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# Release of Annual Wisconsin HIV Surveillance Report

The Wisconsin AIDS/HIV Program recently released its annual HIV surveillance report and other resources that summarize the state's most current AIDS/HIV statistics through 2010. The surveillance data are cumulative and include statistical information reported since 1983, the beginning of the HIV epidemic in Wisconsin. The surveillance report and supporting materials are located on the Wisconsin AIDS/HIV Program website (<a href="http://dhs.wisconsin.gov/aids-hiv/Stats/index.htm">http://dhs.wisconsin.gov/aids-hiv/Stats/index.htm</a>). Information resources were developed in a variety of formats that are intended to be useful to several groups, including public health professionals, clinicians, researchers, planning groups, and interested consumers. Surveillance reports are used by the Wisconsin Division of Public Health, public health departments and partners, nonprofit organizations, academic institutions, and the general public to help focus prevention efforts, plan services, allocate resources, develop policy, and monitor the HIV epidemic in Wisconsin.

## Changes in surveillance methodology

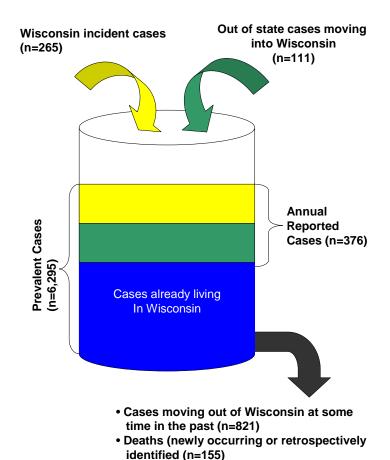
It is important to note that several changes in surveillance methods were implemented during 2010 in order to be consistent with national HIV incidence estimates and as part of the evolution of HIV surveillance. These changes impact the incidence and prevalence estimates presented in the 2010 surveillance report and supporting materials:

- During 2010, AIDS/HIV Program matched the HIV surveillance data to 25 years of Wisconsin death records (1983-2008) from the Wisconsin Vital Records Office, which resulted in identifying 155 persons with HIV who have died since 1983 and whose death was not previously recorded in the HIV surveillance database. The AIDS/HIV Program will continue to conduct this analysis annually, and will also match the HIV surveillance data with national death indices on a regular basis to identify additional deaths.
- 2. The annual incidence estimate in previous reports included both cases receiving their first HIV diagnosis in Wisconsin during the year, as well as cases that were already HIV positive and moved into Wisconsin during the year. Starting with the 2010 surveillance report, only cases receiving their first HIV diagnosis in Wisconsin will be included in the incidence estimate (n=265). Those moving into Wisconsin during the year will be included only in the prevalence estimate (n=111). This new method for estimating incidence is now comparable to that used by the Centers for Disease Control and Prevention (CDC) and other states, and allows better evaluation and direction of prevention resources.
- 3. Persons with HIV who were once reported to be living in Wisconsin but who are known to have moved to another state are no longer included in the annual prevalence estimate. During the analysis of the 2010 surveillance data, 821 cases known to have moved out of Wisconsin at some point in the past were removed from the prevalence estimate. This new method allows a more accurate reflection of the number and geographic location of those living with HIV infection in Wisconsin and thus helps to better direct care and treatment resources.

Changes in 2010 surveillance methods are illustrated in Figure 1.

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Figure 1. Flow of cases of HIV infection in and out of Wisconsin, 2010



As a result of these changes, the prevalence estimate was reduced by 976 and the incidence estimate for 2010 (n=265) will appear to be much lower than that reported in 2009 (n=443). Therefore, users of the HIV surveillance data should not compare the numbers presented for 2010 to numbers reported in previous reports. Instead, the new methods have been applied to estimates from previous years in the 2010 report to allow for trend analysis. The changes implemented during 2010 have improved the quality of the data, have allowed a more accurate presentation of the epidemiology of HIV in Wisconsin, and allow better evaluation of care and prevention services as well as health outcomes.

# Surveillance report highlights

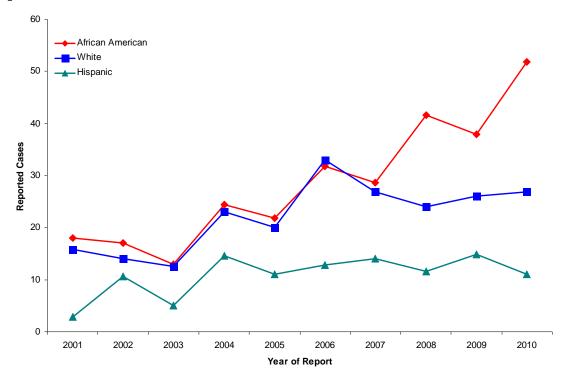
An Executive Summary of the recently released surveillance data (published as a PDF at <a href="http://www.dhs.wisconsin.gov/aids-hiv/Stats/2010CompSurvExecSum.pdf">http://www.dhs.wisconsin.gov/aids-hiv/Stats/2010CompSurvExecSum.pdf</a>) provides a summary of HIV surveillance trends in Wisconsin. Highlights from the Executive Summary include:

 During 2010, 376 cases of human immunodeficiency virus (HIV) infection were reported in Wisconsin, consisting of 265 persons who received their initial HIV diagnosis in Wisconsin and an additional 111 persons who received their initial HIV diagnosis in another state and moved into Wisconsin during 2010. Only the 265 cases are included in the incidence (new cases) estimates of the report.

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- Consistent with the normal fluctuation in HIV reporting, the 265 new cases of HIV infection reported during 2010 was lower than the 300 cases reported during 2009. However, the number of HIV infections is still higher than the number reported a decade ago (n=238 in 2001).
- African Americans were the only racial/ethnic group with an increase in reported cases of HIV infection during 2010, compared to 2009.
- After adjusting for unknown risk, in 2010, 73% (n~194) of HIV cases were MSM, including 70% (n~185) among MSM without a history of injection drug use, and 3% (n~9) among MSM who reported injection drug use (MSM&IDU). High risk heterosexual contact accounted for 18% (n~49) and those with a history of injection drug use accounted for 8% (n~20) of reported cases in 2010.
- Forty-eight percent of MSM reported with HIV infection during 2010 were less than 30 years of age (YMSM); the number of YMSM has been increasing since 2004 and the number of MSM ages 30 and older has decreased in recent years.
- Young African Americans are making up an increasing number of YMSM cases; 56% of YMSM cases reported during 2010 were African American. The number of YMSM cases of HIV infection that are White or Hispanic has been stable since at least 2007 (Figure 2).

Figure 2. Reported cases of HIV infection, MSM 13-29 years of age by race/ethnicity and year of report, Wisconsin, 2001-2010



• Among YMSM, 64% of cases reported in 2010 were from the Milwaukee MSA, 17% were from other metropolitan counties and 15% were from the Madison MSA. Reported cases of

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HIV infection among YMSM have increased in the Milwaukee MSA since 2004, largely reflective of the increase in HIV infection among African American YMSM. African American YMSM in Milwaukee make up almost one-fifth (18%) of all cases of HIV infection reported in Wisconsin during 2010.

- In 2010, females accounted for 84% of reported cases of HIV infection attributed to heterosexual transmission. The number of reported cases of heterosexual-attributed HIV infection that are African American females decreased from 2002 to 2006 but then increased again from 2007 to 2009. The number of reported cases that were White or Hispanic has been more stable throughout the decade. Among females with heterosexual attributed HIV infection reported in 2010, 66% were African American, 19% were White and 6% were Hispanic.
- At the end of 2010, 6,295 persons reported with HIV infection in Wisconsin were presumed to be alive and living in Wisconsin (111 cases per 100,000 population). This number does not include those who do not know they are infected with HIV. An estimated 21% of all persons living with HIV do not know they are infected, meaning an additional 1,670 people are estimated to be living with HIV in Wisconsin but are unaware of their status.
- An estimated 300 out of 1,000 African American MSM are HIV positive, compared to 105 Hispanic MSM and 45 White MSM.
- Of those presumed to be alive and living with HIV infection in Wisconsin, 61% live in the Southeastern region, 18% live in the Southern region, 10% live in the Northeastern region, 6% live in the Western region and 3% live in the Northern region. The remaining 2% of cases are currently in the Wisconsin correctional system.

# Reasons for the increase in HIV cases among young African American MSM

- An investigation conducted in 2009 by the CDC, the Wisconsin Division of Public Health's AIDS/HIV Program, and the City of Milwaukee Heath Department (CMHD) concluded that the increase in reported cases of HIV in young African American MSM was not merely the result of increased HIV testing in this population.<sup>1</sup> Both biological and structural factors play an important role.
- Biological factors refer to transmission risk. African American MSM tend to have sexual partners within their own racial/ethnic group to a greater degree than is true for MSM of other races. Since rates of HIV are higher in this population, a single act of unprotected sex has a much higher risk of transmission than it would in a population with lower rates of HIV. STD rates are also much higher in African Americans than in other racial/ethnic and having a STD can facilitate both transmission and acquisition of HIV.
- Structural factors, particularly anti-gay stigma, play an important role in HIV transmission in this population as well. Housing instability, HIV stigma, lack of attention to education about same-sex sexual behavior, and internalized homophobia are among the factors that

<sup>&</sup>lt;sup>1</sup> "Increases in New HIV Diagnoses among Young Black MSM, Milwaukee County, 1999-2008," March 2010, <a href="http://www.dhs.wisconsin.gov/aids-hiv/Stats/CDCSlides\_MkeBlackMSMInvest.pdf">http://www.dhs.wisconsin.gov/aids-hiv/Stats/CDCSlides\_MkeBlackMSMInvest.pdf</a>

<sup>&</sup>lt;sup>2</sup> HIV among African Americans, CDC Fact Sheet, September 2010, http://www.cdc.gov/hiv/topics/aa/pdf/aa.pdf.

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lead to risky sexual behavior, lack of HIV disclosure to partners, lack of knowledge about HIV risk and poor management of life situations in this population.<sup>3</sup>

# Wisconsin's response to the challenge facing young African American MSM

The AIDS/HIV Program estimates that 30% of African American MSM ages 15-59 are infected with HIV. Averting new infections in this population is a high priority. In addition to efforts to reach and serve all populations at risk for and infected with HIV, the Wisconsin AIDS/HIV Program supports initiatives specifically designed to reach this population, including the following:

- The Wisconsin AIDS/HIV Program, in collaboration with the CMHD, invited the CDC to assist in conducting an epidemiologic investigation in Milwaukee regarding increases in HIV infection in young African American MSM. The CDC recently published the findings.<sup>4</sup>
- The CMHD and the Wisconsin AIDS/HIV Program contracted with Diverse and Resilient (D&R), a local organization that serves MSM, to conduct a community engagement and planning process to mount a response to the epidemic in young African American MSM. The process has resulted in an increase in awareness on the part of both members of the population and service providers about the increase in cases on HIV in African American MSM and has led to a strategic multi-pronged approach to addressing this public health issue.
- The AIDS/HIV Program has expanded its targeted HIV testing efforts using the Social Networks Strategy, in which members of the population who test HIV-positive are invited to bring members of their social network in for testing. This initiative yields a much higher HIV positivity rate than do other targeted HIV testing and routine HIV screening initiatives.
- With CDC funds, the AIDS/HIV Program supports effective behavioral interventions to reach persons as risk for HIV, including African American MSM. These include group-level interventions in which published research has demonstrated reductions in HIV risk transmission behaviors.
- Three HIV research and service organizations in Milwaukee have successfully competed for federal funding to implement effective behavioral interventions. One community partner has secured private funding to implement community-level interventions.
- The AIDS/HIV Program coordinates among partner organizations to ensure effective use of resources and avoid duplication of effort.

# Links to HIV surveillance reports and additional resource information

A more detailed statistical report and related resources are located on the web include the following:

<sup>&</sup>lt;sup>3</sup> "Does Homophobia Play a Role in HIV Transmission among Young MSM in Milwaukee?" November 2010, http://www.dhs.wisconsin.gov/aids-hiv/Stats/CDC\_MKE\_Homophobia.pdf

<sup>&</sup>lt;sup>4</sup> "Increase in Newly Diagnosed HIV Infections among Young Black Men Who Have Sex with Men — Milwaukee County, Wisconsin, 1999–2008," CDC Morbidity and Mortality Weekly Report, Feb 4, 2011, available at <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6004a3.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6004a3.htm</a>.

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- A 61-page PDF report provides a detailed and comprehensive review of the HIV epidemic in Wisconsin. This report is titled "Wisconsin AIDS/HIV Comprehensive Surveillance Report: Cases Reported through December 31, 2010" and is located on the web at <a href="http://www.dhs.wisconsin.gov/aids-hiv/Stats/2010AnnualHIVSurvSum.pdf">http://www.dhs.wisconsin.gov/aids-hiv/Stats/2010AnnualHIVSurvSum.pdf</a>.
- A 12-page PDF report summarizes reported cases of HIV infection by Wisconsin
  Department of Health Services regions as well as counties within regions. This report is
  titled "Wisconsin AIDS/HIV Regional Surveillance Tables: Cases reported through
  December 31, 2010" and is available at <a href="http://www.dhs.wisconsin.gov/aids-hiv/Stats/RegionalTables2010.pdf">http://www.dhs.wisconsin.gov/aids-hiv/Stats/RegionalTables2010.pdf</a>).
- PowerPoint slides with annotated notes (located at <a href="http://www.dhs.wisconsin.gov/aids-hiv/Stats/PPT2010SurvAnnotSlides\_Final.ppt">http://www.dhs.wisconsin.gov/aids-hiv/Stats/PPT2010SurvAnnotSlides\_Final.ppt</a>) graphically summarizing HIV case surveillance data reported through 2010.
- An interactive map of Wisconsin enables website visitors to click on a county location and receive a one-page summary of county-specific HIV case surveillance data. The interactive map is located at <a href="http://dhs.wisconsin.gov/aids-hiv/map.htm">http://dhs.wisconsin.gov/aids-hiv/map.htm</a>.
- Information regarding national HIV surveillance data is available on the website of the federal Centers for Disease Control and Prevention at <a href="http://www.cdc.gov/hiv/topics/surveillance/index.htm">http://www.cdc.gov/hiv/topics/surveillance/index.htm</a>.
- Additional information regarding HIV prevention and care resources is available from the Wisconsin HIV, STD, Hepatitis C Information and Referral Center at <a href="http://www.irc-wisconsin.org/">http://www.irc-wisconsin.org/</a> and the federal HIV/AIDS information resource website at <a href="http://aids.gov/">http://aids.gov/</a>.

For further information regarding the HIV epidemic in Wisconsin and a summary of the Wisconsin AIDS/HIV Program and other resources, visit the Program's website at <a href="http://dhs.wisconsin.gov/aids-hiv">http://dhs.wisconsin.gov/aids-hiv</a>.