

# Coverage Near 100% With Mandatory Flu Shots

## VITALS

**Major Finding:** An influenza immunization mandate increased vaccination rates among hospital employees from a high of 74% to 96% at one institution and from 63% to 91% at another.

**Data Source:** Databases of HCA and Children's Mercy Hospital and Clinics.

**Disclosures:** Dr. Livingston reported having no conflicts of interest. Dr. Perlin did not disclose whether he had conflicts of interest and could not be reached at press time.

BY MIRIAM E. TUCKER

Strategies that compel health care personnel to receive an influenza immunization were shown to successfully increase vaccination rates to nearly 100% in two U.S. studies.

Results from these studies—one involving a large health care system, the other a single hospital—were summarized in a telebriefing, a week prior to their full presentations at the 2010 Decennial International Conference on Healthcare-Associated Infections in Atlanta.

Dr. Jonathan Perlin, chief medical officer of the Nashville, Tenn.-based Hospital Corporation of America (HCA), presented the results of a “somewhat controversial” mandatory vaccination policy adopted during the 2009-2010 influenza season across the system’s 163 hospitals, 112 outpatient clinics, and 368 medical practices located in 20 states.

Two recent lawsuits pertaining to the

program were successfully defended, he noted.

The policy required that any employee who would not be vaccinated because of an egg allergy, a history of Guillain-Barré syndrome, or a religious/philosophical objection must be either reassigned to nonpatient contact roles or required to wear surgical masks.

Webcasts were shown at all facilities explaining the rationale for the program and also introduced nonvaccine strategies such as cough/sneeze etiquette, hand hygiene, proper cleaning techniques, and the importance of staying home when ill (the so-called presenteeism policy).

Prior to the program, seasonal influenza vaccination rates for the 2008-2009 influenza season varied across the various HCA facilities from a low of 20% to a high of 74% (mean, 58%).

As of Nov. 1, 2009, 96% of the 140,599 total employees and of the 98,067 clinical employees who were offered the seasonal influenza vaccine accepted it.

A total of 5,015 employees declined the vaccine, of whom three-fourths gave no reason.

Among those who did give a reason, allergy was the most common (12%). The vast majority of those who declined wore masks.

“The employee response has been overwhelmingly positive. ... We believe that programs such as ours will become

the standard of care,” Dr. Perlin said during the telebriefing.

Similar success was seen at Children's Mercy Hospital and Clinics, Kansas City, Mo., a freestanding children's hospital with approximately 5,600 employees. In 2004, the hospital began offering the vaccine free to all employees, along with education about influenza and the importance of vaccination.

Other strategies were introduced subsequently, including mass vaccination days, mobile vaccination carts, flu vaccine “champions” in hospital wards and critical care units, and rewards such as paid days off.

In 2008, the facility introduced a mandatory policy that required employees to either receive the vaccine or formally decline it in writing with an established deadline for compliance, said Dr. Robyn Livingston, director of in-

fection control and prevention at the hospital.

Compared with a vaccination rate of 63% in 2004, introduction of the policy in 2008 resulted in a rate of 85% in the 2008-2009 season, with about 96% overall compliance with the policy.

In the 2009-2010 season, when vaccination with both the seasonal and H1N1 vaccine was started earlier, the vaccination rate increased to 91%, and 99% of workers were compliant with the policy by either receiving the vaccine or formally declining it.

The institution is now considering a fully mandatory influenza vaccination policy—that is, one with no allowance for declination—for the next influenza season.

“Though our rates are well above the national average, there is still room for improvement,” Dr. Livingston said. ■

## All Health Staff Should Get Vaccine

### MY TAKE

I would expect that a mandatory policy would lead to 100% compliance. The broader question is whether this should become the standard of care and how far it should go.

For physicians, this issue goes to the core of our Hippocratic oath to “do no harm.” I think all hospitalists should receive the vaccine unless a documented contraindication exists, and this should extend to hospital

employees as a requirement for employment. The same could be said for all health care workers, regardless of where they work in the health care system. It is unfortunate that this topic is even an issue at all.

FRANKLIN A. MICHOTA, M.D., is the director of academic affairs in the Department of Hospital Medicine at the Cleveland Clinic. He reported no relevant conflicts of interest.

# Despite Opposition, Mandatory Vaccine Program a Success

BY MARY ANN MOON

A mandatory influenza vaccination program for all employees in a large Midwestern health care organization increased the rate of immunization to more than 98%, according to a study.

Previous, nonmandatory efforts in this organization as well as in other health care facilities across the country have had much more limited efficacy. The average influenza vaccination rate among U.S. health care workers was only 44% in recent years, said Dr. Hilary M. Babcock of Washington University, St. Louis, and her associates.

They reported the first study in the medical literature to describe outcomes of a multihospital health care organization's mandatory vaccination program. The program, an initiative focused on patient safety, required seasonal influenza vaccination as a condition of employment for clinical and nonclinical staff, contracted clinical personnel, and volunteers.

The program was implemented for the 2008-2009 flu season at BJC HealthCare, a network with approximately 26,000 employees working at 11 acute care hospitals and 3 extended care facilities, as well as day care centers, physician group practices, occupational medicine providers, home care providers, and behavioral health services in urban, suburban, and rural settings.

Employees were offered free immunizations, including thimerosal-free and intranasal formulations, at multiple locations and times in each facility. They were encouraged to review educational materials emphasizing patient safety and to consult with a medical director to discuss any concerns. They could request med-

ical or religious exemptions using a standardized declination statement.

“Exemption requests often reflected misinformation about the vaccine. ... Several requests cited chemotherapy or an immunosuppressed state as reasons not to get the vaccine, even though these groups are at high risk for complications from influenza and are specifically recommended to be vaccinated. Several requests cited pregnancy, although the vaccine is recommended during pregnancy,” the investigators noted.

Declination requests were reviewed by medical and human resources personnel, then accepted or denied. Employees who were neither vaccinated nor exempted by mid-December were suspended without pay. Those who were still not vaccinated nor exempted by mid-January were terminated for failing to meet the conditions of their employment.

A total of 25,561 employees were vaccinated (98.4%). All the physicians in the network were immunized, including all 907 residents and fellows, said Dr. Babcock, who is also medical director of occupational health at Barnes-Jewish and St. Louis Children's Hospitals, and her colleagues.

Another 321 employees (1.24%) received medical exemptions for reasons such as allergy to eggs, prior allergic reaction to a vaccine, or a history of Guillain-Barré syndrome. Ninety employees (0.35%) received religious exemptions. Eight employees (0.03%) were terminated.

This represents a 43% increase in the vaccination rate compared with the rate in 2006 and a 27% increase compared with 2007 at BJC HealthCare, Dr. Babcock and her associates said (Clin. Infect. Dis. 2010;50:459-64).

In an editorial, Dr. Andrew T. Pavia of the division of pediatric infectious diseases at the University of Utah, Salt Lake City, agreed that this program was “highly successful,” particularly when compared with the “very modest” success of efforts over the past 10 years to increase the “unacceptably low” rate of vaccination among U.S. health care workers.

“Mandatory vaccination policies have been endorsed by several organizations, including the New York State Department of Health, the Infectious Diseases Society of America, the American College of Physicians, the Association for Professionals in Infection Control and Epidemiology, and the National Foundation for Patient Safety,” he noted.

Although “some of the largest and most prestigious” health care organizations in the nation have adopted mandatory vaccination policies, “mandatory vaccination has also generated vigorous debate and opposition, including legal challenges,” Dr. Pavia said (Clin. Infect. Dis. 2010;50:465-7). “The debate should focus on results, not intentions or methods. Health care organizations should be expected to achieve influenza vaccine coverage that optimizes patient safety and to make data on coverage readily available,” he noted.

“I propose 90% coverage as an appropriate target. Organizations can then choose to achieve the target with less coercive methods if they can or, if necessary, choose to mandate vaccination,” Dr. Pavia said. ■

**Disclosures:** Dr. Babcock and her associates reported no potential conflicts of interest. Dr. Pavia reported serving as a consultant to NexBio.