Appendix K: Mississippi Pandemic Influenza Response Plan

MISSISSIPPI
PANDEMIC INFLUENZA PREPAREDNESS PLAN

MISSISSIPPI STATE DEPARTMENT OF HEALTH
DIVISION OF EPIDEMIOLOGY

Presented: April 22, 2004
MISSISSIPPI
PANDEMIC INFLUENZA PREPAREDNESS PLAN

Identification of management personnel by position, title, and function.

State Health Officer – Provides medical oversight and consultation for Pandemic Influenza Plan development.

State Epidemiologist, Office of Epidemiology – Will provide consultation for the planning process and overall medical oversight and consultation regarding all aspects of the Pandemic Influenza Control and Prevention Plan. Also provides clinical direction for the Public Health Laboratory.

Director, Health Protection – Will provide direction for all health protection activities regarding the Pandemic Influenza Control and Prevention Plan and appropriate utilization of the SNS Plan.

Director, MSHD Pharmacy – Will serve as the state contact for vaccine and antiviral medication supply.

Director, Emergency Planning and Response – Will represent the state emergency medical service and coordinate assistance activities for emergency support services.

Director, Mississippi Emergency Management Agency – Will represent the State emergency management agency.

Director, Communications – Will coordinate MSHD media response and assure accurate, timely, and relevant dissimulation of information.

Director Health Informatics – Will support informatics infrastructure during pandemic influenza control.
Mississippi’s daily maximum morgue capacity is 112 total beds. If this capacity is exceeded, the State Health Officer and MEMA will enact the Mississippi Disaster Mortuary Plan.

Appendix A represents the estimate of health impact of pandemic influenza on Mississippi.

**XI Data Management and Communications**

The Mississippi State Department of Health is available with twenty-four hour coverage. Any unusual disease or manifestation of illness can be reported Monday-Friday from 8:00 a.m. until 5:00 p.m. by calling (601) 576-7725 and nights, weekends, and holidays by calling (601) 576-7400.

In the event of a vaccine adverse event reaction occurrence, a vaccine adverse event reporting system (VAERS) form will be completed at the vaccinating site and entered into the VAERS system by the District Office.

All points of media communication will be handled through the Communications Department. The Office of Communications can be reached at (601) 576-7667. The primary objective of communications will be to maintain concise, clear, and consistently correct communications. This will foster better understanding and credibility with the general public, the private medical community, and the mass media regarding Pandemic Influenza.

The Communications Department should coordinate daily press conferences between the State Epidemiologist and the media. This department will also maintain current and accurate information on MSDH Web site at [http://www.msdh.state.ms.us](http://www.msdh.state.ms.us).

Further duties of the Communications Department will include but are not limited to:

- Daily communications with the State Epidemiologist and/or other appointed officials to assure accuracy of presented information to the media and public.
- Communicating potential threat posed by Pandemic Influenza
- Relaying the benefits and risks of Pandemic Influenza and influenza vaccination and/or antiviral administration.
- Providing the location and hours of operation of vaccination clinic sites
- Supplying additional information for the public, the medical community, and the mass media as needed.
- Coordinating Public Information with the SEOC its Public Information Officer as outlined in the SNS plan. (See Public Information section and Annex VIII)

During limited supply or absence of appropriate vaccines and/or antiviral agents, Mississippi State Department of Health will offer explanations to the public and media.

**XII Training and Education**

The Pandemic Influenza Preparedness Planning Committee and the Mississippi State Department of Health will utilize training, tabletop, and mock exercise to ensure participant preparation. Real life exercise of the plan will be executed as federal supplies of vaccine are distributed to the state during the current vaccine shortage of 2004. Health Emergency Coordination functions and Distribution sites/personnel will be activated to vaccinate the high-risk populations under the direction of the State Epidemiologist and State Health Officer.

**XIII Appendix A**
**Emergency Response for Provision of Key Services**  
MSDH is the designated lead for all public health emergencies, including pandemic infection events, for the State of Mississippi. Key Social and Community Services will be directed and carried out through the State Emergency Operations Center and MEMA under the guidance of MSDH.

Again, the SNS Policy as previously described will define First Responders and Essential personnel. Priority of vaccination and prophylactic treatment of such individuals will be based on the characteristics of the event and availability of vaccine and/or antiviral therapy.

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### Estimates of the Health Impact of Pandemic Influenza

Hospitals and other health care members of the community are integral partners in our statewide preparedness and response plan. As part of the CDC/HRSA terrorism preparedness planning, seventeen regional hospitals in Mississippi are designated as Centers of Excellence. Each has received a stockpile cache of medications, PPE, and supplies to accommodate its proportionate share of surge patients. In addition, 29 Supportive Centers have been identified and have received medication and supplies to handle overflow and create additional surge capacity for a bioterrorism or pandemic event. A new web-based status system will allow the MSDH to identify the numbers and types of beds available to state planners in the event of a pandemic. MSDH will continue to utilize its contract with the Mississippi Hospital Association for terrorism preparedness to facilitate preparedness in licensed facilities.

According to The Mississippi Medical Association 2004 Report, Mississippi has 5457 licensed Primary Care Medical Doctors. The following table represents their primary practice:

<table>
<thead>
<tr>
<th>Family Practice</th>
<th>General Practice</th>
<th>Internal Medicine</th>
<th>OB/GYN</th>
<th>Pediatrics</th>
<th>Non-Primary Care Specialty</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>717</td>
<td>123</td>
<td>749</td>
<td>314</td>
<td>366</td>
<td>3180</td>
<td>8</td>
<td>5457</td>
</tr>
</tbody>
</table>

Based on this data, physicians in family practice, general practice, internal medicine, and pediatrics (1955 physicians) will be impacted directly by pandemic influenza. This plan allows for the availability of 75% of these practitioners during influenza pandemic.

According to The Mississippi Board of Nursing FY 2003 Report, Mississippi has a total of 1303 Nurse Practitioners. Of this total, 613 work in adult and pediatric care settings and will be available for direct patient treatment. This plan allows for 75% availability during influenza pandemic.

<table>
<thead>
<tr>
<th>Family Nurse Practitioners in Hospitals</th>
<th>Family Nurse Practitioners in Nursing Homes</th>
<th>Family Nurse Practitioners in Community/Public Health</th>
<th>Family Nurse Practitioners as School Nurses</th>
<th>Family Nurse Practitioners working in Occupational Health</th>
<th>Family Nurse Practitioners as Office Nurses</th>
<th>Pediatric Nurse Practitioners in Community Health</th>
<th>Pediatric Nurse Practitioners working as Office Nurses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>144</td>
<td>9</td>
<td>71</td>
<td>17</td>
<td>11</td>
<td>260</td>
<td>13</td>
<td>1</td>
<td>613</td>
</tr>
</tbody>
</table>

According to the 2002 Annual Report, Mississippi has a total of 11,518 acute care and intensive care beds. This plan allows for the availability of 2880 beds (25%) for pandemic influenza admissions.

Plan anticipates each provider seeing at least 50 patients a day on a six-day week schedule.
- **Vaccine and Influenza Antiviral Medication Activity**
  The MSDH pandemic vaccination plan will employ vaccination sites identified in the SNS dispensing plan. The staffing composition of vaccination teams to operate each site will be scaled to match the level of pandemic influenza activity in the state and the actual supply of available vaccine. Antiviral Agents will be used as the front line defense for high-risk patients as well as adjunct immunization until new variant influenza vaccine is produced.

- **Distribution** - The MSDH Pandemic Influenza Plan will utilize the same mass distribution/vaccine administration plans as described in the Mississippi Strategic National Stockpile Plan (See Dispensing and Treatment). MSDH secretarial and ancillary staff along with trained lay volunteers will process paperwork as outlined in the SNS plan.

  To ensure that consistent, accurate, and timely information is available to the CDC, DHS, MSDH Central Office, Distribution Sites, and the public, the Health Emergency Coordination, Communication, and Public Information functions of the SNS plan will be enacted.

- **Issuing and Tracking**
  The Mississippi Strategic National Stockpile plan will be utilized for inventory management and medication pick up. Vaccines and Antiviral Agents will be counted and reported to central office before and after each tour. The material manager will oversee the release and/or delivery of pharmaceuticals and medical supplies to the various delivery points, including dispensing sites. Each site will have an onsite materials manager to monitor clinic supplies and to re-order as needed. (See Materiel Management and Annex I)

- **Vaccine Storage**
  As in the Strategic National Stockpile Plan, vaccine storage involves availability of facilities with capacity for secure access and temperature control. The most appropriate site for a non-terrorism event will be the Mississippi State Pharmacy. If this location is not deemed appropriate at the time of the event, one of the current RSS locations will be chosen based on size, scope, and geographic location of the incident. Adequate secure refrigeration and non-refrigeration storage will be available at each worksite.

- **Administration of Vaccine**
  MSDH Pandemic Influenza Plan will utilize the vaccine administration and exit plans as described in the Mississippi Strategic National Stockpile Plan. Depending on the impact, routine clinic services could be disrupted for several weeks. In addition to MSDH medical licensed staff, other licensed nurses and doctors will augment vaccination clinic staffing. Other licensed nursing support will include the National Guard, medical units of the Air Force and Army Reserves, hospital and office nurses, nursing school instructors, occupational and school nurses, and professional volunteers as recruited per the SNS plan.

- **Use of Personal Protective Equipment**
  Personal Protective Equipment (PPE) and training has been provided for law enforcement, fire personnel, EMS, and emergency management agencies by grants from the Department of Homeland Security. The HRSA grant has supplemented this provision with supply of PPE and training funds to hospitals throughout Mississippi. MSDH officials and first responder employees have also been provided training and PPE. Direction for use of this equipment will be under CDC, ASTHO, and MSDH guidelines.

- **Implementation of Community Controls**
  The Mississippi State Department of Health has the authority to investigate and control the causes of epidemic, infectious, and other disease affecting the public health, including the authority to establish, maintain, and enforce isolation and quarantine and in pursuance thereof to exercise such physical control over property and individuals as the department may find necessary for the protection of the public health. *Miss. Code Ann. Section 41-23-5*

  Therefore, the State Health Officer or District Health Officer has the authority to issue isolation/quarantine orders, travel restrictions, school closings, and public gathering restrictions as directed by CDC advisory or he/she deems appropriate. Issue of these orders will be determined by national advisory, severity of pandemic illness, and availability of vaccine.

  Cooperation and Enforcement of these orders will be executed with the cooperation of MEMA and the Emergency Support Functions of the State Emergency Operations Center, including the Mississippi Department of Education, Mississippi Department of Public Safety, and other law enforcement agencies as deemed necessary.
The Mississippi Public Health Laboratory and the virology lab at the University of Mississippi Medical Center are capable of isolating influenza virus in cell culture from nasopharyngeal and throat swabs. These facilities will be enlisted to provide laboratory support during a pandemic.

**Preventive Strategy** - The current influenza vaccine will be the central disease prevention strategy in the event of pandemic Influenza. MSDH will also stress educational measures to control the transmission of disease. Supporting agencies will play a vital part in the success of our response. Antiviral agents will be used as an adjunct to vaccination in the state and/or provide protection when vaccine is not available. Symptomatic treatment will ensue if vaccines and antiviral agents are not available. If indicated, the State Health Officer will cautiously direct isolations and quarantines. The state will observe national recommendations to provide the highest level of protection and care for Mississippi residents.

**Influenza Vaccine Enhancement** - The identification of vaccine recipient groups will be based on state and national threat assessments in close consultation with governmental authorities at the local, state, and federal levels. Additionally, to reduce the incidence of secondary bacterial infections, pneumococcal vaccination coverage levels will continue to be concentrated toward persons 65 years and older, persons greater than or equal to two years of age with normal immune systems who have chronic illnesses. Also, coverage for all children less than 24 months of age and children age 24-59 months with high risk medical conditions by vaccination with PCV7 will be provided. During the 2003-2004 season, the state health officer initiated an aggressive pneumococcal vaccination policy to assure its administration to high-risk groups. Appropriate influenza vaccine will be administered throughout Mississippi if a vaccine effective against the pandemic strain is available. If vaccines and/or antiviral agents are not available, supportive and symptomatic treatment will be encouraged, appropriate isolation will be recommended, and isolation/quarantine could ensue.

**VIII Pandemic Flu Hazard Potential and Impact to Public Health**

The pandemics of 1918, 1957, and 1968 resulted in thousands of deaths in the United States. Although, the pandemics spread throughout the world within a year of their initial detection, their global impact reached the thousands.

**IX Pandemic Flu Operational Concepts**

The Mississippi Influenza Pandemic Response Plan addresses the following critical basic elements:

**Laboratory and Disease Based Surveillance Systems**

Surveillance remains the cornerstone of influenza pandemic planning. MSDH coordinates its pandemic surveillance activities through the use of sentinel physicians at approximately 40 sites. These sites are composed of adult and pediatric clinics, emergency rooms, college campus based clinics, and freestanding after hour clinics. Sentinel physicians are selected across the state at a proportion of one per 250,000 persons. Specimens submitted to the Mississippi Public Health Laboratory will be tested to determine the type of influenza virus.

Adequate laboratory support is available through the Mississippi Public Health Laboratory and the virology lab at the University of Mississippi Medical Center. These laboratories are capable of isolating influenza virus in cell culture from nasopharyngeal and throat swabs and will be enlisted to evaluate cultures during a pandemic.

Electronic reporting between the Mississippi Public Health Laboratory and the CDC will occur using the Public Health Laboratory Information System. Mississippi State Department of Health central office will assure accurate information to the district offices by e-mail, telephone, fax, and electronic reporting. It is the duty of the district office surveillance staff to investigate reportable diseases conveyed to central office. The National Electronic Telecommunications System for Surveillance (NETSS) is utilized to transmit confirmed reportable diseases. Sentinel physicians’ ILI data is submitted weekly to CDC Influenza Branch. Weekly Bioterrorism Syndromic Surveillance and ILI is entered into the Mississippi electronically operated site.

Positive influenza nasopharyngeal or throat cultures specimen results are reported to CDC weekly. Additionally, random isolates are sent to the WHO lab for confirmation during the early, peak, and end of the flu season. Surveillance is monitored daily by the central office epidemiologist, district surveillance staff and central office influenza nurse.
Authority of state department of health to investigate diseases

The Mississippi State Department of Health has the authority to investigate and control the causes of epidemic, infectious, and other disease affecting the public health, including the authority to establish, maintain, and enforce isolation and quarantine and in pursuance thereof to exercise such physical control over property and individuals as the department may find necessary for the protection of the public health. Miss. Code Ann. Section 41-23-5

Any person who shall knowingly and willfully violate the lawful order of the county, district or state health officer where that person is afflicted with a life-threatening communicable disease or the causative agent thereof shall be guilty of a felony and, upon conviction, shall be punished by a fine not exceeding Five Thousand Dollars ($5,000.00) or by imprisonment in the penitentiary for not more than five (5) years, or by both. Miss Code 41-23-2

State board of health may call upon the federal government

The state board of health, with the consent of the governor, when it deems it proper or necessary to do so, may call upon the government of the United States for such financial and medical aid as the necessities created by an epidemic or any other health emergency may require. Mississippi Code 1972 Section 41-23-33

United States Public Law 93-288, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, provides the federal government authority to respond to emergencies and provide assistance to protect public health. The Federal Emergency Management Agency (FEMA) implements this function.

Health and medical services will be provided through the Emergency Support Function (ESF) #8 of the Federal Response Plan (FRP). The purpose of this function is to coordinate assistance to supplement state and local resources needed in response to an event.

VI Command and Control

The Division of Epidemiology is the lead Pandemic Preparedness Unit. All existing departmental command systems, primarily the Command and Control protocol outlined in the Health Emergency Coordination section of the SNS plan, should be applied to pandemic influenza planning and response. The Operational priorities and identity of persons with decision making authority is identified in this appendix and the SNS Plan and will be continually evaluated. The Mississippi State Department of Health (MSDH) will work closely with representative from the following agencies/organizations: The Governor's Office, Department of Safety, Highway Patrol, American Red Cross, Mississippi Emergency Management Agency, Board of Nursing, Association of Funeral Directors, and Hospital Association. Key MSDH departments involved in the process include Immunization, Emergency Planning and Response, Public Health Laboratory, Communications, Pharmacy, Health Informatics, Environmental Health, and Vital Records. The Governor will exercise all emergency powers to ensure the timely receipt, organization, repackage, and distribution of antiviral agents and administration of influenza vaccines.

VII Surveillance Policies and Plans

The early identification of influenza pandemic is essential to respond rapidly and successfully with influenza vaccinations if an effective vaccine is available. This will be assisted through the year round reporting to CDC’s Influenza Sentinel Provider Network and Mississippi’s Bioterrorism Syndromic Surveillance System. Our network is composed of private adult and pediatric clinics, college campus based medical clinics, private after hour clinics, and hospital emergency rooms. These providers make weekly reports of patients with influenza like illness (ILI) to MSDH. They report their total number of patient visits for any reason each week and number of patients with influenza like illness. From the data, the percent of patient visits for ILI is calculated. These data and year round surveillance has helped define a baseline level of influenza activity and provides important surveillance for early detection of unusual occurrences of ILI in the state.
The State of Mississippi Comprehensive Emergency Management Plan (CEMP) provides an organizational structure to allow emergency medical services personnel and health care facilities to work together in a collaborative way and to provide assistance in situations where local resources are overwhelmed.

The Mississippi State Department of Health will follow guidance provided by the National Influenza Pandemic Response Plan.

Security and law enforcement personnel for distribution will be executed as outlined in Annex VII.

The influenza preparedness protocol will utilize the SNS Plan to request, receive, organize, and distribute pharmaceuticals and medical materiel. The Mississippi State Department of Health (MSDH) has been designated as the primary agency to coordinate repackaging and distribution of the pharmaceuticals of the SNS. Mississippi Emergency Management Agency (MEMA) has been designated as the primary agency to transport the SNS once it arrives in Mississippi. Mississippi Department of Public Safety will maintain security and will aid with the distribution of medical supplies for the SNS with direction from the MSDH.

Medical materiel received through the SNS, if indicated, is intended to supplement local supplies and inventories when they have been exhausted.

The Mississippi State Department of Health will initiate a request to SNS for medical supplies per SNS Plan protocol immediately upon the determination of pandemic strain of influenza in Mississippi.

Influenza Vaccine and/or antiviral agents for first responders and essential personnel will be provided prior to mass vaccination initiation as outlined in the SNS plan Annex IV First Responder and Essential Personnel Policy.

The Governor will exercise all emergency powers to ensure the timely receipt, organization, repackage, and distribution of antiviral agents and administration of influenza vaccines.

IV Applicability

This preparedness plan is applicable to those primary state departments and agencies/organizations that may be called upon to support a statewide response and/or recovery tasking to implement the provisions outlined in this planning document. These departments include but are not limited to:

- Office of Governor
- Mississippi State Department of Health
- Mississippi Emergency Management Agency
- Mississippi Department of Public Safety
- Mississippi Military Department

Secondary state departments and agencies and organizations that may be called upon to support a statewide response and/or recovery tasking to implement the provisions indicated in this plan may include the following:

- Office of the Attorney General
- Mississippi Hospital Association
- American Red Cross
- Mississippi Department of Education
- Mississippi Board of Nursing
- Mississippi Department of Human Service
- Mississippi Department of Transportation

V Statutory Authority for Direction of Control

The overall authority for direction and control for the resources of MSDH that respond to a public health emergency is with the State Health Officer. Miss. Code Ann. Section 41-3-5.
<table>
<thead>
<tr>
<th></th>
<th><strong>Novel Virus Alert:</strong> Identification of a novel influenza virus in a person</th>
<th>Maintain communication with the National resources. Coordinate communications with supporting state agencies, governmental agencies, district and county health departments, health care facilities, and the general public. Increase surveillance and specimen collection as appropriate. Review, update and implement contact protocol as outlined in Strategic National Stockpile Plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Confirmation that the novel influenza virus has infected two or more people, but the ability of the virus to spread rapidly person-to-person and cause multiple outbreaks of disease leading to epidemic remains questionable.</td>
<td>Continue escalated surveillance. Increase public awareness campaigns for proper hygiene, and home bound sick guidelines. Provide communication through established communication system. Follow national and state guidelines.</td>
</tr>
<tr>
<td>3</td>
<td>Pandemic Alert: Confirmation of person-to-person spread in the general population with at least one outbreak lasting for more than 2 weeks in one country.</td>
<td>Continue surveillance. Update governmental, medical, and public information. Provide communication through established communication system. Follow national and state guidelines. Follow statutory guidelines. Initiate SNS planning and preparation for mass vaccine and antiviral administration.</td>
</tr>
<tr>
<td>1</td>
<td>Confirmation that the novel influenza virus is causing several outbreaks in one country and has spread to other countries, with consistent disease patterns indicating serious morbidity and mortality is likely in at least one segment of the population.</td>
<td>Maintain surveillance of impact on affected country as well as the USA. Maintain communications with bordering states. Follow national guidelines. Make appropriate changes to meet ongoing changes in situation. Follow governmental/statutory protocol. Continue SNS plan for vaccine and antiviral administration. Analyze impact. Modify plan as necessary.</td>
</tr>
<tr>
<td>2</td>
<td>Outbreaks and epidemics are occurring in multiple countries and spreading across the world.</td>
<td>Continue surveillance. Follow governmental protocol for vaccine and antiviral administration. Continue guidelines set forth in the SNS Plan. Maintain communication. Analyze impact. Modify plan as necessary.</td>
</tr>
<tr>
<td>3</td>
<td>End of the first wave of the pandemic</td>
<td>Re-evaluate status, continue surveillance, maintain inventory and continue to assess impact. Modify plan.</td>
</tr>
<tr>
<td>4</td>
<td>Confirmation of a second or later wave caused by the same novel virus strain</td>
<td>Maintain surveillance and update plan to meet changes. Follow vaccination guidelines. Modify plan as necessary.</td>
</tr>
<tr>
<td>5</td>
<td>Confirmation that the pandemic has ended</td>
<td>Continue surveillance and monitor impact. Maintain communication.</td>
</tr>
</tbody>
</table>

### III Assumptions

The Mississippi Influenza Pandemic Response Plan assumes that influenza vaccine containing the new pandemic strain of influenza virus is available for administration. However, if the new strain of influenza vaccine is not available when the pandemic occurs, influenza antiviral drugs will be distributed throughout Mississippi either until the new influenza vaccine becomes available or until the influenza pandemic decreases.

The Division of Epidemiology is the lead Pandemic Preparedness Unit. The Division of Epidemiology will work closely with specific state and federal agencies and organizations as listed previously.

Laboratory surveillance will be performed to monitor influenza activity in the state. Patients will be managed in accordance with appropriate treatment, isolation, and quarantine as allowed by Mississippi Statute. (See Appendix J)

The Mississippi State Department of Health has the authority to investigate and control the causes of epidemic, infectious, and other disease affecting the public health, including the authority to establish, maintain, and enforce isolation and quarantine and in pursuance thereof to exercise such physical control over property and individuals as the department may find necessary for the protection of the public health. *Miss. Code Ann. Section 41-23-5*
MISSISSIPPI
PANDEMIC INFLUENZA PREPAREDNESS PLAN

I Introduction

The Influenza Pandemic Preparedness Plan for Mississippi was developed to address the threat and affects of a possible influenza pandemic. The plan addresses the state’s preparation for the sudden, pervasive influenza associated illness with appropriate, structured, and well-designed responses. The plan identifies, addresses, analyzes, and provides a broad series of guidelines for action in case the influenza pandemic threat is realized.

In the event of pandemic influenza in Mississippi, pharmaceuticals and supplies of critical medical items will be dispensed and distributed throughout the state in accordance with the Plan for Distribution of the Strategic National Stockpile (SNS). The Pandemic Influenza Response Plan for the State of Mississippi is an appendix to the Strategic National Stockpile Plan.

Pandemic influenza occurs when “novel” Influenza A viruses bearing new surface proteins derive from animal influenza viruses emerge and spread globally among people. Pandemic viruses constitute new Influenza A viruses to which large portions of the world’s population lack preexisting protective antibody. Consequently, global and national levels of illness and deaths can be much higher and more severe.

An influenza pandemic is not a possible threat, but a definite reality. The only question is “When will a pandemic occur?” The emergence of a nationwide influenza pandemic, the need to vaccinate millions of persons as rapidly and safely as possible, and the devastating socioeconomic and mortality effects will pose a potentially overwhelming and unworkable burden on the usual sites for annual influenza vaccinations. Therefore, the efficient distribution of vaccine and/or antiviral agents at prepared pandemic influenza administration sites is vital. An added crisis will exist when there is a vaccine shortage.

The Division of Epidemiology is the lead Pandemic Preparedness Unit. The state epidemiologist along with the executive pandemic influenza preparedness planning committee will continually update the pandemic plan as necessary to assure optimal results. The Mississippi State Department of Health (MSDH) will work closely with representative from the following agencies/organizations: The Governor’s Office, Department of Safety, Highway Patrol, American Red Cross, Mississippi Emergency Management Agency, Board of Nursing, Association of Funeral Directors, and Hospital Association. Key MSDH departments involved in the process include Immunization, Emergency Planning and Response, Public Health Laboratory, Communications, Pharmacy, Health Informatics, Environmental Health, and Vital Records.

II Pandemic Phases

In 1999, the World Health Organization (WHO) defined six pandemic phases to prepare and organize for pandemic influenza. Mississippi will utilize these phases to provide a framework for pandemic planning. However, specific actions will ultimately depend on the initial country of the initial case occurrence.

Table 1: WHO Influenza Pandemic Phases and State Planned Response

<table>
<thead>
<tr>
<th>Phase</th>
<th>Level</th>
<th>Definition</th>
<th>State Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Inter-pandemic Phase</td>
<td>0</td>
<td>Epidemic Influenza viruses circulate in human populations causing yearly outbreaks; no evidence that a novel influenza virus has infected humans</td>
<td>Division of Epidemiology is the Lead Agency in influenza pandemic planning. Epidemiology will continue ILI surveillance; increase surveillance activities to include all health care facilities, schools, work places, etc. Will also continue PCR and Flu culturing by the Public Health Lab and UMC Virology Lab. Encourage influenza vaccination and flu-mist using established APIC guidelines.</td>
</tr>
</tbody>
</table>
# MISSISSIPPI PANDEMIC INFLUENZA PREPAREDNESS PLAN

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MISSISSIPPI
PANDEMIC INFLUENZA PREPAREDNESS PLAN

Lead State Agency

Mississippi State Department of Health
Division of Epidemiology

State Supporting Departments and Agencies

The Office of the Governor
Emergency Planning and Response
Public Health Laboratory
Pharmacy
Communications
Vital Records
Health Informatics
Department of Immunization
Environmental Health
Department of Safety
American Red Cross
Mississippi Emergency Management Agency
Mississippi Hospital Association
Mississippi Association of Funeral Directors
Mississippi Board of Nursing
Mississippi Board of Higher Education
Mississippi Red Cross
Mississippi Medical Association

Federal Supporting Agencies

Centers for Disease Control and Prevention
Federal Emergency Management Agency
U. S. Air Force Medical Department
U. S. Army Reserves Medical Division
The National Guard
MISSISSIPPI ESTIMATE OF HEALTH IMPACT OF PANDEMIC INFLUENZA BASED ON
THIRTY-FIVE PER CENT (35%) GROSS ATTACK RATE

<table>
<thead>
<tr>
<th>Health Impact</th>
<th>Estimate Number of Persons in Mississippi (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths</td>
<td>Total Most Likely 2,503</td>
</tr>
<tr>
<td></td>
<td>Total Minimum: 1,423</td>
</tr>
<tr>
<td></td>
<td>Total Maximum: 4,215</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>Total Most Likely 10,982</td>
</tr>
<tr>
<td></td>
<td>Total Minimum: 3,982</td>
</tr>
<tr>
<td></td>
<td>Total Maximum: 14,102</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>Total Most Likely 512,258</td>
</tr>
<tr>
<td></td>
<td>Total Minimum: 399,714</td>
</tr>
<tr>
<td></td>
<td>Total Maximum: 727,059</td>
</tr>
<tr>
<td>Impact on Hospital Beds</td>
<td>% Capacity (most likely) 29%</td>
</tr>
<tr>
<td>Impact on Morgue Capacity</td>
<td>% Capacity (most likely) 43%</td>
</tr>
<tr>
<td></td>
<td>% Capacity (maximum) 38%</td>
</tr>
<tr>
<td></td>
<td>% Capacity (maximum) 72%</td>
</tr>
<tr>
<td>Total Number of Doses of Vaccine Needed</td>
<td>659,718</td>
</tr>
<tr>
<td>Total Public Health Provider time Needed</td>
<td>32,986 Hours</td>
</tr>
</tbody>
</table>

Estimate is made using FluAid Data Sources 2.0 with Mississippi’s 1999 census of 2,730,050.