

Arizona Vaccine News

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VACCINE NEWS

The Fraud Behind the MMR Scare

- Dr. Wakefield's 1998 *Lancet* article linking MMR vaccine and autism has been further discredited by the January 8, 2011 issue of the *British Medical Journal* (BMJ).
- Brian Deer's investigative reporting showed how Dr. Wakefield intended the MMR crisis to make money.

For more details, see http://www.bmj.com/content/342/bmj.d22.full.

Dr. Paul Offit Comments on Dr. Wakefield's Fraud

- Dr. Offit has countered Dr. Wakefield's claims since their inception. See "Vaccines and Autism: A Tale of Shifting Hypotheses" in *Clinical Infectious Diseases*, February 15, 2009. http://cid.oxfordjournals.org/content/48/4/456.full.pdf+html
- In a Wall Street Journal article on January 11, 2011, Dr. Offit writes an editorial entitled "Junk Science Is Not a Victimless Crime."

See http://online.wsj.com/article/SB10001424052748703779704576073744290909186.html.

Newly Published ACIP Recommendations for Pertussis Vaccines

The Advisory Committee on Immunization Practices (ACIP) has updated pertussis vaccine recommendations:

- When a pertussis booster dose (Tdap) is indicated for adolescents and adults, there is no minimal interval needed between the previous tetanus or diphtheria containing vaccine and the Tdap.
- Adults aged 65 years and older (e.g., grandparents, child-care providers, and health-care practitioners) who have or who anticipate having close contact with an infant less than 12 months of age and who previously have not received Tdap should receive a single dose of Tdap. May give other adults aged 65 years and older a single dose of Tdap vaccine in persons who have not previously received Tdap
- Children aged 7 through 10 years who are not fully vaccinated against pertussis and for whom no contraindication to pertussis vaccine exists should receive a single dose of Tdap to provide protection against pertussis.

See *Morbidity and Mortality Weekly Report* (MMWR), January 14, 2011: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a4.htm?scid=mm6001a4 e%0d%0a

New ACIP Recommendations for Meningococcal Conjugate Vaccines

- ACIP voted in October 2010 to recommend two doses of meningococcal conjugate vaccines for adolescents (instead of just one). The recommended ages are 11-12 years of age and 16 years of age.
- The official ACIP written document summarizing the details of this ACIP vote will be posted soon under "ACIP Provisional Recommendations" on the CDC website. http://www.cdc.gov/vaccines/recs/provisional/default.htm
- Once the provisional recommendations are officially approved by the United States
 Department of Health and Human Services (HHS) and the Centers for Disease Control
 and Prevention (CDC), they will be published in *Morbidity and Mortality Weekly Report*(MMWR) and posted under "ACIP Recommendations."
 http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

MMWR Publishes ACIP's New Childhood Pneumococcal Vaccines Recommendations

The December 10, 2010 MMWR published the new childhood pneumococcal recommendations. Highlights of the recommendations are:

- Routine vaccination of all children aged 2–59 months using 13-valent pneumococcal vaccine (PCV13) instead of 7-valent (PCV7).
- PCV13 vaccination of children aged 60–71 months with underlying medical conditions.
- Catch up PCV13 vaccination for children who previously received ≥1 dose of PCV7. 23valent pneumococcal polysaccharide vaccine (PPSV23) use in children aged 2–18 years with high risk medical conditions once the PCV13 series is finished.

For full details, see http://www.cdc.gov/mmwr/pdf/rr/rr5911.pdf

Quadrivalent Human Papilloma Virus (HPV) Vaccine Now Approved to Prevent Anal Cancer

- The Food and Drug Administration (FDA) has broadened the indications for the quadrivalent human papillomavirus vaccine, Gardasil®.
- The FDA approval includes prevention of anal cancer and related precancerous lesions due to HPV types 6, 11, 16, and 18 in young people ages nine through 26 years.
- Gardasil® has been shown to be 78 percent effective in the preventing prevention of HPV 16- and 18-related Anal Intraepithlial Neoplasia (AIN) due to HPV 16 and HPV 18.

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm237941.htm

VACCINE-PREVENTABLE DISEASES NEWS

Polio Outbreaks Continue in Africa and Southeast Asia

- Travelers to countries with polio should make sure that that their polio vaccines are upto-date. Adults who are traveling to areas where polio cases are occurring and who have received a primary series with either inactivate polio vaccine (IPV) or oral polio vaccine (OPV) in childhood should receive another dose of IPV before departure. http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/poliomyelitis.aspx
- Polio infected countries are listed at the following link of the Global Polio Eradication Initiative: http://www.polioeradication.org/Infectedcountries.aspx

Update on Pertussis Cases

- The intensity of California's pertussis outbreak has slowed. Preliminary pertussis data for 2010 showed 8,383 reported cases, the highest number since 1947. Ten infants in California died from pertussis in 2010. Get more information at: http://www.cdph.ca.gov/programs/immunize/Pages/PertussisSummaryReports.aspx
- Preliminary surveillance data (as of December 2010) showed that Arizona had 444 cases
 of pertussis reported in 2010 with no deaths. More than 80% of these cases had
 symptoms consistent with pertussis, but were not laboratory confirmed or linked to a
 laboratory confirmed case. Arizona had no deaths from pertussis in 2010.
- In 2009 Arizona had 277 reported cases of pertussis. Therefore, there was a 60% increase in pertussis cases between 2009 and 2010. Arizona's most recent infectious disease counts can be found at http://www.azdhs.gov/phs/oids/data_reports.htm.
- If a patient is suspected of having pertussis, please notify your <u>local health department</u> immediately once you suspect the illness and do not wait for test results before reporting.

LITERATURE ON VACCINES AND VACCINE PREVENTABLE DISEASES

Costs Associated with Hospital Pertussis Vaccine "Cocooning" Program

- Pertussis infection in infants is usually due to transmission from parents or family members.
- Vaccinating all contacts caring for infants provides a "cocoon" of protection around the infant.
- A Houston hospital implemented a two year program to give pertussis vaccine (Tdap) to mothers and family contacts.
 - o Of 11,174 postpartum women, 75% received Tdap before discharge
 - o Of 1860 identified contacts, 91% received Tdap
 - o The estimated annual cost for such a program was \$160 per infant

See Clinical Infectious Diseases, January 2011

http://cid.oxfordjournals.org/content/52/2/157.full.pdf+html?etoc

Nebraska Health Department Costs Due to a School Pertussis Outbreak

- A five year old student with pertussis resulted in 26 school related cases. County health department staff members spent 1,032 person-hours responding to the outbreak.
- The total cost of outbreak response (including overhead, labor, travel, and other costs) was estimated at \$52,131 or at about \$2,005 per case.

See MMWR January 14, 2011

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a2.htm?s cid=mm6001a2 w

INFLUENZA DISEASE AND VACCINE

Arizona Has Widespread Influenza with First Pediatric Death

- Arizona influenza activity was "widespread" for the last week of 2010 and first week of 2011. Influenza cases have been confirmed in all counties.
- Laboratory-confirmed influenza cases in Arizona have appeared earlier in the season when compared with the preceding two non-pandemic influenza seasons. http://www.azdhs.gov/phs/oids/epi/flu/index.htm
- Three strains of influenza are currently circulating in Arizona: influenza A(H3), 2009 influenza A(H1N1), and influenza B. All three are good matches to the vaccine strains.
- Arizona has had its first pediatric influenza-associated death of the season. The child was less than two years of age and infected with influenza B.
- It is not too late to vaccinate since influenza will circulate at high levels for the next several months.

Improved Influenza Vaccine Coverage in US Pregnant Women 2009-2010

- 50.7% of pregnant women received seasonal influenza vaccine in the 2009-2010 season.
- 46.6% of pregnant women received 2009 H1N1 influenza vaccine in the 2009-2010 season.
- Historical seasonal influenza vaccine coverage in pregnant women has been much lower: 24.2% in 2007-2008, and 11.3% in 2008-2009.
- When health care providers recommended or offered seasonal or 2009 H1N1 influenza vaccine, pregnant women were three times more likely to get vaccinated.

See MMWR December 3, 2010 http://www.cdc.gov/mmwr/PDF/wk/mm5947.pdf

CDC Handout Explaining Influenza Vaccine for Pregnant Women

 CDC has written a new two page handout for providers to give to pregnant women explaining influenza and why pregnant women need to get an influenza shot. See: http://www.cdc.gov/flu/pdf/freeresources/pregnant/flushot_pregnant_Factsheet.pdf?scid=ccu122010

Safety and Effectiveness of a 2009 H1N1 Influenza Vaccine in Beijing

- 2009 H1N1 vaccine's efficacy and safety profiles were comparable to the seasonal influenza vaccines.
- The estimated protective efficacy of the 2009 H1N1 influenza vaccine was 87.3%.
- Of the 362 patients admitted for neurologic events (including Guillain-Barré syndrome) during a 10 week period after mass vaccination, NONE had received 2009 H1N1 influenza vaccine.

See *New England Journal of Medicine*, December 16, 2010 http://www.nejm.org/doi/pdf/10.1056/NEJMoa1006736

Public Health Associations Sends Open Letter about Influenza to American People

 Forty-four public health associations cosigned a letter explaining about the importance of annual influenza vaccines and urging that everyone be vaccinated.

See http://www.cdc.gov/flu/pdf/nivw/2010-2011open letter color.pdf?s cid=ccu121310 009

Pandemic Influenza's 500th Anniversary

For a review of influenza pandemics and what has been learned over the last 500 years, see Clinical Infectious Diseases, December 15, 2010.
 http://www.journals.uchicago.edu/doi/pdf/10.1086/657429

TRAVEL VACCINES

New CDC Training Course for Yellow Fever Vaccine

- CDC has developed a new online course about yellow fever vaccine for physicians, nurses, physician assistants, pharmacists, and public health professionals.
- The course contains important updated information for providers who administer yellow fever vaccines. The course is a two part series, with each section taking about 1 hour to complete. See: http://www.cdc.gov/travel-training
- Additional details about yellow fever and yellow fever vaccines are contained in "Yellow Fever Vaccine," MMWR, July 30, 2010 http://www.cdc.gov/mmwr/pdf/rr/rr5907.pdf

Yellow Fever Vaccine Trivia Question

➤ How long should blood donation be deferred after receipt of a Yellow Fever vaccine? See the answer at the end of this document (p. 7).

VACCINE RESOURCES

Video of Mother who Gave Her Baby Pertussis

- A mother is infected with pertussis by an unimmunized neighbor and then spreads pertussis to her newborn.
- Your organization can use this video free-of-charge.
- This short video should be of interest to both patients and health care providers.

See link at Parents of Kids with Infectious Diseases

http://www.pkids.org/im_videos_pertussis.php

"It's Not Too Late to Vaccinate" Poster for Providers' Offices

- A simple, easy-to-read, colorful, 8.5x11 inch document.
- The template allows providers to insert their own practice's logo.
- The poster explains why the influenza vaccine needs to continue to be given into the spring.
- "Why Immunize Against Influenza Throughout the Season?" can be downloaded from: https://www.vaccinemanager.com/index.cfm?Fuseaction=main.faDocListFilterHide&Cat =3&Aud=&Dis=&Top=26&DocType=&DocLang=&RecIndex=0

Information for Parents about Aluminum in Vaccines

The Vaccine Center at the Children's Hospital of Philadelphia has created documents in English and Spanish to answer parents' questions about aluminum in shots.

- During the first 6 months of life, infants could receive about 4 milligrams of aluminum from vaccines.
- During the same period, babies will also receive about 10 milligrams of aluminum in breast milk, about 40 milligrams in infant formula, or about 120 milligrams in soy-based formula.

For English, see http://www.chop.edu/system/galleries/download/pdfs/articles/vaccine-education-center/aluminum.pdf

For Spanish see http://www.chop.edu/system/galleries/download/pdfs/articles/vaccine-education-center/aluminum-spa.pdf

Make Sure You Use the Latest Vaccine Information Sheets (VIS)

The multi-vaccine VIS form was updated as of 12/14/2010 to reflect updated rotavirus information. Make sure that you are up-to-date with all of the latest VIS forms by going to: http://www.immunize.org/vis

Immunications Published Quarterly by ADHS

- Immunications is a quarterly publication of the Arizona Immunization Program Office (AIPO) and now it is being distributed electronically.
- Immunications gives updates on programmatic aspects of AIPO including the Vaccine for Children program (VFC), the Arizona State Immunization Information System (ASIIS), the Perinatal Hepatitis B Prevention program, child care and school vaccination coverage, and immunization education.
- Current and past editions of *Immunications* are available online at: http://www.azdhs.gov/phs/immun/immunications.htm

Updated Adolescent and Adult Immunization Recommendations Published by the *Immunization Action Coalition*

These documents include the new pertussis and meningococcal vaccine recommendations based on ACIP's October 2010 meeting. Find them at:

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http://www.immunize.org/nslt.d/n47/n47.pdf?utm_source=Needle+Tips+Announcement&utm campaign=f2c966c6c1-Needle Tips Announcement January 2011&utm_medium=email

CDC Vaccine Education Series: You Call the Shots

- For nurses and other health care providers who want to check their knowledge of immunizations, CDC has developed a computer-based training.
- Short modules are available on General Immunization Recommendations as well as specific instruction about the following vaccines: Adolescent and adult Tetanus, Diphtheria, and Pertussis (Tdap), polio, hepatitis A, and influenza.

See http://www.cdc.gov/vaccines/ed/youcalltheshots.htm

University of Nebraska Online CME for Vaccines

- The Nebraska Medical Center, the France Foundation, and GlaxoSmithKline have developed an online CME program entitled "About PROTECT™ (SupPorting ApROpriate ImmunizaTions Across the AgE SpeCTrum)."
- The CME takes about 1 hour and includes current ACIP recommendations and evolving vaccine schedules.
- The target audience is physicians, physician assistants, pharmacists, and other health care professionals (such as medical assistants) involved with preventing disease through immunizations.

See http://protectcme.org

ANSWER TO YELLOW FEVER VACCINE TRIVIA QUESTION

Question: How long should blood donation be deferred after receipt of Yellow Fever vaccine?

<u>Answer</u>: Two weeks. This is because yellow fever vaccine is a live virus vaccine and there is viremia during the first 2 weeks after injection which could result in yellow fever vaccine associated disease in the recipient of the transfusion.

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/index.htm