

Immunization Recommendations for Adults with HIV¹

Vaccines	Recommended Schedules ^{1,2}	Additional Considerations
COVID-19	1 updated (2023–24) vaccine, regardless of prior vaccine history. See COVID-19 Vaccine Timing Guide	Advanced HIV infection: ≥ 1 updated vaccine(s). Additional doses based on clinical factors ³ .
Hepatitis A (HepA)⁴	Havrix[®], Vaqta[®] : 2 doses, 6 months apart Twinrix[®] (HepA/HepB) : 3 doses 0, 1, and 6 months apart	Check titers ≥ 1 month after series completion. If inadequate immune response, consider revaccination after CD4 ≥ 200 cells/mm ³ .
Hepatitis B (HepB)⁵	Engerix-B[®], PreHevbrio[®], Recombivax HB[®] : 3 doses 0, 1, and 6 months apart Heplisav-B[®] : 2 doses, 1 month apart Twinrix[®] (HepA/HepB) : 3 doses, 0, 1, and 6 months apart	Consider double-dose strategy if using Engerix-B [®] or Recombivax HB [®] . Check titers ≥ 1 month after series completion. If inadequate immune response, consider revaccination after CD4 ≥ 200 cells/mm ³ .
Human papillomavirus (HPV)	Gardasil 9[®] : 3 doses, 0, 1-2, and 6 months apart for ages 15-45 years	Not routinely recommended for ages 27–45 years but some people with HIV in this age range may benefit. Use shared clinical decision-making.
Influenza	1 dose annually	Live attenuated vaccine is contraindicated.
Measles, mumps, rubella (MMR)	M-M-R[®] II, Priorix[®] : 2 doses, 28 days apart ⁶	Contraindicated if CD4 < 200 cells/mm³.
Meningococcal A, C, W, Y conjugate (MenACWY)	MenQuadfi[®], Menveo[®] : 2 doses, 2 months apart; booster every 5 years	Meningococcal cases increased among people with HIV 2017–2022; vaccine coverage remains low.
Meningococcal B (MenB)	Bexsero[®] : 2 doses, 1 month apart Trumenba[®] : 2 or 3 doses, at 0, 1-2, and 6 months	Not routinely recommended for all adults with HIV. ⁷
Mpox virus⁸	JYNNEOS[®] : 2 doses, 1 month apart	Can be given intradermally or subcutaneously.
Pneumococcal (PCV15, PCV20, or PPSV23)	Prevnar 20[®] (PCV20) : 1 dose <i>OR</i> Vaxneuvance[®] (PCV15) + Pneumovax 23[®] (PPSV23) : > 2 months apart	Consider delay of PPSV23 until CD4 ≥ 200 cells/mm ³ .
Respiratory Syncytial Virus (RSV)	ABRSYVO[®], AREXVY[®] : 1 dose	May offer to adults ages ≥ 60 years; use shared clinical decision-making . Give ABRYSVO at 32 to 36 weeks of pregnancy during September-January. ⁹
Tetanus, diphtheria, pertussis (Tdap/Td)	1 dose Tdap (Boostrix[®], Adacel[®]), then Td (Tenivac[®], TDVAX[®]) <i>OR</i> Tdap booster every 10 years	During each pregnancy, give one dose of Tdap. ¹⁰
Varicella (VAR)	Varivax[®] : 2 doses, 28 days apart ¹¹	Contraindicated if CD4 < 200 cells/mm³.
Zoster (RZV)	Shingrix[®] : 2 doses for ages > 19 years, 2 months apart	Consider delay of Shingrix until CD4 > 200 cells/mm ³ .

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¹ For detailed information, see [Immunization Schedules | CDC](#).

² Vaccine doses administered ≤ 4 days before the minimum interval or age are considered valid. There is no maximum interval between vaccine doses. See [Recommended and minimum ages and intervals between vaccine doses | CDC](#).

³ Advanced HIV infection is defined as $CD4 < 200$ cells/mm³, history of an AIDS-defining illness without immune reconstitution, clinical manifestations of symptomatic HIV, or untreated HIV infection. For people with advanced HIV infection, further additional dose(s) of COVID-19 vaccine may be administered, informed by the clinical judgement of a healthcare provider and personal preference and circumstances. Any further additional doses should be administered at least 2 months after the last COVID-19 vaccine dose. See [Interim Clinical Considerations for the Use of COVID-19 Vaccines | CDC](#).

⁴ **Hepatitis A (HepA):** See [Prevention of Hepatitis A Virus Infection in the United States | CDC](#) and [Immunizations for Preventable Diseases in Adults and Adolescents with HIV | NIH](#).

⁵ **Hepatitis B (HepB):**

- See [double-dose vaccination considerations | NIH](#).
- If inadequate immune response, see [revaccination options](#) and [Who should receive post-vaccination testing? | CDC](#).
- For more details see [Immunizations for Preventable Diseases in Adults and Adolescents with HIV | NIH](#).

⁶ If no evidence of immunity to measles, mumps, or rubella.

⁷ **MenB vaccine:** Recommended for people with HIV who are at increased risk of meningococcal disease (e.g., asplenia, complement deficiency, complement inhibitor use, occupational exposure.) May be administered to people with HIV aged 16-23 years not at increased risk for meningococcal disease; use shared clinical decision-making. If using Trumenba, 3 doses are recommended for people at increased risk; 2 doses are recommended for people aged 16-23 years not at increased of risk. See [Meningococcal Vaccination | CDC](#).

⁸ **Mpox:** Intradermal (ID) sites include forearm, upper back below shoulder blade, or shoulder above deltoid muscle. Subcutaneous (SC) sites include back of upper arm/triceps. (If history of keloid scars, give SC). [Vaccines | Mpox | CDC](#).

⁹ **RSV:** See [Use of Respiratory Syncytial Virus Vaccines in Older Adults](#) and [Use of the Pfizer Respiratory Syncytial Virus Vaccine During Pregnancy for the Prevention of Respiratory Syncytial Virus–Associated Lower Respiratory Tract Disease in Infants](#).

¹⁰ **Tdap:** See [Tdap Vaccine & Pregnancy | CDC](#).

¹¹ If no evidence of immunity to varicella.