Screening and Incidence of Sexually Transmitted Infections Among Persons Living with HIV in the Illinois Department of Corrections

Authors: Danny Schreiber,[1] Emily N. Drwiega,[1] Miguel Perez,[1] Rita Uda,[1] Mahesh Patel,[2] Scott Borgetti,[2] *Melissa Badowski[1]

1. Department of Pharmacy Practice, Retzky College of Pharmacy, University of Illinois Chicago, USA
2. Division of Infectious Diseases, Department of Medicine, College of Medicine, University of Illinois Chicago, USA

*Correspondence to badowski@uic.edu

Disclosure: Borgetti has received grants or contracts from GSK for an RSV vaccine study. The other authors have declared no conflicts of interest.

Keywords: Chlamydia, co-infection, corrections, gonorrhea, HIV/AIDS, retrovirus, sexually transmitted infection (STI), syphilis.

Citation: Microbiol Infect Dis AMJ. 2025;3[1]:37-38. https://doi.org/10.33590/microbiolinfectdisam/RRVF1763

BACKGROUND AND AIMS

Sexually transmitted infections (STI) have a disproportionately high prevalence in individuals in custody and persons with HIV (PWH). However, limited data exist for the rates of infection in individuals who are in custody, particularly PWH, leading to a potential gap in timely and appropriate recognition and treatment of STIs. In the Illinois Department of Corrections (IDOC), persons in custody are screened at initial intake and those with HIV are seen by a multidisciplinary care team via telemedicine to manage HIV care and related STIs.[1,2]

MATERIALS AND METHODS

Electronic medical records of PWH receiving care via IDOC telemedicine in conjunction with the University of Illinois Hospital and Health Sciences System, Chicago, USA, were reviewed from January 1st, 2021–June 30th, 2024. The primary objective was to determine the frequency of screening and positivity for gonorrhea, chlamydia, and syphilis. HIV viral load and other known STI risk factors were also collected to assess predictors of STI positivity.

RESULTS

The majority of PWH in IDOC were Black, cisgender males. Of 241 patients with HIV in IDOC, a total of 226 (94%), 98 (41%), and 97 (40%) patients were screened for syphilis, gonorrhea, and chlamydia, respectively (Table 1). Of those screened at intake, 218/226 (96%), 26/98 (27%), and 26/97 (27%) were screened for syphilis, gonorrhea, and chlamydia, respectively. Following linkage to care with the multidisciplinary telemedicine team, more patients were screened for gonorrhea (70/98; 88%) and chlamydia (71/97; 73%) compared to intake. Sixty-five out of 226 (29%), 3/98 (3%), and 2/97 (2%) patients were positive for syphilis, gonorrhea, and chlamydia, respectively, with 41/65 (63%) representing new syphilis diagnoses. STI positivity was associated with women who were transgender ($p=0.02$), men who have sex with men ($p<0.001$), and a history of STI (within 12 months prior to intake; $p<0.001$). Linkage to care with the University of Illinois Health HIV telemedicine team had significantly more gonorrhea and chlamydia screenings than screening upon intake ($p<0.001$).

The majority of patients were screened for syphilis during their time in custody and approximately one in five were newly diagnosed. Gonorrhea and chlamydia were infrequently screened with low rates of positivity.[3]

Table 1: Sexually transmitted infection screening.

STI screening (N=241)	p value	
Screened for STI (composite), n (%)	229 (95)	
Screened for NG, n (%)	98 (41)	
At intake	28 (12)	p<0.001
Post-linkage to care with UIH Telemedicine Team	70 (88)	
Screened for CT, n (%)	97 (40)	
At intake	26 (27)	p<0.001
Post-linkage to care with UIH Telemedicine Team	71 (73)	
Screened for syphilis, n (%)	226 (94)	
At intake	218 (96)	p<0.001
Post-linkage to care with UIH Telemedicine Team	16 (7)	

CT: *Chlamydia trachomatis*; NG: *Neisseria gonorrhoeae*; STI: sexually transmitted infection; UIH: University of Illinois Hospital and Health Sciences System.

CONCLUSION

Routine screening for STIs for PWH by multidisciplinary care teams has the potential to identify a high proportion of STIs, with key patient demographics and past medical history serving as potential predictors of STI positivity.

References

1. Schreiber D et al. Screening and incidence of sexually transmitted infections (STI) among persons living with HIV (PWH) in the Illinois Department of Corrections (IDOC). Poster P-229. IDWeek, October 19-22, 2025.
2. Cloud DH et al. Public health and prisons: priorities in the age of mass incarceration. Annu Rev Public Health. 2023;44:407-28.
3. Dang CM et al. Paired testing of sexually transmitted infections with urine pregnancy tests in incarcerated women. Sex Transm Dis. 2021;48(8S):S20-5.