EPIC® Educating Physicians in their Communities & Practices — INSIDER

Volume 6, Issue 12 **December 2016**

Education is not preparation for life; education is life itself.

-John Dewey

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Mark Your Calendars:

Winter Symposium
February 11, 2017
Marriot Hotel Buckhead
Atlanta, GA

Legislative Day at the Capital
February 23, 2017
Atlanta, GA

National Influenza Vaccination Week (NIVW) will be observed December 4-10, 2016

Support National Influenza Vaccination Week
It's Not Too Late

December 4-10, 2016 is this year's National Influenza Vaccination Week (or NIVW). CDC Established NIVW in 2005 to highlight the importance of continuing flu vaccination through the holiday season and beyond. A goal of NIVW is to remind people that even though the holiday season has arrived, it's not too late to get their flu vaccine.

As long as flu viruses are spreading and causing illness, vaccination should continue throughout the flu season in order to protect as many people as possible against the flu. The CDC recommends everyone 6 months of age and older get a flu vaccine every season. CDC recommends only flu shots this season.

Last season, only about 40% of the US population recommended to get a flu vaccine reported having been vaccinated by the end of November. NIVW is also a great time to stress the importance of getting vaccinated against the flu for those at high risk. People at high risk of serious flu complications include young children, pregnant women, people with certain chronic health conditions like asthma, diabetes, heart disease or lung disease, and people aged 65 years and older.

During the coming season and National Influenza Vaccination Week (NIVW) is the time to remind patients, "**It's Not Too Late To Get A Flu Shot!"**

FDA approves extending the age range for use of FluLaval Quadrivalent to include children 6 to 35 months of age

On November 18, the U.S. Food and Drug Administration (FDA) approved an expanded age indication for FluLaval Quadrivalent (GSK). FluLaval Quadrivalent is now also licensed for use in children 6 to 35 months of age. Previously, it was licensed for patients age 3 years and older.

Why So Few Kids Are Getting the HPV Vaccine

"Most places don't like to think about teens having sex." But that's not the only reason.

BY MATTIE QUINN | NOVEMBER 18, 2016 | GOVERNING

In the decade since the U.S. Food and Drug Administration approved the vaccine for the human papillomavirus (HPV), it's been a tough sell for states, students and their parents. "It's a tricky issue to raise. Most places don't like to think about teens having sex," said Dorit Reiss, a professor at the University of California, Hastings, who specializes in vaccine law. As of 2014, only 40 percent of teenage girls and 22 percent of teenage boys have completed the three doses necessary to be protected against HPV, a sexually transmitted infection that most people contract at some point in their lifetime. While it doesn't cause long-term health problems for most, some strains of the virus can cause cervical cancer.

Only Rhode Island, Virginia and the District of Columbia require the vaccine for students. By comparison, eight years after the meningitis vaccine was approved, 29 states and D.C. had approved school requirements. The slow adoption isn't for a lack of trying, though. According to the National Conference of State Legislatures, 41 states have introduced legislation that would either require the vaccine or educate students about its benefits.

In Rhode Island's case, it wasn't legislation that required students to get the vaccine. Instead, the health department added the vaccine to the list of mandatory immunizations for middle school students. So far, the mandate has been successful: 88 percent of teen girls and 80 percent of teen boys received their first dose in 2015. Rhode Island lets families opt out for religious and medical reasons. So does Virginia, but there, the opt-out option is partially why the mandate hasn't had much of an impact.

"Opt-outs have been more the rule than the exception," according to a news release from the University of Virginia. Virginia also only requires girls to get the vaccine, and in 2014, just 28 percent of teenage girls got all three doses.

Experts blame the low immunization rates, in part, on the fact that the vaccine has to be given in three rounds (unless you're younger than 13). Sometimes, it's tough to get people back to the doctor's office that many times in a roughly one-year period. Despite the low immunization numbers across the nation, Nicole Alexander-Scott, the director of Rhode Island's health department, is optimistic that states are at a tipping point. She's been in talks with her health counterparts in New England who are "thrilled with the results we've obtained."

"It used to be controversial to give the hepatitis B shot to infants," said Alexander-Scott. "The more we can normalize it for families, I'm confident in time [that] rates will increase." But Reiss, the law professor, thinks it will be difficult to raise immunization rates -- especially in socially conservative states.

"When you wage the battle on sexual nature," she said, "it's going to be problematic."

Low parental confidence in HPV vaccine stymies adolescent vaccination rates

Publish date: November 8, 2016
By: Whitney McKnight
Frontline Medical News

Key clinical point: Parents who delay HPV vaccination aren't necessarily inclined to refuse vaccines, so much as need clearer education about advantages.

Major finding: HPV vaccine refusal rate was 28% in parents of teens and preteens; the rate of vaccine delay was 8%.

Data source: Online survey conducted in 2014-2015 of 1,484 U.S. parents with children between ages of 11 and 17 years.

Disclosures: Merck and the National Cancer Institute funded the study. Coauthor Noel T. Brewer, PhD, has received HPV vaccine-related grants from, or been on paid advisory boards for, Merck, GlaxoSmithKline, and Pfizer; he served on the National Vaccine Advisory Committee Working Group on HPV Vaccine and is chair of the National HPV Vaccination Roundtable.

More than a quarter of U.S. parents surveyed refused human papillomavirus (HPV) vaccination for their adolescents because of a lack of overall trust in adolescent vaccination programs and higher levels of perceived harm, a study found.
In an online survey of 1,484 U.S. parents, 28% of respondents reported they had refused the HPV vaccine on behalf of their children aged 11-17 years at least once. Another 8% responded they had elected to delay vaccination. The remaining two-thirds of respondents said they had neither refused nor delayed the vaccination, reported Melissa B. Gilkey, PhD, of Harvard Medical School, Boston, and her associates (Hum Vaccin Immunother. 2016. doi: 10.1080/21645515.2016.1247134).

Because many parents in the refusal and delay groups eventually consented to HPV vaccination for their children, Dr. Gilkey and her associates concluded that persistent use of "targeted strategies" could help drive higher vaccination rates in the face of parental hesitancy. Current HPV vaccination rates (all three doses) are 42% of all adolescent girls and 28% of all adolescent boys in the United States, according to the Centers for Disease Control and Prevention.

Compared with parents who reported neither refusal nor delay, refusal was associated with lower confidence in adolescent vaccination (relative risk ratio = 0.66, 95% CI, 0.48-0.91), lower perceived HPV vaccine effectiveness (RRR = 0.68, 95% CI, 0.50-0.91), and higher perceived harms (RRR = 3.49, 95% CI, 2.65-4.60). Parents who reported delaying vaccination were more likely to endorse insufficient information as the reason (RRR = 1.76, 95% CI, 1.08-2.85). While 79% of parents who had delayed HPV vaccination said talking with a physician would help them with their decision, 61% of parents who refused the vaccination said it would. In addition, nearly half of parents who delayed vaccination said they did so out of a preference to wait until their children were older.

In adolescents whose parents had ever refused the vaccine, only 27% had received one HPV vaccine vs. 59% in those whose parents had elected to delay vaccination. Among adolescents whose parents responded they had neither refused nor delayed the vaccine, 56% had received one HPV vaccine.

Although the investigators did not find race, ethnicity, nor educational attainment were drivers of whether a parent chose to vaccinate, families with higher income levels tended to refuse the HPV vaccine more often than did other parents (RRR: 1.48, 95% confidence interval, 1.02-2.15).

Merck and the National Cancer Institute funded the study. Coauthor Noel T. Brewer, PhD, has received HPV vaccine-related grants from, or been on paid advisory boards for, Merck, GlaxoSmithKline, and Pfizer; he served on the National Vaccine Advisory Committee Working Group on HPV Vaccine and is chair of the National HPV Vaccination Roundtable.

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.

New CDC Report Shows A Win For Vaccines

By Julianna LeMieux — December 1, 2016

Andrew Wakefield, Jenny McCarthy and their anti-vaccination groupies are making less and less of an impact, according to a new report released by the CDC that analyzes vaccination data on Kindergartners.

The CDC collected vaccination data from the beginning of the 2015-2016 school year, and the results look like a win for medicine. The data collected was to look at the rates of vaccination for three vaccines - the first two doses of the measles, mumps and rubella (MMR) vaccine, the diptheria, tetanus and pertussis (whopping cough) (DTaP) vaccine and the two doses of the varicella zoster (chicken pox) vaccine (for the 42 states that require it.)

For each vaccine, the percentage of vaccinated children was above 94%. (whoo-hoo!)

The coverage of the MMR vaccine had increased in 32 states from the previous year, which is most likely due a result of the measles outbreak that occurred last year with a total of 159 reported measles cases throughout the country.

Not to rain on our immunity parade, but, there was also an increase in the exemptions from the previous year, from 1.7% to 1.9%. There are three types of exemptions possible is 16 states, religious, medical and philosophical. The rest of the states omit philosophical exemptions and only allow applications for medical or religious. Three states only offer the medical exemption, California, Mississippi and West Virgina. You can learn more about your state's exemptions here.

The increase in exemptions reported may be attributed to the fact that two states, Texas and Wyoming had not previously reported their exemptions in the past, and that reporting them for the first time this year made the increase inflate artificially.

Interestingly, there was a decrease in the exemptions reported by Michigan, a state that enacted a new rule that requires parents seeking exemptions to receive education on the benefits of vaccination and the risks for vaccine-preventable diseases. The new measured enacted in Michigan was covered in depth by our own Dr. Alex Berezow and can be read about here. This suggests that these programs may be effective at quelling the number of exemptions requested, either because people actually learned the importance of vaccination or because of the inconvenience of going through the classes.

In the majority of states, children can attend school without a complete vaccination record for a period of time while they work on getting them up to speed. These data were also included in the report and accounted for roughly 2% of kindergarten students, but, up to 5% of students in the highest state.

Taken together, the Dr. Paul Offits of the world are winning the fight against the Andrew Wakefields. For that, we are grateful and hopeful for a future free of preventable infectious diseases.

Can breastfeeding reduce babies' pain during vaccinations?

By Lisa Rapaport

(Reuters Health) - Infants who nurse during vaccinations may cry less and feel less pain than babies who are soothed in other ways, a research review suggests. Researchers examined data on breastfeeding and infant pain during needle sticks from 10 previously published studies with a total of 1,066 babies ages one to 12 months.

On average, breastfeeding babies cried for 38 seconds less than babies who didn't nurse during vaccinations, researchers report in the Cochrane Database of Systematic Reviews. Pain scores based on observations of babies' behavior were also lower when infants were breastfed during needle sticks than when they were not.

"We already knew that breastfeeding reduced pain during blood collection in newborn babies," said lead study author Denise Harrison, a researcher at the University of Ottawa and Children's Hospital of Eastern Ontario.

"However we did not know if the same effects would be evident in older babies beyond the newborn period," Harrison added by email.

To assess the potential for breastfeeding to curb pain in babies after the first month of life, researchers analyzed data from studies that compared nursing to alternative pain relief methods such as bottles of formula, pacifiers, cuddling, distraction, topical analgesics, and skin-to-skin contact.

These previously published studies looked at a variety of needle stick procedures in addition to vaccinations, including blood draws and intravenous line insertions. The 38-second reduction in crying time during vaccinations was found in a pooled analysis of six studies of 547 infants who were breastfed, given water or offered no interventions during the shots.

Breastfeeding didn't consistently result in changes in physical indicators of pain such as heart rate, however.

Pain scores were also lower for babies who nursed during vaccinations, although the authors note it's difficult to gauge discomfort in young infants.

Nursing appeared to be more effective at pain reduction than sugar water, pain creams or sprays at the injection site, maternal cuddling or massage, according to data from four studies that examined these alternatives.

None of the studies reported any adverse events associated with breastfeeding.

Beyond the small size of studies included in the analysis, other limitations of the research review include the lack of data on breastfeeding for blood samples or drip insertions and the limited information on babies receiving 12-month vaccinations, the authors note.

Still, it's possible that breastfeeding may be an effective pain reliever because it boosts oxytocin – a hormone associated with calmness, pain reduction and a sense of wellbeing – in both mothers and babies, said Barbara Morrison, a researcher at Wichita State University School of Nursing in Kansas.

"Additionally, the oxytocin calm decreases stress levels, making infants more relaxed," Morrison, who wasn't involved in the study, added by email.

"The more relaxed one is the less the sensations of pain. Being separated from mother during a painful procedure causes the infant to feel abandoned, significantly increasing their stress," Morrison said.

SOURCE: bit.ly/2fbW4uQ Cochrane Database of Systematic Reviews, online October 28, 2016.

From the Journals

Recommendations Updated for Meningococcal Vaccine in HIV

All HIV+ individuals should receive meningococcal conjugate vaccine (serogroups A, C, W, and Y)

MONDAY, Nov. 7, 2016 (HealthDay News) -- In the Nov. 4 issue of the U.S. Centers for Disease Control and Prevention's *Morbidity and Mortality Weekly Report*, new recommendations are presented for meningococcal conjugate vaccination among HIV-infected individuals.

Noting that a growing body of evidence suggests increased risk for meningococcal disease in HIV-infected individuals, Jessica R. MacNeil, M.P.H., from the CDC in Atlanta, and colleagues modified recommendations on vaccination with meningococcal conjugate vaccine.

The authors recommend that all HIV-infected individuals aged ≥2 months should receive meningococcal conjugate vaccine (serogroups A, C, W, and Y); a multi-dose schedule should be used for children aged younger than 2 years. A two-dose primary series of meningococcal conjugate vaccine is recommended for individuals aged ≥2 years.

A booster dose should be given at the earliest opportunity (at least eight weeks after the previous dose) for persons with HIV who have been previously vaccinated; boosters should continue at appropriate intervals. A booster dose should be administered three years later if the most recent dose was received before age 7 years. If the most recent dose was received at age ≥7 years, a booster should be given five years later and every five years thereafter.

"The recommendations for children aged 2 months through 2 years and persons aged ≥25 years are based on expert opinion; the vaccine was not studied in HIV-infected persons in these age groups," the authors write.

IAC posts updated handout for the public titled “Meningococcal: Questions and Answers”

IAC recently posted an updated version of its handout for the public, Meningococcal: Questions and Answers. Changes were made to incorporate HIV-infected people as an at-risk group indicated for MenACWY vaccination, clarification of persistent complement component deficiency that may also be caused by the drug Soliris (eculizumab), and updated MenB vaccine schedules that address the use of a 2-dose series of Trumenba (MenB, Pfizer) for routine vaccination of healthy people 16–23 years of age.

Question of the Week
Issue 1270: October 19, 2016

I've seen the recommendation stating air bubbles in manufacturer-filled syringes do not need to be expelled. Can you explain why those air bubbles can be injected but air bubbles in user-filled syringes must be expelled?

It is not wrong to expel the air from syringes filled by manufacturers, but typically it is such a small amount of air (0.2cc–0.3cc) that it is our opinion that it would not cause a problem. When the syringe is inverted during an injection, that small amount of air would typically just clear the medication from the needle. This is based on the recommendation that when the Z-track method is used for intramuscular injection of irritating medication (e.g., iron preparations), the guidance is to leave 0.2cc–0.3cc in the syringe to be sure that all of the medication leaves the needle and is not tracked back through subcutaneous tissue as the needle is withdrawn. While the Z-track injection technique is not recommended for vaccine administration, the Z-track method demonstrates the acceptability of leaving a very small amount of air in the syringe for intramuscular injections. We do, however, recommend that when drawing vaccine from a vial into a regular syringe, the air be expelled because the amount of air drawn into the syringe may be larger than the amount in a manufacturer-filled syringe. Expelling the air is part of general medication guidelines for drawing medication into a syringe.