

Instructions to Complete the Emerging and Pandemic Respiratory Illness Plan

1. The attached Core Policy sets forth the minimum standards that must be met at each BJC entity with respect to the Emerging and Pandemic Respiratory Illness Plan. Each entity must adopt an entity specific written policy that meets these requirements. The adopted policy may contain provisions beyond the minimum requirements of the attached plan, so long as the additional provisions in no way conflict with or abrogate the terms of the Core Policy.
2. The purpose of this plan is to provide guidelines for prevention of health-care associated transmission of a novel respiratory illness to patients and employees.
3. This policy applies to all staff that may come in contact with known or suspected cases of a novel respiratory illness.
4. Each BJC entity is responsible for the annual review and revision as necessary, of their individual Emerging and Pandemic Respiratory Illness Plan.
5. The core plan for the Emerging and Pandemic Respiratory Illness Plan must be customized to the unique features of each BJC entity. Areas which require customization are indicated by:
 - A. parentheses, and
 - B. bold face type, and
 - C. underlining
 - A. Each BJC entity must designate an individual responsible for the Emerging and Pandemic Respiratory Illness Plan. These individuals must then customize their site-specific plan to correctly include all of its unique features.
6. Change the customized font so it is no longer bold, in parentheses, and underlined.
7. Include fact sheets related to Emerging and Pandemic Respiratory Illnesses.
8. Once steps 1-7 are completed, delete this instruction page from the plan.

BJC HealthCare CORE POLICY

EMERGING and PANDEMIC RESPIRATORY ILLNESS PLAN

Original Document Approved: September 2006
Reviewed: September 2008
Revised: January 2009



**BJC HEALTHCARE CORE POLICY
BJC EMERGING and PANDEMIC RESPIRATORY ILLNESS PLAN – CORE POLICY**

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CORE POLICY

- I. **NUMBER:** EP07P1
- II. **TITLE:** EMERGING and PANDEMIC RESPIRATORY ILLNESS PLAN
- III. **APPLICABILITY:** This policy applies to BJC HealthCare Member locations.
- IV. **PURPOSE:**

This Core Policy sets forth the minimum standards that must be met at each BJC member hospital with respect to the prevention of healthcare-associated transmission of Emerging and Pandemic Respiratory Illnesses. Each hospital must adopt a written policy that meets these requirements. The adopted policy may also contain provisions beyond these minimum requirements, so long as the additional provisions in no way conflict with or abrogate the terms of the Core Policy. The minimum requirements are set forth below.

This policy is intended to be used as a supplement to existing core policies which may already facilitate key issues such as response to a mass casualty, facility lockdown procedures, and mass distribution of medication and hospital emergency incident command systems (HEICS).

V. **STATEMENT OF POLICY:**

A. Introduction

The purpose of this policy is to provide guidelines for the prevention of healthcare-associated transmission of emerging and pandemic respiratory illnesses.

Emerging infectious diseases are diseases of infectious origin whose incidence in humans has increased within the past two decades or threatens to increase in the near future. Emerging and pandemic respiratory illnesses are those that primarily affect the respiratory tract, are spread through droplet or airborne routes or through direct or indirect contact with respiratory secretions. These illnesses include but are not limited to:

1. **Severe Acute Respiratory Syndrome (SARS)** – a respiratory illness that has been reported in Southeast Asia, North America, and Europe. In 2003 a novel coronavirus (SARS-CoV) is the cause of SARS.
2. **Avian (or bird) Influenza** – caused by influenza viruses that occur naturally among wild birds. The H5N1 variant is deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity and no vaccine is yet available.
3. **Pandemic Influenza** – caused by a novel Influenza A virus that emerges in the human population, causes serious illness, and spreads easily from person to person worldwide.

B. World Health Organization (WHO) Pandemic Influenza Phases

1. **Interpandemic Period**

- a. **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.
- b. **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.

2. **Pandemic Alert Period**

- a. **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.
- b. **Phase 4.** Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.
- c. **Phase 5.** Larger cluster(s) but human-to-human spread is still localized, suggesting that the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible. (substantial pandemic risk)

3. **Pandemic Period**

Phase 6. Pandemic phase: increased and sustained transmission in the general population

4. Postpandemic Period

Return to Interpandemic Period

C. Responsibility

This policy applies to all staff that might come in contact with suspected or confirmed emerging or pandemic respiratory illness patients, their environment, and/or their respiratory secretions or body fluids.

D. Activation of the Emerging and Pandemic Respiratory Illness Plan

1. Any healthcare worker who suspects a patient has an emerging or pandemic respiratory illness must notify the **(Administrator in charge at that time)**, who will contact the **(entity appointed emerging respiratory illness authority)** and hospital administrator on call.
2. Any patient in whom serious or credible consideration has been made that the patient has an illness consistent with an emerging respiratory or pandemic infection (SARS, Avian influenza) will have that illness confirmed by an **(Infectious Disease physician or other entity appointed emerging respiratory illness physician expert)**.
3. The **(entity appointed emerging respiratory illness authority or hospital epidemiologist)** must be notified of the following:

- a. Possible transfer of a patient from another facility with disease consistent with an emerging respiratory illness; (also notify the Emergency Department Director)
 - b. Laboratory isolation of an organism consistent with an emerging respiratory illness.
4. During confirmation of suspect patients Administration should be notified.
5. Following confirmation, **ONLY** the **(entity appointed emerging respiratory illness authority)** will make the recommendation to the President of the entity to activate the Emerging and Pandemic Respiratory Illness Plan.
6. Initial Communication
- a. Upon identification of a suspected emerging or pandemic respiratory illness patient, the **(insert title of person responsible who will conduct the notification)** will contact the **(Hospital Epidemiologist or other person responsible)**, Infection Prevention and the Nursing Supervisor on duty.
 - b. The Infection Prevention Specialist must ascertain that all appropriate individuals have been notified that a suspected emerging or pandemic respiratory illness patient has been identified. (i.e. Clinical Manager, patient's nurse, physician)
 - c. The **(entity appointed emerging respiratory illness authority)** will notify the following persons that a suspect case of an emerging or pandemic respiratory illness has been identified:
(NOTE: Call your respective Department of Health based upon location of facility. The Department of Health will contact appropriate authorities.)
 - 1) Infection Control Specialists
 - 2) President or SEO
 - 3) Local City or County Department of Health, if applicable
 - 4) State Health Department, MO: 1-800-392-0272
IL: Illinois only 800-782-7860;
Out of state 217-782-7860
 - 5) Centers for Disease (CDC) Emergency Response Office (770-488-7100)
 - d. When it is determined the Incident Command Center become operational, the **(entity appointed administrative authority/on-scene commander)** for the hospital will initiate the entity specific Communication Matrix or management-call down through telecommunications. These individuals must report to the designated Command Center immediately for briefing by the on-scene commander. **(List titles of all entity specific persons to be contacted. Examples of persons to contact may include but are not limited to the following:**
 - 1) **Chief Operating Officer of facility**
 - 2) **Infection Control Specialist**
 - 3) **Safety Manager**
 - 4) **Critical Care Committee Chair**
 - 5) **Admitting Director/Manager**
 - 6) **Disaster Team Members**
 - 7) **Facilities Management, Vice President**

- 8) **Medical and Nursing Directors of the Emergency Department, Department of Medicine, Pediatrics, OB/GYN, Psychiatry, Anesthesia and Surgery**
- 9) **Human Resources, Vice President**
- 10) **Chief Medical Officer**
- 11) **Medical Executive Committee, Chair**
- 12) **Chief Nursing Executive**
- 13) **Operations, Director**
- 14) **Pharmacy, Director**
- 15) **Pathology, Director**
- 16) **Public Affairs, Director**
- 17) **Risk Management and General Counsel**
- 18) **Security, Director**
- 19) **Occupational Health, Supervisor**
- 20) **Notify BJC – Director of Emergency Preparedness**

VI. PROCEDURE Assessment – Tool for completion is (Appendix J) of this plan

The focus is on planning during the interpandemic and pandemic alert periods. This section allows each entity to assess the current status of their pandemic planning efforts, identify gaps and direct further planning.

A. Inter-Pandemic Period – Phase 1 and 2 - Review and Complete
Planning for all aspects of pandemic/epidemic respiratory illness is the key activity in this phase

- Annual influenza vaccination among healthcare workers (HCWs)
- Review BJC HealthCare – *Influenza Management Plan* each year
- Conduct hospital surveillance for influenza
- Educate emergency department and outpatient areas on signs/symptoms of influenza and utilization of BJC HealthCare – *Influenza Screening Tool*
- Review entity specific plan(s) for emergency department outpatient triage
- Collaborate and communicate with LPHA – local public health agency regarding influenza activity and community transmission
- Assure procedures are in place to facilitate laboratory testing and reporting through the local and state surveillance systems
- Pre-identify negative pressure and neutral pressure locations

B. Pandemic Alert Period, Phase 3 - Review and Complete
Human infection(s) with a new subtype, but no human-to-human spread, or at most, rare instances of spread to a close contact.

- Continue and refine the activities in Phase 1 and 2 (above)**
- Review and understand BJC HealthCare crisis communication plan
- Review and understand your role in Hospital Incident Command Structure
- Understand HICS structure to keep administrators, personnel, patients and visitors informed of ongoing impact of pandemic influenza in the facility and community
- Collaborate with pharmacy on allocation and distribution of antiviral drugs to healthcare personnel
- Review work restriction policies, including clear guidance on the need for staff to stay home in the event of fever and respiratory symptoms
- Clarify time-off policies and procedures for healthcare provides who are asked to stay at home
- Determine how “just in time” refresher training and education will be provided for all health care personnel at the start of the pandemic influenza outbreak
- Review procedures for staff triage stations and evaluation units

- Develop a strategy for regularly updating clinicians, direct patient care staff and screening/triage staff on the current status of the pandemic and any changes in the recommendations for management of influenza patients
- The above includes procedures for deferring elective admissions, for discharging patients as soon as possible, cohorting patients admitted with influenza and for monitoring healthcare acquired transmission
- Develop guidelines on staffing, inclusive of essential and non-essential staff
- Consider re-assigning non-essential staff to support critical hospital services
- Consider assigning staff recovering from influenza to care for influenza patients
- Estimate the 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 strategies for enhancing isolation capacity, including units for cohorting

Pandemic Alert Period, Phase 4 - Review Only

Small cluster(s) with limited human – to – human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans

- Continue, refine and if needed, implement the activities in Phase 1, 2 and 3 in conjunction with your medical director
- Initiate heightened surveillance
- Provide daily surveillance information to local public health agencies and DHSS upon request
- Determine availability of critical equipment and antiviral medications
- Medical director, infection prevention, occupational health to collaborate with LPHA to determine needed doses of vaccine and antivirals for high priority populations

Pandemic Alert Period, Phase 5 – Review Only

Large 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

- Continue, refine and if needed, implement the activities in Phase 1, 2, 3 and 4 in conjunction with your medical director
- Implement this pandemic respiratory illness plan
- Maintain heightened surveillance
- Implement “just in time” refresher training and education for all health care personnel, patients and visitors
- Develop communication plan to push out information from health alerts and LPHA
- Update clinical, emergency department and outpatient staff on the status of pandemic influenza in their area

If pandemic respiratory illness is reported anywhere in the United States: Continue with Phase 5 interventions PLUS;

- 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 a high index of suspicion that patients presenting with influenza-like illness could be infected with the pandemic strain. If the pandemic strain is detected in a local patient, community transmission can be assumed and the hospital should move to the next level.

***If pandemic respiratory illness is reported anywhere in the local area
Continue with above PLUS;***

- Set up Incident Command Center. Refer to your Hospital Incident Command System (HICS) policy and hospital specific Incident Command Center Plans.
- Identify when first cases began in this community; keep in close contact with state, regional and local public health agencies
- Identify, isolate and treat all patients with potential respiratory illness.
- Communicate with local health department when patients who still require isolation are discharged.

Surveillance Review

- B. Signs and symptoms of respiratory or “influenza-like” illness, including influenza, may involve:

Fever >100.4°F (>38°C)
Headache
Muscle aches

Dry or non-productive cough
Shortness of breath

In addition, some patients may present with: eye infection, pneumonia, adult respiratory distress syndrome (ARDS), other life-threatening complications

- C. Risk Factors

1. When respiratory illness is detected in humans
 - a. Travel to any part of the world where emerging or pandemic respiratory illness has been isolated and/or close contact with birds or live poultry (if Avian influenza is suspected).
 - b. Employment at a poultry farm where infected birds have been identified (if Avian influenza is suspected).
2. Risk factors when human-to-human transmission of respiratory illness is present in the world:
 - a. Close contact* with someone suspected of having a known or suspect pandemic respiratory illness.
 - b. Exposure to a domestic location with documented or suspected pandemic respiratory illness or close contact with an ill person with such an exposure history.

****Close contact*** is defined as having cared for or lived with a person known to have a pandemic respiratory illness or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have pandemic respiratory illness. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief period of time.

Emerging and Pandemic Respiratory Illness Plan Implementation

- D. Surveillance

1. **(insert department responsible for conducting employee illness surveillance)** should conduct routine monitoring of the status of emerging respiratory illnesses in the world.
2. **(the department responsible for conducting employee illness surveillance)** should perform routine ongoing surveillance to identify clusters of pneumonia of an unknown etiology among two or more HCWs in the same facility. Occupational Health and Infection Prevention should be notified immediately of any clusters.
3. Infection Prevention should conduct routine ongoing surveillance for hospitalized patients with pneumonia of an unknown etiology during the pandemic alert period phase 5 or pandemic period. If there is a sudden increase in community acquired pneumonia of unknown etiology surveillance should be enhanced to include:
 - a. (insert triage and alternate triage locations)
 - b. Patients admitted with signs and symptoms of respiratory illness
 - c. Daily death reports to identify patients who died from respiratory infections or adult respiratory distress syndrome
4. When pandemic respiratory illness is present in the world, all patients presenting to the emergency room or clinics with a fever or respiratory symptoms should be screened for symptoms.
5. If pandemic respiratory illness is present in the surrounding community, screen all visitors, patients and employees upon entry into the facility for fever and respiratory symptoms.
6. HCWs that care for pandemic respiratory illness patients should be screened at least daily for fever and respiratory symptoms.
7. Evidence of hospital-acquired transmission of emerging or pandemic respiratory illness will require evaluation to determine whether or not the unit needs to be closed to new admissions and/or the most appropriate method for containment of respiratory illness on the unit (i.e., a quarantined area within the unit). Closing, re-opening and/or the creation of a quarantined area will be determined by the **(insert titles of persons designated to make determination may include the designated physician or Hospital Epidemiologist, Infection Prevention, Clinical Manager, Medical Director, Patient Care Director and the Vice-President responsible for Patient Care)**. Hospitals should refer to their hospital specific policies which identify areas which are **(potential surge capacity areas for isolation patients)**.
8. In the event of documented or potential hospital-acquired transmission of emerging or pandemic respiratory illness with cases linked to an identified source:
 - a. Patients exposed will be screened daily for signs and symptoms of respiratory illness (see Post-exposure Monitoring Tool, Appendix A).
 - b. The health care team caring for each patient will perform the screening under the direction of Infection Prevention (insert other involved personnel such as Infectious Disease physicians, etc.).
 - c. Patients who develop symptoms of emerging or pandemic respiratory illness should be placed in appropriate isolation.

E. Triage

The Hospital Infection Prevention Specialist **(or other facility designated emerging respiratory illness expert/authority)**, in conjunction with the Emergency Department Medical Director/Chief of Operations will determine the appropriate time and place to set up a triage center. This determination will be based on the number of patients being seen, transmissibility of the infectious disease agent, and public response.

1. For highly communicable infectious agents, the triage center will be segregated from other waiting areas.

2. Phone triage should be implemented to discourage unnecessary emergency department or outpatient visits.
3. Security may need to provide the triage area with controlled entry and one-way flow (one entrance, one exit) to minimize the risk of transmission to other patients and other staff members not directly involved in the management of the outbreak.

F. **Activation of Hospital Incident Command System (HICS)**

In the event that it is determined that an Incident Command Center should be initiated, hospitals should refer to their respective HICS plan to initiate the command center and identify core responsibilities in the command center. Notify the BJC HealthCare – Director of Emergency Preparedness that HICS has been activated.

NOTE - the BJC-HICS will initiate the process to procure resources needed such as supplies and staffing.

G. **Respiratory Hygiene / Cough Etiquette**

To limit the transmission of respiratory pathogens respiratory hygiene/cough etiquette precautions should be implemented for all patients who present with respiratory symptoms.

1. Educate patients to notify healthcare workers of respiratory symptoms and instruct them on respiratory hygiene/cough etiquette.
2. Post visual reminders instructing patients about respiratory hygiene/cough etiquette and instructing them to notify healthcare workers of respiratory symptoms.
3. Encourage patients to cover nose and mouth when coughing and sneezing.
4. Provide coughing patients with a surgical mask to wear, if tolerated.
5. Provide patients with an alcohol-based product for hand hygiene.
6. Move coughing patients from the waiting area to a private examination room or maintain a spatial separation of at least 3 feet between patients.
7. During periods of increased respiratory infection in the community (i.e. influenza) place patients who present with respiratory symptoms or atypical pneumonia on Droplet Precautions* until the cause is determined to be not contagious. (**See Core Isolation Policy for Droplet Precautions**)
8. In the event of a pandemic event, it may be necessary to cohort families to minimize spread of the disease. It should be understood this may mean adult patients being treated at pediatric hospitals and pediatric patients being treated at adult hospitals.

**Place the patient in a private room. When a private room is not available, place the patient in a room with a patient(s) who has active infection with the same microorganism but with no other infection (cohorting). If cohorting patients with same organism is not possible, then cohort patients with the same symptoms. When a private room is not available and cohorting is not achievable, maintain spatial separation of at least 3 ft between the infected patient and other patients and visitors. Special air handling and ventilation are not necessary, and the door may remain open.*

H. **Infection Prevention Precautions**

Guidelines regarding appropriate isolation precautions of patients, patient transport, cleaning and disinfection of equipment, discharge management and post-mortem care can be found in the Emerging and Pandemic Infection Prevention Patient Management Grid, Appendix B.

Infection prevention measures must be implemented **immediately** when a patient is suspected of having an emerging or pandemic respiratory illness. Refer to Appendix B for disease specific precautions.

1. Patient Placement

- a. Patients are to be placed in appropriate isolation rooms as soon as an emerging or pandemic respiratory illness is suspected. Room type will depend on specific disease, See Patient Management Grid, Appendix B.
- b. If a negative pressure room is not available or cannot be created with mechanical manipulation of the air, place patient in a single room with normal air pressure. Do not place patient in a positive pressure room.
- c. If a single room is not available, confirmed infected patients may be cohorted together in designated multi-bed rooms or units. See below for cohorting guidelines.
- d. Doors to any room or area housing suspected or confirmed patients must be kept closed when not being used for entry or egress.
- e. To facilitate cleaning and to reduce the potential for virus aerosolization via vacuuming, house all infected patients in uncarpeted areas, if possible.
- f. The number of persons entering the isolation room should be limited to the minimum number necessary for patient care and support.

2. Cohorting

- a. If single rooms are not available, patients infected with the same organism can be cohorted.
- b. First cohort confirmed cases and keep private rooms for suspected cases.
- c. Pediatric and adult patients from the same family or household may also be cohorted.
- d. Designated units or areas should be used for cohorting infected patients (suspected should be housed separately from confirmed cases).
- e. The distance between beds should be > 3 feet (increasing spatial distance between patients may be helpful in preventing transmissions of respiratory aerosols) and preferably separated by a physical barrier (e.g. curtain or partition).
- f. All non-essential furnishings are to be removed from the room/area prior to patient entry. The remaining furniture must be easy to clean thoroughly and should not conceal or retain dirt or moisture, either within it or around it.
- g. Whenever possible, HCWs assigned to cohorted patient care units should not “float” or be assigned to other patient care units.
- h. The number of persons entering the cohorted area should be limited to the minimum number necessary for patient care and support.
- i. Consider having portable x-ray equipment available in cohort areas.
- j. HCWs assigned to cohorted patient care units should be aware that infected patients may be concurrently infected or colonized with other pathogenic organisms (e.g., *Staphylococcus aureus*, *Clostridium difficile*) and should use standard and applicable transmission-based infection control precautions to prevent transmission of healthcare associated infections.

3. Guidelines for all isolation precautions

- a. The isolation sign (with appropriate isolation categories marked) must be placed outside the patient's door.
- b. Personal protective equipment must be donned prior to entering the patient room.
- c. Refer to Isolation Core Policy for detailed instructions.

4. Airborne Infection Isolation Precautions (AIIP)

- a. **A surgical mask must be placed immediately on the patient, if tolerated.** The patient should remain in the room and continue to wear the mask until the patient is placed in negative pressure ventilation and isolation precautions are instituted. If tolerated or age appropriate, the patient should continue to wear a surgical mask in the negative pressure room when employees or visitors are present. If the patient cannot tolerate wearing a surgical mask they should be taught to cover nose and mouth with a tissue when coughing and perform hand hygiene after disposing of the tissue.
- b. If a room with negative pressure ventilation (NPV) is required, patients occupying but not requiring a NPV room, must be relocated immediately to allow for placement of the emerging respiratory illness patient. If a NPV room is not available when required, place the patient in private room with the door closed.
- c. In an outbreak situation, NPV rooms may be full. Alternative patient placement should be considered such as isolating entire wards for emerging or pandemic respiratory illness patients. Refer to isolation guidelines (***insert name of plan for surge capacity***).
- d. Limit access to the patient room to a minimal amount of essential healthcare personnel.
- e. Facilities without NPV rooms will transfer patients that require admission to another facility that has engineering controls adequate to provide NPV rooms. **Note that it is unlikely a transfer can occur as other healthcare facilities will be experiencing similar issues.** Proper isolation precautions along with the use of personal protective equipment (as outline in Patient Management Grid, Appendix B) will be maintained during the patient's transfer. The patient must wear a surgical mask during transfer.
- f. If the patient is mechanically ventilated, an expiratory filter must be placed on the circuit.
- g. Personal Protective Equipment (PPE) is required for all persons entering the room. See Patient Management Grid, Appendix B.
- h. **N-95 Respirators must** be worn by all personnel upon entering the room.
 - 1). Staff who have not been fit tested for N-95 respirators should not be assigned to care for a patient in Airborne Infection Isolation Precautions (AIIP).
 - 2). A fit-check as defined in the BJC Respiratory Protection Plan must be performed each time the respirator is put on, prior to entering the patient room.
 - 3). If disposable N-95 respirators cannot be fit-tested to the individual, a higher level of respiratory protection must be used. Higher levels of respiratory protection include: Powered air purifying respirator (PAPRs) designed with loose-fitting facepieces that form a partial seal with the face; PAPRs with hoods; PAPRs with tight-fitting facepieces (both half and full facepiece); Full facepiece elastomeric negative pressure (i.e. non-powered) respirators with N, R, or P100 filters.

- 4). Healthcare Workers (HCWs) must be trained and fit-tested per the BJC Respiratory Protection Program BJC - Core Respiratory Protection Program to the respirator model that they will wear.
- 5). Upon leaving the patient's room, the disposable respirator should be removed and discarded. N-95 respirators should not be reused unless a hospital shortage occurs.
- 6). If there is an insufficient supply of N-95 respirators (hospital shortage), the HCW may reuse the N-95 respirator as long as the device has not been obviously soiled or damaged (e.g., creased or torn). If reuse is required:
 - a). Remove the N-95 respirator and place it in a paper bag. (label the N-95 respirator with the user's name before use to prevent reuse by another individual.)
 - b). Place the N-95 respirator on the face to ensure proper fit for respiratory protection avoiding contact with infectious material that may be present on the outside of the mask.
 - c). Perform hand hygiene after placing the N-95 respirator on the face.
- 7). For severe shortages of N-95 respirators, isolation or surgical masks are preferable to no respiratory protection. N-95 respirators would then be saved for aerosol generating procedures.

5. **Droplet Precautions**

- a. A private room is preferred; a Negative Pressure Ventilation (NPV) is not required.
- b. An isolation or surgical mask is required for all employees, visitors, students and volunteers who enter the room.
- c. Patients must wear an isolation or surgical mask when out of the room.

6. **Contact Precautions**

Personal protective equipment includes disposable gowns and gloves, see Isolation Core Policy.

7. **Eye protection to prevent exposure to eyes** - Regular prescription eyeglasses are not considered adequate eye protection. *Sidepieces, face shields, or eye protection covering eyeglasses must be worn.*

8. Reusable PPE must be cleaned and disinfected with a hospital approved disinfectant prior to reuse. ***(insert entity specific procedures for disinfecting PPE)*** An area should be designated area for cleaning and disinfecting reusable PPE.

9. **Remove PPE in the following order (from most likely to least contaminated):**

- a. Gloves
- b. Goggles/face shield
- c. Gown
- d. N-95 respirator
- e. Proper hand hygiene must be performed after removal of PPE
- f. Clean PPE should be stored outside the patient's room. Receptacles for used/contaminated PPE should be located near point of use but separate from clean PPE.

I. Aerosol-generating Procedures

1. For aerosol-generating procedures all personnel must use additional infection control precautions.

Aerosol-generating procedures capable of stimulating cough and promoting the generation of aerosols include: administration of aerosolized medication treatment; diagnostic sputum induction; bronchoscopy; airway suctioning; endotracheal intubation; positive pressure ventilation via facemask (e.g., BiPAP, CPAP), during which air may be forced out around the facemask; and high frequency oscillatory ventilation (HFOV).

2. Aerosol-generating procedures must be performed in a NPV room.
3. Limit the use of aerosol-generating procedures on emerging and pandemic respiratory illness patients to those that are deemed medically necessary.
4. Use clinically appropriate sedation during intubation and bronchoscopy to minimize resistance and coughing during the procedure.
5. Limit the number of HCWs present in the room during an aerosol-generating procedure to those who are essential for patient care and support.
6. PPE Precautions:
 - a. **N-95 Respirators are the minimum level** of respiratory protection for HCWs who are performing aerosol-generating procedures.
 - b. **Isolation gown** – A single isolation gown to protect the body and exposed areas of the arms. A disposable full-body isolation suit may be considered in this setting as it provides greater protection for the neck area; some suits also have an attached hood to cover the hair. Another alternative for providing full head, neck, face and respiratory protection is a disposable surgical hood with an attached face shield in combination with a disposable respirator. It is unknown whether covering exposed areas of skin or hair of the head and neck will further reduce the risk of transmission.
 - c. **Gloves** – A single pair of disposable gloves that provide a snug fit over the wrist.
 - d. **Eye protection consisting of goggles must be worn**. Goggles must fit snugly around eyes.
 - e. **Face shield** – A face shield may be worn over goggles to protect exposed areas of the face but must not be used as a primary form of eye protection for these procedures.
7. After an aerosol generating procedure clean and disinfect all horizontal surfaces.

J. Testing and Transportation

All procedures must be performed in the patient's room unless physically impossible and medically necessary for treatment (i.e., CT scan, MRI, etc.).

1. If the patient requires transport to another department, the patient's nurse is responsible for notifying the transporters and the receiving department of the patient's diagnosis and indicated isolation status.
2. Nursing personnel and transport staff should travel in the appropriate PPE with the patient to ensure isolation precautions are maintained.

3. When a patient is required to travel the patient must wear a surgical or procedure mask at all times. If the patient cannot tolerate wearing a surgical mask they should be taught to cover nose and mouth with a tissue when coughing and perform hand hygiene after disposing of the tissue.
4. Prior to leaving the room the patient should don a clean gown and perform hand hygiene.
5. The requisition (imaging request, etc.) must be marked to indicate the patient's isolation status.
6. The required test should be the last case of the day, if medically feasible.
7. The patient should be transported by a designated route that is least traveled by patients and staff to be determined by the hospital incident command center.
8. The elevator used to transport the patient should only be occupied by the patient and the transport team during the transportation.
9. The patient should not go to or be held in waiting areas.

K. Hand Hygiene

The use of alcohol-based hand rubs or a vigorous 15-second hand wash with soap and water for visibly soiled hands is required before and after each patient contact.

L. Staffing

Staffing requirements should be identified and supported as indicated by the hospital Mass Casualty Plan. Action plans to supplement staffing should be initiated to ensure adequate staffing levels.

M. Visitors

Visitation policies should minimize the number of visitors exposed to emerging or pandemic respiratory illnesses and decrease the potential of disease transmission of within the facility.

1. Emerging Respiratory Illness:
 - a. Adult patients will not be allowed visitors. Infection Control and ***(the Hospital epidemiologist or other designated individual)*** must be consulted and may approve exceptions to the visitation rule for extenuating circumstances. If a visitation exception is made, nursing must screen the visitor by phone for signs and symptoms of the emerging respiratory illness before the visitor arrives at the facility.
 - b. One parent or legal guardian, who has been screened by nursing for signs and symptoms of the emerging respiratory illness, will be allowed for pediatric patients and will be restricted to the patient's room at all times. The parent must don a new surgical mask prior to leaving the patient's room and will be escorted in and out of facility.
 - c. Close contacts of emerging respiratory illness patients must be educated about signs and symptoms of the emerging respiratory illness and must be instructed that they are not allowed to visit.
 - d. Visitors who arrive with suspected emerging respiratory illness patients should be screened for symptoms and segregated from other visitors.
2. **Pandemic Respiratory Illness**
 - a. Visitors must be instructed on isolation precautions and the use of personal protective equipment.
 - b. Visitors who arrive with suspected pandemic respiratory illness patients should be screened for symptoms and segregated from other visitors.

N. Healthcare Worker Surveillance

1. ***(insert department responsible for conducting employee illness surveillance)*** must perform routine ongoing surveillance to identify clusters of pneumonia of an unknown etiology among two or more HCWs in the same facility. Occupational Health and Infection Prevention must be notified immediately of any clusters.
2. HCWs that care for emerging or pandemic respiratory illness patients should be screened at least daily for fever and respiratory symptoms.
3. All employees with an unprotected occupational exposure to an emerging or pandemic respiratory illness must be screened at least daily for fever and respiratory symptoms.

O. Healthcare-associated Disease Transmission

1. Evidence of healthcare-associated transmission of emerging or pandemic respiratory illness will require evaluation to determine whether or not the unit needs to be closed to new admissions and/or the most appropriate method for containment of emerging or pandemic respiratory illness on the unit (i.e., a quarantined area within the unit). Closing, re-opening and/or the creation of a quarantined area will be determined by the ***(insert titles of persons designated to make determination may include the designated emerging or pandemic respiratory illness physician or Hospital Epidemiologist, Infection Control, Clinical Manager, Medical Director, Patient Care Director and the Vice-President responsible for Patient Care)***.
2. In the event of documented or potential healthcare-associated transmission of emerging or pandemic respiratory illnesses with cases linked to an identified source, patients will be screened daily for signs and symptoms of emerging respiratory illness. The healthcare team caring for each patient will perform the screening under the direction of Infection Control.
3. Patients with a documented exposure to an emerging or pandemic respiratory illness patient should be isolated and monitored for emerging or pandemic respiratory illness symptoms, including influenza.

P. Lab Specimens

Lab specimens must be handled according to direction from the department of health and/or CDC at the time of the incident.

Q. Transfer to another facility/Discharge to home care

1. If the patient is transferred to another health care facility or home health care agency, it will be the responsibility of the patient's primary care physician, case coordinator and/or nurse to notify the appropriate persons at the receiving institution/agency/service of the patient's pandemic respiratory status.
2. Appropriate isolation precautions, along with the use of personal protective equipment must be maintained during the patient's transfer or discharge. The patient must wear a surgical or procedure mask during transfer/discharge.
3. Hand hygiene and Respiratory Hygiene and Cough Etiquette are to be reviewed with the patient and household members
4. The primary care physician, case coordinator and/or nurse should coordinate patient discharge with local health department, if applicable
5. If patient attempts to leave against medical advice (AMA) notify the local public health agency (LPHA) at ***(insert phone number of LPHA)*** and encourage the patient to remain at the facility until arrangements for discharge can be made. If patient is contagious and a risk to the community notify the LPHA.

6. Quarantine regulations may be in effect per the LPHA and local authorities.

R. **Cleaning / Disinfection**

1. Full PPE, as outlined in the Patient Management Grid, Appendix B, must be utilized for all cleaning and disinfection, including after the patient is discharged from the room.
2. All horizontal surfaces in the patient's room will be cleaned (bedrails, doorknobs, faucets, and all bathroom surfaces) daily or more often when visible soiling occurs with a hospital approved disinfectant according to the manufacturer's instructions for contact time. The room of the emerging or pandemic respiratory illness patient should be the last room cleaned each day, if possible.
3. Cleaning cloths used in the isolation room should not be used to clean any other area of the facility and/or equipment and should be bagged and laundered before reuse.
4. Mop bucket water and mop heads used in the isolation room must be changed before cleaning another patient's room. If the entire ward is for isolation patients follow standard protocols for changing mop heads and bucket water.
5. At discharge, terminal cleaning of all horizontal surfaces of the isolation room should occur including, bedrails, doorknobs, faucets, bathroom surfaces, and bed curtains should be changed.

S. **Patient Care Equipment**

Emerging or pandemic respiratory illness patients should have dedicated equipment (i.e., stethoscopes, etc.) whenever feasible. No electronic thermometer will be used.

1. After use, patient equipment that is routinely terminally cleaned in **(insert name of department responsible for cleaning and disinfection equipment)** (i.e.; IV pumps, IV poles, Mini-infusers, enteric tube feeding pumps) should be cleaned with a hospital approved disinfectant according to the manufacturer's instructions for contact time before removal from the isolation room. Thorough, terminal disinfection will be performed in **(insert name of department responsible for cleaning and disinfection equipment)**.
2. The person responsible for the equipment will clean shared/community equipment (i.e.; portable x-ray machines, EKG machines, physical therapy equipment) with a hospital approved disinfectant according to the manufacturer's instructions for contact time (i.e., x-ray machine will be cleaned by the radiology tech).
3. Whenever possible, prior to admission of an emerging or pandemic respiratory illness patient, a minimal amount of supplies should be placed in the room's supply cabinet or in patient's room.
4. Upon discharge, all supplies or linens in the nurse server or patient room will be removed prior to admission of another patient. Linens will be sent to the laundry. Supplies will be discarded. The empty nurse server will be disinfected using the same process as for equipment.

T. **Monitoring negative pressure rooms**

1. Nursing will notify **(Facilities Management or the department responsible for monitoring negative pressure)** regarding the location of an emerging or pandemic respiratory illness patient.
2. **(Facilities Management or the department responsible for monitoring negative pressure)** should monitor the negative pressure status of the room daily.

3. The status of the negative pressure room will be documented on a card placed on the outside of the door of the room.
4. **(Facilities Management or the department responsible for monitoring negative pressure)** will immediately notify nursing if the negative pressure ventilation is not functioning properly.

U. **Reporting**

1. All patients identified with suspected emerging or pandemic respiratory illness will be reported to the LPHA at **(insert phone number of the LPHA)** or the Missouri Department of Health and Senior Services 1-800-392-0272/ Illinois Department of Health 1-217-782-7860
2. In the absence of emerging or pandemic respiratory illness in the world, healthcare workers should report:
 - a. All persons requiring hospitalization for radiographically confirmed pneumonia who report at least one of the four risk factors for exposure to emerging or pandemic respiratory illness. (See section VI. E.)
 - b. Any clusters (two or more persons) of unexplained pneumonia, especially among healthcare workers.
 - c. Any positive applicable laboratory results.
3. If transmission of emerging or pandemic respiratory illness is present in the world, healthcare workers should report as above and
 - a. Any patient with fever or lower respiratory illness who has an emerging or pandemic respiratory illness risk factor.

V. **OR/PACU recommendations**

Surgery should be performed only in a medical emergency; elective or non-urgent surgical procedures should be postponed. The **(Hospital epidemiologist or other emerging or pandemic respiratory illness designated physician)** and the infection control specialist should be contacted prior to transporting the patient to the operating room.

1. The emerging or pandemic respiratory illness patient must go directly to the OR. Do not send patient to the holding area.
2. The patient must wear a surgical/isolation mask for transport, if tolerated.
3. The isolation sign (with contact and airborne marked) will be placed on the OR room door.
4. HCWs must wear a gown, gloves, appropriate respiratory protection as outlined on the Patient Management Grid, Appendix B and eye protection for contact with the patient or stretcher or while in room with the patient. Gown and gloves are removed before exiting the room, respiratory protection is removed after exiting and hand hygiene must be performed immediately.
5. Intubated patients must have 99.9% bi-directional (inhalation and exhalation), bacterial filter placed at the Y-piece.
6. If the patient is to return to the same bed or stretcher after the case, the bed or stretcher must be cleaned with hospital approved disinfectant according to the manufacturer's direction for contact time, prior to removal from OR room. The bed/stretcher should be covered with a sheet and labeled with the OR room number. If the patient will not be returning to the same bed or stretcher, the bed/stretcher must be cleaned with a hospital approved disinfectant according to the manufacturer's direction for contact time immediately after transfer of patient to the OR table.
7. Damp towels must be placed at the base of the OR door. Tap water may be used to wet the towels.
8. Non-essential staff, students and other observers should not be allowed in the OR room.

9. The patient must return to the appropriate room and continue emerging or pandemic respiratory illness isolation precautions (see Patient Management Grid, Appendix B).
10. For patients on Airborne Precautions, the OR room must be kept blocked for 30 minutes (based on minimum of 15 air-exchanges/hour) after the patient leaves the room.
11. Monitors, anesthesia machines, audio-visual equipment, Bovie equipment, BP cuffs, stethoscopes and other equipment that cannot be soaked in a disinfectant should be meticulously cleaned with a hospital approved disinfectant and allowed to air dry.
12. After the room is cleaned, mop heads should be changed and towels used for cleaning placed in a soiled utility bag.
13. IV pumps, poles and equipment not staying with the patient should be disinfected with a hospital approved disinfectant according to the manufacturer's instructions for contact time and then sent to **(insert name of department responsible for cleaning and disinfection equipment)** for thorough terminal cleaning.
14. Gloves should be removed and hands washed prior to handling a phone or a clean towel may be used to handle the telephone. At the end of the case, the telephone keypad, cradle and receiver should be disinfected with a hospital-approved disinfectant.
15. Towels on the anesthesia machine and cart should be changed at the end of the case.
16. The patient will be recovered in the OR room or in a NPV recovery room.
17. The room should not be set up for the next case until the patient has left the room and the room has been properly cleaned.
18. Instruments should be processed per standard protocols.

W. **Postmortem Procedures**

1. Death from reportable communicable diseases is reportable to the local public health officer. **(insert phone number of local public health officer)**
2. Assess current capacity for refrigeration of deceased persons. Work with local health officials and medical examiners to identify temporary morgue sites if the need is anticipated to exceed capacity
3. Determine the scope and volume of supplies (e.g., body bags) needed to handle an increased number of fatalities.
4. Autopsies:
 - a. Mechanical devices used during autopsies can efficiently generate fine aerosols that may contain infectious organisms. Thus, autopsies will be performed in a room that meets appropriate engineering requirements and PPE must include both protective garments and respiratory protection.
 - b. Protective garments: surgical scrub suit, surgical cap, impervious gown or apron with full sleeve coverage, goggles, shoe covers and double surgical gloves with an interposed layer of cut-proof synthetic mesh gloves.
 - c. Respiratory protection: N-95 or N-100 respirators; or powered air-purifying respirators (PAPR) equipped with a high efficiency particulate air (HEPA) filter. PAPR is recommended for any procedures that result in mechanical generation of aerosols, (e.g., use of oscillating saws). Respiratory protection must be used according to the respiratory protection program.
 - d. Safety procedures:
 - 1). Protective outer garments must be removed when leaving the immediate autopsy area and discarded in appropriate laundry or waste receptacles, either in an antechamber to the autopsy suite

- or immediately inside the entrance if an antechamber is not available.
- 2). Hand Hygiene must be performed upon glove removal.
- e. Engineering strategies and facility design
 - 1). Autopsy suites should have a minimum of 12 air-exchanges per hour and should be at a negative pressure relative to adjacent passageways and office spaces.
 - 2). Air must not be returned to the building interior, but will be exhausted outdoors, away from areas of human traffic or gathering spaces (e.g., off the roof) and away from other air intake systems.
 - 3). For autopsies, local airflow control (i.e., laminar flow systems), can be used to direct aerosols away from personnel; however, this safety feature does not remove the need for appropriate personal protective equipment.
- f. Containment devices
 - 1). Biosafety cabinets should be available for handling and examination of smaller specimens.
 - 2). Oscillating saws are available with vacuum shrouds and should be used to reduce the amount of particulate and droplet aerosols generated.
 - 3). These devices should be used whenever possible to decrease the risk of occupational infection.
- 5. **(Insert name of department responsible for notification on communicable diseases)** will be contacted to assist with communicating any special needs to Funeral Directors. Funeral Directors will be provided with basic information related to the specific disease the patient had, if needed. Embalming or cremation and body preparation may be conducted as routine.

X. Outpatient Recommendations

- 1. A wide variety of ambulatory settings provide chronic (i.e., hemodialysis units) and episodic (e.g., freestanding surgery centers, dental offices, IV Treatment rooms) healthcare services. When emerging or pandemic respiratory illness is in the region, these facilities should implement control measures to prevent transmission of emerging or pandemic respiratory illnesses.
- 2. Other infection control strategies that may be utilized include:
 - a. Screening patients for influenza-like illness by phone or before coming into the facility and rescheduling appointments for those with symptoms
 - b. Canceling services when there is pandemic respiratory illness in the community
- 3. Patients in outpatient settings should be screened for influenza-like symptoms and risk factors for emerging or pandemic respiratory illness when community transmission of emerging or pandemic respiratory illness is present. It is essential for all healthcare workers in all medical settings to take emerging or pandemic respiratory illness exposure histories and/or travel histories from patients as well as to ask about signs and symptoms of emerging or pandemic respiratory illness during periods when community transmission has been identified. If the patient reports exposure, or is exposed, to a confirmed emerging or pandemic respiratory illness case, screening for the early symptoms should be done.
- 4. A separate entrance or waiting area may need to be established for symptomatic patients.
- 5. If a patient meets the criteria and has symptoms, immediately place a surgical/isolation mask on the patient, and move the patient to a separate room.

6. If it is essential that a patient with suspected emerging or pandemic respiratory illness visit an outpatient setting, the patient must don a mask prior to entering the facility. The patient must be placed in a separate room and be immediately seen and evaluated. HCWs must wear appropriate PPE, see Patient Management Grid, Appendix B.
7. If advance notification about an emerging or pandemic respiratory illness patient has not occurred, immediately place a surgical/isolation mask on the patient and place the patient in a separate room until evaluation occurs, and have the patient leave the facility as soon as possible.
8. All patients who visit an outpatient facility should be educated about good respiratory hygiene practices. Patient should be taught to cover mouth and nose with tissue when coughing and sneezing. The patient should be taught to dispose of tissue in appropriate container after use and to perform hand hygiene with alcohol based product or soap and water.
9. Tissues and hand hygiene products should be available in the waiting area.
10. A mask should be provided to patients with a cough or patients with a cough should be segregated from other patients.

Y. **Home Care Recommendations**

Many patients with pandemic respiratory illness will be able to remain at home during the course of their illness and can be cared for by family members or others who live the household. Home care providers can provide care for patients at home, decreasing the transmission of emerging or pandemic respiratory illnesses. See Appendix C for home care guidelines.

Z. **Long Term Care Recommendations**

Emerging or Pandemic Respiratory Illness outbreaks can occur in long-term care facilities. See Appendix D for long-term care guidelines.

AA. **Post Discharge Recommendations**

Prior to discharge patients and care givers should be instructed on respiratory hygiene and precautions for preventing the spread of illness.

BB. **Disposal of infectious waste:**

Infectious waste should be disposed of according to hospital policy.

CC. **Occupational Health**

1. Healthcare employees are at risk for emerging or pandemic respiratory illnesses both work-related and through the community. The ability to deliver quality care depends on the optimum well being of the staff.
2. Healthcare facilities must be able to:
 - a. Protect employees from exposures through proper infection control protocols;
 - b. Assess and treat those exposed;
 - c. Distribute and administer antiviral drugs and /or provide vaccines to employees, as recommended by the Department of Health and Human Services (HHS) and state health departments; and
 - d. Provide psychosocial services to employees and family to help sustain the work force.
 - e. Implement a system to educate employees about occupational health issues related to pandemic respiratory illness.

3. Create a plan to assess employees for signs and symptoms of respiratory illness before coming into work. Keep or send those employees home who are not fit for duty per Occupational Health Management Guidelines, Appendix E.
4. Employees who become develop symptoms of illness while on duty should don an isolation/procedure mask and notify their supervisor immediately.
5. Employees who have recovered from the illness should have developed antibodies against the same virus and could be utilized to take care of those patients with active disease. These employees could also be suited to take care of high risk patients, such as transplant patients and neonates.
6. Employees who are high risk themselves for emerging or pandemic respiratory illness, such as pregnant women or those who are immunocompromised, should be informed of their medical risk and offered alternative work assignments away from patient care with known or suspected emerging or pandemic respiratory illness. They may also be furloughed from duty. See Occupational Health Management Guidelines, Appendix E.

DD. Work Restrictions for Health Care Workers

Healthcare Workers with unprotected exposure to emerging or pandemic respiratory illness patients or illness with an emerging or pandemic respiratory illness may be restricted from work. See Occupational Health Management Guidelines, Appendix E.

EE. Mass Prophylaxis and/or Vaccination

Based upon recommendation from the department of health and CDC, medications and/or vaccines will be distributed to employees and their family members according to the *BJC HealthCare Mass Prophylaxis Plan*.

FF. Quarantine

Quarantine for specific illnesses will be based upon direction from the local and state departments of health and CDC. Guidance will be provided at that time.

GG. Surge Capacity

Refer to the entity Mass Casualty Plan for direction related to surge capacity including staffing and child care.

HH. Education and Training

1. Infection Control and/or the Nursing Supervisor will coordinate staff and patient education.
2. The Infection Prevention Specialist will educate the healthcare team on the epidemiological significance of emerging and pandemic respiratory illnesses, infection prevention precautions, and the emerging respiratory illness policy.
3. All of the staff will reinforce education at the change of shift.

II. Available Resources

1. Internal resources for additional information and guidance on the Emerging Respiratory Illness plan include:
 - a. Infection Prevention
 - b. Infectious Disease Division at Washington University School of Medicine, number available from infection prevention
 - c. Occupational Health

2. External resources for additional information and guidance:
 - a. Departments of Health:
 - Local Department of Health: *(insert phone number)*
 - County Department of Health: *(insert phone number)*
 - Missouri Department of Health and Senior Services: 1-800-392-0272
 - Illinois Department of Public Health: Call Local Health Department
 - b. Web Sites:
 - Center for Disease Control: www.cdc.gov/ncidod/sars/
 - World Health Organization: www.who.int/csr/sars/en/
 - Illinois Department of Public Health: www.idph.state.il.us/home.htm
 - Missouri Department of Health and Senior Services: www.dhss.state.mo.us
 - Department of Health and Human Services Pandemic Flu Plan: www.pandemicflu.gov

JJ. Review of Policy

The plan will be reviewed not less than annually and revised as needed.

References:

1. CDC Influenza Pandemic Operating Plan (OPLAN): January 2008
2. Missouri Pandemic Influenza Response Plan (Missouri Department of Health and Senior Services): January 2008

- VII. RECOMMENDED BY:** BJC Emergency Response Team
Infection Prevention & Epidemiology Consortium
Occupational Health Nurse Council
- VIII. ORIGINAL EFFECTIVE DATE:** **September 2006**
- IX. DATE OF REVIEW:**
- X. DATE OF REVISION:** **January 2009**

Appendix A Patient Post-Exposure Monitoring Tool

Name: Last _____ First _____ SS#: _____

Exposure to SARS/Avian Influenza Patient: (circle one) Yes No Date of Exposure: Mo ____/Day ____/Yr ____

Patient Placed on Isolation: Mo ____/Day ____ Date SARS/Avian Influenza Patient Admitted to Floor: Mo ____/Day ____/Yr ____

Patient history and symptoms prior to exposure:

Check any symptoms present on each indicated day	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21	
Date																						
Initials of person completing screening																						
Fever (record temperature)																						
Headache	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	
Dry or nonproductive cough	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	
Muscle aches	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	
Shortness of breath	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	
Other symptoms	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input type="checkbox"/> Y	

Comments: (when writing in this section please enter date prior to each entry and add initials at end of each entry)

If symptomatic referral to ID consult: Date: _____ Name of ID consult: _____

Appendix B Emerging and Pandemic Respiratory Illness Patient Management Grid

PATIENT MANAGEMENT:	Emerging or Pandemic Respiratory Illnesses		
	Severe Acute Respiratory Syndrome	Avian Influenza	Pandemic Influenza
IMPORTANT CONTACTS: Infection Prevention: <i>(insert number)</i> Local City or County Health Department: <i>(insert number)</i> CDC Emergency Response Office: 770-488-7100			
ISOLATION PRECAUTION			
Standard Precautions for all aspects of patient care	X	X	X
Contact Precautions	X	X	
Airborne Infection Isolation Precautions (AIIP) (<i>N95 respirators required</i>)	X	X	
Droplet Precautions			X
Wash hands with antimicrobial soap or alcohol based hand rub	X	X	X
PERSONAL PROTECTIVE EQUIPMENT			
N-95 Respirator required to enter room	X	X	
Surgical/Procedure/Isolation mask required to enter room			X
Isolation Gown to enter room	X	X	
Eye Protection/Goggles	X	X	
Gloves to enter room	X	X	
Patient must wear surgical/isolation mask when outside of room, if tolerated	X	X	X
Respiratory Hygiene/Cough Etiquette	X	X	X
PATIENT PLACEMENT			
Cohort "like" patients when private room not available	X	X	X
Private room	X	X	X
Negative pressure ventilation room	X	X	
Door closed at all times	X	X	X
PATIENT TRANSPORT			
Limit movement to essential medical purposes only	X	X	X
Place surgical/isolation mask on patient to minimize dispersal of droplets	X	X	X
CLEANING, DISINFECTION OF ROOM AND SUPPLIES			
Disinfect surfaces with EPA Registered, hospital-approved disinfectant	X	X	X
Terminally clean room at discharge (bed curtains)	X	X	
Full PPE for all cleaning and disinfection, including after discharge	X	X	
Dedicated equipment (disinfected prior to leaving room)	X	X	X
Soiled linen handling per Standard Precautions	X	X	X
Regulated medical waste handled per hospital policy	X	X	X
Soiled dishes handled per Standard Precautions	X	X	X
DISCONTINUATION OF ISOLATION			
Until 14 days after onset of symptoms		X	
Until 10 days after the complete resolution of symptoms	X		

PATIENT MANAGEMENT:	Emerging or Pandemic Respiratory Illnesses		
IMPORTANT CONTACTS: Infection Prevention: <i>(insert number)</i> Local City or County Health Department: <i>(insert number)</i> CDC Emergency Response Office: 770-488-7100	Severe Acute Respiratory Syndrome	Avian Influenza	Pandemic Influenza
Until afebrile for 24 hours off antipyretics or a minimum of 5 days			X
AEROSOL GENERATING PROCEDURES			
N-95 Respirator required	X	X	X
Perform procedure in negative pressure ventilation room	X	X	X
VISITOR RESTRICTION			
Restrict visitors for adult patients. Pediatric patients may have one parent at a time visit	X	X	
Instruct visitors on isolation precautions and the use of personal protective equipment			X
POST-MORTEM CARE			
Follow principles of Standard Precautions	X	X	X
Avoid autopsy or use Airborne Infection Isolation Precautions (N95 Respirators, negative pressure ventilation, or HEPA filtration required)	X	X	X
Contact Precautions	X	X	X
Routine terminal cleaning of room with hospital-approved disinfectant upon autopsy	X	X	X
Place a mask on the deceased body	X	X	X
Minimal handling of the body; seal body in leak-proof material	X	X	X

Appendix C

Emerging and Pandemic Respiratory Illness Home Care Guidelines

Home healthcare providers who enter homes where there is a person with an influenza-like illness should follow appropriate infection control precautions to prevent disease transmission to themselves, patient family members, and the community.

I. INFECTION CONTROL PRECAUTIONS

- A. Standard Precautions must be utilized when entering the home of all patients
 - 1. Perform hand hygiene using an alcohol-based hand rub or soap and water when hands are visibly soiled before and after patient contact and prior to leaving the home
 - 2. Practice proper respiratory hygiene/cough etiquette.
 - 3. Personal protective equipment, gloves, gowns, or face/eye protection, when contact with blood or body fluids is anticipated.
- B. Healthcare workers entering the home of patient with an emerging or pandemic respiratory illness should wear the same respiratory protection as if the patient were in the hospital. (i.e., for SARS and Avian influenza an N-95 respirator is required to enter the home, for pandemic influenza Droplet Precautions must be utilized)
- C. Droplet Precautions must be utilized when healthcare workers enter the home of a person with an influenza-like illness.
 - 1. Separate the patient from others in the household as much as possible.
 - 2. Wear a surgical or procedure mask for patient interactions
 - 3. Professional judgment should be used in determining whether to don a mask upon entry into the home or only on entering the patient's room. Factors to consider in this decision include the possibility that others in the household may be infectious and the extent to which the patient is ambulating within the home.

II. COMMUNICATION

- A. Communication between home health care providers and patients or their family members is essential for ensuring that personnel are appropriately protected.
- B. When pandemic respiratory illness is in the community, contact patients prior to the home visit to determine whether persons in the household have an influenza-like illness. If patients with pandemic respiratory illness are in the home, consider:
 - 1. Most patients will be able to remain at home and can be cared for by family members or others who live in the household.
 - 2. Anyone residing in a household with a pandemic respiratory illness patient during the incubation period and illness is at risk for developing this illness.
 - 3. When care is provided by a household member, basic infection control precautions should be emphasized.
 - 4. Postponing nonessential services
 - 5. Assigning providers who are not at increased risk for complications of pandemic respiratory illness to care for these patients.

III. PROCEDURE

- A. Care In the Home:
 - 1. Family members in the home should be limited. Individuals without essential need to be in the home should not visit.

2. A surgical or procedure mask should be worn by the patient for contact with all caregivers/family members. If the patient cannot tolerate a surgical or procedure mask the caregiver should wear a surgical or procedure mask.
 3. Patients should be separated from household/family members as much as possible, use separate rooms in the house especially the bathroom.
 4. Instruct the patient and family members to perform hand hygiene after contact with the patient, environment, bodily waste, or glove removal.
 5. Gloves should be worn for contact with body fluids or potentially infectious materials.
 6. Silverware, towels, or bedding should not be shared with the ill patient until these items have been washed with soap and hot water.
 7. Surfaces contaminated with body fluids should be cleaned with a household disinfectant. Gloves should be worn when cleaning contaminated surfaces. Clean and disinfect all surfaces that were in contact with the patient or might have become contaminated during patient illness. No special treatment is necessary for window curtains, ceilings, and walls unless visible soiled. Do not spray (i.e., fog) occupied or unoccupied rooms with disinfectant.
 8. The patient's laundry may be laundered in hot water. Separating the patient's laundry from the rest of the family's laundry is not necessary but gloves should be worn when handling soiled laundry.
 9. Family members should monitor themselves for fever and respiratory symptoms and seek medical evaluation if symptoms appear.
 10. A patient with pandemic respiratory illness should limit their activities outside the home for 5 to 10 days after the resolution of fever and respiratory symptoms
 11. Follow standard practices for handling and reprocessing used patient-care equipment, including medical devices:
 - a. Wear gloves when handling and transporting used equipment.
 - b. Wipe heavily soiled equipment with an approved disinfectant before removing it from the patient's home.
 - c. Place the equipment in a bag labeled "Dirty".
 - d. Follow current recommendations for cleaning and disinfection or sterilization of reusable patient-care equipment.
- B. If a patient with an influenza-like illness is admitted to a healthcare facility from home, the home health agency will notify the receiving facility of the patient's flu-like respiratory symptoms.
- C. Aerosol-generating Procedures in Home Care
For aerosol-generating* procedures all personnel must use additional infection control precautions. Home Care staff will follow the same PPE guidelines as hospital staff

**Aerosol-generating procedures capable of stimulating cough and promoting the generation of aerosols include: administration of aerosolized medication treatment; diagnostic sputum induction; bronchoscopy; airway suctioning; endotracheal intubation; positive pressure ventilation via facemask (e.g., BiPAP, CPAP), during which air may be forced out around the facemask; and high frequency oscillatory ventilation (HFOV).*

Appendix D

Pandemic Respiratory Illness Long-term Care Guidelines

A. ROUTINE IMMUNIZATION OF RESIDENTS

- A. Pneumococcal vaccine should be made available to all residents.
- B. Annual influenza immunization should be made available to all residents and staff (including volunteers and administration).
 - 1. All residents should be vaccinated for influenza at the same time.
 - 2. Persons admitted after the completion of the facility's annual influenza vaccination program should be vaccinated on admission.
 - 3. A list of residents and staff and their vaccination status should be maintained so that in the event of an outbreak, influenza vaccinations and prophylaxis can rapidly be targeted to appropriate residents and staff.

II. INFECTION CONTROL RECOMMENDATIONS

- A. Identify and immediately report any resident(s) or staff with influenza-like symptoms.
- B. Keep a case log to track the location and health status of residents with influenza-like symptoms and restrict movement of staff between wards.
- C. Residents with symptoms are restricted to their rooms and should wear surgical/procedure masks when movement in the facility is required
- D. Limit movement through facility for staff, visitors and residents
- E. Prescreen and limit new admissions.
- F. Screen staff and visitors for symptoms prior to entering the building and limit visitors to those necessary for the residents' well being; instruct on hand hygiene, respiratory etiquette and infection control,
- G. Restrict ill staff from work.
- H. Treat influenza cases with antiviral medications, unless contraindicated.
- I. Eliminate or decrease the number of items shared by residents such as pens, clipboards and telephones.
- J. Clean and disinfect the environment daily and when visibly soiled.
- K. Standard and Droplet Precautions are required for residents with influenza-like respiratory illness.
- L. Resident equipment, if possible, will be bagged or placed in a container before leaving room.
- M. Wear gloves when cleaning and disinfecting dirty equipment.
- N. Offer prophylaxis to exposed non-ill patients and unvaccinated staff.

III. OUTBREAK CONTROL MEASURES

- A. Cohort infected residents:
 - 1. Keep residents with suspected or confirmed influenza in a private room or in a room with other residents with the same symptoms.
 - 2. Limit staff from "floating" to non-infected wards, if possible.
- B. In addition to Standard Precautions, place symptomatic residents on Droplet Precautions.
- C. Implement aggressive hand hygiene and respiratory etiquette.
- D. Cancel or postpone group activities.
- E. Limit new admissions until the incidence of new cases has reached zero. If new admissions are necessary, admit residents to a non-infected ward or to a ward that has had no new cases for at least 2 days.

- F. Restrict visitors and volunteers.
- G. Re-offer influenza vaccination to unvaccinated staff and residents.
- H. Initiate prophylaxis as early as possible to reduce the spread of the virus.

IV. USE OF ANTIVIRAL MEDICATIONS IN LONG-TERM CARE

- A. The use of antiviral medications is known to reduce the morbidity of influenza in confirmed influenza patients, as well as provide protection against influenza infection to exposed non-ill patients and unvaccinated individuals. When outbreaks of influenza occur in a long-term care facility, and antiviral prophylaxis of high-risk persons and treatment of cases is undertaken, drug administration should begin as early in the outbreak as possible to reduce transmission and to limit complications of infection.
- B. When outbreaks occur in facilities, prophylaxis should be administered to all residents if antiviral medication is available and effective against circulating virus, regardless of influenza vaccination status. Prophylaxis should continue for a minimum of 2 weeks. If surveillance indicates that new cases continue to occur, prophylaxis should be continued until approximately 1 week after the end of the outbreak, or 1 week from the date when the last case of influenza, among either residents or staff.
- C. If antiviral influenza medication is limited, use should be restricted to symptomatic patients. For optimal efficacy, administer antiviral medication as soon as possible after symptom onset. If it has been more than 48 hours since the onset of symptoms antiviral medication for influenza may not be effective.

Appendix E
Emerging and Pandemic Respiratory Illness
Occupational Health Management Guidelines

EMPLOYEE MANAGEMENT:	Emerging or Pandemic Respiratory Illnesses		
	Severe Acute Respiratory Syndrome	Avian Influenza	Pandemic Influenza
IMPORTANT CONTACTS: Occupational Health Department: <i>(insert number)</i> Infection Control: <i>(insert number)</i>			
IMMUNIZATION AND TREATMENT			
Annual Influenza Vaccination	X	X	X
Track names of personnel who enter patient room	X	X	
Post-exposure prophylaxis		X	X
Report signs and symptoms of illness during outbreak to Occupational Health	X	X	X
PERSONAL PROTECTIVE EQUIPMENT DURING PATIENT CARE			
Isolation Gown, gloves, and eye protection required to enter room in addition to N95 respirators	X	X	
N95 respirators required to enter patient room	X	X	
Procedure or isolation mask required to enter patient room			X
Perform proper hand hygiene	X	X	X
WORK RESTRICTIONS			
Immediately report unprotected occupational exposures	X	X	X
Furlough from duty for 10 days following exposure	X*		
Monitor for signs and symptoms of illness for 10 days following exposure	X	X	
Ill employees should remain off work until 24 hours without a fever off of all antipyretics (aspirin, acetaminophen, ibuprophen)		X	X
Ill employees should remain off work until 10 days after the complete resolution of symptoms	X		
SURVEILLANCE			
Perform passive surveillance (e.g., review of occupational health or other sick leave records) among all health care workers to identify clusters of emerging or pandemic respiratory illness	X	X	X
Track names of personnel who enter patient room	X	X	
Develop line list of all occupationally exposed employees	X	X	X
Monitor exposed employees for symptoms of illness during incubation period	X	X	X

*See Occupational Exposure to Severe Acute Respiratory Syndrome, Appendix F.

Appendix F

Occupational Exposure to Severe Acute Respiratory Syndrome

- B. Severe Acute Respiratory Syndrome (SARS) is a respiratory illness believed to be caused by a previously unrecognized coronavirus (SARS-CoV).
- C. Case definition
1. Clinical Criteria
 - a. *Early illness*: Presence of two or more of the following features: fever (might be subjective), chills, rigors, myalgia, headache, diarrhea, sore throat, rhinorrhea
 - b. *Mild-to-moderate respiratory illness*:
 - 1) Temperature of >100.4° F (>38° C) **and**
 - 2) One or more clinical findings of lower respiratory illness (e.g., cough, shortness of breath, difficulty breathing)
 - c. *Severe respiratory illness*
 - 1) Meets clinical criteria of mild-to-moderate respiratory illness, **and**
 - 2) One or more of the following findings:
 - a) Radiographic evidence of pneumonia
 - b) Acute respiratory distress syndrome
 - c) Autopsy findings consistent with pneumonia or acute respiratory distress syndrome without an identifiable cause
 2. Epidemiologic Criteria
 - a. *Possible exposure to SARS-associated coronavirus (SARS-CoV)*, One or more of the following exposures in the 10 days before onset of symptoms:
 - 1) Travel[†] to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV **or**
 - 2) Close contact* with a person with mild-to-moderate or severe respiratory illness and with history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV
 - b. *Likely exposure to SARS-CoV*, One or more of the following exposures in the 10 days before onset of symptoms:
 - 1) Close contact with a confirmed case of SARS-CoV disease **or**
 - 2) Close contact with a person with mild-moderate or severe respiratory illness for whom a chain of transmission can be linked to a confirmed case of SARS-CoV disease in the 10 days before onset of symptoms
 3. Laboratory Criteria

Tests to detect SARS-CoV are being refined, and their performance characteristics assessed; therefore, criteria for laboratory diagnosis of SARS-CoV are changing. The following are the general criteria for laboratory confirmation of SARS-CoV:

[†]**Travel** includes transit in an airport within 10 days of onset of symptoms to an area with current or recent documented or suspected community transmission of SARS.

* **Close contact** is defined as having cared for or lived with a person known to have SARS or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have SARS. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief period of time.

- a. Detection of serum antibody to SARS-CoV by a test validated by CDC (e.g., enzyme immunoassay [EIA]), *or*
 - b. Isolation in cell culture of SARS-CoV from a clinical specimen, *or*
 - c. Detection of SARS-CoV RNA by a reverse-transcription-polymerase chain reaction (RT-PCR) test validated by CDC and with subsequent confirmation in a reference laboratory (e.g., CDC)
- D. Symptoms may include the following: fever >100.4° F or 38 ° C, chills, rigors, headache, malaise, myalgia. Mild respiratory symptoms such as dry, nonproductive cough or shortness of breath are present at the onset and may worsen.
- E. The mean incubation period for SARS is typically 4-6 days, but can be as long as 10 days and as short as 2 days.
- F. Mandatory infection control precautions for suspected SARS patients include:
1. Standard, Contact, **and** Airborne precautions
 2. Personal protective equipment for all healthcare workers entering the patient room include gowns, gloves, N95 respirators[§] **and eye protection** (regular prescription eye glasses alone are not considered protective equipment)
 3. Additional precautions include proper hand hygiene (handwashing or alcohol foam) before and after patient and/or environmental contact
- [§]In accordance with the Occupational Safety and Health Administration, the use of N95 respirators requires training and fit testing per the BJC Respiratory Protection Program.
- G. Nosocomial transmission of SARS from patients to healthcare workers after **occupational exposure** has been documented. The definition of an occupational exposure is any employee exposed to an individual with SARS without proper isolation precautions, proper respiratory protection (either patient or employee), and/or proper personal protective equipment (gown, gloves, N95 respirator, and eye protection) in the following circumstances:
1. Having close contact, defined as having cared for a person known to have SARS, or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have SARS. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief period of time.
 2. Entering the isolation room of a suspected SARS patient
 3. Present during high-risk aerosol-generating procedures or events for a patient with suspected SARS:
 - a) Close facial contact during a coughing paroxysm
 - b) Aerosolized medication treatments
 - c) Bronchoscopy
 - d) Sputum induction
 - e) Endotracheal intubation
 - f) Airway suctioning
 4. Transporting a probable SARS patient in a closed vehicle
- H. Management of occupational exposures to SARS patients should occur as follows:

1. The employee must immediately report any occupational exposures to SARS patients to their supervisor and notify Occupational Health and Infection Control. Failure to notify their supervisor of a SARS exposure may result in disciplinary action.
 2. A line list of all exposed employees must be developed by the department manager and Occupational Health (see Table 1).
 3. All employees with an unprotected occupational exposure to a **suspected** case of SARS **must be** furloughed from duty for 10 days following exposure.
 - a. The Infectious Disease Consult Team in collaboration with the (entity appointed SARS authority or hospital epidemiologist) will make a determination about whether an unprotected exposure as defined above has occurred.
 - b. Occupational Health shall be notified of all employee furloughs.
 - c. Exposed employees must watch closely for and immediately report any symptoms of illness to Occupational Health by taking their temperatures twice a day, monitoring for respiratory symptoms and monitoring for the presence of the other early symptoms (subjective fever, chills, rigors, myalgia, headache, diarrhea, sore throat, rhinorrhea).
 - d. Furloughed employees will be paid in accordance with the BJC HealthCare Earned Time Off (ETO) policy (#4-1).
 - 1) Furloughed employees who do not develop signs and symptoms consistent with SARS will be reimbursed for any ETO/EIB (extended illness benefit) used during the furlough period, provided they return to work when requested.
 - 2) Furloughed employees who develop signs and symptoms consistent with SARS will be paid in accordance with the BJC HealthCare Workers Compensation Policy (#4-6).
 4. Passive surveillance (e.g., review of occupational health or other sick leave records) should be conducted among all healthcare workers in a facility with a SARS patient, and all healthcare facility workers should be educated concerning the symptoms of SARS.
 5. Passive surveillance (e.g., review of occupational health or other sick leave records) should be conducted among all healthcare workers to identify clusters of atypical pneumonia without an alternative diagnoses in healthcare workers.
- I. Non-occupational exposure: Employees may be exposed to SARS during activities such as international travel to and from areas with community transmission or exposure to persons identified as a result of a public health investigation
1. The Centers for Disease Control and Prevention recommends that persons planning elective or non-essential travel to areas with community transmission postpone their trips until further notice.
 2. Employees who may have traveled to areas with community transmission or SARS should watch closely for fever, respiratory symptoms and for the presence of the other early symptoms (subjective fever, chills, rigors, myalgia, headache, diarrhea, sore throat, rhinorrhea). Those who develop fever or respiratory symptoms should not report for duty and should seek health-care evaluation.
 3. At this time, in the absence of fever or respiratory symptoms, employees who traveled to areas with community transmission of SARS need not limit their activities outside the home and should not be excluded from work.
 4. All employees with an unprotected exposure or close contact to a known **suspected** case of SARS outside of work **must be** furloughed from duty for 10 days following exposure.
 - a. The exposed employee must immediately notify their supervisor of the exposure. Failure to notify their supervisor of a SARS exposure may result in disciplinary action.

- b. The exposed employee must watch closely for any symptoms of illness by taking their temperature twice a day and monitoring for respiratory symptoms; those who develop fever or respiratory symptoms should not report for duty and should seek health-care evaluation.
 - c. Employees who may have been exposed to SARS patients outside of work will be reimbursed in accordance with the BJC HealthCare Earned Time Off (ETO) policy (#4-1).
5. Infection Control and Occupational Health must be notified of any employees that develop fever or respiratory symptoms consistent with suspected SARS.

TABLE 1

Patient Name:				DOB:		Adate:		Ddate:		Exposure Date:	
Disease of Exposure:				Location:				Date of Isolation:			
Employee Name Last, First	Job Title	Department	Type of Exposure	Fever	H/A	Myalgia	Malaise	Cough	SOB	Work Exclusion	
				<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	
Social Security Number	Home Phone	Date of symptoms		<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	
Employee Name Last, First	Job Title	Department	Type of Exposure	Fever	H/A	Myalgia	Malaise	Cough	SOB	Work Exclusion	
				<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	
Social Security Number	Home Phone	Date of symptoms		<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	
Employee Name Last, First	Job Title	Department	Type of Exposure	Fever	H/A	Myalgia	Malaise	Cough	SOB	Work Exclusion	
				<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	
Social Security Number	Home Phone	Date of symptoms		<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	
Employee Name Last, First	Job Title	Department	Type of Exposure	Fever	H/A	Myalgia	Malaise	Cough	SOB	Work Exclusion	
				<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	
Social Security Number	Home Phone	Date of symptoms		<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	
Employee Name Last, First	Job Title	Department	Type of Exposure	Fever	H/A	Myalgia	Malaise	Cough	SOB	Work Exclusion	
				<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	<input type="checkbox"/> N	
Social Security Number	Home Phone	Date of symptoms		<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	<input type="checkbox"/> Y	

Appendix H

Mandatory Screening Questions for Patients Presenting to the Hospital

- A. Have you recently cared for, lived with, or had close contact* with a person known to have Severe Acute Respiratory Syndrome (SARS) or Avian Influenza? Yes No
- B. Have you recently had close contact* with respiratory secretions and/or body fluids of a person known to have SARS or Avian Influenza? Yes No

**Close contact is defined as having cared for or lived with a person known to have SARS or avian influenza or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have SARS or avian influenza. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief period of time.*

If the answer is “yes” to A or B, consider SARS or Avian Influenza and place the patient on isolation using steps 1 – 4 below.

If patient had exposure to a laboratory confirmed case and has early symptoms of SARS or avian influenza such as subjective fever, chills, rigor, myalgia, and headache place on isolation using steps 1-4 below.

- C. Have you traveled in the past 10 days to an area with community transmission of SARS/Avian influenza or had close contact with an ill person with a recent travel history to one of these areas? Yes No
- D. Are you employed as a healthcare worker with direct patient contact or worker in a laboratory that contains live SARS-CoV or H5N1 influenza A? Yes No
- E. Are you employed at a poultry farm where infected birds have been identified? Yes No
- F. Do you know other people who are currently sick with pneumonia without a cause? Yes No
- G. Do you have any of these symptoms:
- | | | |
|--|------------------------------|-----------------------------|
| Fever (>100.4 degrees F or 38 degrees C) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Shortness of breath/difficulty breathing | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Cough | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

(To be answered by the clinician)

- H. Is the patient hypoxic? Yes No
- I. Is the patient part of a cluster of people with an atypical pneumonia without an alternative diagnosis? Yes No

If the answer is “yes” to C, D, E, or H AND the patient has signs and symptoms (F or G) consider SARS or Avian Influenza and place the patient on isolation using steps 1- 4 below.

- 1) Place a surgical/isolation mask on patient immediately.
- 2) Put on ALL of the following personal protective equipment immediately:

N-95 mask	Protective eyewear (<i>personal eyeglasses are NOT sufficient protection</i>)
Gown	Gloves

All persons entering the patient’s room must wear ALL of the above personal protective equipment

- 3) Place patient immediately in a negative pressure room and Airborne Infection Isolation precautions
- 4) Immediately call Infection Control at pager _____
AND
Designated SARS/Avian Influenza physician (Infectious Disease) _____

Appendix I

Medical Offices and Clinics Upon initiating this plan, notify Risk Manager 314-286-0650

- Vaccinate all staff and their families against seasonal influenza. (This will help differentiate seasonal influenza from the pandemic variant, help keep the health workforce healthy and may have some ameliorating effect on the pandemic variant.)
- Review patients' records to assess their need for pneumococcal vaccination.
- Educate staff and patients about changes they can expect to be implemented in the office during a pandemic and about ways to prepare themselves and their families. (See CDC's "Pandemic Flu Planning Checklist for Individuals and Families" at <http://pandemicflu.gov/plan/individual/checklist.html>.)

Influenza education:

- Educate staff about avian (or other pandemic strain) influenza evaluation and treatment.
- Educate staff about alternative office management plans.
- Educate patients about developing family management plans.

Office preparedness training:

- Design an office management plan for pandemic influenza that includes medical flow, triage, treatment and design.
- Prepare for office staff illness, absences and/or quarantine. (Physicians should plan for a 40 percent absenteeism rate at the peak of a pandemic.)
- Cross-train staff for all essential office and medical functions.
- Review proper office and medical cleaning routines.
- Plan for cross-covering with other health care providers in your community, and participate in local hospital planning exercises.
- Identify materials and supplies required for care to be delivered during a pandemic and businesses that can provide those materials. .) Order appropriate materials and supplies.
- Contact representatives at your office waste disposal service regarding plans for appropriate waste disposal so that they can prepare for an increased amount of dangerous waste materials.
- Become knowledgeable about drugs available for treatment and prophylaxis and about other acute treatment options. This should entail familiarity with general recommendations on pandemic influenza from the CDC and other reliable clinical information sources, as well as with information about what management options and resources may be available and most effective in your area.
- Keep up-to-date on the availability of diagnostic testing (both overall and in your area), location of labs and length of time needed for results to be returned, equipment required, etc.
- Make arrangements necessary to ensure you'll have access to needed diagnostic testing resources and capabilities during a pandemic.
- Establish linkages with your state/local public health offices so that you and your staff can be notified when specific vaccine becomes available and can plan for appropriate distribution according to state and CDC recommendations. Ensure that you and your staff are familiar with specific public health reporting practices legally required in your area.

ASSUMPTION: Transmission will be primarily through exposure to respiratory droplets and direct contact with patients and their contaminated environments.

NOTE: For a task-based approach to preparing for an influenza pandemic, download the CDC's "Medical Offices and Clinics Pandemic Influenza Planning Checklist" at <http://www.pandemicflu.gov/plan/pdf/medofficesclinics.pdf>.

In Areas Without Known But With Suspected Avian Flu

- Post signage, in appropriate languages, at the entrance to and inside the office to alert all patients with influenza symptoms to notify staff immediately of that fact.
- Post signage, in appropriate languages, to teach/remind all patients about correct respiratory hygiene and cough etiquette; specifically, they should cough and sneeze into a tissue (which then should be properly discarded) or into the upper sleeve. (<http://www.cdc.gov/flu/protect/covercough.htm>)
- Reorganize waiting areas to keep patients with respiratory symptoms a minimum of three feet from others and/or have a separate waiting area for patients with respiratory illness.
- Consider arranging a separate entrance for symptomatic patients.
- Schedule patients with acute respiratory illness (ARI) to the end of a day or at another distinct time.
- Evaluate patients with ARI promptly.
- Provide disposable tissues to all symptomatic patients on arrival for their use in trapping respiratory secretions.
- Provide no-touch waste containers with disposable liners in all reception, waiting, patient care and restroom areas.
- Provide alcohol-based hand rub in all reception, waiting, patient care and restroom areas.
- Discontinue the use of toys, magazines and other such shared items in waiting areas, as well as shared items between patients, such as pens, clipboards, phones, etc.
- Dedicate equipment, such as stethoscopes and thermo-meters, to be used in ARI areas.
- Equipment will need to be cleaned with appropriate cleaning solutions between each patient, consider the use of disposable equipment, such as blood pressure cuffs, when possible.

Triage Systems

- Consider rescheduling or postponing all routine appointments.
- Recommend that patients phone the office before arrival.
- Implement alternative patient care systems.

Telephone triage system. Identify a staff person or persons dedicated to triaging phone patients using the following questions:

- 1) "Do you have a fever greater than 100.4°F (38°C) and cough or sore throat?"
- 2). "Have you had contact with other sick people or with sick or dead birds?"
- 3). Have you traveled recently to _____ (will vary according to epidemic disease areas identified)?"

If yes to either, advise patient to come in for evaluation of possible need for prophylaxis.

If no, pursue other symptoms. "Are you having shortness of breath or other signs of respiratory distress?"

If yes, advise patient to proceed to emergency room.

If no, schedule patient for outpatient evaluation using appropriate on-site precautions.

Office triage system

- Isolate or separate all "walk-in" patients by at least a three-foot margin until evaluated/triaged by designated office or nursing personnel. If patient exhibits shortness of breath or other signs of respiratory distress, the triage specialist should call the physician immediately. If not, proceed with triage using the following questions:
- 1) "Do you have a fever greater than 100.4°F (38°C) and cough or sore throat?" If yes, go to next question. If no, pursue other symptoms.

- 2) “Have you had contact with other sick people or with sick or dead birds?” “Have you traveled recently to _____ (will vary according to epidemic disease areas identified)?” If yes to either, continue evaluation for possible need for prophylaxis. If no, pursue other symptoms.

Implement alternative patient flow systems.

Post signage, in appropriate languages, about correct respiratory hygiene and cough etiquette at entrance to and inside office. (<http://www.cdc.gov/flu/protect/covercough.htm>)

Signs should direct patients to notify staff immediately if they have influenza signs or symptoms.

Distribute respiratory prevention packets consisting of a disposable surgical mask, facial tissues and cleansing wipes to all symptomatic patients.

Isolate all symptomatic patients or separate them from others by a minimum of three feet.

Deliver symptomatic patients to exam room as soon as practical.

Examine symptomatic patients wearing appropriate isolation equipment: N-95 respirator*, face shield, gown and gloves (<http://pandemicflu.gov/plan/healthcare/maskguidancehc.html>).

After delivering care, exit office as quickly and directly as possible (consider completing all exit paperwork in exam room).

APPENDIX J
BJC HealthCare Pandemic Planning Assessment
Complete through Phase 3 – Review Phases 4 & 5

Procedure Assessment

The focus is on planning during the interpandemic and pandemic alert periods. This section allows each entity to assess the current status of their pandemic planning efforts, identify gaps and direct further planning.

A. Inter-Pandemic Period – Phase 1 and 2 - COMPLETE

Planning for all aspects of pandemic/epidemic respiratory illness is the key activity in this phase

- Annual influenza vaccination among healthcare workers (HCWs)
- Review BJC HealthCare – *Influenza Management Plan* each year
- Conduct hospital surveillance for influenza
- Educate emergency department and outpatient areas on signs/symptoms of influenza and utilization of BJC HealthCare – *Influenza Screening Tool*
- Review entity specific plan(s) for emergency department outpatient triage
- Collaborate and communicate with LPHA – local public health agency regarding influenza activity and community transmission
- Assure procedures are in place to facilitate laboratory testing and reporting through the local and state surveillance systems
- Pre-identify negative pressure and neutral pressure locations.

B. Pandemic Alert Period, Phase 3 - COMPLETE

Human infection(s) with a new subtype, but no human-to-human spread, or at most, rare instances of spread to a close contact.

- Continue and refine the activities in Phase 1 and 2 (above)
- Review and understand BJC HealthCare crisis communication plan
- Review and understand your role in Hospital Incident Command Structure
- Understand HICS structure to keep administrators, personnel, patients and visitors informed of ongoing impact of pandemic influenza in the facility and community
- Collaborate with pharmacy on allocation and distribution of antiviral drugs to healthcare personnel
- Review work restriction policies, including clear guidance on the need for staff to stay home in the event of fever and respiratory symptoms
- Clarify time-off policies and procedures for healthcare provides who are asked to stay at home
- Determine how “just in time” refresher training and education will be provided for all health care personnel at the start of the pandemic influenza outbreak
- Review procedures for staff triage stations and evaluation units
- Develop a strategy for regularly updating clinicians, direct patient care staff and screening/triage staff on the current status of the pandemic and any changes in the recommendations for management of influenza patients
- The above includes procedures for deferring elective admissions, for discharging patients as soon as possible, cohorting patients admitted with influenza and for monitoring healthcare acquired transmission
- Develop guidelines on staffing, inclusive of essential and non-essential staff
- Consider re-assigning non-essential staff to support critical hospital services
- Consider assigning staff recovering from influenza to care for influenza patients
- Estimate the 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 strategies for enhancing isolation capacity, including units for cohorting

Pandemic Alert Period, Phase 4 - REVIEW

Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

- Continue, refine and if needed, implement the activities in Phase 1, 2 and 3 in conjunction with your medical director
- Initiate heightened surveillance
- Provide daily surveillance information to local public health agencies and DHSS upon request
- Determine availability of critical equipment and antiviral medications
- Medical director, infection control, occupational health to collaborate with LPHA to determine needed doses of vaccine and antivirals for high priority Populations

Pandemic Alert Period, Phase 5 - REVIEW

Large 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.

- Continue, refine and if needed, implement the activities in Phase 1, 2, 3 in conjunction with your medical director
- Implement this pandemic respiratory illness plan
- Maintain heightened surveillance
- Implement “just in time” refresher training and education for all health care personnel, patients and visitors
- Develop communication plan to push out information from health alerts and LPHA
- Update clinical, emergency department and outpatient staff on the status of pandemic influenza in their area

If pandemic respiratory illness is reported anywhere in the United States: Continue with Phase 5 interventions PLUS:

- 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 a high index of suspicion that patients presenting with influenza-like illness could be infected with the pandemic strain. If the pandemic strain is detected in a local patient, community transmission can be assumed and the hospital should move to the next level

If pandemic respiratory illness is reported anywhere in the local area, Continue with above PLUS:

- Set up Incident Command Center. Refer to your Hospital Incident Command System (HICS) policy and hospital specific Incident Command Center Plans
- Identify when first cases began in this community; keep in close contact with state, regional and local public health agencies
- Identify, isolate and treat all patients with potential respiratory illness
- Communicate with local health department when patients who still require isolation are discharged

Date assessment completed: _____

Name of entity: _____

Person(s) completing assessment: _____

Current State

Identified strengths in pandemic planning: _____

Future State

Areas needing improvement with pandemic planning: _____

Next steps:

We need assistance with: _____

Please fax form to: Chris Zirges at 314-286-0474