



Public Health
Prevent. Promote. Protect.

**Memphis and Shelby County
Health Department**

Memphis and Shelby County Health Department

Pandemic Influenza Response Plan

March 1, 2007

Introduction

Severe influenza pandemics represent one of the greatest potential threats to the public's health. Pandemic influenza refers to a worldwide epidemic of a new, dramatically different strain of influenza virus for which the majority of people do not have immunity. A pandemic influenza has the potential to spread rapidly from person to person and can cause high levels of disease and death worldwide.

The U.S. Centers for Disease Control and Prevention (CDC) estimates that an influenza (flu) pandemic could infect 30% of the overall American population. This translates to 300,000 residents of Shelby County who could become ill suddenly, causing a 25% rise in hospital admissions and a 40% absentee rate in schools and throughout all segments of the workforce. A pandemic outbreak could also jeopardize essential community services, such as law enforcement, emergency response, and utilities. While it is impossible to predict the precise time of an outbreak, contingency plans are currently being developed for Shelby County.

The U.S. Department of Health and Human Services and the Tennessee Department of Health have charged the Memphis and Shelby County Health Department with developing a local response plan to coordinate with Federal and State efforts. This plan addresses several areas, including continuity of operations for public health services; regional surveillance data; pandemic vaccine storage and administration; communication with health facilities and the public; and implementing measures to reduce the spread of the disease in our community.

This plan incorporates community input obtained during a series of stakeholder meetings held in July 2006 with leaders in each of the following seven groups: elected and appointed officials; emergency responders; health/medical providers; media; service and human need providers; schools and education community; and business and industry. The stakeholder meetings were designed to make certain that the Health Department's plan is responsive to community needs and that Shelby County is prepared to address the magnitude of such a pandemic.

The purpose of this plan is to support the local response to pandemic influenza. The plan is an annex to Emergency Support Function 8 (Health and Medical Services of the Regional Disaster Plan). A primary objective is to coordinate local, state, and federal response planning. Therefore, this plan follows the format of the Tennessee Pandemic Influenza Response Plan and provides details for implementation in Memphis and Shelby County.

**Memphis and Shelby County Health Department
Pandemic Influenza Response Plan**

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March 2007**

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*Part of this document contains materials adapted from the Seattle and King County Department of Public Health.

Core Plan

Lead Agency:

The Tennessee Department of Health (TDH) is the lead state agency for the response to a pandemic. Its plan is part of the Tennessee Emergency Management Plan (TEMP). TDH is responsible for establishing uniform public health policies for pandemic influenza response. Such policies include the establishment of criteria for implementing and rescinding social distancing measures (e.g., school or business closure), prioritizing recipients of vaccines and antiviral medications, and legally altering acceptable standards of health care or medical licensure requirements. When a pandemic is imminent, an emergency will be declared and the TEMP will be activated.

The Memphis and Shelby County Health Department is responsible for implementing state public health response policies once the TEMP is activated. Regional health departments that oversee multiple counties will work with their county health departments to implement response policies; the relationship between county and regional health departments in the oversight of implementation will vary depending on the capacity of the county health department. Regional health departments will be the primary points of contact for the communication of state public health response policies from TDH.

Regional health departments are specifically responsible for the following tasks:

1. Developing continuity of operations plans for essential public health services, as defined by the TDH
2. Timely collection (and interpretation) of regional surveillance data
3. Assuring that appropriate laboratory specimens from ill persons are collected and shipped by public health or private medical personnel (in collaboration with the state public health laboratory), in accordance with state and national laboratory testing guidance
4. Detection, response and control of initial cases of novel or pandemic influenza infection in humans, in collaboration with the state health department
5. Response to human exposure to animal influenza viruses with pandemic potential during the pre-pandemic period (WHO Phases 3-5), in **collaboration** with the state health department
6. Administration of prophylactic antiviral medication (WHO Phases 3-5 only) as indicated by national or state policy
7. Pandemic vaccine storage, administration, and data collection, as required by state and/or federal health officials
8. Antiviral medication storage, distribution (per Strategic National Stockpile

protocols) and tracking, in conjunction with acute care hospitals where antivirals are administered

9. Communication with regional outpatient and inpatient health care facilities, long-term care facilities, and with the public, using messages coordinated with state public health officials
10. Implementation of social distancing measures under the direction of the state health department
11. Assuring the continuity of essential operations at regional and county health departments
12. Addressing the psychosocial needs of the public health workforce during a pandemic
13. Communicating to the public how to access social support services available in their area during a pandemic

The Memphis and Shelby County Health Department will lead a county-wide health education campaign for pandemic response; coordinate the community's emergency public health response through Emergency Support Function 8 (Health and Medical Services); serve as the County's lead agency for risk communications messaging and public education; conduct county-wide surveillance to track the spread of disease and its impact on the community; communicate with healthcare partners through the Shelby County Regional Hospital Disaster Planning Council to coordinate resources, supplies, and information; implement protocols for prioritizing the use of limited supplies of influenza vaccine and antiviral medicines; initiate and direct mass vaccination efforts; and lead efforts to strengthen support and outreach for vulnerable populations in Shelby County.

Support Agencies:

Support agencies that will work with the Memphis and Shelby County Health Department were identified through a series of stakeholder meetings. These include a variety of government agencies, emergency response agencies, healthcare organizations, media representatives, community organizations, educational institutions, and businesses. Please refer to Section 9 for specific roles and responsibilities of each agency.

Situations and Assumptions:

I. Situation:

Novel influenza viruses periodically emerge to cause global epidemics, known as pandemics, either directly from a mutated animal influenza virus or out of combination of an animal virus with a circulating human influenza virus. Such viruses circumvent normal immune defenses and cause morbidity and mortality at higher rates than seasonal influenza strains; compared to seasonal influenza, a larger proportion of deaths occur in persons aged <65 years.

Novel influenza viruses that cause pandemics are transmitted from person to person in the same manner as seasonal influenza: typically, by mucosal inoculation with large respiratory droplets caused by coughing or sneezing or by touching contaminated environmental surfaces and subsequently touching one's mouth, nose or eyes.

Ten pandemics have occurred in the past 300 years; there is historical evidence of the success or failure of various strategies to contain or control the spread of influenza. With the exception of a vaccine, antiviral medication, and advanced medical care, many of the strategies used to respond to a modern pandemic are the same as the effective measures of previous generations. For example, though the compulsory restriction of movement in or out of certain regions, known as "cordon sanitaire," was not effective in any but the world's most remote island communities, broad community strategies used to reduce dense social contact were effective and the failure to use such strategies was devastating.

The key activities to minimize the impact of a pandemic influenza virus are:

1. Surveillance for disease activity for situational awareness and timely activation of response strategies
2. Accurate communication within and among volunteer and professional responding organizations and with the general public
3. Use of social distancing measures to reduce unnecessary close contacts during a pandemic wave
4. Distribution and use of all available medical resources and personnel

Pandemic Threat Categories Defined by World Health Organization (WHO):

The duration of each period or phase is unknown, but the emergence of pandemic viruses is considered inevitable.

PERIOD	PHASE	DESCRIPTION
Interpandemic No human cases of novel influenza virus	1	No animal influenza viruses circulating with the potential to infect humans
	2	Animal influenza virus is circulating with the potential to infect humans
Pandemic Alert Human cases with increasingly efficient human-to- human spread	3 (March 2007)	Human cases with rare or no human-to-human spread
	4	Small clusters caused by human-to-human spread
	5	Large regional clusters caused by human-to-human spread
Pandemic Worldwide epidemic	6	Geographically widespread and efficiently spread from human- to-human

II. **Planning Assumptions:**

A. Basis of plan:

1. The plan is based upon a pandemic of the severity of the 1918-1919 influenza pandemic; public health interventions described herein represent maximal interventions under these conditions. If the characteristics of the actual event do not reflect planning assumptions, responses will be modified accordingly.
2. While focusing primarily on the response to a pandemic (WHO Phase 6), the plan also addresses the response to imported or acquired human infections with a novel influenza virus with pandemic potential during the Pandemic Alert Period (WHO Phases 3-5).

B. Objectives of pandemic planning:

1. Primary objective is to minimize morbidity and mortality from disease.
2. Secondary objectives are to preserve social function and minimize economic disruption.

C. Assumptions for state and local planning:

1. The plan reflects current federal, state and local response capacity and will be revised annually in light of change in capacity or scientific understanding.
2. Tennessee state and local pandemic plans should be consistent with each other and with federal guidelines unless these guidelines fail to reflect the best available scientific evidence.
3. Public education and empowerment of individuals, businesses, and communities to act to protect themselves are a primary focus of state and local planning efforts; the government's capacity to meet the needs of individuals will be limited by the magnitude of disease and scarcity of specific therapeutic and prophylactic interventions and the limited utility of legal measures to control disease spread.

D. Disease transmission assumptions:

1. Incubation period averages 2 days (range 1-10; WHO recommends that, if quarantine is used, it be used up to 7 days following exposure).
2. Sick patients may shed virus up to 1 day before symptom onset, though transmission of disease before symptoms begin is unusual. The peak infectious period is first 2 days of illness (children and immunocompromised persons shed more virus and for a longer time).
3. Each ill person could cause an average of 2-3 secondary cases if no interventions are implemented.
4. There will be at least 2 “waves” (local epidemics) of pandemic disease in most communities; they will be more severe if they occur in fall/winter.
5. Each wave of pandemic disease in a community will last 6-8 weeks.
6. The entire pandemic period (all waves) will last about 2 years before the virus becomes a routine seasonal influenza strain.
7. Disease outbreaks may occur in multiple locations simultaneously, or in isolated pockets.

E. Clinical assumptions during the entire pandemic period (from federal planning guidance issued in November 2005):

1. All persons are susceptible to the virus.
2. Clinical disease attack rate of $\geq 30\%$ (range: 40% of school-aged children to 20% of working adults).
3. 50% of clinically-ill (15% of population) will seek outpatient medical care.
4. 2%-20% of these will be hospitalized, depending on virulence of strain.
5. Overall mortality estimates range from 0.2% to 2% of all clinically ill patients.

6. During an 8-week wave, ~40% of employees may be absent from work because of fear, illness or to care for a family member (not including absenteeism if schools are closed).
7. Hospitals will have $\geq 25\%$ more patients than normal needing hospitalization during the local pandemic wave.

F. Estimate of burden of illness in Shelby County (derived from national estimates from 2005 HHS planning guidance):

Characteristic	Moderate	Severe
Illness (30%)	300,000	300,000
Outpatient Care	150,000	150,000
Hospitalization	3,000	33,000
ICU Care	450	1,650
Mechanical Ventilation	225	825
Deaths (Case fatality rate)	300 (0.2%)	6,000 (2%)

G. Assumptions about Pandemic Alert Period (WHO Phases 3-5):

1. During the pandemic alert period, a novel influenza virus causes infection among humans who have direct contact with infected animals and, in some cases, through inefficient transmission from person to person. By definition, during the Pandemic Alert Period, cases are sporadic or limited in number with human-to-human spread not yet highly efficient. Limited clusters of disease during this period can be quenched with aggressive steps to stop spread and treat infected individuals.
2. Individual case management will be conducted during the Pandemic Alert Phase. Isolation or quarantine, including the use of court orders when necessary, would be employed to prevent further spread of the

virus. Antivirals would be used during this time for post-exposure prophylaxis or aggressive early treatment of cases (supplies permitting).

3. Efforts to identify and prevent spread of disease from imported human cases and from human cases resulting from contact with infected animals will continue until community transmission has been established in the United States. Community transmission is defined as transmission from person to person in the United States with a loss of clear epidemiologic links among cases. This may occur some time after the WHO declares that a pandemic has begun (WHO Phase 6).

Concept of Operations:

A. WHO Phases 3-5 (Pandemic Alert Period):

The lead agency for addressing influenza disease among animals at the level of the state is the Department of Agriculture (described in TEMP Emergency Support Function [ESF] 11). TDH will provide support to the Department of Agriculture in the prevention of human infections and in surveillance and management of human disease as it pertains to contact with infected animals.

The TDH is the lead state agency for responding to human influenza disease caused by a novel influenza virus with pandemic potential, whether imported from an area with ongoing disease transmission or acquired directly from an animal in Tennessee. The State Health Operations Center (SHOC) would be set up, depending upon the scope of and duration of the situation. See the 2006 Tennessee Department of Health Pandemic Response Plan Section 7, Supplement 2, for isolation and quarantine guidelines during the Pandemic Alert Period. Guidance for hospital management and investigation of cases during the pandemic alert period is located in Section 4. The CDC will provide additional support and guidance regarding human infection management during this period.

The primary activities during this period are surveillance for imported cases or cases contracted from contact with infected animals. Any detected cases will be aggressively investigated by regional health

departments with the assistance of TDH and contacts are to be identified, quarantined, and treated, as appropriate. The objective is to stop the spread of the virus into the general community.

B. WHO Phase 6 (Pandemic):

The lead state agency for the public health response to a pandemic is the Department of Health, working in collaboration with regional health departments. The state and regional health department response will be conducted in collaboration with federal response agencies; primarily, the Department of Health and Human Services (HHS) and Department of Homeland Security (DHS).

The primary activities are surveillance for disease, communication, implementation of general social distancing measures, support of medical care services, appropriate use of available antiviral medications and vaccines, and response workforce support. The state TDH is primarily responsible for communication with federal health authorities and creating state-wide pandemic response policies; the implementation of response measures is the responsibility of local communities and regional public health authorities. Operational details are outlined in the operational sections of this local plan.

Section Summaries

Memphis and Shelby County Health Department local pandemic response policies are outlined in attached sections. Each section is briefly summarized below.

Section 1. Continuity of Operations

This section lists the essential health department operations that must be maintained, even during a pandemic, and how the Memphis and Shelby County Health Department will sustain operations during a pandemic.

Section 2. Disease Surveillance

This section outlines the use and enhancement of current influenza surveillance strategies to monitor for early human infections caused by a novel influenza virus with pandemic potential and to track and respond to the spread of influenza during a pandemic. A focus of this section is the Sentinel Provider Network. Surveillance data are also obtained from

schools and hospitals. Enhanced surveillance will be conducted as requested by the state health department.

- Section 3. **Laboratory Diagnostics**
This section outlines laboratory testing and result reporting procedures for novel influenza viruses in Shelby County and describes responsibilities for testing at the Health Department. The section also highlights the criteria for novel influenza virus testing before a pandemic and the purposes and criteria for testing specimens during a pandemic. Specific responsibilities are outlined for specimen collection, data management and tracking, and communicating results.
- Section 4. **Hospital Planning**
This section outlines local healthcare response planning to ensure effective communication among facilities, obtain necessary surveillance data, and direct all available and necessary human and material resources to existing inpatient and outpatient healthcare facilities. This section lists contact information for Pandemic Influenza Hospital Coordinators and their backups at each local facility.
- Section 5. **Vaccine Distribution and Use**
This section describes the planning for vaccine distribution and use within Memphis and Shelby County. It outlines locations, security, and priority groups for distribution.
- Section 6. **Antiviral Drug Distribution and Use**
This section describes the policies for use of antiviral drugs to prevent spread of novel influenza virus outbreaks with pandemic potential and to treat patients during a pandemic.
- Section 7. **Community Interventions**
This section outlines social distancing and other community interventions that may be implemented to respond to isolated cases of illness caused by a novel influenza virus with pandemic potential and during a pandemic. The section lists general community distancing measures to be implemented during a pandemic by the Health Officer and well as

containment measures for schools, colleges, and the public.

Section 8. Public Health Communications
This section outlines the MSCHD communication strategies to inform the general public, ill persons who are isolated, exposed persons quarantined at home, the media, the medical community, and other pandemic response partners.

Section 9. Workforce and Social Support
This section outlines resources and issues for support to the public health workforce and social support to communities. This section presents community resources and outlines operational plans to address social needs for the response workforce and affected individuals.

VII. Training:

The state pandemic preparedness plan will be used to guide the development of regional and local preparedness plans. Plans will be drilled in partnership with other stakeholders and updated to correct weaknesses identified through these exercises.

VIII. Acronyms:

APHIS Animal and Plant Health Inspection Service

APHL Association of Public Health Laboratories

BT Bioterrorism

CDC Centers for Disease Control and Prevention

CEDS Communicable and Environmental Disease Services

CNS Central Nervous System

<u>DEOC</u>	Director's Emergency Operations Center
<u>DHS</u>	Department of Homeland Security
<u>EMA</u>	Emergency Management Agency
<u>EPA</u>	Environmental Protection Agency
<u>ESF</u>	Emergency Support Function
<u>HHS</u>	Department of Health and Human Services
<u>HPAI</u>	Highly Pathogenic Avian Influenza
<u>ICU</u>	Intensive Care Unit
<u>ILI</u>	Influenza-like Illness
<u>IT</u>	Information Technology
<u>LEA</u>	Local Educational Authority
<u>LRN</u>	Laboratory Response Network
<u>MSCHD</u>	Memphis/Shelby County Health Department
<u>NIH</u>	National Institutes of Health

<u>PIO</u>	Public Information Officer
<u>PPE</u>	Personal Protective Equipment
<u>preK</u>	pre-Kindergarten
<u>RHC</u>	Regional Hospital Coordinator
<u>SARS</u>	Severe Acute Respiratory Syndrome
<u>SNS</u>	Strategic National Stockpile
<u>SPN</u>	Sentinel Provider Network
<u>T-HAN</u>	Tennessee Health Alert Network
<u>TB</u>	Tuberculosis
<u>TCA</u>	Tennessee Code Annotated
<u>TEMP</u>	Tennessee Emergency Management Plan
<u>TDH</u>	Tennessee Department of Health
<u>THA</u>	Tennessee Hospital Association
<u>TPA</u>	Tennessee Pharmacy Association

USDA US Department of Agriculture

WHO World Health Organization

Section 1: Continuity of Operations

Memphis and Shelby County Health Department Pandemic Influenza Response Plan

Section 1: Continuity of Operations

I. Purpose:

To outline the continuity of operation plan for essential health department services that must be sustained, even during a pandemic, and contingency plans for increasing the public health workforce to deal with worker absenteeism.

II. Scope:

It is the responsibility of the Health Department to protect the public health of Memphis and Shelby County residents during any disaster, natural or manmade, and to assist the Memphis/Shelby County Emergency Management Agency in implementing the Memphis/Shelby County Emergency Management Plan. The Memphis and Shelby County Health Department will be the lead agency in coordinating the local health and medical response to a pandemic with State, Federal, and local agencies and officials.

III. Action:

All personnel have a role in continuing essential services of the Department, even if their routine activities are temporarily suspended. Each section will identify essential services and cross-train their staff accordingly. If a critical workforce shortage exists, or if reprioritization of MSCHD's activities occurs, the Health Department will augment services through a variety of ways:

- A. cross-training: employees will be trained to perform jobs other than their normal daily activities
- B. mobilization: staff will be pulled from non-essential services in other departments. (e.g., nurses normally in the office will be in the field; health promotion staff will assist in clinics)
- C. volunteers: professional and lay individuals who have joined the Medical Reserve and the BT Volunteer Program will be contacted to assist with vital services.
- D. technology: critical shortages and reassignments will be communicated via email, website, and hand-held technology

(blackberries). MSCHD staff can access their email from home via: webmail.co.shelby.tn.us. General information updates also may be accessed offsite at the MSCHD website: www.shelbycountyttn.gov

- E. ADMINISTRATIVE POLICY: employee job plans include language requiring them to work in other duties as assigned during a disaster. During a pandemic influenza outbreak, managers and administrative employees are also encouraged to work from home if possible and stay home when ill.

The Memphis and Shelby County Health Department will maintain the following operations, as outlined in the agency's All Hazards Emergency Response Manual (2005), located in the Resource Library in the Office of Emergency Preparedness. This response manual is maintained by the Manager of the Office of Emergency Preparedness:

1. Immunizations
2. Select or limited set of Public Health Programs and Clinical Services (refer to Appendix I)
3. Assessing and making recommendations regarding environmental health issues that could involve
 - a. Air quality management
 - b. Potable water monitoring
 - c. Sanitary sewage management
 - d. Disease monitoring
 - e. Vector control
 - f. Animal control
 - g. Food safety management
4. Emergency Response

During a pandemic, certain public health programs will function at reduced levels depending on the nature of the situation. MSCHD staff and volunteers will be mobilized to provide services of greatest need, as determined by the Director in consultation with the Health Officer.

The MSCHD will implement the "Description of Basic County Health Department Functions during a Severe Pandemic" provided by the Tennessee Department of Health and tailor it to our needs (see Appendix I).

Specific Responsibilities of MSCHD Key Staff and Sections

Director

- Communicate and coordinate directly with executive leadership of Memphis and Shelby County; executive heads of cities and towns; national, state, and local elected officials; Commissioner of Health; and Governor regarding pandemic preparedness and response activities.
- Communicate public health directives regarding social distancing strategies and other protective actions to elected leaders, the business community, schools, the Regional Health Council, and other partners.
- Assign responsibilities to MSCHD staff for planning and responding to the pandemic.
- Ensure operational continuity of critical MSCHD functions during all phases of the pandemic.

Health Officer

- Communicate and coordinate directly with the healthcare community and public, and make recommendations regarding strategies, thresholds and methods for reallocating resources and the temporary restructure of public health system operations in response to a pandemic.
- Authorize and communicate public health directives regarding social distancing strategies to the community and partnering agencies.
- Direct isolation and quarantine of individuals and groups, as needed, based on the recommendations from the Commissioner of Health, as advised by the State Epidemiologist.
- Lead the Public Health Investigation Team (PHIT) to conduct surveillance and detect cases during the early disease outbreak.

Public Information Officer (PIO)

- Provide accurate, timely information to the public regarding preparations for a pandemic, the impacts of an outbreak, local response actions, and disease control recommendations.
- Educate the public on how they can protect themselves from becoming infected and infecting others.

- In conjunction with the Health Officer and the Chief of Epidemiology, activate and direct the management of public information mechanisms focused on providing health information to the public.
- Work in conjunction with the Tennessee Department of Health, with direction from the Centers for Disease Control and Prevention, regarding the content of messages.

Chief, Epidemiology and Infectious Disease Programs

- Conduct countywide surveillance, epidemiologic investigation, and disease control activities.
- Provide information and technical support on surveillance, epidemiology and clinical issues, including case investigation and follow-up guidelines.
- Advise the Health Officer regarding the need for individual and group isolation and quarantine, as well as the need for social distancing measures.
- Work in conjunction with the Public Information Officer to provide timely information to the public and other agencies.

Emergency Service Coordinator

- Lead pandemic preparedness and response planning for MSCHD in conjunction with local, state, and federal response partners.
- Develop protocols for prioritizing and distributing limited supplies of antiviral medicines and vaccines in Shelby County.
- Work with the MSCHD PIO to develop and disseminate risk communications messages to the public.
- Facilitate pandemic planning and response activities with the Memphis/Shelby County EMA, countywide first responders, and Shelby County Regional Hospital Disaster Planning Council, the Medical Reserve Corps, and the BT Volunteer Corps.
- Conduct training, drills, and evaluated exercises to enhance MSCHD's readiness to respond to a pandemic.

Administrator, Assessment and Planning

- Provide information and technical support on surveillance and clinical issues, including case identification, laboratory testing, management, and infection control to health care providers and facilities.

- Coordinate with economic development agencies, chambers of commerce, and community partners regarding pandemic planning and response.
- Help establish PIO messages to support PHIT team and system support (OMS, technology).

Administrator, Personal Health Service

- Oversee professional staffing (including nurses, pharmacists, Disease Intervention Specialists), clerical support, data entry operators, and POD operations, vaccination storage, tracking, and safety monitoring.
- Coordinate receipt and develop strategies for storage, distribution, and allocation of biologics among health system partners.
- Provide technical assistance to countywide pandemic planning, education, and outreach efforts with school systems, the business community, and community-based organizations.

Chief of Nursing/Clinical Services Section

- Participate in planning activities focused to develop capacity for community-based influenza evaluation and treatment clinics.
- Lead and coordinate all mass vaccination response activities.
- Develop infection control plans for MSCHD sites, with technical assistance from the Communicable Disease Control Section, to protect staff and clients.
- Provide technical assistance to licensed childcare centers and service agencies for the homeless and elderly regarding pandemic influenza preparedness.

Administrator, Environmental Health Services

- Coordinate the surveillance of bird and animal influenza with State Departments of Health and Agriculture, including U.S. Department of Agriculture, Wild Life Services.
- Coordinate with MSCHD PIO to develop environmental public health advisories concerning zoonotic influenza virus transmission, food and water safety, including solid waste disposal.
- Provide vector control measures as required.
- Assist Shelby County Medical Examiner in burial plans for large numbers of victims.

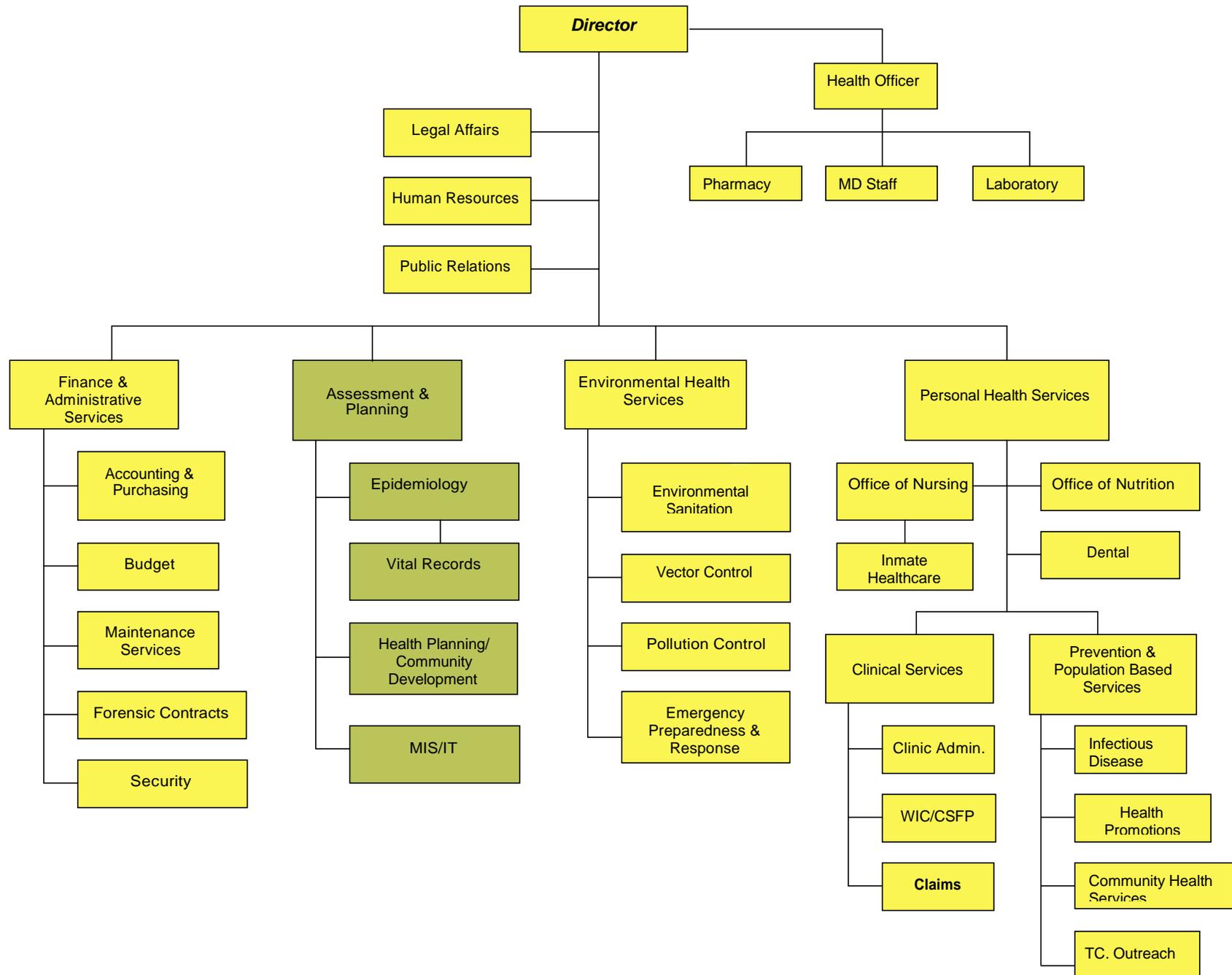
Medical Examiner

- Lead mass fatality planning and response efforts.
- Coordinate and support hospitals regarding mass fatality management, planning and response.

Section Managers

- Identify mission critical functions in preparatory planning that must be maintained during all hazards including a pandemic.
- Identify staff who can be cross trained to perform emergency response functions.
- Identify functions that could be temporarily discontinued or performed via telecommuting for several weeks.
- Be prepared to mobilize all necessary staff to support the MSCHD community response, as directed by the MSCHD Incident Commander.

MEMPHIS AND SHELBY COUNTY HEALTH DEPARTMENT



Emergency Notification of Personnel

Title: Notification to employees during a public health emergency (e.g., pandemic influenza outbreak)

Trigger: Health Department declares health emergency

Target: All employees involved in response*

Title	Order #	Action	Description of Action
Health Director and/or Health Officer	1	Declares	health emergency
	2	Activates	necessary elements of Incident Command System
Emergency Services Coordinator and/or Assistant Emergency Services Coordinator	3	Obtains	incident briefing from Memphis and Shelby County Emergency Management Agency (EMA)
	4	Initiates	call-up for health department response personnel to be prepared to respond if called upon and to wait for appointment from Incident Commander (Operations Center Administrator)
Incident Commander (Operations Center Administrator)	5	Appoints	Section Directors/Deputies and Medical Staff Director Positions
Administrators/Deputies and Section Managers	6	Reports Appoints	to Health Department Operations Center (HDOC) <i>as directed</i> , and Public Health Investigation Team (PHIT) <i>as needed</i>

* Detailed contact information is provided in Appendix IV.

**MSCHD Office of Emergency Preparedness
Emergency Call Down List***

Effective: March 2007

Area code for all #'s = (901)

Manager

Office: 544-7305

Fax: 544-6828



Regional Hospital Coordinator

Office: 544-6846

Fax: 544-6828



Volunteer Coordinator

Office: 544-6844

Fax: 544-6828



Clerical Specialist

Office: 544-6880 Main Office #

Fax: 544-6828

* Detailed contact information is provided in Appendix IV.

**ESF8 Emergency Services Coordinator:
24/7 Contact information is listed in Appendix IV**

Section 2: Disease Surveillance

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 2: Surveillance

I. Purpose:

To detect and track pandemic influenza activity among humans using multiple surveillance systems.

II. Scope:

Data will be used to make resource allocation and intervention decisions. Enhanced surveillance will be conducted as requested by the state health department.

III. Action: Surveillance Systems

Surveillance systems will be used to monitor pandemic influenza activity. These include the Sentinel Provider Network; syndromic surveillance; mortality reporting; school absenteeism; and hospital surveillance.

A. Sentinel Provider Network (SPN):

Outpatient surveillance for influenza in Tennessee is presently conducted through the SPN, according to CDC guidelines; this network is expected to be a primary source of outpatient influenza surveillance data during a pandemic. As of August 2006, 9 healthcare providers in Shelby County were recruited by the MSCHD Health Officer to join this network. The SPN Coordinator maintains the listing of the healthcare providers and their contact information.

This local network of healthcare providers will report weekly the total number of patient visits and number of patients with influenza-like illness (ILI). Providers report to CDC via a password-protected Internet site. Data are available to state health department influenza surveillance coordinators on-line. SPN members also send specimens (throat swabs) from a subset of patients with ILI to the State Laboratory for diagnostic testing at no cost.

Year-round, weekly reporting of ILI will be required of all participating providers. Providers will be asked to submit to the TDH Laboratory at least one appropriate respiratory specimen per month, according to a protocol established by the CEDS (Communicable and Environmental Disease Services) Influenza Surveillance Coordinator.

Data from this sentinel surveillance system will be monitored regularly by CEDS staff. In the event of a pandemic or other substantive change, participating providers may be asked to change the frequency of reporting or specimen submission, using existing communication mechanisms with network physicians.

B. Syndromic Surveillance:

Syndromic surveillance systems collecting non-specific health indicator information from a variety of sources have been developed at the MSCHD. The MSCHD syndromic surveillance program is designed to alert the Epidemiology Program as early as possible to various types of potentially harmful health outbreaks, including influenza-like illness (ILI), thereby providing the MSCHD the ability to investigate and respond quickly.

The MSCHD Epidemiology Program is currently monitoring Hospital Emergency Department Data from 4 hospitals in Shelby County. Data for each visit to the emergency room at participating hospitals are transmitted to Epidemiology on a daily basis. The information includes the date and time of visit, the age and gender of the patient, the home zip code of the patient, and the chief complaint or preliminary ICD-9 code assigned by the provider. The data received daily encompass the previous 24-hour period.

During a pandemic, epidemiologists will monitor for syndromes that might be indicative of an outbreak. These include syndromes for influenza-like-illnesses such as diarrhea, nausea/vomiting, fever plus flu, respiratory, and rash plus fever. Epidemiologists will investigate when the system triggers an alert indicating higher rates of symptoms. If needed, epidemiologists will contact infectious disease practitioners to identify possible cases of pandemic influenza. Specifically, syndromic surveillance will be utilized to define the:

- Magnitude of unexpected high rates of symptoms
- Geographic location and spread of unexpected high rates
- Temporal duration of the unexpected high rates

C. Influenza and Pneumonia Mortality Reporting:

Deaths due to influenza and pneumonia are reported by age group to the Epidemiology Program by the MSCHD Vital Records Program on a weekly basis by age group. These data allow the Epidemiology Program to monitor an increase or decrease in flu/pneumonia deaths and to prepare the Shelby County community appropriately.

D. Influenza Morbidity Reporting:

Area physician offices and hospitals report influenza and influenza-like illnesses to the MSCHD Epidemiology Program on a regular basis. Whenever influenza or influenza-like illness diagnoses are made, those offices provide the program with the facility name, number of cases reported for the day, date of diagnosis, and in some cases the type of influenza (i.e. influenza type A or B). These data are monitored by epidemiologists to determine Shelby County's need for vaccinations and related care.

E. School Absenteeism:

The Tennessee Department of Education obtains daily student absenteeism rates from all local public school systems through an electronic reporting system. The Department of Education will share these data with the TDH to enhance surveillance for influenza activity evidenced by increasing absenteeism levels. A mild pandemic may not result in mandatory school closure; however, if a severe pandemic virus is detected spreading in the community using other surveillance methods, it is anticipated that schools will be closed. Upon the notification by TDH, the MSCHD Health Officer will communicate this information to all Shelby County public and private schools, as well as daycare institutions, and to the general public.

As a local measure, school systems in Memphis and Shelby County (Memphis City Schools and Shelby County Schools) may be asked to notify the MSCHD Epidemiology Program at (901) 544-7717 if their rates of student or staff absences are 10% above usual rates. Surveillance procedures may be initiated if indicated. The Health Officer will coordinate with the school systems to determine the necessity for school closures. However, local school authorities retain their prerogative to close schools for their own reasons before the state criteria for closure by the Commissioner of Health are met.

F. Hospital Surveillance:

Hospital surveillance is coordinated by the MSCHD Regional Hospital Coordinator. Hospitals will complete the ESF-8 status form (attached). Healthcare institutions and physician practices will complete the Avian Influenza Screening form (attached), which uses epidemiologic and clinical criteria to identify cases for reporting to TDH. This Avian Influenza Screening Form will be modified once a novel human virus is propagating. Once the pandemic response plan is activated, daily electronic reports from hospitals to health departments may include emergency room data on ILI, confirmed disease, admissions, and deaths. It is anticipated that the Hospital Resource Tracking System (HRTS) will be implemented to monitor daily hospital bed and service availability across the state.

ESF # 8 Status Reporting Form

Facility _____ Date / Time transmitted _____
 Hospital Originator _____ Sent by (Call) _____
 Date / Time filed _____ Date/ Time received _____ Call _____

1. Use international phonetic alphabet when reporting all information. 2. Inform ESF #8 if location is aid station.

Section I Bed Availability

- A-- _____ Pediatric
- B-- _____ Medical
- C-- _____ General Surgical
- D-- _____ OB/Gyn
- E-- _____ Psychiatric
- F-- _____ Burns
- G-- _____ Neurosurgical
- H-- _____ Ophthalmology
- I-- _____ Orthopedic
- J-- _____ Urology
- K-- _____ Thoracic Surgery
- L-- _____ Spinal Cord Injury
- M-- _____ Oral/Maxi facial
- N-- _____ Trauma
- O-- _____ Isolation _____
- P-- _____ Ventilators
- Q-- _____ Others _____

Section II Bed Needs

- A-- _____ Pediatric
- B-- _____ Medical
- C-- _____ General Surgical
- D-- _____ OB/Gyn
- E-- _____ Psychiatric
- F-- _____ Burns
- G-- _____ Neurosurgical
- H-- _____ Ophthalmology
- I-- _____ Orthopedic
- J-- _____ Urology
- K-- _____ Thoracic Surgery
- L-- _____ Spinal Cord Injury
- M-- _____ Oral/Maxi facial
- N-- _____ Trauma
- O-- _____ Isolation
- P-- _____ Ventilators
- Q-- _____ Others _____

Section III Staffing On Site/On Duty

- A-- _____ # of Staff **(Total)**
- B-- _____ Physicians
- C-- _____ Nurses
- D-- _____ Respiratory Therapy
- E-- _____ EMT

Section IV Transportation

- _____ Ambulance Unit On Site
- _____ Ambulance On Standby
- Golf = Ground
- Hotel = Helicopter

Section V Blood Supply on Hand (units)

- A-- _____ A+
- B-- _____ A-
- C-- _____ O+
- D-- _____ O-
- E-- _____ B+
- F-- _____ B-
- G-- _____ A/B+
- H-- _____ A/B-

Section VI Blood Supply Needed (units)

- A-- _____ A+
- B-- _____ A-
- C-- _____ O+
- D-- _____ O-
- E-- _____ B+
- F-- _____ B-
- G-- _____ A/B+
- H-- _____ A/B-

Section VII Fatalities #'s

- A-- _____ Total
- B-- _____ Stored inside
- C-- _____ Stored outside

Section VIII Contamination Event

- A— Nature of accident _____
- B— Type of contaminant _____
- C— _____ # of Victims
- D-- _____ # injured but no radiation or contamination
- E-- _____ # with radiation exposure
- F-- _____ # with internal Contamination
- G-- _____ # with external Contamination
- H-- _____ # with Contamination wounds
- I-- _____ # deconed
- J-- Type deconed _____
- K-- Type of survey equipment _____
- L-- _____ # of Patients to be admitted

Section IX Agency/ Station

- | | | | |
|-------------------------------|---------------------|--------------------------|------------------------------|
| A-- Health Dept | H-- Baptist Memphis | O-- Methodist University | V--Memphis Mental Health |
| B-- Medcom | I-- Women | P--North | W-- St Francis Park |
| C-- Desoto Co Medical Service | J-- Collierville | Q--South | WA-St. Francis Bartlett |
| D-- Hospital Wing | K-- Desoto | R--Germantown | X-- St Jude Research |
| E-- Rural Metro Ambulance | L-- Lauderdale | S-- LeBonheur | Y-- The Med |
| F-- ASI Ambulance | M-- Tipton | T--Fayette | Z-- VA Hospital |
| G-- EMHC Ambulance | N-- Delta Medical | U-- Lakeside | AA-Midsouth Reg Blood Center |
| AB-- Crittenden Memorial | AC--Other _____ | | AD--Other _____ |

Section X Comments (For additional space use separate sheet including Hospital name, location and contact.)

International Phonetic Alphabet:

- | | | | | | | |
|------------|------------|-----------|-------------|-----------|------------|-----------|
| A. Alfa | E- Echo | I- India | M- Mike | Q- Quebec | U- Uniform | Y- Yankee |
| B- Bravo | F- Foxtrot | J- Juliet | N- November | R- Romeo | V- Victor | Z- Zula |
| C- Charlie | G- Golf | K- Kilo | O- Oscar | S- Sierra | W- Whiskey | |
| D- Delta | H- Hotel | L- Lima | P- Papa | T- Tango | X- Xray | |

Fax Information to: HEALTH DEPT 901-544-6828 (Revised: 7/26/06)

Avian Influenza Screening (March 2007)

Avian influenza screening form for healthcare institutions and physician's offices

Date of First Symptom Onset	MM	DD	YY	Medical Record # or Other Patient Identifier					
1. EPIDEMIOLOGIC CRITERIA									
1a. Occupational Exposures				Condition Met <input type="checkbox"/>					
In the 10 days prior to symptom onset, did patient have a history of the following: (check all that apply)									
<input type="checkbox"/> Healthcare worker who was in close contact (within 6 feet) of a known or suspected human case of H5N1 or was in direct contact with H5N1 contaminated items or surfaces <input type="checkbox"/> Animal care worker/handler/culler or other person who was in direct contact of known or suspected cases of H5N1 and/or their excretions, or H5N1 contaminated surfaces <input type="checkbox"/> Laboratory worker who works in a laboratory that cultures H5N1 for research or other purposes									
1b. Travel Exposures				Condition Met <input type="checkbox"/>					
In the 10 days prior to symptom onset, did patient travel to a country with documented H5N1 avian influenza in domestic poultry, wild birds and/or humans (currently including parts of Asia, Africa, Middle East and Europe: see http://www.oie.int) AND have a history of any of the following while in the infected country in the 10 days prior to symptom onset (check all that apply)									
<input type="checkbox"/> Direct contact with domestic poultry or their excretions (e.g. touching sick/dead chickens or ducks, or well-appearing ducks) <input type="checkbox"/> Consumption of incompletely cooked or raw poultry or eggs <input type="checkbox"/> Direct contact with surfaces contaminated with poultry feces <input type="checkbox"/> Direct contact with sick or dead wild birds suspected or confirmed to have influenza H5N1 <input type="checkbox"/> Close contact (within 6 feet) of a known or suspected human case of H5N1									
Country/Area/City visited		Start	MM	DD	YY	End	MM	DD	YY
Country/Area/City visited		Start	MM	DD	YY	End	MM	DD	YY
Country/Area/City visited		Start	MM	DD	YY	End	MM	DD	YY
Country/Area/City visited		Start	MM	DD	YY	End	MM	DD	YY
If Patient met either condition above (1a or 1b), continue to 2: Clinical Criteria. If neither 1a nor 1b conditions were met, STOP HERE.									
2. CLINICAL CRITERIA									
2a. Fever				Condition Met <input type="checkbox"/>					
During this illness, has patient had a temperature of >38°C (>100.4°F)?									
<input type="checkbox"/> Yes (If yes, continue to 2b) <input type="checkbox"/> No (If no, STOP HERE). <input type="checkbox"/> Unknown									
2b. Abnormal Chest X-Ray or ARDS				Condition Met <input type="checkbox"/>					
(Check all that apply)									
<input type="checkbox"/> Abnormal Chest Radiograph (Chest X-ray) <input type="checkbox"/> ARDS (Acute Respiratory Distress Syndrome) or other severe respiratory illness for which an alternative diagnosis has not been established									
2c. Other Symptoms				Condition Met <input type="checkbox"/>					
(Check all that apply)									
<input type="checkbox"/> Dyspnea (shortness of breath) <input type="checkbox"/> Sore throat <input type="checkbox"/> Cough <input type="checkbox"/> Diarrhea					<input type="checkbox"/> Acute encephalitis <input type="checkbox"/> Blood tinged respiratory secretions <input type="checkbox"/> Myalgia (muscular pain or tenderness)				
If patient met conditions for at least one of epidemiologic criteria (1a or 1b) AND AND at least one of the other clinical criteria (2b or 2c) then NOTIFY PUBLIC HEALTH 24/7. The Tennessee Department of Health central office phone number is (615)-741-7247									

Section 3: Laboratory Diagnostics

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 3: Laboratory Diagnostics

I. Purpose:

The purpose of laboratory testing is to confirm the diagnosis of human influenza caused by novel influenza viruses or a pandemic influenza virus.

II. Scope:

Laboratory testing will be used to confirm the presence of a novel influenza virus or pandemic virus in the community. During a pandemic, in the absence of serologic testing, testing of clinical specimens also will be done to confirm infection, in order to identify recovered persons that they can work with pandemic influenza patients without risk of contracting the disease, and excluding these recovered persons from priority groups for the administration of vaccine.

III. Action: Responsible Agency

The Tennessee Department of Health (TDH) Laboratory is the agency responsible for testing human specimens for pandemic influenza and influenza subtypes with pandemic potential (e.g., H5N1), as well as communicating with other sentinel laboratories licensed in Tennessee.

A. Local Responsibility (MSCHD)

During the pre-pandemic period, requests for novel influenza infection testing should be discussed with and approved by a CEDS physician. During a pandemic, testing will be approved by the MSCHD Laboratory Manager, with standard testing criteria to be provided by CEDS (Communicable and Environmental Disease Services of TDH).

Hospital laboratories or patient care providers who suspect a diagnosis of Avian Influenza Virus should first contact the MSCHD Epidemiologist on-call (901-544-7717), who will notify CEDS. If indicated, a specimen should **be sent for testing** to the MSCHD Central Laboratory. The specimen must be accompanied by the attached form (Highly Suggestive Avian Influenza Virus Information Form) and sent to the MSCHD Laboratory according to Sentinel Laboratory procedure. Confirmatory testing will be done at the MSCHD Central Laboratory. A MSCHD Epidemiologist will provide feedback to the referring hospital or provider on laboratory results within approximately 24 hours.

The MSCHD Laboratory Manager will oversee collection of specimens and shipment by the Health Department. Each hospital laboratory in the Memphis and Shelby County Laboratory Response Network has received a Bioterrorism Manual, which includes Sentinel Laboratory procedure for initial testing, as well as proper handling and shipment of samples. These protocols are in accordance

with CDC, IATA (International Air Transport Association) and U.S.DOT (Department of Transportation) guidelines. Everything handled, processed, stored, and shipped will be done in accordance with CDC/LRN (Lab Response Network) Protocols and Regulations.

MSCHD Epidemiology Clerical Specialists will be responsible for entering patient data and document tests requested into the OMS system or other database used to log and track laboratory information from the State Lab. These procedures will be conducted according to HIPAA regulations.

A MSCHD Epidemiologist will be responsible for communicating laboratory results by telephone, fax, or email to patient care providers.

IV. Testing of Non-Human Specimens (WHO Phases 3-5):

Laboratory testing of birds or animals for influenza is the responsibility of the Department of Agriculture. Requests should be directed to the Office of the State Veterinarian at the Department of Agriculture.

V. Laboratory Capacity:

TDH Laboratory Testing Capacity:

The state public health laboratory in Nashville is capable of testing human specimens for novel influenza viruses using real time RT-PCR according to Laboratory Response Network (LRN) and the American Public Health Laboratory (APHL) protocols.

LRN protocols will also be used to test specimens at state laboratory branches in Jackson, Knoxville and Memphis.

VI. WHO Phases 3-5, Pandemic Alert (Pre-Pandemic):

A. Suspect Case Reporting:

If a clinician reports a patient with a suspected case of novel influenza that meets the current epidemiological and clinical criteria for testing, according to a physician in the Communicable and Environmental Disease Services (CEDS) section of the TDH, the case will be reported to the Centers for Disease Control and Prevention (CDC) Emergency Operations Center at (770) 488-7100. The state laboratory will follow the guidance of the CDC virology laboratory and either submit the specimen directly to the CDC or conduct RT-PCR testing before submission.

B. Specimen Collection and Shipping:

1. During the Pandemic Alert Period (WHO Phases 3-5), testing of a human specimen for a novel influenza virus must be authorized by a physician within CEDS prior to shipping the specimen. Telephone: (615) 741-7247.

2. Unless otherwise directed by a CEDS physician, all influenza specimens should be sent to the State Laboratory in Nashville for testing. Informed consent is not required.

Address:

Laboratory Services: Attn. Virology

630 Hart Lane

Nashville, Tennessee 37216

Telephone: (615) 262-6300

Fax: (615) 262-6393

3. CDC will conduct all confirmatory testing for specimens screened positive for novel influenza. Only confirmed results will be considered valid and reported to the public. During a pandemic, confirmatory testing will not be conducted.



MEMPHIS AND SHELBY COUNTY HEALTH DEPARTMENT

YVONNE S. MADLOCK
DIRECTOR

HELEN G. MORROW, M.D., MPA
ACTING HEALTH OFFICER



DR. WILLIE W. HERENTON
CITY OF MEMPHIS
MAYOR

A C WHARTON, JR
SHELBY COUNTY
MAYOR

Highly Suggestive Avian Influenza Virus Information Form

All information (*) MUST be filled in completely before samples will be accepted for testing. Contact MSCHD Epi-on call, 901-544-7717 before sending specimens. Testing will be authorized by TDH-CEDS prior to start of testing.

Acceptable samples include Acute serum collected (*) _____
 Convalescent serum collected (*) _____
 CSF collected (*) _____
preferred → NP Swab (*) _____
preferred → Nasal Wash/Aspirate (*) _____
 Sputum (*) _____

(*) Patient Name: _____

(*) Hospital Name & Location _____

Hospital Unit #/Chart #: _____

(*) Requesting Physician: _____

Physician's address: _____

(*) Physician's phone: (_____) _____ FAX (_____) _____

(*) Patient Age/Date of Birth: _____ / _____

Patient's respiratory status: _____

_____ as of _____

Chest x-ray Findings: _____

_____ as of _____

(*) Date of onset: _____

Fever: _____ as of _____

_____ as of _____

Other significant findings: _____

Rapid flu test- Type A Detected Type B Detected Date tested _____

Brand/type kit used _____

THIS FORM MUST ACCOMPANY SAMPLES SUBMITTED TO HEALTH DEPARTMENT CENTRAL LABORATORY. ADDITIONAL INFORMATION WILL BE REQUIRED IF/WHEN FOLLOW-UP OCCURS WITH MSCHD EPIDEMIOLOGY.

HD Authorization received: From _____ Date _____

CEDS Authorization received: From _____ Date _____

Section 4: Healthcare Planning

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 4: Healthcare Planning

I. Purpose:

To assure effective communications, obtain necessary data from healthcare facilities, and to direct all available and necessary human and material resources to existing inpatient and outpatient healthcare facilities to keep them operating at optimal capacity.

II. Scope:

The Regional Hospital Coordinator performs a variety of functions in surveillance, monitoring resources, and communicating between public health and the hospitals:

III. Action: Regional Hospital Coordinator (RHC)

A. Serves as a regional point of contact with all area hospitals for Emergency Response and Preparedness planning, assisting staff in training for emergency situations, communication of warnings and alerts throughout the region, and allocation of emergency resources.

B. Facilitates on-going communication among hospital coordinators, public health officials, emergency planners, and other stakeholders for the purposes of emergency planning and response

C. Coordinates multi-hospital public health emergency plans

D. Develops emergency plans consistent with state and federal emergency response plans and regulations

E. Outlines steps for obtaining emergency equipment and resources beyond normal use; provides access to emergency resources available through the Tennessee Emergency Management Plan (TEMP); recommends procedures for continuity of hospital operations during an actual emergency.

F. Identifies unique planning concerns and procedures for pandemic influenza outbreaks and encourages hospital participation in regional exercises.

G. Participates in individual hospital drills as they relate to Public Health Emergency Response Plans to test emergency plan and evaluate hospital preparedness.

H. Reviews hospital preparedness data to assess current capabilities and needs for improvement in relation to emergency response capabilities.

I. Tracks existing resources in all hospitals throughout the region; collects information regarding each facility's capabilities (e.g. number of beds, bed types, number of staff, types of equipment, medication, and supplies).

J. Monitors the utilization of current hospital resources.

K. Collaborates with Emergency Medical Services (EMS) and hospital personnel to direct the flow of patients among regional hospitals

L. Upon activation (in the event of a pandemic), the RHC, assisted by the Volunteer Coordinator, will:

1. Use the Hospital Resource Tracking System (HRTS) as available to communicate resource needs and patient data.
2. Contact all 18 hospitals within the West Region to ascertain a situational assessment and request logistics information for the HRTS in a timely manner.
3. Assist the Regional EMS Consultant in coordinating a region-wide EMS response, including transportation and tracking of illness and deaths.
4. Collaborate with the Regional EMS Consultant to evaluate and identify available bed space to meet regional needs for patients.
5. Compile and analyze scenario and resource projections that may effect long-range medical response planning.
6. Locate additional equipment and supplies, (i.e., PPE, ventilators, hand-washing gel, etc.) and arrange for its transport to sites within the region.
7. Allocate, when necessary, any equipment or volunteer help to a particular hospital requesting said assistance.
8. Assist hospitals in accessing resources of the SNS as indicated.
9. RHC and Nurse Educator will work with Office of Nursing to assure delivery of goods and services to home healthcare and patients with special needs.

IV. Communication Plans

The following mechanisms facilitate communication among local health facilities:

- A. The Shelby County Hospital Disaster Planning Council, consisting of representatives of all regional healthcare institutions, meets monthly.
- B. A formal hospital notification system has been developed for disaster response and is tested regularly.
- C. MEDCOM, housed in the Regional Medical Center, handles communication on a daily basis to coordinate the transportation of trauma patients among facilities in the region.
- D. Pandemic Influenza Hospital Coordinators and back-ups have been identified for all health facilities (see Appendix IV).
- E. The MSCHD has a variety of electronic methods for rapid communication with healthcare facilities: email LISTSERV, Blast fax capability, and hand-held Blackberries.

V. Resource Availability

- A. The MSCHD will utilize the Hospital Resource Tracking System (HRTS) to maintain a current listing of hospital resources in the county. The Regional Hospital Coordinator is responsible for training hospitals in the area to provide accurate, updated electronic data related to bed capacity, ICU capacity, isolation rooms, ventilators.
- B. The MSCHD will coordinate resource allocation to the hospitals as available, including volunteers from Medical Reserve Corps, equipment, or other resources needed that are communicated to the RHC. The MSCHD maintains a volunteer database containing information related to contact information and specialty experience/training. This database will enable us to identify volunteers to be deployed to hospital locations.
- C. The MSCHD has compiled a listing of community resources available for health and human needs in the event of a pandemic (e.g., transportation, food delivery). (see Section 9). The MSCHD will work with partnering agencies, including the Community Service Agency, to coordinate these resources to address basic home healthcare and physical needs for very ill patients not admitted to the hospital.
- D. Federally Qualified Health Centers will be asked to do all they can to continue operations during a pandemic outbreak in order to remain open and provide outpatient services.

V. Hospital Pandemic Flu Coordinators

A listing of the names and contact information for the Pandemic Flu Coordinator (and backup Coordinator) for each hospital in Shelby County is located in Appendix IV of this plan.

Section 5: Vaccine Distribution and Use

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 5: Vaccine Distribution & Use

I. Purpose:

To outline the continuity of operation plan for distribution, storage, and use of pandemic influenza vaccine.

II. Scope:

If supplies are limited, as they are under current manufacturing conditions, all vaccine will be administered in designated locations over the course of months. All vaccinations will be recorded and reported as required by the federal government. Vaccine will be administered in sequential order according to priority groupings, sub-prioritized within the broader groups that are designated by the federal government. Priority groupings are subject to change depending upon the nature of the virus and upon the ultimate decisions about priority groups.

III. Action: Vaccine Distribution

- A. Vaccine will be stored in the MSCHD Pharmacy, which maintains strict security procedures. The Pharmacy remains locked, and only Pharmacists have a key. A sensaphone is available in the Pharmacy for vaccine storage. Security guards will be on duty to monitor the MSCHD building entrances. Vaccine will be distributed in clinics according to the dispensing format outlined in the MSCHD Mass Prophylaxis Plan (see Appendix II). The Supervisor of the MSCHD Immunization Program will monitor vaccine safety and will be responsible for monitoring and reporting adverse events. MSCHD Immunization personnel will be responsible for administering and documenting vaccine administration to various risk groups. MSCHD Immunization Program staff will secure the vaccine until use; assure proper storage of vaccine; assure that the vaccination candidates are appropriately educated; verify the appropriate persons received the vaccine; and monitor for adverse events as required by the Federal government. Clerical personnel in Immunization and other departments will enter the vaccination information into PTBMIS.
- B. Occupationally-defined and medical risk groups will be determined by the federal and state criteria. First responders will receive vaccine at a designated location (see Appendix II); medical groups will receive vaccine at hospitals; and the general public will receive vaccine at two predetermined MSCHD clinic locations (see Appendix II). MSCHD staff and volunteers will administer vaccine at those clinics. MSCHD security guards currently monitor the two clinics. Extra MSCHD security will be added, and it is expected that additional officers from the Shelby County Police and Sheriff's Department will be assigned to those locations for additional crowd control. The Office of Nursing will be responsible for staffing the clinics and will augment the current clinic

staff with additional Immunization Program nurses. Clinical Services Administration will provide additional clerical staff. Volunteers from the Medical Reserve Corps will also assist with clinic operations. The MSCHD will announce via the media the criteria for risk groups as vaccine becomes available. Because shipments of vaccine are not expected to meet the needs of entire sub-tiers of equally qualified candidates, the following protocol will be used: volunteers will pre-screen candidates who come for vaccine to check eligibility. Those who meet the criteria will be allowed to wait and will receive the vaccine on a first-come, first served basis until the supply runs out.

- C. Top tier medical risk groups will receive vaccine at their hospital or clinic location. MSCHD Immunization Program staff will oversee and coordinate vaccine at medical facilities to their predetermined staff according to lists the Hospital Pandemic Flu Coordinator provided to the Regional Hospital Coordinator. In hospitals and other healthcare facilities, the Pandemic Flu Coordinator is the primary point of contact for the Department of Health and will be responsible for providing lists (in advance) of persons meeting the criteria for vaccination in each sub-group of tier one at their facility. Based on this list, the appropriate amount of vaccine will be administered at each healthcare facility.
- D. For tier one recipients, the Pandemic Flu Coordinator at each hospital or outpatient facility will be responsible for communicating to qualified personnel within their institution details of where and when to obtain vaccine. The remaining tiers and sub-groups within each tier of the state plan (see IV) will receive vaccine at the two predetermined clinic locations (see Appendix II), or at one of 20 other identified clinic/dispensing sites as the situation indicates.
- E. Vaccine storage: Vaccine will be stored in the refrigerator at the MSCHD main Pharmacy and kept at 35°F-46°F. Vaccine will be sent from Pharmacy to clinics in refrigerated coolers by the MSCHD Receiving Staff. Once it arrives at the clinic, the vaccine is inventoried and refrigerated.
- F. Security will be provided by the Memphis Police Department on route to the Health Department from the airport. Upon arrival it will be stored within the Pharmacy area. The MSCHD Pharmacist will be responsible for securing the vaccine. It will be placed within a locked secure area, and it will continue to be protected by security personnel within the Health Department as described in the Security Plan of the Mass Prophylaxis Plan.
- G. Vaccine administration clinics have been identified in two strategic locations of the county. Twenty (20) additional clinic locations/dispensing sites have been identified and will be used as needed (see Appendix II).
- H. Personnel who will vaccinate: over 200 MSCHD staff have been trained to assist with vaccine administration (approximately 75 medical/nursing staff; 130 non-clinicians). We have also recruited and trained over 2,500 community volunteers for this effort. Teams made up of these staff and led by MSCHD Immunization staff will be deployed to hospitals and other designated clinic locations (see Appendix II).

- I. Necessary equipment and supplies (gloves, masks, gowns) have been obtained through Pandemic Influenza state funding. If more supplies are needed, the MSCHD has existing county contracts and Memoranda of Understanding with medical suppliers (McKesson) to be able to obtain additional PPE equipment, needles, and syringes quickly.
- J. POD (Point-of-Distribution) Training requirements include a 2-hr general overview of procedures and general job descriptions; we will use “just-in-time” training on-site for specific responsibilities. Experienced nursing staff will assume key leadership roles.
- K. Database: we will use necessary federal or state database for recording number and priority grouping of recipients. The PTBMIS (which accesses the Immunization Registry) is already in use at the two clinic locations. When vaccine is distributed at off-site locations, MSCHD staff will manually complete forms at registration and key data in at a later date. This protocol is standard procedure, currently in use.
- L. Vaccine safety monitoring will report through CDC’s Vaccine Adverse Event Reporting System [VAERS]). The Immunization Program Supervisor is the point person that patients will be advised to contact regarding adverse events.
- M. If the vaccine is given as part of an Investigational New Drug protocol, we will provide additional staff, forms, and physical space to accommodate additional documentation and informed consent forms that may be required. Volunteers will distribute consent forms and pens (on clipboards) for patients to complete as they wait in line.
- N. To accommodate vulnerable populations (e.g., those with disabilities) vaccine may also be transported by staff to nursing homes, assisted living facilities, group homes for the developmentally disabled, residential substance abuse programs, homebound patients, and the homeless. To assist individuals with language barriers, we will have interpreters present and appropriate signage at clinic locations. Every effort will be made to provide resources in Spanish and other languages to communicate with non-English speakers. In the event MSCHD administer vaccine in these off-site locations, forms will be manually completed on site and then batch keyed-in once staff return to the Health Department.
- O. MSCHD will have access to information systems to support tracking and allocation of vaccine distribution, use and monitoring through the state and will use them as required. Epidemiology staff will be dedicated for data entry.
- P. Vaccine administration:
 - 1. Vaccine recipients will require identification each time they present for a dose. Recipients requiring vaccination because of their occupation will require a form of identification from their employer or will need to be identified by name to the health department by their employer. For example, hospitals will provide lists of names of

personnel, in priority order, for immunization to the health department. Children with appointments may be confirmed with a parents' identification. Recipients also should present their immunization card at the time of the second dose.

2. After the first dose, the recipient will receive an immunization card from the health department noting the date of their first dose and the due date for the second dose
3. Recipients will be responsible for communicating their immunization status to their employer (e.g., by providing a copy of their pandemic influenza immunization card)
4. Whenever feasible, appointments will be made to control crowding.
5. Individuals due for a second dose of vaccine take priority over persons not yet vaccinated. Vaccine is only protective 2 weeks after the second dose.
6. If a regular supply of vaccine, delivered at least once monthly, is assured, vaccine will not be held in reserve at health departments for second doses. Second doses will be taken from subsequent shipments.
7. Opening vaccination up to lower priority groups will be decided at the state level and implemented at the same time statewide.
8. Second-tier patients [the medically-high risk, as listed in the state plan] may be identified by documentation of qualifying high risk conditions (e.g., possession of prescriptions, medical records). Vaccination appointments will be made only for vaccine as it becomes available. Waiting lists are recommended.

With current capacity, it is not expected that tiers beyond the first two would be reached with vaccine manufactured during a pandemic; priority groups listed after these are as outlined in federal guidance without further sub-prioritization. Any necessary revision of the medically high-risk priority groups will be made by the Commissioner of Health, with the recommendations of the State Epidemiologist.

Vaccinations will be administered in sequential order. Tier 1 will receive vaccinations first until the entire Tier has been completed, followed by Tier 2, 3, 4, etc. Within each Tier, individuals in Subtier A will be vaccinated first until completed, then Subtiers B, C, D, etc.

IV. Tentative federal priority tiers (as of February 2007):

1. Top Tier (health care service providers):
 - a. All direct patient care providers in hospital settings (this includes physicians with privileges who are not hospital employees) and top 10% of non-patient care personnel responsible for critical hospital operations
 - b. Direct patient care providers in outpatient facilities that will have to provide care to pandemic influenza patients and top 10% of non-patient care personnel responsible for critical functions in these facilities. Outpatient clinics that do not normally provide such care, but alter their scope of services to provide care to infected patients during a pandemic wave.
 - c. Emergency medical service personnel (EMT-Ps, paramedics) AND patient care providers in long-term residential care facilities
 - d. Certified first responder medical personnel (EMT) affiliated with fire and police departments
 - e. Balance of non-patient care workers supporting essential functions in hospitals
 - f. Balance of non-patient care workers supporting essential functions in outpatient facilities providing care to pandemic influenza patients
 - g. Pandemic influenza vaccinators
 - h. Patient care providers in inpatient settings for non-pandemic influenza patients (e.g., Institutes for Mental Disease)
 - i. Health care providers in outpatient facilities providing essential medical services to non-pandemic patients (e.g., neurology, psychiatry, orthopedics, day surgery, pharmacists)

Operationalization:

- Identify: healthcare institutions will provide names of individuals to the Regional Hospital Coordinator; fire and police will provide MSCHD with lists of names; MSCHD Immunization staff and volunteers will receive blast email, phone call.
- Verify: healthcare professionals, hospital workers, first responders, MSCHD staff and MRC volunteers will present ID's issued by their organization.
- Notify: the institution will notify their staff; media will also announce.
- Administer: MSCHD staff will administer in hospital locations and EMA (EMA location will be for first-responders only),

2. Second Tier (medically high risk):
 - a. Persons 6 months to 64 years with 2 or more influenza high risk conditions, not including essential hypertension
 - b. Persons 6 months or older with a history of hospitalization for pneumonia or influenza or other influenza high risk condition in the past year
 - c. Persons >65 years with one or more influenza high risk condition, not including essential hypertension

Operationalization:

- Identify: physicians and patients will self-identify.
- Verify: patients will bring proof of medical condition, such as hard copies of prescriptions, medication bottles with their names listed, notes from physician, medical record information, or proof of prior hospitalization.
- Notify: physicians will advise patients; media will also announce.
- Administer: MSCHD staff will administer at clinic locations

3. Third Tier (medically at-risk groups):
 - a. Pregnant women
 - b. Households contacts of severely immunocompromised persons
 - c. Household contacts of children <6 months of age

Operationalization:

- Identify: physicians and patients will self-identify.
- Verify: patients will bring proof of medical condition; such as hard copies of prescriptions; medication bottles with their names listed; notes from physician; medical record information; proof of prior hospitalization; or proof of age of young child.
- Notify: physicians will advise patients; media will also announce.
- Administer: MSCHD staff will administer at clinic locations

4. Fourth Tier (preservation of social function):
 - a. Public health emergency response workers critical to pandemic response but not providers of direct patient care
 - b. Key local and state government leaders

Operationalization:

- Identify: MSCHD manager of Human Resources will provide a list of current public health staff. Governmental agencies will provide names of leaders to the Health Department PIO.
- Verify: individuals will bring employment or state-issued ID.
- Notify: MSCHD Human Resources will send an email blast to Health Department employees. The MSCHD PIO will alert governmental agencies via email and fax blast. Media will also announce.
- Administer: MSCHD staff will administer vaccine at the Health Department main site and clinic locations.

5. Fifth Tier (medically at-risk):
 - a. 6 months to 64 years with 1 high risk condition (other than essential hypertension)
 - b. 6-23 months old, healthy
 - c. >65 years and healthy

Operationalization:

- Identify: physicians and patients will self-identify.
- Verify: parents will bring proof of child's medical condition; such as hard copies of prescriptions; medication bottles with their names listed; notes from physician; medical record information; proof of prior hospitalization; healthy children and adults will bring proof of age (birth certificate or any identification that lists date of birth).
- Notify: physicians will advise parents; media will also announce.
- Administer: MSCHD staff will administer at clinic locations

6. Sixth Tier (preservation of social function):
 - a. Public safety workers who are non-EMTs (police, fire, 911 dispatch, correctional facility staff)
 - b. Other public health emergency responders that do not provide direct patient care (about 2/3 of public health staff)
 - c. Utility workers involved in critical processes to support the work of power, water, sewage systems
 - d. Transportation workers transporting fuel, water, food, medical supplies and public transportation
 - e. Telecommunications/Information Technology (IT) staff for essential network operations and management

Operationalization:

- Identify: Human Resources of agencies will provide a list of current public health staff. Governmental agencies will provide names of leaders to the Health Department PIO.
- Verify: individuals will bring government-issued or employment ID.
- Notify: MSCHD PIO will alert public safety and government agencies via email and fax blast. Media will also announce.
- Administer: MSCHD staff will administer vaccine at clinic locations.

7. Seventh Tier (preservation of social function):
 - a. Additional key government health decision-makers
 - b. Funeral directors/embalmers

Operationalization:

- Identify: Human Resources of agencies will provide a list of current public health staff.
- Verify: individuals will bring government-issued or employment ID.
- Notify: MSCHD PIO will alert government agencies via email and fax blast. Media will also announce.
- Administer: MSCHD staff will administer vaccine at clinic locations.

8. Eighth Tier (lowest medical risk):
 - a. Healthy persons 2-64 years not in above categories

Operationalization:

- Identify: individuals will self-identify.
- Verify: No ID needed.
- Notify: MSCHD will send fax, email blasts to media. Media will announce.
- Administer: MSCHD staff will administer vaccine at clinic locations.

Vaccine will not be allocated to a lower priority group until at least 75% of the estimated number of higher priority persons statewide have been vaccinated and/or supply exceeds the immediate demand in that group.

Section 6: Antiviral Drug Distribution and Use

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 6: Antiviral Drug Distribution and Use

I. Purpose:

To outline the continuity of operation plan for distribution, storage, and use of antiviral drugs.

II. Scope:

Antiviral drugs will be distributed to acute care hospitals for administration to patients ill enough to require hospitalization. Storage and distribution of antivirals will be conducted according to protocols for the Strategic National Stockpile (SNS). The Regional Hospital Coordinator will be responsible for working with hospitals to assure they receive adequate supplies and to monitor the appropriate use of supplies. With currently available antiviral resources, it is not expected that any antivirals will be prescribed to outpatients in private outpatient facilities or health departments.

III. Action: Antiviral Drugs Storage and Distribution

- A. Stockpiles under state control will be distributed through the SNS distribution system as outlined in the Tennessee Emergency Management Plan (TEMP) ESF 8 Annex 2- Terrorist Response Plan. The State SNS Coordinator, located in the Communicable and Environmental Disease Services section of the TDH, will oversee the distribution of state and federal stockpiled supplies to inpatient hospital pharmacies.
- B. Security will be a hospital responsibility once the antivirals are positioned there. Otherwise, security will be an SNS plan responsibility.
- C. Tracking will be done through the hospital surveillance system (either the hospital resource tracking system [HRTS] or an alternative database for tracking the hospital use of antivirals from state or federal stockpiles)
- D. Adverse event monitoring will be conducted via routine reporting to FDA's Medwatch, or additional monitoring and reporting as required by the federal government at the time. MSCHD Epidemiology will work with the Office of Nursing to follow up on reports of adverse events. Epidemiology will enter this information into Medwatch and report it to CEDS.
- E. If an antiviral is given as an investigational new drug the MSCHD will provide additional staff to obtain written informed consent, additional data collection from patient, and possible adverse event monitoring.

Section 7: Community Interventions

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 7: Community Interventions

I. Purpose:

To outline the plan for implementing, lifting, and communicating the need for social distancing strategies, intended to reduce the spread of disease from person-to-person by discouraging or preventing people from coming in close contact with each other.

II. Scope:

The criteria for the implementation of social distancing strategies will conform to those identified by the Tennessee Department of Health. The criteria for the standardized response will be determined and published by TDH and will be applied uniformly statewide. The standard measures will be implemented when there is laboratory and epidemiologic evidence of the presence of the virus circulating in a county.

III. Action: Regional Case Investigation and Management

- A. The MSCHD Health Officer has the legal authority to implement social distancing measures during case investigation and outbreak control efforts in the pre-pandemic period (WHO phases 3-5). This includes isolation and quarantine (T.C.A. {68-2-609), using the authority to promulgate rules to prevent diseases (T.C.A. Title 68, Chapter 5, Part 1).
- B. In the pre-pandemic period when containment is the objective, the Health Officer and Director will work closely with TDH, epidemiologists, and elected officials (City and County Mayors) to determine the need for implementing isolation and quarantine orders. The elected officials will implement their plans of action regarding continuity of government services. It is anticipated that there will be isolation of early cases and cross-referencing to determine those who are exposed.
- C. When indicated, the Health Officer and Director will collaborate with the Memphis Police Department and Shelby County Sheriff's Office to enforce isolation and quarantine orders.
- D. MSCHD will collaborate with the public and private sector (as noted in Section 9 of this plan) to provide essential services and psychosocial support for persons isolated or quarantined. The Community Services Agency of Shelby County will serve as the primary agency to coordinate the provision of these essential services and psychosocial support to affected individuals.
- E. Potential cases or local outbreaks of a novel influenza strain will be investigated by the MSCHD Public Health Investigation Team (PHIT). This team is led by the MSCHD Health Officer and will enhance existing surveillance efforts, including obtaining relevant available clinical data to identify individuals exposed to the virus. Epidemiology Program staff on the team include epidemiologists, nurses, and other

investigative staff. Epidemiologists on the team are responsible for data collection and management as well as communication with suspected cases and their contacts.

- F. Upon laboratory identification of local cases, the Health Officer will institute isolation of the ill, and ring prophylaxis and quarantine of exposed individuals. If antivirals are not available from the MSCHD cache, we will request them from the TDH.
- G. During the pandemic phase, MSCHD will work with clinicians, hospitals, and infectious disease specialists to enhance case detection, according to CDC criteria, among persons who have recently traveled to outbreak areas and who present with illnesses meeting the clinical criteria for influenza. Likewise, MSCHD will collaborate with the Memphis and Shelby County Airport Authority to identify and respond to imported cases. The Airport Authority will alert the MSCHD Public Health Investigation Team to isolate and handle suspected import cases through the airport. Protocols and decision trees have been developed between the two agencies to detect, investigate, and contain infectious diseases of this type.
- H. The MSCHD will use the Outbreak Management System (OMS) to manage data for such outbreaks. Epidemiology has the lead responsibility for overseeing and operating OMS.
- I. During a pandemic, case management will be replaced by aggregate case reporting using clinical diagnosis. Public health efforts will focus on social distancing measures.

IV. Regional Containment Measures

The MSCHD Director and Health Officer will implement social distancing measures when indicated and appropriate. Current social distancing strategies recommended by CDC to mitigate the spread of influenza include closing schools, canceling public gatherings, planning for liberal work leave policies, teleworking strategies, voluntary isolation of cases, and voluntary quarantine of household contacts (CDC, 2007).

- A. MSCHD will collaborate with the Mayors of Memphis and Shelby County to inform the business community and the public of the decision to implement social distancing via the local Chambers of Commerce. The PIO will also announce this to the media representatives in business, education, and the health communities. using blast emails and faxes.
- B. Large social gatherings (> 10,000 people) will be suspended before a pandemic arrives in Tennessee upon the advisement and direction of the Commissioner of Health upon consultation with the Governor. MSCHD media advisories will announce closings, and the Mayors will direct the law enforcement agencies to enforce these closings.
- C. Discretionary public gatherings of > 100 people (including closure of some businesses) will be suspended if Shelby County is affected by a pandemic virus, meeting the state criteria for closure.

- D. In the event of the necessity of school closures, the Health Officer will notify elected officials, superintendents of public and private school systems, and the media. The decision to close schools will come from the office of the Tennessee Commissioner of Health and will be implemented uniformly across the state. The PIO will issue media advisories to the public via email and fax blasts.
- E. In the event that social distancing measures are warranted in the community, the Director and Health Officer will issue media statements that address the need for local colleges and universities to abide by public health recommendations for the community. The MSCHD will provide consultation regarding management of influenza cases in the university setting.
- F. Social distancing measures will be lifted as determined by the Commissioner of Health, upon consultation with the Governor. These decisions will be based on recommendations by the State Epidemiologist. The Director and Health Officer will collaborate with the mayors of Memphis and Shelby County and other elected officials to issue media statements to the public, to media representatives of appropriate stakeholders (business, education, and health communities), and to the leaders of major stakeholder groups.

V. Local Partners

The MSCHD will work with the following local partners to implement social distancing measures if the need arises:

Agency	Title
Memphis/Shelby County EMA	Director
Memphis City Schools	Superintendent
Shelby County Schools	Superintendent
Shelby County Head Start	Director
Memphis Association of Independent Schools	President
Catholic Diocese of Memphis	Superintendent
University of Memphis	President
Baptist College of Health Sciences	President
University of Tennessee Health Science Center	Chancellor
WDIA Radio	News Director
Radio Ambiente	News Director
WMCT-TV	Gen Manager
WREG-TV	News Director
WHBQ-TV FOX 13	News Director
Commercial Appeal	Editor
Shelby County Government	Mayor
Memphis City Government	Mayor
Shelby Co Sheriff	Captain
Shelby Co Fire Dept	Chief
Memphis Fire Dept	Chief
Arlington Fire Dept	Chief
Bartlett Fire Dept	Chief
Germantown Fire Dept	Chief
Millington Fire Dept	Chief
Memphis Police Dept	Exec Major
Bartlett Police Dept	Inspector
Collierville Police Dept	Captain
Millington Police Dept	Chief
Memphis International Airport Authority	OPS Coordinator
City of Memphis Office of Multicultural Affairs	Manager
Shelby County	Hispanic Affairs
Community Services Agency	Administrator
Mid-South Red Cross	Director Emergency Services

* Detailed contact information is provided in Appendix IV.

VI. Regional Mortuary Services:

A county mortuary plan is being developed by the County Medical Examiner. This will include specifics about the storage and handling of deceased persons. The Medical Examiner will lead mass fatality management planning and response efforts; coordinate with and support hospitals regarding mass fatalities planning and response; and activate mass fatalities plans when necessary.

The Medical Examiner's office defines a mass fatality incident as an occurrence of multiple deaths that overwhelms the usual routine capability of the agency. In reference to the medical examiner's office, the determination of a mass fatality will be made by the Chief Medical Examiner or his/her designee.

A. Plan of Operation

In the case of mass deaths in medical facilities due to what is diagnosed as an influenza pandemic, the medico-legal death investigators will coordinate with the area hospitals that report the deaths, and the Chief Medical Examiner will coordinate with the Health Department. Per the Health Department only the initial suspected cases of a flu pandemic will be tested. It is anticipated that once a pandemic influenza outbreak is confirmed in the area, no more individuals will be tested. Therefore, once pandemic influenza is confirmed in Shelby County, those who exhibit symptoms and then die will be assumed to have contracted the disease. The Memphis and Shelby County Health Department anticipates that a pandemic situation may result in hundreds (300) to thousands (6,000) of deaths in Shelby County. Deaths from the pandemic influenza will be considered natural deaths, and the attending physicians will certify the death certificates of those that occur inside of a medical facility.

B. Transportation

Removal of decedents from any place of death, including medical facilities, will be made by medical examiner's office personnel. The office of the medical examiner will provide personal protective equipment (P.P.E.) for all removal personnel in cases that require medical examination to determine the cause of death. P.P.E. will include but not be limited to N-95 mask, face shield, gloves (latex or heavy duty), and a Tyvek suit for protection of clothing. The medical examiner's office will continue the existing protocol in which funeral homes pick up the deceased. The Medical Examiner's office will coordinate additional transport personnel through other mortuary personnel in the area. The number of funeral homes in Shelby County is estimated at 48, providing enough available mortuary personnel to support this plan.

C. Autopsy and Storage

The medical examiner's office anticipates deaths that occur outside of a medical facility, especially individuals under a certain age, will not be certified by an attending or primary care physician. Without an absolute cause of death, autopsy of these individuals is anticipated.

The medical examiner's office anticipates that a large number of deaths will overload funeral homes in the area. Some funeral homes may shut down due to the pandemic (fear of getting too many people together in a small space) or lack of support personnel. Along with Shelby County, the medical examiner will coordinate refrigerated storage using diesel run trailers (contact: Tri-State Thermo King Inc., Carl Wright, can have one (1) trailer per hour delivered to

a local site (each trailer 48 feet long by 102 inches wide); will need three (3) feet on one side for the diesel engine refueling access). Storage will be provided in an area that is secure and able to be controlled or monitored and away from residential or heavily inhabited areas (example – remote runway at the airport). Storage will have to be provided for decedents from other types of deaths until the funeral homes/crematories are operational.

D. Release

The medical examiner and the county will coordinate the time and date of release of decedents from all types of death during a pandemic. At this time it is unknown what the procedures will be and what the recommendations for burial (mass or single) or cremation will be. It is not expected that bodies of victims of flu are a risk. Thus, recommendations will be based on what is physically possible. Observation of religious rites will be permitted, unless there are other reasons prohibiting this. Funerals with small gatherings (<100 mourners) would not be banned.

E. Equipment and Supplies

The type and number of body bags is dependent on the recommendations by the health department and CDC. A backup supply of body bags and gloves can be obtained from the State Medical Examiner's Office and can be in Memphis within approximately four (4) hours. Suppliers of personal protective equipment and other supplies required by the medical examiner's office are located within the state and can provide additional supplies within hours. Suppliers include mortuary supply companies headquartered in other states (Kentucky, Illinois, and North Carolina.)

Section 8: Public Health Communications

Memphis and Shelby County Health Department Pandemic Influenza Response Plan
Section 8: Public Health Communications

I. Purpose:

To communicate with and educate the public, health care providers, local government and community leaders, and the media about preparation and response to an influenza pandemic.

II. Scope:

Risk communications and public outreach activities will be conducted in order to build trust, confidence and cooperation among Shelby County residents. The goal is to prevent fear-driven and potentially damaging public responses to a pandemic influenza crisis.

III. Action: Local Communication Plan

- A. Important components of this plan include spokesperson preparation and training, coordination of message development, and communication activities conducted with outside partners, agencies and organizations.
- B. Increasing public knowledge of and behavior regarding basic infection control measures (respiratory etiquette, hand washing, using alcohol hand gel, staying home when sick, and avoiding unnecessary contact with other persons during a pandemic) will be a key factor in limiting the spread of influenza during a pandemic.
- C. Communicating clear, concise and accurate information about influenza, the course of the pandemic, and the response activities will increase awareness, limit public panic and speculation, and sustain confidence in the public health system. All messages are developed with key Public Health Department staff and are approved by the Health Officer. During the course of pre-event activities and especially during a pandemic influenza event, messages and other information will be customized and updated regularly.
- D. Specific communication strategies will be required to inform specific audiences:
 - 1. Public Health and other government agencies
 - 2. Residents of Shelby County and surrounding counties
 - 3. Media outlets
 - 4. Patients wanting medical advice
 - 5. Quarantined persons requiring monitoring for signs of disease
 - 6. People honoring voluntary quarantine or isolation during the pandemic itself
 - 7. Physicians needing updates
 - 8. Health care providers
 - 9. Community leaders including municipalities
 - 10. Volunteers

VI. Desired Outcomes

- A. Provide timely and accurate pre-event information to the public to reduce fear and increase public trust and encourage citizen preparedness and appropriate event response.
- B. Provide information to healthcare providers about pandemic influenza, pandemic influenza preparedness and actions, as well as Public Health Department plans and response.
- C. During a pandemic event, provide the most current and accurate information including what is happening, what is being done and what people can do to protect themselves.
- D. Route requests for information to appropriate staff and key community leaders during the planning stages and also during the event.

VII. Public Information Office (PIO) and Assistant PIO

- A. Provide accurate, timely information to the public regarding preparations for a pandemic, the impacts of the outbreaks, local response actions and disease control recommendations.
- B. Educate the public on how they can protect themselves from becoming infected and infecting others.
- C. Activate and direct the management of public information call centers focused on providing health information to the public. Informational messages will be available on the Hotline number prior to the event.

VI. Communications Prior to Event

Communications with the community leaders, corporations, educational leaders, health care providers and general public will be a critical component of the pandemic response.

- A. Memphis and Shelby County Health Department (MSCHD) will serve as the lead agency in Shelby County for risk communications messaging and public information regarding pandemic influenza preparedness. The Health Department will work in conjunction with the Tennessee Department of Health (TDH) and with direction from Centers for Disease Control (CDC) regarding content of messages. This is to ensure consistency of communication and education messaging regarding pandemic influenza preparedness.
- B. Spokespersons throughout the Health Department organization have been identified and given risk communication training. As additional spokespersons are added training will be provided. Training will be updated on a regular basis.
- C. The MSCHD will convene appropriate internal sections to implement a communications

strategy for vulnerable populations including identifying appropriate community partners for reaching and educating diverse communities such as limited English speaking and homeless citizens.

- D. The MSCHD's Regional Hospital Coordinator will work with Medical Examiner to set forth a plan for communication of preparedness regarding mass fatalities to appropriate groups, such as hospitals and funeral directors.
- E. Ongoing pre-event and event communication/education of specific categories of community groups and agencies has been assigned to designated Health Department Sections. These assignments are available from the PIO.
- F. Media Information: media have been given a packet of information including a copy of Terrorism and Other Public Health Emergencies, A Reference Guide for Media from U.S. Dept of Health and Human Services, copy of WHO Handbook for Journalist: Influenza Pandemic and Media Checklist for Preparing for Pandemic Flu was provided to all media outlets July 2006 during Media and Community PIO Stakeholder Meeting. Materials will be updated as necessary.
- G. Material Development:
 - 1. Specific materials are being developed to provide information to the general public, media and healthcare and other partners. The following tools will be used:
 - a. Pandemic Influenza Fact Sheet
 - b. Health Officer Q&A
 - c. Cover Your Cough Poster
 - d. Wash Your Hands Poster
 - e. Your Guide to Pandemic Flu Preparedness (DHHS publications and Health Department publications)
 - 2. All materials for the general public will be posted to the MSCHD Section of the Shelby County Government Web site as they are completed.

VII. COMMUNICATIONS DURING PANDEMIC PHASES INITIALLY

MSCHD will serve as the lead agency in Shelby County for risk communications messaging and public information regarding pandemic influenza. The Health Department will work in conjunction with the Tennessee Department of Health and with direction from CDC. MSCHD will continuously update communications with Emergency Management Operations Center (EOC) and the Health Department Operations Center (HDOC) if activated. When the EOC and HDOC are open, all messages to the media will be distributed through the EOC.

During operation of the EOC, the Public Information Officer (PIO) will be at that site while the Assistant PIO will be at the HDOC location to assure accuracy of public health messages and advisories.

Communications with the public and health care providers will be a critical component of the pandemic response, including managing the utilization of health care services. The communications goals of this phase of the plan are to:

- A. Provide accurate, consistent, and comprehensive information about pandemic influenza including case definitions, treatment options, infection control measures, and reporting requirements.

- B. Instill and maintain public confidence in the County's public health and health care systems and their ability to respond to and manage influenza pandemic.
- C. Contribute to maintaining order, minimizing public panic and fear, and facilitating public compliance by providing accurate, rapid, and complete information.
- D. Address rumors, inaccuracies, and misperceptions as quickly as possible, and prevent the stigmatization of affected groups.
- E. The MSCHD Communications Section will:
 - 1) Alert the public to their own role in pandemic preparedness and response; reinforce the message that preparing for and responding to a pandemic is not something that state or local health officials can do alone – it is everyone's responsibility.
 - a) Promote getting the flu vaccine during regular flu season.
 - b) Stress hand washing and respiratory hygiene to be carried out during "normal" flu season.
 - c) Employ social marketing strategies to promote good personal hygiene and respiratory etiquette.
 - d) Provide social distancing messages as appropriate during the various phases of the pandemic.
 - 2) Identify and address the information needs of health care providers and the general public, with the assistance of the Epidemiology Section and the Health Officer.
 - 3) Identify and address with the Emergency Preparedness Team any logistical constraints to effective communications such as communications staffing and equipment needs, and public information call center staffing and capacity.
 - 4) Develop common health messages and material in conjunction with TDH, CDC and adjacent state departments of health.
 - 5) Use a variety of media (website postings, newspaper editorials or articles, flyers and billboards, television and radio broadcasts) as resources allow to educate the public regarding influenza pandemics, animal influenza and steps to reduce exposure to infection.
 - 6) Develop and disseminate communication materials about influenza pandemic (including but not limited to, press releases, PSAs, fact sheets, questions and answers), and information resources (radio/TV messages and emergency instructions) that can be approved and ready to use ahead of time. Print materials will be maintained in both web-based/CD-ROM and hard copy versions.

VIII. Communications During Phases Where Flu is in the Community

- A. MSCHD Joint Information Center (JIC) will be activated when the Health Officer and Director deem it necessary based on specific characteristics of the pandemic. The Assistant PIO will be at the Health Department (HDOC) while the PIO will be at the Emergency Management EOC when it is activated. The PIO will be the single point of

contact for media inquires about pandemic influenza and questions about human risk and will:

1. Follow risk communication protocol established in the Health Department emergency response plans.
2. Increase communication between hospital and governmental agencies PIO as needed, with continued communication with TDH Communication staff.
3. Communicate recommended action steps to help the public reduce their risk of illness or death, including how to care for influenza patients at home.
4. Provide public information and education on community containment strategies to reduce disease transmission.
5. Communicate travel advisories.
6. Continue to provide public information and education on appropriate use of masks.
7. Continue communication among other county, state PIOs.
8. Use communication strategies to address the issue of “worried well.”

B. Public Health Information Line

Work in concert with Epidemiology Section responsible to establish key pre-recorded (or taped) messages for the Health Department’s Pandemic Flu Hotline (901-544-7503). The MSCHD PIO in conjunction with the Emergency Preparedness Team will evaluate the need to establish a public information call center manned by HD staff and volunteers to respond to public inquiries.

Alert Period - The Pandemic Flu Hotline in the beginning maybe pre-recorded message maintained by the Epidemiology Section.

Pandemic Period – MSCHD may fully activate hotline with staff to respond to calls from the general public. Scripts will be updated and staff will be briefed at regular intervals.

1. Publish The Centers for Disease Control and Prevention (CDC) information line for callers with general questions when the call volume exceeds local capacity.
2. Publish also the TDH Pandemic Influenza Hotline.

C. Media Communications

The media will be the primary information resource for all target audiences during a Pandemic Period. It must be recognized that the media will play an essential role in creating an informed public. However, inaccurate or exaggerated press reports can fuel public concern far in excess of the actual health risk. Thus there must be a constant source of timely “official” public information to reduce rumors that otherwise will quickly fill an information vacuum. To ensure message accuracy and coordination, during a pandemic period, messages will be initially coordinated with TDH before release to media through the EOC.

Alert Period

Conduct media informational briefings during the Alert Period, which can be held

on a one-on-one basis or in small/large groups or e-mail communications
Pandemic Period

- 1) During the Pandemic Period Communication to media outlets will be via EOC, e-mails, fax, teleconference briefing, phone calls as needed. Depending upon the need may be weekly, daily or more frequently if necessary.
- 2) The objective will be to provide accurate, current information and to limit the time spokespersons are taken from their other duties to address the media.

D. Provide Information for Public Health Staff

The Public Information Office in conjunction with other sections such as Health Promotion, Office of Nursing, Epidemiology will provide support to Public Health staff and programs that are primarily responsible for the outreach and coordination of various health department programs throughout the community.

Alert Period

- Provide existing materials available for distribution. Key partners may use these materials for distribution to employees, customers, clients, etc.
- Post information on county website www.shelbycountyttn.gov.
- Tools to be provided may include: Fact sheets, Frequently Asked Questions, Pandemic Flu Updates, other materials as needed.

Pandemic Period

- In conjunction with the Office of Nursing, Epidemiology Section and other members of the Emergency Preparedness Team, information will be shared with the staff continuously as information is updated and appropriate.
- Provide copies of any new materials that maybe developed throughout the Pandemic Period for employees, customers, partners, etc.
- Assist in the development of any new tools as needed.

E. Coordinate information with Healthcare Public Information Officers

Information will be shared with Healthcare Public Information Officers to distribute to employees, patients, clients and visitors.

Alert Period

This will be a packet of tools that will be a joint effort with Epidemiology in the development of materials. The following tools will be developed:

- Fact Sheets – Pandemic Flu, Avian Flu, Isolation & Quarantine
- Frequently Asked Questions
- Health Officer Q & A
- Pandemic Influenza Updates
- Other Materials as determined and approved

Pandemic Period

During the Pandemic Period continued flow of information will be provided as a joint effort with Epidemiology, Health Officer and other HD staff as needed. This may include new fact sheets, or other documents

F. Coordinate information with Healthcare Providers

Alert Period and Pandemic Period

Coordination of content and processing of information to healthcare providers will be conducted through Epidemiology Section and/or the Office of Emergency Preparedness in concert with the Health Officer. The Public Information Section will assist as indicated.

<u>Function</u>	Function Inter pandemic and Early Alert Period Phases 1 – 2 - 3	Late Alert and Pandemic Period Phases 4 – 5 – 6
<u>Communications</u>	<p>Assess the information needs of health care providers.</p> <p>Assess the information needs of the general public.</p> <p>Identify any logistical constraints to effective communications; such as communications staffing and equipment needs, and public information call center staffing and capacity.</p> <p>Intensify public education efforts about influenza pandemics, animal influenza and steps that can be taken to reduce exposure to infection. Information may be disseminated via web site postings, newspaper editorials, flyers and billboards, television and radio broadcasts.</p> <p>Coordinate with TDH with direction from CDC, and the health departments in adjacent jurisdictions to develop common health messages and education materials.</p> <p>The various sections in coordination with Emergency Preparedness and Response Office will educate providers, public officials, businesses and emergency responders about influenza pandemics and steps they should take to plan for pandemic outbreaks.</p> <p>The MSCHD Health Officer will convene appropriate internal sections and Sections to develop a communications strategy for vulnerable populations including identifying appropriate community partners for reaching and educating diverse communities such as limited English speaking and homeless citizens.</p>	<p>MSCHD Director, and Health Officer will evaluate the need to establish a Joint Information Center (JIC) in conjunction with appropriate health system and response partners. A JIC will be activated when it is deemed necessary based on specific characteristics of the pandemic. Public Information Officer or Assistant will be in the JIC.</p> <p>The PIO will evaluate the need to establish a public information call center to respond to public inquiries.</p> <p>The PIO will work with the Health Officer and Epidemiology Section to develop public information messages related to health care delivery and other resources (triage centers, call centers, etc).</p> <p>The Epidemiologist and/or Hospital Liaison will initiate regular communication briefings with hospital emergency rooms, infection control practitioners, infectious disease specialists, and community providers as necessary and in collaboration with the Regional Hospital Council.</p> <p>The Section will also regularly communicate with experts at the TDH with direction from CDC.</p> <p>The Emergency Preparedness Section will conduct regular briefings with key response partners, to inform EOC staff, business leaders, community based organizations, first response agencies and critical infrastructure agencies on the status of the pandemic and local response actions.</p> <p>As the pandemic expands, the MSCHD PIO will provide daily updates on the pandemic and will organize regular media briefings.</p> <p>The PIO will keep the public informed about steps that should be taken to protect against infection, treatment options for individuals who are infected, the status of the spread of the outbreak in the community, and the disease control and containment strategies that are being implemented.</p>

**Memphis and Shelby County Health Department
March 2007**

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Other Key Personnel: Barry Moore

Title: Emergency Response Coordinator

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Public Information Emergency Response Call Tracking

(Hotline Staff use this to collect information about callers. Hotline Coordinator will collect, summarize, and provide updates to PIO)

Time of call: _____ a.m. p.m. (circle which)

Nature of call:

Specific information contained in stock materials:

- Disease or illness-related
- Treatment or Prevention related
- Call from clinic or other health provider
- Clarify recommendations
- Other topic _____

Request for referral:

- For more health information (MSCHD, CDC, Other?)
- For medical attention
- Other _____

Feedback to Memphis and Shelby County Public Health:

- Complaint about specific contact with agency
- Complaint about recommended actions
- Concern about ability to carry out recommended action
- Report possible cases or markers (e.g., increased absences from place of employment)
- Rumor or misinformation verification (briefly describe)

Outcome of call:

- Calmed caller based on scripted information (risk messages & fact sheet)

Referred caller to:

- Health expert outside the department
- Personal doctor or health care professional
- Emergency room
- Red Cross or other non-government organization
- FEMA or state emergency management agency

Action needed:

- None
- Return call to: Caller's name: _____ Phone #: _____ City: _____

Gender: M F

Return Call urgency:

- Critical (respond immediately)
- Urgent (respond within 24 hours)
- Routine

Call taken by: _____ Date: _____

bgw Revised March 2006

Section 9: Workforce and Social Support

**Memphis and Shelby County Health Department Pandemic Influenza Response Plan Section 9:
Workforce and Social Support**

I. Purpose:

To describe plans to support the public health response workforce and list community resources to assist the public in meeting physical, emotional, medical, or spiritual needs in recovering from a pandemic influenza outbreak.

II. Scope:

While the Memphis/Shelby County Emergency Management Agency has the primary responsibility of crisis intervention support, the MSCHD has made a concerted effort to mobilize community agencies to meet the physical, financial, emotional and spiritual needs of individuals affected by pandemic influenza as responders or as victims. The MSCHD will provide similar type referral information to the MSCHD workforce via the Shelby County website.

III. Action: Local Coordination (Pre-pandemic)

- A. In the pre-pandemic period, MSCHD will spearhead meetings to coordinate efforts among social service agencies (both public and private).
- B. MSCHD will also have a Speaker's Bureau available to community organizations to emphasize the potential effects of a pandemic and encourage individual and community planning.
- C. MSCHD will conduct seminars for first responders to educate them on mental health stress reactions and beneficial coping responses during a pandemic or other emergency situation.
- D. MSCHD convened a workshop to assist the Shelby County Division of Community Services in developing a coordinated response among local agencies to address the needs of vulnerable populations.
- E. MSCHD Office of Emergency Preparedness Nurse Educator coordinated the development of a community mental health response plan. This protocol, Memphis and Shelby County Mental Health Emergency Response Plan, outlines procedures and resources to increase the availability of mental health resources during a pandemic. (see Appendix III)

IV. Local Coordination (Pandemic Period)

- A. During a pandemic, MSCHD will disseminate a list of mental health, spiritual and physical support services in the area to persons isolated or quarantined and to other response personnel, such as healthcare providers. This listing will be placed on the MSCHD website and will also be provided to media for distribution and ready access through television, newspapers, and electronic media in multiple languages.

- B. There will be active outreach to at-risk, vulnerable populations who have special needs in the event of a public health emergency. Examples include individuals who are low-income, limited English-speaking, special health needs, pregnant women, children, senior citizens, disabled, or homeless. The Shelby County Division of Community Services will coordinate resources that are available in Shelby County.
- C. MSCHD will coordinate with other health care providers to ensure the medical community has access to mental health resources and support. The following lists major providers of support agencies and identifies services they will provide to the community in a pandemic influenza situation. Representatives of these agencies participated in the series of Stakeholder meetings convened by the MSCHD in July 2006. (Specific contact information for each organization is listed in Appendix IV: Confidential.)

Government Agencies

1. Shelby County Government:
 - a. Division of Community Services- mental health services, shelter, commodity foods, limited transportation
 - b. Division of Corrections- provide labor force
 - c. Division of Public Works- provide services
2. City of Memphis
 - a. Park Services Division- shelter, transportation, information dissemination
 - b. Division of Public Works- public support services (solid waste collection, maintenance of sewer lines)
 - c. Mayor's Citizen Service Center- basic city services
3. Memphis Light, Gas, and Water: utility infrastructure/services
4. Memphis Police Department: public safety
5. City of Bartlett: EMS services, animal services, shelter; city government working with health and business
6. City of Germantown: animal services
7. Town of Collierville: animal services, shelter, food services, emergency services; working with physicians

Emergency Response Agencies

1. Memphis/Shelby County Emergency Management Agency: coordination
2. Tennessee Emergency Management Agency: state resources
3. Tennessee Highway Patrol: police services
4. Memphis Fire Department: first response
5. Arlington Fire Department: emergency health services
6. Germantown Fire Department: coordinate resources; organize shelters
7. Memphis-Shelby County Airport Authority: transportation
8. Lifeblood Regional Blood Center: maintain blood supply
9. Memphis Police Department: CSI- law enforcement
10. Shelby County Sheriff's Office: law enforcement
11. Millington Police; law enforcement
12. Office of Homeland Security

Health Care Organizations

1. Regional Medical Center of Memphis: health services
2. St. Francis Hospital: health services, mental health services
3. Baptist Memorial Healthcare: health services
4. Christ Community Health Services: health services
5. American Esoteric Laboratories/MPL/UT: health services
6. Medical Examiner's Office: coordination of mortuary services
7. Lakeside Behavioral Health: mental health services, shelter
8. Methodist LeBonheur Healthcare: health services, mental health services, shelter, food services
9. LeBonheur Children's Medical Center: health services
10. St. Jude Children's Research Hosp.: health services; expert virology leadership
11. UT Medical Group, Inc: health services, mental health services
12. Delta Medical Center: health services
13. VA Medical Center: health services; support within the scope of VHA mission
14. BlueCross BlueShield of Tennessee: health services
15. Memphis Medical Society: broadcast communication to healthcare community; mobilization of physicians
16. Memphis Managed Care: provide information to 170,000 TLC plan members

Media Organizations/Public Information Officers

1. WMC-TV: inform and direct
2. WREG-TV: information, education
3. WPTY/WLMT: media
4. The Independent Newspaper- suburban news group: information
5. Baptist Memorial Healthcare: health services
6. Delta Medical Center: health services, mental health services
7. Le Bonheur Children's Medical Center: health services
8. Methodist Healthcare: health services
9. Regional Medical Center at Memphis: health services
10. St. Francis Hospital: health services
11. UT Health Science Center: health services
12. Shelby County Sheriff's Office: Homeland Security Office- health services, security, checking on the welfare of elderly, public information

Community Service Organizations

1. Aging Commission of the Mid-South: in-home checks on home-bound
2. Catholic Diocese Memphis: spiritual support, volunteers, health professionals
3. Church Health Center: health services, shelter
4. Memphis Housing Authority: shelter for their residents
5. Mid-South Red Cross: health services, mental health services, food services
6. MIFA: senior buddy line
7. Shelby County Community Services Agency: food service (commodities); family counseling, services for homeless, rent/mortgage, medicine, utilities
8. Southeast Mental Health Center: mental health services
9. Temple Israel: shelter, food services
10. United Way: 2-1-1- and NPO response
11. University of Tennessee Boling Center for Developmental Disabilities: health services
12. University of Tennessee Extension: public health education/training

Educational Institutions

1. Baptist College of Health Sciences: health services
2. Crichton College: shelter
3. ITT Technical Institute: technical support
4. Memphis City Schools: mental health services, shelter, food services
5. Shelby County Schools: if schools are closed, schools can be used for shelter and food services; school buses can be used for transportation.
6. UT Medical Group: health services

Business/Industry

1. Bank of America: financial
2. Baxter Healthcare: health services, medication delivery
3. Center City Commission: communication to downtown community
4. Germantown Chamber of Commerce: communication to businesses
5. FedEx: medication delivery

- D. The MSCHD will promote utilization of services and resources contained in the Memphis and Shelby County Mental Health Emergency Response Plan during a pandemic. (see Appendix III)

Appendices

- I. **Basic Health Department
Functions During a Severe
Pandemic**
(source: Tennessee Department of Health)

- II. **MSCHD Mass Prophylaxis Plan**
(selected portions) **(CONFIDENTIAL)**

- III. **Memphis and Shelby County
Mental Health Emergency
Response Plan** **(CONFIDENTIAL)**

- IV. **Contact Information**
(CONFIDENTIAL)

Appendix I

Description of Basic County Health Department Functions During a Severe Pandemic

(Source: Tennessee Department of Health)

Description of Basic County Health Department Functions during a Severe Pandemic

This document lists the minimal services that should be maintained at a local health department during a severe pandemic. More services will be provided if a less severe scenario takes place and there may be region to region variation based on availability of staff and the severity of the outbreak in each community.

Outline for Family Planning Services in Health Department Clinics

Prepare an outline of limited family planning services in the event of pandemic flu

- File outline in advance with the federal regional family planning office
- File outline in advance with state regional family planning administrators for dissemination to the field

Family planning services shall be limited in the event of pandemic flu. The following services will **not** be provided:

- Initial family planning appointments (that is, there will be no new family planning clients enrolled during the pandemic)
- Annual family planning examinations
- Walk-in (i.e., without a screening telephone interview, see below) reproductive health, medical complaint exams (i.e., vaginal itching)
- Pregnancy testing (explanation below)
- Walk-in (i.e., without a scheduled appointment or without a telephone interview – see below) family planning appointments for any reason including re-supply of method.
- There will be no method changes during pandemic flu other than changes in brand of oral contraceptives.
- There will be no IUD insertions during pandemic flu.

Title X family planning clients will **not** be given prescriptions for their method. Only those clients with third party payors (i.e., TennCare) can receive prescriptions for their method.

Clients who believe they may be pregnant can call the clinic for basic information about early pregnancy. They could be directed to the health department website if they have internet access. During pandemic flu, all persons will be limiting exposure to large groups of people. Pregnant women are at particular risk and should be especially careful about being in public areas. As soon as public health officials announce that risks are decreasing, pregnant women should report to their health care provider or health department clinic.

The following limited family planning services for combined hormonal contraceptives and progestin-only pills will be provided:

- Following a telephone conversation with a registered nurse, nurse practitioner, or physician to screen history for contraindications, side effects, or new adverse events, client will be approved to receive up to a one year supply of combined oral contraceptives, contraceptive rings, contraceptive patches or progestin-only pills. Amount of supply to be dispensed is to be determined by the RN, FNP, or physician.
- Old dispensing orders (i.e., 3 packs and 10; or 3, 4, and 6 etc.) are superseded to assure that the individual has an adequate supply of the method throughout the pandemic.
- Telephone conversation will include instructions regarding proper storage of the method.
- The client or a person designated by the client will pick up their supply at the front desk after showing identification and signing a receipt.
- Blood pressure check will not be required.
- Written client instructions including storage instructions will be included with the supply.
- Condoms will be included with the method.
- Treatment with ECPs for 2 events of unprotected intercourse and a client instruction sheet will be included with the method.
- In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest emergency room.
- All of the above and the transaction itself will be noted in the client record.

The following limited family planning services for progestin-only injections will be provided:

- Following a telephone conversation with a registered nurse, nurse practitioner, or physician to screen history for contraindications, side effects, or new adverse events, client will be approved to report to the clinic for a progestin-only injection. Medical staff should minimize the visit and limit the time the client needs to be in the clinic for the injection. Client may be approved to receive a supply of up to one year of injections with injection supplies if the client can give her own injection or has access to someone who can give her the injection. The clinic will **not** teach the client or her designee how to give the injection during this crisis. But, if in the opinion of the nurse, nurse practitioner or physician, the client has access to a safe mode of administration outside the health department, then she can be given the necessary doses and injection materials.
- Old dispensing orders are superseded to assure that the individual has adequate family planning supplies throughout the pandemic.
- Telephone conversation will include instructions regarding proper storage of the method if the client will be receiving injections at home.
- The client or a person designated by the client will pick up the supply (assuming self-administration at home has been approved) at the front desk after showing identification and signing a receipt.
- Blood pressure check will not be required.
- Written client instructions including storage instructions will be included with the supply.

- Condoms will be included with the method.
- Treatment with ECPs for 2 events of unprotected intercourse and a client instruction sheet will be included with the method.
- In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest emergency room.
- All of the above and the transaction itself will be noted in the client record.

Few clients continue to use the diaphragm as their contraceptive method at this time. Diaphragm users will continue to use their current diaphragm throughout the pandemic. Supplies of contraceptive gel for use with the diaphragm can be dispensed at the front window after a telephone conversation with the nurse, nurse-practitioner or physician.

- The client or a person designated by the client will pick up the contraceptive gel supply at the front desk after showing identification and signing a receipt.
- Written client instructions including storage instructions will be included with the supply.
- Condoms will be included with the method.
- Treatment with ECPs for 2 events of unprotected intercourse and a client instruction sheet will be included with the method.
- In the unlikely event of a serious adverse event related to the method, the client will be instructed to report to the nearest emergency room.
- All of the above and the transaction itself will be noted in the client record.

The following limited family planning services for reproductive health medical complaints in an established family planning client will be provided:

- Clients with a reproductive health complaint such as vaginal itching, profuse discharge, severe pain with intercourse, fever, low abdominal pain etc. will be interviewed by a nurse, nurse-practitioner, or physician. If the staff person assesses that the client needs to be seen and if the clinic can accommodate the client and her complaint, then she can be given a time to come to the clinic for assessment and treatment. If no qualified staff persons are available to see the client, the client will be referred to the nearest emergency room. Emergency room referrals during pandemic flu should be recommended carefully given that hospital staff will be managing the seriously ill flu population.

HIV/AIDS/STD Services in Health Department Clinics

Prepare an outline of limited HIV /STD services in the event of pandemic flu

- File an outline with the Centers for Disease Control and Prevention and HRSA
- File a copy with Regional Directors, regional STD supervisors (for dissemination to the field), and AIDS Centers of Excellence in Knoxville, Cookeville, Columbia, Springfield, Johnson City and Jackson
- File a copy with all CBOs that provide HIV services

HIV/AIDS

HIV Centers of Excellence clinics services will be limited during the pandemic. Due

to increased risk because of compromised immune systems in persons with HIV, the following services will be postponed until the risk has decreased:

- routine HIV counseling and testing
- annual and semi-annual Ryan White certifications
- office visits for routine follow up
- routine lab work
- non-emergency dental care

The following services will be provided in AIDS Centers of Excellence:

- After phone consultation with a nurse practitioner or physician, prescription refills will be sent to the Ryan White mail order pharmacy
- After phone interview with nurse practitioner or physician, patients who have been assessed and determined to need to be seen in the clinic will be given a specific appointment time in the clinic to limit the amount of time spent in clinic.
- If staff is not available to see the patient and the complaint is serious enough to warrant, the patient will be referred to the nearest emergency room. Since these patients have compromised immune systems and emergency rooms may be filled with seriously ill flu patients, a referral to an emergency room should be carefully considered.

STD

STD services will be limited in the event of pandemic flu. The following services will not be provided:

- Group education sessions
- Disease surveillance including both HIV and STDs
- Disease investigation, contact tracing, and partner notification

The following services will be provided for persons who are symptomatic:

- Following a telephone interview with a registered nurse, nurse practitioner or physician to screen history for previous STDs and symptoms, persons assessed by the staff as needing to be seen will be given a specific appointment time to limit exposure in the clinic. Treatment will be provided on site. If appropriate, partner delivered therapy will be provided.
- If no qualified staff are available to see the patient and symptoms warrant, the patient may be referred to the nearest emergency room. Emergency room referrals during pandemic flu should be carefully evaluated since emergency room staffs will be dealing with seriously ill flu population.

WIC and Nutrition Services in Health Departments

According to federal regulations WIC vouchers can be issued for 3 months at a time. We will mail vouchers as allowed by the USDA in cases of emergency. In a severe pandemic we would ask for an exception from USDA and, if granted, would issue WIC vouchers less frequently than every 3 months by mail if needed.

Tennessee TB Elimination Program (TTBEP)

1. Evaluation, diagnosis, and appropriate treatment of active TB cases and TB suspects.
 - Maintain scaled-back TB clinic operations to evaluate TB cases and suspects only (not LTBI)
 - Provide history, physical examination, diagnosis and treatment by the TB physician
 - Provide appropriate diagnostic tests, including X-ray, sputum collection for processing in the State Lab (AFB smears, cultures), and blood tests as indicated
 - Provide pharmacy services for DOT of active TB cases/suspects
 - Provide DOT for all patients with diagnosed or suspected active pulmonary, laryngeal or pleural TB disease
 - Provide DOT for all pediatric cases
 - If staffing is severely limited, consider permitting self-administered therapy for extra-pulmonary cases *only*.
 - Report all active TB cases/suspects per routine

2. Identification, evaluation and appropriate treatment of TB contacts at highest risk for progression to active TB disease.
 - Initiate contact investigation for close contacts of all AFB+ TB cases/suspects
 - Ensure that all pediatric close contacts are fully evaluated with PPD, symptom screen, physical examination, and X-ray
 - Provide self-administered LTBI treatment for all PPD+ contacts at high risk for progression to active TB disease (not medium- or low-risk pts.)
 - Provide window therapy by DOT for all PPD- close contacts under the age of 5 years

Immunization Program Services Critical Operations

During a pandemic or other protracted public health crisis, certain immunization services must be provided regularly to prevent other serious vaccine-preventable diseases. Children whose immunizations are delayed are at high risk of failing to catch up and complete their immunizations on time. Under-immunized infants are at risk for Hib meningitis, pneumococcal disease and pertussis.

During a local pandemic wave, childhood immunization clinics should be operated at least one-half to one day each week for routine immunizations; priority should be given to vaccinating children <18 months of age. Routine adult immunization services may be suspended during the local wave, though emergency immunization for adults should not be suspended (e.g., tetanus prophylaxis following a wound). Immunization clinics and waiting areas should be separate from those where ill patients may be present. Only patients and accompanying adults who are not ill should be permitted in the

immunization clinic.

Primary Care Services

Primary Care Services delivered at the health department will be limited in the event of pandemic flu as follows:

- Routine follow-up of chronic illness will be postponed.
- Acute illness will be managed by phone triage and/or office visit.
- Prescriptions will be filled and/or refilled by phone, use of Express Scripts (for those who qualify), or use of patient assistance programs whenever possible. Chronic medication refills should be for 12 months if possible during pandemic flu in order to minimize visits to the health department by well persons.

Vital Records

Critical activities that must be completed within current timeframes and accuracy standards:

- Death registration.
- Issuance of certified copies of death certificates to funeral directors.
- Reconciliation of facility reports of deaths within the county against death certificates received.
- Track and obtain delinquent death certificates.
- Issue Cremation Permits.
- Issue permits for burial transit out of state (rare).

During a pandemic wave, counties should suspend local issuance of birth certificates from the State Vital Records Automated Index Retrieval System (AIRS) and refer those requesting a birth certificate to the state registry office (contact information below).

Of chief importance during a pandemic, issuance in the county involves the customer presenting in person to the health department. When customers order from the State Office via mail, telephone, or the Internet, there is no human-to-human contact.

For additional information, go to www.tennessee.gov and click on Vital Records.

Mailing Address: Tennessee Vital Records
Central Services Building
1st Floor
421 5th Avenue North
Nashville, Tennessee 37243
Phone: (615) 741-1763
FAX: (615) 741-9860

NOTE: Appendices II-IV have been omitted from this public copy of the Memphis and Shelby County Health Department Pandemic Influenza Response Plan because they contain sensitive information related to the Health Department's emergency response capabilities.