

Checklist 2: Initial (Baseline) and Annual Laboratory Testing for Adults With HIV

Also see clinical comments in [Table 1: Clinical Comments on Recommended Laboratory Testing for Adults With HIV](#)

Initial AND Annual Testing

- HIV-1 RNA quantitative viral load
- CD4 lymphocyte count (optional to repeat annually if CD4 count >350 cells/mm³)
- CBC
- CMP, including eGFR, hepatic panel (AST, ALT, ALP, total bilirubin), fasting random blood glucose
- Lipid panel
- Hepatitis screening, including anti-HAV-IgG, HBsAg, HBsAb, HBcAb [a], and HCV Ab. Repeat testing is not necessary with documented HAV or HBV immunity.
- HCV viral load if previous positive HCV Ab or treatment for HCV. Repeat annually or as indicated for patients with ongoing exposure risk.
- Gonorrhea and chlamydia: Perform baseline NAAT at oral, anal, urethral, and cervical sites for MSM, transgender women, and others as indicated by individual exposure. Repeat annually or as indicated for patients with ongoing risk of exposure.
- Syphilis: Use the same laboratory consistently; in New York State, the [syphilis screening reverse algorithm](#) is the preferred testing method. Repeat annually or as indicated for patients with ongoing risk of exposure.
- TB screening: Obtain IGRA TB test (such as T-SPOT or QuantiFERON-TB) or, if IGRA is not available, tuberculin skin test (commonly known as PPD) at baseline for diagnosis of latent TB infection, unless the patient has previously tested positive for or has documented TB. Repeat annually for patients at risk (e.g., unstable housing, incarceration, travel, immigration).
- Trichomonas: All sexually active patients with a vagina with ongoing risk of exposure. Repeat annually or as indicated.
- Urinalysis
- Serum TSH

Initial Testing Only (unless otherwise indicated):

- [HIV-1/2 Ag/Ab](#) if not already performed
- HIV-1 genotypic resistance testing [b]
- G6PD [c]
- Measles titer
- Varicella titer
- Urine pregnancy test as needed

If Clinically Appropriate (i.e., the patient is symptomatic or has a CD4 count <200 cells/mm³):

- CMV PCR
- Toxoplasma titers
- Histoplasma titers
- Cryptococcal Ag

Abbreviations: Ab, antibody; Ag, antigen; ALP, alkaline phosphatase; ALT, alanine aminotransferase; AST, aspartate aminotransferase; c, core; CBC, complete blood count; CMP, comprehensive metabolic panel; CMV, cytomegalovirus; eGFR, estimated glomerular filtration rate; G6PD, glucose-6-phosphate dehydrogenase; HAV, hepatitis A virus; HBV, hepatitis B virus; HCV, hepatitis C virus; IgG, immunoglobulin; IGRA, interferon-gamma release assay; MSM, men who have sex with men; NAAT, nucleic acid amplification test; PCR, polymerase chain reaction; PPD, purified protein derivative; s, surface; TB, tuberculosis; TSH, thyroid stimulating hormone.

Notes:

- a. If HBsAg-positive, perform an HBV DNA viral load test.
- b. Repeat if a patient experiences ART failure; consult with an experienced HIV care provider as needed.
- c. Screen for deficiency to avoid the use of oxidant drugs, including dapsone, primaquine, and sulfonamides. Prevalence of G6PD deficiency is highest among people of African, Asian, or Mediterranean descent, but consider for all patients given the diversity of backgrounds.