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Arizona Vaccine News
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VACCINE NEWS

CDC Updates Recommendations for 2012-2013 Influenza Season

- All influenza vaccine products available this year will continue to be trivalent, with two influenza A and one influenza B component.
- The influenza A(H1N1) component in this year's vaccine will be the same as the last two influenza seasons (i.e. the 2009 pandemic strain). In contrast, the influenza A(H3N2) and the influenza B components are new this season.
- Persons with only hives after eating eggs can now receive trivalent inactivated influenza vaccine (TIV) with several additional safety measures. An algorithm is provided for deciding on TIV administration to people with egg allergies.
- Egg allergy is still a contraindication for live attenuated influenza vaccine (LAIV).

For more details, see [Morbidity and Mortality Weekly Report \(MMWR\), August 17, 2012, pp. 613-618.](#)

Algorithm for Number of Influenza Vaccine Doses Needed in Young Children for 2012-2013 Influenza Season

- Children 6 months-8 years who have never received influenza vaccine will need 2 doses with a minimum interval of 4 weeks between doses.
- Children 6 months-8 years old will need only 1 dose of influenza vaccine for the 2012-2013 influenza season if they have received any of the following combinations:
 1. Two or more doses of seasonal influenza vaccine since July 1, 2010; or
 2. Two or more doses of seasonal influenza vaccine before July 1, 2010 AND one or more doses of a monovalent 2009(H1N1) vaccine; or
 3. One or more doses of seasonal influenza vaccine before July 1, 2010 AND one or more doses of seasonal influenza vaccine since July 1, 2010.
- The intent is to make sure that children 6 months-8 years old have received at least 2 doses of a seasonal vaccine, and at least 1 dose of a 2009(H1N1)-containing vaccine before they are eligible for a single yearly dose of influenza vaccine.

For more information, including an algorithm, see [MMWR, August 17, 2012, p. 614.](#)

FDA Extends the Period for Postexposure Varicella Immune Globulin to 10 Days

- Varicella immune globulin (VIG) is indicated for postexposure prophylaxis of varicella in persons at high risk for severe disease who lack evidence of immunity to varicella and are ineligible for varicella vaccine.
- The Food and Drug Administration (FDA) has extended the prophylaxis period from up to 4 days after exposure to up to 10 days after exposure.
- VariZIG is the only form of (VIG) available in the US. VariZIG must be administered through an Investigational New Drug (IND) protocol.
- VariZIG can be obtained by contacting the distributor, FFF Enterprises, either by calling 800-843-7477 at any time or by contacting the distributor [online](#).

See [MMWR March 30, 2012.](#)

13-Valent Pneumococcal Vaccine Now FDA Licensed for Adults 50 Years and Older

- The FDA has licensed a 13-valent pneumococcal conjugated vaccine (PCV13) for use in adults aged 50 years and older. However, at this time, only the 23-valent pneumococcal polysaccharide vaccine (PPSV23) is recommended by the Advisory Committee on Immunization Practices (ACIP) for prevention of pneumococcal disease in adults.
- ACIP will continue to review evidence as it becomes available to guide development of a recommendation regarding routine use of PCV13 in adults aged 50 years and older. In the meantime, health-care providers should continue to administer PPSV23 in accordance with current recommendations.

See [MMWR June 1, 2012](#).

Updated CDC Recommendations for Acellular Pertussis Vaccine in Adults

- All adults aged 19 years and older who have not yet received a dose of Tdap vaccine (tetanus/diphtheria/acellular pertussis) should receive a single dose of Tdap, regardless of interval since their last tetanus or diphtheria toxoid-containing vaccines.
- Where feasible, Boostrix[®] should be used for adults aged 65 years and older, but either Boostrix[®] or Adacel[®] is considered a valid Tdap vaccine for those ≥ 65 years old.
- If a tetanus booster is indicated for wound management, Tdap is preferred over Td (tetanus/diphtheria vaccine) in adults aged 19 years and older who have not previously received Tdap.

See [MMWR June 29, 2012](#).

LITERATURE ON VACCINES AND VACCINE-PREVENTABLE DISEASES

Neonatal and Maternal Benefits from Influenza Vaccination during Pregnancy

- Three hundred and forty women in Bangladesh received either influenza vaccine or pneumococcal polysaccharide vaccine (PPSV23).
- During periods when influenza was not circulating, there was no difference in the two groups between newborns being small for gestational age, between median birth weights, or for febrile respiratory illnesses in the mothers and infants.
- During periods when influenza was circulating, the infants born to women who had received influenza vaccine were less likely to be small for gestational age and had higher mean birth weights. In addition, in the group that had received influenza vaccine, there were fewer mothers and infants with febrile respiratory illnesses.

See [Canadian Medical Association Journal, April 3, 2012](#).

Safety of 2009 H1N1 Pandemic Vaccine in Pregnant Women

- A cohort of 53,432 Danish infants were studied regarding outcomes after their mothers received the 2009 (H1N1) pandemic vaccine during pregnancy.
- Of this cohort, 6,989 (13.1%) had mothers who received a 2009(H1N1) vaccine during pregnancy: 345 were exposed in the first trimester and 6,644 were exposed in the second or third trimester.
- Infants born to mothers who received a 2009(H1N1) influenza vaccine during pregnancy did not have a significantly increased risk of major birth defects, preterm birth, or fetal growth restriction.

For more details, see the abstract in the [Journal of the American Medical Association \(JAMA\), July 11, 2012](#).

CDC Summary of 2011-12 US Influenza Season and Viral Resistance Patterns

- The 2011–12 influenza season was one of the mildest and latest seasons on record.
- A total of 2,756 influenza virus specimens have been tested for antiviral resistance since October 2011. All influenza B viruses, and all influenza A(H3N2) viruses tested showed no resistance to either oseltamivir or zanamivir.
- Among the influenza A(H1N1) viruses tested (2009 pandemic strain), all were sensitive to zanamivir, but 1.4% were resistant to oseltamivir.

See [MMWR June 8, 2012](#).

Zoster Vaccine Decreases Shingles Risk in Adults 50-59 Years Old

- In a randomized, double-blind, placebo-controlled study of 22,439 subjects aged 50–59 years who were given zoster vaccine and followed for a year, vaccination reduced the incidence of herpes zoster (HZ): the vaccine group had 30 cases of HZ while the placebo group had 99 cases of HZ.
- Zoster vaccine efficacy for preventing HZ was 69.8%.

See abstract at [Clinical Infectious Diseases, April 1, 2012](#).

Sources of Imported Measles into the US in 2011

- Seventy-two measles cases were imported into the US in 2011.
- Almost half of these cases (n=33) were from the WHO European Region, which in 2011 reported >30,000 cases of measles, including 27 cases of measles encephalitis (a complication that often results in permanent brain damage), and 8 measles-related deaths.
- The majority of the remaining cases were from the Indian peninsula and Southeast Asia.

For more information, see [MMWR, April 20, 2012](#).

The First Measles Vaccine

- A history of the development of measles vaccine, written by Jeffrey P. Baker, can be found in the September 2012 issue of *Pediatrics*.
- The author comments on the differences between Britain and the US in terms of the measles vaccine/autism controversy.
 - Britain did not begin to routinely vaccinate infants with the MMR vaccine until the late 1980s. Thus, the measles vaccine began to be used widely in Britain at the same time that the number of autism cases were rising.
 - The United States had used the MMR vaccine widely since the early 1970s and yet experienced no corresponding rise in autism cases.

See the early release document in [Pediatrics, September 2011](#).

Challenges of Pertussis and Pertussis Vaccines in 2012

- Dr. James Cherry explains many reasons for the upswing in pertussis in the United States: increased detection, less potent pertussis vaccines, waning of vaccine-induced immunity, and the potential contribution of genetic changes in circulating strains of *B. pertussis*.

For the full article, see [New England Journal of Medicine, August 16, 2012](#).

Washington State's Pertussis Outbreak Illustrates National Pertussis Vaccine Issues

- There may be a diminished duration of protection with DTaP (childhood diphtheria/tetanus/acellular pertussis vaccine) as compared to DTwP (childhood diphtheria/tetanus/whole cell pertussis vaccine which started to be used in the 1940s, and was phased out in the late 1990s).
- Tdap immunity in teenagers may wane more rapidly in those that received DTaP as a child rather than those who received DTwP.
- Children who are not vaccinated against pertussis have at least an eightfold greater risk for pertussis than children fully vaccinated with DTaP
- Pertussis vaccinated children can still get pertussis, but their illness tends to be of shorter duration, they are less infectious, and there is less risk for severe outcomes.

See [MMWR July 20, 2012](#).

RESOURCES

Videos with Stories of Patients with Pertussis

- Immunization Action Committee. [Eleven pertussis-related videos and Public Service Announcements](#).
- Adult with Typical Whooping Cough. [New England Journal of Medicine, June 21, 2012](#).

New Fact Sheet Answering Questions about Vaccines and Autism

- The Arizona Autism Coalition (AAC) and the American Academy of Pediatrics, Arizona Chapter have partnered on an awareness campaign to explain to parents about vaccines and whether there is any scientific data to substantiate claims of a connection between childhood vaccination and autism.
- A fact sheet entitled "[Vaccines and Autism. Let's Separate Facts from Fiction](#)" can be viewed at AAC's website. Feel free to print copies and share them with your patients.

New Arizona Perinatal Hepatitis B Virus Prevention Manual

- The Arizona Immunization Program Office of the Arizona Department of Health Services has updated the Arizona Perinatal Hepatitis B Prevention Program manual.
- The new [manual](#) can be found on the ADHS Immunization Program Office website.
- This manual includes checklists to be of assistance to obstetricians, pediatric health care providers, and hospitals in following CDC guidance for preventing perinatal hepatitis B virus infection according to CDC recommendations contained in [MMWR, December 23, 2005](#).

How to Check Which Vaccines Have Latex in Their Packaging

- The printed version of CDC's Epidemiology and Prevention of Vaccine-Preventable Diseases, 12th edition (the Pink Book) has a list of Latex in Vaccine Packaging in Appendix B (B-17) that was current as of February 2011.
- Since the printing of the 12th edition of the Pink Book, some manufacturers have changed the content of latex in vaccine packaging. CDC updates these changes in the on-line Pink Book. The Pink Book's most recent online update on [Latex in Vaccine Packaging](#) was current as of June 2012.
- Since manufacturers change vaccine packaging from time to time, also check the vaccine package inserts for the latest information about latex in vaccine packaging that may not yet have been added to the Pink Book's online list.

How to Check on Thimerosal Content in Vaccines

- The printed version 12th edition of CDC's Pink Book has a list of thimerosal content in vaccines that was up-to-date as of 2/23/2010.
- The most recent online CDC Pink Book list of [Thimerosal Content in Some U.S. Vaccines](#) links to the Institute for Vaccine Safety at the John Hopkins Bloomberg School of Public Health and is current as of 5/2/2012.

Avoid Discarding Multi-Dose Vials Prematurely

- Almost all multi-dose vaccines have preservatives and can be used until the expiration date on the vial if handled and stored correctly.
- Some multidose vials of reconstituted vaccines must be discarded if not used within a defined period after reconstitution.
 - Meningococcal polysaccharide vaccine ([Menomune[®]](#)) should be discarded after 35 days.
 - Yellow fever vaccine ([YF-VAX[®]](#)) should be discarded 1 hour after reconstitution if not used.

See "[Don't Be Guilty of These Errors in Vaccine Storage and Handling, error #10](#) at [Immunization Action Coalition](#).

HPV Vaccines Not Valid When Given Subcutaneously

- CDC's "Ask the Experts" team has stated that human papillomavirus vaccine (HPV) is not a valid dose when given subcutaneously (SC).
- In the May 2012 issue of *Vaccinate Adults!*, the CDC team explained that if an HPV vaccine is given by any other route than intramuscularly (IM), the dose is not valid and needs to be repeated. There is no minimum interval between an invalid SC dose of HPV vaccine and the subsequent IM dose.
- This was a correction from the February 2012 issue of *Vaccinate Adults!* In the February 2012 issue, the recommendation was that an HPV vaccine given SC by mistake could still be counted as a valid dose. However, this answer generated significant discussion, since no data exist on the efficacy or safety of HPV vaccine given by the subcutaneous route. This led the CDC "Ask the Experts" team to correct their answer in the May 2012 issue.

See [Vaccinate Adults! May 2012, p. 5](#).

- Please feel free to distribute ADHS' *Arizona Vaccine News* to any of your partners who may be interested. Past issues of *Arizona Vaccine News* can be found at: <http://www.azdhs.gov/phs/immun/vacNews.htm>