03.28 Respiratory Protection for Healthcare Workers Who Provide Care for Patients with Diagnosed, Probable or Suspected 2009 H1N1 influenza (Swine flu) and Protection of Patients from Healthcare Workers Who Have Declined Immunization with H1N1 Vaccine

Purpose

To prevent healthcare workers (HCWs) from acquiring swine influenza from both inpatients and outpatients and to protect patients from healthcare workers and other employees with whom they may have close contact who have not received the H1N1 vaccine

Audience

All HCWs who provide care for inpatients or outpatients

Policy Statements

<u>Unvaccinated HCWs</u>

I. Inpatients

A. All-Barrier Precautions (ABP) Isolation Rooms on Medical Surgical floors

1. The number of HCWs who provide care for patients on ABP isolation should be limited to the fewest number possible consistent with good patient care.
2. HCWs who have no underlying medical conditions that would place them at increased risk for severe complications of swine influenza will wear surgical masks.
3. HCWs who have any of the following underlying medical conditions that would place them at increased risk for severe complications of swine influenza will wear N-95 masks.
   a. Age 65 years or older
   b. Chronic pulmonary (including asthma), cardiovascular (except isolated hypertension), renal, hepatic, hematological (including sickle cell disease), or metabolic disorders (including diabetes mellitus)
   c. Seizures
   d. Immunosuppression, including that caused by medications or by HIV
4. <u>While pregnant women are included in the above list of underlying medical conditions, they may choose not to wear an N-95 mask due to oxygen desaturation that occurs while wearing these masks. They may elect to wear a surgical mask rather than an N-95 mask.</u>

5. To complement good respiratory protection, all HCWs exiting ABP isolation rooms should wash their hands or apply an alcohol hand rub.

B. ABP Isolation Rooms in Adult and Pediatric Intensive Care Units
   1. All healthcare workers who enter rooms where patients are on ABP in ICUs will wear an N-95 mask (except pregnant HCWs who may choose to wear a surgical mask).
   2. When aerosol-generating procedures are performed in an ICU isolation room, all HCWs in the room must wear a fit-tested N-95 mask. Pregnant HCWs must leave the room prior to start of the aerosol-generating procedure unless they wear a fit-tested N-95 mask.

C. Areas in the hospital where patients with swine influenza may be transported for diagnostic procedures or treatment
   1. A surgical mask will be placed on all patients with swine influenza prior to departure from their rooms.
   2. The unit from which the patient is to be transported will call the destination for the patient and inform them that a patient with swine influenza is being transported to their department.
   3. Since placement of a surgical mask reduces the dispersion of both large droplets and droplet nuclei, all HCWs who provide diagnostic or therapeutic services will wear surgical masks whether or not they have the underlying medical conditions listed above.

D. Surgical procedures on patients with known or suspected swine influenza

   When possible, all surgical procedures performed on patients with swine influenza should be done as the last case of the day in the room where the procedure will be performed.
   1. Patients will be transported to the OR wearing a surgical mask.
   2. Wherever patients are being intubated, all HCWs in the room during the intubation must wear a fit-tested N-95 mask.
   3. During operations, except for those on the upper or lower respiratory tract, HCWs need wear only their surgical mask.
   4. Surgery on the upper or lower respiratory tract in a patient with swine influenza or suspected swine influenza requires that all

HCWs in the room wear fit-tested N-95 masks. Pregnant HCWs must exit the room prior to start of the procedure.

5. At the completion of all operations on patients with swine influenza, all HCWs in the room should continue to wear their masks until they leave the room and are no longer in close contact with the patient.
6. As soon as the patient has recovered, a surgical mask should be placed on the patient until they are back in their room.
7. HCWs in the recovery room should wear a surgical mask if they have no underlying medical conditions, and those with underlying medical conditions (as listed above) should wear an N-95 mask. Pregnant HCWs cannot work in the recovery room with patients who have diagnosed or suspected swine influenza.

E. Respiratory protection during aerosol-generating procedures on patients with swine influenza or suspected swine influenza

1. Aerosol-generating procedures
   a. Bronchoscopy
   b. Endo-tracheal intubation
   c. Sputum induction for a diagnostic specimen
   d. Nebulized medication treatments
   e. Face mask ventilation (Bipap)
2. All personnel present in a room where any of these aerosol-generating procedures are conducted will wear a fit-tested N-95 mask. <u>Pregnant HCWs may not be in a room where any of these procedures are being performed unless they wear a fit-tested N-95 mask.</u>
3. If N-95 masks are unavailable for these aerosol-generating procedures, all personnel in the room will wear powered air purifying respirators (PAPRS). In the absence of N-95 masks, Healthcare Epidemiology (HCE) must be notified prior to starting an aerosol-generating procedure.
   a. HCE will deliver the number of PAPRs needed and will supervise the donning and doffing of PAPRs.
   b. A Respiratory Therapist will be present during doffing to assist with bagging of contaminated equipment and to decontaminate the power units prior to placing them back into their cabinet.

F. Respiratory protection for healthcare workers in the Emergency Department

1. HCWs without any of the underlying medical conditions listed above under I,A,3 should wear a surgical mask when entering rooms of patients on isolation for swine influenza.
2. HCWs with one or more of the underlying medical conditions listed above under I,A,3 should wear an N-95 mask when entering the room of a patient with confirmed or suspected swine influenza. Pregnant HCWs may choose not to wear an N-95 mask, because N-95 masks can cause oxygen desaturation in the wearer. Pregnant HCWs may don a surgical mask prior to entering the room of a patient on isolation for swine influenza in addition to goggles, gown and gloves.

G. Respiratory protection for personnel screening hospital visitors

1. Personnel who have underlying diseases or conditions that place them at higher risk for severe influenza should wear an N-95 mask and goggles. Pregnant HCWs may choose not to wear an N-95 mask due to oxygen desaturation while wearing the mask. Those pregnant HCWs who choose not to wear an N-95 mask should wear a surgical mask.
2. Personnel with no known underlying medical conditions placing them at greater risk for severe influenza should wear a face shield or surgical mask and goggles.

II. Outpatients

A. HCWs with underlying medical conditions as listed above that place them at higher risk for severe influenza should wear N-95 masks. Pregnant HCWs may choose to not wear an N-95 mask due to oxygen desaturation while wearing the mask. Instead, they may choose to wear a surgical mask.

B. All other HCWs should wear surgical masks.

C. HCWs screening patients coming into clinics will wear a face shield or surgical mask and goggles. Personnel who have underlying health conditions placing them at risk of severe swine influenza will wear N-95 masks. Pregnant HCWs may choose not to wear an N-95 mask, because N-95 masks can cause oxygen desaturation to the wearer. Pregnant HCWs may choose to wear a surgical mask.

D. Since all patients who screen positive for an influenza-like illness (ILI) will be wearing a surgical mask, HCWs who have contact with these patients will need only a surgical mask for respiratory protection.

E. Patients with an ILI must wear their mask until they leave the clinic.

III. Healthcare Workers Who have Declined Immunization with the Swine Influenza Vaccine

A. HCWs who have not been immunized against swine influenza and work in patient care areas must wear a surgical mask whenever they are within six (6) feet of a patient. All other personnel who enter patient care areas and have not received the H1N1 vaccine must wear a surgical mask when within six feet of a patient. Healthcare workers and other personnel who have not received the H1N1 vaccine and who work in areas to which patients are transported for diagnostic procedures and healthcare must wear a surgical mask when they are within six feet of a patient.

B. Healthcare workers who have not received the H1N1 vaccine should pay particular attention to the correct use of PPE when entering the room of a patient on ABP isolation. *HCWs who have one or more underlying medical conditions listed above in I,A,3 should wear an N-95 mask when entering the room of a patient on ABP isolation.*

C. These HCWs must monitor themselves for fever and other symptoms of swine influenza continuously and notify their supervisor and leave the patient care unit immediately if they develop symptoms of an ILI. (See the Appendix to Policy 3.09 for the self monitoring form for ILI).

IV. When N-95 masks are unavailable, those who are authorized to wear them should use a surgical mask.

<u>Vaccinated HCWs</u>

I. Inpatients

A. All vaccinated HCWs may wear surgical masks when entering the room of a patient on ABP isolation starting $\geq$14 days after receipt of the swine influenza vaccine except for aerosol-generating procedures.

B. HCWs in a room where an aerosol-generating procedure is being performed will still make use of a fit-tested N-95 mask. Pregnant HCWs must leave the room unless they wear a fit-tested N-95 mask.

II. Outpatients

All HCWs may use surgical masks for respiratory protection starting ≥ 14 days after receipt of the swine influenza vaccine.