

Louisiana
Department
of Health &
Hospital
Pandemic
Influenza
Plan



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ESF-8 Health &
Medical Section

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1.0 Introduction

1.1 Background and Overview of State Hospital Plan

Pandemic influenza is a distinct public health emergency and potential community disaster. It is considered highly probable that at some point, a new strain of influenza virus will emerge and spread around the world. The exact timing of an influenza virus capable of causing a pandemic cannot be forecast. Most experts agree that there will be one to six months between identification of a novel virus and widespread outbreaks in the United States. The effect on individual communities from each wave can be expected to last from six to eight weeks or possibly longer. Up to 40% absenteeism is possible during this time, and several outbreak waves are possible.

An influenza pandemic will place a huge burden on the U.S. healthcare system. Published estimates based on extrapolation of the 1957 and 1968 pandemics suggest that there could be 839,000 to 9,625,000 hospitalizations and 18-42 million outpatient visits nationally depending on the illness rate and case fatality ratio of infection during the pandemic. Estimates based on extrapolation from the more severe 1918 pandemic suggest that substantially more hospitalizations and deaths could occur. The demand for inpatient and intensive-care unit (ICU) beds and assisted ventilation services could increase by more than 25% under the less severe scenario.

Pandemic influenza has the potential to affect all elements of society. A large number of cases will add burden to hospitals and other health care systems. Increased mortality during a severe pandemic is also of concern. Health and medical personnel, as well as, other critical infrastructure workers, i.e., law enforcement, fire, and public works will be susceptible to illness possibly imposing significant stress on critical infrastructure. The effects within communities could be dramatic and of a longer duration than other disasters.

Pre-pandemic planning by healthcare facilities is therefore essential to provide quality, uninterrupted care to ill persons and to prevent further spread of infection. Effective planning and implementation will depend on close collaboration among state and local health departments, community partners, and neighboring and regional healthcare facilities. Despite planning and preparedness, however, in a severe pandemic it is possible that shortages, for example of mechanical ventilators, will occur and medical care standards may need to be adjusted to most effectively provide care and save as many lives as possible.

HHS has established "a framework for developing a unified comprehensive system of response that provides the most good for the greatest number of people while using limited resources and integrates easily into the Federal Response plan". This document provides guidance to hospitals on those critical planning elements needed to manage such an event. In addition, this document includes sections developed by the Louisiana Department of Health and Hospitals Pandemic Flu Clinical Forum intended to further assist Louisiana Hospitals in responding to a pandemic by providing guidance in other areas including but not limited to surge capacity, healthcare education and training, resource tracking, and mortuary needs. As additional guidance is developed at the state or the federal level, relevant sections of this document shall be updated.

The ability to provide detailed guidance on all aspects of a pandemic is limited because of uncertainty about how the pandemic will evolve and variation and uncertainty of local factors that will influence decisions at various stages. These planning activities are

intended to be synergistic with those of other pandemic influenza planning efforts, including state preparedness plans.

While sections of this document focuses on guidelines for individual hospitals, it is imperative that all hospitals understand their role and responsibilities as part of a larger, regional and state response process. Refer to the Louisiana Statewide Draft Pandemic Influenza Plan for additional guidance.

1.2 Planning Assumptions

1.2.1 Planning Assumptions

1. High attack rates will place overwhelming demands on the healthcare system.
2. The number of individuals seeking healthcare (inpatient and outpatient) is likely to exceed normal capacity.
3. Healthcare providers, emergency response personnel, and public safety personnel will be equally or more likely to become infected than the general public.
4. Staffing shortages among healthcare and other responding personnel are likely to occur due to illness of self or family, exhaustion, and fear of contagion.
5. Staffing concerns are also likely among other essential industries, including utilities, transportation, telecommunications and information technology, mortuary services, food services, and public safety.
6. Due to the expected widespread nature of an influenza pandemic, it is unlikely that resources will be diverted from other areas.
7. The first wave of disease will likely occur during the fall with community outbreaks lasting 6-8 weeks.
8. Attack rates will likely range between 20-40% and case fatality rates may be 1% or higher. At least 10% of infected individuals may require hospitalization.
9. Hospital care will include a combination of respiratory support, including mechanical ventilation, and treatment of secondary bacterial pneumonia.
10. A second pandemic wave will likely occur approximately 3 months after the first.

1.3 Pandemic Periods, Phases, Stages, and Intervals

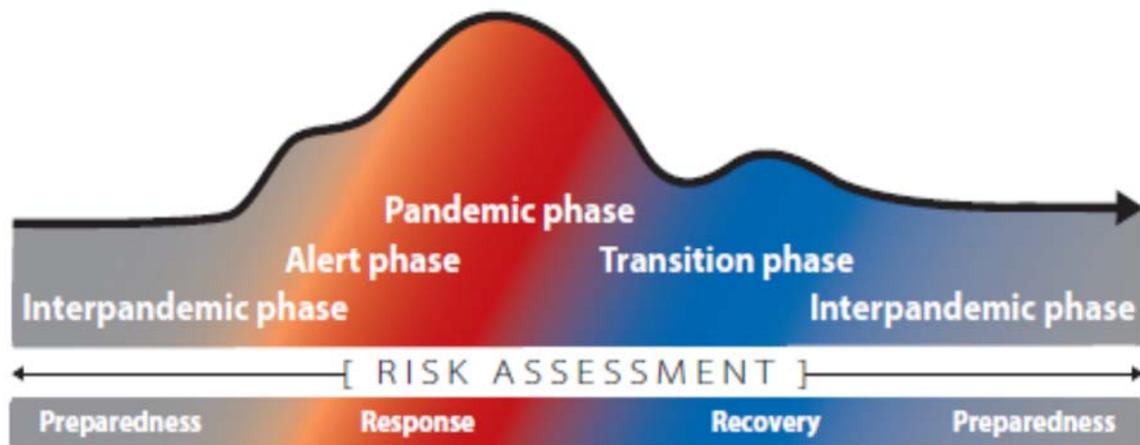
The pandemic influenza phases reflect WHO's risk assessment of the global situation regarding each influenza virus with pandemic potential that is infecting humans. These assessments are made initially when such viruses are identified and are updated based on evolving virological, epidemiological and clinical data. The phases provide a high-level, global view of the evolving picture.

The global phases – interpandemic, alert, pandemic and transition – describe the spread of the new influenza subtype, taking account of the disease it causes, around the world. As pandemic viruses emerge, countries and regions face different risks at different times. For that reason, countries are strongly advised to develop their own national risk assessments based on local circumstances, taking into consideration the information provided by the global assessments produced by WHO. Risk management decisions by countries are therefore expected to be informed by global risk assessments, but based on local risk assessments.

The risk-based approach to pandemic influenza phases is represented in **Figure 1** as a continuum, which also shows the phases in the context of preparedness, response and recovery, as part of an all-hazards approach to emergency risk management. Both WHO guidance and international standards exist that describe formats and conduct of such risk assessment. One of the underlying principles of this guidance is to acknowledge that emergency risk management at country level needs to be sufficiently flexible to accommodate different consequences within individual countries, for example, different severities and different numbers of waves of illness.

The global phases will be used by WHO to communicate the global situation. They will be incorporated into IHR (2005) related communications to National IHR Focal Points, in Disease Outbreak News releases and various other public and media interactions, including through social media channels.

Figure 1. The continuum of pandemic phases^a



^a This continuum is according to a "global average" of cases, over time, based on continued risk assessment and consistent with the broader emergency risk management continuum.

Interpandemic phase: This is the period between influenza pandemics

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment at local, national, and global levels are characteristics of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities toward those in the interpandemic phase may occur.

Pandemic phase: This is the period of global spread of human influenza caused by a new subtype. Movement between the interpandemic, alert and pandemic phases may occur quickly or gradually as indicated by the global risk assessment, principally based on virological, epidemiological and clinical data.

Transition phase: As the assessed global risk reduces, de-escalation of global actions may occur and reduction in response activities on movement toward recovery actions by countries may be appropriate, according to their own risk assessments; the global phases and their application.

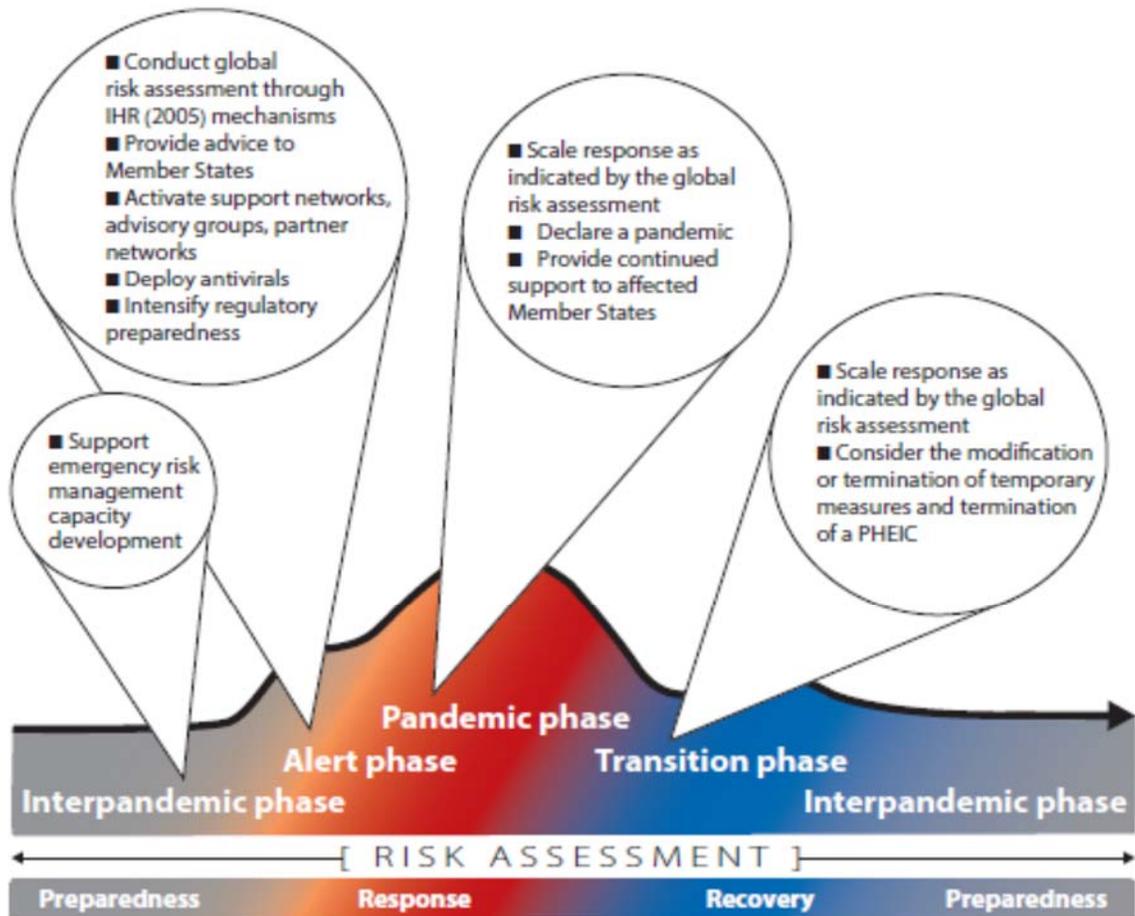
The global phases and their application in risk management are distinct from (1) the determination of a PHEIC under the IHR (2005) and (2) the declaration of a pandemic. These are based upon specific assessments and can be used for communication of the need for collective global action or by regulatory bodies and/or for legal or contractual agreements should they be based on a determination of a PHEIC or on a pandemic declaration.

Determination of a PHEIC: The responsibility of determining a PHEIC lies within WHO Director-General under Article 12 of the IHR (2005). The determination leads to the communication of temporary recommendations.

Declaration of a pandemic: During the period of spread of human influenza caused by a new subtype and appropriate to the situation, the WHO Director-General may make a declaration of a pandemic.

While the determination of a PHEIC and/or declaration of a pandemic may trigger certain regulatory actions by WHO and Member States, actions at national level should be based on national/local risk assessments and be commensurate with risk.

Figure 2. The continuum of pandemic phases with indicative WHO actions



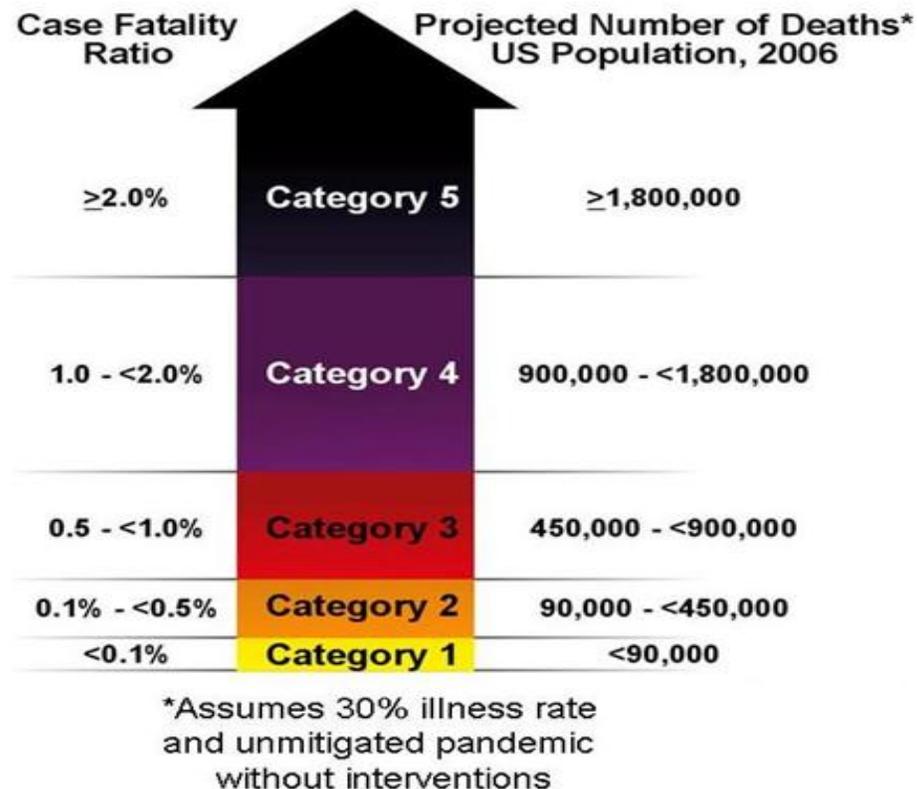
Actions by WHO occur throughout the phases continuum; their nature and scale at any point in time will be in line with the global risk assessment. Indicative actions by the Organization are illustrated in Figure 2.

National actions: The nature and scale of national actions at any point in time will be in line with the current national risk assessments, taking into consideration the global risk assessment. The uncoupling of national actions from global phases is necessary since the global risk assessment by definition will not represent the situation in individual Member States.

The **Pandemic Severity Index (PSI)** is a proposed classification scale for reporting the severity of [influenza pandemics](#) in the [United States](#). The PSI was accompanied by a set of guidelines intended to help communicate appropriate actions for communities to follow in potential [pandemic](#) situations. Released by the [United States Department of Health and Human Services](#) (HHS) on February 1, 2007, the PSI was designed to resemble the [Saffir-Simpson Hurricane Scale](#) classification scheme. The PSI was developed by the [Centers for Disease Control and Prevention](#) (CDC) as a new pandemic influenza planning tool for use by states, communities, businesses and schools, as part of a drive to provide more specific community-level prevention measures. The index and guidelines were developed by applying principles of [epidemiology](#) to data from the history of the last three major flu pandemics and [seasonal flu](#) transmission, mathematical models, and input from experts and citizen focus groups.

The goal of the index is to provide guidance as to what measures various organizations can enact that will slow down the progression of a pandemic, easing the burden of stress upon community resources while definite solutions, like drugs and vaccines, can be brought to bear on the situation.

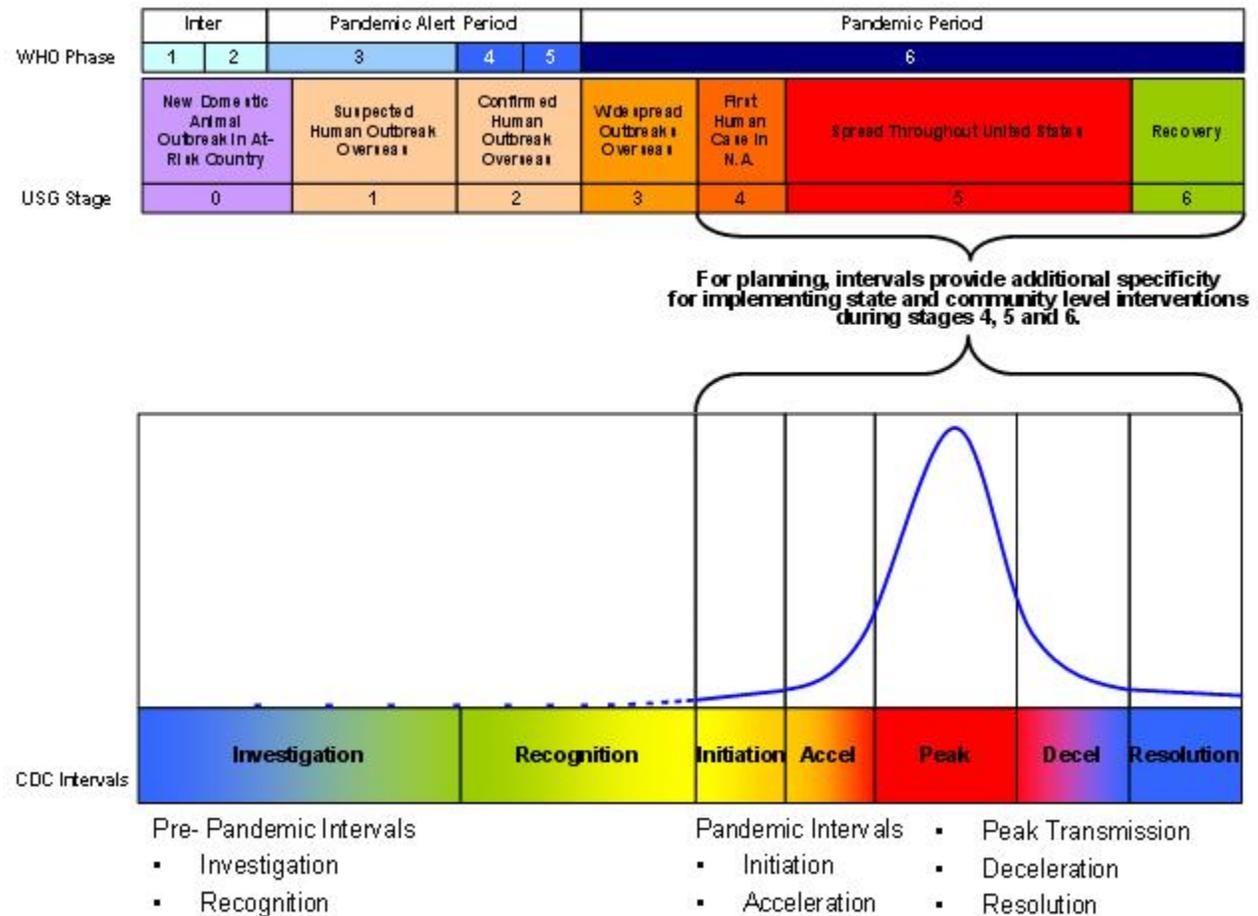
Pandemic Influenza Index



While it is difficult to forecast the duration of a pandemic, it is expected that there will be definable periods between when the pandemic begins, when transmission is established and peaks, when resolution is achieved, and when subsequent waves begin. While there will be one epidemic curve for the United States, the larger curve is made up of many smaller curves that occur on a community by community basis. Therefore, the intervals serve as additional points of reference within the phases and stages to provide a common orientation and better epidemiologic understanding of what is taking place. State health authorities may elect to implement interventions asynchronously within their States by focusing early efforts on communities that are first affected. The intervals thus can assist in identifying when to intervene in these affected communities. The intervals are also a valuable means for communicating the status of the pandemic by quantifying different levels of disease, and linking that status with triggers for interventions.

The intervals are designed to inform and complement the use of the Pandemic Severity Index (PSI) for choosing appropriate community mitigation strategies. The PSI guides the range of interventions to consider and/or implement given the epidemiological characteristics of the pandemic. The intervals are more closely aligned with triggers to indicate *when* to act, while the PSI is used to indicate *how* to act.

Periods, Phases, Stages, and Intervals



2.0 Roles and Responsibilities

Roles and responsibilities have been delineated by the U.S. Department of Health & Human Services (DHHS) based on planning tasks during the interpandemic and pandemic alert periods.

Interpandemic Period

DHHS responsibilities:

- Provide ongoing public health guidance on healthcare preparedness for an influenza pandemic.
- Provide healthcare facilities with model protocols for early detection and treatment of influenza among patients and staff; these protocols can be piloted during routine influenza seasons.

State and local responsibilities:

- Develop statewide and local or regional plans to manage an influenza pandemic.
- Develop regional task forces to facilitate planning efforts.
- Assist healthcare facilities in conducting exercises and drills to test healthcare response issues and build partnerships among healthcare and public health officials, community leaders, and emergency response workers.
- Develop a communications, infrastructure to facilitate and ensure the timely dissemination and transfer of information between the healthcare and public health sectors.
- Address legal issues that can affect staffing and patient care.

Healthcare facility responsibilities:

- Develop planning and decision-making structures for responding to pandemic influenza.
- Develop written plans that address: disease surveillance, hospital communications, education and training, triage and clinical evaluation, facility access, occupational health, use and administration of vaccines and antiviral drugs, scope and altered standards of care, surge capacity, supply chain and access to critical inventory needs, and mortuary issues.
- Participate in pandemic influenza exercises and drills, and incorporate lessons learned into response plans.

Pandemic Alert Period

If an influenza pandemic begins in another country.

State and local responsibilities:

- Work with HHS to provide local physicians and hospital administrators with updated information and guidance as the situation unfolds.

Healthcare facility responsibilities:

- Heighten institutional surveillance for influenza and prepare to activate institutional pandemic influenza plans, as necessary.

Pandemic Alert Period (con't)

If an influenza epidemic begins in or enters the United States

DHHS responsibilities:

- Assist state and local healthcare and public health partners on issues related to hospital infection control, occupational health, antiviral drug use and clinical management, vaccination, and medical surge capacity.
- Provide state with materials from the Strategic National Stockpile for further distribution to healthcare facilities.

State and local health responsibilities:

- Provide healthcare facilities with information on the global, national, and local situation.
- Work with HHS to provide guidance (as needed) on infection control measures for healthcare and non-healthcare settings.
- Work with healthcare facilities to address surge capacity needs.

Healthcare facility responsibilities:

- Activate institutional pandemic influenza plans, in accordance with the "Hospital Pandemic Influenza Triggers" (See *Appendix E*).
- Identify and isolate all potential patients with pandemic influenza.
 - Implement infection control practices to prevent influenza transmission.
 - Ensure rapid and frequent communication with healthcare facilities and between healthcare facilities and health departments.
- Implement surge-capacity plans to sustain healthcare delivery.

3.0 ESF-8 System Organization

3.1 Overview

To facilitate the State's Emergency System Function (ESF) 8 Health and Medical response, nine planning regions for private and public hospitals were identified. These regions correspond with those used by Louisiana Department of Health and Hospitals. While planning begins at the local level, each individual hospital works within its region, each region reports to the state, and the state in-turn interfaces with the federal government. See *Appendix A* (Map of Louisiana DHH/OPH Regions).

3.2 Local Level

All hospitals "belong" to a region including Veterans Administration hospitals and may participate in the development of regional plans.

Hospitals are responsible for developing and identifying their Incident Command Structure (ICS) depending on the nature of the incident. Hospitals have also been asked to identify a point of contact, known as the Hospital Emergency Preparedness Coordinator. This member of the Hospital ICS or his/her designee is responsible for maintaining ongoing communications with the regional response. See *Appendix B* (Region VII Hospital Emergency Preparedness Coordinators)

Louisiana's hospitals provide various levels of care. A classification system of hospitals was identified based on capabilities. Hospitals serve voluntarily as one of three levels:

1. **Designated Regional Hospitals (DRH):** These hospitals are large acute care facilities with emergency room capabilities and many subspecialty services. They serve voluntarily and have agreed to provide additional capacity and resources in the initial emergency response of a mass casualty or event.
2. **Tier 1 Hospitals:** These hospitals have emergency department capabilities 24/7.
3. **Tier 2 Hospitals:** Hospitals that do not provide emergency room capabilities and are more single service in nature such as psychiatric, rehabilitation, and/or long term acute service.

3.3 Regional Level

Leadership for Hospital Emergency Preparedness and Response in each region is provided through hospital volunteers/representatives known as Hospital Designated Regional Coordinators (DRCs). See *Appendix C* (Designated Regional Coordinators)

The primary responsibilities for the Hospital DRCs are:

- o To serve as the liaison for hospitals with other health-related entities (i.e. Office of Public Health, Bureau of Emergency Medical Services) and on behalf of hospitals with non-health related entities (i.e. Office of Emergency Preparedness);
- o To support the patient transfer process during a declared state of emergency;
- o To facilitate the identification of a medical evacuation queue during a declared state of emergency;
- o To facilitate the development and implementation of regional and Inter-hospital emergency preparedness plans for designated regions in the State of Louisiana;
- o To lead the region's process for development of, testing of, continuous improvement of and management of regional hospital response to emergency situation;
- o To be the leader for the region during a statewide emergency in which hospitals are tasked to respond.

Hospital Designated Regional Coordinators work within their Regional Unified Medical Command Structure. Members of the Regional Unified Medical Command include: Office of Public Health (OPH) Regional Personnel, Hospital DRC, Emergency Medical Services DRC, Nursing Home DRC, Mass Fatality DRC and Office of Public Health – ESF 8 liaison and other members as requested by the Structure. The OPH Medical Director serves as the Regional Unified Medical Command Chief.

3.4 State Level

The Regional Unified Medical Command reports to the State ESF 8 Health and Medical Section to forward needed information and assist in response activities. The State Health Officer or his designee serves as the Incident Commander for ESF 8 activities and interfaces directly with other state emergency support functions and federal agencies. The State ESF 8 coordinates the response for requests with other ESFs and federal agencies. See *Appendix D* (Louisiana ESF 8 Structure).

3.5 State and Federal Interface

The Louisiana Department of Health and Hospitals, Office of Emergency Preparedness provides coordination on behalf of the State of Louisiana and all other state agencies, to the federal government through Emergency Support Function (ESF) 8 – Health and Medical Services, and the Louisiana Hospital Emergency Preparedness and Response.

4.0 Emergency Plan Activation

4.1 Overview

Plan implementation begins with the receipt of information that an incident has occurred or a situation exists that may require full or partial implementation/ intervention by the State ESF-8 Health and Medical response. The avenues through which the State ESF 8 may receive initial notification of a routine incident or an emergency/disaster event may include, but is not limited to:

State Epidemiologist identifies and/or confirms a case from the medical community. The State Health Officer and/or Assistant Secretary of Public Health have information that would require full or partial intervention.

4.2 Level One Activation

Level One Activation is in response to an event that is limited in scope or requires only a limited resource response. State Emergency Operations Center (EOC) staffing may include the ESF-8 Public Health Incident Commander and his/her general command staff. ESF-8 Hospital Liaison also reports to the State EOC.

ESF 8 Hospital Liaison communicates the activation status to Regional Unified Command. Regional Unified Command notifies hospitals of the Level One Activation status. Activation of the Regional Unified Command Center is determined by the State ESF 8 Incident Commander.

4.3 Level Two Activation

Level Two Activation is intended to be used in response to most state declared disasters or public health emergencies. The ESF-8 Incident Commander (State Health Officer) and/or DHH Emergency Preparedness Director, general command staff, and all ESF-8 Liaisons report to the State EOC.

State ESF 8 Hospital Liaison communicates the activation status to Regional Unified Command. Regional Unified Command will notify hospitals of the Level Two Activation status. Activation of the Regional Unified Command Center will be determined by the State ESF 8 Incident Commander.

4.4 Level Three Activation

Level Three Activation is intended to be used in response to a major event such as a bioterrorist incident, pandemic flu or a major natural hazard event such as an earthquake.

The ESF-8 Incident Commander requests the Governor's Office of Emergency Preparedness (GOHSEP) for all ESFs to be activated at the State EOC. In this scenario, GOHSEP would be the primary agency coordinating ESF activities with input/ consultation from ESF-8.

5.0 Demographics

The state has a population of 4,164,119 in 64 parishes and is divided into nine (9) public health regions.

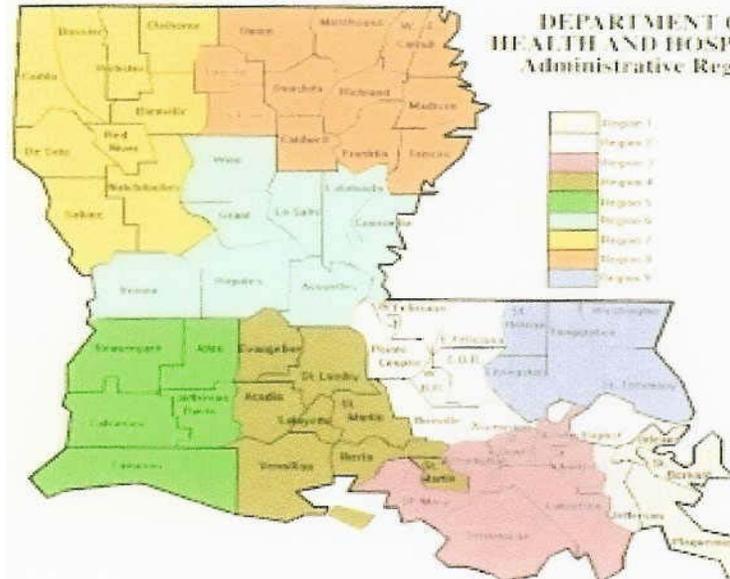


Table 1: State Population by Region

Regions	Population
Region 1	682,470
Region 2	620,212
Region 3	396,745
Region 4	534,375
Region 5	283,403
Region 6	298,458
Region 7	532,060
Region 8	347,173
Region 9	469,223
Total	4,164,119

Each region has a large metropolitan area.

There are a total of 236 hospitals in the state of which, 117 are Tier 1 Hospitals and 119 are Tier 2 Hospitals.

Table 2: Hospitals by Region

State Regions	Tier 1	Tier 2	Total
Region 1	12	16	28
Region 2	10	21	31
Region 3	11	5	16
Region 4	18	23	41
Region 5	9	12	21
Region 6	12	14	26
Region 7	17	13	30
Region 8	16	15	31
Region 9	12	17	29
Total	117	136	253

6.0 Planning

Planning for a pandemic influenza event can be divided into two sections, the inter-pandemic period and the pandemic period. Assumptions noted in the Introduction of this document should be taken into account as state plans are developed.

The focus on planning during the inter-pandemic period should include the following sections which are detailed later in this document: pandemic influenza surveillance, decision-making structures for responding to a pandemic, hospital communications, education and training, patient triage, clinical evaluation and admission, scope and crisis standards of care, facility access, occupational health, distribution of vaccines and antiviral drugs, surge capacity, and mortuary issues.

Planning for the pandemic period should focus on activation of the institutional pandemic influenza response plans. The ability to provide detailed guidance on this aspect of the pandemic is limited because of uncertainty about how the pandemic will evolve and variation and uncertainty of local factors that will influence decisions at various stages. These planning activities are intended to be synergistic with those of other pandemic influenza planning efforts, including state preparedness plans. Refer to the Louisiana Office of Public Health Statewide Draft Pandemic Influenza Plan for additional information. *Appendix F* is a checklist to help healthcare facilities assess their current level of readiness to deal with a influenza pandemic.

All hospitals should be equipped and ready to care for: 1) a limited number of patients infected with a pandemic influenza virus as part of normal operations during the initial phase of a pandemic; and 2) a large number of patients in the event of escalating transmission of a pandemic influenza virus. Hospital response plans for pandemic influenza should:

- Outline administrative measures for detecting the introduction of pandemic influenza, preventing its spread, and managing its impact on the facility and the staff.
- Build on existing preparedness and response plans for bioterrorism events, SARS, and other infectious disease emergencies.
- Incorporate planning suggestions from state and local health departments and other local and regional healthcare facilities and response partners.
- Identify criteria and methods for measuring compliance with response measures (e.g., infection control practices, case reporting, patient placement, healthcare worker illness surveillance).
- Review and update inventories of supplies that will be in high demand during an influenza pandemic.
- Review procedures for the receipt, storage, and distribution of assets received from federal stockpiles.
- Include mechanisms for periodic reviews and updates.
- Identify methods to manage possible mass fatality issues (supplies, storage, transport).

Hospitals should use an “all-hazards” incident command structure for responding to pandemic influenza and will need to incorporate the relevant aspects of communicable disease control that are included in these guidelines. Hospitals should consider using “tabletop” simulations or other exercises to test response capabilities.

6.1 Planning Process

Groups and individuals involved in the hospital planning process should include:

- An internal, multidisciplinary planning committee with responsibility for pandemic influenza preparedness and response. The committee should include technical experts, persons with decision-making authority, and representatives from a range of response partners (see *Appendix G*, "Healthcare Facility Pandemic Influenza Planning Committee"). A pre-existing all-hazards preparedness team (e.g., established for bioterrorism or SARS response) might assume this role.
- A response coordinator/incident commander to direct the facility's planning and response efforts.
- A core group from the multidisciplinary planning committee to work with the response coordinator and assist with decision-making during the pandemic.

The pandemic influenza response team should plan to remain active throughout the pandemic period, which could be several weeks or months.

Hospital planning for pandemic influenza should consider concurrent public health, community, and healthcare planning efforts at the local, state, and regional levels. Some possible mechanisms for collaboration and coordination are to:

- Include a state or local health department representative as an ex-officio member on the hospital planning committee (see *Appendix G*).
- Obtain copies of draft pandemic influenza plans from other local or regional hospitals to use as models.
- Work with other local hospitals, community organizations (e.g., social service groups), and the state or local health department to coordinate healthcare activities in the community and define responsibilities for each entity during a pandemic.
- Collaborate with HHS hospital preparedness programs in the state or region.
- Include a hospital representative in local or regional planning efforts.
- Include representatives from safety-net providers in the local community (e.g., FQHCs and rural community or rural health clinics).

The elements of a hospital influenza preparedness plan discussed below are listed in the Hospital Preparedness Checklist provided in *Appendix F*.

Hospitals have planned for an influenza pandemic for several years, but thus far the characteristics of the 2009 H1N1 pandemic are different than the high-severity pandemic that had been anticipated. The Centers for Disease Control and Prevention (CDC) and the Office of the Assistant Secretary for Preparedness and Response (ASPR) have developed a Readiness Review Checklist (see *Appendix F2*) as a supplement to existing hospital emergency management plans. This list focuses on information hospitals can use in response to a surge in H1N1 and seasonal flu patients rather than the basic planning and regulatory considerations included in earlier checklists (*Appendix F1*). Hospital plans should include the following areas in order to maintain a state of readiness for each wave of patient surge that occurs: protecting and preparing hospital staff, implementing plans to address patient care issues and hospital operations, addressing equipment and supply needs, and providing for security.

An effective plan should incorporate information from state, regional, tribal and local health departments, emergency management agencies/authorities, hospital associations, and suppliers of resources. In addition, hospitals should ensure that their pandemic influenza plans comply with applicable state and federal regulations and with standards set by accreditation organizations such as the Joint Commission.

7.0 Patient Movement Process

The Louisiana Hospital Emergency Preparedness and Response has facilitated the development of regional and statewide patient movement processes.

There are three components to the patient movement: resource availability, patient transfer process, and patient tracking.

7.1 Resource Availability

The Designated Regional Coordinator (DRC) from each region serves to support the process by identifying available resources in their region. Hospitals are asked to contact and work through the DRCs to identify hospital-based resources available in regions throughout the state. The Designated Regional Coordinator “match” patient care needs with available resources in the state and facilitate the arrangement of a hospital-to-hospital transfer. Hospitals report resources available on an as needed base, to DRCs through a resource-tracking tool, EM Systems. Such a system allows Louisiana to maximize existing resources.

7.2 Patient Transfer

Patient transfer includes the movement of patients from one region to another during a declared state of emergency. Hospitals are encouraged to exhaust all local resources before requesting support through the statewide patient transfer process. The Administrator/Medical Director on call from the hospital that has patients that need to be transferred outside the region should contact their Designated Regional Coordinator. The transferring hospital should have the specific information available regarding patient needs. The “transferring” DRC will contact an “accepting” DRC with a referral request. The “accepting” DRC will contact hospitals in their region to identify available resources. If resources are not available, the accepting DRC will contact the HRSA Coordinator to advise that another alternative region must be identified. An “accepting” hospital will contact the transferring hospital regarding transfer resources. Transfer will be arranged per procedures of the transferring and receiving hospitals. Refer to *Appendix H* (Emergency Patient Transfer Process).

7.3 Patient Tracking

An interim patient tracking system (*Appendix I*, Patient Tracking Plan) has been established by the Louisiana Hospital Association (LHA) to facilitate the identification of patients moved during a declared state of emergency. LHA has established a website for data collection and a second site for patient query.

8.0 Hospital Communications

8.1 Overview

In a pandemic influenza event, communications between hospitals within each region, with the state, and with local communities will be of paramount importance. Hospital should work with public health officials, other government officials, neighboring healthcare facilities, and the press to ensure rapid and ongoing information-sharing and those messages to the public remain uniform and consistent at any given time.

8.2 ESF-8 Communications

The Louisiana ESF-8 Hospital Network has identified several communication systems for redundancy:

- Primary system – Internet email
- Secondary system – Telephone and fax
- Tertiary system – Two-way radios

All Tier 1 hospitals have at least one emergency two-way radio. A regional decision was made regarding the two-way radio. Hospitals in Regions 2 and 4 have HEARs radios. Hospitals in Regions 1, 3, 5, 6, 7, 8 and 9 have 700/800 MHz radios. The Louisiana Department of Health and Hospitals, Office of Emergency Preparedness, Designated Regional Coordinators and Designated Regional Hospitals are equipped with 700/800 MHz radios for statewide communications. Additional information may be provided via the HAN (Health Alert Network) by blast fax.

8.3 External Communications

Considerations for external communication should also be made in advance of a pandemic. Each hospital and each region should assign responsibility for external communication about pandemic influenza. With guidance from state or local health departments, determine the methods, frequency, and scope of external communications. In addition, identifying a person responsible for updating public health reporting (e.g., infection control), a clinical spokesperson (e.g., medical director), and a media spokesperson (e.g., public information officer) within each hospital may be necessary. The following are further recommendations that should be considered:

- Identification of points of contact among local media (e.g., newspaper, radio, television) representatives and public officials and community leaders
- Determination of how communications between local and regional healthcare facilities will be handled.
 - Consult with state or local health departments on plans for coordinating or facilitating communication among healthcare facilities. In the absence of such a plan, consider organizing a meeting of local healthcare facilities to determine an optimal communications strategy
 - Identify key topics for ongoing communication (e.g., staffing needs, bed capacity, durable and consumable medical equipment and device needs and supplies of influenza vaccine and antiviral drugs).

- Assign responsibility within the hospital for communications with other healthcare facilities.
- Consult with local or state public health officials regarding the hospital's role in communicating with the media and the public
- Determine the type of hospital-specific communications (e.g., press releases, community bulletin board) that might be needed, and develop templates for these materials
- Consult with local or state health departments on plans for a pandemic influenza hotline and/or website for public inquiries.
 - Determine how public inquiries will be handled (e.g., refer callers to the health department; provide technical support for handling calls)
 - Identify the types of information that will be provided by the hospital and the types of inquiries that will be referred to state or local health departments.

8.4 Intra-Facility Communications

Communications within facilities should also include redundancy options. These lines of communications may be tested during other types of emergencies, but it is important that hospital rosters, call lists, and necessary systems to support communications lines are reviewed and updated. Planning considerations for a pandemic should include how to keep administrators, personnel (including infection control staff and intake and triage staff), patients, and visitors informed of the ongoing impact of pandemic influenza on the facility and on the community.

9.0 Education and Training

9.1 Overview

Each Region should consider developing an education and training plan that addresses the needs of staff, patients, family members, and visitors. This can be done by accessing educational resources for clinicians, including federally sponsored teleconferences, state and local health department programs, web-based training materials, and locally prepared presentations.

Hospitals should assign responsibility for coordination of the pandemic influenza education and training program and identify training materials—in different languages and at different reading levels, as needed—from HHS agencies, state and local health departments, and professional associations.

9.2 Hospital Staff

Pandemic influenza training and education should have a consistent focus (the messages should be the same throughout the state). Training for pandemic influenza may be tier specific, providing a general overview for all employees and a more detailed or disciplined-based technical training for other selected staff and providers delivering direct patient care.

In order to assure some consistency in educational information and a level of competency regarding pandemic influenza, the Louisiana Pandemic Influenza Clinical Forum, Education Subcommittee, in collaboration with the University of North Carolina has developed a web-based educational training course. Free CMEs and CEUs are available. The course consists of three 20-minute modules that will allow the participant to complete the training around his/her busy schedules. A certificate verifying the CME/CEU credits will be available for printing following the successful completion of the on-line course, posttest, and evaluation form.

This training course is designed for physicians, nurse practitioners, registered nurses, respiratory therapists, allied health professionals and emergency preparedness professionals.

The course will:

- Provide a general overview of influenza, including the history of influenza and basic biology
- Provide an overview of avian influenza epidemiology
- Discuss the threat of pandemic influenza
- Provide a general overview of the effects influenza cases in North Carolina, Louisiana and across the U.S.
- Examine the Avian Influenza recommendations made by the ISDA (Infectious Disease Society of America)
- Discuss the development of vaccines for avian influenza
- Provide an overview of the proposed avian influenza vaccine response
- Explain antiviral therapies currently available
- Examine lessons learned for the SARS pandemic
- Discuss federal, state, and local pandemic influenza preparedness
- Understand the role local hospitals play in pandemic influenza preparedness

Faculty members are Dr. Frank Welch, MD, MSPH, Louisiana Pandemic Influenza Medical Director and Dr. David Weber, MD< MPH, MHA, Professor of Medicine, Pediatrics and Epidemiology, University of North Carolina at Chapel Hill. This 3-part series offers a total of 1.5 Continuing Education Unites and 1.0 CMEs, FREE to Louisiana healthcare providers.

To take the course, go to: http://nccphp.sph.unc.edu/training/HEP_LFLUP/certificate.php.

Additional training items:

Hospitals should consider cross-training of staff wherever possible in order to increase the capacity for staff to manage critical care patients during a pandemic event. Accordingly, educational tools that provide “just in-time training” may also need to be developed.

The Louisiana Pandemic Influenza Clinical Forum also developed regional pandemic influenza tabletop drill exercises that were designed to build upon lessons learned from previous exercises and to “push back” the patients past the emergency rooms and into the hospital setting. This allowed the hospitals to test their current pandemic influenza plans while working alongside of various emergency response agencies in the state. If hospitals wish to conduct functional pan flu drills, a set of case patients was developed that can be used to move patients through a “live” drill.

9.2.1 General Staff Training

General pandemic influenza education can be provided during orientation of new employees. Institution-wide meetings or trainings may be held for existing staff.

The use of multiple media presentation including presentations on-line, CDs/DVDs, handouts & brochures may be considered to ensure compliance with education guidelines and requirements within a facility.

General topics for staff education should include at a minimum:

- Prevention and control of influenza
- Individual and societal implications of pandemic influenza
- Benefits of seasonal flu vaccinations and the pandemic strain when available
- Role of antiviral drugs in preventing disease and reducing rates of severe influenza,
- Infection control strategies for the control of influenza, including respiratory hygiene/cough etiquette, hand hygiene, standard precautions, droplet precautions, and as appropriate airborne and/or contact precautions.
- Measures to protect family and other close contacts from secondary occupational exposure

Other topics for staff education may include:

- Pandemic staffing contingency plans, including how the facility will deal with illness in personnel and high rates of absenteeism
- Policies for restricting visitors and mechanisms for enforcing these policies
- Trainings for triage or non-clinical intake staff in recognizing patients with influenza symptoms and to implement immediate containment measures to prevent transmission
- Community resources and referrals
- Changes in standard operations or care delivery in light of increased surge at the peak of a pandemic

9.2.2 Clinical / Allied Health Staff Training

Establish a schedule for training/education of clinical staff and a mechanism for documenting participation. Consider using annual infection control updates/meetings, medical Grand Rounds, and other educational venues as opportunities for training on pandemic influenza. Hospitals are encouraged to provide annual continuing education credits/units for appropriate disciplines.

Cross-train clinical personnel, including outpatient healthcare providers, who can provide support for essential patient-care areas (e.g., emergency department, ICU, medical units)

Supply social workers, psychologists, psychiatrists, and nurses with guidance for providing psychological support to patients and hospitals personnel during an influenza pandemic. If feasible, hospitals should also provide psychological-support training to appropriate individuals who are not mental health professionals (e.g., primary-care clinicians, leaders of community and faith-based organizations)

9.2.3 Volunteer Training

Training for volunteers, similar to that for general staff, may be considered. Roles for volunteers including those utilized from outside of the hospital setting during an event should be discussed and determined to the extent possible prior to an event.

9.2.4 Patients and Visitors

Patients and visitors should also be informed of hospital policies in the setting of a pandemic and what they can do to prevent disease transmission within the hospital or back to their communities.

The information presented should be language-specific and reading-level appropriate where possible. If language-specific materials are not available for the population(s) being served, arrangement for translations should be made.

A plan should be developed that outlines how this information shall be presented to all persons entering the hospital. Identify staff that can answer questions procedures for preventing influenza transmission.

The Department of Health and Hospitals, Office of Public Health has compiled several short educational materials (handouts) that can be utilized to help provide education to patients, family members, visitors, and telephone contacts. Examples include; "Influenza Self-Care Guide", "Preventing the Spread of Influenza", and "Flu Self Diagnosis" and "Caring for Someone with influenza" (See Appendix J). Check with your local or regional health department for copies and for additional educational materials.

10.0 Influenza Surveillance

The threat of pandemic influenza has caused both governmental and private sector agencies throughout the world to recognize the need for pandemic influenza planning as essential to preparing for a severe public health threat. Influenza surveillance requires global and national monitoring both for virus strain and disease activity. Timely identification of circulating or novel virus strains includes detection from animal (avian and other) sources, as well as, human cases. Monitoring influenza disease activity is important to facilitate resource planning, communication, intervention, and investigation. The essential requirement for effective state pandemic surveillance is a well-functioning inter-pandemic system that includes Louisiana's participation in all aspects of influenza surveillance as outlined by the CDC. In the event of an influenza pandemic, surveillance systems shall be flexible and be rapidly adapted to respond to the challenges of a pandemic in order to assess and monitor the pertinent epidemiology of the pandemic influenza virus.

Influenza viruses are unique in their ability to cause infection in all age groups on a global scale. In addition to the highly transmissible nature of influenza, the virus can change its antigenic structure, resulting in novel sub-types that have never before affected humans. Major shifts in the viral sub-types are associated with influenza pandemics.

Pandemic influenza is a unique public health emergency and community disaster. It is considered a highly probable, if not inevitable, event but no one can predict when it will occur. There may be little warning, but most experts agree that there will be one to six

months between identification of a novel virus and widespread outbreaks in the U.S. It is widely hypothesized that outbreaks will occur simultaneously throughout the U.S., and the effect on individual communities will last at least from six to eight weeks or more.

10.1 Pandemic Alert

The Investigation interval represents the time period when sporadic cases of novel influenza are occurring internationally or within the U.S. Enhanced virologic surveillance would continue by sentinel virologic surveillance sites and would be opened up for non-sentinel surveillance sites to participate.

During the pandemic alert periods, healthcare providers and healthcare facilities play an essential role in surveillance for suspected cases of infection with novel strains of influenza and should be on alert for such cases. Novel strains may include avian or animal influenza strains that can infect humans (like avian influenza A [H5N1]) and new or re-emergent human viruses that cause cases or clusters of human disease (H1N1). Case identification will be based on the Centers for Disease Control and Prevention and/or the Department of Health & Hospitals, Office of Public Health surveillance criteria for suspect/confirmed cases (based on symptoms, laboratory results and risk exposure histories).

The Recognition Interval occurs when clusters of cases of a novel influenza virus in humans are identified, and there is confirmation of sustained and efficient human-to-human transmission. This indicates that a pandemic strain has emerged. Public health measures will be taken to contain the outbreak and limit the potential for further spread. Cases of severe illness and deaths associated with influenza will be collected. Demographics (particularly age), occupational, and residential patterns will be evaluated. Any unusual patterns will be investigated. A special focus will be placed on pediatric influenza.

Specimens may be requested from patients who present with severe ILI and on of the following:

- Travel history to a region where a novel strain of influenza has been identified;
- History of influenza vaccine within the previous year;
- Unusually severe symptoms of ILI regardless of their travel history;
- Suspected to be part of an ILI cluster

10.2 Pandemic Period

The Initiation Interval begins with laboratory confirmation of the first human case of pandemic influenza virus in the U.S. If the United States is the first country to recognize the emerging pandemic strain, then the actions described in the previous interval (Recognitions) will occur simultaneously with Initiation.

Activities will focus on case based surveillance to detect suspect cases of individual ILI that meet a specific set of criteria, established by CDC, confirm whether they are due to the novel pandemic strain of influenza virus, and take appropriate control measures to limit the spread of infection.

The specific recommendations will depend on the epidemiology of the virus and the clinical characteristics of the human cases as they are known at the time, and will most likely focus on the following:

- Clinical characteristics such as severity of illness, hospitalization, or ambulatory patients who meet certain epidemiologic and clinical criteria
- Travel or residence history in area known to be a focus of pandemic influenza
- Exposure to affected population groups
- ILI in spite of adequate prior immunization

Suspected and confirmed cases of novel influenza will be reported to CDC at the time intervals specified in enhanced surveillance protocols.

The focus of surveillance during this phase will be on detecting individual cases with specific characteristics that indicate likely infection by a new strain. The virologic surveillance systems will need to have the sensitivity to detect and characterize circulating strains of influenza virus, as well as, early human cases of a novel virus in the state. The epidemiologic surveillance is focused on detection of unusual cases and identifying new strains. The focus of disease control is on stamping out transmission around individual cases.

The Acceleration Interval will begin in Louisiana when public health officials identify that containment efforts have not succeeded and onward transmission is occurring. This is when two or more laboratory-confirmed cases within Louisiana are not epidemiologically linked to any previous cases.

Epidemiologic surveillance will shift to a Community Based Model as the pandemic progresses. Epidemiologic surveillance will focus on:

- Identification of population groups at risk of transmitting infections
- Quantification of health care needs, severe morbidity
- Quantification of mortality

Surveillance activities will need to assimilate large amounts of data to determine age-specific attack rates, morbidity, and mortality. The focus of disease control will shift to identifying best community preventive actions and direct health care resources towards the population in greatest need.

Suspected and confirmed cases of pandemic influenza will be reported to CDC at the time intervals specified in enhanced surveillance protocols.

Prior to an Immunization campaign, it is expected that vaccines will be in short supply and priorities will be established. Epidemiologic surveillance will provide data useful to identify priorities in immunizations strategies. Immunization programs may aim at immunizing groups of high transmitters or immunizing groups at high risk of severe morbidity and mortality (which may be the elderly or a younger population group).

During the mass immunization phase, epidemiologic surveillance will be geared at evaluating the response to immunization and virologic surveillance at identifying any new strains that affect properly immunized individuals.

10.3 Hospital Surveillance for Pandemic Influenza

Healthcare providers and healthcare facilities will play an essential role in pandemic influenza surveillance. Routine hospital surveillance activities will need to be greatly enhanced during a suspected or confirmed pandemic influenza outbreak. Additional

information will become critical for maintaining hospital functions. Information on specific variables will need to be tracked on a frequent basis. Hospitals should have:

- Procedures in place to facilitate laboratory testing on-site using proper biosafety levels and reporting of unusual influenza isolates through local and state health department channels. If appropriate methods or biosafety levels do not exist at the hospital, specimens should be shipped to the state health department.
- Predetermined thresholds for activating pandemic influenza surveillance plans.
- Mechanisms for conducting surveillance in emergency departments to detect any increases in influenza-like illness during the early stages of the pandemic
- Mechanisms for monitoring employee absenteeism for increases that might indicate early cases of pandemic influenza
- Mechanisms for tracking emergency department visits and hospital admissions and discharge/death of suspected or laboratory-confirmed influenza patients. This information will be needed to: 1) support local public health personnel in monitoring the progress and impact of the pandemic, b) assess bed capacity and staffing needs, and c) detect a resurgence in pandemic influenza that might follow the first wave of cases.
- Updated information on the types of data that should be reported to state or local health departments (e.g., admissions; discharges/deaths; patient characteristics such as age, underlying disease, and secondary complications; illnesses in healthcare personnel) and plans for how these data will be collected during a pandemic. State and local health departments will provide guidance on the scope and mechanism of reporting.
- Criteria for distinguishing pandemic influenza from other respiratory diseases.

11.0 Laboratory Diagnostics

11.1 Overview

In the event that pandemic influenza does enter the United States, surveillance and laboratory support will become key public health issues. The Louisiana Office of Public Health Laboratory Emergency Response Coordinator and Laboratory Bioterrorism Program Advisor will be liaisons to the clinical laboratories. The OPH Laboratory maintains a contact list for clinical laboratories throughout the state and when necessary can distribute updated information by BLAST FAS, email, letter, and/or posting on the LA Office of Public Health Laboratory website. The state laboratory is in the process of installing a comprehensive Laboratory Information Management System (LIMS). Once it is fully functional, submitters will be able to receive results by fax, as well as, electronically. In the future they will be able to order tests and access results via the web component.

The state laboratory provides laboratory support for seasonal influenza surveillance. The goal of seasonal virologic surveillance is to provide laboratory confirmation of the first cases of influenza in regional areas to track influenza activity each season. The lab provides influenza and respiratory virus testing throughout the year. Nasopharyngeal swab specimens are routinely test by nucleic acid amplification detection of influenza virus types A or B, with influenza A subtyping for H1, Pandemic H1 and H3 by real time reverse transcriptase polymerase chain reaction (RT-PCR). Although not routinely performed, the

laboratory has the ability to subtype H5 but only when specimens meet the Epi criteria. The RT-PCR test results can be completed on the same day that the specimen is received. At this time, the lab is not able to perform virus culture.

11.2 Investigation and Recognition

During the pandemic alert period (in the Investigation Interval), if a patient meets the current CDC and Office of Public Health clinical and epidemiological criteria for possible infection by a novel influenza subtype, clinical specimens may be submitted to the State Laboratory for testing. At this time, a positive RT-PCR result for a novel influenza A subtype such as H5 would be considered presumptive, pending culture and confirmation at CDC. The State Laboratory will work with the OPH Infectious Disease Epidemiology Section to provide healthcare providers, hospitals, and clinical laboratories within Louisiana the information on how to contact the State Laboratory when a novel influenza subtype is suspected; how to handle, label, and ship clinical specimens for diagnostic evaluation from these cases; and how to notify the Office of Public Health. Specimens must be identified as "test for novel influenza" to ensure that the necessary level of biosafety is used and that appropriate testing is performed.

A second key component in the public health laboratory plan is response to a pandemic. The expected increase in the volume of specimens that the laboratory will receive must be addressed. Issues such as case reporting, specimen management and occupational health of laboratory workers provide special challenges.

During a pandemic, one of the most important issues facing the Public Health Laboratory will be communications. A primary role of the state public health laboratory will be to distribute information provided by the Centers for Disease Control and Prevention to clinical laboratories, as well as, providing them with test results and testing recommendations from the public health laboratory. Forming a solid working relationship with the clinical laboratories throughout the state will be a priority during the interpandemic period.

11.3 Laboratory Surge Capacity Planning

Effective planning and preparation for clinical and OPH laboratories will need to begin in advance of the pandemic. Building on current standards of practice, the response and methodologies used by laboratories will be modified as needed to in accordance with the pandemic threat periods.

The OPH State Laboratory will assess the projected statewide needs for scaled-up diagnostic activity during the early stages of a pandemic and develop strategies to meet those needs as effectively as possible. The state will estimate testing needs for Louisiana and establish proposed goals for testing priorities, so that limited resources will be targeted toward testing the specimens most important for public health planning (e.g. to identify the first cases, or to verify regional spread of the pandemic strain within the state). Plans will also include creating proposed trigger points for making changes in the testing algorithm (e.g. the point at which the pandemic strain is circulating so widely that influenza testing at the state lab should be cut back to more routine surveillance support activities).

11.4 Initiation, Acceleration and Peak/Established Transmission

During a pandemic, the goals of virologic surveillance are to:

- Rapidly detect the introduction and early cases of a pandemic influenza in the U.S.
- Track the introduction of the virus into local areas
- Monitor changes in the pandemic virus, including development of antiviral resistance

When a pandemic first begins, laboratory testing to confirm the new subtype will be required. The State Laboratory will provide information for clinicians on the use and interpretation of commercially available rapid diagnostic tests for the detection of influenza during a pandemic, including the CDC guidance provided in the HHS national pandemic influenza plan. The most intense testing will be during the early stages of the pandemic when the primary goal is to verify whether the new virus has been introduced into the state or community. Once the virus has been identified throughout the state, the level of laboratory testing can be decreased to a level more like that of a non-pandemic flu season. CDC will provide guidelines on when confirmatory or additional testing is required. At the beginning of a pandemic, it will be critical that public health needs are met by appropriately prioritizing specimen submissions and testing at the State Laboratory; otherwise, the surge of specimens might rapidly deplete limited and valuable reagents.

As the pandemic continues, the State Laboratory will follow CDC guidance to the states on the percentage of isolates/specimens per week or month that the State Lab should send to CDC to help monitor changes in the antigenicity and antiviral susceptibility of the pandemic virus. Throughout the pandemic, CDC will provide updated instructions on the collection of clinical and epidemiologic data that should accompany isolates/specimens.

11.5 Biocontainment Procedures

Biosafety conditions for safely testing specimens which may contain a novel or pandemic influenza virus are more stringent than those needed for routine testing of specimens which may contain the currently circulating seasonal influenza strains. Biosafety guidelines for handling or processing specimens or isolates of novel influenza strains are provided in the HHS national pandemic influenza plan. Briefly, testing for influenza using either commercial antigen detection assays such as EIA or nucleic acid amplification by RT-PCR can be conducted under BSL-2 containment conditions if a Class II Biological safety cabinet is used. Virus culture should not be performed except within a BSL-3 laboratory with enhancements. In addition, culture of any novel influenza virus should be kept separate from laboratory areas where seasonal influenza A viruses (i.e. H1 and H3) are cultured. Therefore, respiratory virus cultures from specimens which may contain a novel influenza virus should not be performed in most clinical laboratories. Moreover, highly pathogenic avian influenza A (H5) and A (H7) viruses are classified as select agents and any laboratory working with these agents must be certified by the USDA. The State Laboratory will work with clinical and other laboratories in Louisiana to assure that they are aware of the national biocontainment guidelines for specimens from any patient who may be infected with a novel influenza virus and of the need to review their laboratory protocols to assure laboratory safety during the current novel virus alert phase and during a possible pandemic.

11.6 Occupational Health Issues for Laboratory Workers

At all time (i.e. during the interpandemic, Pandemic Alert and Pandemic Periods), laboratories handling specimens that possibly contain a novel influenza virus need to maintain safety practices to protect the health of the laboratory workers. These safety

practices include: (1) conducting laboratory procedures under appropriate biocontainment conditions, as described in the national pandemic influenza plan; (2) encouraging routine influenza vaccinations of all eligible laboratory personnel who are exposed to specimens from patients with respiratory infections; and (3) providing medical surveillance and follow-up for laboratory personnel who work with novel strains of influenza virus, following the national guidelines. Medical surveillance of laboratory personnel at risk for occupational exposure to novel influenza viruses is important for the benefit of the individual worker and is essential to prevent transmission to other individuals within the community in the event of a laboratory-acquired infection.

It is important to note that the guidelines for biocontainment and for medical surveillance of laboratory personnel apply to any laboratory which may handle or culture specimens containing novel or avian influenza viruses. Such laboratories would include not only the clinical and public health laboratories traditionally included in the Laboratory Response Network (LRN), but also research, university, veterinary, agricultural, or private industry laboratories that may not be easily reached via routine public health communications.

11.7 Recommendations for Clinical and Other Laboratories

11.7.1 Biosafety Issues

Biosafety recommendations for all laboratories which handle influenza virus or specimens (human or animal) which may contain influenza virus (e.g. research, university, veterinary, agricultural, industry, military, hospital/other clinical, and public health laboratories):

1. Review the laboratory biosafety portions of the HHS National Pandemic Influenza Plan (www.pandemicflu.gov) within the Laboratory Diagnostics Section (Supplement 2): (1) Biocontainment procedures and (2) Occupational health issues for laboratory workers.
2. Perform a risk assessment for influenza biosafety within the laboratory. Create a laboratory specific plan to meet the pertinent HHS guidelines for biosafety and occupational health.
3. If the laboratory handles human or animal specimens which may contain any influenza virus not currently circulating in humans, ensure that the biosafety plan also includes the following:
 - CDC and Office of Public Health website addresses to obtain updated influenza information
 - Contact numbers for the state health departments to obtain or report information about novel influenza virus
 - Contact numbers for the Office of Public Health Laboratory to obtain laboratory specific information
4. Review any federal or state regulations or guidelines which apply to influenza agents or nucleic acids used within or shipped by the laboratory. Examples may include: transport of infectious disease materials, HHS select agents, USDA select agents, federal recombinant DNA guidelines, CDC Biosafety in

Microbiological and Biomedical Laboratories (BMBL) 5th Edition, and the Louisiana Regulations for disease reporting.

11.7.2 Diagnostic Testing

1. Review the HHS National Pandemic Influenza Plan (www.pandemicflu.gov), especially the Laboratory Diagnostics Section (Supplement 2).
2. Use the national and state guidelines to create a laboratory-specific pandemic influenza plan, including plans for the current pandemic alert period. Key actions include the following:
 - If a novel influenza virus infection is suspected, the laboratory should contact the Office of Public Health Infectious Disease Epidemiology Section and the Office of Public Health Laboratory to arrange for novel influenza virus testing. The hospital laboratory should NOT attempt virus isolation.
 - It is essential that the laboratory be informed if clinical specimens are submitted from a patient suspected of novel influenza virus infection, to assure safe biocontainment and appropriate testing. Establish clear lines of communication with medical staff and infection control to be implemented if a novel influenza virus is suspected.
 - Review procedures for communication, specimen collection, and transport to the State Laboratory for testing.
 - Plan for laboratory surge capacity in the event of an influenza pandemic, including issues of staffing/training, laboratory supplies/equipment, and specimen management, including an increase in specimens sent to the State Laboratory at the beginning of the pandemic. Be aware that during a pandemic, many individuals may not be able to report to work and the quantity of many supplies may become quite limited.
3. Implement and exercise the laboratory pandemic influenza plan.

11.7.3 During the Pandemic Period

1. Review and update biosafety precautions based on CDC and Office of Public Health recommendations and risk assessment within each individual laboratory.
2. Deploy resources to manage increased numbers of requests for influenza testing and for laboratory support for an increase number of patient visits related to respiratory disease.
3. Communicate freely with the state health department and stay updated about current recommendations related to pandemic influenza.
4. Follow public health guidelines to submit selected specimens to the State Laboratory for testing. During the early phase of the pandemic, any private laboratory which performs RT_PCR testing for the pandemic

influenza strain should consult with the State Laboratory to arrange to have their results confirmed by the State Lab and/or CDC.

5. Provide guidance to physicians about interpretation and limitations of influenza laboratory test, particularly the commercially available rapid diagnostic tests.

11.8 Specimen Collection and Submission Guidelines

Acceptable Specimens

- Nasopharyngeal swab
- Nasal swab

11.8.1 Collection Procedures

Swab specimens should be collected only on swabs with a synthetic tip (such as polyester or Dacron) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are NOT recommended. Specimens collected with swabs made of calcium alginate are NOT acceptable. *Check the expiration date on the viral transport media. If the transport media is expired, the specimen will be considered UNSATISFACTORY for testing.*

Nasal or nasopharyngeal swabs: Swab must be placed in a viral transport media and mixed well immediately after collection.

11.8.2 Requesting Influenza Testing

Prior authorization by the Office of Public Health Infectious Disease Epidemiology Section is required before submitted samples for novel influenza testing.

Lab 96 forms may be obtained on the OPH Laboratory's website (www.lab.dhh.louisiana.gov) or by contacting the State Laboratory.

The patient healthcare provider must complete the specimen submission form (Lab 96) to request influenza testing. ***Please fill out all forms as completely as possible with the following information or the specimen may be considered UNSATISFACTORY for testing:***

- Name of the patient
- Date of birth
- Source of specimen
- Gender
- Time and Date of collection
- Submitter's name, address and fax number
- Unique ID or Hospital ID
- Epidemiologic risk factor
- Travel history
- Specify on the form that Influenza testing is requested

11.8.3 Shipping Instructions

Any suspect influenza specimen should be shipped on ice (2-8 degrees C) as a biological substance, category B specimen. The shipper (hospital, clinic, or parish health unit) – not the transport company – is responsible for the shipment until the specimen reaches the consignee (LA Office of Public Health Laboratory). The specimen can be shipped via FedEx, United State Postal Service (USPS) or UPS or any other Courier system. The specimen should be sent overnight. If the specimen will not reach the OPH Central Laboratory within 72 hours of collection, the specimen should be frozen (-70 degrees C or below) and shipped using dry ice.

All specimens should be shipped to the OPH Central Laboratory.

OPH Central Laboratory
Attn: Virology
3101 W. Napoleon Ave.
Metairie, LA 70001
Phone # 504-219-4664
24 hour Emergency Cell: 504-458-9537

When submitting a routine influenza specimen, there is no need of prior notification. However, the LA Office of Public Health Laboratory must be notified in advance when a specimen from a suspected novel or avian influenza will be arriving at the Laboratory.

12.0 Triage and Clinical Evaluation

12.1 Overview

During the peak of a pandemic, hospital emergency departments and outpatient office might be overwhelmed with patients seeking care. Efficient and effective care delivery will thus be paramount. Therefore, triage should be conducted to: 1) identify persons who might have pandemic influenza, 2) separate them from others to reduce the risk of disease transmission, and 3) identify the type of care they require (i.e., home care or hospitalizations).

The Louisiana Pandemic Flu Clinical Forum has devised a potential means of triage to be used in the peak phases of a pandemic intended to separate the worried well and those with minor flu illnesses from others patients seeking care at a medical facility. In conjunction with Clinical Evaluation guidelines developed by the Office of Public based on HHS and CDC recommendations, these tools can assist providers in making the appropriate clinical decisions for patients.

Review of triage protocols and clinical evaluation criteria with nearby outpatient medical offices may further facilitate efficient and appropriate disposition of patients.

12.2 Triage

12.2.1 Overview

The goals of triage in a pandemic are to: 1) identify persons who might have pandemic influenza, 2) separate them from others to reduce the risk of disease transmission, and 3) identify the type of care they require (i.e., home care or hospitalizations).

The triage strategy outlined below should be reviewed with appropriate clinical staff and ED directors for approval for your institution and/or for opportunities to make modifications to better meet the needs of the healthcare staff and the community.

The triage process is envisioned as tiered, with high-risk influenza patients fast-tracked to a higher level of triage and diagnosis as their symptoms or medical history dictates. Patients may be referred to additional diagnostic levels with increasing levels of resources (i.e., nurse practitioner, physician and diagnostic capabilities) depending on symptoms and medical history. The guidelines are designed to be the diagnostic tool to facilitate patient movement through the system of triage.

12.2.2 Pandemic Influenza Triage Schematic / Algorithm

An algorithm developed by the Louisiana Pandemic Flu Clinical Forum Triage Subcommittee that identifies the potential triage pathway for influenza/non-influenza patients can be found in *Appendix L1-L4*.

The algorithm presented was designed to alleviate surge needs for hospitals/ED at the height of the pandemic flu or as a Hospital ED becomes overwhelmed. It is intended to separate the worried-well and those with minor flu illnesses from the rest of the patient population who may need more acute care.

The decision pathways during the triage process generally should be “two-way”, meaning a patient may return to a previous level of care and/or triage depending on symptoms or care requirements. Following triage, members of the public may be sent home for home care. Hospitals will have to identify resources needed based on the types of patients that present for care. The particular flow and mechanisms of implementation of the triage pathway may differ based on the size and resources of a facility, but the general flow and concept can likely be preserved to maximize the use of limited resources in hospitals as a “surge within the walls” strategy is employed.

An overview and a schematic are described in the section below. In addition, detailed instructions on the use of various forms associated with each step are again provided in the appendices.

The process begins with a **screening triage**. This individual who may be the first greeting staff physically located outside of the ED, even at the entrance of hospital property will perform a quick visual assessment of the presenting patient. If patient looks critically ill or has obvious injury/ailment that is not flu related, the patient would be directed to the main ED for standard triage. If patient is not critical and may have flu like illness, the greeting hospital staff member would ask

the patient if they have any of the following: fever, cough, sore throat, shortness of breath, runny nose, etc. (as noted on the tool). If the answer is yes to any or some of these questions and clinical picture looks like an influenza-like illness, the patient is diverted to the **rapid triage**.

It would be ideal to have a nurse or an EMT performing the **screening triage** as some element of medical experience is necessary even in the quick visual assessment of the patient. In a worst case scenario with extremely limited staffing, a non-medical staff (i.e. security guard or volunteer) may be considered for conducting the screening triage, but this should be avoided if possible.

Please see below for next steps if a patient is diverted to rapid triage. If the patient however presents with a non-flu related complaint and is directly sent to the main ED, this should be noted at the bottom of the screening triage tool.

For patients that display flu-like symptoms at the screening triage and are sent to the **rapid triage**, they are to be greeted by a rapid triage nurse who then completes the left hand side of the next form titled "Pandemic Flu Triage Template", (see *Appendix LA*). The rest of the information provided in each of the patient cases (social history, physical exams, etc.) should be used here to complete this part of the rapid triage.

The goal of the rapid triage nurse is to quickly evaluate and separate patients who have minor flu illnesses and thus can wait (potentially hours) in a **flu holding area** from those whose flu symptoms need more immediate attention and need to be directed to the **main ED**.

The separation of patients to go either to a **flu holding area** or **main ED** will occur based on the rapid triage nurse's assessment and interpretations of the clinical presentation of the paper patients. To guide each nurse, the "Pandemic Flu Triage Template" includes concerning abnormal findings (made bold-faced) both in the history and physical exam of the patient. If one or several of these items are noted in the patient case, it may signify that a patient cannot wait very long for care and thus should be diverted to the main ED rather than the flu holding area.

For other patients that come to the rapid triage nurse, the nurse may note that the patient does not actually exhibit influenza-like illness (perhaps mistakenly sent by screening triage to rapid triage rather than main ED) or based on her exam she notes that what may have sounded like a flu symptom at screening triage may be a result of another medical condition. If so, the nurse would redirect these patients to the main ED and would note this disposition at the end of her section on the Pandemic Flu Triage Template.

The decision as to where a patient may be sent (either the flu holding area or Main ED) may reflect the level of care provided at each site, the proximity of the flu holding area to other acute patient care areas of the hospital, or other institution specific variables. Certain hospitals may set-up a flu holding area in their auditorium where no clinical care can be provided, while others may have a dedicated patient care area where basic monitoring can be done, labs can be obtained, or other medical procedures can be accommodated. Accordingly, the final distribution of patients into the flu holding area vs. main ED may differ for each hospital.

Once the rapid triage nurse finishes her section and notes whether the patient goes to a flu holding area or main ED, you can consider the triage process finished. The form used by the rapid triage nurse (“Pandemic Flu Triage Template”) can be used to document care for the patient that will be diverted to the **flu holding area only**. If the patient is diverted to the Main ED following screening or rapid triage, your own hospital specific forms should be used to document any additional care or activity.

The **flu holding area** may be a large waiting room, hospital auditorium, or other designated spots that may not traditionally be a patient care area. Ideally, this area is in close proximity to the main ED while still clearly separated and delineated to avoid patient mixing. This area would house patients requiring minimal/low intensity clinical supervision who may need to wait for some time before they are evaluated by a physician, APRN, or other advanced degree clinician constituting and meeting the requirements of the medical screening exam to satisfy EMTALA and /or hospital requirements for evaluation and potential discharge. This assessment will be completed on the right hand side of the “Pandemic Flu Triage Template” and will lead the clinician to decide whether the patient can be discharged, held for observation, or will need further work-up or potential admission to the hospital.

Depending on the staffing at your flu holding area, you may have someone there fill in other pertinent medical information for the patient as denoted in the box at the bottom left hand side of the form. This includes, medications, allergies, LMP, social history. This information may be filled out by an LPN or a tech in the flu holding area while the patient waits for an advanced degree health care provider to complete their evaluation. This information was not included in the triage nurse’s assessment to streamline her activity but is amenable to future discussion and change.

For the final disposition on the “Pandemic Flu Triage Template” as determined by the advanced degree provider, you will note that the provider may choose to hold the patient in the flu holding area either to observe, do basic work-up (w/u=work-up), extended work-up, or admit. Similar choices are also provided if the patient is routed to the Main ED. The ability to do any sort of work-up in the flu holding area will depend again on what resources are made available for your specific hospital. If no clinical care can be provided in the flu holding area, (i.e. patients are just sitting in auditorium chairs) the only possible option may be that the patient can be observed in that area and for even a basic work-up which may include (labs and oxygen saturation monitoring) that patient would be diverted to the main ED. For hospitals that can set-up a flu holding area with more advanced care, they may choose not only to observe patients there, but to also provide a more comprehensive or “extended work-up” for that patient (such as labs, pulse ox, cardiac monitoring, chest x-ray, IVF administration, etc.) depending on the overall set-up within that hospital. Again, there will be some expected variability as to the final destination of your patients depending on your hospitals’ specific layout and resources.

As stated previously, the triage process is envisioned as tiered, with high-risk influenza patients fast-tracked to a higher level of triage and diagnosis as their symptoms or medical history dictates. Patients may be referred to additional diagnostic levels with increasing levels of resources (i.e., nurse practitioner, physician and diagnostic capabilities) depending on symptoms and medical history.

If there is an overwhelming increase in the number of patients being diverted to the Main ED following screening or rapid triage such that the existing infrastructure (beds, supplies, staff) can no longer provide the standard level of care, it may be necessary to institute a Crisis Standard of Care Plan. See *Appendix N* for guidelines on Crisis Standards of Care.

12.3 Clinical Evaluation and Management

12.3.1 Overview

Most people who get the flu will have mild illness, will not need medical care or antiviral medications and will recover in less than two weeks. Some people however are at risk for developing flu-related complications. These include:

- Children younger than 5, especially children younger than 2 years old
- Adults 65 years of age and older
- Pregnant women
- Also, American Indians and Alaskan Natives

People who have medical conditions:

- Asthma
- Neurological and neurodevelopmental conditions
- Chronic lung disease
- Heart disease
- Blood disorders
- Endocrine disorders
- Kidney disorders
- Liver disorders
- Metabolic disorders
- Weakened immune systems
- People younger than 19 years of age who are receiving long term aspirin therapy
- People who are morbidly obese

Planning for persons at high risk of influenza complications is in addition to planning for vulnerable populations. There exists a growing vulnerable population in Louisiana.

The clinical guidelines provide guidance for the initial screening, assessment, and management of patients with suspected influenza during the interpandemic, pandemic alert period and the pandemic period. During the interpandemic and pandemic alert periods, early recognition of illness caused by a novel influenza A virus strain will rely on a combination of clinical and epidemiologic features. During the Pandemic period (in a setting of high community prevalence), diagnosis will likely be more clinically oriented because the likelihood will be high that any severe febrile respiratory illness is pandemic influenza.

12.3.2 Clinical Criteria

Any suspected cases of human infection with a novel influenza virus must first meet the criteria for influenza-like illness (ILI), defined as temperature of >38 C plus either sore throat or cough. Since lower respiratory tract involvement might result in dyspnea, dyspnea should be considered as an additional criterion.

Given the large number of influenza-like illnesses that clinicians encounter during a typical influenza season, laboratory evaluation for novel influenza A viruses during the Interpandemic and pandemic alert periods is recommended only for: hospitalized patients with severe ILI, including pneumonia, who meet the epidemiologic criteria, or non-hospitalized patients with ILI and with strong epidemiologic suspicion of novel influenza virus exposure such as direct contact with ill poultry in an affected area or close contact with a known or suspected human case of novel influenza.

Exceptions to the current clinical criteria:

- For persons with a high risk of exposure (e.g., poultry worker from an affected area, caregiver of a patient with lab-confirmed novel influenza, employee in a laboratory that works with live novel influenza viruses), epidemiologic evidence might be enough to initiate further measures, even if clinical criteria are not fully met. In these persons, early signs and symptoms such as rhinorrhea, conjunctivitis, chills, rigors, myalgia, headache, and diarrhea, in addition to cough or sore throat, may be used to fulfill the clinical criteria for evaluation.
- Young children, elderly patients, patients in long-term care facilities, and persons with underlying chronic illnesses might not have typical influenza-like symptoms, such as fever. When such patients have a strong epidemiologic risk factor, novel influenza should be considered with almost any change in health status, even in the absence of typical features. Conjunctivitis has been reported in patients with influenza A (H7N7) and (H7N3) infections. In young children, gastrointestinal manifestations such as vomiting and diarrhea might be present. Infants may present with fever or apnea alone, without other respiratory symptoms, and should be evaluated if there is an otherwise increased suspicion of novel influenza.

Epidemiologic criteria for evaluation of patients with possible novel influenza focus on the risk of exposure to a novel influenza virus with pandemic potential. Although the incubation period for seasonal influenza ranges from 1 to 4 days, the incubation periods for novel types of influenza are currently unknown and might be longer. Therefore, the maximum interval between potential exposure and symptom onset is set conservatively at 10 days.

Exposure falls into two categories: travel and occupational. Persons have a travel risk if they have: 1) recently visited or lived in an area affected by highly pathogenic avian influenza A outbreaks in domestic poultry or where a human case of novel influenza has been confirmed, *and either* 2) had direct contact with poultry, or 3) had close contact with a person with confirmed or suspected novel influenza. Persons with occupational risk for infection with a novel strain of influenza include persons who work on farms or live poultry markets or who process or handle poultry infected with known or suspected avian influenza viruses, workers in laboratories that contain live animal or novel influenza viruses, and healthcare workers in direct contact with a suspected or confirmed novel influenza case.

12.3.3 Case Detection/Clinical Management

A. Interpandemic and Pandemic Alert Periods

When a patient meets both the clinical and epidemiologic criteria for a suspected case of pandemic influenza, healthcare personnel should initiate the following activities:

- Implement infection control precautions for influenza, including Respiratory / Cough Etiquette.
- Notify the Office of Public Health
- Obtain clinical specimens for influenza A virus testing and notify the Office of Public Health to arrange testing (RT-PCR or virus isolation from tissue cell culture with sub typing)
- Acute and convalescent serum samples and other available clinical specimens (respiratory, blood, and stool) should be saved and refrigerated or frozen for additional testing until a specific diagnosis is made
- Evaluate alternative diagnosis
- Decide on inpatient or outpatient management
- Initiate antiviral treatment as soon as possible, even if laboratory results are not yet available
- Assist public health officials with the identification of potentially exposed contacts

Figure 3: Case detection and clinical management during the interpandemic and pandemic alert periods

Situation: No human cases of novel influenza are present in the community. Human cases might be present in another country or another region of the United States.

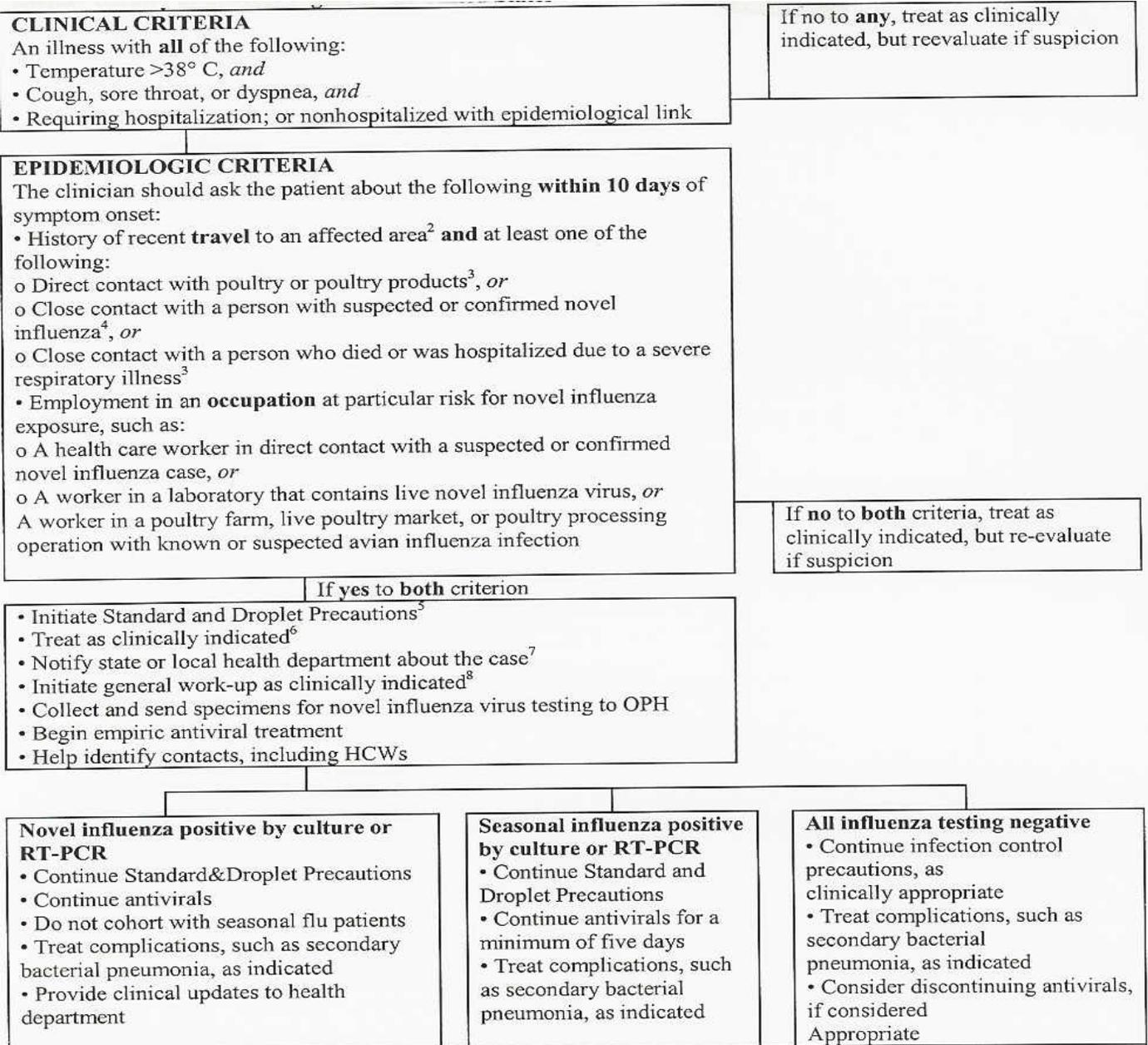


Figure 6: Notes

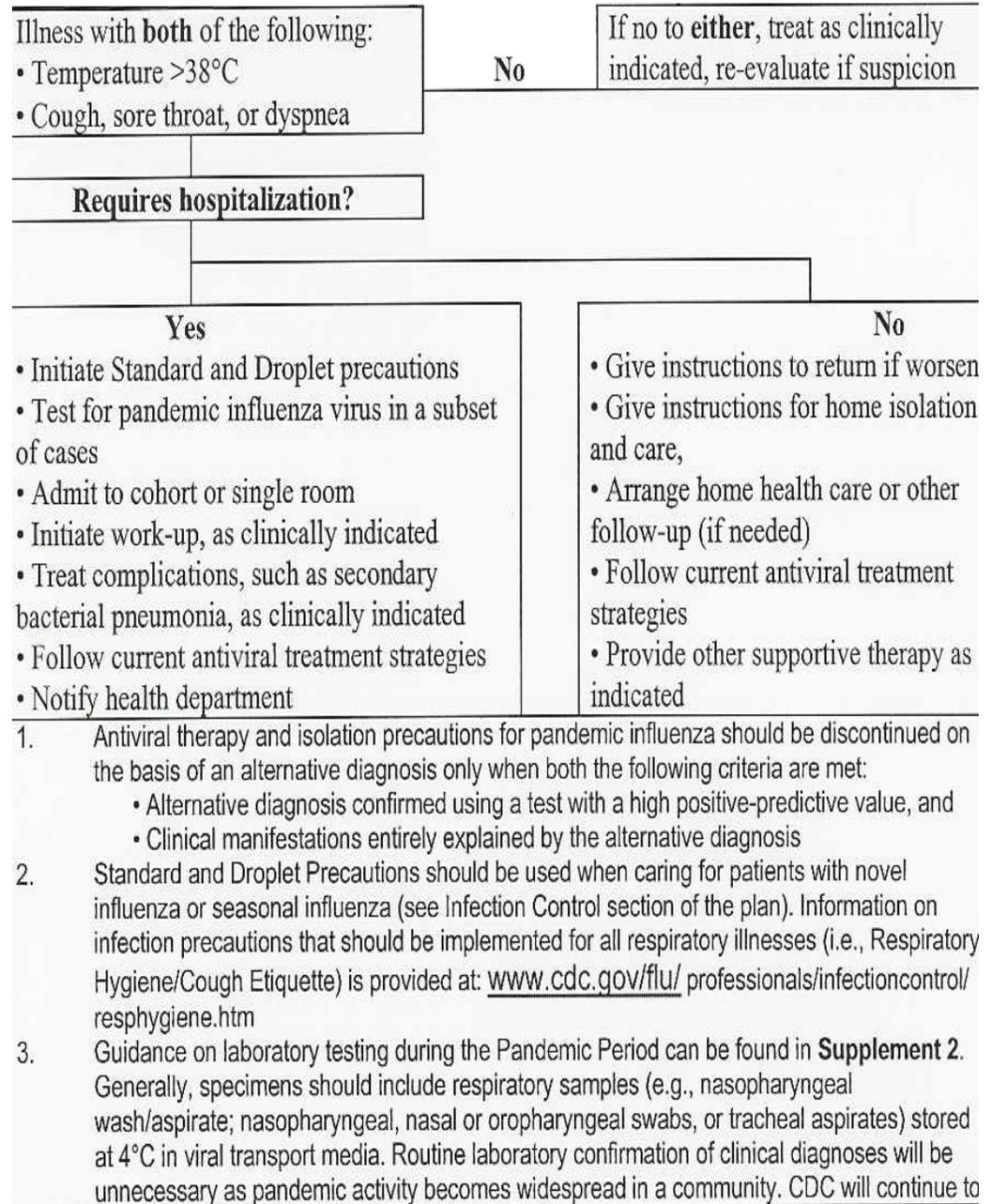
1. Further evaluation and diagnostic testing should also be considered for outpatients with strong epidemiologic risk factors and mild or moderate illness. (See Box 2).
2. Updated information on areas where novel influenza virus transmission is suspected or documented is available on the CDC website at www.cdc.gov/travel/other/avian_flu_ah5n1_031605.htm and on the WHO website at www.who.int/en/.
3. For persons who live in or visit affected areas, close contact includes touching live poultry (well-appearing, sick or dead) or touching or consuming uncooked poultry products, including blood. For animal or market workers, it includes touching surfaces contaminated with bird feces. In recent years, most instances of human infection with a

- novel influenza A virus having pandemic potential, including influenza A (H5N1), are thought to have occurred through direct transmission from domestic poultry. A small number of cases are also thought to have occurred through limited person-to-person transmission or consumption of uncooked poultry products. Transmission of novel influenza viruses from other infected animal populations or by contact with fecally contaminated surfaces remains a possibility. These guidelines will be updated as needed if alternate sources of novel influenza viruses are suspected or confirmed.
4. Close contact includes direct physical contact, or approach within 3 feet (1 meter) of a person with suspected or confirmed novel influenza.
 5. Standard and Droplet Precautions should be used when caring for patients with novel influenza or seasonal influenza. Information on infection precautions that should be implemented for all respiratory illnesses (i.e., Respiratory Hygiene/Cough Etiquette) is provided at: www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm
 6. Hospitalization should be based on all clinical factors, including the potential for infectiousness and the ability to practice adequate infection control. If hospitalization is not clinically warranted, and treatment and infection control is feasible in the home, the patient may be managed as an outpatient. The patient and his or her household should be provided with information on infection control procedures to follow at home. The patient and close contacts should be monitored for illness by local public health department staff.
 7. Guidance on how to report suspected cases of novel influenza is provided in **Supplement 1**.
 8. The general work-up should be guided by clinical indications. Depending on the clinical presentation and the patient's underlying health status, initial diagnostic testing might include:
 - Pulse oximetry
 - Chest radiograph
 - Complete blood count (CBC) with differential
 - Blood cultures
 - Sputum (in adults), tracheal aspirate, pleural effusion aspirate (if pleural effusion is present) Gram stain and culture
 - Antibiotic susceptibility testing (encouraged for all bacterial isolates)
 - Multivalent immunofluorescent antibody testing or PCR of nasopharyngeal aspirates or swabs for common viral respiratory pathogens, such as influenza A and B, adenovirus, parainfluenza viruses, and respiratory syncytial virus, particularly in children
 - In adults with radiographic evidence of pneumonia, *Legionella* and pneumococcal urinary antigen testing
 - If clinicians have access to rapid and reliable testing (e.g., PCR) for *M. pneumoniae* and *C. pneumoniae*, adults and children <5 yrs with radiographic pneumonia should be tested.
 - Comprehensive serum chemistry panel, if metabolic derangement or other end-organ involvement, such as liver or renal failure, is suspected
 9. Guidelines for novel influenza virus testing can be found in the Laboratory section of the plan. All of the following respiratory specimens should be collected for novel influenza A virus testing: nasopharyngeal swab; nasal swab, wash, or aspirate; throat swab; and tracheal aspirate (for intubated patients), stored at 4°C in viral transport media; and acute and convalescent serum samples.
 10. Strategies for the use of antiviral drugs are provided in Antiviral section of the plan.
 11. Guidelines for the management of contacts in a healthcare setting are provided in the Infection Control section of the plan.
 12. Given the unknown sensitivity of tests for novel influenza viruses, interpretation of negative results should be tailored to the individual patient in consultation with the local health department. Novel influenza directed management may need to be continued, depending on the strength of clinical and epidemiologic suspicion. Antiviral therapy and isolation precautions for novel influenza may be discontinued on the basis of an alternative diagnosis. The following criteria may be considered for this evaluation:
 - Absence of strong epidemiologic link to known cases of novel influenza
 - Alternative diagnosis confirmed using a test with a high positive-predictive value
 - Clinical manifestations explained by the alternative diagnosis

B. Case Detection/Clinical Management during Pandemic Period

During the pandemic period, the primary goal of rapid detection is to appropriately identify and triage cases of pandemic influenza. Evaluation will therefore focus predominantly on clinical and basic laboratory findings, with less emphasis on laboratory diagnostic testing and epidemiologic criteria. The main features of clinical management during the pandemic period are outlined below.

Figure 4: Case detection and clinical management during the pandemic period



- work with state health laboratories to conduct virologic surveillance to monitor antigenic changes and antiviral resistance in the pandemic virus strains throughout the Pandemic Period.
4. The decision to hospitalize should be based on a clinical assessment of the patient and the availability of hospital beds and personnel.
 5. Guidelines on cohorting can be found in the Infection Control section of the plan. Laboratory confirmation of influenza infection is recommended when possible before cohorting patients.
 6. The general work-up should be guided by clinical indications. Depending on the clinical presentation and the patient's underlying health status, initial diagnostic testing might include:
 - Pulse oximetry
 - Chest radiograph
 - Complete blood count (CBC) with differential
 - Blood cultures
 - Sputum (in adults) or tracheal aspirate Gram stain and culture
 - Antibiotic susceptibility testing (encouraged for all bacterial isolates)
 - Multivalent immunofluorescent antibody testing of nasopharyngeal aspirates or swabs for common viral respiratory pathogens, such as influenza A and B, adenovirus, parainfluenza viruses, and respiratory syncytial virus, particularly in children
 - In adults with radiographic evidence of pneumonia, *Legionella* and pneumococcal urinary antigen testing
 - If clinicians have access to rapid and reliable testing (e.g., PCR) for *M. pneumoniae* and *C. pneumoniae*, adults and children <5 yrs with radiographic pneumonia should be tested.
 - Comprehensive serum chemistry panel, if metabolic derangement or other end-organ involvement, such as liver or renal failure, is suspected (see Appendix 2 for additional details).
 7. Guidance on the evaluation and treatment of community acquired pneumonia and suspected post-influenza community-acquired bacterial pneumonia are provided in Appendix 3.
 8. Strategies for the use of antiviral drugs are provided in the Antiviral Drug section of this plan.
 9. Guidance on the reporting of pandemic influenza cases is provided in the Surveillance section of the plan.
 10. Patients with mild disease should be provided with standardized instructions on home management of fever and dehydration, pain relief, and recognition of deterioration in status. Patients should also receive information on infection control measures to follow at home (Appendix 4). Patients cared for at home should be separated from other household members as much as possible. All household members should carefully follow recommendations for hand hygiene, and tissues used by the ill patient should be placed in a bag and disposed of with other household waste. Infection within the household may be minimized if a primary caregiver is designated; ideally, someone who does not have an underlying condition that places them at increased risk of severe influenza disease. Although no studies have assessed the use of masks at home to decrease the spread of infection, using a surgical or procedure mask by the patient or caregiver during interactions may be beneficial. Separation of eating utensils for use by a patient with influenza is not necessary, as long as they are washed with warm water and soap.

Although often quite characteristic, the clinical picture of seasonal influenza can be indistinguishable from illness caused by other respiratory infections. The frequent use of non-specific terms such as “flu” and “influenza-like illness” makes the clinical diagnosis of influenza even more indefinite. Even when the diagnosis of influenza is confirmed, management can be challenging, as influenza virus infection can result in subclinical infection, mild illness, uncomplicated influenza, or exacerbation of underlying chronic conditions to fulminant deterioration, and can result in a wide variety of complications see the Louisiana Statewide Draft Pandemic Influenza Plan, Chapter VII, pages 86-96 for additional information on differential diagnosis and complications on influenza.

12.4 Palliative Care

Hospital checklists include action items on palliative care. During an influenza pandemic there will be limited resources for caring for sick individuals. Priority for limited medical resources must be based upon the allocation of scarce resources to maximize the number of lives saved (“the greatest good for the greatest number”). In some instances, decisions will need to be made to withdraw or withhold resources from those not likely to survive and shunt those resources to others. There should be a goal to provide the greatest comfort and minimize the suffering of those whose lives may be shortened as a result of a influenza pandemic. The application of palliative care principles in a healthcare emergency would include: recognizing that initial prognostication may change if additional resources become available or if the situation deteriorates; and honoring the humanity of the dying and those who serve them (whether loved ones, professionals, or strangers) by providing comfort through medical, social, psychological, and spiritual support. For more information on palliative care, see *Appendix N*, “State Hospital Crisis Standards of Care Guidelines in Disasters”.

13.0 Infection Control/Disease Prevention

Disease prevention is an important aspect of managing any influenza outbreak. Keeping healthcare professionals healthy and/or minimizing the complications of influenza is a key element of keeping the hospitals staffed during a pandemic event. Therefore, it is strongly encouraged that hospitals establish annual influenza immunizations and pneumococcal vaccine as appropriate.

During the initial stage of a pandemic influenza outbreak, a vaccine may not yet be widely available and the supply of antiviral drugs may be limited. The ability to limit transmission in health care settings will, therefore, rely heavily on the appropriate and thorough application of infection control measures.

Infection control practices both in the community and in healthcare settings will present special challenges in the event of a pandemic. Influenza virus is highly contagious and persons who are clinically or subclinically infected can transmit virus to persons at high risk for influenza complications. Preventing and controlling healthcare associated infections will be an important factor in reducing the spread of influenza in a pandemic. Measures other than vaccination and chemo-prophylaxis are recommended for controlling healthcare associated influenza outbreaks. These measures include interventions for preventing and controlling healthcare associated influenza through prompt recognition, detection, isolation and cohorting of confirmed and suspect cases, and implementation of droplet precautions.

The Society for Healthcare Epidemiology of America (SHEA) states three goals for infection control and prevention programs: 1) protect patients; 2) protect healthcare workers; and 3) protect visitors, and others in the healthcare environment.

The Centers for Disease Control and Prevention (CDC) and the Healthcare Infection Control Practices Advisory Committee (HICPAC) have developed guidelines on prevention of nosocomial/healthcare associated infections that are based on the latest epidemiologic information on transmission of infection in hospitals. These guidelines include “Standard Precautions” that are to be followed when caring for all patients, regardless of their diagnosis, and “Transmission Based Precautions” to be followed when a patient is known or suspected to be infected or colonized with an epidemiologically important pathogen, such as influenza virus.

Strategies for the prevention of influenza outbreaks should include:

- routine infection control practices: use of appropriate barrier precautions during patient care, as recommended for Standard and Droplet Precautions
- early detection of influenza cases in a facility
- isolation of infectious patients in private rooms or cohort units
- vaccination of patients and healthcare personnel (when available)
- use of antiviral to treat ill persons, and if recommended (and available), as prophylaxis
- restricting visitors
- education of patients and staff
- cohorting healthcare workers assigned to an outbreak unit

Additional infection control guidance can be found in the Louisiana Statewide Draft Pandemic Influenza Plan, Chapter 5, pages 33-60.

14.0 Facility Access

Healthcare facilities should plan for additional security. This may be required given the increased demand for services and possibility of long wait times for care, and because triage or treatment decisions may lead to people not receiving the care they think they require.

Hospitals should determine in advance the criteria and procedures they will use to limit access to the facility if pandemic influenza spreads through the community.

- Define “essential” and “non-essential” visitors with regard to the hospital and the population served. Develop protocols for limiting non-essential visitors.
- Develop criteria or “triggers” for temporary closing of the hospital to new admissions and transfers. The criteria should consider staffing ratios, isolation capacity, and risks to non-influenza patients. As part of this effort, hospital administrators should: 1) determine who will make decisions about temporary closings and how and to whom these decisions will be communicated; and 2) consult with state and local health departments on their roles in determining policies for hospital admissions and transfers.
- Determine how to involve hospital security services in enforcing access controls. Consider meeting with local law enforcement officials in advance to determine what assistance, if any, they can provide. Note that local law enforcement might be

overburdened during a pandemic and have limited ability to assist healthcare facilities with security services.

15.0 Occupational Health

15.1 Overview

The ability to deliver quality health care is dependent on adequate staffing and optimum health and welfare of staff. During a pandemic, the healthcare workforce will be stressed physically and psychologically. Like others in the community, many healthcare workers will become ill.

Healthcare facilities must be prepared to: 1) protect healthy workers from exposures in the healthcare setting through the use of recommended infection control measures; 2) evaluate and manage symptomatic and ill healthcare personnel; 3) distribute and administer antiviral drugs and/or vaccines to healthcare personnel, as recommended by HHS and state health departments; and 4) provide psychosocial services to healthcare workers and their families to help sustain the workforce.

15.2 Managing Ill Workers

- Establish a plan for detecting signs and symptoms of influenza in healthcare personnel before they report for duty
- Develop policies for managing healthcare workers with respiratory symptoms that take into account HHS recommendations for healthcare workers with influenza
- Consider assigning staff who are recovering from influenza to care for influenza patients

15.3 Administrative Considerations

- Time-off policies - Ensure that time-off policies and procedures consider staffing needs during periods of clinical crisis
- Reassignment of high-risk personnel - Establish a plan to protect personnel at high risk for complications of influenza (e.g., pregnant women, immunocompromised persons) by reassigning them to low-risk duties (e.g., non-influenza patient care, administrative duties that do not involve patient care) or placing them on furlough.
 - Psychosocial health service provisions
 - Identify mental health and faith-based resources for counseling of healthcare personnel during a pandemic. Counseling should include measures to maximize professional performance and personal resilience by addressing management of grief, exhaustion, anger, and fear; physical and mental health care for oneself and one's loved ones; and resolution of ethical dilemmas
 - Determine a strategy for supporting healthcare workers' needs for rest and recuperation
 - Develop a strategy for housing and feeding healthcare personnel who might be needed on-site for prolonged periods

- Develop a strategy for accommodating and supporting staff who have child- or elder- care responsibilities

15.4 Influenza vaccination and use of antiviral drugs

- Promote annual influenza vaccination among hospital employees. Increased vaccination coverage during the inter-pandemic period might help increase vaccine acceptance during a pandemic and will limit the spread of seasonal influenza.
- Hospital Infection Control Professionals/Employee Health should register for, and become familiar with the Louisiana Immunization Registry for Kids Statewide (LINKS), which is the Statewide Immunization Registry. Hospital worker immunizations can be documented and tracked using the LINKS system. This can be a very useful tool for hospitals in documenting individual work vaccinations, overall vaccination rates, and can identify pockets of employees who are most prone to either get or spread vaccine preventable diseases for targeted vaccination campaigns. The website address for the LINKS system is <http://linksweb.dhh.state.la.us/linksweb/main.jsp>. On this site you will find the Enrollment documents needed to participate in LINKS and the name of the contact person in your region for further information.
- We further recommend that all infection control professionals/employee health encourage full participation of their entire hospital in the LINKS system, which would document employee and patient vaccinations of all kinds. Full knowledge of the LINKS system and the information contained could be critical during a pandemic. If you have any questions, please call the Immunization Program Office at 504-838-5300.
- Establish a strategy for rapidly vaccinating or providing antiviral prophylaxis or treatment to healthcare personnel as recommended by HHS and state health departments. Preliminary recommendations on the use of antiviral drugs and vaccination have been established but will need to be tailored to fit the epidemiology of the pandemic.

16.0 Use and Administration of Antiviral Drugs

16.1 Overview

The Louisiana Department of Health and Hospitals (DHH) Office of Public Health (OPH) considers the use of antiviral medications as one component of a comprehensive containment and treatment plan to assist in the control of an outbreak of a novel influenza virus. Medications will be used in compliance with international and national recommendations.

DHH OPH has a limited supply of antiviral medication in a state stockpile, referred to as State Antiviral Cache (SAC). This SAC is comprised of purchases made by Louisiana using general funds and purchases made using federal preparedness funds. Additional antiviral medications have been received as a component of the federal Strategic National Stockpile

(SNS) for the State of Louisiana on a pro rata basis.

The Office of Public Health will store, request, distribute, track, administer and provide guidance for antiviral medications during an influenza pandemic. Communication will be coordinated with response partners.

16.2 Mission

Since the allocated amount of antiviral medications is small compared to the State population, individuals and entities in need of antiviral medications are encouraged to obtain materials through normal channels in the marketplace as they would have prior to this response. The Centers for Disease Control issues the directive for the mission of stockpiles.

Antiviral medications strategies support the national pandemic response goals to stop, slow or limit the spread of a pandemic into the United States, limit the domestic spread of a pandemic, mitigate disease, suffering and death, as well as sustain infrastructure and mitigate impact to the economy and function of society. However, the efficacy of antiviral medications against a any specific pandemic influenza strain will have to be determined at the onset and throughout a specific outbreak. This susceptibility testing will be done at the time of a pandemic once the influenza strain has been identified.

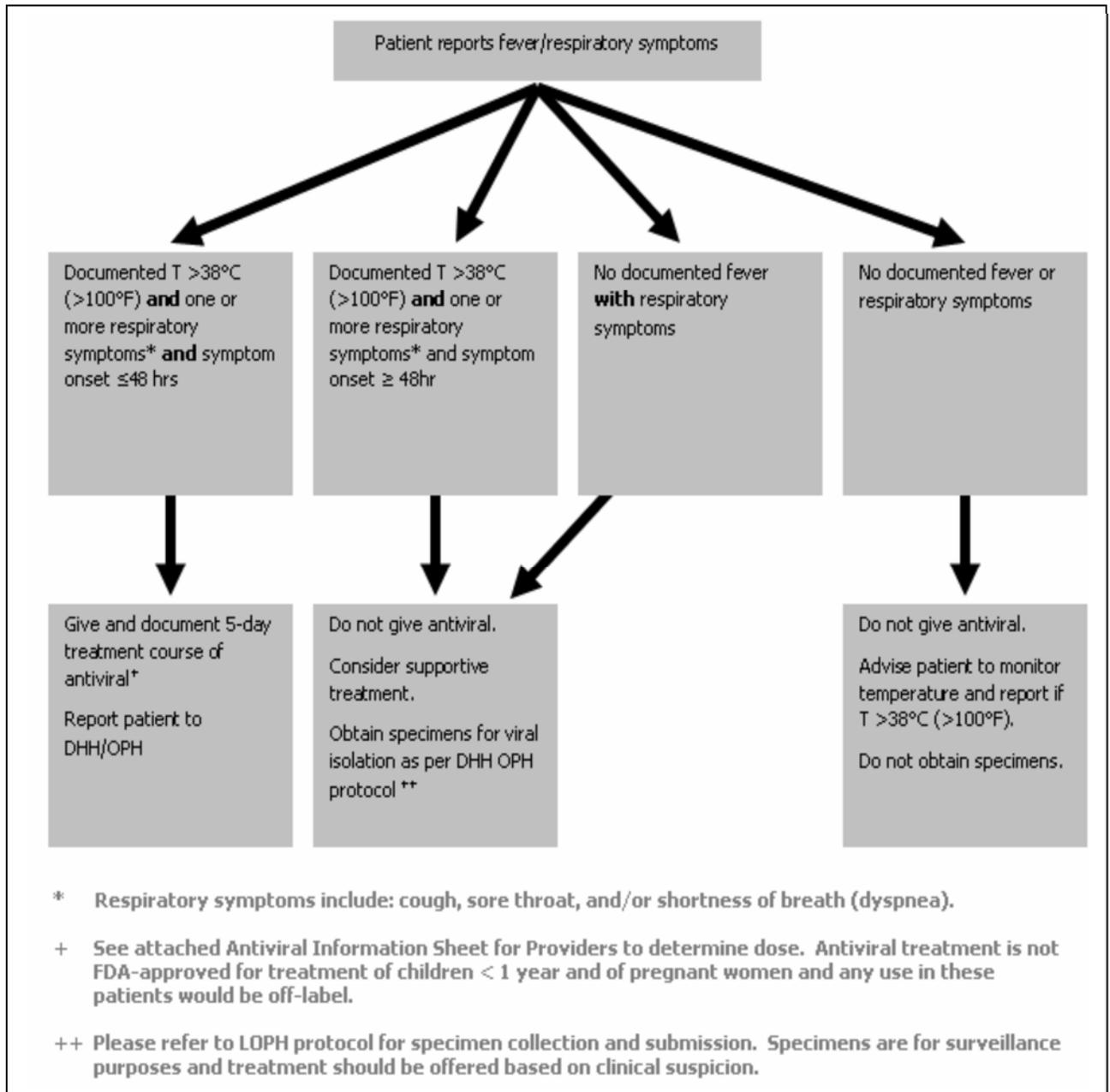
At the time of a pandemic outbreak, this guidance on the use of antiviral medicines will be reassessed based on the epidemiology of the disease, virus resistance and medical intelligence regarding the most efficient and effective use of antiviral medications. Louisiana will follow international, and national recommendations for prophylaxis and treatment of disease through frameworks provided by the Federal government such as the U. S Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC) and Occupational Safety and Health Administration (OSHA).

16.3 Prioritizing Antiviral Medications to Prevent Death and Serious Complications

Louisiana will prioritize the use of state antiviral medications for treatment or chemoprophylaxis of patients at higher risk for influenza-related complications. Revisions to these recommendations for antiviral treatment should be expected as the epidemiology and clinical presentation of each novel virus infection is better understood. Evolution of recommendations is evidenced in the progression of 2009 H1N1 Pandemic Influenza. This guidance can be adapted according to local epidemiologic data and antiviral supply considerations. The following table provides a sample treatment algorithm.

Sample Treatment Algorithm

If patient meets priority criteria, use treatment algorithm for antiviral medication determination



The following tables provide clinicians with information on antivirals available for treatment and recommended dosages, as well as, a list of antiviral drug priority group recommendations.

Figure 5: Antiviral Dosage Regimen

Recommended Daily Dosages of Antivirals for Treatment and Prophylaxis*

Antiviral Agent	Age Groups (years)				
	1-6	7-9	10-12	13-64	≥65
Amantadine^a					
Treatment, influenza A	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	100 mg twice daily ^c	100 mg twice daily ^c	≤100 mg/day
Prophylaxis, influenza A	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	100 mg twice daily ^c	100 mg twice daily ^c	≤100 mg/day
Rimantadine^d					
Treatment, influenza A	NA ^f	NA	NA	100 mg twice daily ^{e, g}	100 mg/day
Prophylaxis, influenza A	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	5 mg/kg body weight/day up to 150 mg in two divided doses ^b	100 mg twice daily ^c	100 mg twice daily ^c	100 mg/day ^h
Zanamivirⁱ					
Treatment, influenza A and B	NA	10 mg twice daily	10 mg twice daily	10 mg twice daily	10 mg twice daily
Oseltamivir					
Treatment, ^l influenza A and B	Dose varies by child's weight ^l	Dose varies by child's weight ^l	Dose varies by child's weight ^l	75 mg twice daily	75 mg twice daily
Prophylaxis, influenza A and B	NA	NA	NA	75 mg/day	75 mg/day

* (Adapted from Prevention and Control of Influenza Recommendations of the Advisory Committee on Immunization Practices [ACIP], July 2005)

NOTE: Amantadine manufacturers include Endo Pharmaceuticals (Symmetrel (R)-tablet and syrup) and Geneva Pharms Tech (Amantadine HCL-capsule); USL Pharma (Amantadine HCL-capsule and tablet); and Alpharma, Carolina Medical, Copley Pharmaceutical, HiTech Pharma, Milkart, Morton Grove, and Pharmaceutical Associates (Amantadine HCL-syrup), and Sandoz. Rimantadine is manufactured by Forest Laboratories (Flumadine (R)-tablet and syrup); Corepharma, Impax Labs (Rimantadine HCL-tablet), and Amide Pharmaceuticals (Rimantadine HCL-tablet). Zanamivir is manufactured by GlaxoSmithKline (Relenza (R)-

Figure 6: Antiviral Drug Priority Group Recommendations*

Group	Estimated population (millions)	Strategy**	# Courses (millions)		Rationale
			For target group	Cumulative	
Patients admitted to hospital***	10.0	T	7.5	7.5	Consistent with medical practice and ethics to treat those with serious illness and who are most likely to die.
Health care workers (HCW) with direct patient contact and emergency medical service (EMS) providers	9.2	T	2.4	9.9	Healthcare workers are required for quality medical care. There is little surge capacity among healthcare sector personnel to meet increased demand.
Highest risk outpatients—immunocompromised persons and pregnant women	2.5	T	0.7	10.6	Groups at greatest risk of hospitalization and death; immunocompromised cannot be protected by vaccination.
Pandemic health responders (public health, vaccinators, vaccine and antiviral manufacturers), public safety (police, fire, corrections), and government decision-makers	3.3	T	0.9	11.5	Groups are critical for an effective public health response to a pandemic.
Increased risk outpatients—young children 12-23 months old, persons >65 yrs old, and persons with underlying medical conditions	85.5	T	22.4	33.9	Groups are at high risk for hospitalization and death.
Outbreak response in nursing homes and other residential settings	NA	PEP	2.0	35.9	Treatment of patients and prophylaxis of contacts is effective in stopping outbreaks; vaccination priorities do not include nursing home residents.
HCWs in emergency departments, intensive care units, dialysis centers, and EMS providers	1.2	P	4.8	40.7	These groups are most critical to an effective healthcare response and have limited surge capacity. Prophylaxis will best prevent absenteeism.
Pandemic societal responders (e.g., critical infrastructure groups as defined in the vaccine priorities) and HCW without direct patient contact	10.2	T	2.7	43.4	Infrastructure groups that have impact on maintaining health, implementing a pandemic response, and maintaining societal functions.
Other outpatients	180	T	47.3	90.7	Includes others who develop influenza and do not fall within

					the above groups.
Highest risk outpatients	2.5	P	10.0	100.7	Prevents illness in the highest risk groups for hospitalization and death.
Other HCWs with direct patient contact	8.0	P	32.0	132.7	Prevention would best reduce absenteeism and preserve optimal function.

*The committee focused its deliberations on the domestic U.S. civilian population. NVAC recognizes that Department of Defense (DoD) needs should be highly prioritized. A separate DoD antiviral stockpile has been established to meet those needs. Other groups also were not explicitly considered in deliberations on prioritization. These include American citizens living overseas, non-citizens in the U.S., and other groups providing national security services such as the border patrol and customs service.

**Strategy: Treatment (T) requires a total of 10 capsules and is defined as 1 course. Post-exposure prophylaxis (PEP) also requires a single course. Prophylaxis (P) is assumed to require 40 capsules (4 courses) though more may be needed if community outbreaks last for a longer period.

***There are no data on the effectiveness of treatment at hospitalization. If stockpiled antiviral drug supplies are very limited, the priority of this group could be reconsidered based on the epidemiology of the pandemic and any additional data on effectiveness in this population.

16.4 Mechanisms for Distributing Antiviral Medications

The State antiviral medication is stored in a secure, climate controlled Receiving, Staging and Storing (RSS) site from which distributions are made. The RSS for this event has been established at a confidential site. The Louisiana OPH CCP will handle the oversight and administration of this warehouse operation, including the inventory tracking and shipping/distribution of the antiviral cache to the identified locales.

Methodology for the distribution of the State assets began with the assumption that it would be most efficacious to distribute a portion of the cache to the chain and independent pharmacies in the State. This allocation to retail pharmacies will be restricted to serve only the uninsured or underinsured. DHH OPH Pharmacy determined allocations in 2009, for instance, for each parish within the State, tiered based on total population total population in poverty, distribution within census tracts and/or zip codes, and influenced by experiences in the State from previous disaster response.

For a location to receive antivirals from the State as part of this antiviral guidance a Memorandum of Understanding must be secured. This document will outline the guidelines for storage, record keeping, and dispensing of the antiviral cache, and an executed agreement will be required prior to distribution to that location.

Hospitals and Residential Health Care Facilities

Supplies will be used within the current treatment guidelines for the treatment of hospitalized patients and residents of health care facilities within Louisiana. Allocation was distributed in May 2009 to these facilities in coordination with the Louisiana Hospital Association and the Louisiana Nursing Home Association and pre-event public health disaster planning with additional groups and organizations within the State. Re-supply requests will be executed through the inventory process described in this Guidance by the DHH OPH CCP RSS.

The antiviral medications will be sent from the secure state storage site under the direction of the Office of Public Health (OPH) to an individual hospital pharmacy to dispense the antiviral medications under specific guidelines. Physicians and nurses will administer the correct dosage in the hospital or other care setting (inpatient or outpatient clinic) to those who qualify under the guidance for either treatment or an antiviral prophylaxis course.

16.5 Reporting Requirements – Patient Dispensing

The mechanisms and process determined for antiviral dispensing may be LINKS, the Louisiana Immunization Network for Kids Statewide. The LINKS system includes an on-line tutorial for users. LINKS had a specific antiviral 'module' created and fully tested for the 2009 H1N1 Pandemic Influenza response. While it was not utilized for dispensing due to the low demand for antivirals from the SAC and SNS caches, the system may be activated and utilized on the same day as the State determines it is the required tracking system for patient dispensing. Providers already have use of the system, and those participating entities as previously listed (that received cache supplies) are already coded for this module.

16.6 Mechanisms for Destroying Expired/Residual Antiviral Medications

The State antiviral medication is allocated to appropriate statewide entities for dispensing according to the mission and processes outlined in this Guidance. When the time arrives that either medications are expired (and have not received Shelf Life Extension Program instruction from the Centers for Disease Control) or a directive from the State Health Officer explains that the threat is passed, guidance on handling these residual medications will be provided. This may include destroying the medications per usual means.

The State may pick up, receive, destroy, and/or pay for the destruction of these assets when appropriate. However, while Louisiana and the federal government do not guarantee any reimbursement regarding destruction or storage of the antiviral medication, in the event that reimbursement becomes available, it will be important that accurate and comprehensive documentation be available.

16.7 Healthcare facilities responsibilities

16.7.1 Interpandemic Period

- Prepare the hospital for secure receipt, storage, distribution and appropriate use of antiviral medicines in both the inpatient and outpatient setting.
- Review State guidance (Table 1) for the appropriate use and distribution of antiviral medications for treatment and/or prophylaxis of certain individuals. Check for updates to this guidance.
- Communicate to hospital staff the extreme importance of using antiviral medicines appropriately. Antiviral medications must be used in accordance with guidance issued by the State Health Officer for treatment of ill persons who fit criteria for pandemic influenza, or limited prophylaxis of essential staff.
- Work with LOPH on appropriate communication messages about antiviral availability, priorities, and distribution.

16.7.2 Pandemic Alert Period

- Distribute antiviral medicines to points of patient evaluation in both the inpatient and outpatient setting, with appropriate use and security guidelines.
- Communicate messages about antiviral availability for treatment and appropriate prophylaxis and use to hospital staff.
- Using the Antiviral Administered Report (VAR), document information on persons receiving antiviral medications. Patient outcome information may be requested, as well as additional information related to a specific pandemic.

17.0 Use & Administration of Pandemic Influenza Vaccines

17.1 Situation Overview

The State Health Officer or designee provides command and control of vaccination efforts during an influenza pandemic. This includes the direction of the activities to obtain and disseminate key medical-related information. Many of the other actions and requirements for vaccination are supported by other State and local agencies at various stages of the pandemic. Planning, emergency management, prevention, preparedness, response, recovery, and mitigation discussions are facilitated by DHH OPH and use subject matter experts for relevant contributions.

The Office of Public Health will order, store, distribute, track, administer and provide guidance for influenza vaccine during a pandemic. The OPH Immunization Program will coordinate communication with response partners.

In the event of a pandemic, influenza vaccine will be distributed using the established vaccine distribution system, with contingency plans for storage, alternate distribution options, transport and security for vaccines. The distribution of vaccine will be accomplished using a myriad of tools that may include direct delivery to preregistered providers, or even mass public and private Points of Dispensing (POD) sites. Vaccine will be administered at the local level to priority groups determined by the State Health Officer using the best epidemiologic evidence and guidance from the Centers for Disease Control and Prevention (CDC). Local communities, in partnership with the nine Louisiana Office of Public Health Regions have the responsibility to plan and implement PODs for administration of influenza vaccine to priority groups in their jurisdictions.

The amount of vaccine that will have to be managed (ordered, stored, distributed and accounted for) by the Louisiana Department of Health and Hospitals Office of Public Health (DHH OPH) Immunization Program will be affected by the manufacturers' ability to produce and distribute vaccine. Therefore, the mass vaccination plan can be flexible and modified based on the status of vaccine technology, amount and speed at which the vaccine is produced and delivered, the characteristics of pandemic illness, and risk groups for severe disease – factors that will remain unknown until a pandemic actually occurs.

17.2 Pandemic Influenza Planning Assumptions

This Mass Vaccination Plan is based on the following assumptions:

There will be a minimum of 4 – 6 months between a novel virus alert and the availability of vaccine. When vaccine does become available, it will be distributed in multiple shipments, over time, as it is manufactured. Vaccine shortages are likely to exist, especially early during a pandemic.

In the event of an H5N1 pandemic, the possibility exists that enough H5N1 Influenza vaccine will be available for a limited prioritized pre-pandemic vaccination campaign. The principals of this document will be followed in this pre-pandemic vaccination campaign. The principals of this document will be followed in this pre-pandemic vaccination campaign as well as during a pandemic vaccination campaign.

The number of doses available each month will depend on the potency of the vaccine and the vaccine manufacturing capacity at the time. Administration of two doses of vaccine, 30 days apart, might be necessary in some or all target groups for optimal immunologic response.

It is expected that pandemic influenza vaccine, whether purchased with federal or state funds, will be allocated or distributed through LOPH. As with 2009 H1N1, the State may pre-register providers who are then directly shipped vaccine for administration, or a combination of public and private distribution using the State POD system.

All pandemic influenza vaccine, whether in public or private hands, will be administered by providers according to the priorities set by the Louisiana State Health Officer outlined in draft form in this document. These priorities are subject to revision as the epidemiology of the pandemic unfolds.

Vaccine standard operating procedures will be followed as detailed in the Louisiana Immunization Manual. These procedures include vaccine storage and handling, security, and documenting maintenance of the vaccine cold chain.

A strict chain of custody for influenza vaccine will be followed and documented.

Medicare and Medicaid will be billed for reimbursement (vaccine and or administrative fee) for state-purchased and privately purchased vaccine, where applicable.

The target population for influenza vaccine will initially be prioritized, but then eventually expanded to the entire population as vaccine becomes available.

The priority groups for vaccine will be based on the priority groups recommended of the U.S. Department of Health and Human Services (DHHS). This list may change on short notice depending upon the epidemiologic and clinical features of the pandemic. Figure 1: Vaccine Priority Groups by Tier in Supporting Documentation is an example for this pre-event planning.

In addition to distributing vaccine, LOPH Regions in cooperation with local Parishes and communities should have plans in place to administer vaccine to residents based on the established priority groups if mass POD sites are opened as part of the distribution scheme.

The initial proportioning of limited amounts of influenza vaccine will be based roughly upon Regional/Parish population, with allowances for areas with a higher proportion of target individuals depending on vaccine indications and availability, or upon appropriate vaccine amounts and appropriate population indications.

Administration of vaccine to priority groups and the general public may occur through registered providers (hospitals, private physicians) and/or also possibly at the local POD and provider level through the Regional LOPH POD system; the responsibility of the LOPH Immunization Program is to ensure the efficient distribution of viable vaccine to vaccine distributors, as described below.

If used as part of the distribution scheme, staffing at the PODs will be through a combination of Public Health employees, state and parish agency employees, and both medical and non-medical volunteers. Staffing is the responsibility of the local Parish organizers, supplemented with public health and government workers.

Influenza vaccine will be distributed in multiple formulations and have different indications based on licensing. Distribution of vaccine may be affected by the abundance or scarcity of specific vaccines based on indications and provider base.

Because there is likely to be a moderate to severe shortage of vaccine, at least in the early phases of the epidemic, security for the vaccine must be addressed.

The Louisiana Immunization Network for Kids Statewide (LINKS) system will be used to register, track, collect demographics on, conduct inventory, and document administration of all influenza vaccine. The full LINKS application can/will be used at locations that have the ability, while the modified pandemic influenza emergency module will be used at locations that either do not use LINKS, or are just vaccinating for the pandemic effort. Training, and a login and password will be required.

The current Vaccine Adverse Event Reporting System (VAERS) system will be used to monitor vaccine safety through the State Vaccine Coordinator and system of Regional Immunization Consultants.

While distribution of all other vaccines will be maintained during the pandemic, inventories of non-influenza vaccine may be reduced at the regional and local distributor sites.

Public education and a detailed communication plan to providers and the public will be an important part of the immunization campaign.

17.3 Healthcare facilities responsibilities

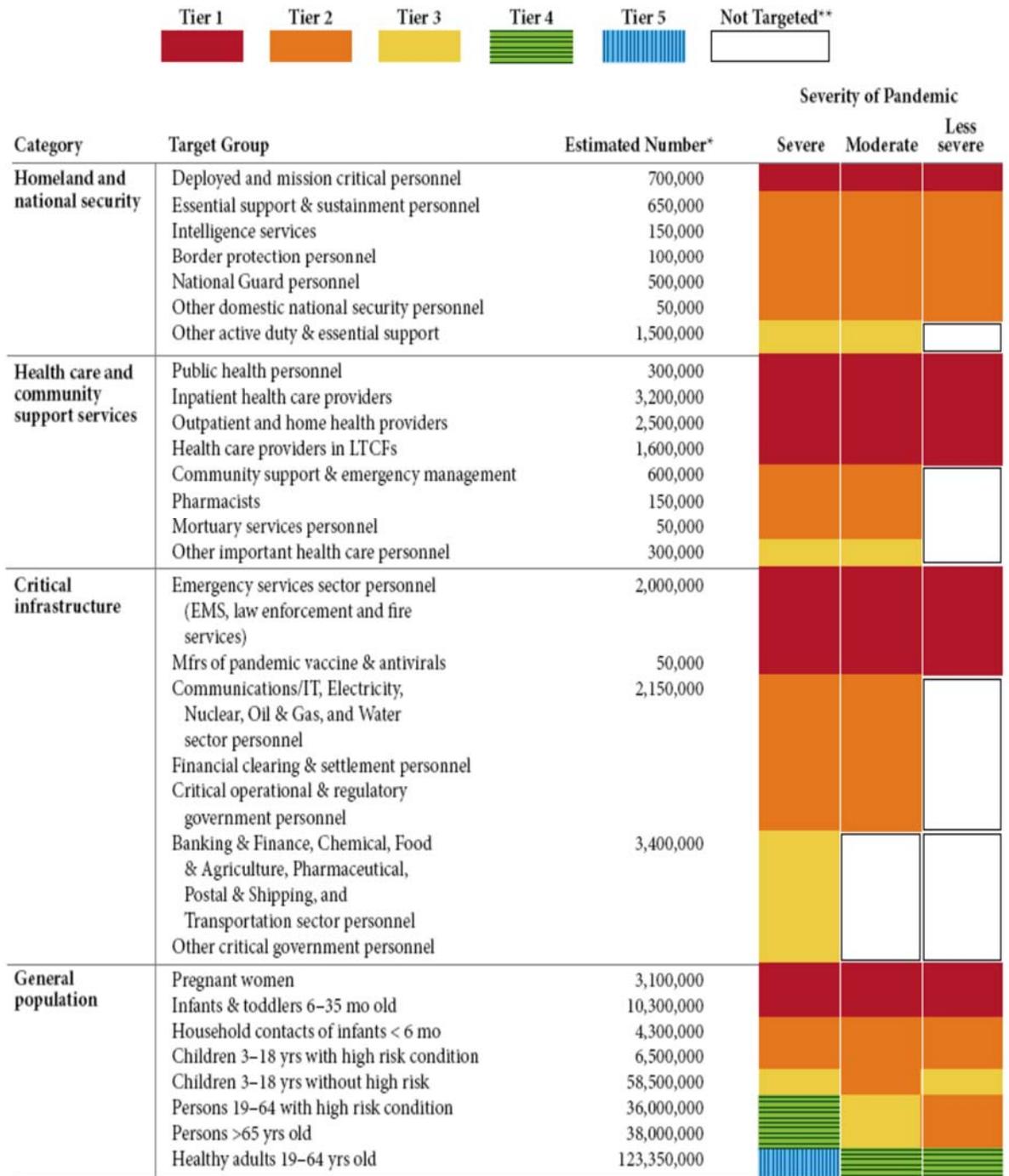
- Monitor updated HHS information and recommendations on the development, distribution, and use of a pandemic influenza vaccine (<http://www.pandemicflu.gov>)
- Work with local and state health departments on plans for distributing pandemic influenza vaccine. Develop hospital POD plans.
- Prioritize and provide estimates of the quantities of vaccine needed for hospital staff and patients (inpatient and outpatient), as requested by the state health department.
- Develop a stratification scheme for prioritizing vaccination of healthcare personnel who are most critical for patient care and essential personnel to maintain the day-to-day operation of the healthcare facility.
- Develop a pandemic influenza vaccination plan in the hospital.

Hospitals should prepare a plan to vaccinate their patients, staff and families, and ancillary health care personnel. Refer to “Hospital Point of Dispensing (POD) Preparedness Workbook” that can be found on the Louisiana Hospital Association’s website (www.lhaonline.org). Hospitals should be initially considered essentially a closed POD (point of dispensing). Refer to Figure 1 for the list of priority groups based on the U.S. Department of Health and Human Services.

As no immunity exists to the pandemic strain, it is possible that two shots of vaccine, thirty days apart will be necessary for every person. The Louisiana Immunization Network for Kids Statewide (LINKS) should be used to document all doses of pandemic influenza vaccine administered.

Monitoring of vaccine adverse events associated with influenza vaccine shall be reported through the Vaccine Adverse Reporting System (VAERS) and mailed immediately upon completion to the DHH OPH Immunization Program 1450 L and A Road Metairie, LA 70001. If the adverse event involves a death, please fax the VAERS immediately to (504) 838-5206.

Figure 7: Vaccine Priority Groups by Tier



*Estimates rounded to closest 50,000. Occupational target group population sizes may change as plans are developed further for implementation of the pandemic vaccination program

**Persons not targeted for vaccination in an occupational group would be vaccinated as part of the General Population based on their age and health status.

17.4 Pneumococcal Vaccine

Pandemic influenza can cause morbidity and mortality in two ways. The first is acute respiratory failure due to influenza viral pneumonia. This was very common in 1918. The second way influenza causes morbidity and mortality is secondary bacterial pneumonia, frequently pneumococcal. During the Inter-Pandemic Phase, efforts to increase pneumococcal polysaccharide vaccination (which can reduce the incidence of invasive pneumococcal disease secondary to influenza) is recommended and emphasized. Because large-scale pneumococcal vaccination may not be feasible once a pandemic alert has occurred, the Inter-Pandemic Phase is the ideal time to deliver this preventive measure.

17.5 Hospital Vaccine-related Planning Activities

Interpandemic Period

- Encourage seasonal influenza vaccine for all healthcare professionals
- Use Community POD Workbook to prepare hospital for internal vaccine distribution for appropriate staff (and families), patients, and accessory emergency staff (EMS)
- Prepare a facility based plan to distribute pre-pandemic and pandemic vaccine to staff, patients, accessory staff, and possibly families of these groups.
- Prepare a priority list of the above groups, to account for limited quantities of vaccine early in the pre-pandemic or pandemic vaccine distribution campaign
- Plan where and how vaccine will be received, stored and distributed within the facility.
- Work with LOPH on appropriate communication messages about vaccine availability, priorities, distribution
- Designate at least 2 clerical persons to learn and be able to enter flu vaccine data into LINKS
- Add to mass vaccination program the possibility that the hospital will need to participate in the state effort to offer vaccination to the general public.
- Ensure to communicate to the Immunization Program any changes such as: delivery addresses, telephone and fax numbers, point of contact, special delivery instructions and vaccine needs

Pandemic Period with Vaccine Available

- Use the Community Workbook to set up an internal Hospital POD
- Distribute vaccine to staff (and families), patients, and accessory emergency staff (EMS) according to priorities outlined by the State Health Officer
- Communicate message about vaccine, availability, and appropriate location to get the vaccine (public to PODS). Use the Vaccine Administered Report (VAR), document who received vaccine, and enter into LINKS
- If necessary, offer vaccine to the general public in a mass vaccination clinic.
- Using the Vaccine Adverse Events Report (VAERS), report cases of adverse events and submit VAERS immediately upon completion to the DHH OPH Immunization Program 1450 L and A Road, Metairie, LA 70001.

18.0 Surge Capacity

18.1 Overview

A pandemic will likely overwhelm the current healthcare system. The increase in patients requiring hospitalization and critical care may result in shortages of multiple resources including beds, personnel and equipment. This section provides a description of patient surge demand, isolation capabilities, equipment and Personal Protective Equipment (PPE), the inventory of existing services and regional system analysis as it currently exists. This information will provide the baseline for the system upon which gaps can be identified and recommendations will be made.

To determine the state's needs, the Louisiana Pandemic Flu Clinical Forum has suggested using a "likely" scenario, by averaging figures including mortality from the mildest and most severe pandemics of 20th century occurring in 1968 and 1918, respectively. Hospitals will have to meet the surge needs that arise from a virus that no one can predict the nature of at this time, recognizing that the assumptions explicitly described here may vary in either direction. If planning using a more severe model is desired such as that based solely on the 1918 pandemic, the numbers in the table would roughly have to be doubled.

18.2 Meeting Surge Demands

FluSurge Software, publicly available from the CDC website provided the basis for calculating the tables presented in this section and in the appendix. The following tables(s) are based on the assumption of a case fatality ratio of approximately 1.25%, 30% of hospitalized patients will need an ICU bed, 25% of hospitalized influenza patients will need ventilators and only 20% of ventilators will be available for panflu patients because patients will continue to have other conditions requiring ventilator support. If the pandemic is less lethal than 1.25% mortality, these numbers may be too high but in 1918, the case fatality ratio was 2.5% and there is no *a priori* reason that a pandemic virus might not have a case fatality ratio significantly greater than 2.5%.

Based on these assumptions, table 3 demonstrates the impact of a moderate panflu event over an eight-week period of time.

Table 3: Pandemic Influenza Impact on Louisiana

STATE		1	2	3	4	5	6	7	8	9
Pandemic Influenza Impact	Weeks									
Hospital Admission	Weekly admissions	3,380	5,634	8,450	10,704	10,704	8,450	5,634	3,380	
	Peak admissions/day				1,668	1,668				
Hospital Capacity	# of influenza patients in hospital	2,485	4,141	6,212	7,868	8,147	7,161	5,492	3,603	
	% of hospital capacity needed	28%	47%	71%	89%	93%	81%	62%	41%	
ICU Capacity	# of influenza patients in ICU	1,014	2,150	3,302	4,362	4,721	4,592	3,649	2,520	

	% of ICU capacity needed	103%	217%	334%	441%	477%	464%	369%	255%	
Ventilator Capacity	# of influenza patients on ventilators	845	1,792	2,752	3,635	3,934	3,827	3,041	2,100	
	% usage of ventilator	146%	309%	475%	627%	679%	660%	524%	362%	
Deaths	# of deaths from influenza			771	1,286	1,928	2,443	2,443	1,928	1,286
*	# of influenza deaths in hospital			540	900	1,350	1,710	1,710	1,350	900

* Deaths are based on the mortality rate assumed in the model 1.25% but would obviously be dependent on ventilator shortfall, availability of vaccine, and antivirals.

The remaining tables in this chapter (Surge Capacity) are limited to participating Tier 1 hospitals. Of the 253 hospitals identified in the state, 117 are defined as participating Tier 1 hospitals. Tier 1 hospitals are acute care hospitals that have an Emergency Room and/or the resources to support isolation.

Hospitals that lie outside the scope of this plan are single service providers such as specialty hospitals, psychiatric hospitals, long-term acute care and rehab (Tier 2 facilities). Tier 2 hospitals will play a supportive role in housing those with minor illnesses at their respective institutions. Specialty hospitals may be called upon to provide staff and assets/medical equipment to be utilized by the State Health Officer during a state of emergency. Additional roles/responsibilities may be deemed necessary during a pandemic influenza event based on an altered standard of care.

To increase available bed capacity in the region over a short period, hospitals within each region should consider the following:

- Review and revise admissions criteria for times when bed capacity is limited
- Streamline admission procedures to limit the number of patient encounters in the hospital (e.g., direct admission to an inpatient bed).
- Develop policies and procedures for expediting the discharge of patients who do not require ongoing inpatient care (e.g., develop plans and policies for transporting discharged patients home or to other facilities, create a patient discharge holding area or discharge lounge to free up bed space).
- Work with home healthcare agencies to arrange at-home follow-up care for patients who have been discharged early and for those whose admission was deferred because of limited bed space
- Develop criteria or “triggers” for temporarily canceling elective surgical procedures and determining what and where emergency procedures will be performed during a pandemic. Determine which elective surgical procedures will be temporarily postponed.
- Determine whether patients who require emergency procedures will be transferred to another hospital or facility
- Discuss with local and state health departments how bed availability, including available ICU beds and ventilators, will be tracked during a pandemic

- Consult with hospital licensing agencies on plans and processes to expand bed capacity during times of crisis. These efforts should take into account the need to provide staff and medical equipment and supplies to care for the occupant of each additional hospital bed.
- Discuss with healthcare regulators whether, how, and when an “Crisis Standards of Care in Mass Casualty Events” will be invoked and applied to pandemic influenza. (See Appendix M, State Hospital Crisis Standards of Care Guidelines in Disasters).
- Develop policies and procedures for shifting patients between nursing units to free up bed space in critical-care areas and/or to cohort pandemic influenza patients
- Expansion of critical care capacity by placing select ventilated patients on monitored or step-down beds; using pulse oximetry (with high/low rate alarms) in lieu of cardiac monitors; or relying on ventilator alarms (which should alert for disconnect, high pressure, and apnea) for ventilated patients, with spot oximetry checks
- Conversion of single rooms to double rooms or double rooms to triple rooms, if possible
- Reduction of the usual use of imaging, laboratory testing, and other ancillary services
- Develop Mutual Aid Agreements (MAAs) or Memoranda of Understanding/Agreement (MOU/As) with other local facilities who can accept non-influenza patients that do not need critical care
- Identify areas of the facility that could be vacated for use in cohorting influenza patients. Consider developing criteria for shifting use of available space based on ability to support patient-care needs (e.g., access to bathroom and shower facilities). Consider developing cohorting protocols based on a patient’s stage of recovery and infectivity.
- The use of cots and beds in flat space areas (e.g., classrooms, gymnasiums, lobbies) within the hospital for noncritical patients care

18.3 Hospital Data Reporting

Hospitals in Louisiana are currently utilizing a regional planning process to prepare for an increase in acutely ill patients, which may occur during a public health emergency. This plan includes the implementation of the emergency preparedness tool, EMSSystem Resource Tracking. Hospitals participating in the EMSSystem will report the status of operations, availability of beds by category and other resources that include equipment, supplies, pharmaceuticals, and personnel. This data warehousing includes inventories of available resources against which incoming data can be continuously compared, and that resources can be quickly assessed, monitored and distributed. The assessing and monitoring of these resources will continue through the recovery phase of the event. All appropriate staff will conduct after action reviews to evaluate the effectiveness of the plan, identify strengths and weaknesses in the execution, and make appropriate recommendations for future events.

Louisiana will continue to maintain EMSSystems as a reporting tool but has also developed a system entitled EMSTAT. Whereas EMSSystem provides hospital bed availability, EMSTAT collects, collates and organizes additional data from both hospitals and nursing homes. EMSTAT, used for gathering real-time information from the critical healthcare facilities was

effective during the 2009 H1N1 pandemic and will continue to be used, along with EMS systems. Selected variables including hospital census data, # of ILI patients seen and admitted, # of ILI patients seen, treated and discharged, total # of non-ILI patients seen in the ED and the number of deaths can be identified and added to the data collection tool to provide the state with an up-to-date visibility on the status and need of hospitals and nursing homes throughout an event.

18.4 State Hospital Bed Gap Analysis

18.4.1 General Beds

The initial planning surge bed capacity goal from the Health and Human Services (HHS) grant, was to “Establish a system that allows the triage, treatment, and initial stabilization of 500 adult and pediatric patients per 1,000,000 above the current daily staffed bed capacity, with acute illnesses or trauma requiring hospitalization from a chemical, biological, radiological, nuclear, or explosive (CBRN&E) incident.” Using the planning estimate of 500 beds/million population, the state surge need has been estimated at 2,082 beds. To accomplish the HHS grant surge goal, all Tier 1 hospitals were asked to provide additional surge beds in addition to beds made available from the discharge of patients and the canceling of elective surgeries. Hospitals have met that initial goal for surge beds. It is now being recommended that they maintain a 20% increase in capacity as a new goal. This may work for many types of events but will more than likely not be sufficient for a severe pandemic influenza event.

Hospitals have also considered re-arrangement of services such as recovery rooms, same day surgery, outpatient areas, physical therapy treatment, and alter staffing to respond to the additional patient needs. According to the data collected in the 2012 HHS Needs Assessment Survey, hospitals can open an additional 10,520 beds above their current daily staffed capacity either as unstaffed beds or by calling in staff within a 24 hour period or opening other structures outside their normal operations.

However, the FluSurge model, a process developed by the Centers for Disease Control and Prevention (CDC) which estimates the need for inpatient services, predicts that hospitals may need more surge capacity than that estimated by HHS. The FluSurge model is based on an average of the 1918 and the 1968 pandemic influenza outbreaks and was calculated on the following assumptions: that 30% of hospitalized patients would need an ICU bed, 25% of hospitalized patients would need a ventilator and only 20% of the current ventilators would be available for influenza patients. Week 5 of FluSurge Model predicts the highest inpatient census for hospitals. Table 4 presents a comparison of projected surge response by Tier 1 hospitals by region in the state and the estimated bed need per the CDC Flu Surge Model.

Table 4: State Surge Bed Capacity

Tier1 Hospitals	FluSurge Week 5 Peak Census	Current Surge Capacity*	Unstaffed Beds
117	8,148 patients	10,520 beds	+2,372 beds

*As reported in Hospital Needs Assessment 2012

While there appears to be a sufficient number of inpatient beds needed to provide care for inpatients with pandemic influenza during the peak period of a Pandemic Influenza, the numbers do not reflect the severity of the patients' conditions and the lack of the necessary critical care/isolation beds that will be needed.

It is important to also note that the peak patient census estimated by FluSurge will be patients over and above the hospitals' routine patient care census.

The State of Louisiana will not sponsor off-site alternate care sites. Based on past experiences with Hurricanes Katrina and Rita, the decision has been made to instead, "surge within walls". Hospitals, therefore, should identify alternatives to increase on-site surge capabilities. As mentioned above, currently there exist 10,520 additional on-site surge capabilities for hospitals in the state. These surge beds would have to be dedicated to the care of pandemic influenza patients.

Table 5: Available Surge Capacity/Need

Tier 1 Hospitals	Bed Goal *	Current Surge Capacity**	Beds
Region 1	1370	1625	+255
Region 2	1181	1357	+176
Region 3	939	692	-247
Region 4	727	1687	+960
Region 5	545	474	-71
Region 6	722	592	-130
Region 7	1030	1431	+401
Region 8	671	1489	+818
Region 9	963	1173	+210
TOTAL	8,148	10,520	+2,372

* hospital 5 year planning goal

**As reported in Hospital Needs Assessment, May, 2012

These numbers only reflect the equipment, hardware and/or supplies needed to care for patients. These beds may not be available if staffing is not available.

Goal: Hospitals should complete purchase / implementation of additional surge beds to support pandemic flu surge estimates with future grant funds.

18.4.2 Isolation Beds

This section provides a description of available isolation services and system analysis for the state. Given the potential demand for isolation capabilities, the demand to increase isolation capacity is greatest on the facilities that have the characteristics of having emergency room access for the community.

The initial planning isolation capacity goal from the Health and Human Services (HHS) grant, was that participating hospitals should *"Have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., smallpox, pneumonic plague, SARS, influenza and hemorrhagic fevers) or febrile patient with a suspect rash or other symptoms of*

concern who might be developing a highly communicable disease.” All Tier 1 hospitals report the availability of at least one (1) isolation beds.

Hospitals have also considered re-arrangement of services such as recovery rooms, same day surgery, outpatient areas, physical therapy treatment, and alter staffing to respond to the additional patient needs. According to the data collected in the 2012 HHS Needs Assessment Survey, as part of the HHS total surge beds, state hospitals can open an additional 431 isolation beds above their current daily staffed capacity either by calling in staff within a 24 hour period or opening other structures outside their normal operations.

Table 6: Isolation Bed Capacity

Tier 1 Hospitals	# of Negative Pressure Units*	Add'l Beds Hospitals can open within 24 hrs*	Total
Region 1	97	89	268
Region 2	62	41	129
Region 3	26	25	47
Region 4	87	64	141
Region 5	31	55	100
Region 6	37	45	108
Region 7	86	36	204
Region 8	30	23	66
Region 9	107	53	113
TOTAL	563	431	1,176

*As reported in Hospital Needs Assessment, May, 2012

These numbers only reflect the equipment, hardware and/or supplies needed to care for patients. These beds may not be available if staffing is not available.

Another HHS Surge Isolation Goal included that regions must *“identify at least one healthcare facility that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation within 3 hours post-event.”*

Goals and strategies to increase isolation beds thus include: 1) Hospitals should identify alternatives to incrementally increase on-site surge isolation capabilities such as critical care, emergency, and/or patient care areas. 2) Hospitals should evaluate methods to identify and implement large isolation holding areas with capacity for 10+ isolation patients. ***Hospitals should complete purchase & implementation of additional isolation beds to support pandemic flu surge estimates with future grant funding.***

18.4.3 Critical Care Beds

Many Pandemic Influenza patients will require critical care services. The CDC FluSurge Model predicts that as many as 30% of patients admitted for pandemic influenza will require critical care services. Week 5 of FluSurge Model predicts the highest inpatient census for hospitals. Table 7 presents a comparison of projected ICU surge response in the state and the recommendations CDC Flu Surge Model peak demand for critical care beds.

Table 7: Critical Care Availability and Need

Tier 1 Hospitals	FluSurge Week 5 Peak Census	Additional ICU Capacity*	Gap
117	4,721 patients	1,269 beds	3,452 beds

*As reported in Hospital Needs Assessment, May, 2012

These numbers represent both staffed (49%) and unstaffed beds (51%)

There appears to be a gap of approximately 3,452 beds needed to provide critical care for inpatients with pandemic influenza during the peak period of a Pandemic influenza outbreak. **It is important to note that the peak patient census estimated by FluSurge will be patients over and above the hospitals' ICU patient care census.**

Hospitals should identify alternatives to increase ICU surge capabilities. As mentioned above, currently 1,269 additional ICU surge beds are available in the state. These surge beds would have to be dedicated to the care of pandemic influenza patients. The availability of health care personnel to support surge requirements will remain the most significant challenge.

Table 8: Critical Care Bed Goal by Region

Tier 1 Hospitals	Bed Goal *	Additional ICU Capacity**	Gap
Region 1	794	251	543
Region 2	684	154	530
Region 3	544	139	405
Region 4	421	125	296
Region 5	316	96	220
Region 6	418	44	374
Region 7	597	145	452
Region 8	389	82	307
Region 9	558	233	325
TOTAL	4,721	1269	3,452

*Hospital 5 Year Planning Goal

**As reported in Hospital Needs Assessment, May, 2012

These numbers represent both staffed (49%) and unstaffed beds (51%)

Goal: Hospitals should complete purchase/implementation of additional ICU surge beds to support pandemic flu surge estimates with future grant funds.

18.5 Consumable and Durable Supplies

18.5.1 Overview

The mass influx of patients to healthcare facilities will also translate to increased use of consumable goods and durable supplies. The most critical needs may include Personal Protective Equipment (PPE), medical devices such as ventilators, monitoring devices that may or may not go with ventilators, (cardiac monitors, pulse oximeters), and other durable goods including thermometers, household goods, etc.

Recommendations from the Louisiana Pandemic Flu Clinical Forum on the most critical shortages and means of addressing are included in the following sections.

Other administrative measures may also need to be taken by hospitals to maximize use of available resources and ensure the highest quality of patient care under the given circumstances. Those measures include:

- Evaluate existing systems for tracking available medical supplies and to detect rapid consumption of goods including items that provide personal protection (e.g., gloves, masks). Improve the system as needed to respond to growing demands for resources during an influenza pandemic.
- Consider stockpiling enough consumable resources such as masks (see Appendix N, Examples of Consumable and Durable Supply Needs) for the duration of a pandemic wave (6-8 weeks).
- Assess anticipated needs for consumable and durable resources, and determine a trigger point for ordering extra resources. Estimate the need for respiratory care equipment (including mechanical ventilators), and develop a strategy for acquiring additional equipment if needed. Neighboring hospitals might consider developing inventories of equipment and determining whether and how that equipment might be shared during a pandemic.
- Anticipate needs for antibiotics to treat bacterial complications of influenza and determine how supplies can be maintained during a pandemic.
- Establish contingency plans for situations in which primary sources of medical supplies become limited. Consult with the local and state health departments about access to the national stockpile during an emergency.

18.5.2 Ventilators

18.5.2.1 Overview

In a pandemic, many more patients could require the use of mechanical ventilators than can be accommodated with current supplies. The Strategic National Stockpile (SNS) contains relatively few ventilators (only 59 for Louisiana). In a disaster on the scale of the 1918 influenza pandemic, however, stockpiles would not be sufficient to meet the need. Even if the vast number of ventilators needed for a disaster of that scale were purchased, trained staff would not be available in sufficient numbers to operate them. If the most severe forecast becomes a reality, Louisiana will need to confront the rationing of ventilators.

Table 9 presents a comparison of projected ventilator availability in the state and the estimated peak ventilator need per the CDC FluSurge Model.

Table 9: Estimated Number of Ventilators

Tier 1 Hospitals	FluSurge Week 5 Peak Census (A)	Available Ventilators in Hospitals (B)*	# of Available Vents for Pan Flu Patients** (20%) (C)	Gap (A-C)
117	3934 patients	3818 ventilators	3,640 ventilators	178 ventilators

*As reported in Hospital Needs Assessment, May, 2012

**At the time of the survey 20% of all types of ventilators were already in use on non-pandemic influenza patients.

Table 10: Type of Ventilators in Tier 1 Hospitals in Louisiana

Type of Ventilator	# of Vents	Percent of Total
Standard Electronic ICU vents	1,338	30%
Pneumatic Portable vents	1,244	28%
Non-Invasive vents	403	9%
Other (vents with an internal gas source)	141	3%
Other (CPAP Only device)	244	5%
Other (EMS or Auto resuscitator)	1,025	23%
Other (obsolete but working, in deep storage)	69	2%
Total Vents in Hospitals	4,464	100%

Table 11: Type of Ventilators in Tier I Hospitals by Region

Ventilators - Number in Possession								
Region	Standard Electronic ICU	Pneumatic Portable	Non-Invasive	Other (Vents with an internal gas source)	Other (CPAP Only device)	Other (EMS or Auto resuscitator)	Other (obsolete but working, possibly in deep storage)	Total
1	269	235	111	32	27	166	9	849
2	192	126	81	62	41	35	9	546
3	74	75	26	0	1	132	0	308
4	186	145	41	9	20	233	5	639
5	54	26	12	0	23	110	5	230
6	89	34	30	9	7	105	3	277
7	199	112	39	12	49	190	23	624
8	132	380	32	15	43	13	12	627
9	143	111	31	2	33	41	3	364
Total	1338	1244	403	141	244	1025	69	4464

Hospitals have made efforts to increase the number of ventilators available, including both fixed and portable vents. It should be noted, however, that 76% of the hospital ventilators are non-standard ICU vents and few of these are in use regularly. At the time of the 2012 Needs Assessment Survey, 40% (522) of the standard ICU vents were in use. Thus these vents would then come out of the total ICU ventilators (1,338) leaving only 816 ventilators available for pandemic influenza patients. While there will be a possible variance of 10% from day to day and maybe as much as 50% variance depending on the time of the year (season), it is clear that hospitals should continue to purchase full service ICU ventilators whenever possible in order to meet the estimated needs of a moderate influenza pandemic.

Hospital respiratory therapists should train additional appropriate staff on the use and maintenance of ventilators in order to have sufficient staff with the necessary skills when a pandemic influenza event occurs.

18.5.2.2 Considerations in Meeting Ventilator Surge Needs

- When stockpiling and/or purchasing additional ventilators, hospitals should also order additional supplies of filters, circuits, and associated accessories including sufficient oxygen associated with maintaining the ventilators in an operational status.
- Consideration should be given to the purchase of ventilators that minimize the use of oxygen (be able to operate on oxygen concentrator or low flow compressed oxygen).
- Procurement plans should include redundancy options, (e.g. obtaining oxygen) in the event that normal supply systems are disrupted.
- Ventilators should be maintained in good working order and Quality Assessment evaluations done as recommended by the manufacturer not to exceed annually.

18.5.2.3 Federal Supplemental Grant Ventilators

In addition to the SNS stockpile of ventilators, the state purchased additional ventilators through a federal supplemental grant. Distribution of these ventilators was population-based and was provided to those hospitals that have the capacity to surge and the expertise to utilize them. The Louisiana Respiratory Care Association agreed to provide training to hospital respiratory therapists on the use and maintenance of the state purchased ventilators. Other training sources may include the manufacturer of the ventilator purchased. As stated previously, it is recommended that the respiratory therapist then train additional hospital staff as appropriate.

18.5.2.4 General Considerations for Ventilator Use in a Pandemic

The Pandemic Influenza Pandemic Clinical Forum Committee is evaluating further recommendations for the use of ventilators purchased by the Federal Supplemental Grant, as well as, others that may be bought or made available for pandemic use. The recommendations focus on issues such as the recommended types of ventilators, skills of staff needed to operate equipment, and the ethical method of allocating ventilators. The recommendations/guidelines may include:

- Pre-triage requirements. Facilities should reduce the need for ventilators and expand resources before instituting ventilator triage procedures.
- Stockpiling. Purchase additional ventilators over time in order to stockpile for future use.
- Patient categories. All patients in acute care facilities will be treated equally subject to triage guidelines, regardless of their disease category or role in the community.
- Implications of triage for facilities. Statewide consistency will prevent inequities; chronic care facilities will maintain different standards from acute care facilities.

- Clinical evaluation. Clinicians will evaluate patients based on universally applied objective criteria, and may offer time-based trials of ventilator support.
- Triage decision-makers. Supervising physicians or crisis standards of care triage teams will take responsibility for triage decisions. Primary care clinicians will care for patients and will not determine ventilator allocation.
- Palliative care. Palliative care will play a crucial role in providing comfort to patients, including those who do not receive ventilator treatment.
- Appeals process. Physicians and patients require a means of requesting review for triage decisions; ethics committee members and others should be prepared to assist in the appeals process.
- Applying Crisis Standards of Care. *See Appendix M, "State Hospital Crisis Standards of Care Guidelines in Disasters".*

18.5.3 Ancillary Supplies

During a pandemic, other medical equipment besides ventilators such as pulse oximeters and cardiac monitors will be needed to help respond and care for surge of patients.

18.5.3.1 Cardiac Monitors

During the pandemic, every attempt should be made to achieve continuous cardiac monitoring of all ventilated patients. Where cardiac monitoring availability falls short of the ideal, attempts should be made to rotate portable monitors to achieve the optimum cardiac monitoring possible under the emergency situation. Hospitals should identify in advance, all available cardiac monitors (portable, fixed, etc) and stockpile additional supplies as needed to handle the surge of patients.

18.5.3.2 Pulse Oximetry

The single most important measurement in deciding when a patient needs to be placed on a ventilator, when that patient can come off of the ventilator, or even whether the patient is a candidate for hospitalization initially is level of oxygenation. Therefore, systems/equipment and protocols must be established. The ability to conduct blood gas testing is essential when placing patients on ventilators. Hospitals may want to consider that blood gas supplies may well run low rapidly during a pandemic both from increased demand and from disruption of "just in time" delivery.

Many decisions that would ordinarily be based on blood gas readings, may, of necessity, need to be made based on pulse ox readings alone if blood gas supplies run low, to "stretch" the remaining blood gas supplies for critical decisions. Pulse oximetry can be used in the ER, ICU, on the floors, and in the influenza triage area. Hospitals should identify current supplies and stockpile additionally supplies as needed in an attempt to meet the surge of patients.

18.5.4 Personal Protection Equipment (PPE)

The Centers for Disease Control and Prevention recommends that hospitals maintain a 6-8 week supply of PPE. The number of healthcare personnel at each facility will determine the amount of personal protective equipment (PPE) each hospital will need. Hospitals should have a methodology to estimate the supply of PPE. (A recommendation/formula was devised by the Pandemic Flu Clinical Forum to estimate the number of N95 masks needed.) This recommendation or others made within each region should consider the following:

- Types of PPE needed for critical care personnel, direct patient care personnel, other hospital employees, guests, and patients.
- Number of personnel in critical care areas, general patient care areas, and other parts of a hospital.
- Estimated number of times masks and other PPEs will be changed per shift.
- Average patient census and their requirement for PPEs
- Number of visitors allowed and their requirements for PPEs

Refer to the OPH Statewide Draft Pandemic Influenza Plan for further guidance on PPEs.

Healthcare facilities should plan ahead to address emergency staffing needs and increased demand for isolation wards, ICUs, assisted ventilation services, and consumable and durable medical supplies (see Appendix M for other examples of Consumable and Durable Supply Needs not discussed in sections above).

18.6 Staffing

The availability of health care personnel to support surge requirements will remain the most significant challenge. Hospital staff absenteeism may exceed 30% during a pandemic due to self illness, illness of family or friends, child care duties if schools and day care centers close, disruption in transportation, and/or other reasons including fear and anxiety about becoming ill in the workplace. Hospitals should consider the following to mitigate staffing needs:

18.6.1 Administrative Considerations

- Assign responsibility for the assessment and coordination of staffing during an emergency
- Estimate the minimum number and categories of personnel needed to care for a single patient or a small group of patients with influenza complications on a given day
- Create a list of essential support personnel titles (e.g., environmental and engineering services, nutrition and food services, administrative, clerical, medical records, information technology, laboratory) that are needed to maintain hospital operations

- Create a list of non-essential positions that can be re-assigned to support critical hospital services or placed on administrative leave to limit the number of persons in the hospital.
- Increase cross-training of personnel to provide support for essential patient-care areas at times of severe staffing shortages (e.g., in emergency departments, ICUs, or medical units)
- Consider changes in staff scheduling (e.g., duration of shifts, staffing ratios).
- Identify insurance and liability issues related to the use of non-facility staff.
- Consider planning for an orientation or “just-in-time” training for volunteers or other professionals that may be recruited outside the hospital settings to assist during a staff shortage.

18.6.2 Recruitment of Additional Workforce

- Recruit retired healthcare personnel
- Use trainees or students from professional schools (e.g., medical, nursing, physical therapy, social work, pharmacy)
- Involve patients’ family members in an ancillary healthcare capacity
- Use LAVA (Louisiana Volunteers in Action) set up through the Louisiana Office of Public Health Center for Community Preparedness to recruit and deploy staff from the community. In addition, consult with the state health department on plans for rapidly credentialing healthcare professionals during a pandemic. This might include defining when an “emergency staffing crisis” can be declared and identifying emergency laws that allow employment of healthcare personnel with out-of-state licenses.
- Explore opportunities for recruiting healthcare personnel from other healthcare settings (e.g., medical offices and day-surgery centers).
- Consider volunteers from Medical Reserve Corps and other professional organizations.
- Collaborate with local and regional healthcare-planning groups in an attempt to achieve adequate staffing of the hospital during an influenza pandemic (e.g., decide whether and how staff will be shared with other healthcare facilities, determine how salary issues will be addressed for employees shared between facilities, and consider ways to increase the number of home healthcare staff to reduce hospital admissions during the emergency). State and local health departments can help assess the feasibility of recruiting staff from different hospitals and/or regions, working in coordination with federal facilities, including Veterans Administration and Department of Defense hospitals. Healthcare facilities may implement these arrangements through Mutual Aid Agreements (MAAs) or Memoranda of Understanding/Agreement (MOU/As).
- Consider volunteers from the community to fulfill roles such as distribution of food trays, transport of patients, answering of phones, or provisions of basic nursing care including bathing, monitoring or recording of vital signs.

19.0 State and Federal Resources

19.1 State and Federal Resource Requests

In the event local resources have been exhausted, hospitals can request additional supplies from the State through their Designated Regional Coordinator at the Regional Unified Medical Command Center. The Louisiana Department of Health and Hospitals (DHH) Office of Public Health currently has a cache of personal protection equipment including surgical masks, N-95 masks, infection control supplies (gloves, gowns, face shield, etc) and disinfectant/cleaning supplies for hospitals, primary care clinics, nursing homes, emergency services providers.

Once local and state resources have been exhausted, federal resources will be deployed. On behalf of the State, the State Health Officer in conjunction with the Office of Public Health will request delivery of the Strategic National Stockpile (SNS).

19.2 Strategic National Stockpile

The Strategic National Stockpile is designed to deliver critical medical assets to the site of a national emergency. The stockpile formulary includes medications deployed as 12-hour push packs shipped in color coded containers as follows:

- **Yellow IV Container (Injectable medications and IV Supplies)**
Ciprofloxacin IV (400mg in D5W, 200ml bag); Doxycycline IV (100mg powder vial); Gentamicin injection IV/IM (40mg/ml, 20 ml multi-dose vial); Diazepam, Doxycycline, Dopamine, Gentamicin, Midazolam, Levophed, Sterile water for injection (IV vials, ampoules and decappers); NaCl flush; Syringes; IV Butterfly needles (21g); Heparin Locks; IV catheters (18, 20 and 24 gauge); IV administration sets, Normal Saline (NaCl 0.9%, 100 ml and 1,000 ml); gloves (large, medium, non-sterile, vinyl, powder-free, non-latex); bandages/trauma care (4 x 4 gauzes, conforming gauze); silk tape; alcohol pads, betadine swabs, antibiotic ointment; Carpuject devices and medication (pre-filled syringes); tweezers; nasal cannulas; and non-rebreather oxygen masks.
- **White/Clear Container (MED/SURG)**
Oxygen tubing, abdominal pads, conforming gauze and 4 x 4's.
- **Blue Respiratory Container (Respiratory Supplies)**
Endotracheal tubes (ET tubes); Endotracheal tube guide/stylette; nasogastric tubes (NG tubes); Oropharyngeal tubes; disposable laryngoscopes and reusable illuminator; non-rebreather oxygen masks; manual pulmonary resuscitator; Easy cap II Co@ detector; suction catheters; Yankauer suction; gloves (large and medium, non-sterile, powder free, non-latex); atropine sulfate (0.4mg/ml 20 ml); Atropine and Methylprednisolone (IV vials); albuterol nebulizer solution (3ml); masks, aerosol (adult and pediatric); nebulizers, T-mouthpieces, 7' tube; and double antibiotic ointment (0.9 gm pkt).
- **Pink Container (Pediatric)**
Broselow tape, suction catheters, NG tubes, endotracheal tube guide/stylette, disposable laryngoscopes and illuminator, oropharyngeal tubes, manual pulmonary

resuscitator (MPR), Pedi-cap CO2 detector, non-rebreather oxygen masks and nasal cannulas, and IV catheters (24 gauge).

- **Red Container (Oral Antibiotics)**

Ciprofloxacin 500mg tablet, Doxycycline 100 mg tablet, Amoxicillin 500 mg capsule/tablet; Pediatric suspensions* - Ciprofloxacin 250mg/5ml (100ml-bt), Doxycycline 25 mg/5ml (60ml-bt) and Amoxicillin 400mg/5 ml (100ml-bt).

Pediatric Suspension is NOT in the 12-hour Push Package but is shipped simultaneously should a 12-hour Push Package be deployed.

Note: Other goods may become available via the SNS including but not limited to the following: Radiation countermeasures (Prussian Blue, Ca and Zn-DTPA, KI, Neupogens, Phenergan, Kytril), Pain medications, Antibiotics (Vancomycin, Levofloxacin), Chemical nerve agent antidotes, Burn and blast items (IV fluids – LR, D5 ½ , NS, K+), Wound care/dressings (burn dressings, gauze, suture), Silvadene cream, Bacitracin ointment, Bacitracin and Alcaine ophthalmic, Flurorscein eye strips, Antifungals (Amphotericin), other emergency medications (Dopamine IV, Methylprednisolone IV, Albuterol nebulizer solution/systems), Smallpox vaccines (ACAMBIS 2000, Aventis Pasteur, diluents and bifurcated needles), Smallpox vaccine adverse event medications (Vaccinia Immune Globulin, Cidofovir, Anthrax Vaccine Adsorbed (AVA), ABthrax, Anthrax Immune Globulin (AIG), Antitoxins and Antivirals (Botulinum Antitoxin, AB, AE, Hepatavalent, Tamiflu capsules, suspension (30mg, 45mg, 75mg, 12mg/ml 25 ml), Rimatadine tablets 100 mg, Relenza inhaler and Peramivir.

- **Distribution of Supplies**

There will be point of dispensing sites (PODS) identified throughout the state where medications or vaccines can be distributed to individuals. These PODS can range from small clinics to large sites with multiple staging and operation areas. It should be noted that the SNS supplies are requested and deployed when state and local resources are depleted or anticipated to be depleted. Assets should be requested in a timely manner allowing for adequate and appropriate delivery.

20.0 Crisis Standards of Care

During a disaster or pandemic, it is recognized that certain healthcare resources may become scarce. These guidelines are designed to provide direction to healthcare providers on the allocation of scarce resources in the setting of a declared state of emergency surrounding an influenza pandemic or other event resulting in scarce healthcare resources. The guiding principle of Crisis Standards of Care is to do the greatest good for the greatest number of persons.

“Crisis standards of care” can be defined as a substantial change in usual healthcare operations and the level of care it is possible to deliver, which is made necessary by a pervasive (e.g., pandemic influenza) or catastrophic (e.g., hurricane) disaster. This change in the level of care delivered is justified by specific circumstances and is formally declared by the state, in recognition that crisis operations will be in effect for a sustained period. The formal declaration (Executive Order) that crisis standards of care are in operation enables specific legal/regulatory powers and protections for healthcare providers in the necessary tasks of allocating and using scarce medical resources.

The Louisiana Department of Health and Hospitals has convened a working committee to assist with the development of state guidelines on methods for conducting crisis standards of care during a pandemic influenza event. Committee members include lawyers, physicians, nurses, Louisiana Hospital Association, ethicists, clergy, government officials and others with a variety of expertise. This committee continues to work on guidance and recommendations. (See *Appendix N*, "State Hospital Crisis Standards of Care Guidelines in Disasters"). The guiding principles for managing a pandemic influenza event are to:

- control pandemic to extent possible; protect public from mass outbreak of disease and resultant morbidity and mortality
- maximize positive patient outcomes when health care needs exceed available resources
- establish process for determining priorities for the use of limited health care resources and crisis standard of care clinical protocols (CSOC protocols) for healthcare providers, including healthcare practitioners at all levels and all institutions which deliver health care
- to the extent possible, have in place, prior to an influenza pandemic, these priorities and protocols.
- establish process for reevaluating these priorities and guidelines during an influenza pandemic.

Priority for limited medical resources and CSOC protocols should be based upon the allocation of scarce resources to maximize the number of lives saved ("the greatest good for the greatest number"). This allocation should be:

- determined solely on the basis of the scientific evidence-base and clinically sound medical information
- implemented in a manner that prohibits disparate treatment of any individual or groups of individuals that is not based on the scientific evidence-base and clinically sound medical information
- implemented without discrimination or regard to age or disability
- implemented without discrimination or regard to sex, race, religion, orientation, ethnicity or income

Priority directives and CSOC protocols will include flexibility and physician discretion to vary priorities and make exceptions based on:

- good faith judgment
- circumstances which warrant exception from the CSOC protocols

The decision to implement the Crisis Standards of Care guideline shall be based upon the degree of the pandemic (or other disaster) and hospital capacity, in conjunction with a governor ordered state of emergency. Specifically, Crisis Standards of Care may be initiated only after all of the following conditions have been met:

1. Initiation of national disaster medical system and national mutual aid and resource management.
2. Surge capacity fully employed within healthcare facility.
3. Attempts at conservation, reutilization, adaption, and substitution are performed maximally.
4. Identification of critically limited resources (e.g., ventilators, antibiotics).
5. Identification of limited infrastructure (e.g., isolation, staff, electrical power).

6. Request for resources and infrastructure made to local and regional health officials.
7. Current attempt at regional, state, and federal level for resource or infrastructure allocation;
8. Institutional implementation team has requested initiation of CSOC.
9. Declared state of emergency or incident of national significance.

21.0 Alternative Care Sites

The State will not establish or sponsor stand-alone Alternative Care Sites for care of pandemic flu patients. The complexities of setting up such a facility, dependent upon medical personnel that will have to be drained from hospitals, as well as, the difficulties in ensuring appropriate care is provided distances the state from encouraging this concept. Given the limitation on resources – both human and material – to operate an alternative care site for months, a more effective plan is to focus on the effective use and surge abilities of EMS and hospitals. The emphasis will be on “surging within walls” or towards setting up an “alternative care site” on the grounds of the hospital(s), in an used wing, in an outpatient building, etc. This type of measure still removes some of the pressure from the hospital EDs and separates flu patients from other types of patients (perhaps more useful in the initial phase of the pandemic). Additionally, in the eyes of the public, it sends the message that they are being cared for at a hospital facility that they are familiar with, rather than an unknown facility that may erroneously become associated with a place for end-of-life care.

22.0 Promotion of Home Care

The Office of Public Health has established communication tools to encourage the public to “stay at home”. Louisiana hospitals should support and encourage that message. In the event of a influenza pandemic, the quality of material care (such as nursing, ventilators, nutrition, and hydration) will deteriorate. Family members will be expected and needed to provide care to family members that are unable to be hospitalized.

Promotion of home care and discouragement of the “worried well” from seeking hospital evaluation and care through the use of media campaigns and access to community health call centers will be adopted. Establishment of guidelines and public health messaging describing how to evaluate symptoms, what treatment can be safely delayed and how to care for themselves at home has been developed by the Office of Public Health and is readily available.

23.0 Mortuary Issues

The mass fatality plan for pandemic influenza rests on a number of complex and highly uncertain assumptions. 1) Significant numbers of deaths do not occur until after the first 30 days of the sentinel case; 2) There will be a severe shortage of personnel at all levels of the private and public sector that will hamper and significantly impede the deployment of resources for victim recovery. (Given these trigger points, the plan assumes that local and state authorities will be quickly overwhelmed after day 30 as fatalities escalate both within medical institutions and in homes); and 3) Given the nature of pandemic influenza, the assumption is that there will be no significant federal assistance forthcoming. See *Appendix O*, Level 5 Event Assumptions.

Mass fatality planning is part of an overall, all-hazards emergency preparedness and response performed in Louisiana by the Department of Health & Hospitals (DHH). DHH handles Emergency Support Function #8, and in mass fatality events relies on other support agencies in managing human remains, including victim identification and mortuary affairs. This Framework is refined and fully developed with the guidance of DHH staff, the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), volunteers with DMORT experience, and the 64 parish coroners. Information regarding capabilities and resource continues to be gathered and anchors this process. No plan will ever be able to capture all contingencies; however, having an established and practiced plan provides the direction and guidance needed during the crisis. (See *Appendix P*, "State of Louisiana DHH Mass Fatality Framework, Version 2.1, November, 2013").

Pertinent parts of the State's operational plan for pandemic preparedness address the following items:

- Roles and responsibilities
- Isolation and quarantine precautions
- Procedures and systems for documenting (identification and tracking), collecting, transporting and accounting for final disposition of the dead including retrieval of bodies from homes, if necessary
- Procedures and systems for storage of bodies including temporary interment sites
- Family Assistance Services

In the event of a pandemic influenza, hospitals will become overwhelmed with the number of deaths. Based on the table below, the state may expect as many as 10,413 deaths during a pandemic. Data collected from hospitals identifies the available resources for holding remains. The chart below summarizes the estimate of the number of deaths, the hospital holding capacity and the potential gap for the state.

Table 12: Estimate of Deaths due to Pandemic Influenza

Tier 1 Hospitals	FluSurge Week 5 Peak Census (A)	Hospital Capacity	Gap
117	1,930 deaths	1,514 beds	416 beds

To reduce or eliminate this gap, the following Tier 1 hospitals in the state will secure additional body bags and/or contract with vendors for refrigerated trucks as follows:

Table 13: Hospital Morgue Capacity Goal, by Region

Participating Tier 1 Hospitals	Morgue Capacity Goal *
Region 1	333
Region 2	270
Region 3	215
Region 4	174
Region 5	130
Region 6	172
Region 7	250
Region 8	163
Region 9	223
TOTAL	1,930

*Hospital 5 Year Planning Goal

Table 14: Morgue Capacity, by Region

Participating Tier 1 Hospitals	Existing Hospital Morgue Capacity	Surge Morgue Capacity on Campus – 1-5 days	Regional Contractual Capacity – 1-5 days	Total	Gap
Region 1	70	48	52	170	163
Region 2	58	48	127	233	37
Region 3	11	78	5	94	121
Region 4	34	98	86	218	+44
Region 5	22	61	71	154	+24
Region 6	13	43	52	108	64
Region 7	43	62	119	224	26
Region 8	11	58	186	255	+92
Region 9	11	13	34	58	165
Total	224	233*	433*	1,514	416

*If the bodies remain longer than 5 days, the number of available morgue beds will decrease.

To prepare for the possibility of mass fatalities during a flu pandemic, hospitals should do the following:

- Assess current capacity for refrigeration of deceased persons.
- Discuss mass fatality plans with local and state health officials and medical examiners.
- Work with local health officials and medical examiners to identify temporary morgue sites.
- Determine the scope and volume of supplies (e.g., body bags) needed to handle an increased number of deceased persons.

Regarding the ability of the state to manage the expected medical surge from a pandemic event, the fact that each of the nine regions within the state all have different ideas as to how and which facilities will be identified to handle fatalities, as well as, where to intern decedents does pose some barriers for successful outcome. Most also don't have a cache of equipment and supplies available and this would need to be pushed out to the regions. Surveys of each region's capability in order to "pool" resources will be conducted and evaluated to identify possible solutions.

Appendix A: Map of DHH Emergency Preparedness Regions

DHH Emergency Preparedness Regions



Appendix B: Hospitals and Hospital Emergency Preparedness Coordinator Information

REG	CNT	PARISH	FACILITY	TYPE	TIER	BEDS	COORDINATOR	PHONE
1	1	Orleans	Beacon Behavioral Hosp of N.O.	Psych (FWF)	T-2	24	Mandy Henry	504-210-0460
1	2	Orleans	Interim LSU Hosp (CHMC of LA at N.O.)	Acute w/ER	DRH	390	Robert Arnold	504-903-0179 cell 225-620-5149
1	3	Orleans	Children's Hospital	Acute w/ER	DRH	247	Chris Sale	504-896-9452
1	4	Orleans	Community Care Hospital	Psych	T-2	36	Paul Kavanaugh	504-899-2500 x209
1	5	Jefferson	Crescent City Surgical Hosp	Acute	T-2	20	Theresa Reynolds	504-391-1500
1	6	Jefferson	East Jefferson General Hosp	Acute w/ER	DRH	420	Michael Guillot	504-889-7152
1	7	Orleans	Kindred Hospital New Orleans	LTAC	T-2	168	Sherri Barcia	504-762-5530
1	8	Jefferson	La Continuing Care Hosp	LTAC (FWF)	T-2	56	Shirlene Sullivan	504-349-2134
1	9	Orleans	Oceans Behavioral Hosp of Greater New Orleans	Psych (FWF)	T-2	18	Deborah Spiers	504-464-8895
1	10	Jefferson	Oceans Behavioral Hosp of Greater N. O. Westbank Campus	Psych	T-2	12	Victor Smith	504-331-1360
1	11	Orleans	Ochsner Baptist Medical Center	Acute w/ER	T-1	83	Julian Springler	504-897-5918
1	12	Jefferson	Ochsner Extended Care Hosp of Kenner	LTAC (FWF)	T-2	32	Fritz Nelson	504-464-8655
1	13	Orleans	Ochsner Medical Center	Acute w/ER	DRH	482	Randy Springer, Sheila Brown	504-842-3772
1	14	Jefferson	Ochsner Medical Center - Kenner	Acute w/ER	T-1	142	Robin Wallace	504-464-8047
1	15	Jefferson	Ochsner Medical Center-Westbank	Acute w/ER	T-1	231	Brenda Bankston	504-228-3209
1	16	Jefferson	Omega Hospital	Acute	T-2	16	Debbie Schenck	504-832-4200
1	17	Jefferson	River Oaks Hospital	Psych	T-2	26	Mike Capielano	504-734-1740 Ext 274
1	18	Orleans	Seaside Behavioral Center	Psych (FWF)	T-2	24	Mary Matamoros	504-393-4223
1	19	St. Bernard	St. Bernard Parish Hospital	Acute	T-2	40	Wayne Landry	504-826-9605
1	20	Orleans	St. Catherine Memorial Hosp (Specialty of N.O.)	LTAC (FWF)	T-2	21	John Gray	504-210-3000
1	21	Orleans	St. Charles	Acute	T-2	39	Leon Danna	504-529-6600

1	22	Jefferson	Surgical Hospital St. Theresa Specialty Hospital - Kenner	LTAC	T-2	42	Linda Rubino	504-250-7795
1	23	Jefferson	St. Theresa Specialty Hospital-Metairie	LTAC (FWF)	T-2	31	Linda Rubino	504-904-7599
1	24	Orleans	Touro Infirmary	Acute w/ER	DRH	360	Denice Eshleman	504-897-8175
1	25	Orleans	Tulane Medical Center	Acute w/ER	T-1	232	Natasha Bryant	504-988-3801
1	26	Jefferson	Tulane-Lakeside Hospital	Acute w/ER	T-1	116	Natasha Bryant	504-988-3801
1	27	Orleans	United Medical Healthwest - New Orleans, LLC	Rehab (FWF)	T-2	26	Michael Rabalais	504-433-5551
1	28	Jefferson	West Jefferson Medical Ctr	Acute w/ER	DRH	427	Steve Brown	504-349-1589
2	29	East Feliciana	AMG Specialty Hospital	LTAC (FWF)	T-2	16	Keith Carruth	225-683-1600
2	30	EBR	Apollo Behavioral Health Hospital	Psych (FWF)	T-2	18	Gopinath Gopalam	225-663-2881
2	31	Ascension	Ascension Gonzales Rehab Hospital	Rehab	T-2	20	Shawanza Alston	225-450-2231
2	32	EBR	Baton Rouge Behavioral Hosp	Psych (FWF)	T-2	15	Wyndy Wood	225-300-8470
2	33	EBR	Baton Rouge General Medical Center - Bluebonnet	Acute w/ER	T-1	201	Wanda Hughes	225-387-7779
2	34	EBR	Baton Rouge General Medical Center - Mid City	Acute w/ER	DRH	327	Connie Deleo	225-387-7862
2	35	EBR	Baton Rouge Rehab Hospital	Rehab	T-2	81	Laura Guillory	225-231-3001
2	36	EBR	Bethesda Rehab Hospital	Rehab	T-2	14	Lionel Murphy	225-767-2034
2	37	East Feliciana	Eastern Louisiana Mental Health System-Feliciana Forensic Facility	Psych	T-2	331	Brittney Jordan	225-634-0678
2	38	East Feliciana	Eastern Louisiana Mental Health System-East Division	Psych	T-2	232	Brittney Jordan	225-634-0678
2	39	EBR	Lane Regional Medical Center	Acute w/ER	T-1	140	Pokey Anders	225-658-6645
2	40	EBR	MMO Behaviorla Health Systems	Rehab	T-2	10	Bridget Suire	225-687-8100
2	41	EBR	Oceans Behavioral Hosp of Baton Rouge	Psych	T-2	20	Victor Smith, Jonathan Jackson	225-331-1360; 225-200-5337
2	42	EBR	Ochsner Medical Center-Baton	Acute w/ER	T-1	147	Gerry Schonekas	225-755-4488

			Rouge					
2	43	EBR	Our Lady of the Lake RMC	Acute w/ER	DRH	730	Allyn Whaley-Martin	225-765-8329
2	44	Pointe Coupee	Pointe Coupee General Hospital	Acute w/ER	T-1	25	Elaine Hurme; Janice David	225-638-5773
2	45	Ascension	Prevost Memorial Hospital	Acute w/ER	T-1	25	James Breaux	225-474-2130
2	46	EBR	Promise Hospital of Baton Rouge-Mancuso	LTAC	T-2	54	Michael Nolan	225-490-9626
2	47	EBR	Promise Specialty Hospital of BR @ BR General	LTAC (FWF)	T-2	28	Michael Nolan	225-490-9626
2	48	EBR	Promise Specialty Hospital of BR @ Oschner	LTAC (FWF)	T-2	29	Michael Nolan	225-490-9626
2	49	EBR	SAGE Rehabilitation Institute	Rehab	T-2	42	Gayla Bryant	225-819-0703
2	50	Ascension	Seaside Health System	Psych	T-2	24	Jason Nassif	225-238-3041
2	51	Ascension	St. Elizabeth Hospital	Acute w/ER	T-1	78	Tina Stallings	225-647-8547
2	52	Ascension	St. James Behavioral Health Hospital (moved from Region 3)	Psych	T-2	28	Rick Bennett	225-647-7524
2	53	EBR	Surgical Specialty Center of Baton Rouge	Acute	T-2	16	David Didier	225-408-5742
2	54	EBR	The NeuroMedical Center Rehab Hospital	Rehab	T-2	27	Jay Ivy	225-906-3820
2	55	EBR	The NeuroMedical Center Surgical Hospital	Acute	T-2	23	Monica Nijoka	225-906-4805
2	56	East Feliciana	Villa Feliciana Medical Complex	Acute (FWF)	T-2	334	Charles Martin	225-634-4086
2	57	West Feliciana	West Feliciana Parish Hospital	Acute w/ER	T-1	22	George Thibodeaux	225-635-3811 ext. 410
2	58	EBR	Woman's Hospital	Acute	T-1	189	Mike Meagher	225-924-8605, 225-439-8257
3	59	Terrebonne	AMG Specialty Hospital of Houma	LTAC	T-2	40	Alvin Campo	985-274-0001
3	60	Assumption	Assumption Community Hospital	Acute w/ER	T-1	15	Liz Templet	985-369-4242
3	61	St. James	Beacon Behavioral Hosp	Psych	T-2	12	Gary Burns	225-258-6103
3	62	Terrebonne	Compass Behavioral Ctr of Houma	Psych	T-2	20	Crystal Mathews	985-223-0161
3	63	St. Mary	Franklin Foundation Hospital	Acute w/ER	T-1	22	Charles Ibert	337-355-1261
3	64	Lafourche	Lady of the Sea General Hospital	Acute w/ER	T-1	25	Helene Melancon	985-632-8371

3	65	Terrebonne	Chabert Operational Management Company (LSU-Leonard J. Chabert Medical Center)	Acute w/ER	T-1	156	Donna Pitre Vera Folse	985-873-1305 985-873-1206
3	66	LaFourche	Ochsner-St. Anne General Hospital	Acute w/ER	T-1	35	Kirk Carlos	985-537-8367
3	67	Terrebonne	Physicians Medical Center	Acute	T-2	30	David Martin	985-858-3333
3	68	St. John	River Parishes Hospital	Acute w/ER	T-1	80	Kerry Kippes	985-651-1599
3	69	St. Charles	Specialty Rehab Hospital of Luling	Rehab	T-2	22	L. Chenell Barnes	985-785-5233
3	70	St. Charles	St. Charles Parish Hospital	Acute w/ER	T-1	59	Blake Boudreaux	985-785-4266
3	71	St. James	St. James Parish Hospital	Acute w/ER	T-1	25	Jeremy Martin	225-746-2907
3	72	St. Mary	Teche Regional Medical Center	Acute w/ER	T-1	165	Don Kight	985-380-4552
3	73	Terrebonne	Terrebonne General Medical Center	Acute w/ER	T-1	321	Dean Marcel Percy Mosely	985- 873-4271 985-804-5275
3	74	Lafourche	Thibodaux Regional Medical Center	Acute w/ER	T-1	183	Eric Degravelle	985-493-4587
4	75	Vermillion	Abbeville General Hospital	Acute w/ER	T-1	60	Lonnie Monteaux	337-898-6566
4	76	Vermillion	Abrom Kaplan Memorial Hospital	Acute w/ER	T-1	33	Donna Gaspard	337-643-5220
4	77	Lafayette	Acadia Optima Hospital	Psych	T-2	24	Patricia Hebert	337-991-0571 ext 241
4	78	Lafayette	Acadia Vermilion Hospital	Psych	T-2	54	Robert Kahn	337-234-5614
4	79	St. Landry	Acadian Medical Ctr-a campus of Mercy Regional Medical Center	Acute w/ER	T-1	42	Tony Johnson	337-580-7590
4	80	Acadia	Acadia-St. Landry Hospital	Acute w/ER	T-1	30	Heather Cradeur	337-684-2044
4	81	Acadia	American Legion Hospital	Acute w/ER	T-1	183	Rebecca Duplechain	337-788-6400
4	82	Lafayette	AMG Specialty Hospital-Lafayette (LTAC of LA-Lafayette)	LTAC	T-2	46	Ronnie Boone	337-839-9880
4	83	Lafayette	AMG Specialty Hospital-Lafayette Regional Camput	LTAC	T-2	10	Jason Branson	337-839-9880
4	84	Lafayette	Community Specialty Hospital	LTAC	T-2	22	Evelyn Walker	337-234-4031
4	85	Acadia	Compass Behavioral Center of Crowley	Psych	T-2	18	Kris Matthews	337-788-3330
4	86	Lafayette	Compass	Psych	T-2	16	Allison Kidder	337-534-4655

			Behavioral Ctr of Lafayette					
4	87	Acadia	KAILO LTAC Hospital (Crowley Rehab Hospital)	LTAC	T-2	15	Pamela Benton	337-783-2859
4	88	Iberia	Dauterive Hospital	Acute w/ER	T-1	103	Kevin Romero	337- 374-4309
4	89	St. Landry	Eunice Extended Care Hospital	LTAC	T-2	18	David Belden Cayle Guillory	337-254-2451
4	90	Evangeline	Evangeline Extended Care Hospital-Mamou	LTAC (FWF)	T-2	18	Biff David	337-468-4203
4	91	St. Martin	Genesis Behavioral Hospital	Psych	T-2	18	Marissa Lajaunie	337-442-6254
4	92	Lafayette	Heart Hospital of Lafayette	Acute w/ER	T-1	32	Michael Richard	337-521-1036
4	93	Iberia	Iberia Extended Care Hospital	LTAC (FWF)	T-2	16	David Belden Cayle Guillory	337- 254-2451
4	94	Iberia	Iberia General Medical Center	Acute w/ER	T-1	101	Trent Hebert	337-364-0441
4	95	Iberia	Iberia Rehabilitation Hospital	Rehab	T-2	24	Dawn Bishop	337-364-6923
4	96	Lafayette	Post Acute Specialty Hosp of Lafayette (Kindred Hosp of Lafayette)	LTAC	T-2	50	Wilson Boudreaux	337-261-1697
4	97	Lafayette	Lafayette General Medical Center	Acute w/ER	DRH	311	Anjanette Hebert	337-289-7441
4	98	Lafayette	Lafayette General Surgical	Acute	T-2	10	Susan Woollen	337-289-8099
4	99	Lafayette	Lafayette Physical Rehabilitation Hospital	Rehab	T-2	32	Johnny Landreth Phil Boudreaux	337-314-1125
4	100	Lafayette	Lafayette Surgical Specialty Hospital	Acute	T-2	20	Selina Guidry	337-769-4202
4	101	Lafayette	Louisiana Extended Care Hospital of Lafayette	LTAC (FWF)	T-2	42	Kevin Frank	337-289-8171
4	102	Lafayette	University Hospital & Clinic (LSU-University Medical Center)	Acute w/ER	T-1	116	Alan Worley	337-962-5573
4	103	Evangeline	Mercy Regional Medical Center (Ville Platte Medical Center)	Acute w/ER	T-1	67	Jacob Fontenot	337-363-9420
4	104	Lafayette	Oceans Behavioral Hospital of Broussard	Psych	T-2	38	Calvin Lambert	337-839-9099
4	105	St. Landry	Oceans Behavioral Hospital of	Psych	T-2	20	Donavan Lewis	337-308-3019

4	106	St. Landry	Opelousas Opelousas General Health System	Acute w/ER	T-1	157	John Armand	337-594-3982
4	107	St. Landry	Opelousas General Health System-S. Campus	Acute w/ER	T-1	88	Rachel Bellard	337-948-5140
4	108	Lafayette	Our Lady of Lourdes RMC	Acute w/ER	T-1	186	Terry Broussard	337-470-2143
4	109	Lafayette	Park Place Surgery Center	Acute	T-2	10	Pam Vidrine	337-237-8119
4	110	St. Landry	Phoenix Behavioral Hospital	Psych	T-2	16	Patricia Tweedel	337-788-0091
4	111	Evangeline	Savoy Medical Center	Acute w/ER	T-1	176	Tony Costa	337-468-0132
4	112	Lafayette	St. Landry Extended Care Hospital, LLC	LTAC (FWF)	T-2	41	Sheila Johnson	337-948-2250
4	113	St. Martin	St. Martin Hospital	Acute w/ER	T-1	25	Julian Knott	337-507-1135
4	114	Lafayette	The Regional Medical Center of Acadiana (Medical Ctr of Southwest LA)	Acute w/ER	T-1	131	Jamie Hollier	337-989-6772
4	115	Lafayette	Women's and Children's Hospital	Acute w/ER	T-1	110	Gregory Davis	337-521-9195
5	116	Allen	Allen Parish Hospital	Acute	T-2	49	Patrick England	337-738-9450
5	117	Beauregard	Beauregard Memorial Hospital	Acute w/ER	T-1	60	Greg Neely	337-462-7176
5	118	Calcasieu	Calcasieu Oaks Psychiatric Hospital	Psych	T-2	24	Charles Getwood	337-439-8111
5	119	Calcasieu	Christus St. Patrick Hospital of Lake Charles	Acute w/ER	DRH	265	Scott Kyle	337-491-7525
5	120	Calcasieu	Cornerstone Hospital of Southwest Louisiana	LTAC	T-2	30	Robert Lafleur	337-310-6000
5	121	Calcasieu	DeQuincy Memorial Hospital	Acute w/ER	T-1	29	Darrell Ross	337-786-1200 ext 252
5	122	Calcasieu	Dubuis Hospital of Lake Charles	LTAC (FWF)	T-2	24	William Willis	337-431-7835
5	123	Calcasieu	Extended Care of Southwest Louisiana	LTAC	T-2	29	Thomas Chapman	337-480-7076
5	124	Jefferson Davis	Jennings American Legion Hospital	Acute w/ER	T-1	60	Ruth Carnes	337-616-7042
5	125	Jefferson Davis	Jennings Senior Care Hospital	Psych	T-2	16	Mark Cullen	337-824-1558
5	126	Calcasieu	Lake Charles	Acute	DRH	301	Bill Wilkie	337-494-3176

			Memorial Hospital	w/ER				
5	127	Calcasieu	Lake Charles Memorial Hospital for Women	Acute	T-2	38	Thomas Chapman	337-480-7076
5	128	Jefferson Davis	MMO Jennings	Psych	T-2	20	Jessica Adkinson	337-616-8122
5	129	Allen	Oakdale Community Hospital	Acute w/ER	T-1	60	Phil Rider	318-215-3274
5	130	Beauregard	Oceans Behavioral Hospital of Deridder	Psych	T-2	20	Ronald Hand	337-460-9472 ext 206
5	131	Calcasieu	Oceans Behavioral Hospital of Lake Charles	Psych	T-2	20	Christin Bennett	337-474-7581
5	132	Jefferson Davis	Rehabilitation Hospital of Jennings	Rehab	T-2	16	Charity Murrell	337-821-5353
5	133	Cameron	South Cameron Memorial Hospital	Acute w/ER	T-1	25	Kelly Vincent	337-542-4111
5	134	Calcasieu	Walter Olin Moss Regional Medical Center	Acute w/ER	T-1	74	Jimmy Pottorff	337-475-8106
5	135	Calcasieu	West Calcasieu Cameron Hospital	Acute w/ER	T-1	109	Randy Favre	337-527-4358
5	136	Calcasieu	Women and Children's Hospital, Lake Charles	Acute w/ER	T-1	88	Lee Willeford; Michelle Poche	337-475-4166 or 337-475-4105
6	137	Avoyelles	Avoyelles Hospital	Acute w/ER	T-1	51	Michael Johnson	318-240-6180
6	138	Vernon	Bayne Jones Army Community Hospital	Acute w/ER	T-1	66	Larry Patterson	337-531-3144
6	139	Avoyelles	Bunkie General Hospital	Acute w/ER	T-1	33	Terry Riche	318-346-3316
6	140	Vernon	Byrd Regional Hospital	Acute w/ER	T-1	60	John Bennett	337-239-5260
6	141	Rapides	Central Louisiana Surgical Hospital	Acute	T-2	24	Louise Barker; Thomas Bonnette	318-466-8900
6	142	Rapides	Central Louisiana State Hospital	Psych	T-2	196	Randy Cole	318-484-6636
6	143	Rapides	Christus Dubuis Hospital of Alexandria (Dubuis Hospital of Alexandria)	LTAC (FWF)	T-2	33	Kimberly Bennett	318-448-4960
6	144	Rapides	Christus St. Frances Cabrini Hospital	Acute w/ER	DRH	283	Mary Tarver Charles Credo	318-448-6861 318-448-6900
6	145	Rapides	Crossroads Regional Hospital	Psych	T-2	68	Brian Brunson	318-445-5111
6	146	Rapides	Department of Veteran's Affairs	Acute w/ER	T-1	132	David Simpson	318-466-4004

			Medical Center					
6	147	Vernon	Doctor's Hospital at Deer Creek	Acute/LTD	T-2	10	Karen Cooper	337-392-5088
6	148	LaSalle	Hardtner Medical Center	Acute w/ER	T-1	35	Ray Atwell	318-495-3131 ext 306
6	149	Rapides	Healthsouth Rehabilitation of Alexandria	Rehab	T-2	47	Bryon Stansell	318-449-8319
6	150	Rapides	LSU-Huey P. Long Medical Center	Acute w/ER	T-1	137	Vanessa Sanders	318-473-6289
6	151	LaSalle	LaSalle General Hospital	Acute/ER	T-1	49	Brenda Smith	318-992-9200
6	152	Vernon	Leesville Rehab Hospital, LLC	Rehab	T-2	16	Jason Causey	337-392-8118
6	153	Rapides	Oceans Behavioral of Alexandria	Psych	T-2	24	Geoff Landry	318-448-8473
6	154	Concordia	Promise Hospital of Miss-Lou	LTAC	T-2	40	Benny Costello	318-336-6500
6	155	Rapides	Rapides Regional Medical Center	Acute w/ER	T-1	320	Chuck Butterfield	318-769-7105
6	156	Concordia	Riverland Medical Center	Acute w/ER	T-1	25	Kathy Halley	318-757-6551 ext 325
6	157	Rapides	Riverside Hospital of Louisiana, Inc	LTAC (FWF)	T-2	28	William Bush; David Glass	318-767-2900
6	158	Winn	Specialty Hospital of Winnfield	LTAC (FWF)	T-2	20	William Bush; David Glass	318-623-7811
6	159	Vernon	Tri Parish Rehabilitation Hospital, LLC	Rehab	T-2	33	Heath Hairgrove	337-462-8880
6	160	Winn	Winn Parish Medical Center	Acute w/ER	T-1	60	Todd Teal	318-648-3050
6	161	Winn	Woodlands Behavioral Center	Psych	T-2	19	Mike Stephenson	318-628-5445
7	162	Bienville	Bienville Medical Center	Acute w/ER	T-1	21	Deborah Hilton, RN	318-263-4700 ext 210
7	163	Caddo	Brentwood Hospital	Psych	T-2	200	Doug Jones	318-617-7300
7	164	Red River	Christus Coushatta Health Care Center	Acute w/ER	T-1	25	Shannon Cox	318-932-2199
7	165	Caddo	Christus Schumpert Health System/St. Mary	Acute w/ER	T-1	378	Millard Kimball	318-681-6494
7	166	Caddo	Christus Schumpert Highland	Acute w/ER	T-1	160	Audrey Henderson, RN	318-681-5929
7	167	Bossier	Cornerstone Hospital of Bossier City	LTAC	T-2	62	Sheri Burnette	318-747-9500
7	168	DeSoto	DeSoto Regional Health System	Acute w/ER	T-1	38	Shane Goodman	318-872-9675
7	169	Caddo	Dubuis Hospital of Shreveport	LTAC (FWF)	T-2	36	Holly Powell	318-221-3802
7	170	Claiborne	Homer Memorial Hospital	Acute w/ER	T-1	60	Kristie Copeland	318-927-1001 Ext 214
7	171	Caddo	LifeCare Hospital	LTAC	T-2	119	Leslie Nolte	318-680-4530

7	172	Natchitoches	- Shreveport Louisiana Extended Care Hospital of Natchitoches	LTAC (FWF)	T-2	21	Kermit Simmons	318-354-2044
7	173	Caddo	LSU Health Sciences Center, Shreveport	Acute w/ER	DRH	459	Donnell Chagnard	318-675-5410
7	174	Webster	Minden Medical Center	Acute w/ER	T-1	161	Kristie Copeland, RN	318-371-5631
7	175	Natchitoches	Natchitoches Regional Medical Center	Acute w/ER	T-1	96	Danita Olivier	318-214-4417
7	176	Caddo	North Caddo Medical Center	Acute w/ER	T-1	25	Stacy Alexander	318-375-4006
7	177	Caddo	Overton Brooks VA Medical Center	Acute w/ER	T-1	112	Terry Mclean	318-990-5040
7	178	Bossier	Pathway Rehab Hosp of Bossier	Rehab (FWF)	T-2	24	James Manning; Jennifer Murphy	318-841-5555
7	179	Caddo	Physicians Behavioral Hospital	Psych	T-2	14	Tom McCardell	318-550-0520
7	180	Bossier	Promise Hospital of Bossier City	LTAC	T-2	50	Rick Stockton	318-841-2525
7	181	Caddo	Promise Specialty Hospital of Shreveport	LTAC	T-2	146	Rick Stockton	318-425-4096
7	182	Bossier	Red River Behavioral Center LLC	Psych	T-2	20	Susan Kottenbrook	318-549-2033
7	183	Sabine	Sabine Medical Center	Acute w/ER	T-1	48	Kenny R. Carter	318-256-5691
7	184	Caddo	Shriners Hospitals for Children	Acute	T-2	45	Shelly Horton	318-226--3324
7	185	Caddo	Specialists Hospital of Shreveport	Acute	T-2	15	Devin Jenkins	318-231-3362
7	186	Red River	Specialty Rehabilitation Hospital in Coushatta	Rehab (FWF)	T-2	12	Denise Logan	318-932-1770
7	187	Webster	Springhill Medical Center	Acute w/ER	T-1	58	Stephen Haehn	318-539-1069
7	188	Bossier	Willis-Knighton Bossier Health Center	Acute w/ER	T-1	166	Billie Martin	318-212-7509
7	189	Caddo	Willis-Knighton Medical Center	Acute w/ER	T-1	368	Susan Cash	318-212-4706
7	190	Caddo	Willis-Knighton Pierremont Health Center	Acute w/ER	T-1	200	Clint Sanders	318-212-3511
7	191	Caddo	Willis-Knighton South & Center for Women's Health	Acute w/ER	T-1	152	Alana Moore	318-212-5501

8	192	Lincoln	Allegiance Health Center of Ruston, L.L.C.	Psych (FWF)	T-2	14	Donna Thompson	318-255-8085
8	193	Morehouse	Bastrop Rehabilitation Hospital	Rehab (FWF)	T-2	15	Tena Hughes	318-556-1191
8	194	Caldwell	Caldwell Memorial Hospital	Acute w/ER	T-1	40	Betty Jordan	318-649-6111
8	195	Caldwell	Citizens Medical Center	Acute w/ER	T-1	40	Mike Hailey	318-649-6106
8	196	Ouachita	Cornerstone Hospital of West Monroe	LTAC	T-2	47	Jay Arthur	318-397-5691
8	197	Ouachita	LSU-E.A. Conway Medical Center	Acute w/ER	T-1	244	Mitchell Gill	318-330-7489
8	198	East Carroll	East Carroll Parish Hospital	Acute w/ER	T-1	23	LaDonna Englerth	318-559-4023
8	199	Franklin	Franklin Medical Center	Acute w/ER	T-1	39	Jason Emfinger	318-412-5335
8	200	Lincoln	Green Clinic Surgical Hospital	Acute	T-2	12	Tammy Ainsworth	318-232-7199
8	201	Ouachita	IASIS Glenwood Regional Medical Center	Acute w/ER	T-1	219	Patrick King	318-329-4747
8	202	Jackson	Jackson Parish Hospital	Acute w/ER	T-1	25	Robby Roberts	318-259-4435
8	203	Morehouse	Liberty HealthCare Systems-Bastrop	Psych	T-2	60	Damaris Crocker	318-281-2448
8	204	Lincoln	Lifecare Specialty Hospital of North Louisiana	LTAC	T-2	70	Brent Martin	318-251-5323
8	205	Ouachita	Louisiana Extended Care of West Monroe	LTAC (FWF)	T-2	18	Cleta Munholland	318-329-4378
8	206	Madison	Madison Parish Hospital	Acute w/ER	T-1	25	Robert Thorton	318-574-2374 ext 296
8	207	Lincoln	Meridan Psychiatric Hospital	Psych	T-2	12	David Caston	318-254-8920
8	208	Ouachita	Monroe Surgical	Acute	T-2	10	Robin Hemphill	318-410-0002
8	209	Morehouse	Morehouse General Hospital	Acute w/ER	T-1	49	De Edre Robinson	318-283-3858
8	210	Lincoln	Northern Louisiana Medical Center	Acute w/ER	T-1	159	Brady Dubois	318-254-2450
8	211	Ouachita	Ouachita Community Hospital	Acute	T-2	10	Kathy Copeland	318-322-1339
8	212	Ouachita	P & S Surgical Center	Acute	T-2	22	Teresa Poole	318-998-7327
8	213	Union	Reeves Memorial Medical Center	Acute w/ER	T-1	15	Randy Banks	318-267-6890
8	214	Richland	Richardson Medical Center	Acute w/ER	T-1	38	Betty Hill, RN	318-728-8396
8	215	Richland	Richland Parish Hospital - Delhi	Acute w/ER	T-1	25	Alisha McVay	318-878-5171 Ext 329

8	216	Union	Serenity Springs Specialty Hosp	Psych	T-2	18	Kendal Corkern	318-368-0110
8	217	Ouachita	St. Francis Medical Center	Acute w/ER	DRH	352	Mike Brame David White	318-966-4971 318-966-7771
8	218	Ouachita	St. Francis North Hospital	Acute w/ER	T-1	198	Mike Brame; David White	318-966-4971; 318-966-7771
8	219	Ouachita	St. Francis Specialty Hospital	LTAC (FWF)	T-2	32	Cleta Munholland	318-966-7132
8	220	Ouachita	Sterlington Rehabilitation Hospital	Rehab	T-2	10	Cathy Martin	318-665-9950
8	221	Union	Union General Hospital	Acute w/ER	T-1	25	Darra Jung	318-368-7095
8	222	West Carroll	West Carroll Parish Hospital	Acute w/ER	T-1	33	Mandy Grey	318-428-3237
9	223	Washington	AMG Specialty Hospital - Bogalusa (LTAC of Wash/ St/Tammany (Bogulusa Campus)	LTAC	T-2	20	Richard Daughdrill	985-732-4402
9	224	Livingston	AMG Specialty Hospital-Denham Springs (LTAC Hosp of Denham Springs)	LTAC	T-2	59	Karen Crayton	225-665-2664
9	225	St. Tammany	AMG Specialty Hospital-Slidell (LTAC of Wash/St. Tammany Slidell)	LTAC	T-2	20	Richard Daughdrill	95-326-0440
9	226	St. Tammany	Cypress Pointe Hospital-East	Acute	T-2	10	Dale Liljedahl	985-690-8200
9	227	Tangipahoa	Cypress Pointe Surgical Hospital	Acute	T-2	30	Denise Fartenberry	985-510-6165
9	228	St. Tammany	Fairway Medical Center	Acute	T-2	21	Nathan Del Rio	985-801-6298; 504-858-6356
9	229	St. Tammany	Greenbrier Hospital	Psych	T-2	60	Bill Fuqua	985-893-2970
9	230	Tangipahoa	Hood Memorial Hospital	Acute w/ER	T-1	25	Jan Graves	985-748-9485 Ext 342
9	231	St. Tammany	Lakeview Regional Medical Center	Acute w/ER	T-1	172	Jason Cobb	985-867-4447
9	232	Tangipahoa	LSU-Lallie Kemp Regional Medical Center	Acute w/ER	T-1	25	Charles Tate	985-878-1377
9	233	St. Tammany	Louisiana Medical Center & Heart Hospital	Acute w/ER	T-1	137	Peggy Shirley	985-690-7904
9	234	Washington	LSU-Bogalusa Medical Center (Inpatient Campus)	Acute w/ER	T-1	80	Beverly Sheridan	985-730-6775
9	235	Washington	LSU-Bogalusa	Psych	T-2	18	Beverly Sheridan	985-730-6775

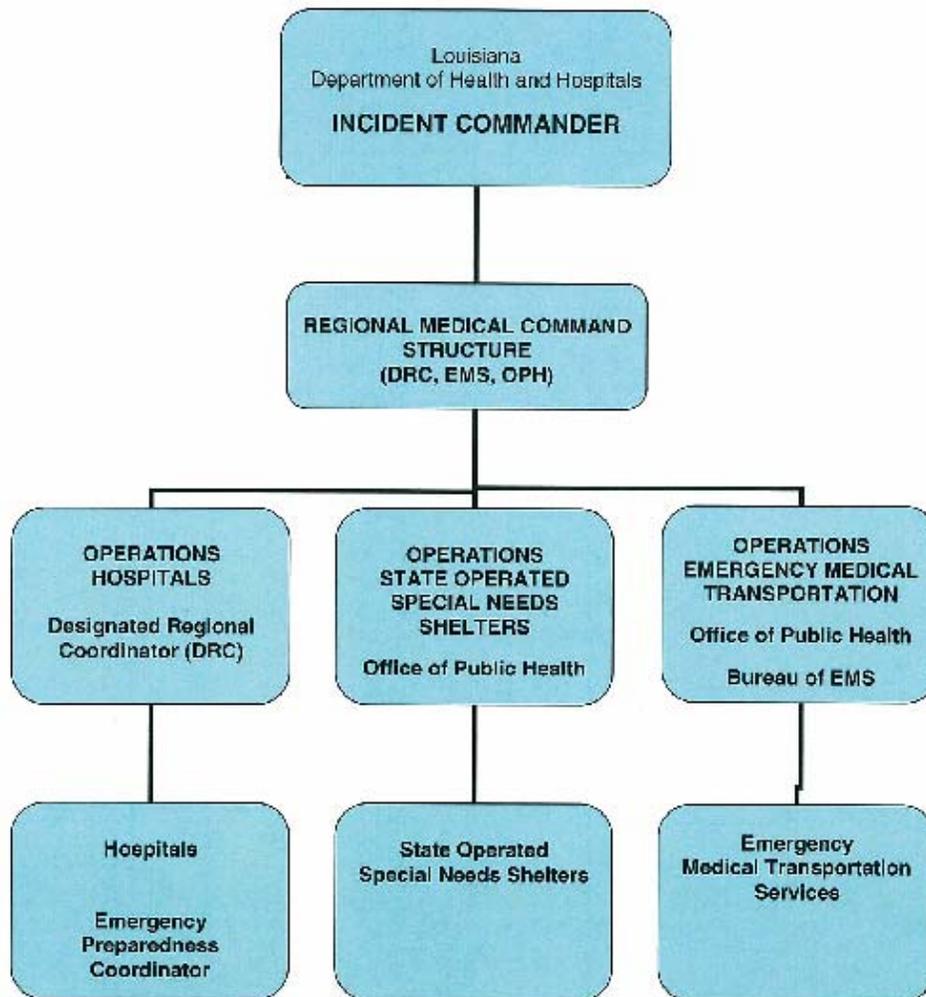
			Medical Center (Outpatient Campus)					
9	236	Washington	Magnolia Behavioral Healthcare, LLC	Pysch	T-2	18	Gerry Morris	985-735-9104
9	237	Tangipahoa	North Oaks Medical Center	Acute w/ER	T-1	237	Russell Hoover	985-230-6554
9	238	Tangipahoa	North Oaks Rehabilitation Hospital	Rehab	T-2	27	Gary Vinyard	985-230-6104
9	239	St. Tammany	Northlake Behavioral Health System (Southeast LA Hospital)	Psych	T-2	348	Cindy Little	985-626-6351
9	240	St. Tammany	Northshore Specialty Hospital	LTAC	T-2	58	Michael Desio	985-875-7525
9	241	St. Tammany	Ochsner Medical Center-Northshore (Northshore Regional Medical Center)	Acute w/ER	DRH	165	Alan Hodges	985-646-5000
9	242	Tangipahoa	Oceans Behavioral Hospital of Kentwood	Psych	T-2	16	Gina ISbell	985-229-0717
9	243	Livingston	Our Lady of the Lake-Livingston	Acute w/ER	T-1	0	Allyn Whaley-Martin	225-765-8329
9	244	St. Tammany	Regency Hospital of Covington	LTAC	T-2	38	Mark Thompson	985-867-3964
9	245	Washington	Riverside Medical Center	Acute w/ER	T-1	25	Tim Magee	985-795-4259
9	246	St. Tammany	Slidell Memorial Hospital	Acute w/ER	T-1	182	Ben Galloway	985-639-8911
9	247	Tangipahoa	Southeast Regional Medical Center	LTAC	T-2	14	Lionel Murphy	225-978-3618C
9	248	St. Tammany	Southern Surgical Hospital	Acute	T-2	37	Joey Bradshaw	985-641-0600
9	249	Tangipahoa	Post Acute Specialty Hospital of Hammond (Specialty LTCH Hosp of Hammond)	LTAC	T-2	40	Michael Desio	985-875-7525
9	250	St. Helena	St. Helena Parish Hospital	Acute w/ER	T-1	25	Sally Sherman	225-222-6111 ext 281
9	251	St. Tammany	St. Tammany Parish Hospital	Acute w/ER	DRH	222	Don Perkins; Raye Ann Story, CPHRM	985-898-5889 (O) 985-705-7552 (C) 985-898-4165 (F)
9	252	Tangipahoa	United Medical Rehabilitation Hospital	Rehab	T-2	20	Cyrellia Bonds	985-340-5998

Appendix C: Designated Regional Coordinators

DESIGNATED REGIONAL COORDINATORS					
REG	COORDINATOR	FACILITY	OFFICE	CELL	E-MAIL
1	Norris Yarbrough	Ochsner Foundation Hospital	504-862-8266	504-452-7864	norris@tulane.edu
1	Cynthia Davidson	Metropolitan Hospital Council	504-837-1171	225-939-1313	region1drc@yahoo.com
1	Luke Strack	EJGH	504-628-7328	504-710-0782	strackluke@yahoo.com
1	Denice Eshleman	Touro Infirmary	504-897-8175	504-235-7193	Denice.eshleman@touro.com
2	Allyn Whaley-Martin	Our Lady of the Lake RMC	225-765-8329	225-247-7343	allyn.whaley-martin@ololrnc.com
2	Connie DeLeo	Baton Rouge General	225-387-7852	225-572-9658	connie.deleo@brgeneral.org
3	Percy Mosely	Terrebonne General Medical Center	985-873-4271	985-804-5275	Percy.mosely@tgmc.com
3	Kim Beetz	Region 3 ADRC	985-413-2859	985-413-2859	region3drc@yahoo.com
4	Anjanette Hebert	Lafayette General Med Ctr	337-289-7441	337-654-2662	ahebert@lgmc.com
4 & 5	Liz Harmon	Regions 4 & 5 ADRC	337-570-4230	337-570-4230	lharmon@lgmc.com
5	Randy Favre	West Calcasieu Cameron Hospital	337-527-4358	337-476-9133	rfavre@wcch.com
5	Scott Kyle	CHRISTUS St. Patrick of L.C.	337-491-7525	337-274-2898	jeron.kyle@christushealth.org
6	Mary Tarver	CHRISTUS St. Frances Cabrini	318-448-6861	318-664-0843	mary.tarver@christushealth.org
7	Knox Andress	LSUHSC-Shreveport	318- 813-3311	318-465-9500	wandr1@lsuhsc.edu
8	Mike Brame	St. Francis Medical Center	318-966-4971	318-348-7096	bramem@stfran.com
9	Keith Peek	Region 9 ADRC	985-290-2642	985-290-2642	Region9DRC@yahoo.com

Appendix D: Louisiana Emergency Support Function 8 Structure

Appendix D
Louisiana Emergency Support Function 8
Incident Command Structure



Appendix E: Hospital Pandemic Influenza Triggers

Pandemic Influenza Level	Suggested Actions
Interpandemic Period	<ul style="list-style-type: none"> • Conduct planning • Conduct education/training • Conduct hospital surveillance for influenza
Pandemic Alert Period	<ul style="list-style-type: none"> • Increase preparation; refine local plan • Conduct hospital surveillance for influenza
Pandemic Period <ul style="list-style-type: none"> • Pandemic influenza outside the U.S. 	<ul style="list-style-type: none"> • Establish contact with key public health, healthcare, and community partners • Implement hospital surveillance for pandemic influenza in incoming patients and previously admitted patients. • Implement a system for early detection and treatment of healthcare personnel who might be infected with the pandemic strain of influenza • Reinforce infection control procedures to prevent the spread of influenza • Accelerate staff training in accordance with the facility's pandemic influenza education and training plan
<ul style="list-style-type: none"> • Pandemic influenza in the U.S. 	As above, plus: <ul style="list-style-type: none"> • Implement activities to increase capacity, supplement staff, and provide supplies and equipment • Maintain close contact with and among healthcare facilities and with state and local health departments • Post signs for respiratory hygiene/cough etiquette • Maintain high index of suspicion that patients presenting with influenza-like illness could be infected with pandemic strain <p>If pandemic strain is detected in local patient, community transmission can be assumed and hospital would move to next level of response.</p>
<ul style="list-style-type: none"> • Pandemic influenza in the local area 	As above, plus: <ul style="list-style-type: none"> • Emergency department (ED) <ul style="list-style-type: none"> ○ Establish segregated waiting areas for persons with symptoms of influenza ○ Implement phone triage to discourage unnecessary ED / outpatient department visits ○ Enforce respiratory hygiene/cough

	<p>etiquette</p> <ul style="list-style-type: none"> • Access controls <ul style="list-style-type: none"> ○ Limit number of visitors to those essential for patient support ○ Screen all visitors at point of entry to facility for signs and symptoms of influenza ○ Limit points of entry to facility; assign clinical staff to entry screening • Hospital admissions <ul style="list-style-type: none"> ○ Defer elective admissions and procedures until local epidemic wanes ○ Discharge patients as soon as possible ○ Cohort patients admitted with influenza ○ Monitor for nosocomial transmission • Staffing practices <ul style="list-style-type: none"> ○ Consider furlough or reassignment of pregnant staff and other staff at high risk for complications of influenza ○ Consider re-assigning non-essential staff to support critical hospital services or placing them on administrative leave: cohort staff caring for influenza patients. ○ Consider assigning staff recovering from influenza to care for influenza patients. ○ Implement system for detecting and reporting signs and symptoms of influenza in staff reporting for duty ○ Provide staff with antiviral prophylaxis, according to HHS recommendations
<ul style="list-style-type: none"> • Nosocomial transmission 	<p>As above, plus, if nosocomial transmission is limited to only a small number of units in the facility</p> <ul style="list-style-type: none"> • Close units where there has been nosocomial transmission <ul style="list-style-type: none"> ○ Cohort staff and patients ○ Restrict new admissions (except for other pandemic influenza patients) to affected units ○ Restrict visitors to the affected units to those who are essential for patient care and support
<ul style="list-style-type: none"> • Widespread transmission in community and hospital; patient admissions at surge capacity 	<p>As above, plus:</p> <ul style="list-style-type: none"> • Redirect personnel resources to support patient care (e.g., administrative clinical staff, clinical staff working in departments that have been closed [e.g., physical/occupational therapy,

	<p>cardiac catheterization])</p> <ul style="list-style-type: none">• Recruit community volunteers (e.g., retired nurses and physicians, clinical staff working in outpatient settings)• Consider placing on administrative leave all non-essential personnel who cannot be reassigned to support critical hospital services
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Appendix F: Hospital Preparedness Checklist

HOSPITAL PANDEMIC INFLUENZA PLANNING CHECKLIST



Planning for pandemic influenza is critical for ensuring a sustainable healthcare response. The Centers for Disease Control and Prevention (CDC), with input from other Federal partners, have developed this checklist to help hospitals assess and improve their preparedness for responding to pandemic influenza. Because of differences among hospitals (e.g., characteristics of the patient population, size of the hospital/community, scope of services), each hospital will need to adapt this checklist to meet its unique needs and circumstances.¹ This checklist should be used as one of several tools for evaluating current plans or in developing a comprehensive pandemic influenza plan. Additional information can be found at www.pandemicflu.gov.

An effective plan will incorporate information from state, regional, tribal and local health departments, emergency management agencies/authorities, hospital associations and suppliers of resources. In addition, hospitals should ensure that their pandemic influenza plans comply with applicable state and federal regulations and with standards set by accreditation organizations, such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Comprehensive pandemic influenza planning can also help facilities plan for other emergency situations.

1. Structure for planning and decision making.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pandemic influenza has been incorporated into disaster planning and exercises for the hospital. ²
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A multidisciplinary planning committee has been identified to specifically address pandemic influenza preparedness planning and preparedness testing. ³
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Primary and backup responsibility has been assigned for coordinating preparedness planning. (Insert names, titles and contact information)
			Primary: _____ <div style="display: flex; justify-content: space-between; width: 80%; margin: 0 auto;"> (Name) (Title) (Contact info) </div>
			Backup: _____ <div style="display: flex; justify-content: space-between; width: 80%; margin: 0 auto;"> (Name) (Title) (Contact info) </div>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Members of the planning committee include (as applicable to each setting) the following: (Check categories below that apply and develop a list of committee members with the name, title, and contact information for each personnel category checked below, and attach to this checklist.)
			<input type="checkbox"/> Hospital administration
			<input type="checkbox"/> Legal counsel/risk management
			<input type="checkbox"/> Infection control/hospital epidemiology
			<input type="checkbox"/> Disaster coordinator
			<input type="checkbox"/> Public relations coordinator/public information officer
			<input type="checkbox"/> Medical staff (e.g., internal medicine, pediatrics, hospitalist, infectious disease)
			<input type="checkbox"/> Nursing administration
			<input type="checkbox"/> Human resources (personnel, including Equal Employment Opportunities)
			<input type="checkbox"/> Facility personnel representative (e.g., union representative)
			<input type="checkbox"/> Occupational health
			<input type="checkbox"/> Physical therapy
			<input type="checkbox"/> Intensive care
			<input type="checkbox"/> Emergency department
			<input type="checkbox"/> Respiratory therapy

1 Checklists applicable to other healthcare settings (e.g., residential and long-term care facilities, emergency medical services, physician offices and clinics, and home health care) are available. See www.pandemicflu.gov/plan/healthcare/index.html.
 2 Hospitals using the Hospital Incident Command System (HICS) may wish to modify the terminology and planning structure in this checklist to be consistent with that model.
 3 An existing emergency or disaster preparedness committee may be assigned this responsibility.



1. Structure for planning and decision making. (continued)

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Diagnostic imaging (radiology) <input type="checkbox"/> Discharge planning <input type="checkbox"/> Staff development/education <input type="checkbox"/> Engineering and maintenance <input type="checkbox"/> Environmental (housekeeping) services <input type="checkbox"/> Central (sterile) services <input type="checkbox"/> Security <input type="checkbox"/> Dietary (food) services <input type="checkbox"/> Pharmacy services <input type="checkbox"/> Information technology <input type="checkbox"/> Purchasing agent /materials management <input type="checkbox"/> Laboratory services <input type="checkbox"/> Expert consultants (e.g., ethicist, mental/behavioral health professionals) <input type="checkbox"/> Other member(s) as appropriate (e.g., volunteer services, community representative, clergy, local coroner, medical examiner, morticians)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Points of contact for information on pandemic influenza planning resources have been identified within local, state and tribal health departments and the state hospital association (insert names, titles, and contact information.) Local health department: <hr/> (Name) (Title) (Contact info) State health department: <hr/> (Name) (Title) (Contact info) State hospital association: <hr/> (Name) (Title) (Contact info) Tribal health association: <hr/> (Name) (Title) (Contact info)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local, regional or state emergency preparedness groups ⁴ , including bioterrorism/communicable disease coordinators points of contact, have been identified. (Insert name, title and contact information for each) City: <hr/> (Name) (Title) (Contact info) County: <hr/> (Name) (Title) (Contact info)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other regional (and/or tribal): <hr/> (Name) (Title) (Contact info)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local or regional pandemic influenza planning groups have been contacted for information on coordinating the facility's plan with other pandemic influenza plans.

State health departments should be contacted for information on pandemic influenza preparedness planning.

Development of a written pandemic influenza plan.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copies of relevant sections of the HHS Pandemic Influenza Plan (available at www.hhs.gov/pandemicflu/plan/) and policy documents that may be forthcoming (available at www.pandemic.gov) have been obtained and reviewed for incorporation into the facility's plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copies of relevant sections of other available plans (i.e., state, tribal, regional, or local) have been obtained and reviewed for incorporation into the facility's plan. <input type="checkbox"/> State <input type="checkbox"/> Regional <input type="checkbox"/> Local <input type="checkbox"/> Tribal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A copy of the facility plan and other relevant materials are available in Administration and Infection Control. (List other locations where information is available, including facility intranet sites.) (Location) _____ (Other locations) _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plan includes strategies for collaborating with local and regional planning and response groups and hospitals and other healthcare facilities in order to coordinate response efforts at the community level (e.g., staffing, material and other resources, triage algorithms, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The facility plan includes the elements listed in #3 below.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plan identifies the person(s) authorized to implement the plan and the organizational structure that will be used, including the delegation of authority to carry out the plan 24/7.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plan stratifies implementation of specific actions on the basis of the WHO Pandemic Phases, US Government Pandemic Stages, and the pandemic severity index level worldwide, in the United States and at the local level. (See section IV and Appendix 3 of the "Community Strategy for Pandemic Influenza Mitigation" at www.pandemicflu.gov/plan/community/commitigation.html .)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Responsibilities of key personnel and departments within the facility related to executing the plan have been described.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personnel who will serve as back-up (e.g., B team) for key personnel roles have been identified.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A tabletop simulation exercise or other exercises have been developed to test the plan. <input type="checkbox"/> Date performed (_____) <input type="checkbox"/> Date performed (_____)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A full scale drill/exercise has been developed to test the plan. <input type="checkbox"/> Date performed (_____)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plan is updated regularly and includes current contact information and lessons learned from exercises and drills.

Elements of an influenza pandemic plan.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A plan is in place for surveillance and detection of pandemic influenza in hospital patients and staff. <input type="checkbox"/> A method for performing and reporting syndromic surveillance for persons with influenza-like illness has been tested and evaluated during the regular influenza season in preparation for using the system for pandemic influenza surveillance. Hospital sites for syndromic surveillance should include the emergency department, hospital clinics, and occupational health. Surveillance reports are sent to hospital epidemiology/infection control personnel and to the local health authority. (The frequency of reporting should be determined by the local health authority and reflect the pandemic severity level, as well as any applicable federal or state recommendations.)

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><input type="checkbox"/> Responsibility has been assigned for monitoring public health advisories (federal and state) and for updating the pandemic response coordinator and members of the pandemic influenza planning committee when pandemic influenza has been reported in the United States and is nearing the geographic area. (For more information see www.cdc.gov/flu/weekly/fluactivity.htm.)</p> <p>Primary: _____ (Name) (Title) (Contact info)</p> <p>Backup: _____ (Name) (Title) (Contact info)</p> <p><input type="checkbox"/> A written protocol has been developed for monitoring and reporting seasonal influenza-like illness among hospitalized patients, volunteers, and staff (e.g., weekly or daily number of patients and staff with influenza-like illness). (Having a system for tracking illness trends during seasonal influenza will ensure that the hospital can detect stressors that may affect operating capacity, including staffing and supply needs, during a pandemic.) Information on the clinical signs and diagnosis of influenza is available at www.cdc.gov/flu/professionals/diagnosis/.)</p> <p><input type="checkbox"/> A protocol has been developed for the evaluation and diagnosis of hospitalized patients and/or staff with symptoms of pandemic influenza. Information on the clinical signs and diagnosis of influenza is available at www.cdc.gov/flu/professionals/diagnosis/.</p> <p><input type="checkbox"/> A protocol has been developed for the management of persons with possible pandemic influenza who are seen in the emergency department, hospital clinics, or are transferred from another facility or referred for hospitalization by an admitting physician. The protocol includes criteria for detecting a possible case, the diagnostic work-up to be performed, infection control measures to be implemented, medical treatment, and directions for notifying infection control.</p> <p><input type="checkbox"/> Protocols include triggers for different levels of action that are based on the Pandemic Severity Index (See www.pandemicflu.gov or www.cdc.gov/flu.)</p> <p><input type="checkbox"/> A system is in place to monitor for and internally review healthcare-associated transmission of seasonal influenza among patients and staff in the facility. Information used from this monitoring system is used to implement prevention interventions (e.g., isolation, cohorting). (This system will be necessary for assessing pandemic influenza transmission.)</p> <p><input type="checkbox"/> A facility communication plan has been developed and is coordinated with the local health authority. For more information, see www.hhs.gov/pandemicflu/plan/sup10.html.</p> <p><input type="checkbox"/> Key public health points of contact for communication⁵ during an influenza pandemic have been identified. (Insert name, title and contact information for each.)</p> <p>Local health department communication contact:</p> <p>_____ (Name) (Title) (Contact info)</p> <p>State health department communication contact:</p> <p>_____ (Name) (Title) (Contact info)</p> <p>Tribal health department communication contact:</p> <p>_____ (Name) (Title) (Contact info)</p> <p><input type="checkbox"/> Responsibility has been assigned for communications with public health authorities (i.e., case reporting, status updates) during a pandemic. (Insert names, titles and contact information of primary and backup persons.)</p> <p>Primary: _____ (Name) (Title) (Contact info)</p> <p>Backup: _____ (Name) (Title) (Contact info)</p>

⁵ Public health points of contact for communicating or reporting during a pandemic may be different from those who are involved in pre-pandemic planning.

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><input type="checkbox"/> Responsibility has been assigned for communicating with the public. (Insert name, title and contact information of primary and backup persons for each)</p> <p>Clinical spokesperson: Primary: _____ (Name) (Title) (Contact info)</p> <p>Backup: _____ (Name) (Title) (Contact info)</p> <p>Public relations spokesperson: Primary: _____ (Name) (Title) (Contact info)</p> <p>Backup: _____ (Name) (Title) (Contact info)</p>
			<p><input type="checkbox"/> Methods of communicating with the public (e.g., public service announcements (PSAs), message mapping) and the subjects that will be addressed have been discussed.</p>
			<p><input type="checkbox"/> Plans and responsibilities for communicating with hospital staff, volunteers, and private medical staff have been developed. Anticipate employee fear/anxiety and plan communications accordingly.</p>
			<p><input type="checkbox"/> Plans and responsibilities for communication with patients and their family members have been developed.</p>
			<p><input type="checkbox"/> Responsibility has been assigned for internal communications with staff regarding the status and impact of pandemic influenza in the hospital. (Insert names, titles and contact information of primary and backup persons.)</p> <p>Primary: _____ (Name) (Title) (Contact info)</p> <p>Backup: _____ (Name) (Title) (Contact info)</p>
			<p><input type="checkbox"/> The types of communication needs (e.g., staff and community updates) and methods of communication (e.g., intranet, PSAs, and newspaper reports) have been identified and are appropriate for individuals with visual, hearing, or other disabilities, or limited English proficiency.</p>
			<p><input type="checkbox"/> A list has been created of other healthcare entities, including their points of contact, within the region (e.g., other hospitals, long-term care and residential facilities, local hospital's emergency medical services, clinics, relevant community organizations [including those involved with disaster preparedness]) with which it will be necessary to maintain communication in real-time and be able to report information in a timely and accurate manner during a pandemic (Insert location of the list of contacts and attach a copy to the pandemic plan:)</p> <p>_____ (location of list)</p>
			<p><input type="checkbox"/> The facility has been represented in discussions with other hospitals regarding local plans for inter-facility communication during a pandemic.</p>
			<p>A plan is in place to provide education and training for personnel and information for patients and visitors to ensure that the implications of and basic prevention and control measures for pandemic influenza are understood. (For more information and resources see www.cdc.gov/flu/professionals/index.htm.)</p>
			<p><input type="checkbox"/> A person has been designated with responsibility for coordinating education and training on pandemic influenza (e.g., identifies and facilitates access to available programs, maintains a record of personnel attendance). (Insert name, title and contact information.)</p> <p>_____ (Name) (Title) (Contact info)</p>

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <input type="checkbox"/> Current and potential opportunities for long-distance (e.g., Web-based) and local (e.g., health department- or hospital-sponsored) influenza training programs have been identified. (See www.cdc.gov/flu/professionals/training/.) <input type="checkbox"/> Language, format (i.e., prepared for individuals with visual, hearing or other disabilities) and reading-level appropriate materials for clinical and non-clinical personnel have been identified to supplement and support education and training programs (e.g., materials available through state and federal public health agencies and through professional organizations), and a plan is in place for obtaining these materials. <input type="checkbox"/> Education and training for hospital personnel includes information on differences in pandemic influenza infection prevention and control measures if necessary and are provided in languages and format (i.e., prepared for individuals with visual, hearing or other disabilities) appropriate for hospital personnel. Regular education and training should include, but not be limited to: training in Standard and Droplet Precautions; use of respiratory protection; social distancing and respiratory hygiene/cough etiquette. <input type="checkbox"/> Education and training includes information on the hospital's pandemic influenza plan, including relevant personnel policies, and operational changes that will occur once the plan is implemented. <input type="checkbox"/> A plan has been established for expediting the identification of, credentialing and training of non-facility staff brought in from other locations within the region to provide patient care when the hospital reaches a staffing crisis. <input type="checkbox"/> Informational materials (e.g., brochures, posters) on pandemic influenza and relevant hospital policies (e.g., visitation) have been developed or identified for patients and their families. These materials are language format (i.e., prepared for individuals with visual, hearing or other disabilities) and reading-level appropriate and a plan is in place to disseminate these materials to hospital patients and visitors.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A plan has been developed for triage (e.g., initial patient evaluation) and admission of patients during a pandemic that includes the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A designated location, separate from other clinical triage and evaluation areas, (utilizing the principles of social distancing) for the triage of patients with possible pandemic influenza. <input type="checkbox"/> Assigned responsibility to specifically-trained healthcare personnel overseeing the triage process. <input type="checkbox"/> Use of signage to direct and instruct patients with possible pandemic influenza on the triage process that is language, format (i.e., prepared for individuals with visual, hearing or other disabilities) and reading-level appropriate. <input type="checkbox"/> A telephone triage system for prioritizing patients who require a medical evaluation (i.e., those patients whose severity of symptoms or risk for complications necessitate being seen by a physician). <input type="checkbox"/> Criteria for prioritizing admission of patients to those in most critical need. <input type="checkbox"/> Coordination with local emergency medical services and 9-1-1 services for transport of suspected flu patients. <input type="checkbox"/> A method to specifically track admissions and discharges of patients with pandemic influenza <p>A plan has been developed to address the needs of specific patient populations that may be disproportionately affected during a pandemic or that may need services normally not provided by the hospital (e.g., pediatric and adult hospitals may need to extend services to other populations).</p> <p><i>Populations to consider</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Children and their families <input type="checkbox"/> Frail elderly and their caretakers <input type="checkbox"/> Young adults <input type="checkbox"/> Patients with chronic diseases (e.g., diabetes, hemodialysis) <input type="checkbox"/> Physically or mentally challenged/individuals with disabilities <input type="checkbox"/> Pregnant women <input type="checkbox"/> Immunocompromised children and adults <input type="checkbox"/> Others (specify) _____

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	<i>Issues to consider</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <input type="checkbox"/> Clinical expertise available <input type="checkbox"/> Need for specialized equipment, medical devices, and medications <input type="checkbox"/> Transportation <input type="checkbox"/> Mental health concerns <input type="checkbox"/> Need for social services <input type="checkbox"/> Translation services/medical interpreters <input type="checkbox"/> Cultural issues affecting behavioral response
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A plan has been developed for facility access during a pandemic that includes the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Criteria and protocols for modifying admission criteria on the basis of current bed capacity. <input type="checkbox"/> Criteria and protocols for closing the facility to new admissions and referrals to other facilities. <input type="checkbox"/> Criteria and protocols for limiting or restricting visitors to the hospital, including specific plans for communicating with patients' families about hospital rules for visiting hospitalized family members. <input type="checkbox"/> A contingency plan has been developed in the event of hospital quarantine in conjunction with local jurisdictions to ensure quarantine is enforced and necessary supplies, equipment, and basic necessities can be delivered and maintained.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A plan has been developed for facility security during a pandemic that includes the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Hospital security personnel input into procedures for enforcing facility access controls. <input type="checkbox"/> Plans for facilitating identification (e.g., special badges) of non-facility healthcare personnel and volunteers by security staff and facilitating their access to the facility when deployed. <input type="checkbox"/> The identity of key and essential personnel who would have access to the facility during a pandemic. <input type="checkbox"/> Recruitment and training of additional security personnel (e.g., local police, national guard) that is coordinated by the local health authority. <input type="checkbox"/> Plans for establishing a controlled, orderly, flow of patients within the facility.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>An infection control plan that includes the following is in place for managing hospital patients with pandemic influenza: (For the most recent information on pandemic influenza infection control recommendations for staff in a healthcare setting, see www.pandemicflu.gov/plan/healthcare/maskguidancehc.html.)</p> <ul style="list-style-type: none"> <input type="checkbox"/> An infection control policy⁶ that requires healthcare personnel to use at a minimum Standard Precautions (www.cdc.gov/ncidod/dhqp/gl_isolation_standard.html) and Droplet Precautions (i.e., mask for close contact) (www.cdc.gov/ncidod/dhqp/gl_isolation_droplet.html) with symptomatic patients. <input type="checkbox"/> A communication plan is developed to inform all hospital staff and employees about appropriate need for and use of infection control measures, social distancing practices, and personal protective equipment. <input type="checkbox"/> Use of respiratory protection (i.e., N-95 or higher-rated respirator as feasible) by personnel who are performing aerosol-generating procedures (e.g., bronchoscopy, endotracheal intubation, open suctioning of the respiratory tract). Use of N-95 respirators for other direct care activities involving patients with confirmed or suspected pandemic influenza is also prudent. If supplies of N-95 or higher-rated respirators are not available, surgical masks can provide benefits against large droplet exposures. (Additional guidance available at www.pandemicflu.gov/plan/healthcare/maskguidancehc.html.) <input type="checkbox"/> A strategy for implementing Respiratory Hygiene/Cough Etiquette throughout the hospital. (For information, see www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm.) <input type="checkbox"/> A plan for cohorting patients with known or suspected pandemic influenza in designated units or areas of the facility.

Refer to HHS recommendations for infection control for pandemic influenza for recent updates or changes in recommendations. (www.hhs.gov/pandemicflu/plan/sup4.html)

. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
			<input type="checkbox"/> Responsibility has been assigned for regularly monitoring www.pandemicflu.gov for updates/revisions of infection control recommendations and implementing recommended changes. Once a pandemic influenza virus is detected and its transmission characteristics are known, HHS/CDC will provide updated guidance on any need to modify infection control recommendations. Any changes to current recommendations will be published on www.pandemicflu.gov . Primary: _____ (Name) (Title) (Contact info) Backup: _____ (Name) (Title) (Contact info)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A plan for monitoring adherence to infection control procedures and for monitoring the effectiveness of the infection control plan. The facility's human resource and payment policies should be reviewed to identify and eliminate language that may encourage staff to work when ill or even when they are symptomatic with influenza-like illness and especially when they are within the period of communicability. An occupational health plan for addressing staff absences and other related occupational issues has been developed that includes the following: <input type="checkbox"/> A liberal/non-punitive sick leave policy that addresses the needs of ill and symptomatic personnel and facility staffing needs during various levels of a pandemic health crisis. The policy considers the following: <input type="checkbox"/> The handling of personnel who develop symptoms while at work. <input type="checkbox"/> Allowing and encouraging ill people to stay home until no longer infectious. <input type="checkbox"/> When personnel may return to work after having pandemic influenza. <input type="checkbox"/> Personnel who need to care for family members who become ill or affected by closed care centers. <input type="checkbox"/> Personnel who must stay home to care for children if schools and childcare centers close. <input type="checkbox"/> A plan to educate staff and volunteers to self-assess and report symptoms of pandemic influenza before reporting for duty; consider a phone triage system similar to that used for patients. <input type="checkbox"/> A list of mental/behavioral health, community and faith-based resources that will be available to provide counseling to personnel during a pandemic. <input type="checkbox"/> A system to track annual influenza vaccination of personnel. (Having a system in place to track annual vaccination will facilitate documentation and tracking of pandemic influenza vaccine in personnel.) <input type="checkbox"/> A plan for managing personnel who at the time of a pandemic are at increased risk for influenza complications ⁷ (e.g., pregnant women, immunocompromised workers, employees 65 yrs of age and over). A plan might include, for example, placing them on administrative leave, altering their work location, or other appropriate alternative.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A vaccine and antiviral use plan has been developed. (For useful information on this subject see www.hhs.gov/pandemicflu/plan/sup6.html and www.hhs.gov/pandemicflu/plan/sup7.html.) <input type="checkbox"/> CDC and state health department websites have been identified for obtaining the most current recommendations and guidance for the use, availability, access, and distribution of vaccines and antiviral medications during a pandemic. <input type="checkbox"/> Local and/or state health departments and the hospital have agreed upon the hospital's role, if any, in a large scale program to distribute vaccine and antivirals to the general population. <input type="checkbox"/> A list has been developed of key healthcare and other personnel who are essential for maintaining hospital operations during an influenza pandemic who would be the first priority for influenza vaccination. <input type="checkbox"/> A plan is in place for expediting administration of influenza vaccine to patients as recommended by the state health department. <input type="checkbox"/> A plan is in place for expediting provision of antiviral prophylaxis/treatment to patients as recommended by the state health department

Persons at increased risk for influenza complications may not be known prior to a pandemic. The subject, however, should be considered as part of the planning process.

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><input type="checkbox"/> A plan is in place for expediting administration of influenza vaccine to staff as recommended by the state health department.</p> <p><input type="checkbox"/> A plan is in place for expediting provision of antiviral prophylaxis/treatment to staff as recommended by the state health department.</p> <p><input type="checkbox"/> The vaccine/antiviral plan considers the following:</p> <p style="padding-left: 20px;"><input type="checkbox"/> How decisions on allocation of limited vaccine or antivirals will be made.</p> <p style="padding-left: 20px;"><input type="checkbox"/> How persons who receive antiviral prophylaxis/treatment will be followed for adverse events.</p> <p><input type="checkbox"/> Security issues have been identified and addressed in the influenza vaccine and antivirals use plans.</p> <p>Issues related to surge capacity during a pandemic have been addressed and discussed with the local and/or State health department and other pandemic influenza planning partners.</p> <p><i>Healthcare services</i></p> <p><input type="checkbox"/> Plans include strategies for maintaining the hospital's core missions and continuing to care for patients with chronic diseases (e.g., hemodialysis and infusion services), women giving birth, emergency services, and other types of required care unrelated to influenza.</p> <p><input type="checkbox"/> Criteria have been developed for determining when to cancel elective admissions and surgeries.</p> <p><input type="checkbox"/> Plans for shifting healthcare services away from the hospital, e.g., to home care or pre-designated alternative care facilities, have been discussed with local, state, tribal, or regional planning contacts.</p> <p><input type="checkbox"/> Ethical issues concerning how decisions will be made in the event healthcare services must be prioritized and allocated (e.g., decisions based on probability of survival) have been discussed.</p> <p><input type="checkbox"/> A procedure has been developed for communicating changes in hospital status to health authorities and the public.</p> <p><i>Staffing</i></p> <p><input type="checkbox"/> A contingency staffing plan has been developed that identifies the minimum staffing needs and prioritizes critical and non-essential services on the basis of essential facility operations.</p> <p><input type="checkbox"/> The contingency staffing plan considers how health professions students assigned to the facility will be utilized.</p> <p><input type="checkbox"/> A plan has been developed for utilizing non-facility volunteer staff, such as those who may be made available through a State Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP) to provide patient care when the hospital reaches a staffing crisis.</p> <p><input type="checkbox"/> The contingency staffing plan includes a strategy for training of non-facility volunteers (e.g., retired clinicians, trainees) and includes a procedure for rapid credentialing/privileging (consistent with the JCAHO disaster privileging standard MS.4.110) and badging for easy identification by security and access to the facility when deployed.</p> <p><input type="checkbox"/> The contingency staffing plan includes a strategy for cross-training and reassignment of personnel to support critical services.</p> <p><input type="checkbox"/> The contingency staffing plan considers alternative strategies for scheduling work shifts in order to enable personnel to work longer hours without becoming overtired.</p> <p><input type="checkbox"/> Responsibility has been assigned for conducting a daily assessment of staffing status and needs during an influenza pandemic. (Insert name, title and contact information of primary and backup persons.)</p> <p>Primary: _____ <small>(Name) (Title) (Contact info)</small></p> <p>Backup: _____ <small>(Name) (Title) (Contact info)</small></p> <p><input type="checkbox"/> Define criteria for declaring a "staffing crisis" that would enable the use of emergency staffing alternatives.</p>

3. Elements of an influenza pandemic plan. (continued)

Completed	In Progress	Not Started	
			<input type="checkbox"/> Strategies have been developed for supporting personnel whose family and/or personal responsibilities or other barriers prevent them from coming to work (e.g., strategies that take into account the principles of social distancing when schools are closed, care of elders, transportation, reasonable accommodation or state governmental mandate).
			<input type="checkbox"/> The staffing plan includes strategies for collaborating with local and regional planning and response groups to address widespread healthcare staffing shortages during a crisis, including the development of memorandums of advanced agreement (MAAs) and memorandums of understanding (MOUs) with regional and tribal healthcare partners.
			Consumable and durable medical equipment and supplies
			<input type="checkbox"/> Estimates have been made of the quantities of essential patient care materials and equipment (e.g., intravenous pumps and ventilators, pharmaceuticals, diagnostic testing materials) and personal protective equipment (e.g., masks, respirators, gowns, gloves, and hand hygiene products), that would be needed during an eight-week pandemic with subsequent eight-week pandemic waves.
			<input type="checkbox"/> Estimates have been shared with local, regional, and tribal planning groups to better plan stockpiling agreements.
			<input type="checkbox"/> A strategy has been developed for how priorities would be made in the event there is a need to allocate limited patient equipment (e.g., ventilators), pharmaceuticals (e.g., antiviral and antibacterial therapy), and other resources.
			<input type="checkbox"/> A plan has been developed to address related shortages of supplies (e.g., intravenous fluids, personal protective equipment), including strategies for using normal and alternative channels for procuring needed resources.
			<input type="checkbox"/> A list of alternative vendors for medical devices, pharmaceuticals, and contracted services (e.g., laundry, housekeeping, food services) has been developed.
			<input type="checkbox"/> A plan has been developed for maintaining critical laboratory testing capability in-house and priorities for tests that require shipping; back-up plans are in place for testing services that will remain in-house.
			<input type="checkbox"/> A process is in place to track and report to public health and other response partners, in real-time, information regarding the status of the hospital and resources available that would identify burden on the system.
			Bed capacity
			<input type="checkbox"/> Surge capacity plans include strategies to help increase hospital bed capacity.
			<input type="checkbox"/> Signed agreements have been established with area hospitals and long-term-care facilities to accept or receive appropriate non-influenza patients who need continued inpatient care to optimize utilization of acute care resources for seriously ill patients.
			<input type="checkbox"/> Facility space has been identified that could be adapted for use as expanded inpatient beds and this information has been provided to local, regional, and tribal planning contacts.
			<input type="checkbox"/> Plans are in place to increase physical bed capacity (staffed beds), including the equipment, personnel and pharmaceuticals needed to treat a patient with influenza (e.g., ventilators, oxygen, antivirals).
			<input type="checkbox"/> Logistical support has been discussed with local, state, tribal and regional planning contacts to determine the hospital's role in the set-up, staffing, and provision of supplies and in the operation of pre-designated alternate care facilities.
			Postmortem care
			<input type="checkbox"/> A contingency plan has been developed for managing an increased need for post mortem care and disposition of deceased patients.
			<input type="checkbox"/> An area in the facility that could be used as a temporary morgue has been identified.
			<input type="checkbox"/> Logistical support for the management of the deceased has been discussed with local, state, tribal, or regional planning contacts and local coroners/medical examiners.
			<input type="checkbox"/> Local morticians have been involved in planning discussions.
			<input type="checkbox"/> Mortality estimates have been used to anticipate and supply needed body bags and shroud packs.
			<input type="checkbox"/> Plans for expanding morgue capacity have been discussed with local, State, tribal and regional planning contacts.

Appendix G: Healthcare Facility Pandemic Influenza Planning Committee

Representatives for a hospital pandemic influenza planning committee may include:

- **Hospital staff**
 - Administrative/senior management (including fiscal officer)
 - Legal counsel/risk management
 - Infection control/hospital epidemiology
 - Hospital disaster/emergency coordinator
 - Engineering/physical plant/industrial hygiene/institutional safety
 - Nursing administration
 - Medical staff (including outpatient areas)
 - Intensive-care unit
 - Emergency departments
 - Laboratory services
 - Respiratory therapy
 - Nutrition and food services
 - Pharmacy
 - Environmental services (housekeeping, laundry)
 - Public relations
 - Security
 - Materials management
 - Education/training/staff development
 - Occupational health
 - Information technology
 - Diagnostic imaging
- **Adjunct staff members**
 - Infectious diseases
 - Mental health (psychiatry, psychology)
 - Union representatives
 - Human resources
 - Social work
 - Director of house staff/fellowship and other training programs
 - Critical care medicine
 - Pathology
- **State and local health departments**
 - Communicable disease division
 - Laboratory services
 - Medical examiners
- **Community partners**
 - Emergency medical technician (“first responders”)
 - Local law enforcement
 - Funeral service personnel
 - Community service agencies
 - Federally qualified health centers (FQHC)* and other healthcare safety net providers**

*A federally qualified health center (FQHC) is a type of provider defined by the Medicare and Medicaid statutes. FQHCs include health centers receiving grants under section 330 of the Public Health Service Act, certain tribal organizations, and clinics designated by HHS as FQHC Look-Alikes. More information may be found at: <http://www.cms.hhs.gov/providers/fqhc>.

**Health care safety net providers deliver care to low income and other vulnerable populations, including the uninsured and those covered by Medicaid. Many of these providers have either a legal mandate or an explicit policy to provide services regardless of a patient's ability to pay (<http://www.ahcprgov/data/safetynet/faq.htm>). Major safety net providers include public hospitals and community health centers, as well as, teaching and community hospitals and private physicians.

Appendix H: Emergency Patient Transfer Process

The HHS Hospital Preparedness Grant has facilitated the development of regional and statewide patient transfer processes. Consistent with the DHH Office of Public Health, the state has been divided into nine regions. The volunteer Designated Regional Coordinator (DRC) from each region has agreed to support the patient transfer process by identifying available resources in their region.

Each region has a Designated Regional Coordinator (and backup) to assist.

The process for patient transfer is as follows:

1) The Administrator/Medical Director on call from the hospital that has patients that need to be transferred **outside the region** should contact their Designated Regional Coordinator. The transferring hospital should have the following information available for their DRC:

Patient Name, Preliminary Diagnosis, Resources Needed, Physician Support, Type of Bed, Other Special Needs

Hospital Information, Hospital Name, Contact Person for transfer, Telephone Number, Transfer approved by, Whether staff will accompany patient(s)

- 2) The "transferring" DRC should contact "accepting" DRC with a referral request. The transferring DRC will provide patient and hospital information. Please note the HHS Coordinator is on-call and is available for back-up assistance.
- 3) The "accepting" DRC will contact hospitals in their region for available resources. The DRC will provide the potential accepting hospitals with limited patient and hospital information consistent with HIPPA guidelines until appropriate resources have been identified. If resources are not available, the "accepting" DRC will contact the "transferring" DRC to advise that another alternative region must be identified.
- 4) The "accepting" hospital will contact the "transferring" hospital regarding transfer resources. Transfer will be arranged per procedures of the transferring and receiving hospitals.
- 5) If transportation is needed, the Hospital DRC will contact the EMS DRC within their region for assistance.
- 6) The "accepting" DRC will notify the "transferring" DRC of the proposed referral arrangements.

Updated 2009

Appendix I: Patient Tracking Plan

PURPOSE:

In the event of a disaster, patients will be displaced from hospitals, nursing homes, and private homes. A mechanism is needed so that patients can be found by their loved ones once they have been transported to and from hospitals, nursing homes and medical special needs shelters. In an event of such a disaster, this patient-tracking plan will be implemented and executed.

CONCEPT OF OPERATIONS:

Once an evacuation is triggered, hospitals and nursing homes will provide a list of their patients via **At Risk Registry**. The list of patients should include all patients including those being evacuated through the federal system, those private moved using commercial resources, as well as, those sheltering in place. The **At Risk Registry** can be found on the LHA website at www.lhaonline.org or at www.dhh.louisiana.gov.

The Louisiana Hospital Association (LHA) will use the list of patients and their dispositions from the At Risk Registry to update Louisiana's Patient Tracking System. The LHA will work with the receiving hospitals to maintain current patient information via the identified mechanism.

PATIENT LOCATOR:

Louisiana's Patient Tracking System is accessible via the web at www.lhaonline.org under the "HHS Emergency Preparedness" section. The web address will also be disseminated to the media for the use by the general public to recover information about family members that have been evacuated.

Draft 4/2011

Appendix J: Influenza Self-care

Influenza Self-care

As with seasonal influenza, most cases of the new pandemic strain can be cared for and treated within the nursing home environment. The following is a guide to help determine if a resident has influenza, a guide to assist in the care of the resident within the nursing home, guidance for use of antiviral medications, and signs and symptoms that a resident may need to seek medical evaluation.

IS it the Flu or the common Cold?

Symptom	FLU (Influenza)	Cold (rhinoviruses)
Fever	USUAL, sudden onset 100 ⁰ F-104 ⁰ F Lasts 3-4 days	Rare
Headache	USUAL, and can be severe	Rare
Aches and Pains	USUAL and can be severe	Rare
Fatigue and Weakness	USUAL, and can last a week or more	Usually mild
Extreme Fatigue	USUAL, early onset can be sever	Rare
Nausea, Vomiting	in Children < 5 years	Rare
Runny, stuffy nose	Rare	USUAL
Sneezing	Rare	USUAL
Sore Throat	Rare	USUAL
Chest discomfort	USUAL, and can be severe	Sometimes, mild to Moderate
Complications	Respiratory failure; can worsen a current chronic condition; can be life-threatening	congestion; ear ache
Prevention	frequent hand washing, cover your Cough, influenza vaccine (if available)	Frequent hand washing; cover your cough

Caring for Someone with Influenza

During a severe influenza outbreak or pandemic, the media and healthcare providers will notify residents of Louisiana with instructions for obtaining medical advice and receiving medical care. The following information is a general guide and is not intended to take the place of medical advice from a healthcare provider.

Monitoring and Comforting

Keep a care log. Record the following information about the ill person at least once each day or more often as symptoms change, along with the date and time.

Check the patient's temperature

Check the patient's skin for color (pink, pale, bluish?) and rash

Record the quantity of fluids consumed each day and through the night

Record how many times the ill person urinates each day and the color of the urine (clear to light yellow, dark yellow, brown, or red)

Record all medications, dosages and times given

Keep the ill person as comfortable as possible. Rest is important.

Keep tissues and a trash bag for their disposal within reach of the patient.

Keep in mind that low-grade fever is a sign that the patient is fighting the infection. It will go away as the patient is getting better. Sponging with lukewarm (wrist temperature) water may lower the patient's temperature, but only during the period of sponging. **Do not sponge with alcohol.**

Watch for complications of influenza. Complications may be more common in individuals with health conditions such as diabetes, heart and lung problems, but may occur with anyone who has the flu.

Call your healthcare provider if the ill person:

Has difficulty breathing, fast breathing, or bluish color to the skin or lips

Begins coughing up blood

Shows signs of dehydration and cannot take enough fluids

Does not respond or communicate appropriately or appears confused

Complains of pain or pressure in the chest

Has convulsions (seizures)

Is getting worse again after appearing to improve

Is an infant younger than 2 months old with fever, poor feeding, urinating less than 3 times per day or other signs of illness

Medications:

Use ibuprofen (Motrin®) or acetaminophen (Tylenol®) or other measures, as recommended by your healthcare provider for fever, sore throat and general discomfort.

DO NOT use aspirin in children or teenagers (sixteen years old and younger) with influenza because it can cause Reye's syndrome, **a life-threatening illness.**

Fluids and Nutrition:

If the patient is **not** vomiting, offer small amounts of fluids frequently to prevent dehydration, even if he or she does not feel thirsty. If the ill person is not eating solid foods, include fluids that containing sugars and salts, such as broth or soups, sports drinks (diluted with half water), ginger ale and other sodas, but **not** diet drinks. Regular urination is a sign of good hydration.

Recommended minimum daily fluid intake, if not eating solid food:

Young children – 1.5 ounce per pound of body weight per day

Example: a 20 lb. child needs approximately 30 oz. fluid per day

Older children and adults – 1.5 to 2.5 quarts per day

If the patient is vomiting, do not give any fluid or food by mouth for at least 1 hour. Let the stomach rest. Next, offer a clear fluid, like water, in very small amounts. Start with 1 teaspoon to 1 tablespoon of clear fluid every 10 minutes. If the patient vomits, let the stomach rest again for an hour. Again, try to give small frequent amounts of clear fluid. When there is no vomiting, gradually increase the amount of fluid offered and use fluids that contain sugars and salts. After 6-8 hours of a liquid diet without vomiting, add solid food that is easy to digest, such as saltine crackers, light soups or broth, mashed potatoes or rice. Gradually return to a regular diet.

Babies who are breast-fed and vomiting can continue to nurse. Feed smaller amounts more often by breast-feeding on only one breast for 4-5 minutes every 30-60 minutes or by offering teaspoonfuls of Pedialyte® or Lytren® every 10 minutes.

Make sure the patient avoids drinking alcohol and using tobacco. Smoking should not be allowed in the home.

Watch for signs of dehydration:

Weakness or unresponsiveness

Decreased saliva/dry mouth and tongue

Skin tenting: check this by picking up layers of skin between your thumb and forefinger and gently pinching for 1 second. Normally, the skin will flatten out to its normal shape right away. If a patient is dehydrated, the skin will "tent" or take 2 or more seconds to flatten out. This is best checked on the belly skin of a child and on the upper chest of an adult.

Decreased output of urine, which becomes dark in color from concentration. Ill persons who are getting enough fluids should urinate at least every 8 hours.

If the ill person is dehydrated, give sips or spoonfuls of fluids frequently over a 4-hour period. Watch for an increase in urination, a lighter color of the urine and improvement in the patient's overall condition. Persons of any age who have become dehydrated need more fluids than the amounts given above for persons who are not dehydrated. These are signs that that the increased fluids are working.

Children under 5 years: Give 1 ounce per pound body weight over 4 hours (example: a 20lb child needs 20 oz. or 2-3 cups of liquid over 4 hours)

Older children and adults will need 1-2 quarts of fluids over the first 4 hours

Appendix K: EMSTAT All Hazards System Tracking

DRAFT



Pandemic Flu Data Tracking

**EMStat Data Elements, Assumptions,
Business Rules, and Page Layout**

Draft: April 6, 2011

Assumptions

1. Default reporting period is every 24 hours
 - a. Data from every reporting period is saved and available for reporting and trending over time
2. Age grouping:
 - a. Adults –17 years old and over
 - b. Children – Under 17 years old

Business Rules

1. Highlighted fields are mandatory. Entry is required to permit further data entry.
2. If Event type is labeled “Pan Flu”, display only fields tagged as “Pan Flu”. Otherwise, display all fields.
3. “Beds” can also include cots and stretchers in counts.
4. Bed Census data should be pre-populated from Hospital Profile. No redundant data entry.

Page 1: Incident Command Structure

Emergency Operations Center Location	
Emergency Operations Center Email	

Liaison Officer First Name		Operations Branch Manager First Name	
Liaison Officer Last Name		Operations Branch Manager Last Name	
Liaison Shift		OPS Shift	
Liaison Phone Number (Day)		OPS Phone Number	
Liaison Phone Number (Night)		OPS Fax Number	
Liaison Fax Number		OPS Email	
Liaison Email			
Incident Commander First Name		Finance Branch Manager First Name	
Incident Commander Last Name		Finance Branch Manager Last Name	
IC Shift		Finance Shift	
IC Phone Number		Finance Phone Number	
IC Fax Number		Finance Fax Number	
IC Email		Finance Email	
Planning Branch Manager First Name		Public Information Officer First Name	
Planning Branch Manager Last Name		Public Information Officer Last Name	
Planning Shift		Public Information Shift	
Planning Phone Number		Public Information Phone Number	
Planning Fax Number		Public Information Fax Number	
Planning Email		Public Information Email	
Logistics Branch Manager First Name		Security Officer First Name	
Logistics Branch Manager Last Name		Security Officer Last Name	
Logistics Shift		Security Shift	
Logistics Phone Number		Security Phone Number	
Logistics Fax Number		Security Fax Number	
Logistics Email		Security Email	
Pharmacy Contact Name			
Pharmacy Contact Phone Number			
Pharmacy Contact Fax Number			
Pharmacy Contact Email			

Page 2: Facility Census Information

Facility Secure		
Security Description		
Facility Problem Text		
Census Data	Adults	Children
Census		
Waiting in ED/Triage		
Total Treated for Influenza		
Total Treated for Pneumonia		
Total Treated for Any Reason		
Admissions		
Admitted for Influenza		
Admitted for Pneumonia		
Total Admitted for Any Reason		
Maximum Surge Capacity for PanFlu		

Page 3: Staffing Information

Staff Type	Can Provide	Urgently Needed
Doctors: Pulmonologists		
Doctors: Infectious Disease		
Doctors: Intensivists		
Nurses: Critical Care		
Nurses: Critical Care Pediatric		
Pharmacists		
Respiratory Therapists		
Other (Specify):		

Page 4: Detailed Census Information

Bed Type	Available		Needed	
	Adult	Pediatric	Adult	Pediatric
Beds: General Med/Surg				
Beds: Critical Care (Telemetry)				
Beds: OR Rooms				
Beds: ICU				
Beds: Negative Pressure Isolation				
Beds: Emergency				
Beds: Burn				
Beds: Psychiatry				
Beds: Dialysis				
Beds: Other (Specify):				

Page 5: Equipment Inventories

Equipment Type	Adult		Pediatric	
	Available	Needed	Available	Needed
Ventilators				
Disposable Nebulizers				
Other Respiratory Equipment (Filters, Circuits, etc.)				
Mobile Cardiac Monitors				
Pulse Oximetry				
Beds				
IV Pumps				
Other (Specify):				

Page 6: Pharmaceutical Inventories

Number of Treatment Regimens	Urgently Needed	
	Adult	Pediatric
Tamiflu		
Relenza		
Pandemic Influenza Vaccine		
Ciprofloxacin		
Levofloxacin		
Doxycycline		
Tetracycline		
Rifampin		
Streptomycin		
Gentamicin		
Penicillin		
Cephalosporins		
Vaccinia immune globulin		
Other (Specify)		
Comment		

Page 7: Other Patient Care Supply Inventories

Item Counts	Available	Urgently Needed
Disposable N95, Surgical And Procedure Masks		
Face Shields (disposable Or Reusable)		
Gowns		
Gloves		
Hand Hygiene Supplies		
O2 Masks, Suction Catheters, O2 Tubing		
Endotracheal Tubes, Laryngoscopes, Oropharyngeal Airways		
Central Line Kits, Iv Start Kits		
IV Fluids		
IV Fluids - Normal Saline - 1000ml		
IV Fluids - Normal Saline - 500ml		
IV Fluids - D5W - 1000ml		
IV Fluids - D5W - 500ml		
IV Fluids - Lactated Ringers - 1000ml		
IV Fluids - D5 1/2NS - 1000ml		
IV Fluids - Other (Specify)		
IV Fluids - Other		
Syringes		
Bandages/dressings		
Facial Tissues		
Extra Linens		
Bleach/Disinfectant		
Morgue Packs		
Body Bags		
Water		
Food Supply		
Other (Specify):		

Page 8: Decontamination and Mortality Data

Item	Adults	Children
Event Related Deaths		
Non-Event Related Deaths		
Number of Unidentified Males		
Number of Unidentified Females		
Number of Deceased Stored On Site		
Number of Deceased Stored Off Site		
	Available	Urgently Needed
Number of Refrigerated Storage Spaces		

Appendix L-1: Triage

The proposed triage system were developed to address needs of hospital EDs, as number of patients presenting to the facility begin to exceed usual capacity for the ED. The implementation and adoption of the proposed system is up to each facility, but is strongly encouraged by the Louisiana Pandemic Flu Clinical Forum where applicable. Refer to *Appendix J-1* for the flow diagram associated with the triage process.

To reduce the number worried-well and patients with minimal illness in the main ED of hospital, the triage process should begin with a Screening Triage at the perimeter of the campus. Refer to *Appendix J-2* for the form associated with this step. The first step of the screening triage is to have a hospital staff* quickly conduct a visual assessment to determine whether a patient looks critically ill or has an obvious injury/ailment (e.g. broken arm) that is not flu related. If so, the patient is directed to the main ED for standard triage. If the patient is not critically ill and may have a flu like illness, the hospital staff should go through the checklist of symptoms associated with the flu and listed on the screening triage tool. If the patient has one or more of the symptoms listed and again does not look critically ill, the patient is diverted to Rapid Triage. The destination of the patient whether Main ED or Rapid Triage is indicated at bottom of the screening form, initialed and timed by hospital staff, and is handed to the patient or care provider to take. Hospitals may choose to adopt duplicate copies of the screening triage form so one is kept for their own records at the screening triage station.

** Note: It would be ideal to have a nurse or an EMT perform the screening triage but in a worst case scenario and with extremely limited staffing or where the state would operate under altered standards, a non-medical staff (i.e. security guard/volunteer) may be considered for conducting the screening triage.*

For patients that are diverted to the main ED, usual operating procedures for triage, assessment, and evaluation may be followed along with use of that institution's regular forms. For patients that display flu-like symptoms at the screening triage and are sent to the rapid triage, they are to be greeted by a Rapid Triage Nurse or other Clinical professional who completes the left hand side of the form presented in *Appendix J-3*, titled "Pandemic Flu Triage Template."

The goal of the rapid triage professional is to quickly evaluate and separate patients who have minor flu illnesses and thus can wait (potentially hours) in a Flu Holding Area from those whose flu symptoms need more immediate attention and need to be directed to the main ED. To assist as a guide, the "Pandemic Flu Triage Template" includes concerning abnormal findings (made bold-faced) both in the history and physical exam of the patient. If one or several of these items are noted in the patient case, it may signify that a patient cannot wait very long for care and thus should be diverted to the main ED rather than the flu holding area.

For other patients that come to the rapid triage nurse, the triage nurse or professional may note that the patient does not actually exhibit influenza-like illness (perhaps mistakenly sent by screening triage to rapid triage rather than main ED) or based on her exam she notes that what may have sounded like a flu symptom at screening triage may be a result of another medical condition. If so, the nurse would redirect these patients to the main ED and would note this disposition at the end of her section on the Pandemic Flu Triage Template.

The decision as to where a patient may be sent (either to the flu holding area or Main ED) may reflect the level of care provided at each site, the proximity of the flu holding area to other acute patient care areas of the hospital, or other institution specific variables. Certain hospitals may set-up a flu holding area in their auditorium where no clinical care can be provided, while others may have a dedicated patient care area where basic monitoring can be done, labs can be obtained, or other medical procedures can be accommodated. Accordingly, the final distribution of patients into the flu holding area vs. main ED may differ for each hospital.

Depending on the staffing at your flu holding area, you may have additional staff, an LPN, medical students, or other paraprofessionals fill in other pertinent medical information for the patient as denoted in the green box at the bottom left hand side of the form. This includes, medications, allergies, LMP, social history. This information was not included in the triage nurse's assessment to streamline his/her activity but is amenable change.

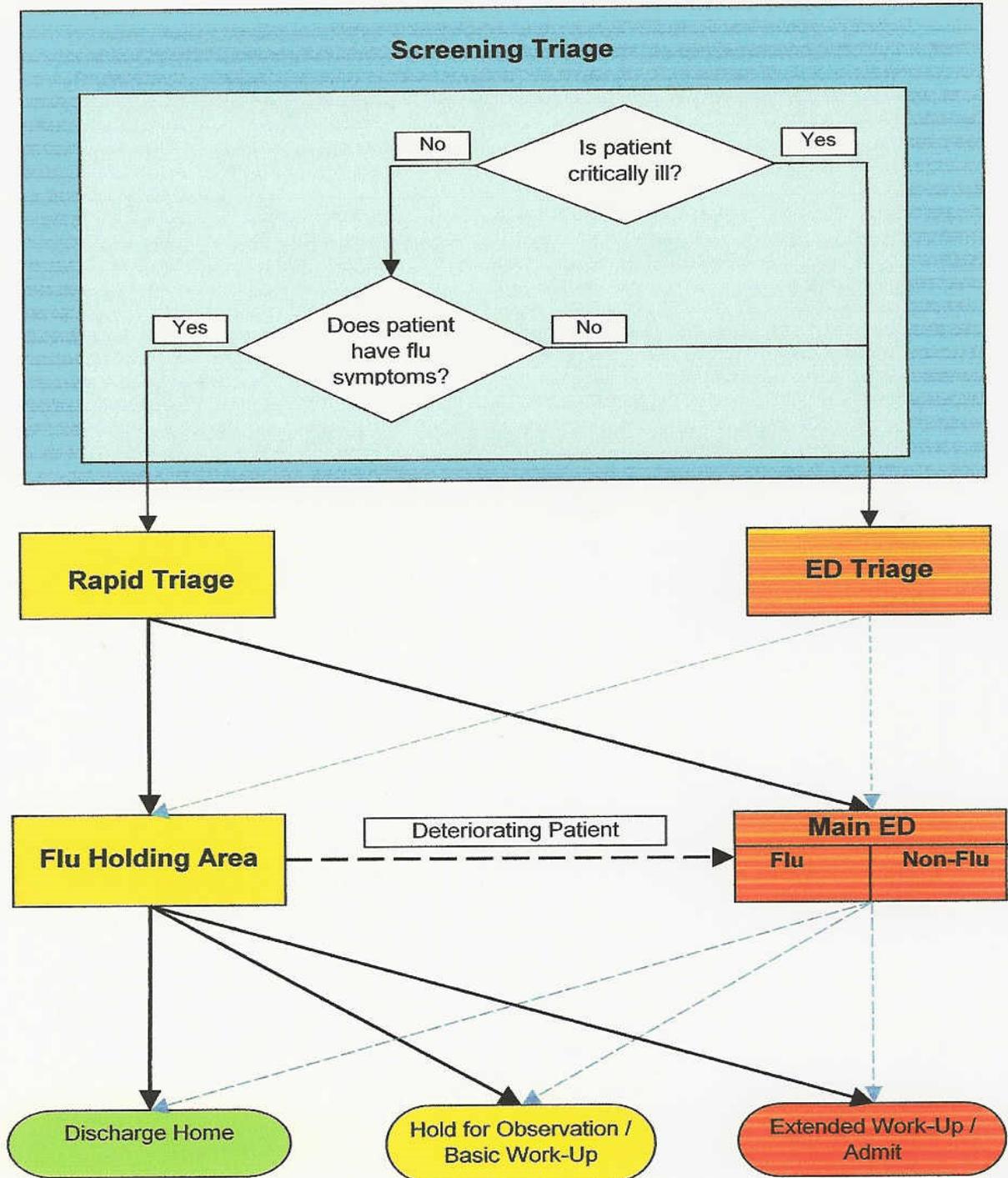
Once the rapid triage nurse or professional finishes her section and notes whether the patient goes to a flu holding area or main ED, you can consider the triage process finished. The form used by the rapid triage nurse can be used further to document care for the patients diverted to the flu holding area. This form is not recommended to be used for patients that are directed to the Main ED, unless the institution reviews/changes this form and finds it acceptable to do so.

The flu holding area whether a large waiting room or another designated patient care area in the hospital should be ideally in close proximity to the main ED. While it is important to keep these two areas clearly separated and delineated to avoid patient mixing and minimize contact of flu patients with non-flu patients, this will accommodate quick transfers for any patients rapidly declining in status or requiring further supplies, material, etc. from the main ED.

The flu holding area would again house patients requiring minimal/low intensity clinical supervision and who may need to wait for some time before they are evaluated by a physician, APRN, or other advanced degree clinician. The clinician when available can continue completing the right hand side of the Pandemic Flu Triage Template. This form was designed by the Pandemic Flu Clinical Forum to meet the requirements of a "medical screening exam" to satisfy EMTALA requirements. Therefore, once complete, the advanced practitioner can discharge the patient if he or she chooses to do so. If the patient is not discharged, the patient may be kept for further observation and evaluation in the flu holding area or the main ED.

Appendix L-2: Triage Algorithm

The algorithm below was designed by the Louisiana Pandemic Flu Clinical Forum Triage Subcommittee to serve as a guide for mass triage by Hospital EDs during a potential pandemic flu event.



Appendix L-3: Pandemic Flu Screening Triage Form

Does the patient look critically ill or have obvious injuries?

- Yes** → Send to Main ED
 No → Continue Form Below

Patient Name: _____ Date: ____/____/____
 Time: ____:____

*Does the patient have any of the following problems? Check all that apply.
 Send to Rapid Triage if one or more boxes (excluding "other") are checked.*

- Fever
- Cough
- Sore Throat
- Shortness of Breath
- Runny nose
- Congestion/sinus aches
- Muscle Aches
- Exposure to anyone with the flu
- Other: _____

- Report to Rapid Triage
- Report to Main ED Triage

Screener Initials: _____

**The above document was produced in conjunction with the Louisiana Pandemic Flu Clinical Forum Triage Subcommittee.*

Appendix L-4: Pandemic Flu Triage Template Form

Pandemic Flu Triage Template	
<div style="text-align: center; border: 1px solid black; padding: 5px; margin-bottom: 10px;">Rapid Triage (Nurse)</div> <p>Triage Date: _____ Triage Time: _____</p> <p>Name: _____</p> <p>DOB: _____ Age: _____ M / F _____</p> <p>Chief Complaint: _____</p> <p>HPI: _____</p> <p>Vitals: BP _____ P _____ RR _____ Temp _____ SaO₂ _____</p> <p>ROS: Non-Remarkable Mod-Severe Dyspnea Chest Pain (> 1 min) Hemoptysis Severe Headache Intractable Vomiting Intractable Diarrhea Syncope Change in Mental Status Other: _____</p> <p>PMH: None HIV Steroids Recent chemo Other: _____</p> <p>PE: General: NAD Mod-Severe Distress Toxic Appearance Abnormal ENT: Normal Wheezing (Mod-Severe) Resp: Clear Rales Decreased Air Flow Retractions/Nasal Flaring Heart: Normal Irregular Rhythm (new) Irregular Rate Murmur</p> <p>Disposition <input type="checkbox"/> Flu Holding Area <input type="checkbox"/> Main ED</p> <p>Provider Signature: _____</p> <hr/> <p>Meds: _____ Allergies: _____</p> <p>LMP: _____ Pregnant (Y/N) If yes, 2nd or 3rd trimester (Y/N)</p> <p>Social History: _____</p>	<div style="text-align: center; border: 1px solid black; padding: 5px; margin-bottom: 10px;">Medical Screening (Physician/APRN/PA)</div> <p>Date: _____ Time: _____ <input type="checkbox"/> Reviewed Triage Note</p> <p>Chief Complaint: _____</p> <p>HPI: _____</p> <p>Associated Signs and Symptoms: <i>Non-Remarkable</i> Cough (productive / nonproductive) Fever Chills Sore Throat Dyspnea Congestion Rhinorrhea Wheezing Ear Pain Myalgia/Arthralgia Nausea/Vomiting</p> <p>ROS: <i>Non-Remarkable</i> Headache Syncope Blurry Vision Diarrhea Abdominal Pain Chest Pain Back Pain Urinary frequency/urgency</p> <p>PMH: <i>Non-Remarkable</i> CVD CHF Asthma/COPD Steroids Recent Chemo Malignancy Diabetes HIV ESRD Splnectomy Age>70 or <6 mo Prematurity</p> <p>PE: Vitals: BP _____ P _____ RR _____ Temp _____ SaO₂ _____ General: NAD Mild /Mod/Sev. Distres Alert Lethargic Oriented Disoriented ENT: Ears Normal Air-fluid level Nose Normal Rhinorrhea Purulent Nasal Discharg Nasal Flaring Throat Normal Mucus Membranes Dry Tonsillar Exudate Pharyngeal Erythema Resp: Normal Wheezing/Rhonchi/ Ral Decreased breath sound Dullness to Percussion Retractions Heart: Regular Rhythm Irregular Rhythm Regular Rate Irregular Rate No Murmur Murmur Present</p> <p>Other: _____</p> <p>Clinical Impression: _____</p> <p>Condition: _____</p> <p>Orders: _____</p> <p>_____</p> <p>_____</p> <p>Disposition: <input type="checkbox"/> Discharge <input type="checkbox"/> Flu Holding Area <input type="checkbox"/> Main I</p> <p>Provider Signature _____ Time: _____</p>

Appendix M: Examples of Consumable and Durable Supply Needs

- **Durable resources:**

- Ventilators
- Respiratory care equipment
- Beds
- IV pumps

- **Consumable resources**

- **PPE Supplies**

- Disposable N95, surgical and procedure masks
- Face shields (disposable or reusable)
- Gowns
- Gloves
- Hand hygiene supplies (antimicrobial soap and alcohol-based, waterless hand hygiene products)

- **Patient Care Supplies**

- oxygen tanks, oxygen masks, suction catheters, O2 tubing
- endotracheal tubes, laryngoscope, oropharyngeal airways
- Central line kits, IV start kits
- IV fluids
 - Normal saline – 1000ml
 - Normal saline – 500ml
 - D5W – 1000ml
 - D5W – 5000ml
 - Lactated Ringers – 1000ml
 - D5 1/2NS – 1000ml
 - other
- syringes
- bandages/dressings
- facial tissues
- extra linens

- **Other Supplies**

- bleach
- morgue packs
- water
- food – 6-8 week supply

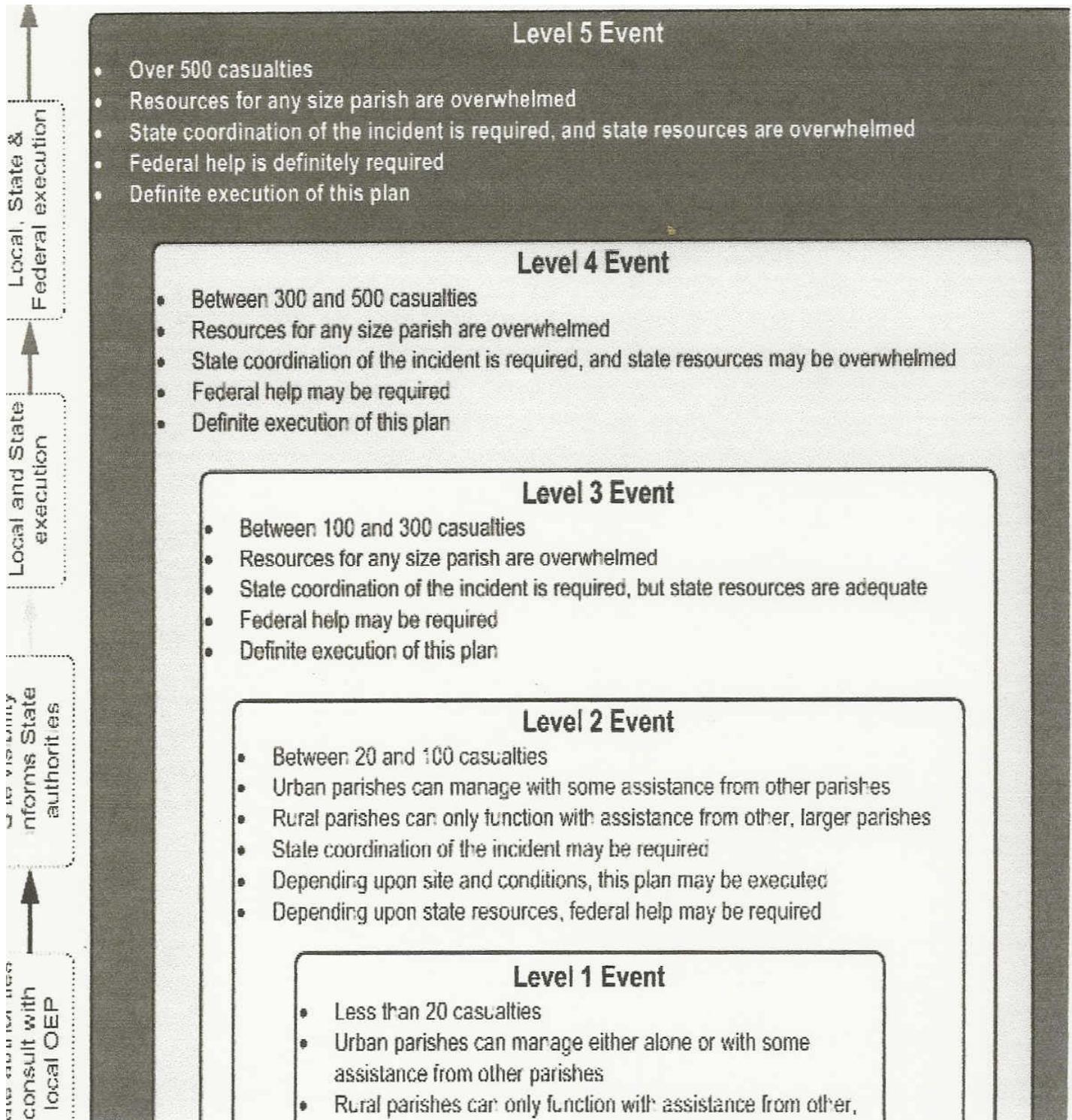
Appendix N: DHH State Hospital Crisis Standard of Care Guidelines in Disasters

The current Plan can be found at the following websites:

1. www.lhaonline.org
2. www.louisianaep.com

It is also available through the ESF-8 portal (under Public PanFlu Documents) at <https://esf8.dhh.la.gov/documentportal/Private/Esf8PublicDocumentList.aspx?id=6d58b051-cf7f-43a6-93ea-1526e63f4099> or <https://esf8.dhh.la.gov/esf8> portal and clicking on the Public Documents link at the bottom right of the page.

Appendix O: Level 5 Event Assumptions



Appendix P: State of Louisiana DHH Mass Fatality Framework

The DHH Mass Fatality Plan can be found at the following websites:

1. www.lhaonline.org (under the Emergency Preparedness Section)
2. www.louisianaep.com.