### SUMMARY OF RECOMMENDED VACCINES FOR ADULTS WITH HIV

<table>
<thead>
<tr>
<th>Vaccine Trade Name</th>
<th>Indications</th>
<th>Administration and Revaccination</th>
<th>Comments</th>
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<tr>
<td><strong>COVID-19/SARS-CoV-2</strong>&lt;br&gt;• Pfizer-BioNTech COVID-19 Vaccine&lt;br&gt;• Moderna COVID-19 Vaccine&lt;br&gt;• Janssen COVID-19 Vaccine</td>
<td>• Pfizer-BioNTech COVID-19 vaccine: ≥5 years old&lt;br&gt;• Moderna and Janssen COVID-19 vaccines: ≥18 years old&lt;br&gt;• As determined by CDC guidelines; approved for use under FDA Emergency Use Authorizations.</td>
<td>• Administer as per manufacturer’s instruction for each vaccine:  - Pfizer-BioNTech: 2 doses, given 3 weeks apart  - Moderna: 2 doses, given 4 weeks apart  - Johnson &amp; Johnson (Janssen): 1 dose</td>
<td>- Covered by the Countermeasures Injury Compensation Program</td>
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<td><strong>Haemophilus Influenzae Type B Conjugate (Hib)</strong>&lt;br&gt;• Hibrix; ActHIB</td>
<td>Patients at risk of Hib infection; see CDC guidelines for all adults</td>
<td>• Administer according to CDC guidelines for all adults at risk&lt;br&gt;• Revaccination: None</td>
<td>Not routinely recommended for people with HIV in the absence of other risk factors</td>
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<td><strong>Hepatitis A (HAV)</strong>&lt;br&gt;• HAV: Havrix; Vaqta&lt;br&gt;• HAV inactivated + HBV: Twinrix</td>
<td>All patients aged ≥1 year with HIV.</td>
<td>• Administer according to CDC guidelines&lt;br&gt;• Obtain HAV IgG at least 1 month after final dose of vaccination series to identify nonresponders&lt;br&gt;• If immune reconstitution appears likely, then consider deferring until patient’s CD4 count &gt;200 cells/mm³&lt;br&gt;• Revaccination: Nonresponders to primary HAV vaccination series should be revaccinated and counseled to avoid exposure</td>
<td>• Covered by the Vaccine Injury Compensation Program*&lt;br&gt;• See NYSDOH AI guideline Prevention and Management of Hepatitis A Virus in Adults With HIV</td>
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<td><strong>Hepatitis B (HBV)</strong>&lt;br&gt;• HBV 2-dose series: HEPLISAV-B&lt;br&gt;• HBV 3-dose series: Engerix-B, Recombivax HB&lt;br&gt;• HAV inactivated + HBV: Twinrix</td>
<td>• Patients who are negative for anti–HBs and do not have chronic HBV infection; see NYSDOH AI guideline HBV–HIV Coinfection, Figure 3</td>
<td>• Administer according to CDC guidelines for all adults&lt;br&gt;• Alternative administration strategies, such as a 3- or 4-injection double–dose vaccination series or an accelerated schedule of 0, 1, and 3 weeks, may be considered&lt;br&gt;• Test for anti–HBs 1 to 2 months after administration of the last dose of the vaccination series&lt;br&gt;• Revaccination: Nonresponders to the primary HBV vaccination series (anti–HBs &lt;10 IU/L) should receive a double–dose revaccination series; a 4-dose schedule should be considered</td>
<td>• In patients at risk for HBV infection, initial vaccination should not be deferred if CD4 cell count is &lt;200 cells/mm³&lt;br&gt;• If an accelerated schedule is used, a 4th dose booster should be administered at least 6 months after initiation of the series; the accelerated schedule is not recommended for patients with CD4 counts &lt;500 cells/mm³&lt;br&gt;• The HAV/HBV combined vaccine is not recommended for the double–dose or 4–injection HBV vaccination strategy&lt;br&gt;• A 2–dose (1 month apart) recombinant HBV surface antigen vaccine with a novel adjuvant (HEPLISAV-B) is available. There are no data available on use among people with HIV. There were no autoimmune adverse events among people with HIV exposed to the adjuvant&lt;br&gt;• See NYSDOH AI guideline HBV–HIV Coinfection&lt;br&gt;• Covered by the Vaccine Injury Compensation Program*</td>
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<td><strong>Human Papillomavirus (HPV)</strong>&lt;br&gt;• Gardasil 9</td>
<td>• All patients aged 9 to 45 years who were not previously vaccinated or did not receive a complete 3-dose series</td>
<td>• Administer through age 45 years as a 3-dose series according to CDC guidelines for adults with immunocompromising conditions&lt;br&gt;• Revaccination: None</td>
<td>• A 2–dose schedule is not recommended&lt;br&gt;• Because of the broader coverage offered by the 9–valent HPV vaccine, it is the only HPV vaccine currently available in the United States (see CDC HPV Vaccine Information for Healthcare Professionals for more information)&lt;br&gt;• Although the 9–valent vaccine has not been specifically studied in people with HIV, it is expected that the response will be the same in this population as with the 4–valent vaccine&lt;br&gt;• Follow recommendations for cervical and anal cancer screening in the NYSDOH AI guidelines Screening for Cervical Dysplasia and Cancer in Adults With HIV and Screening for Anal Dysplasia and Cancer in Adults With HIV&lt;br&gt;• Covered by the Vaccine Injury Compensation Program*</td>
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<td><strong>Influenza</strong>&lt;br&gt;• For brand names, see CDC flu vaccines table</td>
<td>• For all patients, as determined by CDC guidelines for all adults</td>
<td>• Administer annually during flu season (October through May) according to CDC guidelines for all adults&lt;br&gt;• Revaccination: None</td>
<td>• Covered by the Vaccine Injury Compensation Program*</td>
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*New York State Department of Health AIDS Institute: [www.hivguidelines.org](http://www.hivguidelines.org)
### SUMMARY OF RECOMMENDED VACCINES FOR ADULTS WITH HIV

![Table 21 Continued](see Tables 7–20 for source and reference information for individual vaccines)

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| **Measles, Mumps, and Rubella (MMR)**  
  • M–M–R II  
  • MMR + varicella: ProQuad | For patients with CD4 cell counts ≥200 cells/mm3 who do not have evidence of MMR immunity, as determined by CDC guidelines for all adults | Two doses at least 28 days apart  
  • **Revaccination:** Recommended only in the setting of an outbreak | Contraindicated for patients with CD4 counts <200 cells/mm3  
  • MMRV should not be substituted for MMR  
  • Those who previously received 2 doses of a mumps–containing vaccine and are at increased risk for mumps in the setting of an outbreak should receive a third dose to improve protection against mumps disease and related complications  
  • Covered by the Vaccine Injury Compensation Program* |

| **Meningococcal Serotype Non-B (MenACWY)**  
  MenACWY: Menactra  
  MCV4: Menveo | All patients with HIV  
  • See NYSDOH Health Advisories on Meningococcal Disease | Administer 2 doses of MenACWY at least 8 weeks apart in those not previously vaccinated  
  • For those previously vaccinated with 1 dose of MenACWY, administer the 2nd dose at the earliest opportunity at least 8 weeks after the previous dose  
  • **Revaccination:** Administer 1 booster dose of MenACWY every 5 years | MenACWY is preferred over MPSV4 in adults with HIV >55 years of age  
  • Covered by the Vaccine Injury Compensation Program* |

| **Meningococcal Serotype B (MenB)**  
  Bexsero; Trumenba | Patients at risk of MenB infection, as determined by CDC guidelines | Administer according to CDC guidelines for all adults  
  • **Revaccination:** None | Not routinely recommended for people with HIV in the absence of other risk factors  
  • Covered by the Vaccine Injury Compensation Program* |

| **Pneumococcal**  
  • 13-valent: Prevnar 13 (PCV13)  
  • 23-valent: Pneumovax 23 (PPSV23) | All patients with HIV | The complete series of vaccinations is 1 dose of PCV13 and 2 doses of PPSV23 before age 65 years, followed by 1 additional dose of PPSV23 after age 65 years  
  • See Table 17 for detailed administration guidelines based on age and previous vaccination history | The PCV13 vaccine should not be deferred for patients with CD4 count <200 cells mm3 and/or detectable viral load; however, the follow–up secondary administration of PPSV23 vaccine may be deferred until the patient’s CD4 count is >200 cells mm3 and/or viral load is undetectable  
  • Covered by the Vaccine Injury Compensation Program* |

| **Tetanus, Diphtheria, and Pertussis (Tdap) and Tetanus–Diphtheria (Td)**  
  Tdap: Adacel; Boostrix  
  Td: Tenivac; Decavac (generic 9Td) | For all patients, as determined by CDC guidelines for all adults | Administer according to CDC guidelines for all adults  
  • **Revaccination:** None | Covered by the Vaccine Injury Compensation Program* |

| **Varicella**  
  • Varicella: Varivax  
  • MMR + varicella: ProQuad | For patients with CD4 cell counts ≥200 cells/mm3 who do not have evidence of immunity to varicella, as determined by CDC guidelines for all adults | Administer according to CDC guidelines for all adults  
  • **Revaccination:** None | Contraindicated for patients with CD4 counts <200 cells/mm3  
  • Anti–varicella IgG screening should be performed in patients with no known history of chickenpox or shingles  
  • MMRV should not be used  
  • Antitherpetic agents should be avoided at least 24 hours before and 14 days after administration  
  • An interval of at least 5 months is recommended between administration of post–exposure varicella IgG (VarizIG) and varicella vaccination  
  • Clinical disease due to varicella after vaccination, a very rare event, should be treated with acyclovir  
  • Covered by the Vaccine Injury Compensation Program* |

| **Zoster**  
  • RZV: Shingrix—PREFERRED  
  • For information on ZVL (brand name Zostavax), see Table 20 | MCCC recommendation: Patients ≥18 years old with HIV (A2)  
  Updated 12/2021 | Two IM doses, spaced 2 to 6 months apart, regardless of past receipt of ZVL  
  • See CDC information on administering Shingrix  
  • Perform anti–varicella IgG screening in patients with no known history of chickenpox or shingles  
  • **Revaccination:** None | RZV is preferred over ZVL (A2)  
  • RZV provides strong protection against shingles and post–herpetic neuralgia. Currently, there is no data on efficacy specific to people with HIV; however, superior efficacy and longer duration of protection have been demonstrated among the elderly, and a recombinant vaccine is preferred people with HIV  
  • In addition, immunogenicity and safety following a 3-dose schedule has been demonstrated among people with HIV infection. Note: RZV is administered IM in distinction to ZVL which is delivered by SQ injection. |

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CDC: Centers for Disease Control and Prevention; MMR: measles, mumps, and rubella; NYSDOH AI: New York State Department of Health AIDS Institute; RZV: recombinant zoster vaccine; ZVL: zoster vaccine live.  
*Vaccine injury compensation program: Tel: 1-800-338-2382; U.S. Court of Federal Claims, 717 Madison Place, NW, Washington DC 20005  
New York State Department of Health AIDS Institute: [www.hivguidelines.org](http://www.hivguidelines.org)