HIV CLINICAL RESOURCE ¼-FOLDED GUIDE

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SCREENING FOR ANAL DYSPLASIA AND CANCER IN ADULTS WITH HIV

NYSDOH AIDS INSTITUTE HIV CLINICAL GUIDELINE FEBRUARY 2025

ALL RECOMMENDATIONS P.1

HPV Prevention

- Given the increased lifetime risk of persistent HPV infection and increased prevalence of HPV-related cancers, clinicians should recommend the 3-dose nonavalent HPV vaccine series (0, 1–2, and 6 months) to all individuals with HIV aged 9 to 45 years regardless of CD4 cell count, prior cervical or anal screening results, HPV test results, HPV-related cytologic changes, or other history of HPV-related lesions. (A3)
- Clinicians should promote smoking cessation, optimal virologic control with antiretroviral therapy, and condom use for all patients with HIV, especially those at increased risk for anal cancer. (A3)

Anal Cancer Screening

- For all patients aged ≥35 years with HIV, regardless of HPV vaccination status, clinicians should:
  - Inquire annually about anal symptoms, such as itching, bleeding, palpable masses or nodules, pain, tenesmus, or a feeling of rectal fullness. (A2)
  - Perform a visual inspection of the perianal region (the perianal area is a 5 cm radius from the anal verge; in women, the vulvar and perianal areas overlap). (A3)
  - Provide information about anal cancer screening and engage the patient in shared decision-making regarding screening, including anal cytology before DARE. (A3)
  - Perform DARE annually and whenever anal symptoms are present. (A*)
- Clinicians should evaluate any patient aged <35 years with HIV who presents with signs or symptoms that suggest anal dysplasia. (A3)
- For adults aged ≥35 years who have HIV and are cisgender men who have ever had sex with men (A3), are transgender women (A3), or are transgender men who have sex with men (B3), clinicians should perform or recommend annual (A3) anal cancer screening to identify dysplasia and precancerous and malignant lesions. (Data for some populations, such as nonbinary individuals, are limited.)

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ALL RECOMMENDATIONS *(continued from P.1)* P.2

Anal Cancer Screening, *continued*

- For individuals who have been diagnosed with vulvar cancer or vulvar intraepithelial neoplasia grade 3, clinicians should initiate annual anal cancer screening within 1 year of diagnosis to identify dysplasia and precancerous and malignant lesions. (B1)
- For adults aged ≥45 years who have HIV and are cisgender women or are cisgender men or transgender men who have never had sex with men, clinicians should perform or recommend annual anal cancer screening to identify dysplasia and precancerous and malignant lesions. (A3)
- For individuals with HIV who have undergone solid organ transplant and have no other indication for earlier screening, clinicians should initiate anal cancer screening 10 years after transplant (as recommended for solid organ transplant recipients without HIV; see text) if that occurs earlier than the recommended age for screening. (A3)
- Clinicians should engage in shared decision-making regarding discontinuing screening for anal cancer in individuals whose life expectancy is less than 10 years. (B3)
- For individuals who have 2 consecutive anal screenings that are negative for both high-risk HPV and high-grade dysplasia on cytology, clinicians should perform anal cancer screening every 3 years. (B3)

Follow-Up of Abnormal Anal Cancer Screening

- Clinicians should refer patients with abnormal anal cancer screening results to a care provider with experience performing HRA and follow up as indicated in Figure 1: Follow-Up of Anal Cancer Screening Results, by Screening Strategy (available in full guideline). (A3)
- Clinicians should refer patients with suspected anal cancer determined by DARE or histology to an experienced specialist for evaluation and management. (A3)
- Clinicians should perform cervical cancer screening for any individual who is not up to date with current cervical screening guidelines. (A3)

Treatment and Follow-Up: HSILs and Anal Cancer

- Clinicians should perform post-treatment follow-up with repeat HRA at 6 months in patients who have been successfully treated for anal HSILs. (A3)

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ALL RECOMMENDATIONS *(continued from P.2)* P.3

Treatment and Follow-Up: HSILs and Anal Cancer, *continued*

- Clinicians should base follow-up after a patient's first post-treatment HRA and biopsy on the most recent histopathology findings (see Figure 1: Follow-Up of Anal Cancer Screening Results, by Screening Strategy, available in full guideline). (A3)
- For patients with a history of HSILs, clinicians should continue annual HRA or annual anal cancer screening, with referral for HRA if screening results are abnormal, as long as life expectancy exceeds 10 years (A3), until 2 consecutive anal screenings are negative for both high-risk HPV and high-grade dysplasia on cytology, after which clinical assessment and anal cancer screening should be performed every 3 years. (B3)
- Clinicians should immediately refer patients diagnosed with anal cancer to an oncologist or surgeon trained in the management of anal cancer. (A2)
- Clinicians should closely monitor patients with anal cancer in collaboration with the oncologist after definitive treatment for cancer. (A3)

PERFORMING AN ANAL CYTOLOGY TEST

- Perform an anal cytology test *before* using swabs for other STI testing, using lubricant, or performing DARE.
- A moistened nylon or polyester swab may be used to obtain an anal cytology sample according to the laboratory authority's collection instructions (cotton swabs should not be used). For detailed instructions, see University of California San Francisco Anal Neoplasia Clinic, Research and Education Center > Obtaining a specimen for anal cytology.
- Instruct patients to refrain from performing an anal enema or douche, engaging in anal sex, or inserting any objects into the anus for 24 hours before cytologic screening.

SELECTED KEY POINTS

HPV-Related Anal Disease in Individuals With HIV

- Lower rates of anal cancer screening for people of color have been described and represent inequities in health care.
- Missed opportunities for screening and prevention have been documented in 44% of individuals with anal cancer.
- Infection with more than 1 HPV type occurs more frequently among individuals with HIV, and such individuals can be at risk for cervical, vulvar, and perianal or anal SILs.
- The absence of HPV-related cervical disease in the genital tract does not eliminate the need to screen for anal dysplasia in cisgender women aged ≥45 years with HIV.

Other Forms of HPV Prevention

- It is important that clinicians inform patients with HIV about the risk of acquiring HPV and other STIs from close physical contact with the external genitalia, anus, cervix, vagina, urethra, mouth and oral cavity, or any other location where HPV lesions are present.
- Consistent and correct condom use remains an effective way to reduce the risk of transmission of most STIs, including HPV. However, it is important that clinicians inform patients that barrier protection, such as condoms and dental dams, may not fully protect against HPV.

Approaches to Screening

- All anal cancer screening strategies are acceptable, based on resources and available testing.
- Inform patients about the objective of anal cancer screening and risk prevention. It is important to discuss the specifics of the screening procedure and identify patient preferences to support informed decision-making about screening.
- The absence of high-risk HPV in the anal canal is associated with a low risk of high-grade dysplasia and anal cancer.
- For adults aged ≥45 years who have HIV and are cisgender women or are cisgender men or transgender men who have never had sex with men, a tailored and more acceptable approach to screening might be to offer hrHPV 16 testing alone as it has the highest negative predictive value; those who screen negative may repeat hrHPV screening every 2 to 3 years, whereas those who screen positive for HPV 16 would be referred to HRA.

TABLE 1: ANAL CANCER SCREENING STRATEGIES			
Screening Strategy	**Sensitivity (for predicting HSILs)**	**Specificity (for predicting HSILs)**	**Benefits and Limitations**
Anal cytology alone	88% (95% CI, 85–90)	30% (95% CI, 27–33)	Has a high sensitivity but relatively low specificity and generates a large number of HRA referrals
Anal cytology with hrHPV triage	85% (95% CI, 82–88)	47% (95% CI, 44–50)	Generates fewer unnecessary HRAs than some other strategies but includes the second step of hrHPV determination
hrHPV alone	96% (95% CI, 95–97)	27% (95% CI, 25–30)	Has the highest sensitivity but lowest specificity and triggers the most HRA referrals
hrHPV with anal cytology triage	85% (95% CI, 82–88)	48% (95% CI, 44–51)	Generates fewer unnecessary HRAs than some other strategies but includes the second step of cytology
Anal cytology with hrHPV cotesting	89% (95% CI, 86–91)	40% (95% CI, 37–44)	An efficient strategy but requires coordination with laboratory services

Abbreviations

ASC-US, atypical squamous cells of undetermined significance; **CI**, confidence interval; **DARE**, digital anorectal examination; **HRA**, high-resolution anoscopy; **hrHPV**, high-risk human papillomavirus; **HPV**, human papillomavirus; **HSIL**, high-grade squamous intraepithelial lesion; **SIL**, squamous intraepithelial lesion; **STI**, sexually transmitted infection.

← Use this code with your phone's QR code reader to go directly to a mobile-friendly version of the guideline.

This ¼-Folded Guide is a companion to the New York State Department of Health AIDS Institute guideline *Screening for Anal Dysplasia and Cancer in Patients With HIV*. The full guideline is available at www.hivguidelines.org.