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INSIDER

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Mark Your Calendars:

ACP Immunization Webinar
Communicating Risk-Benefits of Vaccination to Patients
Date: Wednesday, July 18, 2012
Time: 12pm
Speaker: Marie Brown, MD FACP
Registration: Online
Visit www.acponline.org

Current Issues in Vaccines Webinar
Date: September 12, 2012
Time: 12pm
Speaker: Paul Offit, MD
Registration: Online
Www.vaccine.chop.edu/webinars

GA-AAP Charity Golf Tournament
Date: September 12, 2012
Location: Bear's Best
Suwanee, GA

Immunize Georgia Conference
Date: Thursday, September 13, 2012
Location: Macon Marriott City Center

Confirmed Measles Case in Atlanta

The Georgia Department of Public Health has distributed this information to Emergency Departments, Infection Control, and Health Care Provider Networks in the metropolitan Atlanta Area.

Title: Confirmed Measles Case Identified in Atlanta June 29, 2012

Please note that a person with laboratory confirmed measles was identified on June 29, 2012 in the metro Atlanta area. This alert is being disseminated so that any potential secondary cases may be quickly diagnosed, isolated, and reported to Georgia Department of Public Health. Susceptible contacts around this case have been identified and post-exposure prophylaxis has been provided. However, there may have been others exposed in the community and secondary cases may arise. Therefore, through July 18, 2012, persons presenting with a febrile rash illness accompanied by cough, conjunctivitis or coryza should be evaluated for measles.

If you suspect measles in a patient, you should immediately notify the Georgia Department of Public Health at 1-866-PUB-HLTH (1-866-782-4584). Public Health officials can assist you in the diagnosis of suspect measles cases. Georgia Department of Public Health reminds you to take precautions when evaluating highly suspect patients such as:

- Move the patient quickly out of the general waiting area
- Place a mask on patients while waiting to be evaluated
- Move suspect patients to a negative pressure room, if available, as soon as possible

Alternative immunization schedules

On June 18, 2012, researchers from the Oregon Immunization Program and the Centers for Disease Control and Prevention (CDC) published a paper titled "Frequency of Alternative Immunization Schedule Use in a Metropolitan Area" (Robison SG, Groom H, and Young C. *Pediatrics* 2012;130:32-38). The purpose of the study was to evaluate the percentage of parents who chose to delay or withhold vaccines. What they found was troubling. Between 2006 and 2009, the percentage of parents in Oregon choosing an "alternative" vaccine schedule increased from 2.5 percent to 9.5 percent. Children whose parents chose this schedule received fewer shots per visit but visited the physician more frequently for their immunizations.

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Report Cites Problems in CDC Vaccine Program

Some of the CDC's Vaccines for Children Program vaccines might have been stored at inappropriate temperatures in provider offices, according to a report from the Office of the Inspector General. Findings from site visits include: vaccines being stored at inappropriate temperatures, expired vaccines on hand, providers not meeting the VFC vaccine management requirements and state VFC Programs were not effective in ensuring that providers met the VFC requirements over time. The findings do not raise concerns about the safety of vaccines. The concern with improper storage temperatures is that they can make vaccines less potent rather than less safe.

Vaccine Storage at a Glance

Freezer

All varicella-containing vaccines should be stored in a continuously frozen state at the manufacturer recommended freezer temperature until administration. All varicella-containing vaccines (VAR, Varivax; ZOS, Zostavax; and MMRV, ProQuad) should be stored between -58°F and +5°F (-50°C and -15°C).

The measles, mumps, rubella vaccine (MMR) can be stored either in the freezer or the refrigerator.

Refrigerator

All inactivated vaccines require refrigerator storage temperatures between 35°F and 46°F (2°C and 8°C), with a desired average temperature of 40°F (5°C). The following live attenuated vaccines must also be kept at refrigerator temperature: influenza (LAIV, FluMist); rotavirus (RV1, Rotarix and RV5, RotaTeq); typhoid (Ty21-A, Vivotif); and yellow fever (YF-Vax). Review each manufacturer's instructions in the product information for vaccine specific storage temperatures.

If lyophilized varicella vaccine is inadvertently stored in the refrigerator, it should be used within 72 hours.

Expiration dates

Monitor vaccine and diluent expiration dates closely. Rotate stock so that vaccine and diluent with shortest expiration dates are used first.

The *Immunization Action Coalition* has produced a **checklist** for safe vaccine storage and handling that can be accessed at the following web address: http://www.immunize.org/catg.d/p3035.pdf

CDC has produced an **extensive guide** for vaccine storage and handling that can be accessed at the following web address: http://www.cdc.gov/vaccines/recs/storage/guide/vaccine-storage-handling.pdf

FDA Approves New Combination Vaccine That Protects Children Against Two Bacterial Diseases

FDA News Release (06/14/12)

Menhibrix, a combination vaccine that protects against invasive disease caused by Neisseria meningitidis serogroups C and Y and Haemophilus influenzae type b (Hib), has received U.S. Food and Drug Administration approval. These diseases can be life-threatening, infecting the bloodstream and causing sepsis, or infecting the lining around the brain and spinal cord and causing meningitis. Researchers tested the safety and effectiveness of Menhibrix in about 7,500 infants and toddlers. For the vaccine's Hib component, the children's immune responses after vaccination were comparable to immune responses in those who received a previously approved vaccine against invasive Hib disease. For Menhibrix's meningococcal component, results showed that the vaccine produces antibodies at levels considered predictive of protection against invasive meningococcal disease caused by serogroups C and Y. Menhibrix is given in four doses at two, four, six, and 12 to 15 months of age. The first dose can be given as early as six weeks of age, and the fourth dose can be given as late as 18 months of age. Menhibrix is manufactured by GlaxoSmithKline Biologicals.

CDC posts archive of its Immunization NetConference "Coughing up the Facts on Pertussis"

CDC recently posted the archive of its May 30 NetConference, Coughing up the Facts on Pertussis–Emerging Trends and Vaccine Recommendations. http://www.cdc.gov/vaccines/ed/ciinc/Pertussis.htm The presenter is CDC's Stacey Martin, MSc; CDC's Andrew Kroger, MD, MPH, is the moderator.

A podcast of the NetConference is available at the link above, as are PowerPoint slides, a transcript, and information on continuing education (CE) credit

Update: Influenza Activity--United States, 2011-12 Season and Composition of the 2012-13 Influenza Vaccine

Morbidity and Mortality Weekly Report (06/08/12) Vol. 61, No. 22, P. 414

Influenza activity in the United States was low from October to December, but increased in January and peaked in mid-March during the 2011-2012 season. The predominant viruses were influenza A (H3N2), with also some circulation of influenza A (H1N1)pdm09 (pH1N1) and influenza B viruses. This most recent U.S. season was mild compared to past seasons. There were lower rates of hospitalizations and flu-attributed deaths, although the percentage of deaths attributed to pneumonia and influenza exceeded the epidemic threshold for the one week ending January 21, 2012, peaking at 7.9 percent. For the 2011-2012 influenza season, there were 26 laboratory-confirmed influenza-associated pediatric deaths reported, down from 122 during the 2010-2011 season. In testing for antiviral resistance, all influenza B viruses and influenza A (H3N2) viruses were sensitive to both oseltamivir and zanamivir. Of the pH1N1 viruses tested for resistance to oseltamivir, 1.4 percent were found to be resistant. The U.S. Food and Drug Administration recommended that the 2012-2013 trivalent influenza vaccine for the United States contain A/California/7/2009-like (pH1N1), A/Victoria/361/2011-like (H3N2), and B/Wisconsin/1/2010-like (B/Yamagata lineage). This is a change in the influenza A (H3N2) and influenza B components from the 2011-2012 vaccine.

Spotlight on immunize.org: where you'll find up-to-date vaccine package inserts and contact information for vaccine manufacturers

Looking for vaccine product information? The web sections of Package Inserts and Vaccine Product Manufacturers saves you time: All package insert information for vaccines licensed for use in the United States are provided. In addition, the manufacturers' section provides website links, contact information, and product listings for vaccine and immune globulin manufacturers.

These listings are part of IAC's online Directory of Immunization Resources, [http://www.immunize.org/resources/] which is a compendium of helpful immunization resources—such as blogs, books and periodicals, state and local immunization coalitions, email news services, and more—from a variety of organizations: government, professional associations, nonprofit organizations, private industry, and others.

CDC Panel: Child Under 9 Needs Two Flu Vaccines Doses

By: MIRIAM E. TUCKER, Family Practice News Digital Network
Family Practice News **06/20/12**

ATLANTA – The 2012-2013 influenza vaccination statement from the Centers for Disease Control and Prevention's vaccine advisory panel is expected to contain a new algorithm for children aged 6 months through 8 years to determine whether they need one or two doses.
The CDC's Advisory Committee on Immunization Practices voted to approve the same algorithm approved by the American Academy of Pediatrics' Committee on Infectious Disease earlier this year:

The new flu algorithm was designed to be simple, the AAP's liaison Dr. Michael T. Brady said, " You'd like to make it so that any child who needs two gets two (doses of the flu vaccine)."

First, has the child ever received influenza vaccine?
• If yes, did the child receive two or more total doses of seasonal vaccine since July 2010?
• If yes, give one dose. If not, or if the information isn't known, give two doses.
• If the child has never received influenza vaccine or the information isn't known, give two doses.
The algorithm was necessary because children younger than 9 years of age need two doses of seasonal vaccine in order to establish immune system priming, and two out of the three influenza strains included in the 2012-2013 influenza vaccine –A/Victoria/361/2011 (H3N2) and B/Wisconsin/1/2010 – are different from those of the 2011-2012 vaccine. The one that remains the same is the 2009 pandemic strain A/California/7/2009, which was available in 2009 as a monovalent vaccine and then was included in the seasonal 2010-2011 and 2011-2012 flu vaccines, said Dr. Lisa Grohskopf of the CDC's Influenza Division.
The algorithm was designed to be simple, the AAP's liaison Dr. Michael T. Brady said in an interview. "Thirty-five percent or so of children receive vaccines outside of their medical home. That creates a problem with access to the information. Also, many pediatricians will set up vaccine clinics designed to move children through quickly. ... You'd like to make it so that any child who needs two gets two [doses of the flu vaccine]."

But, he said, if the information is available, then the option is still there to use it. "The option is, do you want to put the onus on the pediatrician to try to track everything down, or do you want to try to make it more fail-safe so that it's easier? What this does in general is make it simple. But if you want to get the information and avoid an extra dose, that's fine," said Dr. Brady, professor and chair of pediatrics at the Ohio State University and Nationwide Children's Hospital, both in Columbus.
Once adopted by the CDC and published in the CDC's Morbidity and Mortality Report, the influenza vaccine statement will also contain information about the strains selected for 2012-2013, a reiteration of the universal recommendation for flu vaccine for all individuals aged 6 months and older, and an acknowledgement of the recently-approved quadrivalent live attenuated vaccine, which is expected to be available for the 2013-2014.
The statement also will include an update of an investigation into an increased risk for febrile seizures associated with receipt of the trivalent inactivated influenza vaccine (TIV) in conjunction with the 13-valent pneumococcal conjugate vaccine. The elevated risk was seen for seizures following TIV in children aged 6-23 months in surveillance data for 2011-2012 among children aged 6-23 months, but not in those aged 24-59 months.
At the meeting, the committee also voted for the use of the vaccine via the new algorithm into the federal Vaccines for Children Program.
As a CDC employee, Dr. Grohskopf has no disclosures. Dr. Brady stated that he has no relevant financial disclosures.

Vaccination Rates in Teens Higher in States With Middle School Requirements

Researchers from the CDC found that teenagers in states with vaccination requirements for middle school have higher rates of vaccination with meningococcal (MCV4) and tetanus, diphtheria, pertussis (Tdap) vaccines. Their study used data from the 2008-2009 National Immunization Survey-Teen. Some states require education about the vaccines, but educational requirements did not increase immunization rates. The study appears in the journal *Pediatrics*. Access this study at: http://pediatrics.aappublications.org/content/129/6/1056.full (login required).

Humoral immunity 10 years after booster immunization with an adolescent and adult formulation combined tetanus, diphtheria, and 5-component acellular pertussis vaccine.

Tomovici A, Barreto L, Zickler P, Meekison W, Noya F, Voloshen T, Lavigne P.

Source: Sanofi Pasteur Limited, Toronto, Ontario M2R 3T4, Canada. miggi.tomovici@sanofipasteur.com

From **Vaccine.** 2012 Mar 30;30(16):2647-53. Epub 2012 Feb 19.

Abstract

Persistence of antibodies after a single dose of Tdap vaccine (tetanus, diphtheria, and 5-component acellular pertussis vaccine) was evaluated in a follow-up study of adolescents (N=324) and adults (N=644) who had received Tdap in earlier clinical trials. Outcome measures were seroprotection (tetanus and diphtheria) or seropositivity (pertussis) and geometric mean concentrations. Humoral immune responses to all antigens were robust 1 month after initial immunization, decreased at subsequent measurements, but continued to exceed pre-immunization levels 1, 3, 5, and 10 years later. Protective levels of diphtheria and tetanus antitoxin persisted in 99.3% of adolescents 10 years after a booster dose of Tdap. Seropositivity to 1 or more pertussis antigens also persisted in most adolescents for 10 years. Although tetanus antitoxin responses were similar in adults to those observed in adolescents, diphtheria antitoxin titers were lower, reflecting the fact that a smaller proportion of adults had received diphtheria toxoid in the previous 10 years compared to adolescents. These data will contribute to the selection of the optimal interval for repeat doses of Tdap.

Fewer young women are completing the Human Papillomavirus (HPV) Vaccine Series

A recent study in the journal *Cancer* found that from 2006 to 2009 rates of women completing HPV 3-dose series, after receiving an initial dose, has dropped from 50% to 22%. The study also noted that those who received the vaccine in a clinic were more likely to complete the series than those who received it from a pediatrician. To read the article, visit:

http://well.blogs.nytimes.com/2012/05/07/fewer-young-women-complete-hpv-vaccine/.