Increased STD testing among HIV-infected adults in care — United States, 2009 – 2013

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BACKGROUND

- Sexually transmitted disease (STD) prevention services are important for HIV prevention efforts because STDs can increase HIV transmission by increasing HIV viral load and genital shedding
- Guidelines recommend that all sexually active HIV-infected persons be screened at least annually for *Treponema pallidum* (syphilis), *Chlamydia trachomatis* (CT), and *Neisseria gonorrhoeae* (GC)
- Little is known about temporal trends in STD testing among HIV-infected adults in the United States

OBJECTIVES

- To examine syphilis, CT and GC testing trends among HIV-infected adults receiving medical care in the United States during 2009 to 2013

METHODS

- The Medical Monitoring Project (MMP) is a national surveillance system that produces annual, cross-sectional estimates of behavioral and clinical characteristics of HIV-infected adults
- For the 2009-2013 data collection cycles, MMP utilized a 3-stage design to sample HIV-infected adults receiving outpatient medical care (i.e., sampling states, outpatient HIV care facilities, and patients)
- Data were collected via face-to-face or telephone interviews and medical records were abstracted at the facility from which the patient was sampled
- We used medical record data to determine syphilis, CT, and GC testing in the 12 months prior to interview using standard diagnostic methods
- Response Rates:
  - States: 100%
  - Facilities: ranged from 76–85%
  - Patients: ranged from 50–53%
- Data were weighted on the basis of known probabilities of selection and were adjusted for facility and patient non-response
- Using data collected from 14,072 sexually active patients, we used bivariate linear regression to estimate linear trends over time for syphilis alone and for syphilis, CT, and GC by year and stratified by sexual behavior and race/ethnicity
- All analyses accounted for the complex sample design and weights

RESULTS

- From 2009 to 2013, the proportion of sexually active HIV-infected adults tested for syphilis increased from 55% to 65% (β=0.022, P for trend < 0.01)
  - Testing increased significantly among MSM (58% to 69%, β=0.026, P for trend < 0.01) but not among MSW (54% to 61%, β=0.016, P for trend = 0.20) or WSM (50% to 59%, β=0.018, P for trend = 0.15 (Figure 1)
  - Testing increased significantly among non-Hispanic whites (48% to 64%, β=0.036, P for trend < 0.01), but not among non-Hispanic blacks (58% to 64%, β=0.013, P for trend = 0.2) or Hispanics (61% to 69%, β=0.014, P for trend = 0.14) (Figure 2)
- From 2009 to 2013, the proportion of sexually active HIV-infected adults tested for CT, GC, and syphilis increased from 20% to 36% (β=0.040, P for trend < 0.01)
  - Testing increased among MSM (29% to 39%, β=0.044, P for trend < 0.01), men who have sex with women (MSW) (25% to 33%, β=0.042, P for trend < 0.01), and women who have sex with men (WSM) (26% to 35%, β=0.030, P for trend < 0.01) (Figure 1)
  - Testing increased among all race and ethnicity groups included in this analysis: non-Hispanic whites (23% to 30%, β=0.038, P for trend < 0.01), non-Hispanic blacks (28% to 35%, β=0.037, P for trend < 0.01) and Hispanics (34% to 47%, β=0.051, P for trend < 0.01) (Figure 2)

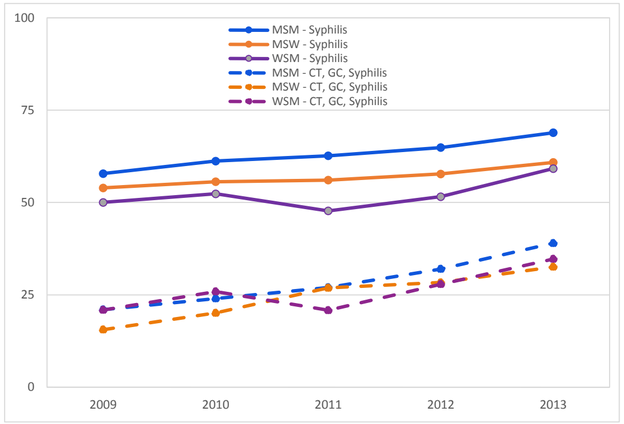

Figure 1. Testing for *Treponema pallidum, Chlamydia trachomatis, and Neisseria gonorrhoeae* and *Treponema pallidum* alone among HIV-infected men who have sex with men, men who have sex with women and women who have sex with men receiving medical care – United States, Medical Monitoring Project: 2009-2013

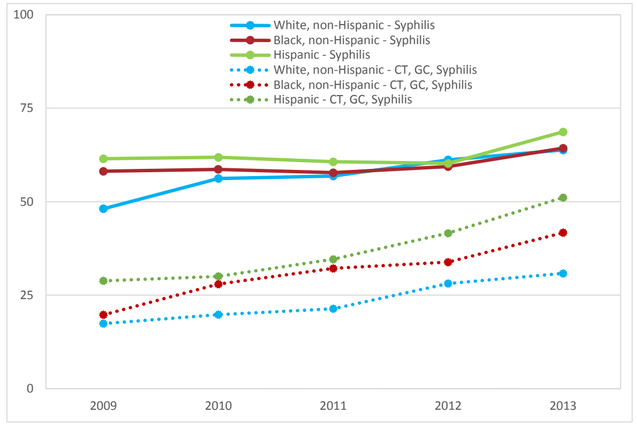

Figure 2. Testing for *Treponema pallidum, Chlamydia trachomatis, and Neisseria gonorrhoeae* and *Treponema pallidum* alone among HIV-infected adults in care, by race/ethnicity – United States, Medical Monitoring Project: 2009-2013

DISCUSSION

- Testing for syphilis increased overall among sexually active HIV-infected adults receiving medical care in the United States from 2009 to 2013, but improvements were not seen for all groups
  - Increases were identified for MSM and non-Hispanic whites only; however, these groups had the lowest testing in 2009
- Testing for syphilis, CT, and GC increased overall from 2009 to 2013
  - Improvements in testing were seen across all sexual behavior and race and ethnicity groups
  - Testing was highest among MSM and Hispanics
- While overall increases in STD testing indicate progress, testing remained far below recommended guidelines, which state that all sexually active HIV-infected persons should be screened at least annually for syphilis, CT, and GC

LIMITATIONS

- Patients could have received STD testing at a facility other than the one where they received their medical care
- MMP altered the way STD testing was captured in 2013 such that it was easier to record tests at multiple anatomical sites on the same day; however, all trends remained significant when we limited the analysis to 2009-2012 data only (*data not shown*)
- We were unable to determine if tests were administered as part of regular screening or due to the presence of symptoms

CONCLUSION

- From 2009 to 2013 the percentage of sexually active HIV-positive persons in care who received all recommended STD screening tests increased, however, in 2013 at least 64% of persons did not receive recommended testing
- Given the morbidity associated with STDs and their potential to increase HIV transmission, our findings suggest that enhanced efforts may be warranted to screen all HIV-infected sexually active adults for syphilis, CT, and GC

ACKNOWLEDGMENTS

We thank the MMP participants, the facilities, the field staff, the MMP Community and Provider Advisory Boards, and the Clinical Outcomes Team at CDC

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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