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APIC Position Paper: Influenza Vaccination Should Be a Condition of Employment for Healthcare Personnel, Unless Medically Contraindicated

Influenza is a serious disease that is associated with high rates of morbidity and mortality. In the United States, an estimated 5% to 15% of the population is affected by the virus each year.[1] Influenza infections result in approximately 150,000 hospital admissions and 24,000 deaths annually.[2] A recent study estimated that annual influenza epidemics account for 610,660 life-years lost, 3.1 million days of hospitalization and 31.4 million outpatient visits.[3]

The most efficient method of preventing annual influenza epidemics and their associated morbidity and mortality, is through pre-exposure vaccination.[4] In addition to their risk for exposure to influenza from community sources, healthcare personnel (HCP) are at an increased risk for acquiring influenza due to their exposure to ill patients. Conversely, those patients who are at greatest risk of developing severe complications of influenza are themselves more likely to be exposed to potentially infectious HCP. Therefore, one of the most important strategies to decrease influenza transmission to or from high risk persons is to immunize healthcare personnel.[5]

Despite long standing recommendations by the Association for Professionals in Infection Control and Epidemiology (APIC), the Centers for Disease Control and Prevention (CDC) and other national healthcare organizations, the response to voluntary programs has failed to increase immunization rates to acceptable levels required to substantially reduce healthcare-acquired influenza.[6,7] Annual influenza vaccination for HCP has been recommended by the CDC since 1981; however national survey data from 2010 demonstrated only marginal increases in HCP seasonal influenza vaccination coverage levels (61.9 %).[8]

As a profession dedicated to the prevention of infection, we have an ethical responsibility to protect those individuals entrusted to our care. We must do a better job of immunizing HCP every year to ensure patient safety and protect those individuals at high risk of developing complications of influenza.

Recommendation:

Therefore, APIC recommends that acute care hospitals, long term care, and other facilities that employ healthcare personnel* require annual influenza immunization as a condition of employment unless there are compelling medical contraindications. This requirement should be part of a comprehensive strategy which incorporates all of the recommendations for influenza vaccination of HCP of the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP) for influenza vaccination of HCP.[9] An essential part of this comprehensive strategy includes strict attention to important infection prevention practices such as hand

hygiene and respiratory etiquette. Individuals exempted from annual vaccination due to medical contraindications must be educated on the importance of careful adherence to **all** of the non-vaccine related HICPAC prevention strategies, including hand hygiene and cough etiquette. Further, they may be required to wear a surgical mask when contact with patients or susceptible employees is likely. Additionally, strong leadership commitment that takes into account and collaboratively addresses concerns by employees and the organizations representing them is essential to providing the necessary support and resources to implement such a comprehensive program.

Rationale:

- Multifaceted mandatory vaccination programs have been tried and tested and have been found to be the single most effective strategy to increase HCP vaccination rates, with multiple facilities and systems achieving vaccination coverage of more than 95%[10]

- The vaccine is most effective in younger, healthier individuals. Patients at highest risk including the elderly and the immunocompromised are least likely to develop an adequate response to the vaccine.[11] Several studies now demonstrate that HCP influenza vaccination reduces patient mortality.[12] Therefore vaccination of those individuals who come in contact with our vulnerable population is the most effective strategy for prevention.

- The virus can be transmitted to patients by both symptomatic and asymptomatic HCP. Multiple studies show that 70% or more of HCP continue to work despite being ill with influenza, thus exposing patients to the virus.[13]

- Institutions that have implemented a mandatory policy have dramatically reduced employee absenteeism as well as healthcare associated influenza, thereby improving patient safety and reducing healthcare costs.[14]

- Influenza vaccine is safe. The most common side effects of the injectable (inactivated) influenza vaccine include soreness, redness, or swelling at the site of the injection. These reactions are temporary and occur in 15%–20% of recipients.[15]

- Immunization requirements are effective in increasing vaccination rates. HCP policies requiring demonstrable vaccination for measles, mumps and rubella have been successful in achieving near universal compliance. Requiring influenza vaccine should similarly be highly effective.[16]

Positions on mandatory vaccination have been endorsed by the Infectious Diseases Society of America (IDSA), the American Academy of Pediatrics (AAP), and the Society for Healthcare Epidemiology of America (SHEA).

Conclusion:

Seasonal influenza vaccination of HCP offers an important method for preventing transmission of influenza to high-risk patients. Evidence supports the fact that influenza vaccine is effective, cost efficient and successful in reducing morbidity and mortality. Evidence also demonstrates that the current policy of voluntary vaccination has not been effective in achieving acceptable vaccination rates. As healthcare providers, we have an obligation to ensure that all HCP are vaccinated against influenza. As a profession that relies on evidence to guide our decisions and actions, we can no longer afford to ignore the compelling evidence that supports requiring influenza vaccine for HCP. This is not only a patient safety imperative, but is a moral and ethical obligation to those who place their trust in our care.

"[T]he term HCP includes: all paid and unpaid persons working in health-care settings who have the potential for exposure to patients with influenza, infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces or contaminated air. HCP might include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, housekeeping, maintenance, and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from HCP. The recommendations in this report apply to HCP in acute care hospitals, nursing homes, skilled nursing facilities, physician's offices, urgent care centers, and outpatient clinics, and to persons who provide home health care and emergency medical services." [Source MMWR August 28, 2009)

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[4] Poland, GA, Tosh P, Jacobson RM. Requiring influenza vaccination for health care workers: seven truths we must accept. Vaccine 2005;23:2251-2255.

[5] Ibid.

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