National Center for Emerging and Zoonotic Infectious Diseases

Centers for Disease Control and Prevention Immunization Safety Office Update

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Advisory Commission on Childhood Vaccine (ACCV)
June

Disclaimer

- The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of CDC

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Topics

- Recent and upcoming presentations at meetings including presentations for upcoming June ACIP meeting
- Selected publications

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Recent Presentations

Annual Conference on Vaccinology Research

- April 3-5, Baltimore, MD http://www.nfid.org/professional-education/conferences/2019-acvr
  - DeStefano F. **Using Large Healthcare Databases to Look for Links Between Vaccines & Autoimmunity: Challenges & Benefits.** (oral presentation)
  - Broder K. **Clinical Research in the Clinical Immunization Safety Assessment Project (CISA), 2012–2018: Advancing the Evidence Base for Vaccine Safety**. (poster presentation)
  - Su J. **Anaphylaxis After Vaccination Reported to the Vaccine Adverse Event Reporting System, 1990-2016**. (poster presentation)
  - Suragh T. **Cluster anxiety-related adverse events following immunization (AEFI): An assessment of reports detected in social media and those identified using an online search engine**. (oral presentation)

Annual EIS Conference

- April 29-May 2, Atlanta, GA https://www.cdc.gov/eis/conference/index.html
  - Hesse E. **Deltoid Bursitis as an Adverse Event Following Injectable Influenza Vaccine in the Vaccine Safety Datalink—United States, 2016-2017.** (oral presentation)
  - Hesse E. **Post-Licensure Safety Surveillance of Recombinant Zoster Vaccine (Shingrix) Using the Vaccine Adverse Event Reporting System — United States, October 2017–June 2018.** (poster presentation)

American Academy of Ambulatory Care Nursing

- May 8-11, Palm Springs, CA, http://conference.aaacn.org/
  - Miller E. **Four Vaccine Safety Updates: What Nurses Need to Know.** (poster presentation)

Prevention 2019, Pittsburgh, PA

- May 20-23, Pittsburgh, PA, https://www.acpm.org/mpage/meeting
  - Duffy J. **Safety Surveillance of Bivalent Meningococcal Group B Vaccine, Vaccine Adverse Event Reporting System, 2014-2018** (poster presentation)

Upcoming Meetings

Royal College of Obstetrics and Gynecology (RCOG) World Congress 2019

- June 17-19, London, UK. https://www.rcog.org.uk/en/courses-exams-events/rcog-world-congress/london-congress-2019
  - Panagiotakopoulos L. **Safety of vaccines during pregnancy: The CDC perspective** (oral presentation)

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Upcoming ACIP Meeting

- June 26-27, Advisory Committee on Immunization Practices (ACIP), Atlanta, GA. https://www.cdc.gov/vaccines/acip/meetings/index.html
- Herpes Zoster Session will include following ISO presentation
  - **"Update: Safety monitoring and surveillance for recombinant zoster vaccine (RZV)"**
- Influenza Session will include following ISO presentation:
  - **"2018-2019 influenza season vaccine safety update"**

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Recent Publications

Recent Publication

- DeStefano F, Monk Bodenstab H, Offit PA. **Principal controversies in vaccine safety in the United States.** *Clin Infect Dis*. 2019 Feb 12.
  - Summary of some main current vaccine safety controversies in the United States: 1) MMR vaccine and autism; 2) thimerosal and the risk of neurodevelopmental disorders; 3) vaccine-induced Guillain-Barré Syndrome; 4) vaccine-induced autoimmune diseases; 5) safety of HPV vaccine; 6) aluminum adjuvant-induced autoimmune diseases and other disorders; and 7) too many vaccines given early in life predisposing children to health and developmental problems. A possible small increased risk of GBS following influenza vaccination was identified, but the increase is less than the risk of GBS following influenza infection. Otherwise, the biological and epidemiologic evidence does not support any of the reviewed vaccine safety concerns.
  - Available at https://www.ncbi.nlm.nih.gov/pubmed/30753348

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Recent Publication

- Myers TR, McCarthy NL, Panagiotakopoulos L, Omer SB. **Estimation of the Incidence of Guillain-Barré Syndrome During Pregnancy in the United States**. *Open Forum Infect Dis.* 2019 Mar 15.
  - Conclusions: It is reassuring that in a cohort of >1.2 million pregnancies and using validated methods to identify pregnancies and classify cases of GBS, we found very few cases of GBS occurring during pregnancy. This study helps fill a critical knowledge gap for a potential adverse event following immunization that will be of particular interest during Zika vaccine trials. Should a signal for GBS be detected during clinical trials of maternal Zika vaccination, it will warrant immediate scrutiny given the low incidence of this syndrome during pregnancy. Available at https://doi.org/10.1093/ofid/ofz071

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Recent Publication

- Klein NP, Goddard K, Lewis E, Ross P, Gee J, DeStefano F. Baxter R. **Long term risk of developing type 1 diabetes after HPV vaccination in males and females**. *Vaccine* 2019 Mar 28;37(14):1938-1944.
  - Conclusions: No increased risk for development of DM1 following HPV vaccination. Provides reassurance that during the 10-year time period after HPV vaccine was introduced, there was no substantial increased risk for DM1 following HPV vaccination.
  - Available at https://www.ncbi.nlm.nih.gov/pubmed/30827738

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Recent Publication

- Su JR, Moro PL, Ng CS, Lewis PW, Said MA, Cano MV. **Anaphylaxis after vaccination reported to the Vaccine Adverse Event Reporting System, 1990-2016.** *J Allergy Clin Immunol*. 2019 Apr;143(4):1465-1473.
  - Conclusions: Anaphylaxis after vaccination is rare in the United States and can occur among persons with no history of hypersensitivity. Most persons recover fully with treatment, but serious complications, including death, can occur.
  - Available at https://www.ncbi.nlm.nih.gov/pubmed/30654049

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Recent Publication

- Kochhar S, Edwards KM, Ropero Alvarez AM, Moro PL, Ortiz JR. **Introduction of new vaccines for immunization in pregnancy-Programmatic, regulatory, safety and ethical considerations**. *Vaccine* 2019 May 6.
  - Conclusions: Important pre-requisites for the successful introduction of new vaccines for immunization in pregnancy include political commitment and adequate financial resources: trained, committed and sufficient numbers of healthcare workers to deliver the vaccines; close integration of immunization programs with antenatal care and Maternal and Child Health services; adequate access to antenatal care by pregnant women in the country; and a high proportion of births occurring in health facilities (to ensure maternal and neonatal follow-up can be done). The framework needed to advance a vaccine program from product licensure to successful country-level implementation includes establishing and organizing evidence for anticipated vaccine program impact, developing supportive policies, and translating policies into local action.
  - Available at https://www.ncbi.nlm.nih.gov/pubmed/31072733

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Recent Publication

- DeStefano F, Shimabukuro TT. **MMR vaccine and Autism**. *Ann Rev Virol* 2019 April 15.
  - Conclusions: Autism is a developmental disability that can cause significant social, communication and behavioral challenges. A report published in 1998, but subsequently retracted by the journal, suggested that MMR vaccine might cause autism. Autism, however, is a neurodevelopmental condition that has a strong genetic component with genesis before one year of age, when MMR vaccine is typically administered. Several epidemiologic studies have not found an association between MMR vaccination and autism, including a study that found that MMR vaccine was not associated with increased risk of autism even among high-risk children whose older siblings had autism. Despite strong evidence of its safety, some parents are still hesitant to accept MMR vaccination of their children. Decreasing acceptance of MMR vaccination has led to outbreaks or resurgence of measles. Health care providers have a vital role in maintaining confidence in vaccination and preventing suffering, disability and death from measles and other vaccine-preventable diseases. Available at https://www.ncbi.nlm.nih.gov/pubmed/30986133

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For more information, contact CDC
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