

Authors: Morgan Owens, Sara Bares, MD, Nicole Kusnik, MD

Affiliations: Department of Internal Medicine – Division of Infectious Disease, University of Nebraska Medical Center, Omaha, NE 68198

Abstract Title: Adherence to STI screening in pregnancy and missed opportunities

Abstract:

Background:

Sexually transmitted infections (STIs) in pregnancy pose significant risks to maternal and neonatal health, including stillbirth, preterm birth, and congenital infections³. National guidelines recommend routine HIV, syphilis, chlamydia, and gonorrhea screening during pregnancy, with repeat testing for patients at increased risk². Despite these recommendations, rates of congenital syphilis have risen sharply in Douglas County, Nebraska, mirroring national trends and highlighting persistent screening gaps¹. To address this, we evaluated adherence to national prenatal HIV screening guidelines at a large academic medical center and examined demographic and clinical factors associated with missed testing.

Methods:

We conducted a retrospective analysis of pregnant individuals receiving obstetric care at the University of Nebraska Medical Center between March 2023 and March 2024. Demographic and clinical data were extracted from the electronic medical record. Descriptive statistics, Chi-square/Fisher's exact tests, and t-tests were used to evaluate predictors of screening adherence.

Results:

Of 1,673 patients, 84% completed HIV testing during prenatal care while 16% did not. Race, ethnicity, marital status, interpreter use, and neighborhood-level social vulnerability were not significantly associated with HIV testing. Insurance type, however, was significantly associated ($p=0.002$): among patients without a prenatal HIV test, 45.5% had Medicaid compared to 38.3% among those who did receive an HIV test. Conversely, 58.0% of patients with private insurance completed prenatal HIV testing compared with 47.4% without testing.

Conclusion:

Adherence to prenatal HIV testing was high overall, but disparities by insurance status highlight structural inequities in screening access. These findings underscore the need for targeted interventions to address insurance-related barriers and ensure universal screening to improve maternal-child health outcomes.

References

1. Screening for Syphilis in Pregnancy – Updated ACOG Recommendation. The American College of Obstetricians and Gynecologists. April 2024.

<https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2024/04/screening-for-syphilis-in-pregnancy>

2. Centers for Disease Control and Prevention. Screening Recommendations and Considerations Referenced in Treatment Guidelines and Original Sources – Sexually Transmitted Infections Guidelines. 2021. Available from: <https://www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm> [Last accessed: January 19, 2025].

3. Dude AM, Drexler K, Yee LM, Badreldin N. Adherence to Sexually Transmitted Infection Screening in Pregnancy. *J Womens Health (Larchmt)*. 2023 Jun;32(6):652-656. doi: 10.1089/jwh.2022.0409. Epub 2023 Apr 20. PMID: 37083421; PMCID: PMC10277975.