Updates and Alerts

- Flu Season 2013-2014 is here!
  View the Special Section for policies, implementation guidance, and other updates for the influenza season.

- CDC publishes report on 2012 national and state vaccination coverage among children and adolescents
  **Children**
  The Centers for Disease Control and Prevention (CDC) reports that the median coverage for children in kindergarten is:
  - 94.5% 2 doses of MMR
  - 95.1% 3-5 doses of DTaP (based on local requirements)
  - 93.8% 2 doses of varicella (based on local requirements)
  For more information, visit: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6230a3.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6230a3.htm).

- Adolescents
  The CDC also reports that from 2011 to 2012, coverage increased for the following vaccines: ≥1 Tdap (from 78.2% to 84.6%), ≥1 meningococcal (from 70.5% to 74.0%) and, among males, ≥1 HPV (from 8.3% to 20.8%).
  To view the report in its entirety, visit: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6234a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6234a1.htm).

- HPV Immunization Rates are Stagnant
  On July 26, 2013, the CDC released a report showing low, stagnating HPV vaccination rates. In 2012, 53.8% of girls received at least one dose of HPV vaccine, compared with 53% in 2011. Had HPV vaccine been administered whenever another immunization was given, rates could be as high as 92%.
  Pediatricians have a unique opportunity to address missed opportunities and vaccinate adolescents to protect against many forms of cancer. To view the CDC report, visit: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6229a4.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6229a4.htm).
  To view resources for pediatricians to reduce office barriers and address parents’ common concerns related to HPV vaccine, visit: [http://www2.aap.org/immunization/pediatricians/adolescents.html](http://www2.aap.org/immunization/pediatricians/adolescents.html).

- Rotavirus Vaccine for Infants Protects Others
  Hospitalizations from rotavirus have declined for children and young adults, not just infants, since the vaccine was introduced in the United States in 2006. New research from the CDC shows the incidence of rotavirus dropped from the pre-vaccines years (2000-2006) to the post vaccines years (2008-2010) by 80% in children under 4 years of age, by 70% in children ages 5 to 14, and by 53% in patients ages 15 to 24 years. The results are published in the Journal of the American Medical Association at: [http://jama.jamanetwork.com/article.aspx?articleid=1733704&resultClick=3](http://jama.jamanetwork.com/article.aspx?articleid=1733704&resultClick=3) (login required).

This page, compiled by the American Academy of Pediatrics Committee on Infectious Diseases, contains a comprehensive list of influenza resources on vaccine guidance, prevention, treatment, payment, policies, news, and more. The Red Book Online Influenza Resource Page is frequently updated with pertinent information related to seasonal, H1N1, avian, and pandemic influenza. Look for these and other recently added topics and information:

- **PediaLink Hot Topics: Seasonal Influenza: 2013-2014**
- **Patient Education Online: Seasonal Influenza 2013-2014 handout**
- **AAP News article: AAP updates policy on flu prevention, treatment**

### Upcoming Events

- **CDC ACIP Meeting**
  
  October 23-24, 2013
  
  CDC, Building 19, Atlanta, GA
  
  [http://www.cdc.gov/vaccines/acip/meetings/meetings-info.html](http://www.cdc.gov/vaccines/acip/meetings/meetings-info.html)

- **Children’s Hospital of Philadelphia Vaccine Education Center “Current Issues in Vaccines” Webinar**
  
  November 13, 2013
  
  [http://vaccine.chop.edu/webinars](http://vaccine.chop.edu/webinars)

- **National Foundation for Infectious Diseases Clinical Vaccinology Course**
  
  November 15-17, 2013
  
  Boston Marriott Cambridge, Cambridge, MA
  

- **Infectious Diseases in Children 26th Annual Infectious Diseases in Children Symposium**
  
  November 16-17, 2013
  
  The Waldorf Astoria, New York, New York
  
  [http://www.healio.com/meeting/idcnewyork/home](http://www.healio.com/meeting/idcnewyork/home)

- **Epidemiology and Prevention of Vaccine-Preventable Diseases**
  
  October 10-11, 2013
  
  Chicago Cultural Center, Chicago, IL
  
  For more information, visit:
  

### Resources

- **Hepatitis Birth Dose Resources from IAC**
  
  The Immunization Action Coalition (IAC) is urging hospitals and birthing centers to meet the national standard of care by providing a universal birth dose of hepatitis B vaccine. View their resources, including a comprehensive guide book, at: [http://www.immunize.org/protect-newborns/](http://www.immunize.org/protect-newborns/).

- **Clear Answers & Smart Advice about Your Baby’s Shots**
  
  Written by pediatrician and author Ari Brown, MD, FAAP, the 6-page handout addresses the concerns of vaccine-hesitant parents. Dr. Brown recently revised this resource. Access the handout through the IAC at: [http://www.immunize.org/catg.d/p2068.pdf](http://www.immunize.org/catg.d/p2068.pdf).

- **HPV Vaccine Resources for Healthcare Professionals from CDC**
  
  With all of the focus on HPV vaccine, the CDC has a new provider portal specifically for pediatricians and other vaccinators with tips, information, and one-stop shopping with HPV resources for providers and parents! Access it at: [www.cdc.gov/vaccines/youarethekey](http://www.cdc.gov/vaccines/youarethekey).
Researchers in Colorado sought to determine whether undervaccination with DTaP vaccine was associated with pertussis infection. Undervaccination for DTaP was defined as the number of doses of DTaP vaccine that the child was either missing or delayed. Children could be undervaccinated by 0, 1, 2, 3, or 4 doses. Children undervaccinated by 0 doses were considered age-appropriately vaccinated.

All children in the study belonged to one of 8 managed care organizations (MCOs) - that comprise the Vaccine Safety Datalink. Children needed to have been enrolled in the MCO from age 2 months to 12 months continuously to be included and were followed until age 36 months or until they disenrolled from the MCO. Authors identified 72 case patients who had a laboratory-confirmed diagnosis of pertussis. Four control patients (children not diagnosed with pertussis) were matched to each case patient by MCO site, sex, and age at the index date (date of pertussis diagnosis) for a total of 288 controls. The mean age of the 72 case patients was 14.27 months, half of whom were female. At the index dates, 38 (52.78%) case patients had been age-appropriately vaccinated with DTaP vaccine, and 34 (47.22%) were undervaccinated. Only 64 of the control patients were undervaccinated at a rate of 22.22%, while 244 (77.77%) of controls were age-appropriately vaccinated with DTaP.

Results showed that undervaccination with DTaP vaccine was strongly associated with laboratory-confirmed pertussis. They also found a dose-response relationship. When the magnitude of undervaccinated with DTaP increased, the odds of pertussis infection increased as well. The odds of contracting pertussis were 18.56 times higher for children who were undervaccinated by 3 doses of DTaP and 28.38 times higher for children were undervaccinated by 4 doses of DTaP compared with children who were age-appropriately vaccinated. Odds ratios calculated for children undervaccinated by 1 and 2 doses pertussis were not statistically significant. The data suggest that 36% of pertussis cases were attributed to undervaccination. Authors concluded that on-time receipt of vaccination is important in preventing pertussis infection. Undervaccination with DTaP directly increases children’s risk of pertussis infection.

(Login may be required)
I consider myself a seasoned Vaccine Champion. For years, I have preached about vaccine safety to my office staff, my AAP chapter colleagues and local pediatricians. I have reassured parents who bring their questions and doubts to me. My car proudly wears a VACCINES SAVE LIVES bumper sticker.

During medical students’ pediatrics rotation, I teach the history of vaccines. The lecture spans from the 1700s and Dr Jenner’s smallpox vaccine to today’s “modern” vaccines. We discuss the past heroes of vaccine development--Drs. Salk, Sabin, and Hillman; today’s heroes, like Paul Offit, who stand up for vaccines and debunk the myths; and the incidental heroes like Bill Gates through the Gates Foundation and their contributions to vaccine progress and history.

The lecture closes with modern “urban myths” and stories of vaccine refusers and hesitators. The discussion with my students is always passionate and lively: How can parents refuse? What can we do? And, of course, there is the power of the Internet-- parents have as much access to misinformation as they do to evidence-based information. It can be misleading and confusing. Decisions about whether or not to vaccinate are influenced by today’s “heroes”--not physicians and scientists but celebrities like talk show hosts and sports stars. Of course we discuss the travesty of Andrew Wakefield and his debunked claims linking vaccines to autism. As a pediatrician, professor, and community member, it all can be very discouraging.

Then I heard about Shot@Life. The appeal was instant. It is a collaboration of the UN Foundation, Gates Foundation, the AAP, and others. Perfect. It uses the power of social media in a positive way, and, most importantly, it broadened my view of vaccines – the global impact and a stark reminder that vaccines do save lives. I read about the true modern champions of vaccines--vaccine workers trying to rid the world of polio among other preventable killers.

I brought the campaign to my colleagues and my office. My staff loves it. We have hung the posters in our waiting room. I bought the staff Shot@Life T-shirts and we wear them every Friday for dress down day. All pay the minimum of a dollar to wear the Shot@Life T-shirts, and we donate the funds to the campaign. Parents comment on the staff in” green” and ask about the shirts. We spread the word.

Just the other day, I witnessed one of our nurses donating to the Shot@Life jug with the simple comment, ‘I just bought a baby a polio vaccine.’ How cool is that?! I look forward to spreading this simple yet effective message in my office because, after all, all children deserve a shot at being whomever they want to be when they grow up – hopefully, more than a few will choose to be a pediatrician!
Global Immunization Corner
Re-energizing My Passion for Global Immunizations Through Shot@Life
By: Colleen Mattimore, MD, FAAP
AAP New York State Chapter I
(Continued)

Free Educational Toolkit on Global Immunizations for your Practice

The AAP has partnered with the Shot@Life campaign to offer free educational toolkits for pediatricians interested in addressing global immunizations in their local practices. Resources include promotional Shot@Life materials for the office (ie, shirts, pens, posters) and educational resources (ie, informational cards for parents/patients and talking points on global immunizations). Learn more and sign up for a free toolkit today. Questions about getting involved? E-mail the AAP Global Immunization team at globalvaccines@aap.org.
Pediatrics in Practice

Pediatric Best Practices

The AAP CISP has revised its series, “Maintaining Standards of Excellence” in support of the National Vaccine Advisory Committee Standards for Child and Adolescent Immunization Practices. The series is available at: http://www2.aap.org/immunization/pediatricians/nvacstandards.html.

Part 1 of the series features the successful flu clinic of Laurie McAuliffe, MD, FAAP. Dr McAuliffe’s flu clinic demonstrates an efficient, cost-effective way to get all her patients vaccinated in a timely manner during flu season. Please view this best practice at: http://www2.aap.org/immunization/pediatricians/NVACStandards/NVACStandard1.pdf.

The AAP CISP would like to feature your office’s successful ways to improve vaccination rates. If you have a practice that you would like featured, please send it to cispimmunize@aap.org. If you need help thinking of what to focus on, consider answering one of these questions:

• How does your practice ensure that vaccines are stored and handled according to the manufacturers’ recommendation? What equipment and methods are used to monitor the temperature at which vaccines are stored?
• How does your practice encourage/mandate that staff in your office are fully vaccinated, including influenza vaccine every year? If so, how do you motivate those who do not wish to receive the vaccine?

Or view all the NVAC Standards to help you choose a best practice from your office. Visit: http://pediatrics.aappublications.org/content/112/4/958.full.pdf. (Login required)

Improve Adolescent Immunization Rates

Adolescent Immunizations: Give Feedback, Get $500

Want to raise adolescent immunization rates in your practice? We do, too!

We are looking for practices willing to pilot new adolescent immunization content in the EQIPP module. The practice would need to:

• Implement a plan-do-study-act cycle focused on adolescent immunization rates
• Review the EQIPP module’s educational content on adolescent immunization
• Give feedback on the content by phone
• Share practice data on whether rates improved (confidential)

In return, you will receive:

• $500 as compensation for your time
• A free subscription to the EQIPP module (or higher stipend if you’ve already registered)
• Maintenance of Certification Part IV credit if you complete two quality improvement cycles through the EQIPP module
• The satisfaction of helping other practices improve their adolescent rates with your feedback!

To enroll in the pilot or to ask questions, please contact Elizabeth Sobczyk at esobczyk@aap.org.
Influenza Season 2013-2014

Recommendations
View influenza recommendations and other helpful resources at:
http://www2.aap.org/immunization/pediatricians/influenzaguidance.html.

- AAP: Recommendations for Prevention and Control of Influenza in Children, 2013-2014
  http://pediatrics.aappublications.org/content/early/2013/08/28/peds.2013-2377

- AAP: Influenza Implementation Guidance
  http://www2.aap.org/immunization/illnesses/flu/implementationguidance_flu.pdf

  http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6207a1.htm?s_cid=rr6207a1_e

Flu Strain Circulating and Vaccine Match
The 2013-2014 trivalent influenza vaccine is made from the following three viruses:

- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011;
- a B/Massachusetts/2/2012-like virus.

Quadrivalent vaccines also contain a B/Brisbane/60/2008-like virus.

Because of the constant change in flu viruses, CDC studies samples of flu viruses circulating during each season to evaluate how close a match there is between viruses used to make the vaccine and circulating viruses. Data are published in the weekly FluView.

Children with Neurologic and Neurodevelopmental Conditions
The CDC recently studied whether children at high risk for complications of influenza were being vaccinated, and where parents were receiving information about vaccines. They found that about half of children with neurologic and neurodevelopmental conditions receive a flu vaccine each year, and 75% of parents report their child’s health provider as their main source for vaccine information. They also found that healthcare providers who routinely care for children with neurologic and neurodevelopmental conditions recognized several conditions - including, cerebral palsy, epilepsy, stroke, spinal cord conditions, and other brain conditions - as being high-risk conditions for flu illness more often than general pediatricians. Intellectual disability was not often identified by any of the health providers as being a high-risk condition. To view this report, visit:
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6236a3.htm?s_cid=mm6236a3_w.

Got an idea about a topic you’d like us to cover? Contact us at cispimmunize@aap.org
Influenza Season 2013-2014

Vaccine Types
Most influenza vaccines available for the 2013-2014 season will be trivalent (three component), but some will be quadrivalent (formulated to protect against four flu viruses). Intramuscular (IM), intradermal, and nasal spray vaccines will all be available. All nasal spray vaccines are expected to be quadrivalent, however, this makes up only a small portion of total vaccine availability. Visit the Preparing Your Practice for Providing Influenza Vaccines to learn more about vaccines available, product codes, and payment information at: www.aap.org/en-us/my-aap/Pages/Preparing-Your-Practice-for-Providing-Influenza-Vaccines.aspx.

Vaccine Supply
Manufacturers have projected that they will produce between 135 million and 139 million doses of influenza vaccine for use in the United States during the 2013-2014 influenza season. An estimated 30 million to 32 million of these doses will be quadrivalent flu vaccine. The rest will be trivalent flu vaccine. Thus far, no supply delays have been reported.


Healthcare Worker Vaccination
- AAP - Recommendations for Mandatory Influenza Immunizations of All Health Care Personnel:
  http://pediatrics.aappublications.org/content/early/2010/09/13/peds.2010-2376

- AAP - Implementation Guidance for Physicians on Mandatory Influenza Vaccination of Healthcare Workers:
  http://www2.aap.org/immunization/illnesses/flu/hcpmandatoryfluguidance.pdf

- Influenza Vaccination Coverage Among Health Care Personnel:
  http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6138a1.htm?s_cid=mm6138a1_w

The CDC and AAP continue to recommend that all health care personnel get vaccinated against influenza. Vaccination rates are highest for physicians, nurse practitioners, and nurses. Information on a CDC healthcare worker influenza survey, including online reports with the data broken out by region/state, is available on FluVaxView at http://www.cdc.gov/flu/fluuvxview/.
Resources

AAP Influenza Guidance:  
http://www2.aap.org/immunization/pediatricians/influenzaguidance.html

CDC Seasonal Influenza  
http://www.cdc.gov/flu/

CDC What You Should Know for the 2013-2014 Influenza Season  
http://www.cdc.gov/flu/about/season/flu-season-2013-2014.htm#vaccine-doses

National Influenza Vaccine Summit:  
http://www.preventinfluenza.org

Earn Your Stripe Poster Template  
http://www2.aap.org/immunization/pediatricians/influenzaguidance.html#Stripe

Vaccine Information Statements

• In English:
  o Inactivated influenza vaccine (IIV)  
    http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html
  o Live attenuated influenza vaccine (LAIV)  
    http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flulive.html

• In Spanish:
  o IIV  
  o LAIV  

American Lung Association:  
www.facesofinfluenza.org or  
www.rostrosdelagripe.org (for Spanish language materials)

CDC Letter to Providers:  

Reminder/Recall Strategies and Resources:  
http://www2.aap.org/immunization/pediatricians/pdf/ReminderRecall.pdf

Families Fighting Flu:  
http://www.familiesfightingflu.org