







SHEA, APIC, ACOEM, and IDSA Joint Position Statement: Healthcare Personnel at High-Risk for Severe Influenza Illness: Care of Patients with Suspected or Confirmed Novel H1N1 Influenza A

The emergence of a novel H1N1 influenza A virus has dramatically impacted communities and healthcare institutions across the globe. ^{1, 2} In addition to potential exposure in the community, healthcare personnel are often called upon to care for individuals with suspected or confirmed novel H1N1 influenza A and may become exposed to the virus if appropriate infection control precautions are not implemented. The Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) have issued interim guidance on recommended infection control practices in healthcare settings for the current outbreak of novel H1N1 Influenza A in order to protect patients and healthcare personnel from transmission of the virus. ^{3,4} Based on available data and the evolution of the H1N1 outbreak, the Society for Healthcare Epidemiology of America (SHEA), Association for Professionals in Infection Control and Epidemiology, Inc. (APIC) and the Infectious Diseases Society of America (IDSA) recently advocated updating the CDC guidance to recommend similar infection control practices employed to prevent the transmission of seasonal influenza. ⁵ (Table)

Current CDC guidance also includes a recommendation to reassign healthcare personnel at high-risk for severe influenza illness when feasible so that they do not provide care to patients with suspected or confirmed novel H1N1 influenza A.^{6,7} In addition to known risk factors for complications of seasonal influenza, early data suggest that obese individuals, those with asthma, and pregnant women might be at increased risk for complications from H1N1 virus infection.^{8,9} Since the emergence of the novel H1N1 influenza strain, our organizations' primary goal has been to ensure effective and sustainable delivery of patient care while protecting healthcare workers, patients, and

visitors from influenza acquisition in healthcare settings. SHEA, APIC, IDSA, and American College of Occupational and Environmental Medicine (ACOEM) believe that the CDC recommendation regarding automatic and uniform reassignment of high-risk healthcare personnel is neither necessary nor feasible. We advocate changing these recommendations for the reasons outlined below.

Every day, healthcare personnel may encounter patients infected with any of a wide array of pathogens that could, in the event healthcare personnel become infected, result in severe illness in the exposed worker. This risk is often greater for those with weakened immune systems or other conditions associated with progression to severe disease or complications from the infection.

Nonetheless, recommendations to reassign healthcare personnel caring for patients with an infectious disease are rare.

The foundation of infection prevention and control recommendations for all healthcare personnel is the rigorous and consistent application of basic infection control and personal hygiene practices including adherence to hand hygiene and cough etiquette, rapid identification and separation of patients with communicable diseases based on standard and transmission-based precautions, utilization of appropriate personal protective equipment, and environmental controls such as airborne isolation rooms for patients with pulmonary tuberculosis. We believe that the current recommendation for reassignment of high-risk healthcare personnel erodes confidence in the efficacy of personal protective equipment and current infection control recommendations. Reassignment implies that the current personal protective equipment and healthcare infection control recommendations are insufficient to prevent healthcare personnel from acquiring the novel H1N1 influenza A virus from patients. On the contrary, recent data suggest that community exposures, failure to wear appropriate personal protective equipment, or failure to recognize and isolate affected patients are responsible for the majority of novel H1N1 influenza A illness among healthcare personnel.8 Reassignment of healthcare personnel for this virus based on assessment of risk to the worker is a precedent that opens the door for concern about a wide range of other pathogens that are encountered in the healthcare setting.

There are also significant logistic and privacy concerns with regards to recommendations to reassign high-risk healthcare personnel who may care for suspected or known cases of novel H1N1 influenza A. It is unclear how institutions should proceed to screen and reassign healthcare personnel, who should perform the screening, and how facilities will deal with the resultant scheduling and workforce issues so that they can continue to provide safe, effective and sustainable healthcare delivery. Many types of employees interact with patients in clinical healthcare settings and reassignment programs would be vast and complex to address all of these groups. Since the high-risk groups are fairly broadly defined in the guidance, they likely encompass a substantial proportion of healthcare personnel and reassignment may lead to important shortages of staff to care for infected patients. Atypical presentations and undefined respiratory infections may be difficult to initially recognize as novel H1N1 influenza A, therefore the current guidance suggests that high risk healthcare personnel should be excluded from working in settings where patients are first encountered (e.g. emergency departments, ambulatory clinics, triage) before the patients can be recognized and isolated. In addition, given that many healthcare personnel may have little to no immunity to the novel H1N1 influenza A strain currently circulating⁹ and highly prevalent conditions such as obesity and asthma appear to place individuals at higher risk for complications of novel H1N1 influenza infection¹⁰, one could argue that many individuals are at increased risk for severe illness from this influenza strain. Defining obesity and asthma as high-risk groups may be highly subjective.

In addition to logistic concerns, there are privacy issues related to the reassignment recommendation. Healthcare personnel are entitled to privacy in the workplace regarding their own personal health status as long as it does not involve an illness that places patients or co-workers at risk. Personal health information of healthcare personnel is generally handled by their own physicians and by occupational health officials in the workplace. Clinical managers do not and should not have access to their employees' health records. Reassignment of healthcare personnel based on pregnancy, medical conditions, or immunosuppression would require that managers and directors inquire about or receive their employees' private medical and personal information. While some

conditions such as third trimester pregnancy may be readily apparent, others such as early pregnancy, HIV seropositivity, or receipt of immunosuppressive medications would require disclosure by healthcare personnel thus compromising their privacy.

Logical extensions of the current guidance suggest that it will be difficult to draw the line when reassigning healthcare personnel. Should healthcare personnel be reassigned if they have family members or other close contacts with a high-risk condition? Since seasonal influenza can cause severe complications in pregnant and immunocompromised individuals and the existing vaccine is not 100% protective should the reassignment guidance apply to seasonal influenza as well – particularly if someone has not been or cannot be vaccinated?

For the reasons outlined above, our organizations recommend that all healthcare personnel, regardless of pregnancy or medical status, abide by current infection control recommendations during the care of patients with novel H1N1 influenza A. Healthcare facilities should educate workers regarding their occupational risks, personal health factors that may increase their risks, and available resources to lower risk. While healthcare facilities may choose to review reassignment requests on a case-by-case basis, routine reassignment of healthcare personnel based on their pregnancy, medical conditions, or immune status is not necessary.

SHEA, APIC and IDSA Recommendations for Infection Control Practices in Healthcare Settings for Patients with Suspected or Confirmed Novel H1N1 Influenza A

Standard Precautions (gown, gloves, mask and eye protection as warranted)

Droplet Precautions (surgical mask)

Private Room (preferable) or Cohort with other infected patients

Hand Hygiene Adherence

Respiratory Hygiene and Cough Etiquette

Early Recognition and Separation of Infected Patients

Restriction of Visitors and Healthcare Personnel with Febrile Respiratory Illnesses

Particulate Respirator during Aerosol-Generating Procedures^a

References

1. Centers for Disease Control and Prevention: H1N1 Flu (Swine Flu). Accessed on June 25, 2009 at http://www.cdc.gov/h1n1flu/

A This is a controversial issue and we feel this recommendation for N95 or PAPR during bronchoscopy, <u>open</u> suctioning of airway secretions, resuscitation involving emergency intubation or cardiac pulmonary resuscitation, and endotracheal intubation should be re-evaluated as more data become available.

- 2. World Health Organization: Influenza A H1N1. Accessed on June 25, 2009 at http://www.who.int/csr/disease/swineflu/en/index.html
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- 5. SHEA Position Statement: Interim Guidance on Infection Control Precautions for Novel Swine-Origin Influenza A H1N1 in Healthcare Facilities. Accessed on June 25, 2009 at http://www.shea-online.org/Assets/files/policy/061209 H1N1 Statement.pdf
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- 7. Centers for Disease Control and Prevention. Considerations for Pregnant Women who are more likely to be exposed to Novel H1N1 Flu (Swine Flu) at work: Information for Women in Education, Child Care, and Health Care, May 3, 2009. Accessed on June 25, 2009 at http://www.cdc.gov/h1n1flu/guidance/pregnant-hcw-educators.htm
- 8. Jamieson, DJ et al. H1N1 2009 influenza virus infection during pregnancy in the USA. The Lancet, Volume 374, Issue 9688, Pages 451 458, 8 August 2009.
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- 11. Intensive-Care Patients with Severe Novel Influenza A (H1N1) Virus Infection Michigan, June 2009. MMWR. July 10, 2009 / 58(Dispatch):1-4.