

6. Human papillomavirus vaccination (www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html)

General information

- Administer human papillomavirus (HPV) vaccine to **females through age 26 years** and **males through age 21 years** (males ages 22 through 26 years may be vaccinated based on individual clinical decision).
- The number of doses of HPV vaccine to be administered depends on age at initial HPV vaccination.
 - **No previous dose of HPV vaccine:** Administer 3-dose series at 0, 1–2, and 6 months (minimum intervals: 4 weeks between doses 1 and 2, 12 weeks between doses 2 and 3, and 5 months between doses 1 and 3; repeat doses if given too soon).
 - **Age 9–14 years at HPV vaccine series initiation and received 1 or 2 doses less than 5 months apart:** Administer 1 dose.
 - **Age 9–14 years at HPV vaccine series initiation and received 2 doses at least 5 months apart:** No additional dose is needed.

Special populations

- Adults with **immunocompromising conditions (including HIV infection)** through age 26 years: Administer 3 doses at 0, 1–2, and 6 months.
- **Men who have sex with men** through age 26 years: Administer 2- or 3-dose series depending on age at initial vaccination (see above); if no history of HPV vaccine, administer 3-dose series at 0, 1–2, and 6 months.
- **Pregnant women** through age 26 years: HPV vaccination is not recommended during pregnancy, but there is no evidence that the vaccine is harmful and no intervention needed for women who inadvertently receive HPV vaccine while pregnant; delay remaining doses until after pregnancy; pregnancy testing is not needed before vaccination.

7. Pneumococcal vaccination (www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/pneumo.html)

General information

- Administer to immunocompetent adults age 65 years or older 1 dose of 13-valent pneumococcal conjugate vaccine (PCV13), if not previously administered, followed by 1 dose of 23-valent pneumococcal polysaccharide vaccine (PPSV23) at least 1 year after PCV13; if PPSV23 was previously administered but not PCV13, administer PCV13 at least 1 year after PPSV23.
- When both PCV13 and PPSV23 are indicated, administer PCV13 first (PCV13 and PPSV23 should not be administered during the same visit); additional information on vaccine timing is available at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf.

Special populations

- Administer to adults age 19 through 64 years with the following chronic conditions 1 dose of PPSV23 (at age 65 years or older, administer 1 dose of PCV13, if not previously received, and another dose of PPSV23 at least 1 year after PCV13 and at least 5 years after PPSV23):
 - **Chronic heart disease** (excluding hypertension)
 - **Chronic lung disease**
 - **Chronic liver disease**
 - **Alcoholism**
 - **Diabetes mellitus**
 - **Cigarette smoking**

- Administer to adults age 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13 and a second dose of PPSV23 at least 5 years after the first dose of PPSV23 (if the most recent dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):

- **Immunodeficiency disorders** (including B- and T-lymphocytic deficiency, complement deficiencies, and phagocytic disorders)
- **HIV infection**
- **Anatomical or functional asplenia** (including sickle cell disease and other hemoglobinopathies)
- **Chronic renal failure and nephrotic syndrome**

- Administer to adults ages 19 years or older with the following indications 1 dose of PCV13 followed by 1 dose of PPSV23 at least 8 weeks after PCV13 (if the dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 5 years after the last dose of PPSV23):

- **Cerebrospinal fluid leak**
- **Cochlear implant**

8. Hepatitis A vaccination (www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepa.html)

General information

- Administer to adults who have a specific risk (see below), or lack a risk factor but want protection, 2-dose series of single antigen hepatitis A vaccine (HepA; Havrix at 0 and 6–12 months or Vaqta at 0 and 6–18 months; minimum interval: 6 months) or 3-dose series of combined hepatitis A and hepatitis B vaccine (HepA-HepB) at 0, 1, and 6 months; minimum intervals: 4 weeks between first and second doses, 5 months between second and third doses.

Special populations

- Administer HepA or HepA-HepB to adults with the following indications:
 - **Travel** to or work in countries with high or intermediate hepatitis A endemicity
 - **Men who have sex with men**
 - **Injection or noninjection drug use**
 - **Work with hepatitis A virus in a research laboratory or non-human primates infected with hepatitis A virus**
 - **Clotting factor disorders**
 - **Chronic liver disease**
 - Close personal **contact with an international adoptee** (e.g., household or regular babysitting) during the first 60 days after arrival in the United States from a country with high or intermediate endemicity (administer the first dose as soon as the adoption is planned)
 - Healthy adults **through age 40 years who have recently been exposed to hepatitis A virus**; adults older than age 40 years may receive HepA if hepatitis A immunoglobulin cannot be obtained

9. Hepatitis B vaccination (www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html)

General information

- Administer to adults who have a specific risk (see below), or lack a risk factor but want protection, 3-dose series of single antigen hepatitis B vaccine (HepB) or combined hepatitis A and hepatitis B vaccine (HepA-HepB) at 0, 1, and 6 months (minimum intervals: