



### Mark Your Calendars:

Current Topics in Mental Health for  
the Primary Care Pediatrician  
Marriott Riverfront Savannah  
March 21, 2015

Georgia Pediatric Nurses &  
Practice Managers Associations  
Georgia International Convention Center  
May 1, 2015

### UO Moves Meningitis Vaccination Clinic to Basketball Arena

**KVAL 13 (OR) (02/23/15) Liedle, Chris**

The University of Oregon hopes to vaccinate up to 22,000 students against meningitis by March 2. Although many students received the meningitis shot before arriving at the university, strategic communications director Rita Radostitz stresses that the strain on campus is a different strain, Meningitis B. "This is a brand new vaccine for a different strain. This is why we are doing it," she says. The university recently rolled out a social media campaign to promote the meningococemia vaccine, and it has been vaccinating students since January. The disease took the life of one student last week. University officials say they are working with insurance companies to cover the costs of the vaccine, which could be as much as \$170 per student.

### Measles Outbreak Highlights the Importance of Adult Immunization

*Los Angeles Times (02/12/15) Xia, Rosanna; Lin, Rong-Gong*

A national outbreak traced to California's Disneyland shows how dangerous measles can be for all ages. Adults 20 years and older make up 59 percent of confirmed measles cases, and most of them have no record of being immunized as children. "We're seeing more adults than we have seen in a typical outbreak," said Dr. Anne Schuchat, director of the Centers for Disease Control and Prevention's National Center for Immunization and Respiratory Diseases. Health officials are now considering how to better track adult vaccinations, since adults are more likely to spread the disease because they may travel and come in contact with more people. In response to the outbreak, the University of California has said it will require proof of four immunizations, including for measles, in addition to an existing hepatitis B vaccine requirement, and the national daycare chain KinderCare said it will begin requiring measles vaccines for all staff working with babies under 15 months old. Disneyland has offered free measles vaccines for any of its 27,000 theme park employees in California. More schools are also considering tracking the vaccination statuses of their teachers as well as for students. People may not realize that they may need a second dose of the measles vaccine, so immunization advocates have suggested more "checkpoints" between kindergarten and adulthood to catch individuals who are not fully vaccinated. The National Vaccine Advisory Committee has called on all healthcare providers to request the immunization records of all adult patients and to follow up to make sure they have had all the recommended vaccines.

## **Outbreaks Can Occur Anywhere**

Parents Pack Monthly Newsletter February 2015

Children's Hospital of Philadelphia

By late January 2015, a measles outbreak that originated when an infected person visited Disneyland in southern California, had spread to more than 67 people in six states and Mexico. So far, more than 20 people had been hospitalized and public health officials were scrambling to halt further spread.

The overwhelming majority of those infected were unvaccinated either by choice or because they were too young to receive the vaccine. Typically, children receive the first dose of measles vaccine between 12 and 18 months of age and the second dose between 4 and 6 years of age.

The story has refocused attention on the importance of vaccination to avert vaccine-preventable disease (VPD) outbreaks. The likelihood of a VPD thriving is greater in locations with a large number of unprotected people. It's based on this principle that states require children to be vaccinated before entering school systems. And, although other gathering places do not require immunizations, tourist attractions, like amusement parks, that draw large groups of visitors from around the world, are prime locations for outbreaks to originate.

The decision not to vaccinate, or even to delay vaccination, does not occur in a vacuum, nor is it inconsequential. Last year, California parents claimed a record number of personal belief exemptions to mandatory school vaccinations. That was the same year that state health officials reported the most measles cases since 1995 and the most whooping cough cases since 1947. Indeed, more than 80 percent of those infected in the current outbreak are from California. Of interest, on Feb. 5, 2015, two California state legislators have stated they will submit a bill asking for the elimination of California's personal belief exemption to vaccines.

### **Impacts of VPD outbreaks**

Although this particular outbreak makes for a compelling news story, it's important to remember that VPD outbreaks don't have to happen on such a grand scale, or originate at such a well-known location, to have an impact. Any outbreak, anywhere affects not only the infected individuals, but also their families and friends. For example, a hepatitis A outbreak sickened more than 600 and killed three people in western Pennsylvania in 2003. The people affected by this outbreak had simply gone out to a local restaurant for some Mexican food. Unfortunately, the scallions being served were contaminated with hepatitis A. Nearly 2,000 people had dined at that restaurant during the four days of peak exposure.

Even a small-scale outbreak of a VPD like measles can cause significant and unforeseen inconveniences. In this example from the Parents PACK personal stories collection, a small measles outbreak at a Pennsylvania high school led to unanticipated, and unappreciated, quarantines, when some students had to miss important activities like the prom, graduation and final exams.

As recently as December 2014, an outbreak of mumps affected the National Hockey League infecting 16 players across several teams. Luckily, in most cases, the public did not need to worry about the virus spreading from players on the ice. However, it was around the holidays and these players did likely visit family and friends and travel. One group of unknowingly exposed players even visited a children's hospital while potentially contagious.

Exposure to a transmissible disease can occur anywhere people gather. It can be at a church gathering, sporting events or even supermarkets — all of which have been documented. As the above examples demonstrate VPDs can occur when you go on vacation, when you go out to eat, or when you go to school. For better or worse, these examples also serve as a reminder that while vaccinations may be a choice, exposures are not.

### **Combating Pertussis Resurgence: One Booster Vaccination Schedule Does Not Fit All**

*Proceedings of the National Academy of Sciences (01/20/15) Rioloa, Maria A.; Rohani, Pejman*

Pertussis has reemerged as a major public-health concern, prompting experts to call for booster vaccinations, but research suggests that the effectiveness of booster schedules depends on the cause of disease resurgence. The timing and number of recommended booster vaccinations can vary widely, so researchers used a genetic algorithm to look for cost-effective booster vaccination strategies. Investigators assumed four hypothesized causes for the resurgence: insufficient vaccine coverage, frequent primary vaccine failure, waning of vaccine-derived protection, and vaccine "leakiness." The results suggested that booster schedules are unable to alleviate a disease resurgence when vaccines are leaky. The findings suggest that "the ultimate effectiveness of vaccine booster schedules will likely depend on correctly pinpointing the causes of resurgence, with misdiagnosis of the problem epidemiologically ineffective and economically costly," the researchers write.

### **Some Doctors Won't See Patients With Anti-Vaccine Views**

*San Diego Union-Tribune (01/29/15) Chang, Alicia*

In recent years, some pediatricians and family physicians have refused to see patients who will not have their children vaccinated. Doctors are hoping that the strategy will help change parents' minds and reduce the risk to other patients. This approach comes as the United States is seeing a large measles outbreak, with most of the reported cases linked to an outbreak at Disneyland in Southern California. The American Academy of Pediatrics (AAP) advises that doctors speak on the importance of vaccinations but respect a parent's wishes unless the child is at a significant risk. "In general, pediatricians should avoid discharging patients from their practices solely because a parent refuses to immunize his or her child," according to AAP guidelines. Some doctors defend their decision not to see unvaccinated patients, but others warn that such treatment could send patients to less reputable providers. While all states require certain vaccinations for children enrolling in school, California is one of 20 states that let parents opt out through personal belief waivers.

### **HPV Vaccination Does Not Appear to Boost Risky Teen Sex, Study Shows**

**By Amy Norton**  
**HealthDay Reporter**

MONDAY, Feb. 9, 2015 (HealthDay News) -- Contrary to what some parents might fear, girls who get vaccinated against the human papillomavirus (HPV) do not treat it as a green light to start having risky sex, a new study indicates. Researchers said they hope the findings, published online Feb. 9 in JAMA Internal Medicine, help ease parents' minds.

For nearly a decade, experts have recommended that girls and young women be vaccinated against HPV -- the sexually transmitted infection that can cause genital warts and, in some people, eventually lead to cervical cancer. Most cases of cervical cancer among U.S. women are caused by persistent HPV infection, experts say. The U.S. Centers for Disease Control and Prevention and other groups recommend that all girls aged 11 and 12 receive the HPV vaccine, and that teenagers and young women up to age 26 get "catch-up" shots if they missed the earlier window. While vaccination was initially suggested for girls only, the advice now extends to boys and young men.

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Yet by 2013, only 38 percent of U.S. teenage girls had received all three doses of the HPV vaccine, according to the CDC. There are multiple reasons, but one issue has been particularly thorny: Some people have argued that vaccinating children against HPV gives tacit consent for them to start having sex, said lead researcher Dr. Anupam Jena. "It's a valid concern," said Jena, an assistant professor of health care policy at Harvard Medical School, in Boston. "That's why it's important to scientifically study it." Past surveys have suggested that HPV vaccination has not been encouraging kids to become sexually active. But, Jena noted, those studies depended on parents' and teens' own reports.

To get a more-objective picture, Jena's team scoured health insurance records for over 200,000 U.S. girls, looking at rates of sexually transmitted diseases like chlamydia, gonorrhea and herpes. The researchers reasoned that if HPV vaccination spurs girls to have sex -- unsafe sex, in particular -- then STD diagnoses should change noticeably in the year after vaccination. The investigators found that STD rates did rise among vaccinated girls -- to almost seven cases per 1,000 girls. But there was a nearly identical increase among unvaccinated girls, whose rate rose to just over four per 1,000 over the same time period. "Hopefully, this will help allay some concerns about vaccination," Jena said.

He noted that it's not only parents who've expressed worries in past research; even some doctors hesitate to recommend the vaccine because of its connection to an STD. Some pediatricians think that vaccinating means they'll have to go into a birds-and-bees discussion with an 11-year-old, explained Robert Bednarczyk, an assistant professor at Emory University in Atlanta, who studies HPV vaccination and cancer prevention. "Some doctors don't want to talk about sex with kids that age," said Bednarczyk, who wrote an editorial published with the study. But there's no need for "the Talk," anyway, according to Bednarczyk. "This is a cancer-prevention vaccine," he said. "That's how it should be presented."

There are more than 100 strains of HPV, some of which cause genital and anal warts. In most people, the immune system clears the infection fairly rapidly. However, persistent infection with certain HPV strains can eventually lead to cancer: Cervical cancer is the most common one, but HPV is also associated with anal, penile, vaginal or throat tumors.

The current study looked only at STD rates, and not whether girls became sexually active at a higher rate after HPV vaccination. But Bednarczyk said past studies have already indicated that's not the case. "All evidence points to no increase in sexual activity," he said. And in general, he added, research has shown that the vaccine is safe -- which is another concern some parents have. According to the CDC, the most common side effects are the same as with other vaccines: pain at the injection site, dizziness and mild fever.

There are two vaccines that can prevent infection with certain cancer-related strains of HPV: Merck's Gardasil and GlaxoSmithKline's Cervarix. Both cost about \$400 for all three doses; but most insurance plans and Medicaid cover them. "HPV vaccination should be a routine part of pre-teens' health care," Bednarczyk said. Jena agreed. "Here we have a vaccine that will prevent cancer, and utilization is still so low," he said. "That, to me, is alarming."

SOURCES: Anupam Jena, M.D., Ph.D., assistant professor, health care policy, Harvard Medical School, Boston; Robert Bednarczyk, Ph.D., assistant professor, global health, Emory University Rollins School of Public Health, Atlanta; Feb. 9, 2015, JAMA Internal Medicine, online

### **Question of the Week**

**IAC Express Issue 1165: February 3, 2015**

**Our patient is a 78-year-old female who received PCV13 (Pneumovax 13, Pfizer), then received PPSV23 (Pneumovax 23, Merck) approximately 10 weeks later. She had not received PPSV23 previously. Is the PPSV23 dose valid, or does it need to be repeated?**

Answer: Even though the interval was shorter than the recommended 6–12 months, the dose of PPSV23 should be counted and does not need to be repeated. In the future, please note the ACIP recommendations for pneumococcal vaccine-naïve patients age 65 and older are as follows: The dose of PPSV23 should be given 6–12 months after a dose of PCV13. If PPSV23 cannot be given during this time window, the dose of PPSV23 should be given during the next visit. The two vaccines should not be coadministered, and the minimum acceptable interval between PCV13 and PPSV23 is 8 weeks. For more information, see ACIP recommendations: [Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years](#)

### **Question of the Week**

**IAC Express Issue 1167: February 17, 2015**

**How does being born before 1957 confer immunity to measles?**

People born before 1957 lived through several years of epidemic measles before the first measles vaccine was licensed in 1963. As a result, these people are very likely to have had measles disease. Surveys suggest that 95% to 98% of those born before 1957 are immune to measles (see [www.cdc.gov/vaccines/vpd-vac/measles/faqs-dis-vac-risks.htm](http://www.cdc.gov/vaccines/vpd-vac/measles/faqs-dis-vac-risks.htm)). Persons born before 1957 can be presumed to be immune. However, if serologic testing indicates that the person is not immune, at least 1 dose of MMR should be administered. Additional information is available at [www.cdc.gov/mmwr/pdf/rr/rr6204.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr6204.pdf).