



Volume 6, Issue 2

February 2016

ACIP Meeting
February 24, 2016 (1-day meeting)
Location: CDC, Atlanta, GA

Follow us on:



Mark Your Calendars:

Legislative Day at the Capitol
February 11, 2016
State Capitol, Atlanta

GPNA & GPPMA Spring Meeting
April 22, 2016
Middle Georgia State University
Macon, GA

Pediatrics by the Sea
Summer CME Conference
June 8-11, 2016
The Ritz Carlton, Amelia Island, FL

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Vaccines Protect the HEART

February is American Heart Month. This month highlights the importance of heart health and reminds patient with heart disease the importance of staying up-to-date with recommended vaccines, especially flu and pneumococcal. Healthcare professionals please encourage your patients to get vaccinated. Please share this handout <http://www.immunize.org/catg.d/p4044.pdf>



Are you an immunization expert?
Do you enjoy sharing your knowledge with others?

If you answered yes, you could become a trainer for EPIC. We provide training on the program curriculum, use of the program equipment (laptop and projector), a stipend for your time, and some great tips for presenting to adult learners.

Please contact Shanrita McClain or Janna McWilson for more information.

**Updated ACOG Toolkit:
Influenza Immunization during Pregnancy Tool Kit 2015**

The American College of Obstetricians and Gynecologists (ACOG), with support from ASTHO and CDC, recently revised and distributed an influenza immunization toolkit to ob-gyns nationwide. This toolkit presents an opportunity to educate ob-gyns and other health care providers and reinforce the importance of vaccinating all adults, particularly pregnant women, against influenza.

The tool kit is also available online on ACOG's Immunization for Women website at www.immunizationforwomen.org/toolkit/flu.

Pertussis Outbreak Among Vaccinated Preschoolers Raises Alarm

Diana Swift

January 18, 2016

A 5-month pertussis outbreak in a Florida preschool with a high vaccination rate highlights the need for efforts to reduce transmission and provide booster vaccinations for adults in regular close contact with young children.

The sustained transmission of whooping cough at the school "raises concerns about inadequate protection against pertussis in an age group believed to be well protected by acellular pertussis vaccination," write public health researchers led by James Matthias, MPH, an epidemiology and surveillance unit manager with the Florida Department of Health in Tallahassee.

The spate of cases, detailed in an article [published online](#) January 13 in *Emerging Infectious Diseases*, began in a 1-year-old preschooler and eventually affected 26 of 117 pupils, 2 adult employees, and 11 family members or contacts.

The school's pupils, aged 10 months to 6 years, were all age-eligible for at least three doses of the diphtheria/tetanus/pertussis vaccine, and only five children, including two whooping cough cases, had not received the complete series.

Alarmingly, the highest case rate, 48%, occurred in one class where all 17 pupils had received the full series. That raises red flags "about vaccine effectiveness in this preschool age group and reinforces the idea that recent pertussis vaccination should not dissuade physicians from diagnosing, testing, or treating persons with compatible illness for pertussis," Matthias and colleagues write. The classroom's teacher, who had laboratory-confirmed pertussis, continued to work while ill and had not received a booster shot.

According to the investigation, many physicians seemed to have been reluctant to test for and diagnose pertussis in light of patients' recent immunization histories. "Hesitation by providers in reporting presumptive pertussis delays public health response to prevent continued transmission of pertussis in the community," the authors write. "[R]ecent pertussis vaccination should not preclude diagnosis, testing, and treatment of presumptive pertussis cases."

They note a spike in reported US cases of whooping cough from 2000 to 2012, with a more than six-fold jump from 7867 to 48,277. One possible factor may be waning immunity. "Reports of genetic changes in circulating [*Bordetella*] *pertussis* have raised concern that this organism could be adapting to vaccine-induced immunity," the authors write. They suggest that acellular pertussis vaccine performance in preschoolers be monitored to ascertain whether the Tallahassee outbreak was an isolated event or part of an emerging epidemiologic trend.

Emerg Infect Dis. Published online January 13, 2016. [Full text](#)

Study investigates physicians' perspectives on HPV vaccination

[Pediatrics](#). 2016 Jan 4. pii: peds.2015-2488.

On January 4, the journal *Pediatrics* published [Primary Care Physicians' Perspectives About HPV Vaccine](#) online. The study showed that pediatricians and family physicians do not always strongly recommend HPV vaccination to patients and their parents. The abstract is reprinted below.

BACKGROUND AND OBJECTIVES

Because physicians' practices could be modified to reduce missed opportunities for human papillomavirus (HPV) vaccination, our goal was to: (1) describe self-reported practices regarding recommending the HPV vaccine; (2) estimate the frequency of parental deferral of HPV vaccination; and (3) identify characteristics associated with not discussing it.

METHODS

A national survey among pediatricians and family physicians (FP) was conducted between October 2013 and January 2014. Using multivariable analysis, characteristics associated with not discussing HPV vaccination were examined.

RESULTS

Response rates were 82% for pediatricians (364 of 442) and 56% for FP (218 of 387). For 11–12 year-old girls, 60% of pediatricians and 59% of FP strongly recommend HPV vaccine; for boys, 52% and 41% strongly recommended. More than one-half reported $\geq 25\%$ of parents deferred HPV vaccination. At the 11–12 year well visit, 84% of pediatricians and 75% of FP frequently/always discuss HPV vaccination. Compared with physicians who frequently/always discuss, those who occasionally/rarely discuss (18%) were more likely to be FP (adjusted odds ratio [aOR]: 2.0 [95% confidence interval (CI): 1.1–3.5]), be male (aOR: 1.8 [95% CI: 1.1–3.1]), disagree that parents will accept HPV vaccine if discussed with other vaccines (aOR: 2.3 [95% CI: 1.3–4.2]), report that 25% to 49% (aOR: 2.8 [95% CI: 1.1–6.8]) or $\geq 50\%$ (aOR: 7.8 [95% CI: 3.4–17.6]) of parents defer, and express concern about waning immunity (aOR: 3.4 [95% CI: 1.8–6.4]).

CONCLUSIONS

Addressing physicians' perceptions about parental acceptance of HPV vaccine, the possible advantages of discussing HPV vaccination with other recommended vaccines, and concerns about waning immunity could lead to increased vaccination rates).

FDA approves Hiberix for full Hib vaccine series

On January 14, FDA approved an expanded age indication for GSK's *Haemophilus influenzae* type b (Hib) conjugate vaccine, Hiberix, to include children age six weeks through four years. Previously, Hiberix was only licensed for the final booster dose of Hib vaccine.

Related Links

[FDA supplemental approval letter](#) for Hiberix age expansion

Updated [Hiberix package insert](#)

[Package Inserts](#) section on immunize.org

Less Than Half of U.S. Babies Receive Flu Vaccine: CDC

Many parents don't realize how deadly flu can be, expert says

By **Steven Reinberg**

HealthDay Reporter

TUESDAY, Feb. 2, 2016 (HealthDay News) -- Only about four out of 10 U.S. babies aged 6 months to 23 months are getting vaccinated against the flu, federal health officials reported Tuesday. Between the 2002-2003 and 2011-2012 flu seasons, the number of infants who received flu shots increased from just under 5 percent to almost 45 percent, according to a new study. However, that falls far short of the recommendation from the U.S. Centers for Disease Control and Prevention that children 6 months and older get a flu shot every year.

"While flu vaccination for children has gone up, there is still a long way to go to protect every child," said study lead researcher Tammy Santibanez, an epidemiologist with CDC's National Immunization Program. "We also know that more effort needs to be put into encouraging black parents and children, and Hispanic parents and children to get the flu vaccine," she said.

Flu is a serious and potentially life-threatening illness. Each year an average of 20,000 children under 5 years of age are hospitalized because of complications from the flu. During last year's flu season, more than 140 children died from flu, the CDC said. Depending on age and vaccination history, children need either one or two doses of vaccine to be fully protected. Some children 6 months through 8 years of age need two doses, including those being vaccinated for the first time, the CDC says. The agency recommends that you check with your doctor to see if your child needs two doses.

In the 10 flu seasons studied, black and Hispanic children had lower rates of vaccination than white children, Santibanez said. Complete vaccination coverage was higher among children who needed only one dose, compared with those requiring two doses. In the 2011-2012 flu season, 49 percent of white children were vaccinated compared with 40 percent of Hispanic children and 35 percent of black children, the researchers found.

"Vaccination is the first and most important step parents can take to protect their family against the flu," Santibanez said. Vaccination can reduce flu illnesses, doctor visits, and missed work and school, and also prevent flu-related hospitalizations, she added. "Both parents and doctors can work together to do a better job at ensuring that children are fully vaccinated and protected against the flu," she said.

The report was published online Feb. 2 in the journal *Pediatrics*.

For the study, Santibanez and colleagues used data from the National Immunization Survey to estimate influenza vaccination among children aged 6 to 23 months based on doctors' reports.

Dr. Jefry Biehler, chairman of pediatrics at Nicklaus Children's Hospital in Miami, said people need to realize that "influenza is a serious infection, especially in children that are high-risk because of other health conditions, and it can be serious even in children who are otherwise healthy."

Biehler recently treated a young girl who nearly died from heart complications brought on by the flu. "The parents didn't realize how serious the flu can be," he said. "Many parents still believe that the flu is a bad cold and it's nothing to worry about."

It's important for all members of the family to get their flu shot every year, Biehler said.

ICAAC: Synergistic effects of two pediatric vaccines highlighted

By: BRUCE JANCIN, Pediatric News Digital Network

SEPTEMBER 24, 2015

SAN DIEGO – The potent synergistic benefits of coadministration of rotavirus vaccine and pneumococcal conjugate vaccine in young children are uniquely highlighted by a natural experiment conducted in southern Israel as described by **Dr. Ron Dagan** at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy. Dr. Dagan is professor of pediatrics and infectious diseases at Soroka University Medical Center in Beersheba, Israel. It's the sole hospital in a large, well-defined area of southern Israel. All children in that part of Israel are born in the hospital and receive their health care there, making it possible to generate highly reliable disease incidence data.

At any given time, physicians at the hospital are responsible for the care of roughly 30,000 children less than 2 years of age. So there's a huge study population, comprehensive follow-up, and – the final element in this prospective, population-based study – the rotavirus and pneumococcal conjugate vaccines were introduced in Israel just a few years ago and at roughly the same time. This enabled Dr. Dagan and his coinvestigators to compare hospitalization rates and pediatric emergency department outpatient visits for diarrheal and lower respiratory viral illnesses among children less than 2 years old during the prevaccine period of April 2006-March 2009 with rates during April 2013-March 2014, when uptake of the two vaccines in that age group exceeded 90%.

This was an unusual study in that it looked at the global impact of two major vaccines. In contrast, vaccine clinical trials and postmarketing studies typically evaluate only those outcomes directly related to that particular vaccine. The results of the Israeli study were startling: in the 3 years prior to introduction of the vaccines, one in five children under age 2 years admitted to the hospital had as an admitting diagnosis either rotavirus gastroenteritis confirmed by a positive stool ELISA test or pneumococcal pneumonia as evidenced by alveolar pneumonia on chest x-ray.

After the vaccines became available, the hospitalization rates for rotavirus gastroenteritis and alveolar pneumonia plummeted by 78% and 46%, respectively. Moreover, outpatient pediatric emergency department visits for rotavirus gastroenteritis dropped by 71% and visits for alveolar pneumonia fell by 67%. But that's not all. Smaller yet clinically meaningful reductions were also documented in nonrotavirus gastroenteritis and nonalveolar lower respiratory tract infections. Specifically, the hospitalization rate for nonrotavirus diarrheal illnesses and nonalveolar pneumonia lower respiratory infections dropped by 21% and 7%, respectively, while outpatient emergency visits for those disorders fell by 16% and 14%.

This translates to an estimated 1,890 fewer hospitalizations and 4,030 fewer outpatient emergency department visits for diarrheal disease or lower respiratory infection per 100,000 children under age 2 per year, Dr. Dagan reported.

Michael Schmidt, Ph.D., who chaired a press conference highlighting the Israeli study, declared, "These data are absolutely phenomenal. It really shows the global value of these vaccines for society." Dr. Schmidt, professor and vice chairman of microbiology and immunology at the Medical University of South Carolina, Charleston, posed a question: What's the explanation for the reductions in diseases not directly addressed by those two vaccines?

"We believe that one success can favorably affect the other. If you are weakened by diarrhea, you may be more likely to get pneumonia, and vice versa," according to Dr. Dagan. He added that the results actually pack a significantly greater wallop than is apparent at first look because rotavirus gastroenteritis and pneumococcal pneumonia in young children are seasonal diseases. They occur chiefly during October-March. So those 5,920 fewer hospitalizations and outpatient visits/100,000 per young children per year are concentrated during pediatricians' busiest half of the year.

"In most places in the world, winter is a time of so much illness that pediatricians can't deliver appropriate care. We knew that in our hospital we couldn't deliver appropriate care to children in the winter because there were so many sick children piled on top of each other. But now, because of these two vaccines, we are less crowded in the winter, we have more time for children, we make fewer mistakes," he said.

The study was funded by vaccine manufacturers and the Israel Ministry of Health. Dr. Dagan reported serving as a consultant, adviser to, and/or recipient of research grants from GlaxoSmithKline, Merck Sharp & Dohme, Pfizer, and Genocera.
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Chickenpox, Shingles Vaccines Linked to Rare Eye Inflammation

But study doesn't prove cause-and-effect

MONDAY, Jan. 25, 2016 (HealthDay News) -- The vaccine for chickenpox and shingles has been linked to inflammation of the eye's cornea, but the number of such cases is small, a new study says.

"Keratitis, or inflammation of the clear layer on the front of the eye, is a vision issue that can cause serious complications or even permanent damage to your vision if left untreated," Dr. Frederick Fraunfelder, chair of the ophthalmology department and director of the University of Missouri Eye Institute, said in a university news release.

Researchers found 20 cases of keratitis in children and adults that occurred within a month of receiving a chickenpox or shingles vaccine. Symptoms of the disorder developed within 24 days of vaccination among adults. In children, symptoms began within 14 days of vaccination, the researchers said.

The researchers said there is a probable relationship between the vaccine and the eye inflammation. However, the new study wasn't designed to prove that the vaccine actually caused the condition.

Despite the findings, most people should still get the chickenpox and shingles vaccine, the researchers said.

"While this is a rare occurrence, it's important for physicians to know when giving the vaccine to individuals who have a history of the condition because it could be reactivated by the vaccine," he said.

Anyone with a past history of keratitis should be closely monitored after they get a chickenpox or shingles vaccine to be sure they don't have any inflammation of the cornea or additional scarring, Fraunfelder advised.

The study was presented recently at the American Academy of Ophthalmology in Las Vegas. Findings presented at meetings are generally viewed as preliminary until published in a peer-reviewed journal.

More information

The U.S. Centers for Disease Control and Prevention has more about [shingles vaccination](#).

SOURCE: University of Missouri, news release, Jan. 20, 2016

-- [Robert Preidt](#)

Question of the Week

Issue 1222: January 6, 2016

If a patient received Trumenba (MenB; Pfizer) two months ago and Bexsero (MenB, GSK) yesterday, should they complete the series with two additional doses of Trumenba or one more of Bexsero since the two brands are not interchangeable? What would be the interval from the Bexsero to the next dose?

The patient can complete the series with either vaccine. If Bexsero is chosen, the next dose (Bexsero #2) should be administered at least one month after yesterday's dose. The Bexsero #2 would be the final dose. If Trumenba is chosen, the next dose (Trumenba #2) should be administered at least one month after yesterday's Bexsero dose. The one-month interval between doses of Trumenba and Bexsero is recommended because one component (FHbp) is contained in both of the vaccine products and there is concern about potential interference. The final dose (Trumenba #3) should be administered four months after Trumenba #2.