



INSIDER

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### Mark Your Calendars:

**GPPMA/GPNA Spring Meeting** May 10, 2013 Atlanta, GA

**Building Bridges: Current Topics In Immunization Conference** May 21, 2013 Creekside Center at Chehaw Park Albany, GA

**ACIP Meeting** 

June 19-20, 2013 (Wednesday - Thursday) Deadline for registration: June 3, 2013

**CHOP Vaccine Education Center Webinars** September 11, 2013 http://vaccine.chop.edu/webinars

**20th Annual Immunize Georgia Conference** September 12, 2013 Callaway Gardens, Pine Mountain, GA

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National Nurses Week begins each year on May 6th and ends on May 12th, Florence Nightingale's birthday.

**CDC publishes two corrections to the U.S. immunization schedule for children and teens age 0 through 18 years** CDC published <u>Errata: Vol. 62, Suppl 1</u> in the <u>April 5 issue of</u> <u>MMWR</u> (page 256). The correction is reprinted below.

In the MMWR supplement, <u>Advisory Committee on Immunization</u> <u>Practices (ACIP) Recommended Immunization Schedules for Per-</u> <u>sons Aged 0 Through 18 Years and Adults Aged 19 Years and Old-</u> <u>er—United States, 2013</u>, "on page 7, in the third bulleted item under footnote 13, the text should read, For children aged 2 months through 10 years with high-risk conditions, see below."On page 8, under Additional Vaccine Information, in the fourth bulleted item, the last reference should read, American Academy of Pediatrics. Immunization in Special Clinical Circumstances. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. Red book: 2012 report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics."

# **Chicken Pox Vaccine Effective Over Long Term, Kaiser Study Finds**

Los Angeles Times (04/01/13) Brown, Eryn

Chickenpox is rare nearly 20 years after the approval of a vaccine for the varicella virus, and a new study confirms its effectiveness. Researchers at Kaiser Permanente in Northern California report a reduction in cases of chickenpox in 7,585 children by as much as tenfold over a 14-year study period. Parents reported just over 1,500 cases of "breakthrough" varicella in the immunized children, the equivalent of 15.9 cases per 1,000 person-years. However, the rate would have been between 140 and 160 cases per 1,000 person-years, if the children had not been vaccinated, previous studies suggest. There were very few severe illnesses. And the incidence of breakthrough cases declined over the course of the study, which suggests the vaccine's protection did not wane. Also, none of the children developed chickenpox after receiving a second dose of the vaccine. The findings are published in Pediatrics.



# **CDC** looks to end Polio globally

Published on April 2, 2013 by Ryan Parrish Vaccine News Daily April 4, 2013

CDC Director Thomas R. Frieden activated the CDC's Emergency Operations center in December 2011 as part of an effort to help the Global Polio Eradication Initiative. The CDC continues a close collaboration with the World Health Organization, the United Nations Children's fund, Rotary International and the Bill and Melinda Gates Foundation for a globally coordinated response to Polio. Eradication services were moved into EOC operational structures to better support Polio infected countries like Angola, Chad, Democratic Republic of the Congo, Nigeria, Afghanistan and Pakistan. Since December 2011, there have been 430 workers in the field, and 70-80 people every day work to eradicate Polio.

Since the launch of global polio eradication efforts in 1988, cases of Polio have dropped more than 99 percent. In 2012, 97 percent of cases were found in Afghanistan, Nigeria and Pakistan. In Angola, Chad and the Democratic Republic of Congo, Polio was eliminated in the past, but has seen recent reestablishment transmission of the poliovirus. Concerns are growing that time for eliminating the poliovirus from these countries is slipping away. "If we fail to get over the finish line, we will need to continue expensive control measures for the indefinite future..." Frieden said. "More importantly, without eradication, a resurgence of polio could paralyze more than 200,000 children worldwide every year within a decade."

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### Teen's Death From Chickenpox Highlights Need for Vaccination, CDC Reports Prior inoculation probably would have protected her, experts say.

THURSDAY, April 11 (HealthDay News) --

The death from chickenpox of an otherwise healthy 15-year-old Ohio girl should remind parents of the importance of vaccination against the disease, U.S. health officials reported Thursday.

The teenager was admitted to the hospital with severe chickenpox, also known as varicella, and died three weeks later because of serious complications, according to a case study provided by the U.S. Centers for Disease Control and Prevention.

"Varicella can be deadly, even in seemingly normal individuals," said Dr. Kenneth Bromberg, director of the Vaccine Research Center and chairman of pediatrics at the Brooklyn Hospital Center in New York City. "It is likely that death would have been prevented with prior vaccination," he said. Chickenpox, which is highly contagious, is usually a mild illness characterized by an uncomfortable, itchy rash. But it sometimes leads to serious illness and death, as this 2009 case demonstrated.

Infants, adults and people with weakened immune systems are at increased risk for severe chickenpox, but most chickenpox-related hospitalizations and deaths occurred among healthy people younger than 20 before the chickenpox vaccine was introduced in 1995, the CDC report said. "One of the reasons for death is bacterial superinfection of skin lesions with *Streptococcus pyogenes* [group A strep]," said Bromberg. "The other is disseminated viral infection, which seems to have happened in this case." The teenager had no underlying conditions that might have raised the odds for severe chickenpox, according to the report.

The article, published in the April 12 issue of the CDC's *Morbidity and Mortality Weekly Report*, noted that the chickenpox vaccine is safe and more than 95 percent effective at preventing severe illness and death. Since the vaccine became available, the number of chickenpox cases, hospitalizations and deaths in the United States has decreased substantially. The 15-year-old's death demonstrates the importance of routine chickenpox vaccination, as well as catch-up vaccination of older children and teens to prevent chickenpox vaccination was included in routine childhood immunization, the disease caused about 11,000 hospitalizations and 100 to 150 deaths in the United States each year. The two dose-vaccine has led to declines of more than 95 percent in chickenpox-related illnesses, hospitalizations and deaths among people who have received routine vaccinations.

The CDC recommends children get the first dose of chickenpox vaccine at age 12 to 15 months and the second dose at age 4 to 6 years. Children, teens and adults who have not had a second dose -- and have not had chick-enpox -- should get the catch-up vaccine. Experts say adult vaccination is critical. "The varicella vaccine is especially important for healthcare professionals, child care workers, teachers, residents and staff in nursing homes and people who care for or are around others with weakened immune systems," said Dr. Roya Samuels, a pediatrician at Cohen Children's Medical Center in New Hyde Park, N.Y.

### More information

The U.S. Centers for Disease Control and Prevention has more about chickenpox.

SOURCE: Kenneth Bromberg, M.D., F.A.A.P., F.I.D.S., director, Vaccine Research Center, and chairman, pediatrics, the Brooklyn Hospital Center, New York City; Roya Samuels, M.D., pediatrician, Cohen Children's Medical Center, New Hyde Park, N.Y.; U.S. Centers for Disease Control and Prevention, news release, April 11, 2013

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## Parents Who Veto Vaccinations Often Seek Like-Minded Opinions Study suggests friends, family may be important sources of advice

**By Amy Norton** *HealthDay Reporter* 



Photo: U.S. Centers for Disease Control and Prevention

MONDAY, April 15 (HealthDay News) -- Friends and family may be key in parents' decisions on whether to vaccinate their young children, a small study suggests. The study, of about 200 parents, found that those who had opted not to follow the standard vaccine schedule often sought advice from anti-vaccine friends and family. Experts said it's not certain that the advice actually steered parents in an anti-vaccine direction: Parents who were already prone to shunning vaccines may have turned to like-minded people for reinforcement. "It's the chicken-and-egg question," said researcher Emily Brunson, an assistant professor of anthropology at Texas State University, in San Marcos. "The answer is, we don't know which came first." To be more sure, Brunson said, parents would have to be followed over time, to see whether undecided parents actually base vaccine decisions on advice from other people. But Brunson said she thinks family, friends and others in parents' "social networks" really are an important influence.

Dr. Douglas Opel, of Seattle Children's Research Institute and the University of Washington, agreed. "It is unclear how these groups influence parents. Do they simply reinforce the vaccine decisions parents would have made otherwise, or do they actually function as a way that provokes a parent to consider other ideas?" said Opel, who wrote an editorial published with the study, which appears online April 15 and in the May print issue of the journal *Pediatrics* Opel said his hunch is that family and friends reinforce parents' existing views. But even if that's true, they are still a big influence by bolstering parents' beliefs. Experts recommend that babies and young children routinely receive vaccinations against a host of common (or once common) infectious diseases, such as measles, mumps, whooping cough, chickenpox and hepatitis. But some parents balk at those recommendations, largely because of a purported link between vaccines and autism. More than a decade's worth of studies have failed to confirm that link exists, but anxiety remains: A recent study of U.S. parents found that about one-third thought children receive too many vaccinations in their first two years, and they thought the shots could contribute to autism. Brunson wanted to see where parents are turning to get their information, so she recruited nearly 200 parents of children 18 months old or younger. About 130 had their child up to date on all vaccines (and were dubbed "conformers") and 70 had opted to skip or delay at least some vaccinations ("nonconformers").

In an online survey, Brunson asked the parents to list the people and other sources -- such as websites and books -- they had gone to for vaccine advice. She found that nearly all parents had sought advice from other people -- usually several people, including their doctor, spouse, family members and friends. And parents' ultimate decisions generally fell in line with that advice. Among nonconforming parents, nearly three-quarters of their social circle recommended not vaccinating, on average. That was in sharp contrast to the conformers, whose social circles by and large said they should have their child vaccinated on time. Brunson found that the more anti-vaccine views parents heard from their circle, the more likely they were to skip or delay vaccinations. And people seemed to matter more than information sources, such as the media. She noted that the media often "gets a bad rap" as being a well of vaccine misinformation. But in this study, nonconforming parents actually got a more positive view of vaccines from the media than they did from their social circles.

Brunson and Opel said the findings speak to the power of the people in our lives. "Parents do not make immunization decisions in a vacuum," Opel said. "Parents listen to and are influenced by other parents." He said parents who vaccinate might try being more "vocal" to other parents about why they made their decision. Brunson said efforts to encourage parents to vaccinate often focus on the role of pediatricians. "But this study is saying that we probably need to have a much broader approach than that," she said. Media campaigns and other approaches that reach the general public, not just parents, might work better, Brunson said.

#### More information

The American Academy of Pediatrics has information on vaccine safety.

SOURCES: Emily Brunson, Ph.D., M.P.H., assistant professor, anthropology, Texas State University, San Marcos; Douglas Opel, M.D., M.P.H., assistant professor, bioethics and general pediatrics, University of Washington School of Medicine, Seattle; May 2013 *Pediatrics* 

### **Genital Wart Decline Tracked to HPV Vaccine** *MedPage Today (04/18/13) Bankhead, Charles*

Four to five years after the human papillomavirus (HPV) vaccine was introduced in Australia, the incidence of genital warts fell by more than 90 percent among adolescent and teenage girls, and the rate dropped by 70 percent among women 21 to 30, researchers report. Investigators also found decreases of genital warts by 50 percent to 80 percent among heterosexual boys and young men. "In 2011 no genital wart diagnoses were made among 235 women under 21 years of age who reported prior human papillomavirus vaccination," the authors noted. "The significant declines in the proportion of young women found to have genital warts and the absence of genital warts in vaccinated women in 2011 suggests that the human papillomavirus vaccine has high efficacy outside the trial setting." The findings are reported in BMJ. Australia implemented a nationwide HPV vaccination program for girls and young women in 2007.

#### Shingles Vaccine Is Associated With Reduction in Both Postherpetic Neuralgia and Herpes Zoster EurekAlert (04/09/13)

U.S. and U.K. researchers have examined the records of 766,330 Medicare beneficiaries aged 65 years or more between 2007 and 2009, and they report that shingles vaccine uptake was very low at 3.9 percent of participants. Almost 13,000 people developed shingles, and the vaccine reduced the rate of shingles by 48 percent. However, the vaccine was not as effective in older adults with impaired immune systems. Also, vaccine effectiveness against post-herpetic neuralgia was 59 percent. "Herpes zoster vaccination was associated with a significant reduction in incident herpes zoster and [post -herpetic neuralgia] in routine clinical use," according to the authors of the study. The findings are published in PLOS

### AAP Risk Communication Videos

As a reminder, CISP offers a set of videos to help providers facilitate effective conversations with vaccine-hesitant parents. To view these videos,

visit: http://www2.aap.org/immunization/pediatricians/ riskcommunicationvideos.html



Save The Date!

May 21, 2013



Georgia Chapter American Academy of Pediatrics 1330 West Peachtree Street, NW, Ste 500

Atlanta, GA 30309-2904

# Save the Date!

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Current Topics in Immunization: From Hesitation to Vaccination

May 21, 2013 Chehaw Park - Albany GA

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### Vulnerable Spot On Respiratory Syncytial Virus Protein Could Lead To Vaccine

29 Apr 2013

An atomic-level snapshot of a respiratory syncytial virus (RSV) protein bound to a human antibody represents a leap toward developing a vaccine for a common - and sometimes very serious - childhood disease. The findings, by scientists from the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, define the vulnerable shape of a critical RSV component called the fusion glycoprotein.

The NIAID scientists determined the fusion glycoprotein's shape as it appears before its interaction with human cells. It is this pre-fusion shape that is most vulnerable to neutralizing antibodies. Progress toward an RSV vaccine has been stalled in part because researchers did not previously know about a highly vulnerable site at the tip of the pre-fusion form of the fusion glycoprotein. Now that the structure has been solved and the site of antibody vulnerability revealed, scientists can use the new structural information to design vaccines capable of eliciting potent antibodies aimed at the target on top of the pre-fusion state of the glycoprotein.

Almost everyone is infected with RSV before turning three years of age. Most children recover quickly from such symptoms as sneezing, runny nose and cough, but the virus is a leading cause of hospitalization in children under age one. In the United States each year between 75,000 and 125,000 children in this age group are hospitalized with RSV infection. Globally, RSV infection accounts for nearly 7percent of deaths among children between the age of one month and one year. The only drug available to prevent severe RSV illness is a monoclonal antibody, palivizumab, which binds to the RSV fusion glycoprotein. In their study, the NIAID researchers showed how three antibodies that potently neutralize RSV all bind to the newly revealed site on the fusion glycoprotein of RSV. Thus, in addition to new clues for vaccine developers, the NIAID findings also provide a structural basis for how these antibodies neutralize RSV disease in very young infants, who are the most vulnerable to serious illness.

### CDC: Too Early to Predict Future of H7N9 Outbreak

Infectious Disease News (04/09/2013)

The Centers for Disease Control and Prevention (CDC) is closely watching the outbreak of the novel influenza A (H7N9) virus in the Southern Hemisphere, and it is concerned because it does not expect any immunity to the virus if human-to-human transmission occurs, according to Michael Shaw, associate director of Laboratory Science for the center's Influenza Division. As of April 9, the virus has infected 28 people and killed eight in China. The CDC is pursuing a vaccine for H7N9, which has been found in pigeons, chickens and quail, all farm-raised animals grown for commercial purposes. In addition to egg-based vaccine manufacturers, Novartis is working on a cell-based vaccine and MedImmune is working on a live-attenuated vaccine. "We're not going to leave anything to chance," Shaw said. "We are going to try everything we can think of."

# Three Cases of Congenital Rubella Syndrome in the Postelimination Era — Maryland, Alabama, and Illinois, 2012

MMWR / March 29, 2013 / Vol. 62 / No. 12

### What is already known on this topic?

Congenital rubella syndrome (CRS) is caused by fetal infection with rubella virus from the mother and characterized by birth defects. During the 1964–1965 rubella epidemic in the United States, an estimated 12.5 million rubella cases occurred, and an estimated 20,000 infants were born with CRS. As a result of universal childhood vaccination, rubella and CRS elimination were documented in the United States in 2004; however, rubella still circulates in other areas of the world.

### What is added by this report?

With the elimination of rubella, cases of CRS are a rare occur-rence in the United States. This report describes three infants with CRS born in the United States in 2012; all had severe defects, and one died. In all three cases, the mother likely was exposed to rubella in Africa and had no documentation of vaccination against the virus.

### What are the implications for public health practice?

Although CRS occurs infrequently in the United States, health-care providers and public health officials should consider CRS in an infant with compatible birth defects whose mother was in a rubella-endemic country during her pregnancy. Heightened awareness is critical for obtaining appropriate specimens early for laboratory confirmation of CRS and for initiation of a thorough epidemiologic investigation. In addition, health-care providers should know the vaccination status of women of childbearing age who are planning to travel internationally.

### **On Twitter, Anti-Vaccination Sentiments Spread More Easily Than Pro-Vaccination Sentiments** *Science Daily (04/04/2013)*

A team of Penn State researchers has tracked how Twitter users feel about the new vaccine for combating influenza H1N1 and believes the results could help improve strategies for vaccination-awareness efforts. The researchers report that negative sentiment was contagious and suggest that negative opinions of vaccination may spread more easily than positive opinions. Microbloggers tended to tweet more anti-vaccine sentiments when their reciprocal connections expressed anti-vaccine sentiments, but that did not hold true when their reciprocal connections tweeted more positive sentiments. And when looking at the sheer volume of tweets, the team found that high volume of negative tweets seemed to encourage more negative tweets, while a high volume of positive tweets also seemed to lead to more negative tweets. "In other words, pro-vaccine messages seemed to backfire when enough of them were received," says Marcel Salathe, who led the study. The results appear in the journal EPJ Data Science.