WISCONSIN AIDS/HIV PROGRAM NOTES

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Investigation of Increased Cases of HIV Infection in Young Black Men Who Have Sex with Men in Milwaukee

Mari Gasiorowicz, MA, Epidemiologist; Karen Johnson, HIV Prevention Coordinator for Youth and Communities of Color; Jim Vergeront, MD, Director, AIDS/HIV Program, Wisconsin Division of Public Health

Background and context

In its summary of 2008 surveillance data, the Wisconsin Division of Public Health, AIDS/HIV Program, reported that adjusted¹ reported cases of HIV in Black men who have sex with men (MSM) ages 13-29 years tripled between the years 2000 and 2008. Prompted by these findings, the AIDS/HIV Program, in collaboration with the City of Milwaukee Health Department (CMHD), invited the federal Centers for Disease Control and Prevention (CDC) to assist in conducting an epidemiologic investigation in Milwaukee. The on-site work took place in October and November 2009.

In addition to the AIDS/HIV Program and CMHD, local agencies in Milwaukee actively involved in the investigation included AIDS Resource Center of Wisconsin, Black Health Coalition, Diverse and Resilient, the Milwaukee LGBT Community Center, Sixteenth Street Community Health Center, UMOS, Medical College of Wisconsin, Health Institute of Milwaukee (HIM), Brady Street STD Clinic and others.

CDC scientists presented findings at two community meetings in March 2010, one for a primarily professional audience and another for members of the Black MSM community. The AIDS/HIV Program and CMHD hosted the meetings to foster discussion regarding the community and public health response. This article is based upon data presented by CDC² and subsequent discussion among the AIDS/HIV Program, the City of Milwaukee, Diverse and Resilient, the CDC, and others, regarding the implications of the findings and next steps.

The objectives of the investigation were to:

- explore whether the increase in diagnoses among young MSM might be attributable to intensified testing;
- investigate factors (demographic, behavioral, biological, structural and social) associated with the increase in diagnoses; and
- assess opportunities to prevent the spread of HIV among young MSM.

It is important to note that trends in HIV infection in Milwaukee are not unique. Cases of HIV infection in MSM have increased nationwide in recent years and rates of infection in young MSM are increasing more rapidly than in older men. In addition, infection rates in Black MSM are very high, as noted in several reports:

¹ Case numbers are adjusted to account for cases where risk exposure is not known.

² Jeffries, WL and Torrone, EA, "Increase in New HIV Diagnoses among Young Black Men Who Have Sex with Men (MSM), Milwaukee County, Wisconsin, 1999–2008" (PowerPoint slides, April 2010). Available at http://dhs.wi.gov/aids-hiv//Stats/CDCSlides_MkeBlackMSMInvest.pdf.

- In 34 states with confidential, name-based HIV infection reporting, the estimated number of newly diagnosed HIV/AIDS cases increased 26% among MSM from 2004 to 2007 compared to a 15% increase in the estimated number of newly diagnosed HIV/AIDS cases in the general population.³
- A study of MSM in Baltimore, Los Angeles, Miami, New York City, and San Francisco found that 46% of Black MSM were infected with HIV.⁴
- In 2008, among 500 MSM participants in a study in Washington, DC, 14% were HIVpositive.⁵

Based on estimates that 4%⁶ to 8% of males are MSM, the Wisconsin AIDS/HIV Program estimates that 20% to 40% of Black MSM (ages 15-59) in Milwaukee County may be HIV-positive, compared with 8% to 16% for both white and Latino MSM in this age range. In contrast, the HIV prevalence among Black females and non-MSM males is 0.7%.

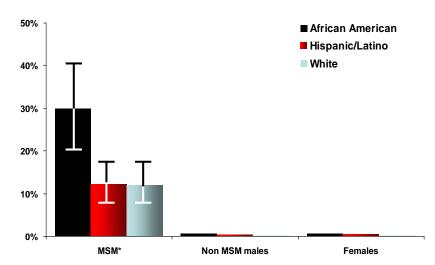


Figure 1: Estimated prevalence of HIV infection by demographic and racial/ethnic group, Milwaukee County, 2009

* MSM includes men who have sex with men and also inject drugs. Case numbers are adjusted to account for cases where risk exposure is not known.

³ CDC. HIV/AIDS surveillance report, 2007. Vol. 19. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009. Available at

http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2007report/table1.htm.

⁴ CDC. HIV prevalence, unrecognized infection, and HIV testing among men who have sex with men --- five U.S. cities, June 2004-April 2005, Morbidity and Mortality Weekly Report (MMWR) 2005: 54(24);597-601. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5424a2.htm.

⁵ MSM in DC: A Life Long Commitment to Stay HIV Free. Government of the District of Columbia, Department of Health, HIV/AIDS Administration, March 2010.

⁶ CDC estimates that nationwide, 4% of adolescent and adult men have sex with other men (CDC Fact Sheet. HIV and AIDS among Gay and Bisexual Men. March 2010. <u>http://www.cdc.gov/nchhstp/newsroom/docs/FastFacts-MSM-FINAL508COMP.pdf</u>). However, data from the Youth Risk Behavior Surveys statewide and from the Milwaukee Public Schools suggest that this estimate may be low for Milwaukee, which would overestimate the HIV prevalence in the population. Therefore the AIDS/HIV Program uses a range, estimating that 4% to 8% of males are MSM.

Methods

HIV and syphilis surveillance and testing data

The Wisconsin AIDS/HIV and STD Programs and CMHD provided CDC with aggregate surveillance data (excluding personally identifiable information) for the years 1999-2008 that included cases of HIV infection/AIDS, primary and secondary syphilis diagnoses, and data regarding HIV testing at publicly funded sites. Investigators reviewed data trends, comparing the periods 1999-2001 and 2006-2008, and abstracted information from CMHD records of 29 syphilis cases to include demographic characteristics and diagnoses of sexually transmitted diseases (including HIV).

Interviews with young MSM diagnosed with HIV and/or syphilis

CMHD and HIV service providers in Milwaukee contacted young men ages 15-29 years who were diagnosed in Milwaukee County with HIV and/or primary or secondary syphilis between January 2006 and June 2009, to recruit them to be interviewed. Forty-nine young men completed structured audio computer-assisted self interviews (ACASI). Of these men, 29 agreed to a qualitative interview conducted with a CDC investigator. Participants received an incentive of \$25 for each interview completed.

Results

Is the increase real?

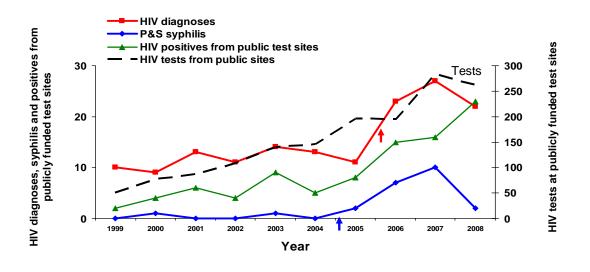
Collectively, diagnoses of HIV doubled among young Black, Latino, and white MSM (from 51 cases, 1999-2001 to 103 cases 2006-2008) with the entire increase occurring among Black and Latino MSM. Data analysis focused on whether the increase in diagnoses of HIV and syphilis in young MSM represented an increase in new cases or if expanded and more targeted efforts for HIV testing resulted in identification of new infections.

Trend data, shown in Figure 2, indicate the striking increase in testing efforts and the resulting HIV positive MSM identified through publicly funded testing sites. Between the periods 1999-2001 and 2006-2008, the number of tests conducted at publicly funded clinics tripled among Black and Latino men and increased by 25% among white MSM. The number of HIV positive MSM identified through publicly funded testing sites also increased in all groups – the largest percentage increase (30%) occurred among Black MSM, followed by increases of 20% among white MSM and of 9% among Latino MSM.

However, the increase in cases of HIV cannot be attributed fully to intensified testing. If increased testing identified primarily MSM who had been undiagnosed for a number of years, the expected increase in HIV would occur mainly in older MSM. Instead, the increase occurred in younger men who were more likely to have contracted HIV in recent years.

Increasing syphilis diagnoses can serve as an early sign of increased HIV transmission. The number of primary and secondary syphilis cases in young MSM increased from one case during 1999-2001 to 23 cases in 2006-2008, with 19 of the 23 (83%) in the recent period occurring among Black men. Primary and secondary syphilis diagnoses among young Black MSM in Milwaukee began to increase the year before HIV diagnoses in this population (as shown by arrows in Figure 2). Of the 29 young MSM diagnosed with syphilis between January 2006 and June 2009, 14 (48%) are currently co-infected with HIV. Eleven had a previous or concurrent HIV diagnosis and three had a subsequent diagnosis.

Figure 2: Cases of HIV and syphilis and HIV tests and positives identified at publicly funded sites among African American MSM 13-29 years of age, Milwaukee County, 1999-2008



Arrows show that the increase in primary and secondary syphilis diagnoses among young Black MSM in Milwaukee preceded the increase in HIV diagnoses by one year.

What factors are associated with increased HIV transmission?

Using factors identified in interviews with key informants in Milwaukee and Madison as well as prior research, CDC researchers developed a conceptual framework (reflecting factors expected to be important to the spread of HIV) to guide the development of the structured questionnaire and semi-structured qualitative interview. Factors included community acceptance, stigma, sexual networks, economic conditions, community norms, and acute and chronic stress. The key findings from the interviews, listed below, highlight the complexity and inter-relatedness of factors and the importance of social determinants of health.

It is important to note that the interviews were conducted with HIV-positive young MSM, and primarily those receiving HIV medical care. Many of the young men not currently receiving medical care could not be located. Except for MSM with syphilis diagnoses, few who were located agreed to participate in the interviews. Caution should therefore be used in generalizing the findings beyond this population.

Compared to young HIV-positive white and Latino MSM, young Black HIV-positive MSM:

- Had comparable sexual risk behaviors (inconsistent condom use, large number of partners). *Consideration: Risk behaviors alone may not explain increased HIV transmission among young Black MSM.*
- Had greater frequency of feelings indicative of internalized homophobia, a greater frequency of negative reactions of family members to whom they disclosed their sexual orientation, and were less likely to report feeling they could be open about their

sexuality at church, school, and work. *Consideration: The environment may drive men to live compartmentalized lives or engage in risky sexual behaviors.*

- Had greater frequency of economic and housing instability. *Consideration: Other research has found that high risk survival sex often accompanies housing instability.*⁷
- Had the same frequency of using the Internet to find partners. Three out of four of young MSM of all races used the Internet to find partners before their diagnosis. *Consideration: The Internet and other technologies should be considered as important conduits for delivering prevention interventions.*
- Had a greater frequency of having been pressured to have sex against their will. *Consideration: Persons engaging in non-consensual sex are less likely to be able to negotiate condom use.*
- Had a higher proportion of same-race partners. *Consideration: Rates of HIV are higher among Black MSM, so Black MSM who have sex with other men of the same race are more likely to become infected even if they use condoms at a similar rate.*
- Had a lower frequency of being asked if they engaged in male-to-male sex or to have informed their health care provider about having sex with other men prior to testing HIV positive. *Consideration: Health care providers who know that a male patient has sex with other men or is contemplating sex with men are more likely to recommend HIV testing and consistent use of condoms, as well as to ask about other MSM-related emotional and health issues.*
- Were younger, on average, at their homosexual debut and at diagnosis of HIV or syphilis, and were more frequently diagnosed with HIV and AIDS concurrently. *Consideration: These data suggest that young Black MSM may have been infected with HIV and/or syphilis close to their homosexual debut. Because of the challenges involved in targeting HIV prevention interventions to young MSM who have yet to accept and disclose their sexual orientation or same-sex behaviors, a general, population-level strategy, such as sexuality education that address same-sex behavior, may be the best alternative.*
- Had a higher proportion of older women and men to whom they could turn to teach them strategies for successful living. *Consideration: Openness to receiving support from safe adults is a potential strength on which intervention strategies can be built.*

The findings of the investigation suggest risk behavior alone may be insufficient to explain the increases in cases of HIV infection. Social and environmental factors appear to play an important role in increasing the vulnerability of young Black MSM to HIV.

CDC's recommendations

CDC summarized its recommendations as follows:

⁷ Examining the Evidence: The Impact of Housing on HIV Prevention and Care: Policy Paper from the Third Housing and HIV/Aids Research Summit, 2008. Available at <u>http://www.nationalaidshousing.org/PDF/Summary-Key%20Summit%20Findings.pdf</u>.

- continue HIV and STI testing, high quality partner services, and prevention programs;
- incorporate messages based upon lessons learned from the investigation (increasing transmission among young MSM and high HIV prevalence among MSM) into post-test counseling, provider communication with young MSM, partner services communications, media, and other interventions reaching young MSM;
- implement additional prevention activities to reach both HIV-positive and HIVnegative Black MSM, including individual, group, and community-level interventions to address risk behavior, homophobia, and other factors associated with risk; and
- engage community members and influential people in the lives of young Black MSM to support prevention and healthy expressions of sexuality.

Response to the findings of the investigation

The AIDS/HIV Program, City of Milwaukee Health Department, and community agencies have been working for more than twenty years to reduce HIV in MSM. Using the findings of the investigation, existing prevention and testing efforts to address HIV in Black MSM will be expanded and new initiatives will be developed to address underlying conditions. A planning process that engages a wide range of stakeholders will address key strategies. The strategies are expected to include:

- <u>**Community engagement**</u> to educate and build capacity in the Black MSM population about HIV risks and inform the broader Black community and community at large about the findings and implications of the investigation.
- <u>Leadership, public policies, and media</u> that acknowledge and seek to change conditions leading to high rates of HIV in Black MSM, including economic conditions, and stigma against lesbian, gay, bisexual and transgender populations in the population at large and particularly in communities of color.
- <u>Scientifically based, culturally appropriate interventions</u> to reach young men who have sex with men. These interventions include use of the Internet, text messaging and other technologies; stress the importance of HIV testing and medical care; and strategies for discussing and disclosing HIV status. Prevention efforts directed to young MSM diagnosed with HIV or syphilis can reduce the risk of the client acquiring additional infections and of transmitting infection to others.
- <u>Broader population strategies</u> such as comprehensive sex education in schools that addresses same-sex as well as heterosexual sexual behavior, to reach young men who may become infected soon after their homosexual debut and who cannot be reached with prevention strategies aimed at young MSM.
- Collaboration with <u>private and public medical providers</u> to conduct routine screening for HIV of persons who may be at risk for HIV, and annual HIV testing of men who have sex with men and to provide culturally appropriate services to MSM. MSM with syphilis and other sexually transmitted diseases should be screened for HIV and those with HIV should routinely be screened for syphilis.

- <u>Linkage to care and treatment</u> for young men who have sex with men, ensuring that special efforts are made to reach and provide culturally competent services to young Black and Latino MSM who may be less likely than white MSM to access services. HIV treatment benefits the individual and contributes to reduction of community viral load.
- <u>Other strategies</u> as identified through a planning process that will involve a wide range of stakeholders.

Summary

The epidemiologic investigation of increased cases of HIV infection in young Black MSM has provided important information and raised awareness of a significant health disparity. HIV diagnoses in young MSM in Milwaukee County have doubled over the course of the last decade, with the entire increase occurring among young Black and Latino MSM. The investigation has highlighted the convergence of factors such as stigma, lack of community acceptance, economic conditions, the intersection of HIV and syphilis, and the insularity of sexual networks in creating a context of vulnerability to HIV and syphilis in this population. Community meetings and other collaborative work pertaining to the investigation will continue to serve as a catalyst for a public health and community response to HIV in young MSM. An editorial in the Milwaukee Journal Sentinel shortly after meetings at which findings from the investigation were presented underscores the fact that "community leaders need to come together to address the high risk of contracting HIV."⁸

Additional information

HIV surveillance data for 2009 for Wisconsin and the City of Milwaukee can be found at the Wisconsin AIDS/HIV Program web site at: <u>http://dhs.wisconsin.gov/aids-hiv/Stats/index.htm</u>.

PDF slides summarizing the findings from the Milwaukee investigation of increased cases of HIV infection in young Black MSM are posted on AIDS/HIV Program website at http://dhs.wi.gov/aids-hiv//Stats/CDCSlides_MkeBlackMSMInvest.pdf.

⁸ JSOnline Editorial. Target black HIV rates: community leaders need to come together to address the high risk of contracting HIV. The latest numbers show that testing alone is not enough. Available at http://www.jsonline.com/news/opinion/86976117.html.