Cervical Cancer Screening

- Clinicians should perform screening for cervical and genital tract dysplasia and cancer in patients with HIV who have a cervix
  - <30 y/o: Pap (without HPV co-testing) within at least 2 years of onset of receptive sexual activity or by age 21. Repeat pap every 12 months. If results of 3 consecutive Pap tests are normal, follow-up pap can be performed every 3 years.
  - ≥30 y/o: Pap with HPV co-testing- If negative, follow-up pap with HPV-co-testing every 3 years; or pap testing only every 12 months. If results of 3 consecutive pap tests are normal, follow-up pap can be performed every 3 years.
  - Note: if a result of "insufficient specimen for analysis" has been reported, repeat cervical cytology within 2-4 months.
  - Clinicians should continue cervical cancer screening as indicated for a patient's lifetime (do not end at 65 y/o). Factors such as life expectancy and risk of developing cervical cancer should informed shared decision-making regarding continued screening.
  - If HPV 16/18, HPV positive ASCUS, LSIL and above > colpo. If ASCUS without HPV testing, repeat cytology in 6-12 months.

Anal cancer screening

- No national guidelines exist for routine screening for anal cancer. Some specialists recommend anal cytologic screening for PWH. Screening for anal cancer with anal cytology should NOT be done without availability to refer for HRA. If anal cytology indicates ASCUS, ASC-H, LSIL, HSIL then it should be followed by HRA.
- Per NYS HIV clinical guidelines: For all patients with HIV ≥35 y/o, regardless of HPV vaccine status.
  - Inquire annually about anal symptoms (ex- itching, bleeding, palpable masses/nodules, pain, tenesmus, feeling of rectal fullness); Perform visual inspection of perianal region; provide information about anal cancer screening and engage in shared decision making before DARE; perform DARE annually or whenever anal symptoms are present; annual anal pap testing.
- Clinicians should evaluate any patient with HIV <35 who presents with sxs that suggest anal dysplasia.

Resources

1. https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-opportunistic-infection/recommended-immunization-schedule
2. https://www.hivguidelines.org/hiv-care/primary-care-approach/immunizations/#tab_1
3. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html?s_cid=11706:cdc%20covid%20booster%20dose:sem.ga:p:RG:GM:gen:PTN:FY22
4. https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-opportunistic-infection/human-papillomavirus-disease
5. https://www.hivguidelines.org/hiv-care/anal-cancer/#tab_3

Summary Of Recommended Vaccines For Adults With HIV

Vaccine	Indications	Administration & Revaccination	Comments
COVID-19	• Regardless of CD4 count or viral load.	• Pfizer (age ≥12): 2 doses 0, 21 days. For untreated or advanced HIV(VL ≥200, CD4 <200 or <14%) at any time during initial vaccine period, administer supplemental vaccine 28 days after dose 2. Otherwise administer booster vaccine (same dose) ≥5 months after dose 2 of initial series. • Moderna: (age ≥18): 2 doses 0, 28 days. For untreated or advanced HIV per above administer supplemental vaccine 28 days after dose 2 of initial series (dose is same as initial dose). Otherwise, administer ≥5 months after dose 2 of initial series. Moderna booster of 50mcg is not the same as primary dose of 100mcg • J&J (age ≥18), 1 dose. Administer booster ≥2 months after primary vaccination.	• Authorized use of Pfizer for ages ≥5 years old. No booster shot unless 12 y/o and older. • Eligibility for booster #2 at least 4 months after 1st booster: adults 50 years and older; people ages 12 and older w/ mod/severe immunocompromising condition (ex- untreated or advanced HIV); people who got 2 doses (1 primary and 1 booster) of J&J vaccine.

Vaccine	Indications	Administration & Revaccination	Comments
Hepatitis A Virus (HAV)	• Patients ≥1 years old with HIV	• Administer 2 dose series (dosing interval depends on vaccine used: at 0 and 6-12 months for Havrix or 0 and 6-18 months for Vaqta)	• Assess antibody response 1 to 2 months after completion of the series. If negative, revaccinate when CD4 count >200. • *there is also a combined hepatitis A and hepatitis B vaccine (HepA-HepB Twinrix) if without immunity to HAV or HBV.
Hepatitis B Virus (HBV)	• Patients who are negative for hepatitis B surface antibody (anti-HBs) and do not have chronic HBV infection. • PWH with CD4 <200 with ongoing risk for HBV should be immunized. For PWH without risk factors, waiting for CD4 >200 is an option.	• Administer a 3 dose series of single antigen hepatitis B vaccine (Recombivax or Energix) at 0, 1, 6 months. • Or double dose Recombivax or Energix 4 dose series (0, 1, 2, 6 months) • Heplisav-B- two dose vaccine at 0 and 1 months. No data available on use among people with HIV. No autoimmune adverse events reported.	• Test for anti-HBs quant titer 1 to 2 months after last dose of vaccine series. Non-responders (anti-has <10 IU/L) to primary vaccine should receive a double-dose revaccination series. • Vaccinate individuals with isolated anti-HBc with 1 standard dose of HepB and check anti-HBs 1-2 months after. If anti-HBs is <100IU/mL, then vaccinate with complete series of Hep B (single or double dose) followed by anti-HBs testing.
Human Papillomavirus (HPV)-Gardasil	• All patients aged 9 to 45 years who were not previously vaccinated or did not receive a complete 3 dose series.	• Administer 3 dose series of 0, 1, 6 months.	• If significant delay occurs between doses, there is no need to restart series. • Delay HPV vaccination for pregnant persons. Pregnancy testing not routinely recommended before administering HPV vaccine.

Vaccine	Indications	Administration & Revaccination	Comments
Influenza	• For all adults.	• Administer annually during flu season (October through May).	
Measles, Mumps, Rubella (MMR)	• For patients with CD4 count ≥200 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 setting of an outbreak	• Contraindicated for patients with CD4 counts <200 • Contraindicated during pregnancy. Persons of childbearing potential who get MMR should wait 4 weeks before getting pregnant.
Meningococcal-Serotype Non-B (MenACWY)	• All patients with HIV	• 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 2nd dose at the earliest opportunity at least 8 weeks after previous dose • Revaccination: Administer 1 booster dose of MenACWY every 5 years	• MenACWY (menactra) is preferred over MCV4 (menveo) in adults with HIV >55 y/o
Pneumococcal (PCV13 & PPSV23)	• All patients with HIV	• 1 dose of PCV13 followed by PPSV23 at least 8 weeks later. Administer 2nd dose PPSV23 at least 5 years after first dose PPSV23. Additional dose of PPSV23 after age 65	• PCV13 (Prevnar) should NOT be deferred for patients with CD4 <200 and/or detectable viral load; however, the follow-up secondary administration of PPSV23 may be deferred until CD4 >200 and/or viral load is undetectable.

Vaccine	Indications	Administration & Revaccination	Comments
TDAP/Td	• For all patients, as determined by CDC guidelines for all adults	• Td or TDAP every 10 years. • For adolescent and adult PWH who have not received primary vaccine series: Administer one dose TDAP followed by one dose Td or TDAP 4 wks later; and another dose Td or TDAP 6-12 months after last Td/TDAP. TDAP can be substituted for any Td dose but is preferred as first dose.	• Administer regardless of previous vaccine status during pregnancy at GA 27-36 wks.
Varicella	• For patients with CD4 counts ≥200 who do not have evidence of immunity to varicella as determined by CDC guidelines for all adults.	• 2 doses series of VAR 3 months apart	• Contraindicated in pregnancy
Zoster	• Age ≥18 regardless of past herpes zoster or receipt of Zostavax per NIH/IDSA/CDC. NO CURRENT recommendation for use by ACIP in PWH.	• 2 dose series of Shingrex (RZV) IM 2-6 months apart.	• Consider delaying vaccine until patient is virologically suppressed on ART or wait for immune reconstitution if CD4 <200 to maximize immunologic response to vaccine. • Do NOT give in acute episode of herpes zoster • FDA approved for adults >50 and adults >18 y/o at increased risk of herpes zoster due to immunodeficiency or immunosuppression.