Mandating Flu Shots Gets the Job Done

BY MIRIAM E. TUCKER

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.

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, who is chief medical officer of the Nashville, Tennessee–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 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 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, as well as 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 infection 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% 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, 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. ■

Flu Shots for School-Age Kids Confers Herd Immunity

BY MARY ANN MOON

Immunizing children aged 3-15 years in isolated rural communities against influenza conferred substantial immunity to unvaccinated members of the communities, according to a report.

"Our findings offer experimental proof to support selective influenza immunization of school-aged children with inactivated influenza vaccine to interrupt influenza transmission. Particularly, if there are constraints in quantity and delivery of vaccine, it may be advantageous to selectively immunize children in order to reduce community transmission of influenza," said Dr. Mark Loeb of McMaster University, Hamilton, Ont., and his associates.

Observational and computer modeling studies have suggested that such an approach might reduce influenza transmission, but randomized clinical trials to confirm this theory have not been feasible because in most settings, it would be unethical to withhold immunization from children in a control group.

However, rural Hutterite colonies in Western Canada offer a unique setting for such a study. These communities of approximately 60-120 Anabaptist residents are relatively isolated from other populations but show significant influenza activity each winter. The members of 46 Hutterite colonies in Alberta, Saskatchewan, and Manitoba agreed to random assignment to receive either immunization for influenza A and B during the 2008-2009 flu season (22 colonies) or to receive hepatitis A vaccination as a control (24 colonies).

Only healthy children aged 3-15 years were immunized, because those are the ages at which Hutterite children attend school. Mean vaccine coverage was 83% in this age group. This resulted in 502 children receiving flu vaccine in a population totaling 1,773 and 445 children receiving hepatitis A vaccine in a population totaling 1,500. Other colony members were not immunized, as is customary in Hutterite colonies. This includes community members at high risk of influenza complications such as children aged 23 months and younger, pregnant women, the elderly, and people of all ages with chronic medical conditions.

The primary outcome of this study was the development of laboratory-confirmed influenza A or B in colony members who did not receive flu vaccine. This occurred in 39 members of colonies assigned to influenza immunization (3%), a rate less than half of the 7.6% rate of influenza infection in control colonies.

"The level of indirect vaccine protectiveness was 61%" overall and 49% among high-risk subjects, Dr. Loeb and his colleagues said (JAMA 2010;303: 943-50). ■

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