

**LSUHSC-S
Pandemic Influenza Plan**

Table of Content

Activation	6
Admission Procedure	17
Alternate Care Sites	24
Antiviral Drugs and Antibiotics	20
Background	6
Ethics	25
Clinical Evaluation	17
Communication	14-15
Coordination	5
Definitions	6, 7,8
Education, Training	15-16
Goals	3
Introduction	3
Influenza Rapid Screening Tool	13
Isolation Rooms – Attachment 1	27-30
Isolation Plan 9K--- Attachment 2	31
Laboratory	23
Leadership and Authority	4
Managing Ill Workers	19
Morgue	24
Occupational Health	18
Pandemic Periods	9
Post-exposure Follow-up	19
Post-Mortem Care	25
Purpose	3
Supplies	31
Security / Access	18
Surge Capacity – Beds	22
Surge Capacity – Materials	22
Surge Capacity – Staffing	21
Surveillance	10,11
Triage	17
Vaccination	14
Vaccine	20
Ventilators and Respiratory Therapy	21

LOUISIANA STATE UNIVERSITY HEALTH SCIENCE CENTER
PANDEMIC INFLUENZA PLAN

Purpose

To provide a response plan for LSUHSC-S in presence of a novel influenza virus in Northwest Louisiana that has the potential to result in a pandemic event.

Policy

By activation of this policy, the following objectives will be activated to respond in a pandemic event;

1. Describe the pandemic threat and its potential impact in Louisiana.
2. Describe response coordination between hospitals and governmental agencies.
3. Develop a leadership and authority structure that supports the plan and provides for timely activation and decision making.
4. Develop and describe a plan for pandemic influenza disease surveillance and tracking during an outbreak.
5. Describe a plan for internal and external hospital communication throughout the pandemic event.
6. Present a strategy for pandemic flu response education and training.
7. Describe a plan to triage, isolate, and treat infectious patients.
8. Identify clinical evaluation and admission procedure alternatives.
9. Be able to admit a large number of infectious patients while protecting other (non-infected) patients.
10. Designate plans for facility access and increased security needs during a pandemic response.

11. Demonstrate a strategy for addressing associate health needs during a pandemic including vaccination, flu prevention, clinical and psychological needs.
12. Describe plans for pharmaceutical needs during an influenza pandemic response.
13. Describe strategies for managing increased ventilator and respiratory therapy needs.
14. Present plans for alternate staffing methods during patient surges and staffing shortages.
15. Demonstrate plans for increased hospital bed capacity during patient surge.
16. Describe plans for material management during the pandemic response.
17. List strategies for laboratory and mortuary management during the pandemic response.
18. Describe alternate care locations within the hospital.
19. Describe how ethical issues will be addressed.

III. Leadership and Authority

- A. Given the significant burden of a Pandemic Event, the LSUHSC-S Medical Director, and Hospital Administrator will lead the planning, response, mitigation and recovery efforts to a pandemic event.
- B. The Louisiana Department of Health and Hospitals/Office of Public Health and the Louisiana State Health Officer is charged with state leadership in a pandemic response (Louisiana Office of Public Health, Pandemic Influenza Plan 2006 Draft).
- C. LSUHSC-S leadership response will be compliant with National Incident Management System (NIMS) guidelines and reflected in

Hospital Emergency Incident Command System (HEICS)

implementation, designation of an incident commander (senior leadership or designee), and necessary incident command positions/functions.

- D. The HEICS methodology will be used to coordinate/implement decisions regarding bed closures, procedure cancellations, patient placement, and allocation of scarce medical resources including medications, vaccines, antiviral, durable and nondurable medical equipment.

IV. Coordination

- A. A pandemic influenza occurrence will require an immediate, coordinated response by LSUHSC-S including coordination with local, state and federal levels of government.
- B. Coordination will also occur within the LSU System facilities.
- C. Coordination within Shreveport – Bossier and Louisiana Region 7 will be with the guidance of Louisiana Region 7 Office of Public Health, the Caddo-Bossier Office of Homeland Security and Emergency Preparedness/Metropolitan Medical Response System, and HHS Louisiana Region 7 Hospitals via the HHS-Louisiana Hospital Emergency Preparedness infrastructure.
- D. On the state level LSUHSC-S will coordinate with Louisiana Department of Health and Hospitals, Louisiana Office of Public Health, and Louisiana Hospital Association through the hospital's

HHS Louisiana Hospital Coordinator and Region 7, Designated Regional Coordinator (DRC).

- E. Coordination will be response and will follow National Incident Management System (NIMS) guidelines.

V. Activation

- A. The decision to activate the Pandemic Response Plan, escalate, or de-escalate the response level will be made by LSUHSC-S incident commander (see “Authority”).
- B. This decision will be based on information provided by LSUHSC-S Infectious Disease Department Chairmen, LSUHSC-S Infection Control Practitioner, Louisiana Department of Health and Hospitals/Office of Public Health; WHO, DHHS, CDC, and DHS.

VI. Pandemic Influenza - Background

A. Incubation Period

The incubation period for human influenza virus is usually 1 to 3 days (range 1 -7 days). The incubation period for novel viruses may differ, and therefore, current CDC information on the specific novel virus should be referenced.

B. Route of Transmission

Transmission of human influenza is predominately by large respiratory droplets (>5 microns nuclei) and to a lesser degree by the fine droplet nuclei that are expelled from the respiratory tract during coughing, sneezing and even talking. Transmission also occurs

through direct contact with contaminated respiratory secretions followed by touching the nose or mouth. Recent outbreaks of influenza A (H1N1) have not suggested a role for airborne transmission of disease. However, since the transmission routes of novel viruses may be unknown until adequate time has elapsed for study of transmission characteristics, caution should be used, and current CDC recommendations for the novel virus in question should be referenced for guidance.

VII. Definitions

Antiviral medication - A medication that destroys or inhibits the growth and reproduction of viruses.

Confirmed case – Refers to a laboratory-confirmed influenza virus infection is a person with influenza-like illness. A diagnosis of influenza is usually made on a clinical basis, particularly if influenza has been reported in the community.

CDC- United States Center for Disease Control

Contact – A person who has been exposed to an influenza case in some way during the infectious period.

Contact – close – A person who has had direct exposure to respiratory secretions or body fluids or a person with confirmed influenza, or has touched or talked to a person with confirmed influenza within 3 feet. For instance, a person who has cared for or lived with an influenza patient is considered a close contact.

Contact – household – A type of close contact where direct exposure occurs through such additional actions as kissing or hugging, sharing eating or drinking utensils.

Working in the same building, walking by, or sitting across a room from a person with influenza is NOT considered a direct exposure and therefore is considered a contact only.

DRC – Designated Regional Coordinator (A HHS designation)

Isolation – Refers to the separation and restriction of movement of people with a specific communicable disease to contain the spread of that illness to susceptible people. People in isolation may be **cared** for in their homes, in hospitals, at designated health care facilities, or other dedicated facilities.

NIMS – National Incident Management System is the federal disaster management methodology and guidance directed to federal, state, local and certain private agencies for implementation.

Quarantine – the separation and restriction of movement of well people who may have been exposed to an infectious agent and may be infected but are not yet ill. Quarantine usually occurs in the home but can be in a dedicated facility or hospital. The term “quarantine” also can be applied to restrictions of movement into or out of buildings, other structures, and public conveyances. In addition, specific areas or communities may be quarantined.

HHS – Health Human Services Administration

Incubation period – Refers to the time from exposure to an infectious disease to symptom onset.

Influenza-like illness (ILI) – Describes a combination of symptoms that include 1) a fever $\geq 100^{\circ}$ F and 2) cough and/or sore throat in the absence of a known cause.

Influenza pandemic – A worldwide outbreak of a novel influenza virus causing sudden, pervasive illness that can severely affect otherwise healthy individuals in all age groups. Influenza pandemics occur infrequently and at irregular intervals and have the potential for substantial impact resulting in increased morbidity and mortality, significant social disruption, and severe economic cost.

OPH- Louisiana Office of Public Health

World Health Organization – Pandemic Periods Defined

Period	Phase	Definition	Overarching Public Health Goals
<i>Inter-pandemic Period</i>	Phase 1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.	Strengthen influenza pandemic preparedness at the global, regional, national and sub-national levels.
	Phase 2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.	Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.
Pandemic Alert Period	Phase 3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.
	<i>Phase 4</i>	<i>Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.</i>	Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.
	Phase 5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.
Pandemic Period	Phase 6	Pandemic: increased and sustained transmission in general population	Minimize the impact of the pandemic.

VII. Surveillance

Phases 1, 2 and 3

- A. Follow Standard Precautions for all persons entering facility.
- B. Reference Infection Control Isolation Manual IC 1.2
http://www.sh.lsuhsu.edu/policies/policy_manuals_via_ms_word/infection/IC%20%201.2.pdf
- C. Implement Droplet Precautions for all persons having respiratory symptoms of coughing and sneezing, running nose and/or fever.
 - 1. Have tissue or surgical masks available for persons to use to cover their cough
 - 2. Keep alcohol hand sanitizer in easy access
 - 3. Have persons with respiratory or flu-like symptoms sit as far away as possible from other persons in the waiting area.
 - 4. Use negative pressure rooms, if possible for waiting area.

Phases 4 and 5

- A. Follow action steps outlined in Phases 1, 2 and 3.
- B. In addition place signs (in appropriate languages) outside the Emergency Department (ED)/ outpatient facilities requesting that persons with certain travel history in areas where Pandemic influenza has been identified coupled with an influenza-like illness identify themselves to the Triage Nurse. (or e.g., security, admitting staff)
 - 1. Refer to current CDC recommendations regarding the identified novel virus. Follow CDC guidelines, realizing that as new data is accumulated and analyzed, guidance may change, therefore it is important to stay closely informed. At a minimum, guidance

provided should be followed, and updated as directed by Infection Control, Nursing, and Hospital Administration.

2. A mask should be placed on the patient prior to them entering the ED or Clinic
3. Patient will be placed in a designated waiting area-isolated from general patient population. (example ED –pediatric negative air isolation waiting room)
4. Persons accompanying the patient for evaluation should be screened for symptoms of the novel virus ideally prior to entering the facility. If symptomatic, they should be masked and placed in the designated waiting area.
5. Post visual alerts will recommend “respiratory hygiene” precautions.

C. Initiate active screening of symptomatic patients for either a personal or contact history of travel to geographic area with novel virus activity.

D. Decisions regarding the need for escalating infection control measures will be based on novel virus activity and transmission risks.

1. It is anticipated that neither immunization nor chemoprophylaxis will be available in the early stages of a pandemic and perhaps not even available in later stages, necessitating an emphasis on infection prevention and control practices.
2. Strict adherence to hand hygiene recommendations is the cornerstone of infection prevention and may be the only preventative measure available during a pandemic.

Phase 6 Pandemic Period

In addition to steps in Phases 1 – 5 begin the following:

- A.** Begin active screening of patients entering the facility (direct questioning of persons with respiratory symptoms and temperature monitoring).
- B.** Conduct Influenza A screening on all patients hospitalized with pneumonia who in the 10 days before illness onset, traveled to or had close contact with other ill persons who recently traveled to a previously affected novel influenza A area. [See screening tool below]
- C.** Activate essential and non-essential staff as needed.
- D.** Consult the LSUHSC-S Virology Department for instructions on specimen collection. DO NOT refer to outside sources for specimen collection information.

Influenza Virus Rapid Screening Tool

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
*1. Within the last 24 hours, have you had any of the following symptoms:			
a. Cough?			
b. Runny nose?			
c. Sore throat?			
d. Chest tightness and/or shortness of breath?			
e. Fever ($\geq 100^{\circ}\text{F}$)/chills?			
f. Muscle/joint pain?			
*2. Have you been in contact with any ill persons with the above symptoms within the last seven (7) days			
*3. Within the last 7 days have you traveled or been in contact with someone who traveled to an area listed by CDC for travel advisory.			
* If yes to any of these questions, initiate Enhanced Droplet / Contact Precautions (surgical mask on patient) and place in negative air-pressure isolation room if available; staff to wear N95 when entering room			
4. Have you had your influenza vaccination this year?			
5. Are you currently taking any antiviral medication for influenza?			Date medication started _____ Name of medication _____

PERSONAL CONTACT INFORMATION:

Name: _____
 Current Resident Address: _____
 City/State: _____

Telephone Contact Number: Home (____) _____ Business (____) _____
 Cell/Mobile (____) _____

Name of Nearest Relative _____
 Contact # of Nearest Relative _____
 Address of Nearest Relative _____

Temperature: _____ **Date/Time:** _____

DISPOSITION:

WORK (if associate): _____ HOME: _____
 Admit to HOSPITAL: _____ UNIT: _____ Date/Time: _____

(Signature of staff completing or verifying the form)

<p>Fax screening form to Infection Control at Fax: 675-5800 and Send a copy of the screening form with the specimen to the Virology Lab.</p>	<p>.Virology dept.</p>
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<p>Patient Identification MR#</p>
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VIII. Communication

A. External Communication

1. Responsibility for external communication regarding pandemic will be assigned to the Public Information Officer, with input from Medical Director, Infection Control, and ER Director.
1. Identify points of contact among local media representatives, public officials and community leaders.
2. Establish the method, frequency and scope of external communications.
3. Determine how public inquires will be handled, the types of information that will be provided by LSUHSC-S and the types of inquiries that will be referred to the Office of Public Health.
4. Communications between local and regional healthcare facilities and support agencies will be managed by the HHS Region 7 DRC, Hospital Administration, and Safety Officer. Ongoing communication with this group will include:
 - a. Testing Procedures/protocols
 - b. Staffing needs
 - c. Bed capacity
 - d. Durable and consumable medical equipment and device needs
 - e. Supplies of influenza vaccine and antiviral drugs
5. Safety Officer will monitor and report necessary information to web-based EMSsystem, Caddo/Bossier WEBEOC, and DHH .

B. Internal Communication

1. Laboratory Services will notify Infection Control immediately of a laboratory confirmed case of a novel influenza virus.
2. Communication/guidance received from DHH, OPH, and CDC will be distributed to necessary staff by Hospital Administration.
3. Infection Control will notify Hospital Administration, Infectious Disease Physician and Emergency Preparedness Coordinator.
4. Communication with clinicians involved in any case of novel influenza virus will follow the post exposure plan listed below.
5. During a pandemic, key stakeholders will remain updated at least weekly on pandemic status. Updates to include:
 - a. Number of cases
 - b. Severity
 - c. Trends (beginning, increasing numbers, peak, decreasing numbers, end)
 - d. Prevention strategies being used
 - e. Allocation of resources
6. Formal report will be presented to the Quality Leadership Team monthly during the pandemic event and to Campus Safety Committee.

X. Education and Training

- A. Health-care personnel who would be involved in caring for a patient with a novel strain of influenza A will receive training in modes of transmission, appropriate infection control precautions and exposure control.
- B. Standard Precautions is to be routinely practiced by all health-care personnel.
- C. CDC recommendations are posted on the cdc.gov website, and may change as data is analyzed. Current CDC recommendations regarding a specific novel virus should be referenced and followed, with changes made as information is updated. Until CDC guidance is obtained the following guidance is given:

D. During the care of a patient with suspected or confirmed novel influenza

1. Upon entry into the patient's room, wear N-95 mask, gloves, gown, and eye protection for all contacts unless otherwise notified by Infection Control.
2. Change gloves and gowns after each patient encounter and perform hand hygiene.
3. Decontaminate hands before and after touching the patient, after touching the patient's equipment or furnishings, or after touching the patient's respiratory secretions, whether or not gloves are worn.
4. When hands are visibly soiled or contaminated with respiratory secretions, wash hands with soap and water.
5. If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands in clinical situations. Alternatively, wash hands with soap and water.

E. Use airborne respiratory precautions for patients with suspected novel virus, until otherwise notified by Infection Control.

1. In addition to Standard Precautions, observe Airborne Precautions during the care of a patient with suspected or confirmed novel influenza.
2. Place patient into a private room. If a private room is not available, place (cohort) suspected influenza patients with other patients suspected of having influenza; cohort confirmed influenza patients with other patients confirmed to have influenza. A negative pressure room is preferred, unless otherwise notified by Infection Control.
3. Wear an N-95 mask upon entry into the patient's room and upon entering the patient's room. Remove the mask when leaving the patient's room and dispose of the mask in a waste container.
4. If patient movement or transport is necessary, have the patient wear a surgical mask.

- E. Clinicians, intake and triage staff will be regularly updated on the status of the pandemic locally, nationally, and internationally (via email, memoranda, or meetings).
 - a. Intake and triage staff will be trained on how to assess risks for the pandemic strain of influenza and use any applicable tools (thermometers, signs/symptoms of pandemic influenza) to screen patients.
 - b. The pre-identified pandemic influenza coordinator or designee will develop a strategy to assign responsibility.

XI. Triage, Clinical Evaluation and Admission Procedures

A. Triage

1. Phone triage and 'in person' triage screening tool will be the same.
 2. Triage station will be placed outside the facility to screen patients before they enter the Emergency Department.
 3. Priority triage of persons with respiratory symptoms - ED
 4. Telephone screening of patients with appointments - Clinics
 5. Patients with a suspected strain of pandemic influenza requiring medical evaluation will be seen in designated staging locations.
 6. If possible, the designated area will be notified prior to the patient's arrival.
 7. The patient will be requested to wear a surgical mask.
 8. Persons accompanying the patient for evaluation will be screened for symptoms of pandemic influenza ideally prior to entering the facility.
- A. Influenza Virus Rapid Screening Form will be completed and faxed to Infection Control. Also, a copy will be sent with specimen collection to Viral Laboratory.
 - B. Screenings will be conducted in all clinics, MD offices, ED, intake, etc.
 - C. Net Access system will be utilized for medical record documentation.
 - D. Passive screening will be initiated with any of the signs and symptoms.

- E. Active screening will begin with first confirmed case of human to human contact during Pandemic Period
- F. Admitting process for direct admissions as well as admissions from ED will be as they are presently.

XII. Facility Security/Access

A. Hospital Access controls

When pandemic influenza is present in the community, preventing patients with an unrecognized pandemic strain of influenza from entering the facility will be essential. Restricting access to the facility will assist in the implementation of effective surveillance and screening. Building lock-down procedure may be activated.

B. Security Control

Upon direction by Hospital Administration, UPD will restrict the access to facility entrances on campus and also restrict vehicle access to driveway entrances.

C. Medical Staff

The hospital may limit hospital admissions, transfers, and discharges (in accordance with local/state recommendations and regulations) in the event that hospital transmission of a pandemic strain of influenza occurs.

XIII. Occupational Health

A. Vaccination

1. Annual seasonal influenza vaccination will be offered to all hospital staff, licensed independent practitioners and volunteers.
2. 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 will be followed.
3. Each employee is provided with a copy of vaccination documentation and it should be kept in their departmental personnel file.

4. It is recommended that all health care workers who meet the following criteria be vaccinated with the current WHO recommended influenza vaccine as soon as possible:
 - a. expected to have contact with a novel influenza A virus or a patient infected with novel virus, or
 - b. have contact with an environment that is likely to be contaminated with the influenza virus

B. Managing ill workers

1. LSUHSC-S will follow the systems approach to managing workers during a Pandemic as outlined in the “Surveillance” Section above.
2. Supervisors should monitor their employees for signs and symptoms of influenza before they start their assigned duties.
3. Develop policies for managing healthcare workers with respiratory symptoms that take into account HHS recommendations for healthcare workers with influenza (see link below)
www.cdc.gov/ncidod/hip/GUIDE/infectcont98.htm
4. Supervisors should consider assigning staff who are recovering from influenza to care for influenza patients.
5. Supervisors should consider time-off policies/ procedures and staffing needs during periods of clinical crisis.
6. Personnel at high risk for complications of influenza (such as pregnant women, persons immune compromised or over 65 years of age) will be evaluated on a one-on-one basis by Occupational Health; recommendation will be made to Supervisor who will determine if reassigning them to low-risk duty or placing them on furlough will be needed.

C. Post Exposure to novel influenza virus

1. Infection Control and Occupational Health will follow post-exposure follow-up guidelines of healthcare personnel after unprotected exposures

to novel strains of influenza A. Follow-up will be inclusive of medical staff, hospital associates, students, contract and volunteer services.

2. If a healthcare worker provides care at more than one facility, the healthcare worker will notify Infection Control if known or suspected exposure to novel influenza has occurred.”

3. Health care workers will have access to mental health professionals to help them cope with the emotional strain of managing a pandemic (e.g., Employee Assistance Program, Social Services, Pastoral Services and Psychiatry).

XIV. Vaccine, Antiviral Drugs and Antibiotics

- A. Prioritize and coordinate the needs of staff for Influenza Vaccinations with Occupational Health Clinic.
- B. Vaccinate staff according to need based on exposure rates, demography, etc.
- C. Estimate of vaccine usage based on previous years order quantity.
- D. Base vaccinations and medication usage on recommended CDC Guidelines.
- E. Delivered SNS stockpile of antiviral medications will be used for immediate use when emergency declarations are announced.
- F. Routinely communicate with drug distributor; in this case our primary supplier is Morris & Dickson, Co, Ltd, on availability of antiviral products and antibiotics.
- G. Determine clinical efficacy of antiviral based on diagnostic lab results versus indications of each antiviral medication.
- H. Maximize Pharmacy staffing by using additional Clinical associates in a distribution role.

- I. If certain inpatient areas of this institution are designated for patient isolation, review the Medical Record to better allow Nursing to care for this type of patient.
- J. If the need for alternate care sites arises, dispense medication in this/these areas with approval of Hospital Administration and Pharmacy Director. Viral Disease Clinic and ACC will be considered for out-patient pharmacy needs.
- K. Coordinate with Louisiana DHH/OPH on potential CDC, Strategic National Stockpile (SNS) pharmaceutical distributions to LSUHSC-S.

XV. Ventilators and Respiratory Therapy

- A. Stock pile vents and related supplies
 - 1. Hospital inventory of 77 fixed vents and 2 transport vents.
 - 2. Six extra Newport vents were purchased in 2008. (4 hospital-2 medical school)
- B. Stock pile of extra PPE will be delivered to departments as needed.
- C. Maintain current call pyramid that is updated monthly
- D. Respiratory Department will prioritize the patients need for therapy according to departmental policy for classification of patient.

XVI. Surge Capacity / Staffing

- A. Staff at all levels needs to be educated as to the “WHO Alert Status” implementation and what this actually means to them as either as essential or non-essential personnel.
- B. All employees shall report to their department director to determine whether they are needed or not. No one is to assume that just because their area may not be operational, that they are excused from work. This is a disaster; no one is excused unless approved by the department director.
- C. All departmental directors have been notified to compile their staff list of essential and non-essential associates. A listing of essential and non-essential associated will be used in a central staffing location upon the event of a flu disaster.
- D. Director of Nursing will be charged with the staffing lists of essential and non essential personnel in order to properly select and send personnel to the needed areas.

- E. Hospital Administration, and Medical Director will meet with key members of Management and the Medical staff to determine what service areas should be closed in order to divert the necessary staff to needed areas.
- F. The Incident Command Center will receive staffing reports and be in contact with other hospitals in our area for coordination purposed and also in touch with the Department of Health.
- G. A staff day care center maybe be set up to provide child care services for employees who need to work but need child care services for their children.

XVII. Surge Capacity / Beds

- A. Depending upon the number of flu patients needing isolation (negative pressure), 9K/8K-Wing can be converted to isolation units and can be utilized for admission of these individuals, if possible in order to semi quarantine these patients. (See Bioterrorism Plan for Smallpox)
- B. Utilizing 3G and 6G as inpatient areas for non-isolation patients.
- C. In the event that large numbers of critically ill vent dependent patients are in-house, possible surge can be contained on floor 9K with isolation conversion.
- D. Oncology patients will be triaged at FWCC and possibly housed there as inpatients in order to minimize contact with infected patients.
- E. ACC/WCC will stay open and would possibly be used as a flu clinic to triage and treat patients in the community in order for them to stay clear of infected individuals at the hospitals. Isolation rooms in ACC/WCC can be used.
- F. See attachments for list of negative air pressure rooms at hospital, out-patient clinics, and ED.

G. Surge Capacity / Materials

- A. The rapid consumption of goods (PPE) is currently tracked through CMS that has established PAR levels supplies.
- B. Each item is set up in the system with a PAR Level (desired stocking level), an automatic reorder point, and a reorder quantity.

- C. As an item is consumed and reaches the reorder point, a supply requisition is generated for the reorder quantity placed in the system.
- D. If the items are consumed at a pace faster than normal and the stock is completely depleted prior to shipment arrives, Material Supply Leader will coordinate with Purchasing, vendors, and other facilities to secure the needed items.
- E. An extra one month supply of N95 masks and gowns are kept extra at Spartans.
- F. Spartans warehouse is responsible to rotate stock to avoid expiration.
- G. When WHO alerts reaches level 4 and novel flu has been diagnosed in North America, CMS and Spartans will check available supplies/stock-pile and re-stock if needed.
- H. With HHS grant funds, the Safety Office has purchased extra pandemic materials/supplies, which include the following, N95 masks, Tyvek-coveralls, Hoods and Hepa filters for PAPR's, body bags, cots and half-face /hepa filter respirators.

H. Lab/Mortuary

A. Specimen Type and Collection

Use Standard Precautions in handling of all specimens. Specimens suspected of being contaminated with influenza virus are regarded as potentially infectious and staff that collect or transport clinical specimens should adhere rigorously to protective measures in order to minimize exposure.

1. Pneumatic tube system will not be used to transport these specimens.
2. The request form accompanying the specimen will be clearly labeled as “novel influenza virus” or influenza A (H5), (H1) or (H7) if one of these subtypes is suspected and must be accompanied by an Influenza Screening Tool. (Green Sheet)
3. Send the lab sample with a test order for the suspected influenza type to the Clinical laboratory. Nasopharyngeal swab, throat swab, and serum sample are recommended. Contact the virology section of the Clinical

Laboratory for additional information regarding testing or specimen collection.

4. Preliminary screening test to detect influenza A/B will be performed in the LSUHSC-S Clinical laboratory and specimens will be sent to the OPH Louisiana State Laboratory for confirmatory testing.
5. The hospital laboratory will contact OPH /State Lab by phone for transportation of collected specimens to the State Lab.
6. OPH/State Lab will perform a rapid influenza assay to detect influenza
A. Confirmatory testing will be sent to Public Health lab.

B. Laboratory Testing Supplies

1. When Pandemic Alert Phase 4 or higher is achieved- inventory influenza test kits available on site will be done.
2. The quantity of influenza kits stored on site is restricted by kit expiration dates.

C. Morgue

1. When Pandemic Alert Phase 5 or 6 is reached, prepare for possibility of mass fatalities.
2. Assess current capacity for refrigeration of deceased persons.
 - o Lab walk-in refrigerator available for use as a morgue. Will hold 20-30 bodies on rolling racks.
3. Morgue could be expanded by using available walk in cooler space in gross anatomy in the medical school.
4. Collaborate with OPH and Coroner's office for other temporary morgue sites.
5. Determine scope and volume of supplies (body bags) needed.

XVIII. Alternate Care Sites

- A. ACC/WCC is identified as an alternate site for triage and treatment of influenza patients, if the hospital ED is overwhelmed.
- B. Viral Disease Clinic and ACC have been identified as an out-patient treatment facility with pharmacy capacity.

XIX. Ethics

Ethical decisions may need to be made during a pandemic event on ventilator capacity;

1st level: Persons that would immediately benefit from ventilator such as those patients that can gain strength by being on the ventilator.

2nd level: Persons that may benefit from ventilator, however, may take longer to gain strength.

3rd level: Persons that are terminally ill where ventilator care would be futile.

The decision would be a case by case decision between the team with input from the patient's primary physician, Medical Director, and other members of the patient's medical team that is appropriate.

Patient may be involved in the decision if able; and family may be consulted depending upon the level deemed.

XX. Post-Mortem care of Hospitalized Pandemic Influenza Patients.

- A. Health care workers must follow Standard Precautions when caring for a patient with pandemic influenza who is deceased.
- B. Full PPE must be worn if the patient died during the infectious period (i.e. within 7 days after resolution of fever in adults and 21 days after the onset of symptoms in children).
- C. Transfer to the mortuary should occur as soon as possible after death.

- D. If the family wishes to view the body, they may be allowed to do so. If the patient died during the infectious period, the family should wear gloves and a gown.
- E. Labor pool workers will be utilized for cleaning rooms after body is removed.
- F. Establish plan to locate deceased patients to accommodate high mortalities.
- G. Materials Management to stockpile body bags in sufficient number.

References:

- Health and Humans Services Pandemic Influenza Plan – Supplement 3 Healthcare Planning
<http://www.hhs.gov/pandemicflu/plan/sup3.html#triage>
- Louisiana Department of Health and Hospitals Office of Public Health Immunization Program *Draft Pandemic Influenza Plan 2006*
- . <http://www.dhh.louisiana.gov/offices/miscdocs/docs-295/Statewide%20Draft%20Pandemic%20Influenza%20Plan.pdf>
- World Health Organization

Resources and Supplies-

Attachment 1

LSUHSC-S Facility –Pressurized Rooms and Isolation Rooms

Re: Facility Room Pressurization

Isolation Rooms

<u>Room</u>	<u>dP</u>	<u>Room</u>	<u>dP</u>	<u>Room</u>	<u>dP</u>
G2-28	N	J7-14	N	D1-12 (Rm # 21)	N
G2-33	N	J7-16	N	D1-14 (Rm # 22)	N
G3-22	N	K1-3E	N	D1-22B (Rm # 7)	N
G4-28	N	K4-19	N		
G4-33	N	K6-21	N	B3-7	N
G5-18	P *1	K6-22	N	2-15A	P *2
G5-19	P *1	K7-21	N	D3-4	N
G5-42	N	K7-22	N	D3-	N
G5-43	P *1	K7-27	N	D3-10	N
G6-28	N	K7-28	P *1	D3-11	N
G6-33	N	K8-21	N	E3-11	N
G7-28	N	K8-22	N		
G7-33	N	K8-27	P *1		
G8-28	N	K8-28	N		
G8-33	N	K9-21	N		
J1-10	N	K9-22	N		
J3-5 (Rm # 8)	N	K9-27	N		
J3-6 (Rm # 9)	N	K9-28	N		
J3-8 (Rm #10)	N	K10-21	N		
J3-9 (Rm #11)	N	K10-22	N		
J4-20	N	K10-27	N		
J5-3	N	K10-28	N		
J5-4	N				
J5-12	P *1				
J5-16	P *1				
J5-17	N				
J6-11	N				
J6-18	N				
J7-10	N				
J7-12	N				

Morgue

<u>Room</u>	<u>dP</u>
G-304	N
G-308	N
G-321	N
CORRIDOR	N

OPD

<u>Room</u>	<u>dP</u>
01-110	N
01-111	N
01-112	N
01-113	N
01-114	N

Cancer Center

<u>Room</u>	<u>dP</u>
B-334	N

01-166	N
01-168	N
01-169	N
01-186	N
02-226	N
02-228	N
03-318	N
03-319	N
03-333	N

Bone Marrow

<u>Room</u>	<u>dP</u>
K6-24	P
K6-25	P
K6-27	P
K6-28	P
K6-31	P
K6-32	P
K6-33	P
K6-34	P

Burn OR

<u>Room</u>	<u>dP</u>
D1-36	P
J1-20A	P

K6-36	P
K6-37	P
K6-40	P
K6-41	P

Eye Clinic

<u>Room</u>	<u>dP</u>
160	N

Viral Disease

<u>Room</u>	<u>dP</u>
120	N
121	N

Operating Rooms

<u>Room</u>	<u>dP</u>
K3-26 OR#1	P
K3-29A	P
K3-30 OR#2	P
K3-31 OR#3	P
K3-33 Cysto2	P
K3-34 OR#4	P
K3-35 OR#5	P
K3-44 OR#6	P
K3-38 Hammo Dirty	N
K3-38A Hammo Clean	P

<u>Room</u>	<u>dP</u>
K2-21	P
K2-28 OR#7	P
K2-30 OR#8	P
K2-31 OR#9	P
K2-32 OR#10	P
K2-33 OR#11	P
K2-34 OR#12	P
K2-38 OR#14	P
K2-41 OR#15	P
K2-37 Hammo Dirty	N
K2-37A Hammo Clean	P

OB

<u>Room</u>	<u>dP</u>
K4-10 Pink	P
K4-25 Surgery	P
K4-28 Delivery	P
K4-35 Delivery	P
K4-42 Delivery	P
K4-51 Surgery	P

NICU

<u>Room</u>	<u>dP</u>
K5-38 Procedure	P

Cancer Center

<u>Room</u>	<u>dP</u>
B-339 (OR-1)	P
B-340 (OR-2)	P
B-410 (Pharmacy)	P

ACC Building

<u>Room</u>	<u>dP</u>
1005	N
1006	P *2
1010	N
1064	N
1084	N
1090	N
1238	N
2002	N
2003	N
2037	N
2118	N
2119	N
2128	N
2129	N
2181	N
2183	N
2193	N
2192	N
2196	N
2205	N
3047	N
3131	N
3134	N
3113	N
3114	N
3216	N
3126 (OR #1)	P
3127 (OR #2)	P

WCC Clinic

<u>Room</u>	<u>dP</u>
1-154	N
1-164	N
1-192	N
2-139	N
2-157	N
2-159 (Procedure)	P
2-169 (Procedure)	P

CMS

<u>Room</u>	<u>dP</u>
KG-15	N
KG-23B	P

8J-Wing

<u>Room</u>	<u>dP</u>
8J-02	P
8J-21	P

Special Procedures

<u>Room</u>	<u>dP</u>
G1-02	P
G1-05	P
K1-44	P
G1-07	P

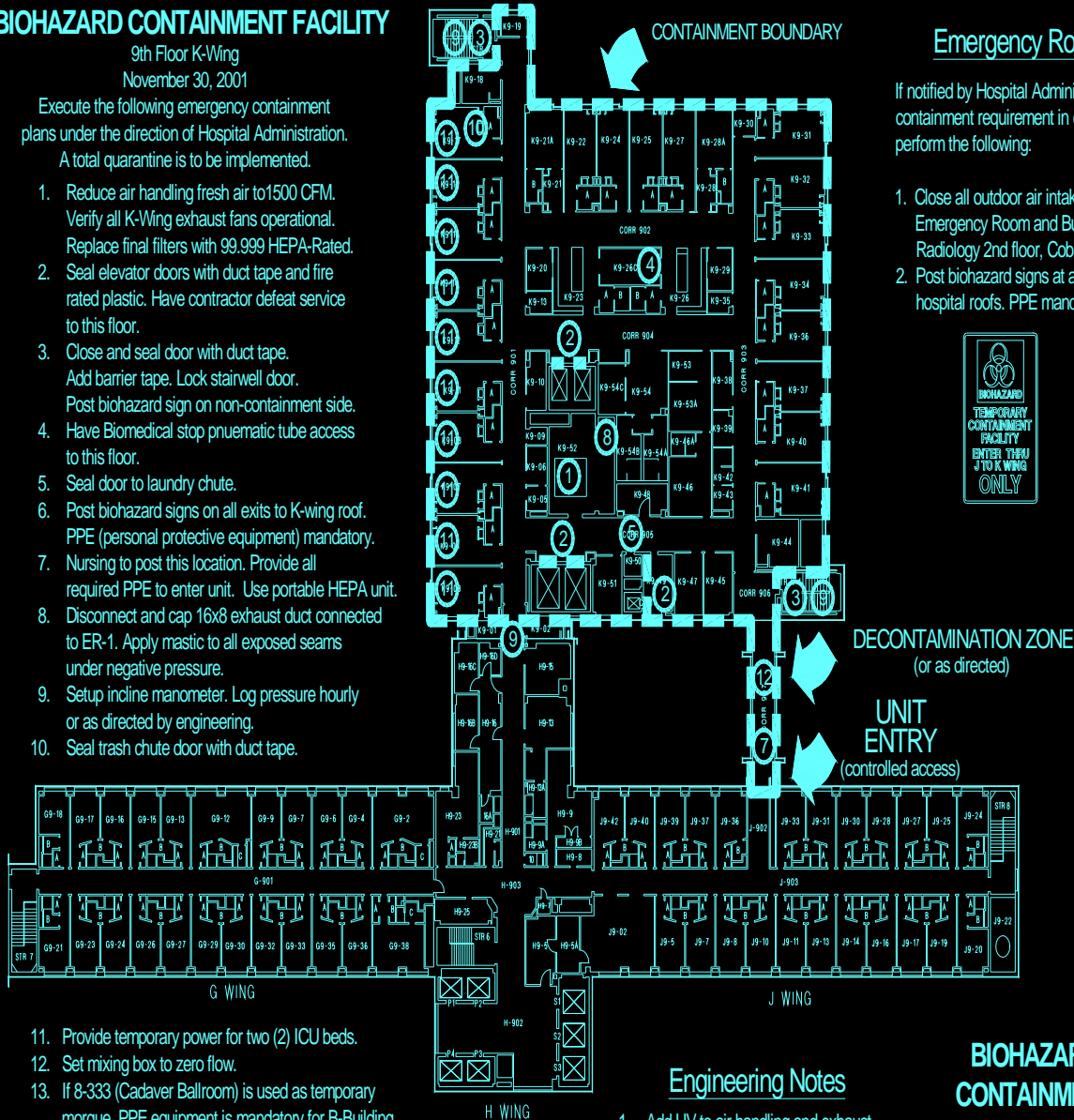
Attachment 2--- 9K Isolation Plan

BIOHAZARD CONTAINMENT FACILITY

9th Floor K-Wing
 November 30, 2001

Execute the following emergency containment plans under the direction of Hospital Administration. A total quarantine is to be implemented.

1. Reduce air handling fresh air to 1500 CFM. Verify all K-Wing exhaust fans operational. Replace final filters with 99.999 HEPA-Rated.
2. Seal elevator doors with duct tape and fire rated plastic. Have contractor defeat service to this floor.
3. Close and seal door with duct tape. Add barrier tape. Lock stairwell door. Post biohazard sign on non-containment side.
4. Have Biomedical stop pneumatic tube access to this floor.
5. Seal door to laundry chute.
6. Post biohazard signs on all exits to K-wing roof. PPE (personal protective equipment) mandatory.
7. Nursing to post this location. Provide all required PPE to enter unit. Use portable HEPA unit.
8. Disconnect and cap 16x8 exhaust duct connected to ER-1. Apply mastic to all exposed seams under negative pressure.
9. Setup incline manometer. Log pressure hourly or as directed by engineering.
10. Seal trash chute door with duct tape.



Emergency Room

If notified by Hospital Administration of a containment requirement in emergency room, perform the following:

1. Close all outdoor air intakes for Emergency Room and Burn Unit, Radiology 2nd floor, Cobalt.
2. Post biohazard signs at all exits to hospital roofs. PPE mandatory.



11. Provide temporary power for two (2) ICU beds.
12. Set mixing box to zero flow.
13. If 8-333 (Cadaver Ballroom) is used as temporary morgue, PPE equipment is mandatory for B-Building and BRI roofs.

Engineering Notes

1. Add UV to air handling and exhaust.
2. Identical application to 8th floor K-Wing.

BIOHAZARD CONTAINMENT FACILITY

PANDEMIC FLU
 SUPPLIES
 DELIVERED ON 5-1-
 2009 FROM SNS

**PHARMACY
 SUPPLIES
 LOCATED IN
 HOSPITAL
 PHARMACY**

TYPE	STRENGTH	CASES
Zanamivir	5mg	77
Tamiflu	75mg	31

TYPE	MAKE	SIZE	MODEL	NUMBER OF CASES	AMOUNT PER CASE
B&D Syringes		30ml		46	
B&D Syringes		20ml			
B&D Syringes		5ml			

**PPE SUPPLIES
 LOCATED AT
 SPARTANS
 WAREHOUSE**

TYPE	MAKE	SIZE	MODEL	NUMBER OF CASES	AMOUNT PER CASE
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Face shields/mask	Kimberley Clark		47147-17	28	100
N95 mask	Kimberley Clark	small	46827-10	35	210
N95 mask	Moldex	Large	3003-N95-L	1	160
N95 face mask	Kimberley Clark	regular	46727-17	14	210
Disposable Face Shields	Medline		NONFS300	6	96
Latex Large Gloves	Medline		MG8703	2	1000
Latex Small Gloves	Medline		MG8701	2	1000
Latex medium Gloves	Medline		MG8702	3	1000
Nitride Small Gloves	Cardinal Health		NPF882	1	600
Nitride medium Gloves	Cardinal Health		NPF885	2	600
Medium/Small Surgical Gowns	Cardinal Health		9505N	7	20
Large Surgical Gowns	Medline		DYNJP2701	10	30
XL Surgical Gowns	Medline		DYNJP2702	6	30
XXL Surgical Gowns	Medline		DYNJP2703	12	18