



# INSIDER

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## **Mark Your Calendars:**

Immunize Georgia Conference September 15, 2017 Atlanta, GA

Georgia Pediatric Nurses & Practice Manager Associations Fall Meeting October 13, 2017 Cobb Galleria Centre, Atlanta, GA

Pediatrics on the Parkway (GAAAP)
Fall CME Meeting
October 26-28, 2017
Westin Buckhead Atlanta, GA

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Please contact Shanrita McClain at (404) 881-5054 more information.

# Factors Predictive of Parental Intent to Vaccinate Against HPV

Maternal education, Hispanic ethnicity, provider recommendation linked to intent to vaccinate teens

WEDNESDAY, June 14, 2017 (HealthDay News) -- Maternal education, Hispanic ethnicity, and provider recommendations are associated with parental intent to vaccinate adolescents against human papillomavirus (HPV), according to a study published in the June 8 issue of



the U.S. Centers for Disease Control and Prevention's *Preventing Chronic Disease*.

Kahee A. Mohammed, M.D., M.P.H., from the St. Louis University Center for Outcomes Research, and colleagues examined data for 10,354 adolescents aged 13 to 17 years from the 2014 National Immunization Survey-Teen to examine factors associated with parental intention toward HPV vaccination.

The researchers found that among unvaccinated adolescents, there were significant associations for Hispanic ethnicity (adjusted odds ratios [AORs], 1.87 and 1.57, respectively, for boys and girls), mothers with less than a high school diploma (AORs, 2.41 and 1.86, respectively, for boys and girls), and having a health care provider recommend the vaccine (AORs, 1.87 and 1.38, respectively, for boys and girls) with parents' intention to have their adolescent child vaccinated within the next 12 months. For boys, non-Hispanic black race was a significant predictor of parents' intent to vaccinate (AOR, 1.89).

"As HPV vaccination rates in the United States remain below the Healthy People 2020 goal, messages may need to be targeted based on maternal education, race/ethnicity, and provider recommendation," the authors write.

One author disclosed financial ties to Merck.

Abstract/Full Text

## Prioritizing children, elderly more beneficial during influenza vaccine shortages

Dorratoltaj N, et al. PLoS Comput Biol. 2017. doi:10.1371/journal.pcbi.1005521.

June 14, 2017

When vaccine supplies are limited during influenza pandemics, prioritizing high-risk groups, followed by children and the elderly for vaccination improved epidemiologic and economic outcomes for vaccine interventions, according to a study published in *PLOS Computational Biology*.

"While the Advisory Committee on Immunization Practices (ACIP) recommendations for the 2015-2016 influenza season partially account for risk of transmission, such as influenza-immunized individuals caring for immunosuppressed persons are recommended to avoid such contact with persons for 7 days after vaccination, they do not address prioritization of influenza vaccination among subpopulations," **Nargesalsadat Dorratoltaj, MPH, PhD,** from the department of population health sciences at Virginia Polytechnic Institute, and colleagues wrote.

To assess the monetary and epidemiologic influence of various influenza vaccine administration strategies during pandemics in Chicago and to support potential interventions, the researchers simulated a pandemic using agent-based transmission dynamic modeling. Scenarios that implemented multiple vaccine interventions for catastrophic (30.15%), strong (21.96%) and moderate (11.73%) outbreaks were compared against a coverage of 40%, an efficacy of 40% and a unit cost of \$28.62.

Dorratoltaj and colleagues also examined compliance, efficacy and start date for influenza vaccination using sensitivity analysis. For a group to be prioritized, risk of death, total deaths, net benefits and return on investment were considered.

Those aged 65 years or older were at the highest risk of influenza-related death during a catastrophic pandemic; however, those aged 0 to 19 years were the highest risk during a moderate or strong pandemic. The highest number of deaths and net benefits total are those that are considered high-risk between the ages of 20 to 64 years in all pandemics, and the best return investment was observed in individuals between the ages of 0 and 19 years in all pandemics.

Based on the data analyzed, the researchers determined that vaccination interventions and prioritization were warranted and cost-saving for the high-risk groups within each age group. Children, who may experience more contact with others who may be infected in a school scenario, had higher attack rates and were recommended to be prioritized below those at high-risk, along with those aged 65 years and older.

"This study can be extended to analyze for a range of vaccine compliance and efficacy values at different attack rates of influenza pandemics in different rural and urban areas of the United States and at the country level, to infer objective prioritization criteria for influenza vaccine interventions among different risk and age groups," Dorratoltaj and colleagues wrote. — by Katherine Bortz

**Disclosure:** Please see the full study for a list of all relevant financial disclosures.

# Register now! Dr. William L. Atkinson, IAC's associate director for immunization education, will present a webinar on adolescent immunization and the 16-year-old platform on July 10

William L. Atkinson, MD, MPH, IAC's associate director for immunization education, will present a one-hour webinar titled "Adolescent Immunization Update and the 16-Year-Old Platform" on July 10 at 1:00 p.m. (ET). During his presentation, Dr. Atkinson will review the recommendations for adolescent vaccines, including those recommended at 11–12 years of age and those at age 16.

Register today for the webinar.

# Vaccines: One of Pediatricians' "Super Powers" to Protect Kids

Ari Brown, MD, FAAP

After twenty years in private practice pediatrics, I have had some pretty rewarding and memorable moments. I've convinced kids to drink more water, eat more vegetables, exercise regularly, and clean their rooms. My white coat is my super power!

These tiny victories remind me of why I love my job—I can make a positive difference in my patients' lives. I also feel this way when I vaccinate my patients.

My passion for immunization stems from a very personal experience with vaccines and vaccine preventable disease. I never had chickenpox.

My mom would ask my pediatrician one question at every annual well check: "Is there a chickenpox vaccine yet?" His response was always the same: "They're working on it." When I was old enough (and embarrassed enough that she always asked the same question), I asked my mom why she was so interested in a vaccine. She told me that if I got chickenpox now that I was older, it might kill me. Nice. Note to parents everywhere: never tell your child that she might die from something!

#### "I would never let a child die from a vaccine-preventable disease on my watch."

I went through my young adult life hoping I would never cross paths with a kid who had chickenpox. Choosing a career in pediatrics might be deadly, I thought. Thankfully, those people who were "working on" the chickenpox vaccine happened to be at the medical school I attended, and they were looking for study participants. I received my pre-licensure varicella vaccine in 1990 and mounted an awesome immune response prior to starting my pediatrics residency.

Fast forward to a cold winter night in 1995. As the senior resident on call in the intensive care unit, I briefly cared for a child with varicella and Group A Strep sepsis in the final hours of her life. Witnessing a child experience the very fate I had feared as a child was more than chilling. When the Food & Drug Administration approved the varicella vaccine just five months after the virus claimed the life of my young patient, it became my call to action. I would never let a child die from a vaccine-preventable disease on my watch.

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When people express concerns about vaccinations, I tell them honestly that no parent would ever want their child to have one of these illnesses. Like so many other pediatricians, I have devoted much time and energy in my daily practice convincing parents that vaccinations are really necessary and really important. And (after much trial and error!), I have found the most effective messaging and communication strategies to share vaccine information with families.

So, when a parent recently had a better sound byte than me, I was speechless. I did a one-year well check with a patient on his actual birthday. I apologized for having to give him shots on this celebratory day.

His mom said, "We are giving him the best birthday gift—the gift of protection!" I couldn't have said it any better!

## **Communication Toolkit: School-Age Children**

Updated 6/9/17



August in National Immunization Awareness month

Getting vaccinated according to the recommended immunization schedule is one of the most important things a parent can do to protect their child's health. Diseases can quickly spread among groups of children who aren't vaccinated. Whether it's a baby starting at a new child care facility, a toddler heading to preschool, a student going back to elementary, middle or high school – or even a college freshman – parents should check their child's vaccination records.

Child care facilities, preschool programs, schools and colleges are prone to outbreaks of infectious diseases. Children in these settings can easily spread illnesses to one another due to poor hand washing, not covering their coughs, and other factors such as interacting in crowded environments.

When children are not vaccinated, they are at increased risk for disease and can spread disease to others in their play groups, child care centers, classrooms and communities – including babies who are too young to be fully vaccinated and people with weakened immune systems due to cancer and other health conditions. Additionally, states may require children who are entering child care or school to be vaccinated against certain diseases. Colleges and universities may have their own requirements, especially for students living in residence halls. Parents should check with their child's doctor, school or the local health department to learn about the requirements in their state or county.

# National Center for Health Statistics releases data brief titled "Vaccination Coverage Among Adults Aged 65 and Over: United States, 2015"

The National Center for Health Statistics recently released the <u>data brief from its 2015 National Health Interview Survey</u>. Key findings from the survey data include:

- Among adults aged 65 and over, more than two-thirds had an influenza vaccine in the past 12 months (69.0%)
- More than one in two adults aged 65 and over had a tetanus vaccine in the past 10 years (56.9%)
- More than 6 of 10 adults aged 65 and over had ever had a pneumococcal vaccine (63.6%), while a little more than one-third had ever had a shingles vaccine (34.2%)
- Among adults aged 65 and over, vaccination coverage was highest for non-Hispanic white adults compared with non-Hispanic black and Hispanic adults
- Vaccination coverage was lowest among poor adults aged 65 and over
- Older adults have greater susceptibility to and complications from disease and so, they stand to benefit
  greatly from vaccinations as a preventive health measure. This report describes the receipt of an influenza
  vaccination in the past 12 months, at least one dose of pneumococcal vaccine, a one-time dose of shingles
  vaccine, and a tetanus booster in the last 10 years among community-dwelling adults aged 65 and over.
  Data are presented by sex, age group, race and ethnicity, and poverty status.

Access the full NCHS Data Brief. (PDF)

### **Question of the Week**

How effective are three doses of MMR vaccine compared to two doses for the prevention of mumps during an outbreak?

There are no published estimates of the effectiveness of a third dose of mumps-containing vaccine in the setting of a mumps outbreak. However, CDC recommends that a third dose of MMR may be offered in certain outbreak settings (e.g., when a large proportion of cases are in 2-dose MMR recipients). Information about mumps and mumps outbreaks is available on the CDC website at <a href="https://www.cdc.gov/mumps/outbreaks.html">https://www.cdc.gov/mumps/outbreaks.html</a>.

The Advisory Committee on Immunization Practices (ACIP) has established a Mumps Work Group to examine the epidemiology of mumps in more detail and to further assess the utility of a third dose of MMR vaccine in these outbreak situations.