerges for which there is little or no immunity in the human population. The virus begins to cause serious illness and then spreads easily person-to-person worldwide. A pandemic is determined by the spread of disease, not its ability to cause death. There are plans for non-pharmaceutical as well as pharmaceutical interventions to control the spread of disease.

The MSDH response to the 2009 H1N1 Influenza Pandemic included prophylaxis (H1N1 vaccinations), medical materiel management and distribution, public information and warning, laboratory testing, and epidemiological surveillance and investigation. This response was led by MSDH and supported by a host of other partners across the state.

Pandemic Influenza exercise

Flu Shots

Pandemic Influenza planning and exercising are ongoing in Mississippi under the direction of the MSDH. The Mississippi Pandemic Influenza Steering Committee is a group of representatives from various agencies and organizations who meet twice a year to coordinate the state's pandemic influenza program. Various projects through different agencies and workgroups help to ensure the pandemic influenza program readiness. Such projects include a kindergarten handwashing campaign, agency telework template development, etc. In 2016, pandemic influenza tabletop exercises with county EMA directors and the Mississippi Band of Choctaw Indians were held across the state.

Mississippi State Department of Health worked with kindergarten students on the importance of handwashing

Handwashing Campaign

Each year, more than 164 million school days are lost due to various illnesses. It is hypothesized that a great number of these days could be reduced if children merely washed their hands properly and regularly. As a nonpharmaceutical intervention to prevent and control student absenteeism due to communicable diseases, proper hygiene practices were promoted with a special emphasis on hand hygiene to all kindergarten classrooms in each of the 148 public school districts in Mississippi for the 2016-2017 school year.

This project will continue in the 2017-2018 school year. Promotion of healthy living is covered, including making healthy choices such as physical activity, eating fruits and vegetables, and cough etiquette. The MSDH has engaged several state partners representing healthcare and government agencies to implement a statewide kindergarten handwashing campaign. Partners for this campaign include the Mississippi Department of Education, Mississippi Nurses Foundation, and the Mississippi Hospital Association/Association for Professionals in Infection Control and Epidemiology-Greater Jackson Chapter.

For the 2016-2017 campaign, allied health teachers served as training instructors for the allied health students who worked in the kindergarten classrooms. Each allied health teacher was provided with a train-the-trainer CD which included instructions on all the materials and lesson plans their allied health students used to implement the handwashing activities in the elementary schools. There were four lesson plans lasting approximately 30-45 minutes each. The allied health students visited the classrooms once a month for four months to implement each lesson. Between the times that allied health students were in the classrooms, the kindergarten teachers were provided with supplemental activities used to reinforce the concepts covered by the allied health students' monthly lessons.
The four lessons are as follows:

Lesson 1: Introduction to Germs
Lesson 2: Introduction to Proper Handwashing
Lesson 3: ABC's of Handwashing
Lesson 4: How Germs Are Spread

Pharmacy Supply trailer during tornado response

ESF-8 Partners: Mississippi Board of Pharmacy

During a disaster, healthcare professionals are needed to quickly respond to the area to help manage the healthcare needs of the community and mitigate the burden of the disaster on the health of the population. When a healthcare volunteer arrives at the scene, the onsite volunteer coordinator needs the capacity to quickly verify licenses for pharmacists, physicians, physician assistants, nurse practitioners, nurses and other healthcare providers. The Mississippi Board of Pharmacy has been a very willing partner to enhance the credentialing capacities of the medical community during disaster situations. The Mississippi Board of Pharmacy online system for licensure verification is connected to the Mississippi Responder Management System to simultaneously verify the licenses of pharmacists and pharmacy technicians both before and during a disaster.

Also, the Mississippi Board of Pharmacy is working to have a healthcare professional command center open at the Mississippi Board of Pharmacy during emergencies. This command center would house staff members from the Mississippi State Board of Medical Licensure, the Mississippi Board of Nursing, and the Mississippi Board of Pharmacy. The command center will grant emergency licensure to those out of state physicians, pharmacists, nurse practitioners, and nurses who are trying to come to the state to help in times of disaster. In addition, the command center will help recruit and vet volunteer healthcare professionals from within Mississippi to work in the disaster area. The Mississippi State Department of Health values the partnership with the Mississippi Board of Pharmacy and appreciates their emergency planning efforts.

Response Efforts

Zika Virus

In March 2016, the MSDH activated the Incident Command Structure to coordinate a multidisciplinary response to Zika Virus Infection. The response is led by the Office of Epidemiology and partners include Entomology and Environmental Health, Communications, Health Services (Child Health, Women's Health and the Birth Defects Registry), the Public Health Laboratory, and the Office of Emergency Planning and Response.

Activities include human surveillance, communication and outreach to Mississippi healthcare providers about testing and reporting recommendations, public health messaging about prevention, mosquito control and surveillance activities, Zika Pregnancy Registry and Birth Defects Registry coordination, improved access to long acting reversible contraceptives, land laboratory support, and testing.

District Public Health Emergency Preparedness (DPHEP) Map

Northwest Public Health District I
Batesville 662-563-5603

Northeast Public Health District II
Tupelo 662-841-9015

Delta Hills Public Health District III
Greenwood 662-455-9429

Tombigbee Public Health District IV
Starkville 662-323-7313

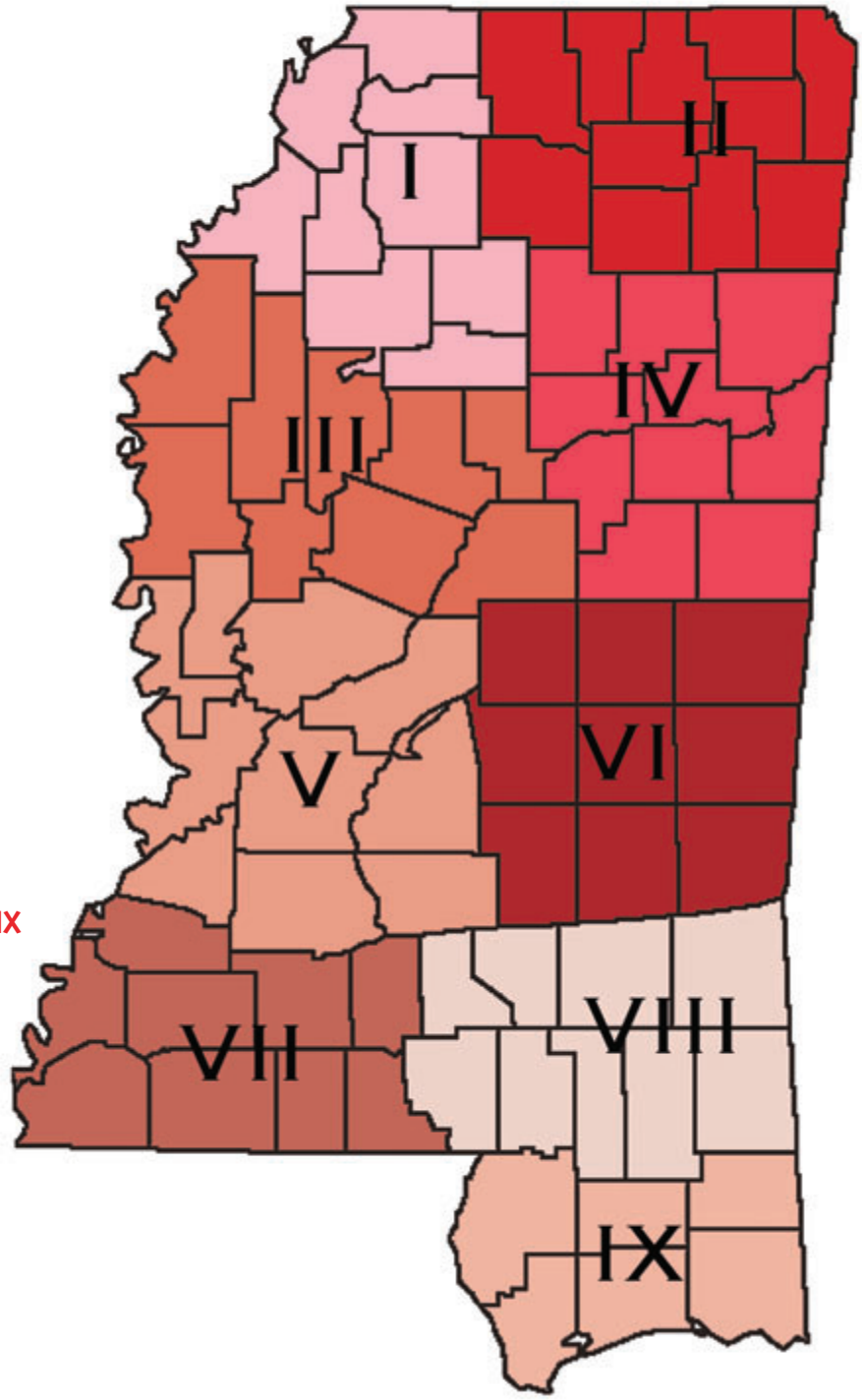
West Central Public Health District V
Jackson 601-978-7864

East Central Health District VI
Meridian 601-482-3171

Southwest Public Health District VII
McComb 601-684-9411

Southeast Public Health District VIII
Hattiesburg 601-271-6099

Coastal Plains Public Health District IX
Biloxi 228-436-6770



Acronym List

AMBUS	Ambulance Bus
ASPR	Assistant Secretary for Preparedness and Response
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosives
CDC	Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
CONOPS	Concept of Operations Plan
CRI	Cities Readiness Initiative
DHA	District Health Administrator
DHO	District Health Officer
DHP	Director of Health Protection
DHS	Department of Homeland Security
DOC	Director of the Office of Communications
DOD	Department of Defense
DSLR	Division of State and Local Readiness
EF	Enhanced Fujita
ELR	Electronic Laboratory Report
EMAC	Emergency Management Assistance Compact
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPI	Epidemiology
ESAR-VHP	Emergency System for Advance Registration of Volunteer Health Professionals
ESF	Emergency Support Function
ERC	Emergency Response Coordinator
FBI	Federal Bureau of Investigation
FAST	Forward Assessment and Scene Triage
FEMA	Federal Emergency Management Agency
GIS	Geographic Information Systems
HAN	Health Alert Network
HAZMAT	Hazardous Materials

Acronym List (cont'd)

HHS	U.S. Department of Health and Human Services
HR	Human Resources
HSEEP	Homeland Security Exercise Evaluation Program
IAP	Incident Action Plan
IC	Incident Command(er)
ICS	Incident Command Structure
IT	Information Technology
IMT	Incident Management Team
JIC	Joint Information Center
JIS	Joint Information System
LAB	Laboratory
LNO	Liaison Officer
LRN	Laboratory Response Network
MA	Mission Assignments
MBAH	Mississippi Board of Animal Health
MDAC	Mississippi Department of Agriculture and Commerce
MDEQ	Mississippi Department of Environmental Quality
MDHS	Mississippi Department of Human Services
MDOT	Mississippi Department of Transportation
MEMA	Mississippi Emergency Management Agency
MEPA	Mississippi Environmental Protection Agency
MERC	Mortuary Enhanced Remains Cooling (System)
MHA	Mississippi Hospital Association
MHRT	Mississippi Health Response Team
MHz	Megahertz
MMD	Mississippi Military Department
MMRT	Mississippi Mortuary Response Team
MRC	Medical Reserve Corps
MRMS	Mississippi Responder Management System
MS	Mississippi
MSA	Metropolitan Strategic Area
MSDH	Mississippi State Department of Health
MSOHS	Mississippi Office of Homeland Security

Acronym List (cont'd)

MSWIN	Mississippi Wireless Information Network
MYTEP	Mississippi Yearly Training and Exercise Program
NGO	Non-governmental Organizations
NIMS	National Incident Management System
NMMC	North Mississippi Medical Center
NRP	National Response Plan
OEPR	Office of Emergency Planning and Response
PAN FLU	Pandemic Influenza
PHCC	Public Health Command/Coordination Center
PIO	Public Information Officer
POD	Points of Dispensing
PPE	Personal Protective Equipment
RNA	Rapid Needs Assessment
SEOC	State Emergency Operations Center
SERT	State Emergency Response Team
SHO	State Health Officer
SMAT	State Medical Assistance Team
SME	Subject Matter Expert
SMNS	Special Medical Needs Shelter
SMRS	State Medical Response System
SNS	Strategic National Stockpile
SO	Safety Officer
SOP	Standard Operating Procedures
TCL	Target Capabilities List
UHF	Ultra High Frequency
UMMC	University of Mississippi Medical Center
UMHC	University of Mississippi Health Care
UTL	Universal Task List
VHF	Very High Frequency

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