IMMUNIZATIONS NEWSLETTER

PROVIDING GSA MEMBERS WITH UPDATES ON ADULT IMMUNIZATIONS
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FEATURES

News

• The Advisory Committee on Immunization Practices (ACIP) provides updated recommendations on use of quadrivalent live attenuated influenza vaccine (LAIV4) in the June 8 Morbidity and Mortality Weekly Report. ACIP states no preference among the available products—LAIV4, inactivated influenza vaccine (IIV), or recombinant influenza vaccine—but it notes that the effectiveness of the updated LAIV4, which contains A/Slovenia/2903/2015, against currently circulating influenza A(H1N1)pdm09-like viruses is unknown. That lack of evidence has led some groups, including the American Academy of Pediatrics, to call for preferential use of IIV during the upcoming season.

• GSA National Adult Vaccination Program (NAVP) Workgroup Chair R. Gordon Douglas, MD, was a panelist on preventing disease in older adults at the July Healthy Aging Summit in Washington, DC. He shared the importance of vaccines for older adults, advances in technology in recent vaccines, and how NAVP is helping raise immunization rates in older adults.

Resources

• “Adults: Vaccines are not just for kids” is a suggested theme for August 26–31, the designated week for promoting adult immunizations as part of National Immunization Awareness Month. The 2018 toolkit contains key messages, vaccine information, sample news releases and articles, sample social media messages, links to web resources from the Centers for Disease Control and Prevention (CDC) and other organizations, and logos, web banners, posters, and graphics to use with social media (#NIAM18).
One of the lessons learned from introduction of the human papillomavirus (HPV) vaccine with adolescents is that singling out a vaccine can raise concerns with patients. For example, doctors were frequently saying, “Today we recommend that your child receive Tdap and meningococcal vaccines, and then we also have HPV to consider.” Parents wondered why it was not as strongly recommended and felt it was optional and less important than the other two vaccines.

Making a routine recommendation for all vaccines due based on the CDC schedules makes it much more likely for a patient to accept. For example, “Today I recommend that your child receive Tdap, HPV, and meningococcal vaccines.” The same approach could be applied with adults. Consider saying, “Today I recommend that you receive influenza, pneumococcal, and shingles vaccines to help you stay healthy.” This can be a particularly helpful strategy to gaining acceptance with influenza vaccine.

With an expanded age-range indication under review at the U.S. Food and Drug Administration (FDA) and new data showing cancer-preventing protection that lasts for several years, the HPV vaccine will be in the spotlight in coming months. At its June meeting, the ACIP reviewed data on the 9-valent formulation (Gardasil-9—Merck) and prepared for making recommendations in October if FDA approves use of the product in adults up to age 45 years.

Despite HPV vaccine’s impressive effectiveness and safety record, the vaccine has not been without controversy since it was first marketed in 2006 for girls and women ages 9 to 25 years. Some parents worried that a vaccine that prevents a sexually transmitted disease would give “license” to teens to become sexually active. The antivaxxers have been active as usual. In Japan, reports of vague fatigue symptoms among vaccine recipients caused vaccination levels to drop from an impressive 70% to near zero (see March 2017 NAVP Immunizations Newsletter).

The 9-valent HPV vaccine is currently licensed by FDA for administration to females and males ages 9 to 25 years. It is a routine vaccine in the pediatric schedule at age 11 or 12 years for boys and girls and recommended by ACIP as a routine vaccine and for catch-up vaccinations in women through age 26; men through age 21; men who have sex with men (MSM), transgender persons, or persons with certain immunocompromising conditions through age 26. ACIP also says that men ages 22 to 26 years can receive the product if they were not vaccinated previously.
BIOLOGICAL SCIENCES

In an observational study of young Dutch women, the bivalent HPV vaccine in use in the Netherlands provided nearly full protection against the oncogenic viruses included in that formulation and an impressive level of cross-protection against other strains. The study and a related editorial were published in the May 15 issue of the Journal of Infectious Diseases.

This ongoing monitoring program is prospectively following 1,635 women who were eligible for catch-up vaccinations at ages 14 to 16 years in 2009–2010. Annual questionnaires and vaginal swabs provide insights into differences in outcomes between vaccinated (54% received the full 3-dose schedule) and nonvaccinated participants. Vaccine effectiveness (VE) ratios were 97.7% against HPV16 and 18 persistent infections and 61.8% against three high-risk strains (HPV31, 33, and 45) related to the two included in the product.

For incident and persistent infections combined, the VE was 77.5% for HPV16 and 18. The cross-protective VE against HPV31, 33, and 45 was 55.9% for incident infections. Importantly, the protection observed in this study has not waned over time, indicating VE that is sustained for 6 years or more.

These findings “have important implications, as they have robustly demonstrated that cross-protection is real and sustained in girls vaccinated with the bivalent vaccine and could increase protection against up to 84% of cervical cancers globally,” the editorialist wrote.

BEHAVIORAL/SOCIAL SCIENCES

The lower end of the recommended age range for administration of HPV vaccine was developed based on the knowledge that immunity is needed before a person becomes sexually active and is quickly exposed to this ubiquitous virus. The upper limit of the mid-20s recognizes that 90% of people are sexually active at that point and would likely have already been exposed to and possibly infected with whatever strains their partners had. Additionally, the cost-effectiveness of HPV vaccination becomes less favorable as the age at vaccination increases.

At the ACIP meeting, speakers presented data that recognize a more complicated picture of sexual activity in the United States and other countries. While women have a declining prevalence of HPV DNA from any strain as they age, the prevalence in men is about the same from their 20s through their 50s, according to published studies and unpublished CDC data. About half of men in their 20s reported one or more new sex partners during the past year, according to data from 2013–2014, as did nearly 40% of women. While these percentages decline in older age groups, the figure is about 10% for men and nearly that high for women in their 50s. Thus, people continue to be sexually active and to have new partners as they move through various life events, including divorce.

Studies that focused specifically on mid-adult women showed that 50% of those who engage in online dating report one or more new sex partners in the past year. At an ob/gyn clinic in Baltimore, 10% of women aged 35 to 60 years said they had had a new sex partner in the past year. For those women with new sex partners, 64% to 82% of new HPV detections were attributed to newly acquired infections.
Such data have led to an increased realization that men and women in older age groups can benefit from HPV vaccination. Presence of HPV16 and 18 is associated with cancers of the cervix, vagina, vulva, penis, anus, and oropharynx, and with high-grade intraepithelial neoplasias. The nononcogenic HPV types 6 and 11 are associated with development of anogenital warts and recurrent respiratory papillomatosis.

Some populations of patients have higher rates of HPV-associated disease. These include MSM, who have higher prevalence of anal HPV and a higher risk of anal cancer, particularly when they also have HIV infection. Women with HIV or AIDS have significantly higher rates of cervical cancer and some other HPV-associated outcomes than do women in the general population, according to presentations at the ACIP meeting.

ACIP is reassessing the cost-effectiveness of HPV vaccine in older age groups who have these risk factors or conditions. The new research and emerging models that recognize the wide variations in sexual activity among mid-adults will provide the basis for these evaluations.

As FDA works toward an early October decision on expanding the approved uses of the 9-valent HPV vaccine, an ACIP working group is preparing to report back at the committee’s October meeting with recommendations on several policy options:

- For catch-up:
  - Retain the current catch-up age
  - Extend catch-up through an older age

- For persons older than the determined catch-up age:
  - No recommendation
  - Vaccination based on individual decisions
  - Recommendation for specific groups

Even if ACIP declines to recommend the HPV vaccine for mid-adults, the ACIP task force is expected to recommend that the upper age recommendation be the same for men and women. The cutoffs based on FDA-licensed indications are currently age 25 years for women but age 26 years for men, and ACIP recommends catch-up vaccine for women through age 26 and men through age 21. These differences confuse providers and patients.

ACIP also recommends catch-up vaccine for MSM and the other special populations listed earlier. All of these recommendations will need to be revisited based on FDA’s decision about 9-valent HPV vaccine and ACIP’s conclusions on the main policy questions.

In short, the landscape for HPV immunization could be quite different by the end of October. Advocates for adult vaccinations should be learning more about this new opportunity to share evidence-based information with patients, colleagues, and others.
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**SOURCES AND RESOURCES**
