

16-Year-Old Immunization Visit: Key Points

In a nutshell

- Immunization rates in older adolescents are critically low for certain vaccines.
- The US child and adolescent immunization schedule, with its separate column for 16 years of age, makes clear that an immunization visit at age 16 is a milestone visit that can improve adolescent immunization rates.
- This visit is an opportunity to provide other preventive services important to the overall well-being of the adolescent, such as medical screening and psychosocial counseling to reduce risk behaviors.
- Ideally, an immunization and preventive health visit at age 16 will stimulate a preventive care mindset in adolescents that reaches into adulthood.

The problem

- Despite the fact that timely vaccination is one of the foundations of preventive health care for adolescents,¹ immunization rates for a number of vaccines recommended for teenagers are well below desired levels. The low rates mean that millions of teenagers are underprotected against potentially serious vaccine-preventable diseases such as meningococcal disease, human papillomavirus (HPV), and influenza.
- *NOTE: 2016 national immunization rates are listed on page 2. The adolescent immunization rates for 2017 for most vaccines are expected to be published in MMWR in August or September 2018; rates for influenza vaccine for the 2017-2018 season are expected to be out in the fall of 2018.*

ACIP schedule change

- In 2017, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) highlighted the need to improve immunization rates in teenagers by adding a separate column for age 16 years to the child and adolescent immunization schedule. (Previously, 16 years had been grouped with ages 17 and 18 years in one column on the schedule.)
- The new column serves to emphasize the importance of administering vaccines recommended at age 16 years, including quadrivalent meningococcal conjugate vaccine (MenACWY), meningococcal B (if indicated or based on discussion with the patient/family*), and influenza (seasonally), as well as catching up adolescents on vaccines or doses they may have missed, such as HPV and tetanus, diphtheria, and acellular pertussis (Tdap).

*For adolescents who are not at increased risk for meningococcal B disease, MenB vaccination is at the clinician's discretion. The American Academy of Pediatrics encourages pediatricians to discuss the availability of MenB vaccines with families.²

Potential benefits of a routine visit at age 16

- Older teens have a lower rate of preventive visits than do younger adolescents—who have an established immunization visit or “platform” at 11-12 years of age—and typically come to the office for reasons other than well care, such as sports physicals and completion of college forms. Given the relative infrequency of “well visits” by teenagers, the 16-year-old visit is particularly important because it gives health care providers an opportunity to administer any missed vaccine doses before eligible adolescents age out of coverage under the federal Vaccines for Children program, which ends at 19 years of age.

- Sixteen-year-olds are in the midst of a period of dynamic development. A health visit at this age provides an opportunity to deliver not only immunizations but also other vital preventive care services uniquely relevant to the needs of these older teens. Those services include psychosocial counseling to promote safe and healthy behaviors, such as substance abuse avoidance, safe driving, safe sexual behaviors, and regular exercise.
- The visit is also a prime opportunity to prepare teens for the transition from pediatric to young adult care, empowering them to take ownership of their health, including adherence to immunization recommendations such as annual flu vaccination.

The challenge in implementing an immunization platform at 16 years of age

- There is a lack of awareness among health care providers about the new 16-year age column on the ACIP schedule. In addition, health care providers tend to overestimate their practice's immunization rates and therefore may not recognize the need for a plan of improvement.³
- Firmly establishing the 16-year-old immunization platform in practice will require widespread recognition among health care providers that 16 years is a priority age for a preventive health visit and that vaccination is an important intervention during the visit.

Adolescent immunization rates

- *Healthy People 2020* targets for adolescent vaccines⁴
 - 80% coverage rate among adolescents 13-15 years of age for 1 dose of Tdap vaccine, 1 dose of MenACWY, and 3 doses of HPV vaccine. No *Healthy People 2020* goal has been established for 2 doses of MenACWY.
 - 70% coverage rate for teenagers through 17 years of age for annual seasonal influenza vaccination.
- MenACWY, 2016 data: Only 39% of eligible 17-year-olds had received the second dose of MenACWY (this dose is recommended at 16 years of age). In contrast, 82% of teens 13 through 17 years of age had received the first dose MenACWY vaccine (this dose is recommended at 11-12 years of age).⁵
- HPV, 2016 data: Among teens 13 through 17 years of age, just 50% of females and 38% of males had completed the HPV vaccine series.⁵
- Influenza: Only 49% of teens 13 through 17 years of age were vaccinated with influenza vaccine during the 2016-2017 flu season.⁶

Impact of vaccine-preventable diseases on adolescents

- Meningococcal disease: Adolescents are a key risk group. Approximately 21% of the nearly 2,000 deaths from meningococcal disease that occurred from 1999 through 2015 were in the 15- through 24-year-old age group.⁷ Overall case fatality rates for meningococcal disease are 10% to 15%, and up to 19% of survivors suffer long-term consequences of the disease.⁸
- HPV: Half of the 14 million new HPV infections that occur each year in the United States are in the 15- through 24-year-old age group, putting these adolescents and young adults at risk for cervical and other cancers later in life.⁹
- Influenza: In the 2015-2016 and 2016-2017 flu seasons combined, adolescents 12 through 17 years of age accounted for approximately 27% of influenza deaths among patients younger than 18 years of age.¹⁰

Call to action

- Every health care professional can take action to help make the immunization platform visit at 16 years of age a reality and to create an expectation among teens, parents, and health care professionals that 16 years is an age when vaccines and other well-care services are routinely provided—and that such services are vital.
- Implementing the platform requires a proactive approach, such as identifying 16-year-olds who are due for their annual immunization and preventive health visit and reaching out to them rather than waiting for them to come in to the medical office on their own. *[More on implementation directly below.]*

How health care practices can implement the 16-year-old immunization visit

- Measure adolescent immunization rates to get a baseline and set goals for improvement.
- Identify and reach out to vaccine-eligible patients (e.g., remind and recall).
- Adopt a team approach and a routine vaccination workflow (e.g., use standing orders), and designate a vaccine champion to lead the practice’s immunization efforts.
- Capitalize on opportunities to immunize (check immunization status at every patient visit).
- Foster a culture of prevention, including scheduling annual preventive health visits for all teens.
- Educate families about the 16-year-old visit far in advance (as early as the 11- to 12-year-old immunization visit).

About the Adolescent Immunization Initiative

- The Adolescent Immunization Initiative (*All*) is a multidisciplinary group of experts in adolescent health and immunization, including pediatricians, adolescent medicine specialists, family physicians, nursing professionals, infectious disease experts, public health advocates, and pharmacy professionals.
- *All*’s mission is to increase immunization rates among older teens by collaborating with stakeholders to firmly establish an immunization platform at 16 years of age.
- *All* aims to raise awareness about the 16-year column on the ACIP schedule and its significance and help health care providers implement an immunization and preventive services visit for 16-year-olds in their practice. To learn more, you can read *All*’s white paper, “*Rationale for an Immunization Platform at 16 Years of Age*,” [<http://www.16yearoldvisit.org/download/white-paper.pdf>] and visit *All*’s website at www.16yearold.visit.org.

References cited above

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4. *Healthy People 2020*. 2020 topics & objectives: immunization and infectious diseases. <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>.
5. CDC. National, regional, state, and selected local area vaccination coverage among adolescents aged 13-17 years—United States, 2016. *MMWR*. 2017;66(33):874-882.

- 6.** CDC. Flu vaccination coverage, United States, 2016-17 influenza season. <https://www.cdc.gov/flu/fluview/coverage-1617estimates.htm>.
- 7.** National Vital Statistics Reports, 1999-2015.
- 8.** CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 2013;62(RR-2):1-28.
- 9.** CDC. Human papillomavirus vaccination: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 2014;63(RR-5):1-30.
- 10.** CDC. Influenza-associated pediatric mortality. <http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>.