**Figure 1** (Last updated September 13, 2017; last reviewed September 13, 2017)

Figure. Recommended immunization schedule for adults and adolescents with HIV infection, United States, 2017

Adapted from the Advisory Committee on Immunization Practices (ACIP) recommended immunization schedules for adults and adolescents. These immunization schedules are available at [www.cdc.gov/vaccines/schedules/hcp/index.html](http://www.cdc.gov/vaccines/schedules/hcp/index.html). Detailed information on these and other vaccines can be found at [www.cdc.gov/vaccines/hcp/acip-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/index.html).

<table>
<thead>
<tr>
<th>VACCINE</th>
<th>Age</th>
<th>CD4 Cell Count (cells/μL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13–18 years</td>
<td>19–26 years</td>
</tr>
<tr>
<td>Influenza¹</td>
<td>1 dose annually</td>
<td></td>
</tr>
<tr>
<td>Tdap/Td²</td>
<td>1 dose Tdap, then Td booster every 10 yrs</td>
<td></td>
</tr>
<tr>
<td>MMR³</td>
<td>2 doses if CD4 cell count ≥200</td>
<td></td>
</tr>
<tr>
<td>VAR⁴</td>
<td>2 doses if CD4 cell count ≥200</td>
<td></td>
</tr>
<tr>
<td>HZV⁵</td>
<td>2 doses</td>
<td></td>
</tr>
<tr>
<td>HPV⁶</td>
<td>3 doses</td>
<td></td>
</tr>
<tr>
<td>PCV13⁷</td>
<td>1 dose</td>
<td></td>
</tr>
<tr>
<td>PPSV23⁷</td>
<td>2 doses</td>
<td>2 doses</td>
</tr>
<tr>
<td>HepA⁸</td>
<td>2 doses depending on vaccine</td>
<td></td>
</tr>
<tr>
<td>HepB⁹</td>
<td>3 doses</td>
<td></td>
</tr>
<tr>
<td>MenACWY¹⁰</td>
<td>2 doses, then booster every 5 yrs</td>
<td></td>
</tr>
<tr>
<td>MenB¹⁰</td>
<td>2 doses depending on vaccine</td>
<td></td>
</tr>
<tr>
<td>Hib¹¹</td>
<td>1 or 3 doses depending on indication</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended for adults and adolescents with HIV infection**

**Recommended for adults and adolescents with HIV infection and other indications**

**Contraindicated**

**No recommendation**

**Abbreviations used for vaccines**

- **HepA**: hepatitis A vaccine
- **HepA and HepB**: hepatitis A and hepatitis B vaccine
- **HepB**: hepatitis B vaccine
- **Hib**: Haemophilus influenzae type b vaccine
- **HPV vaccine**: human papillomavirus vaccine
- **HZV**: herpes zoster vaccine (live)
- **IV**: inactivated influenza vaccine
- **MenACWY**: meningococcal A, C, W, and Y vaccine
- **MenB**: meningococcal B vaccine
- **MMR**: measles, mumps, and rubella vaccine (live)
- **PCV13**: 13-valent pneumococcal conjugate vaccine
- **PPSV23**: 23-valent pneumococcal polysaccharide vaccine
- **RIV**: recombinant influenza vaccine
- **Td**: tetanus and diphtheria toxoids
- **Tdap**: tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine
- **VAR**: varicella vaccine (live)

Report clinically significant postvaccination events to the Vaccine Adverse Event Reporting System (VAERS) at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7967. All vaccines listed in this immunization schedule except herpes zoster and 23-valent pneumococcal polysaccharide vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a claim is available at [www.hrsa.gov/vaccinecompensation](http://www.hrsa.gov/vaccinecompensation) or by telephone, 888-336-2662.
1. Influenza vaccination
Administer age-appropriate inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV) to adults and adolescents annually. Administer IIV or RIV to pregnant women. For adults and adolescents with a history of hives-only egg allergy, administer IIV or RIV. Those with a history of egg allergy other than hives (e.g., angioedema or respiratory distress) may receive IIV or RIV in a medical setting under supervision of a health care provider who can recognize and manage severe allergic conditions. A list of currently available influenza vaccines is available at www.cdc.gov/flu/protect/vaccine/vaccines.htm.

2. Tetanus, diphtheria, and pertussis vaccination
Administer 1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) to adults and adolescents who were not previously vaccinated with Tdap, followed by a tetanus and diphtheria toxoids (Td) booster every 10 years. Administer 1 dose of Tdap to women during each pregnancy, preferably in the early part of gestational weeks 27–36. Information on the use of Tdap or Td as tetanus prophylaxis in wound management is available at www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm.

3. Measles, mumps, and rubella vaccination
Administer a 2-dose series of measles, mumps, and rubella vaccine (MMR) at least 1 month apart to adults and adolescents with a CD4 cell count ≥200 cells/μL who do not have evidence of immunity to measles, mumps, and rubella (born before 1957, documentation of receipt of MMR, or laboratory evidence of immunity or disease). Pregnant women with a CD4 cell count ≥200 cells/μL who do not have immunity to rubella should receive a 2-dose series of MMR at least 1 month apart after pregnancy. Adults and adolescents with a CD4 cell count <200 cells/μL should not receive MMR.

4. Varicella vaccination
Administer a 2-dose series of varicella vaccine (VAR) 3 months apart to adults and adolescents with a CD4 cell count ≥200 cells/μL who do not have evidence of immunity to varicella (documented receipt of 2 doses of VAR, born in the United States before 1980, diagnosis of varicella or zoster by a healthcare provider, or laboratory evidence of immunity). Those with a CD4 cell count <200 cells/μL should not receive VAR.

5. Herpes zoster vaccination
There is no recommendation for herpes zoster vaccine (HZV) for adults and adolescents with a CD4 cell count ≥200 cells/μL. Those with a CD4 cell count <200 cells/μL should not receive HZV.

6. Human papillomavirus vaccination
Administer a 3-dose series of human papillomavirus (HPV) vaccine at 0, 1–2, and 6 months to adults and adolescents through age 26 years. Pregnant women are not recommended to receive HPV vaccine.

7. Pneumococcal vaccination
Administer 1 dose of 13-valent pneumococcal conjugate vaccine (PCV13) followed by 1 dose of 23-valent pneumococcal polysaccharide vaccine (PPSV23) at least 2 months later. Administer 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.

8. Hepatitis A vaccination
Administer a 2-dose series of single-antigen hepatitis A vaccine (HepA) at 0 and 6–12 months or 0 and 6–18 months, depending on the vaccine, or a 3-dose series of combined hepatitis A and hepatitis B vaccine (HepA-HepB) at 0, 1, and 6 months to adults and adolescents who may not have a specific risk but wants protection against hepatitis A infection. Administer a HepA-containing vaccine series to adults and adolescents at risk which includes chronic liver disease, receive clotting factor concentrates, men who have sex with men, inject illicit drugs, and travel in countries with endemic hepatitis A.

9. Hepatitis B vaccination
Administer a 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.

10. Meningococcal vaccination
Administer a 2-dose primary series of serogroup A, C, W, and Y meningococcal vaccine (MenACWY) at least 2 months apart, and revaccinate every 5 years. Serogroup B meningococcal vaccine (MenB) is not routinely recommended. Young adults and adolescents age 16 through 23 years (preferred age range is 16 through 18 years) may receive MenB (a 2-dose series of MenB-4C at least 1 month apart or a 3-dose series of MenB-FHbp at 0, 1–2, and 6 months) based on individual clinical decision.

11. Haemophilus influenzae type b vaccination
Adults and adolescents with HIV infection are not routinely recommended to receive Haemophilus influenzae type b vaccine (Hib). Administer Hib to those with asplenia, hematopoietic stem cell transplant, and other indications.