EPIC® Educating Physicians in their Communities & Practices

INSIDER

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Education is the most powerful weapon which you can use to change the world.
-Nelson Mandela

Follow us on:

Mark Your Calendars:

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

ACIP Meeting
June 22-23, 2016
Atlanta, GA

JANNA MCWILSON MSN, RN
EPIC IMMUNIZATION
PROGRAM DIRECTOR
404-881-5081
jmcwilson@gaaap.org

SHANRITA MCCLAIN
EPIC IMMUNIZATION
PROGRAM COORDINATOR
404-881-5054
smcclain@gaaap.org

The Science Behind Successful HPV Vaccine Communication with Parents
The Georgia Chapter, American Academy of Pediatric hosted this webinar March 16, 2016.
You can access the archived webinar by clicking on the link below.
https://attendee.gotowebinar.com/recording/viewRecording/5266259747638190593/5113197834398019076/jmcwilson@gaaap.org

National Infant Immunization Week

National Infant Immunization Week (NIIW) is set for April 16-23, 2016 to promote the benefits of immunizations and to improve the health of children two years old or younger. Since 1994, local and state health departments, national immunization partners, healthcare professionals, community leaders from across the United States, and the Centers for Disease Control and Prevention (CDC) have worked together through NIIW to highlight the positive impact of vaccination on the lives of infants and children, and to call attention to immunization achievements.

NIIW provides an opportunity to:

- Highlight the dangers of vaccine-preventable diseases, especially to infants and young children, and the importance and benefits of childhood immunizations.
- Educate parents and caregivers about the importance of vaccination in protecting their children from birth against vaccine-preventable diseases.
- Focus attention on our immunization achievements and celebrate the accomplishments made possible through successful collaboration.
- Encourage better communication between parents and health care professionals.
- Remind parents and caregivers they need to make and keep needed immunization appointments.

Are you or someone you know 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.

U.S. free vaccine program tied to reduced disparities for kids

BY LISA RAPAPORT

(Reuters Health) - Racial and ethnic disparities in vaccination rates have declined since the U.S. started a free childhood vaccine program more than two decades ago, but affluent and white youth are still more likely to get shots than their low-income and non-white peers, a recent study suggests. Researchers focused on Vaccines For Children (VFC), a federal government initiative started in 1994 to provide vaccines at no cost to children who might not otherwise be vaccinated because of inability to pay. The U.S. Centers for Disease Control and Prevention (CDC) buys vaccines at a discount and distributes them across the country so doctors and clinics can give kids free shots.

The study compared vaccination rates in 1995 to 1997, just after the VFC program went into effect, with the rates in 2011 to 2013 and found that overall, vaccination against polio climbed from about 89 percent to roughly 93 percent. For the measles, mumps and rubella vaccine (MMR), uptake rose from 90 percent to 92 percent. Use of the vaccine for diphtheria, tetanus, and pertussis – often called DTaP – increased from 80 percent to 83 percent. "Prior to the program's introduction, outbreaks of common communicable diseases such as measles remained quite high in the U.S.," said lead study author Brendan Walsh of City University London in the U.K.

"These outbreaks were more common among low-income and non-white children who were not vaccinated," Walsh added by email. Despite overall gains in vaccination rates, racial, ethnic and economic disparities persist, Walsh and colleagues report in the journal Health Affairs. They examined U.S. records on vaccination rates for children aged 19 months to 35 months based on race, ethnicity and household income from 1995 to 2013, focusing on three shots – MMR, DTaP and polio. Among high-income white children, for example, 91 percent got at least four doses of the DTaP vaccine by the end of the study, compared with just 78 percent of low-income white kids. For black children, DTaP vaccination rates were 89 percent for high-income kids and 76 percent of low-income kids at the end of the study.

With Hispanic kids, DTaP vaccination rates at the end of the study were 90 percent for high-income children and 81 percent for low-income children. By the end of the study, MMR vaccination rates for at least one dose were 94 percent for high-income white kids and 95 percent for high-income black and Hispanic children. But among low-income kids, 89 percent of white children got the vaccine, compared with 90 percent of black children and 93 percent of Hispanic kids. Vaccination rates for at least three doses of the polio vaccine among high-income kids were 96 percent among white and black children and 95 percent for Hispanic kids. Among the low-income groups, polio vaccination rates were 92 percent for white and Hispanic children and 91 percent for black kids.

Over its first two decades, the program prevented 322 million illnesses, helped avoid 732,000 deaths and saved nearly $1.4 trillion in direct healthcare costs and other costs to society, according to the CDC. But the remaining disparities in vaccination rates suggest more still needs to be done to reach some children, Walsh said. "Providing free vaccinations does not guarantee optimal uptake and some children, such as low-income black children, still have lower vaccination rates than their richer peers, as our study has shown," Walsh said. "Other potential barriers to vaccinations include travel costs, time costs, access to vaccination providers and lack of knowledge and fears about vaccinations," Walsh added. "These factors need further research and may need to be addressed in order to increase vaccination rates further, particularly among low-income children."

Publicizing benefits of HPV vaccine may drive uptick in its use

By: KATIE WAGNER LENNON, Pediatric News Digital Network

MARCH 4, 2016 FROM THE PEDIATRIC INFECTIOUS DISEASE JOURNAL

Increased publicizing of the human papillomavirus (HPV) vaccine's benefits could drive growth in patients' usage of the vaccine, researchers said in a letter to the editors of the Pediatric Infectious Disease Journal. Dr. Harry Pellman, clinical professor of pediatrics at the University of California, Irvine, and Brandon Brown, Ph.D., of the division of clinical sciences at the Center for Health Communities at the University of California, Riverside, cited having observed higher rates of HPV vaccinations in their practice, where doctors recommend the vaccine, than were found by a Centers for Disease Control and Prevention study (42% males, 60% females) as an explanation for their hypothesis. In Dr. Pellman's and Dr. Brown's study, which included 101 patients, 90% of male and 67% of female patients (*P* less than .01) received an HPV vaccination.

In an anonymous survey of these patients' parents, the researchers learned that "strength of the provider recommendation" (85%) and "publicity around the importance of vaccinating against HPV disease" (69%) were the most common reasons parents chose to accept the HPV vaccination for their child. The pediatricians also noted that 89% of the parents surveyed who had a family member or friend diagnosed with cervical or female organ cancer agreed to have their child vaccinated.

Dr. Pellman and Dr. Brown also found that "wanting to learn more about the vaccine" (60%) was the reason given by most parents who opted not to have their child vaccinated to prevent HPV. "This also suggests that publicizing the role of HPV vaccination in preventing HPV disease and its consequences might be an important public health strategy," they said.

HPV vaccination protects high-risk girls from cervical cancer

By: HEIDI SPLETE, Pediatric News Digital Network MARCH 14, 2016

Full or partial vaccination with the quadrivalent human papillomavirus vaccine reduced the overall risk of abnormal cervical pathology by 36%, based on data from a retrospective cohort study of just over 4,000 high-risk girls and young adult women. Early vaccination (ages 11-14 years) was the most protective, with reductions in risk of abnormal cervical pathology of 64% with at least one dose and 73% for three doses (JAMA Pediatr. 2016 March 14. doi: 10.1001/jamapediatrics.2015.3926).

"This study provides crucial information about the HPV vaccine in minority populations and females engaging in high-risk sexual behaviors who arguably were underrepresented in the HPV vaccine clinical trials and postlicensure studies, yet are at increased risk for cervical cancer," wrote Dr. Annika M. Hofstetter of the University of Washington, Seattle, and her colleagues.

The researchers reviewed data from 4,127 girls and young women aged 11-20 years who were seen at 16 locations in New York City. Most (92%) of the patients were publicly insured, and 58% were Spanish speakers. Overall, the risk for abnormal cervical pathology was lower in vaccinated vs. unvaccinated individuals, (hazard ratio 0.64) and even lower in those who received all three recommended doses (HR 0.48). Detection rates were 58 per 1,000 person-years in those vaccinated vs. 126 per 1,000 person-years among the unvaccinated.
The next steps for research should include a larger sample and a longer follow-up period after greater uptake of the nonavalent HPV vaccine, the researchers added.
Dr. Hofstetter has received funding for a separate investigator-initiated study from the Pfizer Medical Education Group, and the study was funded in part by a grant from the Merck Investigator-Initiated Studies Program.

Two-Dose Chickenpox Shot Gets the Job Done, Study Shows
Adding second shot at ages 4 to 6 is almost 100 percent effective

By Steven Reinberg
HealthDay Reporter

MONDAY, March 14, 2016 (HealthDay News) -- Among school children, two doses of the chickenpox vaccine is better than one, a new study finds.

Giving the first dose at age 1 and the second dose at ages 4 to 6 is nearly 100 percent effective in preventing the once common childhood disease, researchers have found.

"A second dose of varicella [chickenpox] vaccine provides school-aged children with better protection against the chickenpox virus, compared to one dose alone or no vaccination," said lead researcher Dana Perella, of the Philadelphia Department of Public Health.

Two doses of the vaccine protected against the moderate to severe chickenpox infections that can lead to complications and hospitalizations, she said.

The report was published online March 14 and will appear in the April print issue of the journal Pediatrics.

Chickenpox is a viral infection that causes a painful, itchy rash with small, fluid-filled blisters. It is highly contagious if you haven't had the disease or been vaccinated, according to the U.S. Centers for Disease Control and Prevention.

Before routine chickenpox vaccination began in 1995, virtually all children were infected at some point, sometimes with serious complications. About 11,000 children were hospitalized each year for chickenpox, and 100 died annually from the disease, according to the CDC.

One-dose vaccination greatly reduced incidence of chickenpox, but outbreaks continued to be reported in schools where many kids had been vaccinated. That led the CDC in 2006 to recommend a second vaccine dose.

To evaluate effectiveness of the double- dose regimen, Perella and colleagues collected data on 125 children with chickenpox in Philadelphia and northern Los Angeles and compared them with 408 kids who had not had the disease.

They found that two doses of the vaccine was slightly more than 97 percent effective in protecting kids from chickenpox.

"With improved protection provided by two-dose varicella vaccination compared with one-dose only, continued decreases in the occurrence of chickenpox, including more severe infections and hospitalizations, are expected as more children routinely receive dose two between the ages of 4 and 6 years," Perella said.

The reduction in chickenpox in the community as a result of two-dose vaccination will also protect children who have weakened immune systems and are not eligible for the chickenpox vaccine, she said.

School vaccine requirements should include two-dose varicella vaccination, Perella said.

"In addition, 'catch-up' varicella vaccination is also important," she said. This applies to anyone over 6 who hasn't had a second vaccine dose, especially if they could be exposed to chickenpox or shingles, a painful condition in older people caused by reactivation of the chickenpox virus, she said.

The two-dose regimen has proved successful in the Miami area, an expert said.

"We have been giving the two doses for 10 years," said Dr. Gloria Riefkohl, a pediatrician at Nicklaus Children's Hospital in Miami.

Even though the single doses did protect children from severe disease, some children still came down with chickenpox. Now both doses are required before kids are allowed in school, she said.

"The two-dose vaccine has worked very well for us," Riefkohl said.

Among recent U.S. measles patients, 42% intentionally unvaccinated

By: MARY ANN MOON, Pediatric News Digital Network
MARCH 15, 2016

In approximately 42% of recent cases of measles in the United States, the patients were intentionally unvaccinated for nonmedical reasons such as religious or philosophical objections to vaccines, according to a report published online March 15 in JAMA.

Vaccine refusal raised the risk of acquiring measles not only among unvaccinated individuals but also among fully vaccinated people living where the outbreaks occurred, said Dr. Varun K. Phadke of the division of infectious diseases, Emory University, Atlanta, and his associates. To characterize the contribution of vaccine refusal to recent outbreaks of two vaccine-preventable diseases, the investigators reviewed 18 published studies involving 1,416 measles cases and 32 involving 10,609 pertussis cases. They found that 56.8% of the patients who acquired measles and 24%-45% of those who acquired pertussis were unvaccinated or undervaccinated (hadn't received all the recommended doses of the vaccines).

In 970 measles cases for which there were detailed data, 405 patients (42%) were intentionally unvaccinated without any medical indications for avoiding the vaccine; these patients avoided immunization against measles because of personal, philosophical, or religious beliefs or cultural norms. Unvaccinated people were up to 35 times more likely than were vaccinated people to acquire the infection. Nonetheless, a higher frequency of vaccine refusal in the geographic area of an outbreak also correlated with a higher measles incidence among the vaccinated people living there.

In eight of the largest pertussis outbreaks for which there were detailed data, 59%-93% of patients were intentionally unvaccinated for nonmedical reasons. Unvaccinated people were up to 20 times more likely than were vaccinated people to acquire the infection. And among people who hadn't received all recommended the doses of pertussis vaccine, the risk of the infection was proportional to the number of doses they missed. As with measles, a higher frequency of refusal of the pertussis vaccine in the vicinity of a pertussis outbreak correlated with a higher incidence even among the vaccinated people living there. Waning immunity explained only some, not all, of the increased risk among vaccinated individuals, Dr. Phadke and his associates noted (JAMA 2016 March 15;315[11]:1149-58). These findings "have broad implications" for vaccine practice and policy. For example, to restrict peoples' individual freedom by mandating vaccination, it must first be demonstrated that exemptions harm others living in the community.

To improve vaccine coverage, communities should strengthen state- or school-level enforcement of existing vaccine mandates, as well as increase the difficulty of obtaining a vaccine exemption. They also should "address the reasons for vaccine hesitancy, which may include parental perceptions regarding the risk and severity of vaccine-preventable diseases, the safety and effectiveness of routine immunizations, and confidence in medical professionals, corporations, and the health care system," the investigators said.

This study was supported by the National Institute of Allergy and Infectious Diseases' Emory Vaccinology Training Program. Dr. Phadke reported having no relevant financial disclosures; one of his associates reported ties to Crucell, Pfizer, Merck, and Parents of Kids with Infectious Diseases.

Vaccine database bill moves ahead

By KRISTEN WYATT
Associated Press

DENVER – A new Colorado database tracking kids who have not been vaccinated moved ahead in the state Legislature last week. On the Net House Bill 1164: http://bit.ly/1YCG5UV

But the measure faces stiff opposition. Republicans gave the bill a lengthy debate, saying a database could open the door to shaming parents who have opted not to vaccinate their children. And a last-minute mix-up means the Democratic House will have to revisit the vaccine matter twice before sending it to the GOP-controlled Senate. Colorado has some of the nation's loosest rules for avoiding required vaccines. Parents must simply state that they have a medical, moral or religious objection, after which their kids may attend public schools.

Federal health authorities said last year that Colorado ranked dead last in school vaccination coverage for measles, mumps and rubella for the 2013-14 school year. Just last month, four cases of mumps were identified in Denver. Democrats who support a vaccine database in the Colorado Department of Public Health and Environment argued Thursday that the database does nothing to tighten vaccine exemptions. "We're doing absolutely nothing to change that standard," said Rep. Dan Pabon, D-Denver and sponsor of the bill. "This is a streamlining bill that takes the burden off our school nurses to collect vaccine-exemption forms." But Republicans weren't buying it. They cited an avalanche of opposition from parents fearing Colorado health authorities plan to make it harder to go to school without vaccines.

"There's a lot of people in this state that do not want to vaccinate their children," said Rep. J. Paul Brown, R-Ignacio. "They have that right." Others questioned the need for a database. "How can you guarantee that this sensitive data will be protected?" asked Rep. Lois Landgraf, R-Parker. GOP opponents will have more chances to argue against the vaccine database. "Why would we want to post this on a website?" asked opponent Rep. Patrick Neville, R-Castle Rock. "The only reason I can think is to publicly shame someone."

Question of the Week
Issue 1238: March 30, 2016

I have a patient who is a medical student about to start clinical rotations. She has written documentation of two doses of varicella vaccine (the first at age 12 years and the second at age 26 years). Her varicella IgG is negative. Is she a non-responder? Should I give her a booster dose?

Titers are not necessary or recommended if there are documented doses of varicella vaccine. Commercial serologic tests may not be sensitive enough to detect vaccine-induced antibody. In this situation, a negative titer should be disregarded. The student should be considered immune because of her documented vaccination history. See ACIP's Immunization of Health-Care Personnel, pages 23–24, for more information on this issue.

Question of the Week
Issue 1231: February 24, 2016

Although licensed by the Food and Drug Administration for use through age 4 years, a dose of Pentacel was inadvertently given to a six-year-old. Do any components of the Pentacel dose need to be repeated?

Pentacel (DTaP-IPV/Hib) inadvertently administered to children six years of age and older is considered a vaccine administration error. However, none of the vaccine components need to be repeated.