



INSIDER

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November 2012

Mark Your Calendars:

Vaccine update webinar Date: November 14

National Influenza Vaccination Week

Date: December 2-8, 2012

Time: noon—1pm

Vaccine Education Center plans November 14 webinar on current vaccine issues

The Vaccine Education Center (VEC) at Children's Hospital of Philadelphia will present a free one-hour webinar, beginning at noon (ET) on November 14. <u>Current Issues in Vaccines–Winter 2012</u> will feature VEC director Paul Offit, MD, discussing the following topics:

- New pertussis vaccine recommendations
- New meningococcal vaccine recommendations
- HPV vaccine update
- Rotavirus vaccine update
- Influenza vaccine update

ACIP: Pertussis Shots for All Pregnant Women

MedPage Today (10/24/12) Smith, Michael

The Centers for Disease Control and Prevention's Advisory Committee for Immunization Practices (ACIP) has recommended that all pregnant women be vaccinated against pertussis. The move--which would help protect newborns against infection--comes amidst an outbreak of the disease that has resulted in more than 32,000 cases of pertussis in the United States and 16 deaths. According to Dr. Mark Sawyer, of the University of California San Diego and the chair of ACIP's pertussis working group, most of the deaths were "in the first few months of life, an age where we cannot protect the infant directly." ACIP said that the Tdap vaccine against pertussis, tetanus, and diphtheria should be given in the third or late second trimester of pregnancy.

ACIP recommendation for infants at high risk of meningococcal

ACIP members voted in favor of recommending that infants at higher risk for meningococcal disease be vaccinated with HibMenCY (MenHibrix) at two, four, and six months and again between 12 and 15 months of age. ACIP's recommendations are not final until accepted by the director of the CDC and published in Morbidity and Mortality Weekly Report; however, all ACIP recommendations have been accepted in the past.

See additional information on page 5.

MedPag Today (10/24/12) Smith, Michael

INFLUENZA VACCINE

More Evidence Flu Shot Is Safe for the Egg-Allergic: Study

Reuters (10/09/12) Norton, Amy

Researchers led by Anne Des Roches of Montreal's Hospital Sainte-Justine followed 367 people with egg allergies, mainly children, who received the flu shot over five years and found that it was safe for them to be immunized, as the current vaccine contains little egg protein. Although nearly 67 percent of the people studied had a history of anaphylaxis after eating eggs, none of them had a serious reaction to the flu vaccine, and just 13 exhibited itchy skin, hives, or other mild allergy-like symptoms within a day of immunization. The researchers also note that none of the 4,000 egg-allergic people involved in 26 past studies they reviewed had a serious allergic reaction to the vaccine. The study is published in the Journal of Allergy and Clinical Immunology.

But overall, the evidence supports the safety of the vaccine for egg-allergic kids, according to Dr. Schneider.

Dr. Schneider said she thinks egg-allergic kids should get the flu shot from a doctor who can recognize and, if needed, treat a severe reaction. The protocol at the Boston center, she said, is to monitor egg-allergic kids for 30 minutes after the shot, to be safe.

SOURCE: http://bit.ly/OlicAs
J Allergy Clin Immunol 2012.
Reuters Health Information © 2012

Cite this article: More Evidence Flu Shot Is Safe in Egg-Allergic. *Medscape*. Oct 09, 2012.

PCV13 Vaccine Cuts Disease, CDC Suggests

MedPage Today (10/21/12) Smith, Michael

The 13-valent pneumococcal conjugate vaccine significantly reduced the incidence of disease associated with the new bacterial types included, new research from the Centers for Disease Control and Prevention (CDC) suggests. The PCV13 vaccine was introduced in 2010, adding six pneumococcal serotypes that were not in the earlier PCV7 product. Among children under age two, the CDC estimates that the vaccine reduced disease incidence between 50 percent and 60 percent. Researchers studied data from 10 centers in the CDC's Active Bacterial Core surveillance program, looking at five of the new pneumococcal serotypes included in the PCV13 vaccine. When the scientists compared the average disease incidence among children under age two years in the first quarters of the baseline years to the first quarter of 2012, they found that disease linked to the five new strains dropped 90 percent and disease caused by all serotypes declined by 55 percent. The CDC's Matthew Moore presented the findings at the annual ID Week meeting in San Diego.

CDC publishes recommendations for use of PCV13 and PPSV23 in adults with immunocompromising conditions

CDC published <u>Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine for Adults with Immunocompromising Conditions: Recommendations of the Advisory Committee on Immunization Practices (ACIP) in the <u>October 12 issue of MMWR</u> (pages 816-819). Part of the first paragraph and the section titled "ACIP Recommendations for PCV13 and PPSV23 Use" are reprinted below.</u>

On June 20, 2012, the Advisory Committee on Immunization Practices (ACIP) recommended routine use of 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13, Wyeth Pharmaceuticals, Inc., a subsidiary of Pfizer, Inc.) for adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid (CSF) leaks, or cochlear implants. PCV13 should be administered to eligible adults in addition to the 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23, Merck & Co. Inc.), the vaccine currently recommended for these groups of adults....

ACIP Recommendations for PCV13 and PPSV23 Use

Adults with specified immunocompromising conditions who are eligible for pneumococcal vaccine should be vaccinated with PCV13 during their next pneumococcal vaccination opportunity.

Pneumococcal vaccine-naïve persons. ACIP recommends that adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, CSF leaks, or cochlear implants, and who have not previously received PCV13 or PPSV23, should receive a dose of PCV13 first, followed by a dose of PPSV23 at least 8 weeks later. Subsequent doses of PPSV23 should follow current PPSV23 recommendations for adults at high risk. Specifically, a second PPSV23 dose is recommended 5 years after the first PPSV23 dose for persons aged 19–64 years with functional or anatomic asplenia and for persons with immunocompromising conditions. Additionally, those who received PPSV23 before age 65 years for any indication should receive another dose of the vaccine at age 65 years, or later if at least 5 years have elapsed since their previous PPSV23 dose.

Previous vaccination with PPSV23. Adults aged ≥ 19 years with immunocompromising conditions, functional or anatomic asplenia, CSF leaks, or cochlear implants, who previously have received ≥ 1 doses of PPSV23 should be given a PCV13 dose ≥ 1 year after the last PPSV23 dose was received. For those who require additional doses of PPSV23, the first such dose should be given no sooner than 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23.

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Trial Suggests Prevnar May Also Protect Ages 18 to 49

Oct 07, 2012

(Reuters) Oct 05 - Pfizer Inc said a late-stage trial of its vaccine to protect against pneumococcal pneumonia suggested it would also work in adults aged 18-49, thereby possibly expanding its sales.

The vaccine, Prevnar 13, which already has \$3.5 billion in annual sales from its use in adults over age 50 and children under age five, is designed to protect against pneumonia, meningitis and other infections caused by 13 strains of Streptococcus pneumoniae.

• Pfizer said Prevnar 13 met the main goal of the late-stage study by showing that the immune response to the vaccine in the 18- to 49-year-old age group was not inferior when compared with the response in the 60-to 64-year-old group.

Pfizer said on Thursday that the favorable results from the study will support both its recent European Union application to market the product for the 18-49 age group, as well as applications it plans to make in other countries.

A competing vaccine from GlaxoSmithKline, Synflorix, protects against 10 strains of S. pneumoniae. Reuters Health Information © 2012

Cite this article: Trial Suggests Prevnar May Also Protect Ages 18 to 49. Medscape. Oct 04, 2012.

Study Finds HPV Vaccine Gardasil Safe

Wall Street Journal (10/02/12) P. D2 Dooren, Jennifer Corbett

A new study of Merck's Gardasil found no safety concerns for the human papillomavirus (HPV) vaccine. The Kaiser Permanente Vaccine Study Center in Oakland, Calif., led the study, which noted only rare occurrences of fainting and skin infections--known side effects of Gardasil. The vaccine protects against four strains of HPV, including two that account for about 70 percent of cervical-cancer cases in women. The U.S. Food and Drug Administration and the European Medicines Agency sought an additional look at the vaccine's safety in a large group of people. The study, published in the Archives of Pediatrics & Adolescent Medicine, involved about 190,000 females who received at least one dose of the HPV vaccine between August 2006 and March 2008. Approximately 44,000 of the women received all three recommended doses of the vaccine. The researchers looked at emergency room visits and hospitalizations following each vaccine dose, reviewing more than 200 categories of illnesses to see if there might be a link, and found that in most cases the condition existed prior to vaccination. Gardasil was first approved in 2006 for girls and women ages 9 to 26 years old before later being approved for use in males, but HPV immunization rates lag those of other vaccines partly due to concerns about safety, according to doctors. "This is very reassuring," said Mary Anne Jackson, section chief, infectious disease at Children's Mercy Hospitals and Clinics in Kansas City, Mo. The "bottom line is it's a very safe vaccine."

Red Book Online

Red Book App Now Available!

The newly revised and updated *Red Book* 2012—the go-to resource for the most current information on infectious diseases—is now available for download from iTunes to your Apple (iOS) device (ie, iPad, iPhone, and iPod Touch), as well as from Google Play for your Android device, as part of your individual subscription to *Red Book Online*!

Download from iTunes: http://itunes.apple.com/us/app/aap-red-book/id540698874?ls=1&mt=8 Download from Google Play: https://play.google.com/store/apps/details?id=com.rbo

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Sexual Activity-Related Outcomes After Human Papillomavirus Vaccination of 11- to 12-Year-Olds *Pediatrics (10/12) Bednarczyk, Robert A.; Davis, Robert; Ault, Kevin; et al.*

Human papillomavirus (HPV) vaccination among girls aged 11 and 12 is not associated with outcomes associated with increased sexual activity, such as pregnancy or sexually transmitted infections, according to a new study. Previous surveys have hypothesized that sexual activity may change after HPV vaccination, but their results may be subject to self-response biases. The new study used electronic data from a large managed care organization, including data on about 1,400 11- and 12-year-olds enrolled in the managed care group between July 2006 and December 2007. Outcomes--including pregnancy, sexually transmitted infection testing or diagnosis, and contraceptive counseling--were assessed through Dec. 31, 2010. Of the girls in the study, 493 received the HPV vaccine and 905 did not. The risk of the composite outcome was not significantly higher in girls who received the HPV vaccine compared to those who did not get vaccinated.

CDC panel OKs Glaxo's meningitis vaccine for at-risk infants

CHICAGO | Wed Oct 24, 2012 3:56pm EDT

CHICAGO (Reuters) - Advisers to the U.S. Centers for Disease Control and Prevention voted on Wednesday to recommend the use of GlaxoSmithKline's newly approved vaccine for bacterial meningitis in babies at increased risk of the infection.

The vote is not related to the ongoing outbreak of fungal meningitis that has been linked to tainted steroid injections and has so far killed 24 people.

Children at increased risk include those with sickle cell disease and an immune system disorder known as complement component deficiency.

The CDC panel said the vaccine could also be used in babies 2 months through 18 months who live in communities battling an outbreak of meningococcal disease caused by serogroup C and Y.

The vaccine, known as MenHibrix, targets two common causes of bacterial meningitis, a serious infection of the thin lining surrounding the brain and spinal cord. It can cause severe brain damage, and it is fatal in 50 percent of cases if untreated.

The Advisory Committee for Immunization Practices, which advises the CDC, voted 13 to 1, with 1 abstention, to recommend the vaccine for use in infants at greater risk for meningococcal disease, with 4 doses starting at 2, 4, 6 months and 12 through 15 months.

The U.S. Food and Drug Administration approved the vaccine in June.

The vaccine is intended to prevent disease caused by the bacteria Neisseria meningitidis serogroups C and Y, two of the three most common causes of meningococcal disease in the United States.

It also protects against Haemophilus influenzae type b or Hib bacteria. Hib was the most common cause of bacterial meningitis in children under the age of 5 before vaccines for the strain became common.

About 4,100 cases of bacterial meningitis occurred in the United States each year from 2003 to 2007, the most recent data available, and 500 people died from the disease, according to the CDC. Infants are at highest risk.

(Reporting by Julie Steenhuysen)

'New' Pertussis Vaccine Offers Less Protection

MedPage Today (10/22/12) Susman, Ed

The acellular pertussis vaccine seems to be less effective for preventing pertussis, researchers said at IDWeek 2012. The acellular pertussis vaccine was introduced in the United States in 1991, and use of the whole-cell vaccine--which the acellular vaccine replaced--ceased in 2001. The study, from Kaiser Permanente, included 465,059 individuals ages eight to 20 years who were vaccinated against pertussis. In all, there were 1,424 cases of pertussis. There were 249 cases of pertussis among patients who received five doses of pertussis acellular vaccine, compared with 12 cases among those who received the whole-cell pertussis vaccine, amounting to an 8.57-fold increase in the relative risk of experiencing pertussis. "The attack rate of pertussis was substantially lower among persons who had received at least one dose of their vaccine series doses as whole cell pertussis," said Maxwell A. Witt, a research assistant at Kaiser Permanente Medical Center, San Rafael, Calif. He noted, "Our study population was old enough to have received whole cell pertussis vaccine and young enough to have received acellular vaccine."

CDC releases FAQs about its interim vaccine storage and handling guidance document

CDC recently published <u>Vaccine Storage and Handling: Interim Guidance</u> (see <u>IAC Express #1019</u> for a summary of this new document). Subsequently, CDC has posted <u>Interim Guidelines for Vaccine Storage and Handling: Frequently Asked Questions.</u>

CDC advises vaccine providers to read the guide and frequently asked questions (FAQs) carefully, as this interim guidance is an important first step to improving storage and handling practices.

Feds Probe Whooping Cough Epidemic

Seattle Times (09/29/12) Ostrom, Carol M.

Federal health officials have been investigating the whooping cough outbreak in Washington State, trying to determine why rates of the disease there this year are 10 times higher than in 2011. The state has the thirdhighest rate of whooping cough cases in the country, with 4,190 cases so far this year. Investigators with the Centers for Disease Control and Prevention (CDC) are looking at the immunization records of patients ages 11 to 18, the age group hit hardest by the disease. Seventy-seven percent of 13- to 19-year-olds diagnosed with whooping cough in the state had received their last recommended vaccination. They were also part of the first generation of teenagers to receive only the new formulation of the vaccine. In the late 1990s, pertussis vaccines switched from the whole-cell (DTP or DTwP) to the more highly purified acellular vaccines (DTaP and Tdap), which cause fewer side effects such as fever or seizures. However, the major spikes in pertussis cases were in younger teens who never received the whole-cell vaccine. One concern is that the new vaccine may not create a strong enough, or lasting enough, immune response. But pertussis is also a cyclical disease that will show high levels in one area one year but decline in others. A 2010 outbreak in California garnered the attention of researchers from the Kaiser Permanente Vaccine Study Center, who published a study showing that protection against pertussis waned during the five years after the last dose of the newer DTaP. After the data from Washington State is analyzed, the CDC's Advisory Committee on Immunization Practices will recommend the next steps.

A Parent's Grief Highlights Flu Shot's Importance General good health is no protection from infection or death, CDC study shows

By Maureen Salamon

HealthDay Reporter

FRIDAY, Oct. 19 (HealthDay News) -- Austin Booth was a three-sport high school athlete who never missed a day of school for illness. So his parents could never have foreseen the nightmare that would unfold in January 2011 when the 17-year-old Colorado teen would die of the flu just five days after developing symptoms, four days of which were spent on life support.

"It was unreal to see this kid on life support who a few days before was playing in a basketball game," said Austin's mother, Regina Booth. "Even to look back on it, it's still just an unreal situation for us. To think that something as simple as a flu shot could have saved his life is hard to think about as a mom, but we had not ever gotten flu shots."

As flu season gets under way, health officials are urging people of all ages to get vaccinated against influenza regardless of whether they have any high-risk conditions, such as asthma or diabetes, that predispose them to worsened bouts of the illness. Indeed, Austin Booth's story is not unusual, with a new study indicating that healthy children who die of the flu have a shorter period between symptom onset and death than children with underlying conditions who succumb.

The research, presented Thursday at the Infectious Diseases Society of America's IDWeek in San Diego, found that healthy children died within about four days of flu onset, compared to seven days for kids with high-risk conditions. A complementary study presented at the conference that looked at school-based vaccinations determined that unvaccinated children were nearly three times as likely to get the flu than vaccinated kids.

Between 3,000 and 49,000 Americans die of the flu each year, according to the U.S. Centers for Disease Control and Prevention.

"This may surprise a lot of people who think of influenza in the same box as children having colds," said Dr. Karen Wong, author of the first study and an epidemic intelligence service officer for the CDC in Atlanta. "I think our study is important because it reminds people that influenza is a really serious disease. The vaccine is the best prevention tool we have."

During influenza seasons between 2004 and 2012, almost half the children who died had previously been healthy, according

During influenza seasons between 2004 and 2012, almost half the children who died had previously been healthy, according to the study, which reviewed flu-associated deaths among children younger than 18 as reported by city and state health departments and confirmed through lab testing. More than 800 children died of the flu in that span.

In addition to vaccinations, parents can promote other measures to help prevent their children and themselves from catching the flu, Wong said, including washing hands often, covering coughs and keeping any sick family members at home. Talk to the child's health care provider if he or she shows signs of the flu instead of simply loading up on symptom-relieving medications, she advised.

"Early warning signs can be really difficult to pick up on, especially in young children, which is why prevention is the best defense," Wong said. "If your child is irritable, isn't interacting as they normally would, and symptoms get a little better and then markedly worse, talk with a doctor."

Regina Booth, who is expecting the couple's sixth child in December, now makes sure she, her husband, Carl, and Austin's siblings are vaccinated before flu season each year. A flu vaccination drive was recently held in Austin's name at his high school football field.

"I try to explain to people, without pushing it on them, that I was one of those parents who didn't think it was needed," said Booth, who is also a member of the advocacy group Families Fighting Flu. "Now, if I can help someone, I definitely want to. We feel it's the only thing we can do that's positive out of what's happened."

Research presented at scientific conferences should be considered preliminary until published in a peer-reviewed medical journal.

More information

The U.S. Centers for Disease Control and Prevention offers a flu guide for parents.

SOURCES: Karen Wong, M.D., epidemic intelligence service officer, Influenza Division, U.S. Centers for Disease Control and Prevention, Atlanta; Regina Booth, Rifle, Colorado; Oct. 18, 2012, presentation, IDWeek (Infectious Diseases Society of America), San Diego

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CDC: Hospitals, physicians increase worker flu vaccinations

AHA News Now (9/27)

September 27, 2012

An estimated 77% of hospital workers report receiving a flu vaccine for the 2011-12 flu season, up from 71% in 2010-11, according to a survey (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6138a1.htm?scid=mm6138a1.e) released today by the Centers for Disease Control and Prevention. That includes 87% of hospital physicians, 78% of hospital nurses, and 76% of other hospital personnel. Coverage for health care workers in all settings was 67%, up from 64% in 2010-11. Hospitals achieved a higher vaccination rate than physician offices (68%) and long-term care facilities (52%). While vaccinations in physician offices rose from 62% the prior year, those in long-term care facilities fell from 64%. Coverage was 95% among workers in hospitals requiring vaccination, compared with 68% in those that did not. To protect the lives and welfare of patients and hospital employees, the AHA Board of Trustees last year approved a policy supporting mandatory patient safety policies that require either flu vaccination or wearing a mask in the presence of patients across health care settings during flu season.

Vaccine Webinar Series

(This was an excellent webinar which took place on October 3, 2012 watch for the archived webinar which should be posted October 5, 2012.

http://www.chop.edu/professionals/vaccine-healthcare-providers/vaccine-webinar-series/webinar-archives.html)

Current Issues in Vaccines - Fall 2012

 Presenter: Paul Offit, MD Director, Vaccine Education Center Chief, Division of Infectious Diseases, The Children's Hospital of Philadelphia Professor of Pediatrics and Maurice Hilleman Professor of Vaccinology, University of Pennsylvania School of Medicine

Supported by the Thomas F. McNair Scott Endowed Research and Lectureship Fund

Topics

Updates on various issues surrounding vaccines for:

- Pneumococcus
- Pertussis
- Influenza
- Meningococcus
- HPV