



# INSIDER

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If you have knowledge, let others light their candles in it.

> -Margaret Fuller Journalist

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#### Mark Your Calendars:

Immunize Georgia Conference September 9, 2016 Peachtree City, GA

National Immunization Conference September 13-15, 2016 Atlanta, GA

> Pediatrics on the Perimeter CME Fall Meeting September 22-24, 2016 Atlanta, GA

Webinar "What You Need to Know About Meningitis and Meningococcal Vaccines" September 29, 2016

Georgia Pediatric Nurses and Practice Managers Meeting October 14, 2016 Atlanta, GA

> ACIP Meeting October 19-20, 2016 Atlanta, GA

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SHANRITA MCCLAIN EPIC IMMUNIZATION PROGRAM COORDINATOR 404-881-5054 <u>smcclain@gaaap.org</u> "Merck ad for HPV vaccine is tough on parents" The Washington Post (August 9, 2016) - "A new commercial for the HPV vaccine by Merck has children asking parents why they didn't get their children vaccinated."

http://wapo.st/2bcrq1v

## **CE opportunity on HPV-related oropharyngeal** cancer

The Academic Pediatric Association sponsored a notable head and neck surgeon to present grand rounds on HPVrelated oropharyngeal cancer at Children's Mercy Hospital, Kansas City, MO, on August 18, 2016. To see it, go to https://www.childrensmercy.org/grandrounds/. Registration is required (because of Continuing Education accreditation).

To receive Continuing Education (CE) credit, complete the pre-test, watch the video presentation, then complete the post-test and evaluation. You will then be directed to print off your certificate. (Upon signing in and registering, you will notice that you have access to the previous two months of Grand Rounds Online.) If you have questions about the CE system, please contact Graduate Medical Education at (816) 234-3755 or ext. 53755.

#### 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.

# Lawsuit challenges law requiring students to be vaccinated to attend school

#### JoAnn Seltzer Aug. 9, 2016, 10:28am

SAN DIEGO – A group of parents and the nonprofit Education 4 All in California are suing the state over a new law (Senate Bill 277) requiring children to be vaccinated to attend school, which went into effect July 1.

California has permitted unvaccinated students to attend schools for more than 50 years, but last year's measles outbreak led legislators to pass a law removing the personal belief exemption (not medical exemptions) that about 3 percent of parents claimed to avoid vaccinating their children.

"The case is very unlikely to lead to striking down SB277," Dorit Rubinstein Reiss, a law professor at UC Hastings College of Law, told the *Northern California Record*. "Opponents have tried to strike down immunization requirements for decades, and the courts have repeatedly rejected such challenges because immunization requirements protect children and the community."

The parents, who filed the case under Education 4 All, are claiming that the new law violates their religious freedom, but state and federal courts have rejected that argument in the past because there is no precedent for that, Reiss said. The lawsuit could identify areas of the law that still need to be interpreted, including a portion about Individualized Education Programs (IEP), but all new laws have to be interpreted, she said. The case may also affect how the law is applied and exemptions for one or two students may be enacted, but the entire law is not going to be struck down.

To set a country-wide precedent the case has to make it all the way to the U.S. Supreme Court. Reiss said she believes the case will be appealed.

"If the Supreme Court takes it and rules the precedent will be binding in the U.S.," Reiss said.

If the Supreme Court decides not to hear the case the ruling would only be binding in the 9th Circuit Court, she said. This is not the first time parents have gone to court over immunization requirements. West Virginia and New York have both had similar cases and in both cases, the claims were denied.

"No court in the U.S., state or federal, has ever struck down immunization requirements or required non -medial exemptions," Reiss said, although some courts say if religious exemptions are permitted it must apply to all religions.

Currently, the law is in place and unvaccinated children may not attend California schools, however, that could change before the new school year begins. The parents have asked the court for an injunction, which would postpone the law until the case is decided.

"If the court grants it, the children can attend without vaccination. If not, they cannot," Reiss said.



### Mortality rates higher among influenza B patients than influenza A patients

By: JESSICA CRAIG, Pediatric News Digital Network AUGUST 17, 2016

Influenza-attributable mortality was significantly greater in children with influenza B, compared with influenza A, investigators found. Among those with influenza B, patients aged 10-16 years were most likely to require ICU admission, suggesting this subpopulation may be a target for immunization programs.

The percentage of clinical cases attributed to influenza B range from less than 1% to 44%, according to data published by the Centers for Disease Control and Prevention. However, influenza B is considered less virulent and less capable of causing pandemics and has therefore been less studied and outcomes of its disease less characterized, Dat Tran, MD, MSc, of the Hospital for Sick Children in Canada and his associates reported (Pediatrics. 2016 August. doi: 10.1542/peds.2015-4643).

The purpose of this study was to further understand the prevalence and severity of influenza B cases in comparison with influenza A and to identify pediatric subpopulations most at risk for contracting influenza B. Children aged 16 years or younger hospitalized from laboratory-confirmed influenza A or B from September 2004 to June 2013 (excluding the pandemic year 2009-2010) were identified through active surveillance of admissions at the 12 pediatric referral centers of the Canadian Immunization Monitoring Program Active (IMPACT), a national surveillance initiative. Information regarding demographics, health status, vaccination status, presenting signs and symptoms, illness severity and mortality, treatment regimens, and ICU admission were collected and analyzed.

Of 4,155 influenza-related admissions during this time period, influenza B accounted for 1,510 (36.3%) cases and influenza A accounted for 2,645 (63.7%) cases. Children admitted with influenza B tended to be older with a median age 3.9 years (interquartile range, 1.4-7.2), compared with a median of 2 years (IQR, 0.6-4.8 years) for children admitted with influenza A. Children admitted with influenza B, compared with influenza A, had higher odds of having a vaccine-indicated condition (odds ratio, 1.30; 95% confidence interval, 1.14-1.47) and lower odds of having no underlying medical condition (OR, 0.80; 95% CI, 0.71-0.91), Dr. Tran and his associates reported.

"Compared with influenza A cases, children admitted with influenza B had greater adjusted odds of presenting with headache, abdominal pain, and myalgia, ranging from 1.38 for abdominal pain to 3.19 for myalgia," they added. "There were no significant differences in antiviral or antibiotic prescription or use between influenza A and B cases." There was no significant difference in the proportion of influenza A or B patients admitted to the ICU (12.7% vs. 12.6%). Rather, multivariate modeling identified age and presence of an underlying condition as independent predictors of ICU admission.

Finally, influenza-attributable mortality was significantly greater in children with influenza B (adjusted OR, 2.65; 95% CI, 1.18-5.94). Influenza-attributable mortality occurred in 16 (1.1%) children with influenza B and only 10 (0.4%) children with influenza A. All-cause mortality followed a similar trend. "Among hospitalized children, influenza A and B infections resulted in similar morbidity while mortality was greater for influenza B disease. Among healthy children hospitalized with influenza B, those aged 10-16 years were most likely to require ICU admission," the investigators summarized.

"These children should be considered at high risk for complicated influenza B infection and be specifically targeted by immunization programs to receive influenza vaccination, and in particular, a [quadrivalent influenza vaccine]," they recommended.

This study was funded by GlaxoSmithKline Biologicals SA. The Canadian Immunization Monitoring Program Active is funded by the Public Health Agency of Canada. The investigators reported having no relevant disclosures.

### Parents remain leery of schools that require HPV vaccination

By <u>Ed Silverman @Pharmalot</u> August 23, 2016

A decade after first becoming available, the HPV vaccine is still a hard sell.

A new study finds that only 21 percent of parents believe that a law requiring vaccination for attending school is a good idea, and 54 percent disagreed with the notion of such a requirement for school entry altogether. What might make them change their minds? Well, 57 percent reported that they could live with the requirement, but only if there is an opt-out provision.

The results suggest that such legislative requirements may accomplish very little. "Opt-outs lead to a large number of parents choosing not to vaccinate their children, and that makes requirements ineffective in raising vaccination rates," said Noel Brewer, a coauthor and associate professor in the UNC Gillings School of Global Public Health, in a <u>statement</u>.

So far, just two states — Rhode Island and Virginia — and the District of Columbia, require HPV vaccination for entering school. To what extent such legislative efforts will spread around the country seems unclear. Only New Jersey has such a bill pending, while legislation died recently in Hawaii and Maryland, according to the National Conference of State Legislatures.

"It would be hard for lawmakers to enact a policy that has 21 percent support," Brewer acknowledged. We should note that the study was <u>funded by Merck</u>, which sells the Gardasil HPV vaccine, and that Brewer has received HPV vaccine-related grants from or served on paid advisory boards for Merck.

Interestingly, the study also found 32 percent of parents felt the vaccines are promoted to make money for drug companies, and only 40 percent believed the vaccines are effective in preventing cervical cancer. (The vaccines are designed to thwart human papillomavirus, or HPV, which can lead to cervical cancer). More than 1,500 parents of 11- to 17-year-olds were queried, by the way.

The findings, which were published late last week in Cancer, Epidemiology, Biomarkers & Prevention, underscore the difficulties that public health officials have encountered since Gardasil, the first HPV vaccine, was approved by the US Food and Drug Administration a decade ago.

From the start, some parents objected to the cost of the treatment, which requires three shots, costing a total of about \$530. Others expressed concerns that getting an HPV vaccine may lead teenage girls to think it may be safer to have casual sex, although a subsequent study found there is no evidence to suggest the vaccines — GlaxoSmithKline sells another called <u>Cervarix</u> — leads to risky sexual behavior.

Those anxieties were initially fueled by a surreptitious Merck marketing campaign. Even before regulators approved Gardasil, Merck tried to persuade lawmakers to require school districts to make vaccination mandatory. The effort failed and created lingering distrust of the company, which only two years earlier was ensnared in scandal over its withdrawal of the Vioxx painkiller amid controversy over the extent to which side effect data about cardiovascular risks was properly disclosed.

Most of all, the vaccines have been plagued by numerous reports of side effects. The issue prompted European regulators to investigate although they <u>did not find evidence</u> the vaccines cause chronic pain or dizziness. Earlier this month, meanwhile, 63 young women in Japan filed a class-action <u>lawsuit</u> seeking \$9 million in compensation from the central government and the manufacturers over side effects, pain in various parts of their bodies, difficulty walking, and impaired eyesight.

Physicians have also been affected by the criticisms. A study last fall, which was based on a survey of 776 US doctors, found that a quarter <u>did not strongly endorse</u> the need for HPV vaccination with parents of 11- and 12-year-olds under their care.

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Consequently, <u>uptake has been slow</u>. The US Centers for Disease Control and Prevention reported that about 7 percent of girls and 22 percent of boys aged 13 to 17 years of age had completed all three recommended doses as of 2014.

The low vaccination rates have frustrated public health officials, as well as Merck, which earlier this summer began running the first Gardasil television <u>ad campaign</u> in several years. The ads, however, have generated some controversy of their own. Instead of specifically promoting the product, the message tugs on parental heart strings by focusing on the hazards of contracting HPV.

Merck began the ad campaign amid declining Gardasil sales in the United States. For the first six months of this year, the vaccine generated \$770 million, down from \$785 million during the comparable period in 2014. On an annualized basis, the figures suggest sales may lag behind the \$1.9 billion in revenue that Gardasil generated in 2015.

"Most cervical cancers are preventable with regular screening for precancerous lesions among women aged 21-65 years linked with follow-up for abnormal test results," researchers said.

# HPV vaccination provides protection for immunocompromised children

By: LUCAS FRANKI, Pediatric News Digital Network

AUGUST 9, 2016

A quadrivalent human papillomavirus vaccine provided adequate seroconversion response rates in immunocompromised children, according to Dr. C. Raina MacIntyre, MBBS, PhD, and her associates. In a clinical trial of 59 immunocompromised children aged 5-18, seroconversion rates for HPV types 6, 11, 16, and 18 were 93.3%, 100%, 100%, and 88.9%, respectively, 7 months after receiving the first dose of vaccine. After 2 years, seroconversion rates for HPV types 6, 11, 16, and 18 were 82.2%, 91.1%, 91.1%, and 68.9%, respectively.

Local adverse events occurred in 16 patients after the first dose, but incidence decreased after the second and third doses. Injection site erythema, pain, and swelling were the most commonly reported adverse events. Minor disease flare occurred in two patients during the follow-up period, and one patient developed a squamous cell oral carcinoma, but the tumor could not be tested for HPV. The data suggest "that HPV vaccine could be given earlier for immunosuppressed children, who are at higher risk of earlier onset cancers, but long-term follow-up studies are required to determine persistence of immunity," the investigators said.

Find the full study in Vaccine (doi: 10.1016/j.vaccine.2016.06.049).

### Vaccine refusals and pediatrician dismissals increasing

By: TARA HAELLE, Pediatric News Digital Network August 29, 2016

More parents have been refusing vaccines in recent years than a decade ago, according to surveys of pediatricians by the American Academy of Pediatrics published in Pediatrics Aug. 29. "In a busy practice, vaccine refusals and delays occur daily (if not multiple times per day)," wrote Catherine Hough-Telford, MD, of the University of Alabama at Birmingham and her colleagues (Pediatrics. 2016 Aug. 29. doi: 10.1542/peds.2016-2127).

"From the perspective of the pediatricians, parents who delay vaccines may do so because of concern for their child's discomfort and concern about immune system burden, whereas vaccine refusers are more likely to believe that vaccines are unnecessary," the authors wrote. "Pediatricians report that they continue to provide education to vaccine-refusing and delaying parents at high rates."

Dr. Hough-Telford's team compared the national AAP Periodic Surveys of 2006 and2013 that dealt exclusively with immunizations to learn how currently practicing pediatricians perceived three issues related to vaccination: the prevalence of vaccine refusals and delays, why parents refuse or delay vaccines, and the decision of doctors to dismiss families who refuse to vaccinate.

The researchers excluded pediatricians who did not routinely administer vaccines or otherwise adhere to the Centers for Disease Control and Prevention–recommended immunization schedule for their patients. The 2006 survey had a response rate of 52.6% and included 629 final respondents; the 2013 survey had a response rate of 52.7% and included 627 respondents.

The proportion of pediatricians reporting parental refusals in their practice increased from 74.5% in 2006 to 87% in 2013 (odds ratio, 2.29; P less than .001). These pediatricians estimated in 2013 that 8.6% of their patients refused at least one vaccine, compared with 4.5% in 2006. Similarly, 2.5% of parents refused some vaccines in 2006, the physicians reported, compared with 4.8% in 2013. Those refusing all vaccines increased from 2.1% in 2006 to 3.3% in 2013.

A perceived 73.1% of parents refused vaccines in 2013 because they regarded them as unnecessary, the pediatricians reported, compared with 63.4% in 2006. But parental concern over autism and/or thimerosal dropped from 74.2% of vaccine-refusing parents in 2006 to 64.3% in 2013. Further, the parents refusing vaccines because of safety/side effects concerns dropped from 73.7% in 2006 to 66.6% in 2013, and those worried about their children receiving too many shots more than halved from 42.1% in 2006 to 17% in 2013. Concern among parents about their baby being too small to receive vaccines also dropped.

Physicians estimated that 7.3% of their parents wanted to delay one vaccine, 7.1% wanted to delay multiple vaccines, and 4.3% wanted to delay all vaccines. Urban, inner-city pediatricians were less likely to have parents requesting delays than were parents in other areas, but requests for vaccine delays were geographically similar across different U.S. regions. Only the 2013 survey included questions on delaying vaccines.

Pediatricians reported that 75% of their patients wanted to delay vaccines to reduce discomfort to their child, and 72.5% wanted to delay because they perceived too many vaccines would overburden their child's immune system.

The percentage of pediatricians who always dismiss patients who continue to refuse vaccines increased from 6.1% in 2006 to 11.7% in 2013; they cited a lack of trust between physician and patient as a major reason (87.4% in 2006; 79.9% in 2013). Further, 80.5% of pediatricians reported in 2013 (the only year asked) that they dismissed vaccine-refusing patients out of concern for their other patients.

Despite no notable geographic differences in dismissals in 2006, the 2013 survey revealed that pediatricians in the West had three to four times greater odds of dismissing patients than those in the Midwest and South. Suburban pediatricians had three times greater odds of dismissing patients than did urban physicians.