

# Mississippi State Department of Health



## Emergency Preparedness Overview and Response Efforts



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 Capabilities

The Centers for Disease Control and Prevention (CDC)'s National Standards for State and Local Planning provide a description of capabilities 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 15 total capabilities, and their descriptions are as follows:

- Capability 1:** Community preparedness is the ability of communities to prepare for, withstand and recover, in both the short and long term, from public health incidents.
- Capability 2:** Community recovery is the ability to collaborate with community partners, (e.g., healthcare organizations, businesses, educational institutions and emergency management) to plan and advocate for the rebuilding of public health, medical and behavioral health systems to at least a level of functioning comparable to pre-incident levels, and improved levels where possible.
- Capability 3:** Emergency operations coordination is the ability to direct and support public health emergency response by establishing a standardized, scalable system of oversight, organization and supervision consistent with jurisdictional standards and practices and with the National Incident Management System.
- Capability 4:** Emergency public information and warning is the ability to develop, coordinate and disseminate information, alerts, warnings and notifications to the public and responders.
- Capability 5:** Fatality management is the ability to coordinate with other organizations (e.g., law enforcement, healthcare, emergency management and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage and disposal of human remains and personal effects; certify cause of death; and facilitate access to behavioral health services for family members, responders and survivors of an incident.
- Capability 6:** Information sharing is the ability to conduct multijurisdictional, multidisciplinary exchange of health-related information and situational awareness data among federal, state, local, territorial and tribal levels of government and the private sector. This capability includes routine sharing of information as well as issuing public health alerts to federal, state, local, territorial and tribal levels of government and the private sector in preparation for, and in response to, public health emergencies.
- Capability 7:** Mass care is the ability to coordinate with partner agencies to address the public health, medical and behavioral health needs of those impacted by an incident at a congregate location. This capability includes the coordination of ongoing surveillance and assessment to ensure that health needs continue to be met as the incident evolves.
- Capability 8:** Medical countermeasure dispensing is the ability to provide medicine (including vaccines, antiviral drugs, antibiotics, antitoxin, etc.) to treat the population in accordance with public health guidelines and recommendations.

## Public Health Capabilities (cont'd)

- Capability 9:** Medical materiel management and distribution is the ability to acquire, transport, distribute and track medical materiel (e.g., pharmaceuticals, gloves, masks, and ventilators) during an incident and to recover and account for unused medical materiel, as necessary, after an incident.
- Capability 10:** Medical surge is the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of the healthcare system to survive a hazard impact and maintain or recover operations that were compromised.
- Capability 11:** Non-pharmaceutical interventions are the ability to recommend strategies for disease, injury, and exposure control to the lead agency, and implement them as needed. Such strategies may include isolation, quarantine and hygiene.
- Capability 12:** Public health laboratory testing is the ability to conduct rapid and conventional detection, characterization, testing, reporting, support and networking to address actual or potential exposure to hazards including chemical, radiological and biological agents. This capability supports routine surveillance, including pre-event or pre- and post-exposure activities.
- Capability 13:** Public health surveillance and epidemiological investigation is the ability to create, maintain, support and strengthen routine surveillance and detection systems and epidemiological investigation processes, as well as to expand these systems and processes in response to incidents of public health significance.
- Capability 14:** The responder safety and health capability describes the ability to protect public health agency staff responding to an incident and the ability to support the health and safety needs of hospital and medical facility personnel, if requested.
- Capability 15:** Volunteer management is the ability to coordinate the identification, recruitment, registration, credential verification, training and engagement of volunteers to support the public health agency's response to incidents.

## 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 equipment.

## Ebola Virus Disease 2014-2015

The 2014 West Africa Outbreak is the largest Ebola epidemic in history, with two imported cases in the United States and two acquired cases in healthcare workers at the Texas Health Presbyterian Hospital in Dallas.

On Monday, October 20, 2014, the Mississippi State Department of Health (MSDH) activated the Ebola Response Team in response to Ebola virus concerns 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 continues to communicate with hospitals, emergency responders, and healthcare workers to determine readiness and to reinforce protocols established during the response.

MSDH's Office of Epidemiology proactively developed plans to utilize in the event that monitoring identified international travelers who recently returned from Liberia, Guinea or Sierra Leone or identified contacts to Ebola Virus Disease (EVD) cases. By incorporating iPhone technology such as FaceTime, MSDH is prepared to provide appropriate patient care while limiting direct contact during the 21 day monitoring period. An informational packet has also been developed to provide the monitored individual with instructions for medical emergencies and important telephone numbers.

The Mississippi Public Health Laboratory developed guidelines for Mississippi laboratories that may perform routine diagnostic testing on specimens from patients who are suspected or confirmed with EVD. These guidelines include proper personal protection equipment, collection of specimens, labeling 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.

MSDH's relationship with the University of Mississippi Medical Center (UMMC) continues to facilitate the response by utilizing UMMC's resources as an Ebola assessment hospital and operation of the Ebola Hotline.

MSDH's EVD response effort continues to protect the health and safety of the people of Mississippi. MSDH and many emergency responders continue to conduct training events to ensure they are ready to respond should a suspected case of Ebola emerge in Mississippi.

# Response Efforts

## Louisville Tornado 2014 – 2015

A series of 23 tornadoes devastated parts of Mississippi the week of April 28, 2014. There were 14 deaths; almost 3,500 homes were destroyed or damaged; close to 300 businesses were affected; and the Winston Medical Center was seriously damaged.

One of the worst hit areas was Louisville in Winston County.

Mississippi ESF-8 quickly deployed and responded to the immediate need for medical assistance and stayed on-site to assist with construction and the opening of a FEMA modular hospital.

FEMA's mobile disaster hospital was obtained through an Emergency Mutual Aid Compact (EMAC) from North Carolina, and was assigned to remain on-site for 18-24 months or until the Winston County Medical Center was rebuilt. This was the first time for the mobile disaster hospital to be used in an emergency capacity, and the hospital opened in record time on May 19, 2014. The mobile disaster hospital contained acute care beds, an emergency room, X-ray equipment, a pharmacy and a laboratory. The staff of the Winston Medical Center worked in the mobile disaster hospital until a more permanent facility was completed.



# Mobile Disaster Field Hospital



Acute Care Area



Emergency Room Area

# Winston Medical Center Transitional Facility





## Epidemiology

Epidemiological Surveillance and Investigation is the capacity to rapidly conduct investigations. It includes exposure and disease detection; rapid implementation of active surveillance; maintenance of ongoing surveillance activities; epidemiological investigation, analysis, and communication with the public and providers about case definitions; disease risk and mitigation; and recommendations for the implementation of control measures.

Disease control is conducted by rapidly determining exposure, mode of transmission, and agent, followed by interrupting transmission to contain the spread of the disease. Confirmed cases are reported immediately to all relevant public health, food regulatory, environmental regulatory, and law enforcement agencies. Suspected cases are investigated promptly, reported to relevant public health authorities, and accurately confirmed to ensure appropriate preventive or curative countermeasures.

The Office of Epidemiology implemented Epi-Tracks, a new surveillance system, in September 2009. This system can receive electronic laboratory reports and online reports. Users of this system can also share disease case information in real time and can edit and review disease cases electronically. Stakeholders are able to report diseases and conditions electronically and receive electronic laboratory reports.

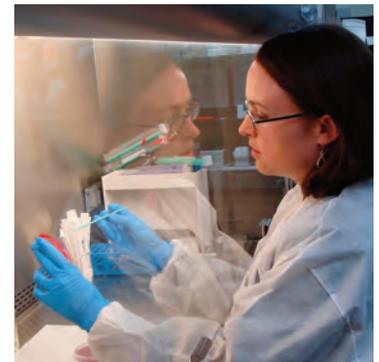


## Public Health Laboratory

The Dr. F.E. “Ed” Thompson, Jr. State Public Health Laboratory currently has a 90-member staff that performs approximately 125 tests on more than 600,000 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, Lyme disease, West Nile virus, rotavirus 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.





SMNS full scale exercise

## Special 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 Special 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 special 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 community 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.



Groundbreaking of Stone County SMNS



MMRT Full Scale Exercise

## Mississippi Mortuary Response Team (MMRT)

The Mississippi Mortuary Response Team (MMRT) works to manage fatalities during an emergency. Members of the MMRT include coroners, funeral directors, medical examiners, and members of the Mississippi Department of Mental Health, Homeland Security, and the Mississippi Hospital Association.

The MMRT participated in a Full Scale Exercise, February 26-27, 2014, to enhance their training and capabilities to respond to an actual event.

On Monday, April 28, 2014, the MMRT team responded to Louisville, Mississippi, which was devastated in a tornado outbreak. Team members throughout the state responded to assist the local coroner in retrieving and processing the victims of the tornado. There were a total of 11 lives lost during the event.





## 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](http://www.signupms.org).

“The feedback I have heard has been nothing but positive. The volunteers left feeling accomplished, because they truly made a difference in possibly preventing a house fire and saving a fire fighter’s life.” - Dr. Romeatrius Moss, Leader, MS Gulf Coast Medical Reserve Corps, MLK Day of Volunteer Service and Fire Safety Canvassing Event



## At-Risk Population Identification

The Public Health Emergency Preparedness Program and the Hospital Preparedness Program address the public health and medical needs of at-risk individuals in the event of a public health emergency. Before, during, and after an incident, members of at-risk populations may have additional needs including communication, medical care, maintaining independence, supervision and transportation.

In addition to those individuals specifically recognized as at-risk in the Pandemic and All Hazards Preparedness Act (i.e., children, senior citizens and pregnant women), individuals who may need additional response assistance include those who have disabilities, live in institutionalized settings, have diverse cultural backgrounds, have limited English proficiency or are non-English speaking, are transportation-disadvantaged, have chronic medical disorders, or have pharmacological dependence. Assisting the at-risk populations is a part of all preparedness plans.

MSDH has developed an At-Risk Work Group of individuals who work with the people defined above on a daily basis. The group meets quarterly to determine how to address the needs of these individuals.

## 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 38 ambulances available for use in the event of an emergency. The use of ambulances is a key element of many preparedness plans.



## Emergency Operation Plans (EOPs)

In January 2008, the Mississippi State Board of Health approved a regulation requiring licensed hospitals, long-term care facilities, home health, hospice and personal care homes within the state to have an “all-hazards” emergency operations plan (EOP). These EOPs comply with standards established by the MSDH and are to be completed and reviewed annually.

In order to assist facilities in complying with this regulation, the MSDH has developed five EOP templates that meet the critical elements of emergency planning:

- Communications
- Resources and Assets
- Safety and Security
- Staff Responsibilities
- Utilities and Clinical Requirements
- Support Activities

The “all-hazards” approach to planning and response for events considers activities that will take place during each phase of emergency management (preparedness, response, recovery and mitigation).

Having these EOPs in place improves the capacity of healthcare organizations to prepare for, detect, respond to, recover from and mitigate the negative outcomes of multiple potential emergency events. This “all-hazards” approach allows each facility to respond to a range of emergencies varying in scale, duration and cause in order to better protect their patients.

## 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.

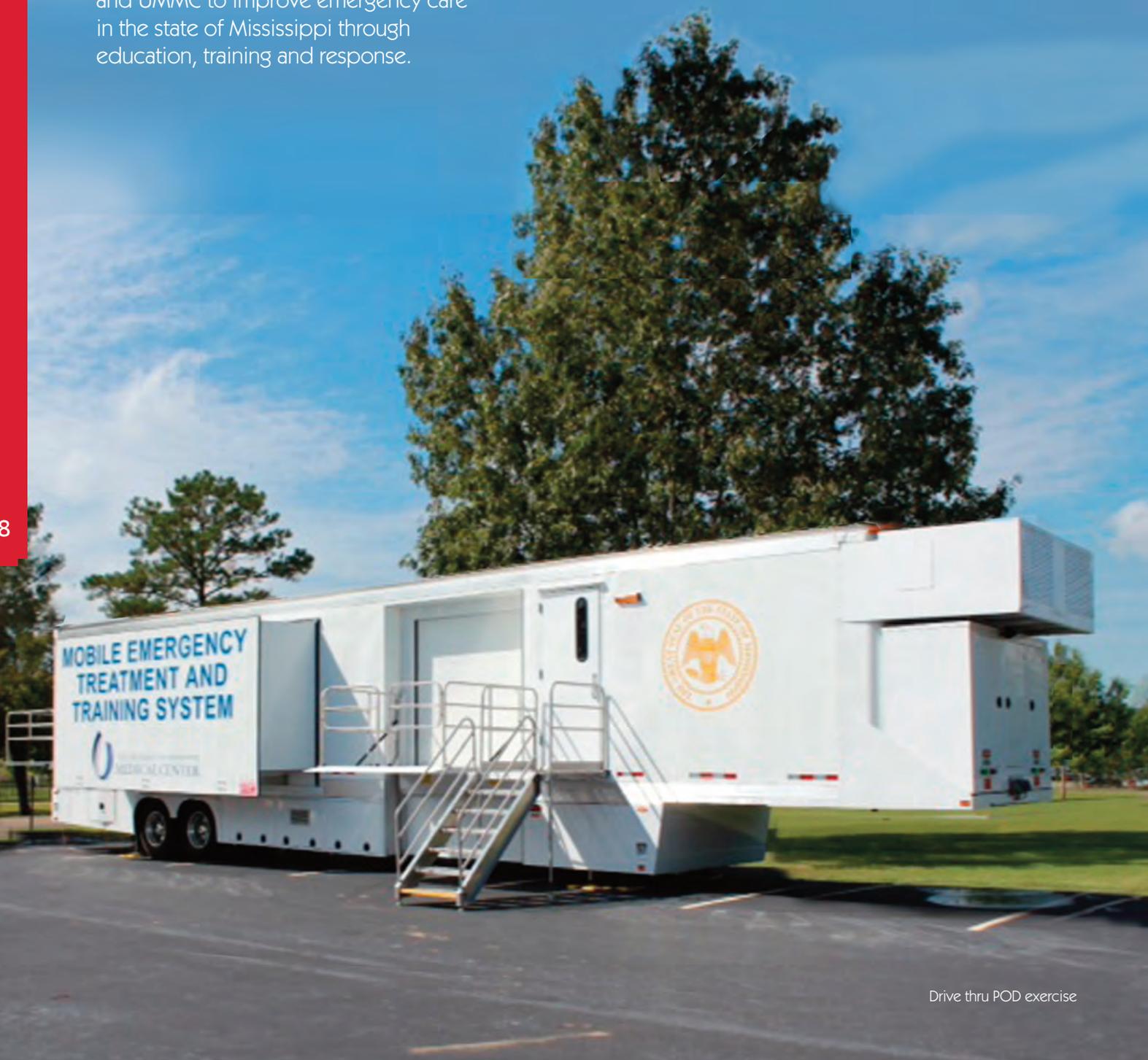
The statewide State Medical Assistance Team (SMAT) is made up of physicians, registered nurses, paramedics, emergency medical technicians, licensed practical nurses, pharmacists, firefighters, laboratory specialists, mental health specialists, HAZMAT technicians, law enforcement/protection officers, 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 decontamination, 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.





## State-Level Healthcare Coalition

While MSDH is responsible for coordinating all state ESF-8 responses, under ESF-8 of the Governor's Comprehensive Emergency Management Plan (CEMP), MSDH shares the role of primary agency with UMMC. Under the two primary agencies, there are multiple agencies and organizations that provide a supporting role to ESF-8. These primary and secondary support entities make up what is now referred to as the state level Mississippi ESF-8 Healthcare Coalition (MEHC).

To effectively communicate from the Governor to the Mississippi ESF-8 Healthcare Coalition (MEHC), a communications chart has been developed and tested through exercise and real world events. The comprehensive ESF-8 group reflects an entire representation of the potential primary and support entities of the public health and medical community.

It is natural to think about hospitals and long-term care facilities when thinking about ESF-8, but the Mississippi ESF-8 Healthcare Coalition (MEHC) also includes pharmacists, dentists, doctors, nurses, veterinarians, morticians, mental health providers, dialysis providers, and other medical partners. Often an organization such as the Mississippi Board of Medical Licensure will have a comprehensive list of medical physicians and can serve as a conduit for information sharing during a disaster event.



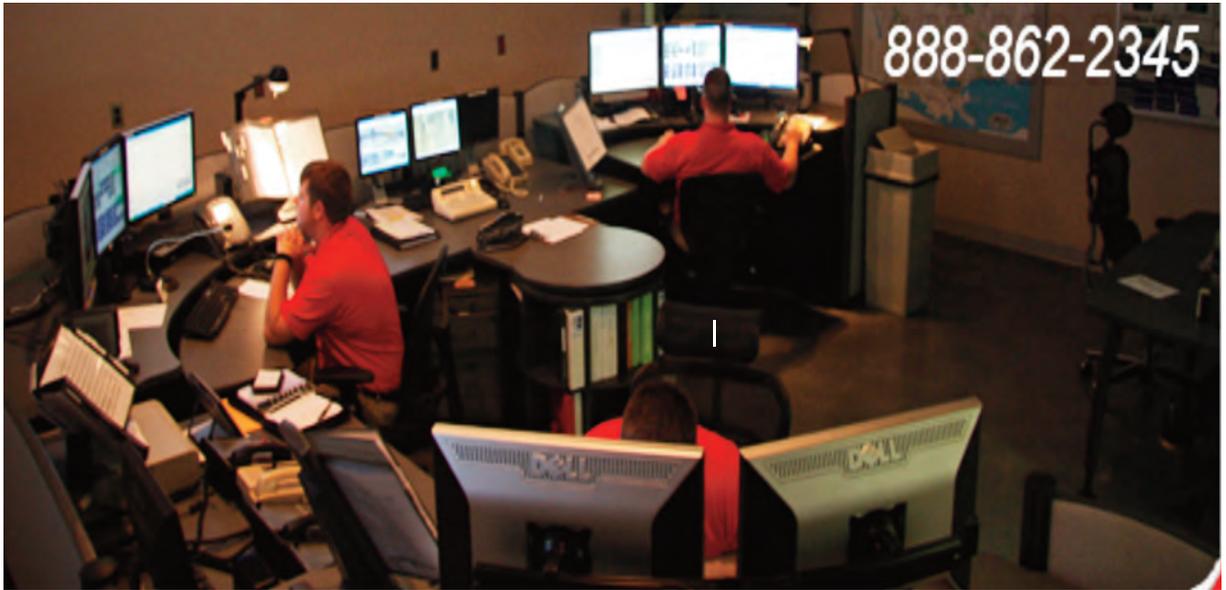
## District Planning Coalitions

Active participation in an ESF-8 Planning Coalition is a best practice for healthcare providers and responders who are dedicated to creating resilient communities through improved communications and planning.

Following guidance in federal grants used to create resilient communities, ESF-8 Planning Coalitions provide an opportunity for public and private agencies, organizations and companies to establish valuable partnerships for times of emergency response.

The MSDH has accepted the responsibility for helping communities throughout the state develop their own local, county and district-wide coalitions. These coalitions help grow important partnerships, improve communications and information sharing, discuss scarce resource allocation, coordinate training and exercises, and more.

For more information, please contact your MSDH district office.



## 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 6,000 calls for assistance a month and provides a single point of contact for more than 1,000 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.



## Strategic National Stockpile (SNS)

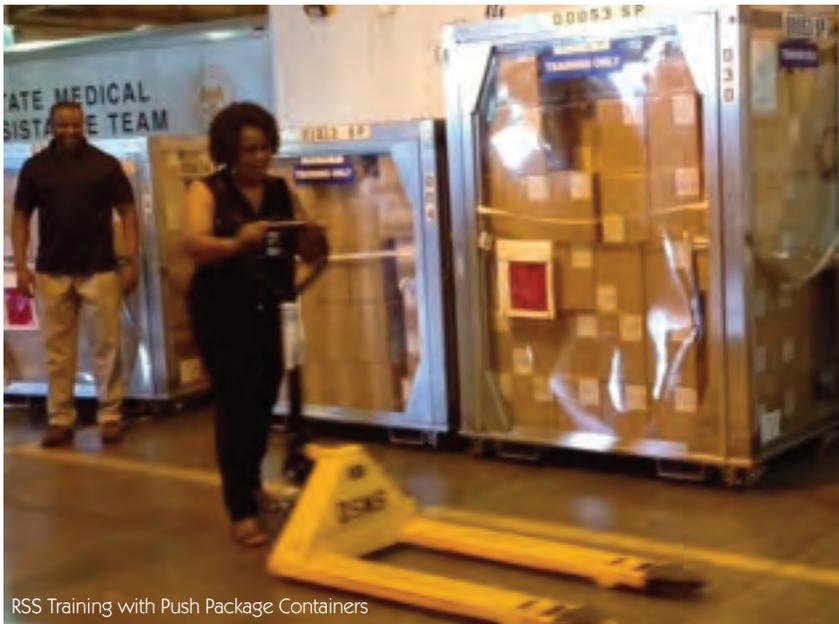
The mission of the Strategic National Stockpile (SNS) is to deliver critical medical assets to the site of a public health emergency severe enough to cause local supplies to run out. This is necessary since an act of terrorism or a large scale natural disaster targeting the U.S. population will require 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, stage and store (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 MSDH Radiation Control Program is designed to identify sources of radiation exposure, understand the biological effects of radiation, investigate and evaluate exposures, and formulate and apply regulations for the control and reduction of exposure. Through comprehensive monitoring and surveillance, the program determines levels of radioactivity present in the environment.

Staff members annually collect and analyze samples, including water, soil, meat, air and vegetation, as well as direct measurements to record radiation levels in the environment. Each person licensed to possess and use radioactive materials or registered to operate X-ray devices is evaluated to ensure the protection of citizens and the environment through compliance with regulations and specific license or registration conditions.

Radiological Health Program staff members participate in national studies, including the Nationwide Evaluation of X-Ray Trends sponsored by the Food and Drug Administration's Center for Devices and Radiological Health, to characterize the radiation doses patients receive during X-ray diagnostic examinations. The program maintains and enforces regulatory standards to ensure that the exposure of Mississippians to biologically-harmful radiation is maintained at low levels.

In addition, the Radiological Health Division maintains emergency response capabilities in the event of an incident or accident at the Grand Gulf Nuclear Station, a transportation accident, or a terrorist act involving radioactive materials. The professional staff are trained and on 24-hour call to respond to radiological emergencies. The division participates in quarterly exercises with Grand Gulf Nuclear Station and with other state agencies during bi-annual Federal Emergency Management Agency exercises.

The Mississippi Legislature also designated the MSDH Radiological Health Program to review and comment on technical information regarding radioactive waste issues. Accordingly, the staff actively participated in the implementation of the Southeast Interstate Low-Level Radioactive Waste Management Compact.



## 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 five counties of Copiah, Hinds, Madison, Rankin and Simpson contained within West Central Public Health District V. The Mississippi portion of the Memphis, Tennessee MSA includes the three Mississippi counties of DeSoto, Tate and Tunica contained within Northwest Public Health District I, as well as 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 I

### Open Point of Dispensing (POD) Drive-Thru Exercise

The DeSoto County 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 615 facilities into the Closed POD program. This is equivalent to approximately 982,000 of its 2.9 million population. The goal is to enroll over one million Mississippians into the Closed POD system, 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 mass prophylaxis (H1N1 vaccinations), medical materiel management and distribution, public information and warning, laboratory testing, and epidemiological surveillance and investigation.



Pandemic Influenza steering committee meeting with First Lady Deborah Bryant, right, and State Health Officer Dr. Mary Currier



Flu Shots

The response was led by the MSDH and supported by the Mississippi Band of Choctaw Indians, the Region IV ESF-8 Coalition, private hospitals and medical providers throughout the state, the Mississippi State Medical Association, the Mississippi Academy of Family Physicians, the Mississippi Public Health Association, the Mississippi Hospital Association, and numerous Mississippi state governmental agencies.

In general, Mississippi encountered a novel disease that experts initially believed had the potential to cause extensive morbidity, loss of life and social disruption. The reality of the situation was that the disease caused a widespread mild illness. Throughout the course of the response, the MSDH lab had to detect and monitor influenza-like illness in the state. The agency received and distributed emergency medical supplies and antiviral medications, disseminated public information, and administered H1N1 vaccinations to the public.



Partners from Mississippi Hospital Association, Mississippi Nurses Foundation, Mississippi State Department of Health, Mississippi Department of Education and the Association for Professionals in Infection Control and Epidemiology

## 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 152 public school districts in Mississippi for the 2013-2014 school year.

This project will continue in the 2014-2015 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 2013-2014 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

One of the ESF-8 supporting partners is the Mississippi Board of Pharmacy (BOP). In recent months, BOP staff members have been heavily involved in emergency planning for ESF-8. They were instrumental in several response activities including the 2014 tornado in Louisville. The BOP was key to alleviating problems associated with early prescription refill needs to those suffering from the storm as well as assistance onsite at the Mississippi Emergency Treatment and Training System (METTS). The BOP's engagement in disaster planning and response efforts has strengthened its relationship with the ESF-8 community.



Board of Pharmacy staff members responding to the Louisville tornado event

# Response Efforts



## Hurricane Sandy 2012

In the fall of 2012, MSDH Incident Management Team (IMT) One spent 16 days in Middlesex County, New Jersey, following the devastation of Superstorm Sandy. The State of New Jersey requested assistance from MSDH in their County Emergency Operations Center. The request was made through the Emergency Management Assistance Compact.

MSDH IMT One was tasked to assist Middlesex County Emergency Management with the logistical, fiscal, planning, safety and community issues related to Superstorm Sandy. Tasks included coordination of emergency support functions, developing a common operating picture, and preparing incident command forms, reports and documentation required for federal reimbursement.

“This was the first time an MSDH team worked a hurricane response in the snow. Units from New Jersey came to assist Mississippi during our response to Hurricane Katrina. We were proud to assist them in their time of need.”

-Jim Craig, MSDH  
Director of Health Protection



# 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**

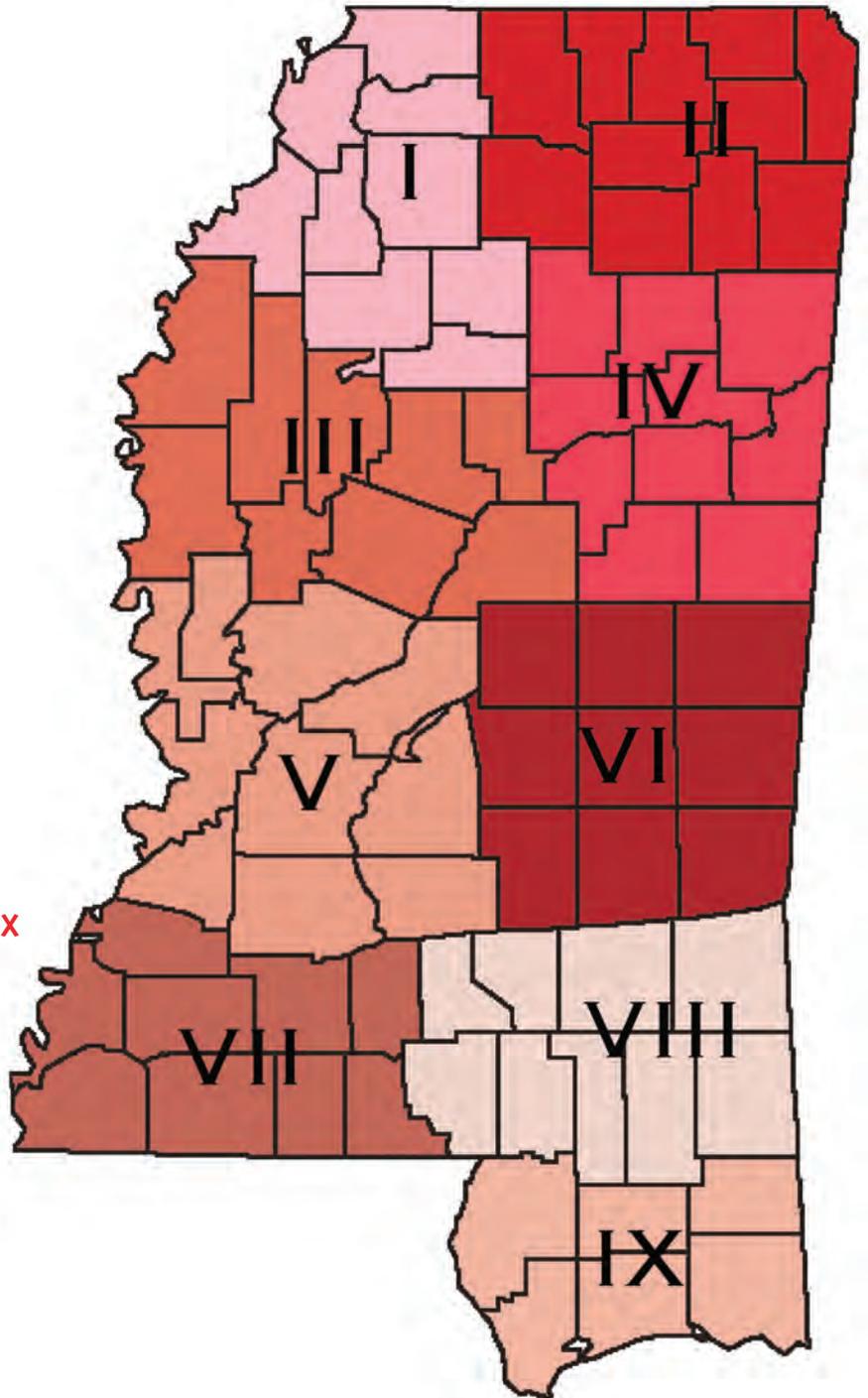
McComb 601-684-9411

**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
DSLRL	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





MISSISSIPPI STATE DEPARTMENT OF HEALTH

[www.HealthyMS.com](http://www.HealthyMS.com)  
1-866-HLTHY4U