

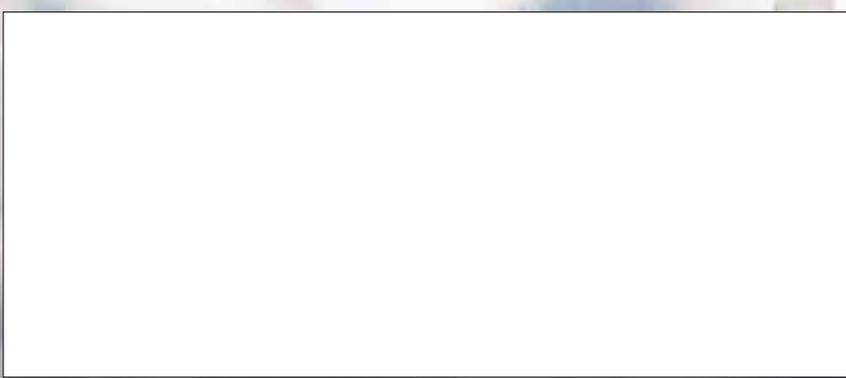
The profession is changing. Are you?

Adult immunizations

Renal artery stenosis

Where we practice: Athens

**Legal takes on MACRA
& complying with
government regulations**



Adult immunization: A call for action

By Sandra Adamson Fryhofer, M.D., MACP, FRCP



Sandra Adamson Fryhofer, M.D.

When we think about vaccines, childhood immunizations may first come to mind. The 2014 mumps outbreak in the National Hockey League^{1, 2} and the recent measles outbreak at Disneyland,^{3, 4, 5} however, remind us what happens when kids and adults don't get vaccinated.

In July 2015, the first U.S. measles death in 12 years (an adult woman) occurred in Washington state.⁶ The resurgence of childhood diseases – measles and mumps – made the headlines, but this is just the tip of the iceberg.

Each year, thousands of adult Americans get sick or die from vaccine-preventable diseases. As many as 40,000 adults are afflicted with, and as many as 4,000 adults die from, invasive pneumococcal disease (bacteremia and meningitis). The annual death toll for influenza for adults ranges from 3,000 to 49,000 people depending on the severity of the flu season.

Adults make up about 9,000 of the pertussis (aka whooping cough) cases reported each year. And adults can pass pertussis to others, which can be a death sentence for babies. About 3,000 adults are diagnosed with acute hepatitis B each year. Approximately one million adults suffer infection and pain from shingles each year.⁷ All these diseases can be largely prevented with appropriate immunization.

Historical snapshot: The last 30 years

When I finished Emory Medical School in 1983, adult vaccination was pretty simple: flu shots, pneumococcal vaccination for seniors, and also a tetanus (Td) booster every 10 years. The hepatitis B vaccine became available my senior year of medical school. I rotated on the hepatitis service with John Galambos, M.D. – in my eyes, the father of hepatology, and the real-life father of Atlanta gastroenterologist Michael Galambos, M.D.

I realized that hepatitis B was a disease I never wanted to acquire. When the vaccine became available at Grady, I

quickly volunteered to receive the three dose series of what was then a plasma-derived vaccine made from “pasteurized and inactivated” blood products of HBsAg-positive donors, not the more refined recombinant that is currently available.⁸ The following year, after resuscitating a patient later found to be hepatitis B positive, I was glad I did.

I became a believer in flu vaccination when I came down with flu as an intern at Grady and missed a week of work. I have not missed my annual flu vaccine since then.

I also remember the days when travelers had to get a shot of gammaglobulin to prevent hepatitis A infection. The hepatitis A vaccine was not licensed until 1995.⁸ My twins (now age 26) came down with chicken pox on a family vacation – only a few months before the varicella vaccine became available.⁸

We've come a long way with adult vaccinations

There are now 13 different vaccines recommended for adults by the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP).⁹ ACIP's recommendations have been

evidence-based (using the GRADE process) since October 2010.¹⁰ Each year, ACIP updates its adult immunization schedule by collating its latest recommendations into an easy-to-use reference guide. The schedule includes color-coded graphics that offer vaccine recommendations based on age, medical, and “other indications.” Each vaccine is also paired with detailed footnotes that highlight nuances of vaccination implementation, including order, timing, and intervals between vaccine doses.⁹

As the number of new vaccines that are recommended has increased, so have vaccine prices, which can be a financial barrier. Fortunately, ACIP recommendations do have coverage clout with health insurance companies. The Affordable Care Act mandates insurance coverage, with no cost sharing, for all Category A and B ACIP recommendations within one year after the

•••
When you vaccinate record it immediately in the Georgia Registry of Immunization Transactions and Services (GRITS) at www.grits.state.ga.us so it will be available to all hospitals and health care providers.
 •••

recommendation is made. This mandate does *not* apply to Medicare, however.¹¹

The 2016 adult schedule updates recommendations for the cancer-preventing HPV and lifesaving pneumococcal vaccinations. It also debuts and explains when to administer the new Meningococcal B vaccine, a topic that should be discussed with all prospective college students and their parents.⁹

Our adult immunization report card: Mediocre

How well are we doing getting our adult patients vaccinated? The latest National Health Interview Survey (NHIS) – our national adult immunization coverage “report card” – is a continuous, cross-sectional survey sample of households throughout our country, one that includes a snapshot of vaccination coverage among adults from August 2013 through June 2014.¹²

Vaccine coverage rates for Tdap (tetanus/diphtheria/acellular pertussis) and herpes zoster (shingles) did show an uptick of 2.9 percent and 3.6 percent, respectively. But when considering that all adults should have a one-time Tdap booster, the Tdap coverage rate of only 20.9 percent was disappointing. Zoster can be debilitating, especially for older patients; however, the coverage rate of zoster vaccination (recommended for those age 60 and older) was only 27.9 percent. Pneumococcal disease is a leading killer of the elderly and those who are at high risk of infection, but only 61.3 percent of those 65 and older and only 20.3 percent of those with high-risk medical conditions had received it.

Everyone six months and older needs a flu vaccination every year, but only 43.2 percent of adults reported receiving vaccination against flu.^{9, 12} Human papilloma virus (HPV) vaccine prevents cancer. It is a prophylactic vaccine and must be given before exposure to the virus for best results. Although the HPV vaccination’s three dose series should be routinely given during adolescents age 11-12 for best immune response, catch-up vaccination is recommended for young adult females through age 26 and for all adult males though age 21 (and for immunocompromised, HIV-positive males as well as males who have sex with other males though age 26).^{9, 13} HPV vaccination coverage rates for adults age 19-26 reporting receipt of at least one HPV vaccine dose was 40.2 percent for females and only 8.2 percent for males.¹²

These low coverage rates are disappointing. We are failing our patients. But it does not have to be that way.

A call to action

Vaccines are one of our greatest public health achievements. Adult immunization can help keep us and our patients healthy. Vaccines are not just for kids; adults need them

too. Our patients need the physicians who care for them to make this happen. Pharmacists have also stepped up to the plate as partners in this effort. You should encourage your patients to get vaccinated, and you should also update your own vaccination status. And when you vaccinate, record it immediately in the Georgia Registry of Immunization Transactions and Services (GRITS) at www.grits.state.ga.us so it will be available to all hospitals and health care providers.

Vaccination protects not only you but everyone around you. To quote fellow immunization advocates Bernie Rosof, M.D., and Bill Schaffner, M.D., “The single most important factor in promoting adult immunization is strong advocacy from a physician.”¹⁴

In other words, don’t wait.

Dr. Fryhofer is an Atlanta internist who serves as the American Medical Association (AMA) and American College of Physicians (ACP) liaison to ACIP. She also serves on several ACIP vaccine work groups for the CDC. She is an adjunct associate professor at the Emory University School of Medicine and is on the medical staff at Piedmont Hospital.

References

- 1 Bernstein L. How can pro hockey players on teams across the U.S. get the mumps? Washington Post website, Available at <https://www.washingtonpost.com/news/to-your-health/wp/2014/12/17/how-can-pro-hockey-players-on-teams-across-the-u-s-get-the-mumps/>. Accessed on March 12, 2016.
- 2 Klein J. Mumps Outbreak Prompts N.H.L. Teams to Take Precautions, New York Times website, Available at http://www.nytimes.com/2014/12/07/sports/hockey/mumps-outbreak-prompts-nhl-teams-to-take-precautions.html?_r=0. Accessed on March 12, 2016.
- 3 Measles Cases and Outbreaks, CDC website, Available at <http://www.cdc.gov/measles/cases-outbreaks.html>. Accessed on March 12, 2016.
- 4 Zipprich J, Winter K, Hacker J, Xia D, Watt J, Harriman K, et al. Measles Outbreak — California, December 2014–February 2015. MMWR Morb Mortal Wkly Rep. 2015; 64(06):153-154.
- 5 Kaplan K. Vaccine refusal helped fuel Disneyland measles outbreak, study says. LA Times website, Available at <http://www.latimes.com/science/sciencenow/la-sci-sn-disneyland-measles-under-vaccination-20150316-story.html>. Accessed on March 12, 2016.
- 6 Szabo L. Measles kills first patient in 12 years, USA Today website, Available at <http://www.usatoday.com/story/news/2015/07/02/measles-death-washington-state/29624385/>. Accessed on March 12, 2016.
- 7 The National Vaccine Program Office, National Adult Immunization Plan, HHS.gov website, Available at <http://www.hhs.gov/nvpo/national-adult-immunization-plan/index.html>. Accessed on March 12, 2016.
- 8 Vaccine Timeline, Historic Dates and Events Related to Vaccines and Immunizations, Immunization Action Coalition website, Available at <http://www.immunize.org/timeline/>. Accessed on March 12, 2016.
- 9 Kim DK, Bridges CB, Harriman KH, on behalf of the Advisory Committee on Immunization Practices. Advisory Committee on Immunization Practices. Advisory Committee on Immunization Practices recommended immunization schedule for adults aged 19 years or older, United States, 2016. Ann Intern Med. 2016; 164:184-194.
- 10 Evidence-Based Recommendations—GRADE, CDC website, Available at <http://www.cdc.gov/vaccines/acip/recs/GRADE/about-grade.html>. Accessed on March 12, 2016.
- 11 The Affordable Care Act and Immunization, HHS website, Available at <http://www.hhs.gov/healthcare/facts-and-features/fact-sheets/aca-and-immunization/index.html>. Accessed on March 12, 2016.
- 12 Williams WW, Lu PJ, O’Halloran A, et al. Surveillance of Vaccination Coverage Among Adult Populations- United States, 2014. MMWR Morb Mortal Wkly Rep. 2016; 65(1):1-36.
- 13 Petrosky E, Bocchini JA, Hariri S, Chesson H, Curtis CR, Saraiya M, et al. Use of 9-Valent Human Papillomavirus (HPV) Vaccine: Updated HPV Vaccination Recommendations of the Advisory Committee on Immunization Practices MMWR. 2015; 64(11); 300 -304.
- 14 Rosof B, Schaffner W. General internists crucial to raising adult immunization rates, October 2015, Available at <http://www.acpinternist.org/archives/2015/10/immunization.html>. Accessed on March 12, 2016.