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Mark Your Calendars:

February 22-23
ACIP Meeting
Atlanta, GA

Virtual NIC Conference
March 26-28
http://www.cdc.gov/vaccines/events/nic/

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Chickenpox Vaccination of Children Helps Protect Infants, Too

WebMD (11/28/11) Mann, Denise

The rate of chickenpox among infants has declined by nearly 90 percent from 1995 to 2008, according to a study by Adriana S. Lopez, an epidemiologist at the Centers for Disease Control and Prevention, and colleagues. The rate fell during this period, even though infants are not eligible for the chickenpox (varicella) vaccine. In 1995, the United States began recommending a single dose of the chickenpox vaccine for children aged 12 months and older, and a second dose was added to the immunization schedule in 2006. Infants were four times more likely to die from chickenpox compared to children aged 1 to 14 before the vaccine was recommended. "Vaccinating children aged 12 months and older protects infants who are too young to be vaccinated," says Lopez. "It is important to have high vaccine coverage with the recommended two doses so that the risk is low for infants and others who can't get vaccinated." The study is published in Pediatrics.

Babies Sleep Better Following Afternoon Vaccines

Reuters (11/29/11) Grens, Kerry

Afternoon shots might be better for babies, according to a new study from Linda Franck and colleagues at the University of California, San Francisco. The team, whose findings are published in the journal Pediatrics, set out to test how well acetaminophen helps babies sleep after immunizations. Franck noted that sleep is important after receiving shots because it indicates a vaccine response. The 70 two-month olds in the study received a number of immunizations, including pneumococcal, diphtheria-tetanus-pertussis, Haemophilus influenzae type b, poliovirus and hepatitis B vaccines, which are part of the Centers for Disease Control and Prevention's recommendations for routine immunizations. Most slept longer in the 24 hours following the vaccinations than in the 24 hours preceding the shots, and those who received shots after 1:30 in the afternoon were more likely to sleep longer.

HPV Vaccination Becoming More Common for Boys

New England Cable News (12/03/11)

Some physicians say they are seeing more boys get vaccinated against human papillomavirus (HPV) now that the U.S. Centers for Disease Control and Prevention (CDC) has recommended the HPV vaccine Gardasil for males ages 11 to 21 years. The vaccine greatly reduces the risk of cervical cancer caused by HPV for girls, studies have shown. "Boys should get the vaccine because HPV is a sexually transmitted disease, and they are the source of the infection," explains Dr. Sam Voora, a pediatrician and neonatologist at Saint Vincent Sports Medicine. "We can prevent the virus in girls by giving the vaccine to boys." Moreover, the vaccine can lower the risk of penile, anal and throat cancers in males, and genital warts in males and females. The $375 cost of the three-dose vaccination series is not cheap, but more health plans will cover the vaccine for boys in 2012 because of the CDC recommendation, predicts Dr. Carey Vinson, vice president of quality and medical performance management for Highmark Blue Cross Blue Shield.

Increased Transmission and Outbreaks of Measles — European Region, 2011

Excerpt from MMWR / December 2, 2011 / Vol. 60 / No. 47

During 2003–2009, substantial progress toward the goal of measles elimination in the World Health Organization (WHO) European Region by 2010 was achieved. However, after 3 years of historic low measles incidence, the number of reported measles cases increased sharply, beginning in late 2009.

As of October 26, a total of 26,074 measles cases with onset in 2011 have been reported regionwide, with outbreaks in 36 of 53 member states and nine measles-associated deaths. France reported the largest number of cases (approximately 14,000). Approximately half (49.4%) of patients in the region were aged ≥15 years, and the majority were unvaccinated (45.1%) or had unknown vaccination status (45.4%).

Failure to vaccinate, leading to the existence of susceptible populations across a wide age range, particularly in the western European subregion, has contributed to increased transmission and outbreaks of measles in the European Region. Eliminating measles by the WHO regional target of 2015 will require 1) increasing and sustaining ≥95% coverage with 2 doses of measles-containing vaccine across a wide age range, 2) implementing effective outbreak control measures, and 3) further strengthening surveillance to identify cases and outbreaks quickly, and to validate measles elimination.

Children's Influenza Vaccination Rates Increase

Washington Post (12/06/11) P. A7 Brown, David

Of the 129 million doses of flu vaccine delivered by mid-November, 111 million doses were administered, according to the Centers for Disease Control and Prevention (CDC). About 36 percent of children had received the vaccine, marking a gain from last year, but the 36 percent of adults that have been vaccinated is about the same. Among the vaccinated children, 43 percent are Hispanic, 36 percent African American, and 34 percent white. As for vaccinated adults, 40 percent are white, 28 percent African American, and 26 percent Hispanic. The CDC also reports a jump in vaccination among healthcare workers to 63 percent as of mid-November, up from 56 percent at the same time in 2010.

SPOTLIGHT ON IMMUNIZE.ORG: SUBSCRIBE TO IMMUNIZATION-RELATED EMAIL NEWS SERVICES FROM AAP, CDC, CIDRAP, AND MORE

IAC Express December 12, 2011

The Email News Services section on immunize.org includes descriptions and subscription information for more than 25 immunization-related e-newsletters and email updates published by governmental and non-governmental agencies, professional societies, academic centers, and nonprofit organizations.

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SPOTLIGHT ON IMMUNIZE.ORG: IAC'S SELECTION OF PRACTICAL AND CLINICALLY RELEVANT VACCINE-RELATED JOURNAL ARTICLES

IAC Express December 19, 2011

Looking for help finding practical journal articles about vaccines and immunization? Look no further. IAC's Journal Articles web section provides a chronological catalog of vaccine-related, peer-reviewed articles organized by vaccine and topic area.

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http://www.immunize.org/journalarticles

First U.S. cell-based flu vaccine plant set for dedication

Excerpt from HHS PRESS RELEASE December 12, 2011

Facility's ability to produce cell-based pandemic flu vaccine marks historic change

The first U.S. facility to use a faster and more flexible technology to make influenza vaccine was dedicated today, as part of an initiative that could provide vaccine supplies sooner in an influenza pandemic. The plant in Holly Springs, N.C., can create vaccine using cultured animal cells instead of the conventional process of using fertilized eggs. The facility is a public-private partnership of the U.S. Department of Health and Human Services, and Novartis Vaccines and Diagnostics, Inc. of Cambridge, Mass. This partnership will be maintained under contract for at least 25 years.

The dedication signals that in an influenza pandemic the facility can produce cell-based influenza vaccine that could be authorized by the U.S. Food and Drug Administration for use during the emergency.

"Today we're marking the first change in influenza vaccine manufacturing in the United States in 50 years," said Robin Robinson, Ph.D., director of the Biomedical Advanced Research and Development Authority in HHS's Office of the Assistant Secretary for Preparedness and Response (ASPR). Robinson led the effort for HHS. "The pandemic readiness of this facility is a major milestone in national preparedness for pandemic influenza and other diseases."

In an influenza pandemic, the new Novartis facility may be able to produce 25 percent of the vaccine needed in the United States. In addition, cell-based technology used in this facility for manufacturing seasonal and pandemic influenza vaccines may be adapted to produce vaccines for other known and unknown emerging infectious diseases in an emergency. The United States joins several European countries with the capability to manufacture cell-based influenza vaccines on a large scale.

AAFP, Others Urge That Pregnant, Postpartum Women Be Immunized Against Flu

AAFP News Now (12/06/11)

The American Academy of Family Physicians (AAFP), the American Nurses Association, and a number of other groups are calling on healthcare professionals to encourage their pregnant and postpartum patients to be vaccinated against the flu. A Dec. 5 letter signed by the organizations notes, "Pregnant patients whose provider recommended and offered influenza vaccination were almost five times more likely to be vaccinated for influenza than patients who reported that their provider did not make a recommendation or offer influenza vaccination."

Although the Advisory Committee on Immunization Practices and the AAFP have recommended since 2004 that all women who are pregnant and who may become pregnant during flu season receive the vaccine, almost half of pregnant women still do not get immunized. Studies have shown that vaccination during pregnancy can help protect both the mother and the baby. Flu-related hospitalization rates in infants under six months of age are significantly higher than those for older children, as the infants are too young to be vaccinated against influenza.

The letter points out that flu vaccines have been given to millions of pregnant women over the past 10 years and have not been shown to cause harm to women or their infants; flu vaccine can be given to pregnant women during any trimester; and that while pregnant women should receive the inactivated vaccine as an injection and not the live attenuated spray vaccine, postpartum women, even if they are breastfeeding, can receive either type of the vaccine.

U.S. approves Prevnar pneumonia vaccine for adults

Anna Yukhananov
Reuters December 30, 2011

(Reuters) - U.S. health regulators approved the expansion of Pfizer Inc's blockbuster Prevnar vaccine for use in adults 50 and older to fight pneumonia, meningitis and other diseases caused by pneumococcus bacteria. Prevnar 13 is designed to fight 13 forms of a bacterium called Streptococcus pneumoniae, or pneumococcus. Pneumonia caused by the pneumococcal organism is one of the biggest causes of death in older people and its incidence begins to increase after age 50.

The vaccine, which had been approved for children in the United States, is already one of Pfizer's biggest brands and an expanded population of adults could generate more than $1.5 billion in annual sales.

The Food and Drug Administration said about 300,000 adults in the United States in that older age group are hospitalized each year because of pneumococcal pneumonia. "Pneumococcal disease is a substantial cause of illness and death," said Dr. Karen Midthun, director of FDA's Center for Biologics Evaluation and Research. "Today's approval provides an additional vaccine for preventing pneumococcal pneumonia and invasive disease in this age group."

Pfizer's vaccine was considered under the FDA's accelerated approval process, meaning the agency believed the medicine represents an unmet medical need.

In November, the vaccine secured the support of FDA advisers, who found it safe and as effective as Merck & Co's Pneumovax, which is currently the only vaccine for pneumococcal bacteria approved in the United States for adults 50 years of age or older.

The FDA has said the older vaccine from Merck, known as a free polysaccharide vaccine, was effective against invasive pneumococcal disease, but was not shown to have an effect on pneumococcal pneumonia, which is more common in adults.

Prevnar 13 belongs to a new generation of pneumococcal vaccines known as conjugates, which can trigger a stronger and longer-lasting immune response.

The vaccine can protect against pneumonia, when the pneumococcus bacteria infects the lungs, and is also effective against the bacteria's spread to other parts of the body such as the blood or spinal fluid.

Side effects were similar to those for Merck's Pneumovax, including swelling at the injection site, fatigue, headache and muscle and joint pain.

The vaccine is already approved for adults aged 50 and older in the European Union, Australia, Bolivia, Colombia, Ecuador, Thailand and the Philippines, Pfizer said.

In total, the Prevnar franchise - known as Prevenar in Europe and other countries - had about $3.7 billion in global sales last year.

Under the conditions for accelerated approval, Pfizer must conduct a study to confirm Prevnar 13 can actually prevent pneumococcal pneumonia in adults, not just cause the body to produce antibodies - which is typically used as a surrogate in clinical trials, the FDA said.

Opting out of vaccines

A theme of many media articles the past few weeks revolved around exemptions after the Associated Press (AP) published results of a recent analysis. State health departments were asked to supply the AP with kindergarten exemption rates for the 2006-07 and 2010-11 school years. Findings were supplemented with data previously supplied to CDC.

Key findings

- More than half of states have experienced some increase in the rates of vaccine exemptions between the two time periods reviewed.
- In eight states, one-fifth of kindergarten students were exempted from at least a single vaccine.
- Highest rates of exemptions in the 2010-11 data were found in Alaska (9 percent), Colorado (7 percent), Minnesota (6.5 percent), Vermont (6 percent), and Washington (6 percent). Oregon, Michigan, and Illinois were cited as also having high rates of exemptors.

Mississippi, which is one of two states that does not allow religious or philosophical exemptions, had virtually no exemptions. The other state that allows only medical exemptions is West Virginia.

Immunization Newsbrief December 2011

HIV Vaccine Goal of Duke Researchers

WRAL.com (12/07/11) Mask, Allen

The Duke Laboratory for AIDS Vaccine Research and Development will use $24.6 million of grants totaling $37.2 million from the Bill and Melinda Gates Foundation to work on developing a vaccine to prevent HIV. A global lab program will be created to monitor antibody immune response to better understand how to develop an effective vaccine, which researchers hope to create by binding antibodies to three glycoprotein molecules on HIV. Dr. David Montefiori, head of the research center, says: "When these proteins are coated with antibodies, then they're unable to attach to their receptors, and the virus is therefore unable to get into (a human) cell." Researchers first must pinpoint the most effective antibodies, after which they can launch human clinical trials involving high-risk groups in high-risk locales.

CDC Publishes Recommendations

In the December 23 issue of MMWR, CDC published the following recommendations:

- Recommendations on the Use of Quadrivalent Human Papillomavirus Vaccine in Males
- Recommendations on the use of Hepatitis B Vaccination for Adults with Diabetes Mellitus

For more information visit:
http://www.cdc.gov/mmwr/mmwr_wk/wk_cvol.html