Arizona Vaccine News
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The intent of Arizona Vaccine News is to summarize local, national, and international vaccine information that affects Arizona.

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VACCINE NEWS

The Region of the Americas Is No Longer Classified as Measles-Free
- Measles elimination in the World Health Organization’s Region of the Americas was achieved in 2002. However, the Americas are no longer measles-free due to Brazil having a sustained transmission of a single measles virus strain for over 1 year.
- Between 2000 and 2014, global coverage with the 2nd measles vaccine is estimated to have increased from 15% to 56%.
- Compared with no measles vaccination, measles vaccination prevented an estimated 17.1 million deaths globally between 2000-2014.
- An estimated 20.6 million infants globally did not receive the routine first dose of measles in 2014. Fifty-six percent of these infants were in six countries: Nigeria, the Democratic Republic of the Congo, Ethiopia, Pakistan, India, and Indonesia.

See the article in Morbidity and Mortality Weekly Report (MMWR), November 13, 2015.

ACOG Updates Statement in Support of Human Papilloma Virus Vaccines
- The American College of Obstetrics and Gynecology (ACOG) has updated its human papillomavirus (HPV) vaccine recommendations to include the nine-valent HPV vaccine.
- Testing for HPV DNA is not recommended before giving an HPV vaccine. If a patient were to have positive DNA testing for HPV, the HPV vaccine series should still be given.
- Although HPV vaccination in pregnancy is not recommended, it is also not recommended to do routine pregnancy testing before HPV vaccination.

See ACOG’s Committee Opinion, September 2015.

INFLUENZA AND INFLUENZA VACCINES

Influenza Vaccine Decreases Risk of Hospitalization Due to Pneumonia
- Of 2,767 children and adults hospitalized in the United States (U.S.) for pneumonia from January 2010 through June 2012, 162 (5.9%) had laboratory-confirmed influenza.
- Influenza vaccine had been given to 28 of the 162 cases (17%) with influenza-associated pneumonia while influenza vaccine had been given to 766 of the 2,605 controls (29%) with influenza-negative pneumonia.
- Among patients hospitalized with community-acquired pneumonia, those with pneumonia not associated with influenza had higher odds of having received influenza vaccine, compared to those with laboratory-confirmed influenza-associated pneumonia.

See the abstract in the Journal of the American Medical Association (JAMA), October 13, 2015.

U.S. Elderly Are at Less Risk of Influenza if Surrounding Adults Are Immunized
- Data between 2002-2010 were analyzed to assess the association between county-wide influenza vaccination coverage and illnesses related to influenza in elderly Medicare beneficiaries (≥ 65 years).
- Counties with ≥31% influenza vaccination coverage among nonelderly adults had 20.6% lower adjusted odds of a principal diagnosis of influenza in the elderly than in counties with ≤15% vaccination coverage among nonelderly adults.
- Influenza vaccination among adults aged 18–64 years was inversely associated with illnesses related to influenza in the elderly.

See the abstract in Clinical Infectious Diseases, November 15, 2015.
LITERATURE ON VACCINES AND VACCINE-PREVENTABLE DISEASES

Factors Associated with Infant “Cocooning” for Influenza and Tdap Vaccines
- Postpartum women were asked whether they and close contacts received influenza and/or tetanus-diphtheria-acellular pertussis vaccine (Tdap).
- Sixty-one percent of mothers reported that they and at least 1 close contact of their newborn had received influenza vaccine; 67% reported this for Tdap.
- Infants whose mothers received influenza vaccine had a mean of 2.8 close contacts who also received influenza vaccine versus a mean of 0.9 contacts for infants whose mothers did not receive influenza vaccine (P < 0.0001).
- Infants whose mothers received Tdap had an average of 2.4 contacts who also received Tdap versus 0.8 for infants whose mothers did not receive Tdap (P < 0.0001).
- Factors associated with influenza and Tdap cocooning included obstetrician recommendation, maternal vaccination, high perceived benefits, low perceived barriers, and perceived susceptibility to disease.
- For Tdap (but not for influenza vaccine) Hispanic/Latino mothers were less likely than White mothers to have close contacts who received Tdap.

See the article in *Pediatric Infectious Disease Journal*, November 2015.

Tdap during Pregnancy Does Not Increase Risk of Adverse Events in Mother or Child
- In a study of 29,155 pregnant women who received Tdap, there was no increased risk of acute adverse events or adverse birth outcomes for those who had been previously vaccinated with a tetanus-containing vaccine less than 2 years before or 2 to 5 years before compared with those who had been vaccinated more than 5 years before Tdap.
- Relatively recent receipt of a prior tetanus-containing vaccination does not increase risk to the mother or the infant after Tdap receipt in pregnancy.

See the abstract in the *Journal of the American Medical Association* (JAMA), October 20, 2015.

Many Physicians Are Not Giving Strong Recommendations for HPV Vaccination
Based on a national survey in 2014 of 776 pediatricians and family practitioners:
- 27% of physicians did not strongly recommend HPV vaccine.
- 59% used a perceived risk-based approach in recommending HPV vaccine.
- Only 51% usually recommended same-day HPV vaccination.
- HPV vaccine recommendation quality was lower among physicians who were uncomfortable talking about HPV vaccine or who believed parents did not value it.

See the abstract in *Cancer Epidemiology, Biomarkers, and Prevention*. November 2015.

Description of Physicians Who Dismiss Families for Refusing Vaccines
- In a national survey, 83% of physicians said that in a typical month, ≥1% of parents refused at least one infant vaccine, and 20% said that >5% of parents refused at least one vaccine.
- Fifty-one percent of physicians reported always/often requiring parents to sign a form if they refused vaccines.
- Twenty-one percent of pediatricians and 4% of family practitioners always/often dismissed families if they refused ≥1 vaccine.
- Pediatricians who dismissed families were more likely to be in private practice, from the South, and reside in a state without a philosophical exemption law.

See the article in *Pediatrics*, December 2015.
Arizona Vaccine Providers’ Perceptions of Personal Belief Vaccine Exemption Policies

- One hundred and fifty-two Arizona pediatricians and family practitioners responded to a survey about personal belief exemptions.
- Arizona health care providers were generally strong advocates of all immunizations but were more accepting of parents' desires to refuse hepatitis B and rotavirus vaccines.
- Almost all providers indicated that they see patients whose parents request to refuse or delay from vaccinations at least occasionally (88% and 97%, respectively).
- Only 37% of respondents indicated that they would be supportive of a policy requiring them to sign off on a parent's decision to refuse vaccination.

See the abstract in *Vaccine, June 17, 2014*.

Pakistan Is Making Progress towards Polio Eradication

- Since Nigeria reported its last case of wild poliovirus type 1 (WPV1) in July 2014, Pakistan and Afghanistan are the only two countries where wild poliovirus (WPV) transmission has never been interrupted.
- Thirty-eight WPV1 cases were reported in Pakistan during January–September 2015, compared with 243 during the same period in 2014.
- Among the 38 WPV1 cases reported in 2015, 32 occurred in children aged <36 months, nine of whom had never received oral poliovirus vaccine (OPV).
- Focused efforts to close remaining immunity gaps by locating, tracking, and vaccinating continually missed children and improving coverage with OPV through the routine vaccination program are needed to stop WPV transmission in Pakistan.

See the article in *MMWR, October 19, 2015*.

RESOURCES

How to Sign Up for AIPO’s Immunications eNewsletters

- *Immunications* is the monthly newsletter of the Arizona Immunization Program Office (AIPO) of the Arizona Department of Health Services (ADHS).
- In order to subscribe to *Immunications*, you need to enter your email address at the ADHS eCommunications site. You will then be given a list of ADHS electronic newsletters from which to choose *Immunications*.

Immunization Action Coalition (IAC) Free Electronic Newsletters

- The IAC has three different electronic immunization newsletters.
  - *IAC Express* gives weekly news about immunizations. *Needle Tips* is a quarterly publication for health professionals providing care to children, teens, or adults. *Vaccinate Adults* is a quarterly publication for health professionals in adults care settings.
- Interested people can subscribe to these newsletters at [http://www.immunize.org/subscribe](http://www.immunize.org/subscribe).

- Please feel free to distribute ADHS’ *Arizona Vaccine News* to any of your partners who may be interested. Past issues of *Arizona Vaccine News* and AIPO’s *Immunications* newsletter can be found at [http://www.azdhs.gov/phs/immun/vacNews.htm](http://www.azdhs.gov/phs/immun/vacNews.htm).