

## Screening and Isolation Guidance for Healthcare Facilities

**NOTE: This guidance document has been revised to include the issues surrounding swine influenza.**

**04/27/09**

This document provides bulleted recommendations for infection control in healthcare facilities for swine influenza. More thorough explanations follow in this document. As with all new diseases, recommendations may change as we learn more about transmissibility and viral characteristics.

### Bulleted Recommendations

#### **Point of Entry Recommendations**

- Update emergency department/clinic receptionist/triage staff/sanitation staff on current situation with swine influenza.
- Make masks, tissues, alcohol hand rub products available for staff and patient use.
- Put up signage on Cover your Cough and Respiratory Etiquette in appropriate language for community
- Put up signage that instructs patients to notify triage nurse/receptionist if they are coming in with flu-like symptoms (fever, cough, sore throat).
- Have waste baskets available
- Make sure to wipe down high touch areas/items: doorknobs, elevator buttons, restrooms, chair arms

#### **Triage Questions**

- *Have you had fever (elevated temperatures) in the past two weeks?*
- *Have you had cough in the past two weeks?*
- *Have you had shortness of breath or difficulty breathing in the past two weeks?*

#### **If YES to fever and respiratory symptoms:**

- *Do you have any of the following current epidemiological risk factors for swine influenza (as of April 27, 2009): travel to Mexico in the past 10 days, close contact with an ill suspected or confirmed case within the last 10 days, or close contact with an ill person associated with the St. Francis Prep School.*
- *Are you a healthcare worker who provided direct clinical care for a patient with suspected or confirmed swine influenza for which you did not wear appropriate PPE or had a break in PPE?*

**If YES, then patient is suspect for swine influenza and should be placed in an AIIR or separate single room to await medical provider.**

#### **Infection control measures for suspect case**

- Give patient surgical mask immediately if not already given
- If patient unable to be placed immediately in isolation room, separate patient at least 6 feet from other patients.
- Place appropriate infection control signage on door.

#### **Infection control measures for healthcare workers**

- Recommendations for masks and respirators should follow the interim recommendations as proposed for pandemic influenza. These recommendations may change over the course as a better characterization of the swine flu occurs:

1. Personnel engaged in any aerosol generating activities (e.g., collection of clinical specimens, endotracheal intubation, nebulizer treatment, bronchoscopy, and resuscitation involving emergency intubation or cardiac pulmonary resuscitation) for suspected or confirmed swine influenza cases should wear a fit tested disposable N-95 respirator.
  2. Pending clarification of transmission patterns for this virus, personnel providing direct patient care for suspected or confirmed swine influenza cases should wear a fit-tested disposable N-95 respirator when entering the patient room.
- Personnel providing care to or collecting clinical specimens from suspected or confirmed cases should wear disposable non-sterile gloves, gowns, and eye protection.
  - Strict adherence to hand hygiene with soap and water or with alcohol hand sanitizers should be maintained.
  - Please review the guidance in the October 2006 “Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Healthcare Settings during an Influenza Pandemic”  
<http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>
  - More recommendations on infection control in medical facilities can be found at:  
[http://www.cdc.gov/swineflu/guidelines\\_infection\\_control.htm](http://www.cdc.gov/swineflu/guidelines_infection_control.htm)

## **Section 1. Initial Patient Encounter:**

Effective screening for and isolation of potentially infectious patients, especially those who may be at risk for airborne or droplet transmission of infectious agents to others, is critical to ensure prompt recognition and isolation as soon as possible after patient arrival. The following measures are recommended to be routinely in place to help decrease transmission of infectious agents to staff, visitors and other patients:

*(Note: Sections a and b below should be considered standard measures for all EDs and clinic to routinely have in place.)*

- a. **Place surgical masks and alcohol hand hygiene products as close as possible to all entranceways to ED/Clinics so that they are available to all patients and visitors coming to the hospital/clinic.**

**Signage (see below) should be placed next to these items and be clearly visible.**

**Boxes of tissues, waste baskets, and alcohol-based hand hygiene products should be placed throughout the ED/clinic waiting areas and examination rooms.**

- ❖ Signage should have a simple, clear message in large font stating that all patients who come in with fever and respiratory symptoms should wear a mask and perform hand hygiene with the alcohol hand hygiene products available at the entranceway. They should then proceed directly to the registration desk and/or triage nurse and alert staff to their symptoms.
- ❖ Signage should show patients how to wear the mask correctly and how to use the alcohol hand hygiene products.
- ❖ Other options: Show a streaming video on TV/media equipment in ED/clinic waiting areas that demonstrate proper methods for hand hygiene, usage of surgical mask, and how patients should alert ED/clinic staff if they have fever and respiratory. “Cover Your Cough” posters in various languages can be obtained from the DOHMH website: <http://www.nyc.gov/html/doh/html/cd/cd-cough.html>.

- b. **Signage should be in all languages that are appropriate for your patient community.**

- c. **Triage/screening staff should have a reminder system that will prompt them to perform “communicable disease triage screening” for respiratory communicable diseases of urgent public health concern on ALL patients who present or self-identify with a fever.** Screening should include asking all patients with fever about the presence of respiratory symptoms (cough or shortness of breath), as well as epidemiologic risk factors, such as recent travel. Triage/screening staff should note the time at which the patient was triaged on the patient’s ED record.

*The following questions should be asked of all patients at the initial screening:*

- ❖ *Have you had fever (elevated temperatures) in the past two weeks?*
- ❖ *Have you had cough and/or sore throat in the past two weeks?*
- ❖ *Have you had shortness of breath or difficulty breathing in the past two weeks?*

**For patients reporting fever and respiratory symptoms:**

- ❖ *Have you traveled outside the United States or had close contact with someone who has recently traveled outside the United States, in the past two weeks? If yes, ask where:*
    - *Current epidemiological risk factors for swine influenza (as of April 27, 2009) are: travel to Mexico in the past 10 days, close contact with an ill suspected or confirmed case within the last 10 days, or close contact with an ill person associated with the St. Francis Prep School.)*
  - ❖ *Are you a healthcare worker (e.g., nurse, physician, ancillary services personnel, allied health services personnel, hospital volunteer, or laboratory worker) who has had a recent exposure to an individual with a highly communicable disease or unexplained, severe febrile respiratory or rash disease?*
    - *Are you a healthcare worker who provided direct clinical care for a patient with suspected or confirmed swine influenza for which you did not wear appropriate PPE or had a break in PPE?*
  - ❖ *Do any of the people who you have close contact with at home, work or your friends have the same symptoms?*
- 1) For infection control purposes in New York City, a suspected case of swine flu is considered for any patient who has influenza like illness and an epidemiological risk factor as described above.
- d. **Patients who meet the suspect case definition should be prioritized for individual placement in an AIIR or private room pending clinical evaluation. Both patient and triage staff should perform hand hygiene.**
- Hospitals may consider any of the following methods to help prompt staff to routinely use this communicable disease triage screening tool:
- 1) A poster or desk chart that is placed in a location that is easily seen by the triage or registration staff.
  - 2) Including the communicable disease triage screening questions on all paper-based registration or triage forms, or a sticker that is placed on all forms for patients who report fever.
  - 3) In hospitals with computerized ED or clinic registration systems, adding a computer prompt that asks all patients about fever symptoms. For patients that report fever, the communicable disease triage screening tool will automatically pop-up on the computer screen.

## **Infection Control Measures on Arrival**

Prompt implementation of Standard Precautions, respiratory hygiene/cough etiquette [standard respiratory precautions], and appropriate isolation precautions based on the suspected infection will decrease the risk of transmission to others.

- a. **The patient should be given a surgical mask immediately, if not already wearing one.** The patient should be shown how to wear the mask and instructed to wear this mask at all times. The patient should keep the mask on at all times while in the isolation room (unless it is an AIIR) in order to minimize contamination of the room. The patient should be instructed on how to perform hand hygiene after coughing or other contact with respiratory secretions or their rash.

[NOTE: The following considerations should be made for patients who may have difficulty breathing with a mask on, such as allowing a looser fit of the surgical mask (e.g., surgical masks with ties) or providing them with their own supply of tissues. Strict hand hygiene should be reinforced for these individuals.]

Surgical masks may not be feasible for young children with a positive communicable disease triage screen to wear. In these situations, the child and accompanying adults should be seen as quickly as possible by the triage staff and placed in an appropriate isolation room or an area in the waiting room in a way that allows at least 3 feet (for swine influenza, CDC recommends 6 feet for close contact) separation from other persons. The parents should be instructed to wash their hands and their children's hands with soap and water, or alcohol hand hygiene products frequently, especially after the child coughs, sneezes or has other direct contact with oral secretions.

- b. **Patients need to be separated from others in an isolation room or in the waiting area pending medical evaluation.** Depending on the space resources available in the hospital ED or clinic, isolation options in decreasing order of preference include:
1. Airborne Infection Isolation Room (AIIR): negative pressure isolation rooms with a minimum of 6-12 air exchanges per hour and direct exhaust to the outside which is located more than 25 feet from an air intake and from where people may pass (if air cannot be exhausted directly to the outside more than 25 feet from an air intake and from where people may pass, then air should be filtered through an appropriately installed and maintained HEPA filter). These rooms should be tested monthly (and daily when in use) to verify negative airflow.
  2. Pre-identified enclosed private room(s): an examination room with a door that is kept closed to the hallway. (Self-closing doors are preferable). **(Note: These rooms should be tested by Facility Engineering beforehand to ensure that the rooms are exhausted appropriately (i.e., not positive pressure and do not share airflow with other rooms.)**
  3. Pre-identified examination area, even if not individual rooms, to cohort patients with similar symptoms. Patients should be separated from each other by at least three feet (more if possible).
  4. If an AIIR, private room or pre-identified examination area is not available, the patient should be asked to stay in an area of the waiting room that allows at least three feet of separation between the patient and others in the waiting area. The patients should be instructed to keep the surgical

mask on at all times while in the waiting area and discouraged from walking around the ED/hospital.

5. Portable isolation chambers can also be considered as an alternative if neither AIIR nor private rooms are available.
- c. If patients are placed in an AIIR or isolation room, appropriate infection control signage based upon the route of transmission for the suspected disease of concern and/or Hospital Infection Control policies should be posted outside the patient's isolation room signifying the need for precautions until a medical evaluation determines that the patient does not have a contagious disease requiring isolation. At a minimum, droplet and contact precautions should be used for all patients with a positive communicable disease triage screen.

### **Infection Control Measures for Healthcare Personnel Specific for Swine Influenza (as of April 27, 2009)**

- Recommendations for masks and respirators should follow the interim recommendations as proposed for pandemic influenza. These recommendations may change over the course as a better characterization of the swine flu occurs:
  1. Personnel engaged in any aerosol generating activities (e.g., collection of clinical specimens, endotracheal intubation, nebulizer treatment, bronchoscopy, and resuscitation involving emergency intubation or cardiac pulmonary resuscitation) for suspected or confirmed swine influenza cases should wear a fit tested disposable N-95 respirator.
  2. Pending clarification of transmission patterns for this virus, personnel providing direct patient care for suspected or confirmed swine influenza cases should wear a fit-tested disposable N-95 respirator when entering the patient room.
- Personnel providing care to or collecting clinical specimens from suspected or confirmed cases should wear disposable non-sterile gloves, gowns, and eye protection.
- Strict adherence to hand hygiene with soap and water or with alcohol hand sanitizers should be maintained.
- Please review the guidance in the October 2006 "Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Healthcare Settings during an Influenza Pandemic"  
<http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>
- More recommendations on infection control in medical facilities can be found at:  
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### **The management of PPE disposal should be consistent with your hospital's infection control policies.**

1. All appropriate PPE should be stocked outside the door to the patient's AIIR or isolation room. Appropriate PPE for select pathogens can be found at the CDC website:  
<http://www.cdc.gov/ncidod/hip/ISOLAT/ISOLAT.HTM> as well as in the *2004 DRAFT HICPAC Infection Control Guidelines: Appendix B. Type and Duration of Precautions Recommended for Selected Infections and Conditions.*

Signage on the proper method of donning and removing PPE should be prominently displayed outside or nearby all AIIRs in the ED and clinics. Alcohol hand hygiene products or a sink with hot water, soap and paper towels should be available.

2. If available, patients with a positive communicable disease triage screen should be placed in an AIIR with an anteroom that has a sink, so that persons leaving the room can dispose of PPE immediately and wash their hands before exiting to the hallway.
  3. **In the absence of an anteroom, gowns and gloves should be removed inside the patient's room and discarded in a waste receptacle just inside the room by the door. Hand hygiene products should be placed right outside the door so that staff can use immediately after removal of respiratory protection equipment. Doing this prevents staff from wearing the same gloves and gowns after leaving the isolation room and contaminating other areas of the ED/clinic.** Signage should be placed to remind staff of this protocol. A separate waste receptacle should be placed immediately outside the patient's room for disposal of respirators.
- d. Limit as much as possible the number of persons who enter the patient's room, as well as the traffic in and out. Entry should be limited to necessary hospital staff and public health personnel. Visitors should be excluded, as much as possible, from entering the patient's room.
  - e. After use, all PPE should be placed into a plastic biohazard bag and left in the patient's room (gowns and gloves) or outside of the room (respirators) --- ideally, in the anteroom, if an isolation room with anteroom is available. If positive air pressure respirators (PAPR) are used, the PAPR should be cleaned and disinfected prior to entering another patient's room. **Please note that PAPRs should not be considered a higher level of protection and their use should be limited to men with facial hair or for those individuals who have documented poor fit for N95 respirators.**
  - f. As much as possible, when contact precautions are indicated, dedicated patient care equipment (e.g., blood pressure cuffs and stethoscopes) should be assigned to and left in the patient's room. **If equipment must be used on other patients (e.g., portable X-ray machine), meticulously clean and disinfect the equipment with EPA-registered hospital disinfectants (e.g., quaternary ammonium compounds) or sodium hypochlorite.**
  - g. Use disposable items whenever possible.
  - h. Dispose of all non-sharps waste in biohazard bags for disposal or transport for incineration or other approved disposal method.

**Appendix A. Examples of Communicable Diseases of Urgent Public Health Concern:**  
Diseases with greater likelihood to spread to others, and with higher likelihood of more severe morbidity or mortality (Taken from HICPAC Guideline for Isolation Precautions).

	<b>Potential Pathogens:</b> <i>The organisms listed in this column are not intended to represent the complete, or even most likely, diagnoses, but rather possible etiologic agents that require additional precautions beyond Standard Precautions until they can be ruled out.</i>	<b>Empiric Precautions:</b> <i>Infection control professionals should modify or adapt this table according to local conditions.</i>
<b>Rash or Exanthems, generalized, etiology unknown</b>		
Petechial/ecchymotic with fever	Neisseria meningitidis	Droplet for first 24 hours of antimicrobial therapy
Vesicular	Varicella, smallpox, or vaccinia virus	Airborne infection isolation plus Contact; Contact if vaccinia
Maculopapular with cough, coryza and fever	Rubeola (measles) virus	Airborne infection isolation
<b>Respiratory Infections</b>		
Cough/fever/upper lobe pulmonary infiltrate in HIV-negative patient or a patient at low risk for HIV	M. tuberculosis; SARS	Airborne infection isolation; add Contact plus eye protection if history of SARS exposure; travel
Cough/fever/ pulmonary infiltrate in any lung location in an HIV-infected patient or a patient at high risk for HIV infection	M. tuberculosis	Airborne infection isolation
Respiratory infections, particularly bronchiolitis and pneumonia, in infants and young children	Influenza virus	Contact plus Droplet; Droplet may be discontinued influenza has been ruled out
Fever, cough, sore throat, myalgias, diarrhea, rhinorrhea/nasal congestion	Swine influenza	Standard, contact and droplet precautions