

Few Children Younger Than Age 2 Years Receive Influenza Vaccine

BY SHARON WORCESTER
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ATLANTA — Influenza vaccination rates remain low among children aged 6-23 months, despite a recommendation made 3 years ago by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices that children younger than age 2 years be vaccinated.

At the committee's fall meeting, Dr. Anthony Fiore reported that the latest data show complete coverage of only about 21% in the under-2 age group.

"We still have a long way to go," said Dr. Fiore of the CDC.

The findings, which are from the 2007 National Immunization Survey and which are based on the 2006-2007 influenza season, were published recently in *Morbidity and Mortality Weekly Report*.



At 21%, "we still have a long way to go," to vaccinate children aged 6-23 months, said Dr. Anthony Fiore.

Data emerging from the 2007-2008 season appear similar to those from 2006-2007, Dr. Fiore noted.

Because children younger than age 2 years are at the greatest risk for influenza-related hospitalizations, ACIP in 2002 encouraged vaccination of this population, and in 2004 strengthened that stand by recommending vaccination.

According to the MMWR report, 32% of children aged 6-23 months received one or more doses of vaccine during the 2006-2007 flu season, and only 21% were fully vaccinated.

Two doses given 4 weeks apart are recommended in children younger than age 9 years who are being vaccinated for the first time (MMWR 2008;57:1039-43).

Of note, there was substantial variability in vaccination coverage among states, according to the survey results.

For example, only about 9% of children were fully vaccinated in Mississippi, and nearly 48% were vaccinated in Rhode Island.

In most states, there was no significant increase in the percentage of children who were fully vaccinated, compared with the previous flu season.

"The findings underscore the need to increase interest in and access to influenza vaccination for more children in the United States.

Further study is needed to identify knowledge deficits or logistical barriers that might contribute to continued low influenza vaccination coverage among young children," the article states.

Additionally, in an editorial note, the authors state that health care providers can help improve vaccination coverage among young children by routinely informing parents about "the substantial burden of influenza illness among young children and about the benefits and safety of preventing influenza with vaccination."

Proven strategies for reducing missed opportunities for vaccination also include having standing orders to offer vaccine to all patients throughout the flu season, holding vaccination-only clinics, and using reminder/recall systems, they noted.

Vaccine Success Seen

RotaTeq from page 1

tavirus-related hospitalizations also were seen in New York among nonimmunized older age groups, which suggests possible herd immunity following the introduction of the oral three-dose pentavalent rotavirus vaccine RotaTeq (Merck & Co.), which was licensed in February 2006.

Although a new two-dose oral rotavirus vaccine (Rotarix, GlaxoSmithKline) was approved in April, the available data reflect findings based on the use of RotaTeq; data on the effects of Rotarix are expected in 2009, Dr. Parashar said.

A project at Texas Children's Hospital in Houston, which was funded by a CDC grant, showed that in children aged 15 days through 23 months, vaccine effectiveness was 85%-89% among both case patients (including 400 children who presented to the hospital emergency department with acute gastroenteritis) and controls (including 115 rotavirus-negative acute gastroenteritis patients, 228 concurrently enrolled patients with acute respiratory infection symptoms, and up to 10 age- and ZIP code-matched children from the Houston-Harris County Immunization Registry for each case), Dr. Julie A. Boom said.

The effectiveness rates, based on findings from February to June 2008, were comparable to prelicensure estimates, Dr. Boom, director of infant and childhood immunizations at the Center for Vaccine Awareness and Research of Texas Children's Hospital, reported to the committee.

Dr. Boom stressed the need for ongoing monitoring of effectiveness of rotavirus vaccines in the wake of the introduction of Rotarix, and especially in light of the fact that some patients will receive a combination of the two available vaccines.

Monitoring the duration of protection and any changes in rotavirus strains also will be important, she said.

ACIP committee members applauded the apparent rotavirus vaccine success, with one of the committee members calling the findings "very impressive" and noting that the data should provide "incentive and reassurance to health care providers who are reluctant to use new vaccines."

ACIP Clarifies PPV23 Revaccination for High-Risk Children

BY SHARON WORCESTER
Southeast Bureau

ATLANTA — Vaccination with 23-valent pneumococcal polysaccharide vaccine should be given 5 years after vaccination with 7-valent pneumococcal conjugate vaccine in high-risk children, the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices agreed at its fall meeting.

The purpose of the vote was to clarify existing recommendations, which called for an interval of 3-5 years between vaccinations in this population, despite a lack of data on revaccination safety and the best timing for revaccination, according to Dr. Pekka Nuorti of the CDC, who presented the recommendation on behalf of the Pneumococcal Vaccines Workgroup.

"The [3- to 5-year interval] recommendation causes confusion among providers as to which time period is recommended," he said, noting that the suggestion that a 3-year interval might be warranted in some children was based on data from studies conducted several years ago that indicated some children had rapid declines

in antibodies following initial vaccination.

However, those studies predated the availability of more sensitive and specific assays, he said.

The one-time, 5-year revaccination interval approved by the ACIP applies to those aged 2 years and older who are immunocompromised, have sickle cell disease, or have functional or anatomic asplenia.

These individuals are at highest risk for serious pneumococcal infection and may have a rapid decline in pneumococcal antibody levels after initial vaccination.

The 23-valent pneumococcal polysaccharide vaccine (PPV23) has been shown to provide excellent booster response in healthy children to the seven serotypes found in both the 7-valent pneumococcal conjugate vaccine (PCV7) and in PPV23. The intent of revaccination with PPV23 in high-risk children is to target the 16 serotypes included in PPV23 to better protect those who were previously vaccinated with PCV7.

The work group based its recommendation in part on the possibility that immunologic responses to PPV23 are improved in older children and also on the



New data led the committee to change to a 5-year revaccination interval of PPV23 after PCV7, Dr. Pekka Nuorti explained.

possibility that a longer interval between doses may reduce immunologic hypersensitivity, said Dr. Nuorti.

In other PPV23-related business, the committee also addressed revaccination in American Indians and Alaska Natives, who may have high rates of invasive pneumococcal disease. Vaccination is routine in those aged 24-59 months with medical conditions that are PPV23 indications, and

existing language allows for revaccination in those who were previously vaccinated with PCV7, but the burden of the decision to revaccinate was put on individual practitioners who rarely employed this approach.

The new wording, upon CDC approval of the committee's recommendation, will advise against rou-

tine use of PPV23 in those aged 24-59 months who were previously vaccinated with PCV7, because the current consensus is that anticipated benefits of revaccination do not outweigh potential risks. The change however, will, allow for consideration of revaccination in special situations—namely in areas in which public health authorities deem the risk for invasive pneumococcal disease is increased.