10 Infectious Diseases Pediatric News • March 2008

ACIP Urges 2009 Coverage

Universal from page 1

school-aged children who already have an indication for the vaccine because of a chronic condition or contact status.

Data on cost-effectiveness of influenza vaccine in that age group suggest that it is more expensive than many currently recommended vaccines but that "models do not fully account for potential indirect effects," Dr. Fiore said.

The CDC is expected to follow the advice of the ACIP, which then must be "harmonized" with that of the American Academy of Pediatrics and other professional societies. The AAP's Committee on Infectious Disease will discuss the recommendation at its April meeting. Since the AAP was involved in the ACIP Influenza Vaccine Working Group's deliberations, it's unlikely that that there will be any disagreement with the panel's decision, said Dr. Bocchini, one of two AAP liaisons to the ACIP.

He added that even with the language allowing a year's leeway, many pediatricians won't be able to start right away.

"We recognize there will be significant potential impediments to getting this done, and most won't be able to consider this until the 2009-2010 season," said Dr. Bocchini, professor of pediatrics and chairman of the department of pediatrics at Louisiana State University Health Sciences Center in Shreveport, and chief of the section of pediatric infectious diseases and medical director of the Children's Hospital in Shreveport.

But pediatricians aren't expected to shoulder the entire burden. During the discussion, panel members agreed that broader approaches such as school- or community-based immunization programs will need to be developed in order to achieve the goal of immunizing all children every year during influenza season.

Dr. Kathleen Neuzil, who chaired the ACIP Influenza Vaccine Working Group, said that the decision to go forward at this time

was based on the fact that there are no remaining critical data gaps, and no clear indication that more data will be available in the near term on feasibility or indirect protection from influenza immunization to unimmunized contacts. Moreover, "there is no clear indication that steps will be taken to prepare in the absence of a recommendation."

The working group's document that was initially presented to the committee called for the recommendation to take effect beginning in the 2009-2010 season, primarily because many practitioners would have already ordered their vaccine supply for 2008-2009. Other reasons for waiting included the large number of new vaccine recommendations in the last 2-3 years, the need for education, and the need for time to harmonize with other professional organizations, said Dr. Neuzil of the University of Washington, Seattle.

Several panel members endorsed that cautious approach, but others urged the committee to move forward more quickly. Patricia Stinchfield, a nurse practitioner and director of pediatric infectious disease and immunology at the Children's Hospitals and Clinics of Minnesota, St. Paul, said that most of the clinicians she works with are already offering influenza vaccine to all children. "They don't feel fearful of a new implementation program. We have already ordered our vaccine, but we also know that at the end of every season we throw vaccine away.'

Ms. Stinchfield, a member of the working group, was the ACIP member who came up with the compromise language "as soon as feasible and no later than" that the committee ultimately opted for. "I will have to deal with the headaches at my institution, so I know what I'm bringing upon myself. ... But we already have a policy that's allowable, so I don't think the sky will fall in, and I think we can do it with a concerted effort."

Data Show 'Full' Flu Immunization Prevents Hospitalizations in Infants

BY MIRIAM E. TUCKER

Senior Writer

ATLANTA — Full immunization against influenza is approximately 75% effective in preventing hospitalizations in 6- to 23-month-old children, Dr. David Shay reported at the winter meeting of the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention.

The ACIP's recommendation for annual influenza immunization for all children aged 6-23 months beginning in the 2004-2005 influenza season was based on the burden of disease in that age group and the fact that hospitalization rates among that age group were similar to those among the elderly, for whom annual flu vaccination was already recommended. However, no previous study has assessed the effectiveness of the trivalent inactivated vaccine (TIV) in preventing laboratory-confirmed hospitalizations in that age group, said Dr. Shay of the CDC's National Center for Immunization and Respiratory Diseases, Influenza Division.

Now, a multistate case-control study conducted during the 2005-2006 and 2006-2007 flu seasons has confirmed that TIV indeed prevents influenza-related hospitalizations in 6- to 23-month-olds, but only if they receive "full" immunization.

"Partial immunization was less effective, and not significantly protective, based on two seasons of data. It is critical to ensure that children aged 6-23 months are fully immunized if we seek to prevent influenza-associated hospitalizations among children," Dr. Shay commented.

The data were analyzed using the 2007 definition of "full" immunization, which is more stringent than it had been during the study period: The child must have received two doses during the current season if he or she had never previously received TIV or if they had received only one dose in the previous season. A child who received just one dose in the current season would be considered "fully" immunized if he or she received two doses in a single prior season or had one dose in two or more prior seasons.

The study population comprised 93 of a total 191 eligible 6- to 23-month-old children who were hospitalized with laboratory-confirmed influenza (85% type A, 12% B, and 3% unknown), identified at eight U.S. state health department surveillance sites, and 334 age-matched controls. Cases and controls also were well matched by gender (56% of cases and 52% of

controls were male) and by race (72% and 80% were white, respectively).

During the 2005-2006 season, only 9% of cases were fully immunized, compared with 20% of controls. Sixty-seven percent of cases were not immunized, compared with 55% of controls, while about a quarter of both groups were partially immunized. In 2006-2007, only 13% of cases had been immunized, compared with 32% of controls, while 65% of cases were not immunized vs. 38% of controls. Again, the rates of partial immunization were similar, 23% among cases and 30% among controls. (Cumu-



Partial immunization was less effective, based on two seasons of data, said Dr. David Shay.

lative percentages might exceed 100% because of rounding.)

Overall effectiveness of TIV in preventing hospitalization was 74% for full immunization, compared with just 39% for partial immunization. Adjustment for high-risk conditions, very low birth weight, and insurance status did not significantly change the result for full immunization (76%), but it dropped the effectiveness of partial immunization to just 27%, Dr. Shay reported.

Following Dr. Shay's presentation, ACIP member Dr. Carol J. Baker urged meeting participants to "get the message out" to their constituencies about the importance of giving two doses in the 6-23 month age group, even if it means vaccinating late into the season. "Unfortunately, we have created a culture of stopping vaccination in late November, early December. ... That mentality must change," said Dr. Baker, professor of pediatrics, molecular virology, and microbiology at Baylor College of Medicine, Houston.

Midseason Flu Update: Rates Peak, but Within Normal Range

BY HEIDI SPLETE
Senior Writer

Every state but Florida reported widespread influenza activity by the midpoint of the flu season in February, according to data from the Centers for Disease Control and Prevention.

"We can't predict the severity and duration of an influenza season, but the data suggest that we are nearing the peak," Nancy Cox, Ph.D., said in a teleconference. The state of Florida had reported regional activity and the District of Columbia had reported local activity.

The percentage of people with flulike symptoms who tested positive for flu spiked in mid-February, but "we are within normal parameters of what we would expect," said

Dr. Cox, director of the influenza division at the CDC.

A total of 22 deaths in children with confirmed influenza had been reported to the CDC as of Feb. 22, based on data from the National Notifiable Diseases Surveillance System. Of these, 21 occurred between Dec. 24 and Feb. 10, Dr. Cox said. The number of flu-related deaths in children so far this year remains below the totals from the past 3 years, she added. The CDC does not track flu-related deaths in adults.

The H3N2 strain of influenza A has become the dominant strain for this year's flu season, said Dr. Cox. "The influenza season started out as mostly an H1N1 year through December and into the first part of January, and then it switched to H3N2," she said.

As of Feb. 16, 14% of the more than 100,000 specimens

tested since September 2007 have been positive for influenza. Of these, the majority (more than 84%) is influenza A; less than 16% is influenza B, said Dr. Cox.

Mainstream news reports of the mismatch between the influenza virus in the 2007-2008 vaccine and the virus that is circulating this year have caused concern among many people that their flu shots might not be effective, but vaccination can still provide protection, according to the CDC

And, whether persons have been vaccinated or not, the CDC's take-home message remains the same: Good hand hygiene and cough etiquette also are important to prevent the spread of the disease.

For the latest information on the 2007-2008 flu season, visit www.cdc.gov/flu.