New HIV Diagnoses in a County Jail Highlight the Importance of HIV Testing in Correctional Settings

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Background

Individuals in the justice system are at increased risk for HIV, but few studies have characterized new HIV cases identified in correctional settings.

Methods

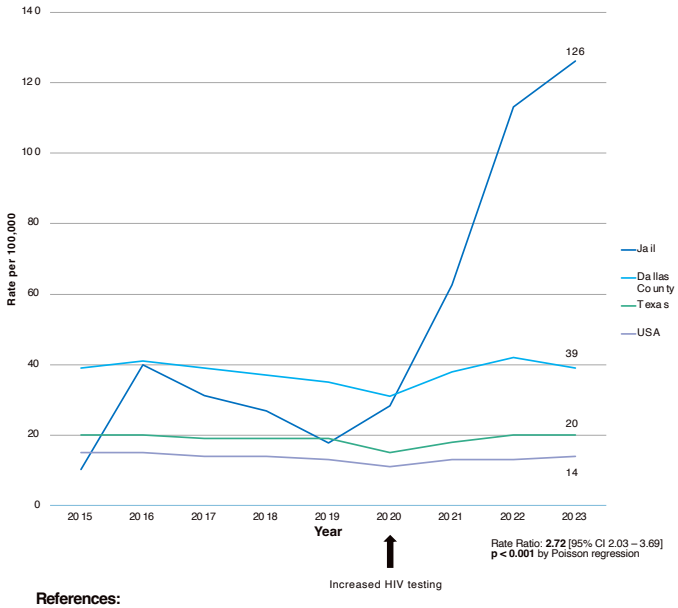
- Retrospective review of electronic health record (EHR) data from both Correctional Health at Dallas County (PEARL) and Parkland Health (EPIC), the safety-net healthcare system for Dallas County
- Cases were defined as a new HIV diagnosis first captured by Correctional Health at Dallas County from 2015-2023
- We compared the distribution of HIV risk factors to county, state, and national estimates from AIDSVu[1]
- We estimated rates of new HIV diagnoses overall and over time and compared these to county, state, and national data

Table 1: Characteristics of new HIV Cases (N = 200)

Age, median [IQR]	31 [26 – 38]
Gender, N (%)	
Male	146 (73%)
Female	41 (20.5%)
Transgender Female	13 (6.5%)
Race/Ethnicity, N (%)	
White, non-Hispanic	43 (21.5%)
Black, non-Hispanic	115 (57.5%)
Hispanic, any race	42 (21%)
CD4 count, median [IQR]	529 [357.5 – 674]
CD4 < 200 at diagnosis, N (%)	10 (5%)
Active substance use, N (%)	133 (66.5%)
Bacterial STI, N (%)	88 (44%)
Unstable housing, N (%)	51 (25.5%)

An HIV testing program in a large county jail in the US South identified rates of new HIV diagnoses 3 times the county rate and 9 times the national rate

Figure 1: New HIV Diagnosis Rates, per 100,000 Population



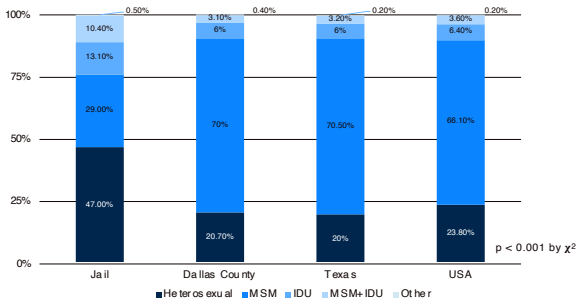
References:

[1]Sullivan PS, Woodyatt C, Koski C, Pembleton E, McGuinness P, Taussig J, Ricca A, Luisi N, Mokotoff E, Benbow N, Castel AD. A data visualization and dissemination resource to support HIV prevention and care at the local level: analysis and uses of the AIDSVu Public Data Resource. Journal of medical Internet research. 2020;22(10):e23173.

Results

- 200 cases identified, most had preserved CD4 counts
- Rates of new HIV diagnoses significantly increased after a systematic opt-out HIV testing program was implemented in 2020
- New diagnoses in the jail were more likely to identify heterosexual sex as their HIV risk factor compared to population estimates
- Substance use, bacterial sexually transmitted infections, and unstable housing were common at the time of HIV diagnosis

Figure 2: Proportions of HIV Risk Factors by Population



Conclusions

- Estimated HIV incidence rates in correctional settings are many times higher than in the community – reflecting the urgent need to detect HIV through comprehensive testing programs in these settings
- Those who are diagnosed with HIV in jail are mostly diagnosed early in the course of disease as evidenced by preserved CD4 counts at diagnosis
- Those who receive HIV testing in jail may not be accessing HIV testing in the community