

Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older — United States, 2016

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In October 2015, the Advisory Committee on Immunization Practices (ACIP)* approved the Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States, 2016. This schedule provides a summary of ACIP recommendations for the use of vaccines routinely recommended for adults aged 19 years or older in two figures, footnotes for each vaccine, and a table that describes primary contraindications and precautions for commonly used vaccines for adults. Although the figures in the

adult immunization schedule illustrate recommended vaccinations that begin at age 19 years, the footnotes contain information on vaccines that are recommended for adults that may begin at age younger than age 19 years. The footnotes also contain vaccine dosing, intervals between doses, and other important information and should be read with the figures.

Changes in the 2016 adult immunization schedule from the 2015 schedule included the following new ACIP recommendations:

- Interval change for 13-valent pneumococcal conjugate vaccine (PCV13) followed by 23-valent pneumococcal polysaccharide vaccine (PPSV23) from “6 to 12 months” to “at least 1 year” for adults aged ≥ 65 years who do not have immunocompromising conditions, anatomical or functional asplenia, cerebrospinal fluid leaks, or cochlear implants (1). The interval for adults aged ≥ 19 years with any of these conditions is at least 8 weeks (2).
- Serogroup B meningococcal (MenB) vaccine series should be administered to certain groups of persons aged ≥ 10 years who are at increased risk for serogroup B meningococcal disease (3).
- MenB vaccine series may be administered to adolescents and young adults aged 16 through 23 years (preferred age is 16 through 18 years) to provide short-term protection against most strains of serogroup B meningococcal disease (4).
- Nine-valent human papillomavirus (HPV) vaccine (9vHPV) has been added to the schedule and can be used for routine vaccination of females and males against HPV (5).

These recommendations were also reviewed and approved by the American College of Physicians, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Nurse-Midwives.

The 2016 adult immunization schedule contains the following changes from the 2015 schedule:

- In Figures 1 (“Recommended adult immunization schedule, by vaccine and age group”) and 2 (“Vaccines

* <http://www.cdc.gov/vaccines/acip/committee/members-archive.html>.

Recommendations for routine use of vaccines in children, adolescents, and adults are developed by the Advisory Committee on Immunization Practices (ACIP). ACIP is chartered as a federal advisory committee to provide expert external advice and guidance to the Director of the Centers for Disease Control and Prevention (CDC) on use of vaccines and related agents for the control of vaccine-preventable diseases in the civilian population of the United States. Recommendations for routine use of vaccines in children and adolescents are harmonized to the greatest extent possible with recommendations made by the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG). Recommendations for routine use of vaccines in adults are harmonized with recommendations of AAFP, ACOG, the American College of Physicians (ACP), and the American College of Nurse-Midwives (ACNM). ACIP recommendations adopted by the CDC Director become agency guidelines on the date published in the Morbidity and Mortality Weekly Report (MMWR). Additional information regarding ACIP is available at <http://www.cdc.gov/vaccines/acip>.



- that might be indicated for adults based on medical and other indications”), the row for “Meningococcal” was retitled “Meningococcal 4-valent conjugate (MenACWY) or polysaccharide (MPSV4)” and a new row for “Meningococcal B (MenB)” was added; additional text was added in indication bars to describe reasons for alternate dosing schedules for vaccines where such designations were appropriate. For example, the measles, mumps, and rubella (MMR) indication bar that stated “1 or 2 doses” in the 2015 schedule was revised to “1 or 2 doses depending on indication” in the 2016 schedule.
- In Figure 2, the text in the PPSV23 indication bar was revised from “1 or 2 doses” to “1, 2, or 3 doses depending on indication” to account for the recommendation that adults aged ≥ 19 years with immunocompromising conditions or anatomical or functional asplenia can receive up to 3 doses of PPSV23. The text in the *Haemophilus influenzae* type b (Hib) indication bar was revised from “1 or 3 doses” to “3 doses, post-HSCT recipients only” because adults who have received hematopoietic stem cell transplants are the only group for which a 3-dose series of Hib vaccination is recommended; for the other groups of adults for which Hib vaccination is recommended, the text in the indication bar has been revised to “1 dose.”
 - In Footnotes, the sections on influenza, pneumococcal, meningococcal, and HPV vaccination were changed as follows:
 - The language on vaccinating persons with egg allergies was clarified to state: “Persons aged ≥ 18 years with egg allergy of any severity may receive the recombinant influenza vaccine (RIV) because it does not contain any egg protein. Persons with hives-only allergy to eggs may receive the inactivated influenza vaccine (IIV) with additional safety measures.” (6).
 - Two errata in the 2015 footnotes on pneumococcal vaccination were corrected: 1) “Adults aged ≥ 19 years” replaced “adults aged 19 through 64 years” as the age at which adults with immunocompromising conditions, anatomical or functional asplenia, cerebrospinal fluid leaks, or cochlear implants should receive PCV13 followed by PPSV23 at least 8 weeks later (7); and 2) “Adults aged 19 through 64 years who are residents of nursing homes and other long-term care facilities” was removed from the list of persons for whom PPSV23 is recommended. These adults should be assessed for pneumococcal vaccination status and vaccinated as appropriate on the basis of age or medical indications (7).
 - Recommendations for the use of MenB vaccine for persons aged ≥ 10 years with certain conditions were included (3). Information was also included to indicate that persons aged 16 through 23 years (preferred age range is 16 through 18 years) may be vaccinated with either a 2-dose series of

MenB-4C or a 3-dose series of MenB-FHbp vaccine to provide short-term protection against most strains of serogroup B meningococcal disease (4).

- The use of 9vHPV vaccine for HPV vaccination of young adult females and males was added (4). For females, 2vHPV, 4vHPV, or 9vHPV may be used; for males, 4vHPV or 9vHPV may be used as indicated.
- In the table of contraindications and precautions to commonly used vaccines in adults, rows for MenACWY/MPSV4 and MenB vaccines replaced the single row for meningococcal vaccine in the 2016 table.

Details on these updates and information on other vaccines recommended for adults are available online under Adult Immunization Schedule, United States, 2016 (www.cdc.gov/vaccines/schedules/hcp/adult.html) and in the *Annals of Internal Medicine* (8). The full ACIP recommendations for each vaccine are also available online (www.cdc.gov/vaccines/hcp/acip-recs/index.html).

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