

**February 2017  
Volume 7, Issue 2**

JANNA MCWILSON MSN, RN

EPIC IMMUNIZATION

PROGRAM DIRECTOR

404-881-5081

[jmcwilson@gaaap.org](mailto:jmcwilson@gaaap.org)

SHANRITA MCCLAIN

EPIC IMMUNIZATION

PROGRAM COORDINATOR

404-881-5054

[smcclain@gaaap.org](mailto:smcclain@gaaap.org)



## **A 2017 Supplement to *Epidemiology and Prevention of Vaccine-Preventable Diseases*, 13th Edition (the Pink Book)**

A 2017 Supplement to the 13<sup>th</sup> Edition of the Pink Book is now available. The supplement reflects the latest ACIP recommendations since the latest publication of the Pink Book in 2015.

The Pink Book supplement is a resource intended for immunization providers, and includes supplementary immunization information on human papillomavirus vaccine, meningococcal vaccines, and pneumococcal vaccines.

Please visit <https://www.cdc.gov/vaccines/pubs/pinkbook/index.html> to view and/or download your copy.

The 13<sup>th</sup> edition of the textbook, *Epidemiology and Prevention of Vaccine-Preventable Diseases*, or the Pink Book, is available for purchase. Published by CDC, NCIRD, and the Public Health Foundation (PHF), the Pink Book provides health care professionals with the most comprehensive information available on vaccines and vaccine-preventable diseases.

**Are you or someone you know an immunization expert?  
Do you enjoy sharing your knowledge with others?**

If you answered yes, you could become a trainer for EPIC. We provide training on the program curriculum, use of the program equipment (laptop and projector), a stipend for your time, and some great tips for presenting to adult learners.

**Please contact Shanrita McClain or Janna McWilson for more information.**

### **Mark Your Calendars:**

**Winter Symposium**

**February 11, 2017**

**Marriot Hotel Buckhead**

**Atlanta, GA**

**ACIP Meeting**

**February 22-23, 2017**

**Legislative Day at the Capital**

**February 23, 2017**

**Atlanta, GA**

**Georgia Pediatric Nurses and  
Practice Managers Meeting**

**May 5, 2017**

**College Park, GA**

# Pertussis among infants younger than 1 year of age remains high

Carla Kemp, Senior Editor

Masseria C, et al. *Pediatr Infect Dis J*. 2016, <http://bit.ly/2hR5XR3>.

The pertussis rate among infants younger than 12 months of age is high, and the incidence is highest among 3-month-olds, according to a nationwide study of 1.2 million infants.

Pertussis is the least-controlled bacterial disease for which a vaccine is universally recommended, according to the Centers for Disease Control and Prevention. However, limited data are available on the disease burden in U.S. infants.

Using databases of commercial health plans around the country, researchers estimated the incidence of pertussis in infants younger than 1 year of age who were born between July 2005 and September 2010. They also sought to identify factors associated with a pertussis diagnosis by comparing each infant diagnosed with pertussis with 10 matched infants without the disease.

Results showed 1,023 infants were diagnosed with pertussis during the study period. In the two weeks before their diagnosis, infants were 18 times more likely than their matches to have been treated for a cough, seven times more likely to have a wheezing-related illness and nearly six times more likely to have an acute upper respiratory infection.

The difference in health care costs between the two groups was highest among 1- and 2-month-olds at \$18,781 and \$15,446, respectively.

About half of both groups had received at least one dose of diphtheria, tetanus and acellular pertussis vaccine prior to the date of the pertussis diagnosis in the affected infant.

“This study supports the CDC decision to protect infants from exposure to the pertussis organism by recommending a dose of reduced-antigen Tdap vaccine to each pregnant woman between 27 and 36 weeks gestation during each pregnancy and to all people with close contact with the infants, including parents, grandparents, relatives, babysitters, nannies, daycare providers, and housekeepers,” the authors wrote.

## Children in Taiwan being undervaccinated for pertussis

**Publish date:** January 5, 2017

**By:** [Abigail Cruz](#)

Frontline Medical News

[FROM HUMAN VACCINES & IMMUNOTHERAPEUTICS](#)

Up to one-fifth of pertussis cases in Taiwanese children aged 3-35 months from 1996 to 2012 could have been prevented with on-time vaccination, reported Wan-Ting Huang and coauthors at the Taiwan Centers for Disease Control, Taipei.

Although vaccination coverage was 97.4% for three or more pertussis vaccine doses among Taiwanese children aged 12-23 months, many had not received proper vaccination at the right time.

The study used the Taiwanese National Immunization Information System (NIIS) database to evaluate a retrospective cohort of children born between 1996 and 2012 and their vaccination records; each child was followed until the age of 36 months or death. The results showed that of 4,104,526 children born between 1996 and 2012, 61% were undervaccinated with DTwP (whole-cell pertussis vaccine, combined with diphtheria and tetanus toxoids) or DTaP. Of those with a delay in vaccination, 30% were undervaccinated for more than 6 months; 23% of cases of pertussis were attributed to undervaccination.

“The study indicated that in Taiwan, undervaccination was decreasing but had placed young children at risk for pertussis,” the authors wrote.

## **Meningococcal conjugate vaccination may be associated with increased risk of Bell's palsy**

**Publish date:** December 26, 2016

**By:** [Dan Watson](#)

Frontline Medical News

A postlicensure safety study of a meningococcal conjugate vaccine in Southern California has shown that the vaccine may be associated with an increase in the risk of Bell's palsy, but only if the vaccine is taken concomitantly with another vaccine.

Researchers set out to evaluate the safety of one quadrivalent meningococcal conjugate vaccine, MenACWY-CRM. Two MenACWY vaccines are currently licensed in the United States; MenACWY-D is the other. The vaccines underwent studies on the road to approval, but researchers saw an absence of data about how the vaccine was faring in routine clinical use.

[Hung-Fu Tseng, PhD](#), of the department of research and evaluation, Kaiser Permanente Southern California, Pasadena, and his colleagues examined a cohort of 48,899 individuals aged 11-21 years who received the MenACWY-CRM vaccine between Sept. 30, 2011, and June 30, 2013 (Pediatrics. 2017 Jan. doi: [10.1542/peds.2016-2084](#)).

Researchers looked through the electronic health records of the study population for “26 prespecified events of interest (EOIs) under investigation, including neurologic, rheumatologic, hematologic, endocrine, renal, pediatric, and pediatric infectious disease EOIs. Occurrence of incident episodes of these EOIs was identified during a 1-year observation period after the index vaccination for each individual.”

They identified 4,240 EOIs, but dismissed 3,000 of them as probable preexisting conditions. With what was left, some of the EOIs did not occur at all (such as Guillain-Barré syndrome, myasthenia gravis, or systemic lupus erythematosus). Of transverse myelitis and autoimmune hemolytic anemia, among others, there was only 1 case.

Seizure, iridocyclitis, Hashimoto's disease, and anaphylaxis initially showed statistically significant risk incidence, but were all ruled out (of the hypothesis of possible cause by vaccination) by further review from a physician investigator.

But in the case of Bell's palsy, the independent case review committee did not rule out the possibility that the MenACWY-CRM vaccine increased the risk incidence of the condition.

However, the increased risk was present only for subjects who received a concomitant vaccine along with the MenACWY-CRM, such as Tdap, influenza, or human papillomavirus vaccine. “Stratified analyses demonstrated an increased risk for Bell's palsy in subjects receiving concomitant vaccines (risk incidence, 5.0; 95% confidence interval, 1.4-17.8), and no increased risk for those without concomitant vaccine (RI, 1.1; 95% CI, 0.2-5.5),” Dr. Tseng and his coauthors wrote. All eight cases of Bell's palsy resolved completely.

They concluded, “we observed a temporal association between occurrence of Bell's palsy and receipt of MenACWY-CRM concomitantly with other vaccines. The association needs further investigation because it could be due to chance, concomitant vaccination, or underlying medical history predisposing to Bell's palsy.

# Doctors alarmed that Trump has asked Robert F. Kennedy Jr., a critic of vaccines, to lead safety panel

By LAURAN NEERGAARD and JONATHAN LEMIRE, Associated Press  
Tuesday, January 10, 2017 5:30pm

WASHINGTON — President-elect Donald Trump is reviving long debunked attempts to link vaccines to autism, asking a vocal skeptic to chair a commission on vaccination safety — a

"President-elect Trump has some doubts about the current vaccine policies and he has questions about it," Kennedy said, adding that "we ought to be debating the science."

To pediatricians, there's nothing left to debate.

"Vaccines have been part of the fabric of our society for decades and are the most significant medical innovation of our time," Drs. Fernando Stein and Karen Remley of the American Academy of Pediatrics said in a statement Tuesday.

Scientists have ruled out a link between vaccines and autism. But Kennedy, the son of the late U.S. attorney general and senator, has long argued that vaccines containing the preservative thimerosal may cause autism, and has advocated for parents to more easily opt out of childhood vaccinations.

Trump also has voiced vaccine skepticism, on Twitter and during one of the primary debates when he said that autism has gotten "totally out of control." In that debate he went on to say: "I am totally in favor of vaccines, but I want smaller doses over a longer period of time."

Those are views unsupported by scientific evidence and dismissed as conspiracy theory by experts who find their revival alarming. Vaccination prevents millions of deaths around the world each year. Once common childhood killers can return if support for immunization wanes: During a 2015 measles outbreak that started at Disneyland, many who fell ill were unvaccinated. Repeated scientific studies in the U.S. and abroad have found no evidence that vaccines in general or those with thimerosal cause autism. That preservative has been removed from routine childhood immunizations; while it remains in some flu vaccines, there are thimerosal-free versions.

"The science has spoken. Thimerosal is a dead issue," said Dr. Paul Offit, a vaccine researcher at Children's Hospital of Philadelphia and a critic of anti-vaccine groups. "It is concerning. You have as a president-elect a science denialist."

Beyond thimerosal, research has discredited concerns that children get too many vaccines at once.

"Delaying vaccines only leaves a child at risk of disease," said Stein and Remley of the pediatricians' group. It's not just children who gain, they noted: Widespread vaccination lowers the spread of disease that also threatens the elderly or people with weak immune systems.

It's not clear what Kennedy described as a "commission on vaccine safety and scientific integrity" would do.

Already, there is a National Vaccine Advisory Committee that advises the government on vaccine safety and other issues, in addition to regulation and oversight by scientists at the Food and Drug Administration and the Centers for Disease Control and Prevention.

The American Academy of Pediatrics offered to work with the incoming Trump administration "to share the extensive scientific evidence demonstrating the safety of vaccines."



# Flu Tightens Its Hold on the Nation

**It's not too late to get vaccinated, CDC says**

By **Steven Reinberg**

*HealthDay Reporter*

FRIDAY, Jan. 13, 2017 (HealthDay News) -- The pace of flu activity continues to quicken across the United States, and probably hasn't peaked yet. That's the assessment of the U.S. Centers for Disease Control and Prevention, which is urging the most vulnerable -- the very young, the elderly, the chronically ill and pregnant women -- to get their flu shots before it's too late.

"Even though activity is elevated, we are probably not at peak yet," Lynnette Brammer, a CDC epidemiologist, said Friday. "Even if we were at peak, you've still got half the season to go," she added.

Right now, the heaviest flu activity is occurring along the East and West Coasts, Brammer said.

"The Northwest has been hit harder and earlier, and activity could have peaked there, but we won't know that for a couple of weeks," she said.

Only the center of the country has been largely spared, but Brammer expects flu activity to increase there over the next several weeks. The dominant strain right now is H3N2, which often signals a severe season that affects the oldest and youngest people the hardest, she said.

"Not all H3 years are severe years, but a lot of the severe years are H3 years," Brammer said.

On the upside: So far, this year doesn't seem as severe as the most severe H3 years, she said.

H1N1 and B viruses are also circulating, Brammer said.

"We may be approaching a peak in H3N2 viruses, but H1N1 viruses could increase as the H3s go down," she said. "And it's not uncommon to see a second wave of influenza B, because right now we haven't seen much B."

This year's vaccine contains all the circulating viruses, Brammer said, but it may be less effective against the H3N2 virus. However, if you get vaccinated and still catch the flu, it may be milder than if you weren't vaccinated, she explained.

The CDC recommends that anyone aged 6 months and older get a flu shot. Besides the elderly and the chronically ill, pregnant women also fall into the high-risk group in need of vaccination. Also, mothers of newborns need a flu shot to help protect their infants, who can't be vaccinated until they're 6 months old. For people 65 and older, the extra-strength vaccine is a good idea, Brammer said. It comes in two types: the high-dose vaccine and the adjuvanted vaccine. "Either should give them more protection," she said.

Get your shot soon, because it can take several weeks to produce enough antibodies to give you maximum protection. Most years, the vaccine is between 40 percent and 60 percent effective, according to the CDC. If you do get sick, there are antiviral drugs that can help. Tamiflu and Relenza are effective if taken early. That's particularly important for high-risk individuals, such as the elderly and people with chronic health conditions like heart and lung disease, according to the CDC.

In a typical flu season, flu complications -- including pneumonia -- send more than 200,000 Americans to the hospital. Death rates fluctuate annually, but have gone as high as 49,000 in a year, according to the CDC.



### Free in-office materials promoting measles vaccination

In collaboration with the Measles & Rubella Initiative (M&RI), the AAP is offering a new set of measles education resources featuring illustrator Sophie Blackall's popular Ivy and Bean characters. The posters, coloring comic books, and stickers, available in English or Spanish, are free of charge. For more information, visit [HealthyChildren.org](http://HealthyChildren.org).



### Question of the Week

Issue 1286: January 18, 2017

**A dose of Kinrix (DTaP-IPV; GSK) should have been administered to a 4-year-old, but Pentacel (DTaP-IPV-Hib; Sanofi Pasteur) was administered instead. Does the dose of DTaP count?**

Yes. The DTaP in the Pentacel can be counted. Although Pentacel is licensed as a 4-dose series and this may represent a fifth dose of Pentacel (in which case it would be off-label use), the dose of DTaP counts as the fifth dose of DTaP.

### Question of the Week

Issue 1285: January 11, 2017

**When I was 5 years old, I had Guillain-Barré syndrome (GBS) unrelated to vaccination. I am now 35 with no residual effects of the GBS. I am a nurse and my facility requires employees to receive influenza vaccine. Is it safe for me to be vaccinated?**

Yes. A history of GBS unrelated to influenza vaccine is not a contraindication or precaution to influenza vaccination. GBS within 6 weeks following a previous dose of influenza vaccine is considered a precaution for use of influenza vaccines.

## February is American Heart Month

Major findings showed that people who had received the flu shot were:

About 36% less likely to experience heart disease, stroke, heart failure or death from cardiac-related causes.

About 55% less likely to suffer a cardiac event if they had recently experienced a heart attack or stroke.

The CDC recommends that everyone above the age of six months get the flu vaccine and all major health organizations recommend that people with heart disease get the influenza vaccine.