

WISCONSIN AIDS/HIV PROGRAM NOTES

April 2013

Summary of the HIV/AIDS Surveillance Annual Review: New Diagnoses, Prevalent Cases and Deaths Reported through December 31, 2012

This issue of *Wisconsin AIDS/HIV Program Notes* presents the annual Wisconsin HIV/AIDS surveillance review. This article highlights recent changes in surveillance methods and provides an overview of surveillance data regarding HIV/AIDS diagnoses in 2012, prevalent cases, and deaths in Wisconsin through December 31, 2012. The article includes links to additional information resources and comprehensive reviews of state and federal HIV/AIDS surveillance data.

Reporting annually on surveillance data is important for policy makers, program planners, HIV service providers, and the public to enable effective planning of HIV prevention and care services and efficient use of resources. When planning for HIV prevention and testing strategies, it is important to focus on cases newly diagnosed in Wisconsin—those infections that might have been prevented or identified earlier within the state. By contrast, when planning care and treatment services, the focus should be on prevalent cases—those living with HIV in Wisconsin, irrespective of where they were diagnosed. Services are designed to ensure that all people diagnosed with HIV are linked to and maintained in high-quality HIV care.

METHODS

Two changes in surveillance methods affect the data presented in the 2012 Wisconsin HIV/AIDS surveillance summary in contrast to previous summaries. The first change is the reporting of data by year of *HIV diagnosis* rather than the year when *cases were reported*. The second change was a more complete accounting of deaths among people ever reported with HIV infection in Wisconsin.

HIV diagnoses: Through 2011, Wisconsin's annual surveillance summary described cases newly diagnosed in Wisconsin by the year in which they were reported to the Surveillance Program. Beginning with the 2012 annual surveillance summary, the AIDS/HIV Program describes cases newly diagnosed in Wisconsin by year of diagnosis to match the surveillance method used by the Centers for Disease Control and Prevention (CDC) and most other states.

Deaths: Each year, HIV surveillance staff review the Wisconsin death records to determine whether persons have died in Wisconsin who were previously reported with HIV and presumed to be alive. In 2012, staff conducted matches to the National Death Index in addition to the Wisconsin death records. An additional 235 persons of the 12,000 (2%) cases ever reported with HIV in Wisconsin were found to have died since the early 1980s. As a result, the estimated prevalence of HIV in Wisconsin remained level from 2011, rather than increasing as has been reported in recent years.

FINDINGS

Highlights

Reflecting national trends, young Black/African American men who have sex with men (MSM) in Wisconsin continue to be the population most affected by HIV in Wisconsin.

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- Diagnoses in young Black MSM nearly tripled from 2003 to 2012;
- Half of Black MSM diagnosed in Wisconsin in 2012 had not reached their 23rd birthday at their time of diagnosis;
- Black MSM accounted for 58% of HIV diagnoses in young MSM in 2012 (versus accounting for only 8% of the young male population, ages 15-29 in Wisconsin);
- More than one in four (27%) Black MSM ages 15-59 is estimated to be living with HIV, compared to 7% of Hispanic MSM, 3% of White MSM.

2012 Diagnoses

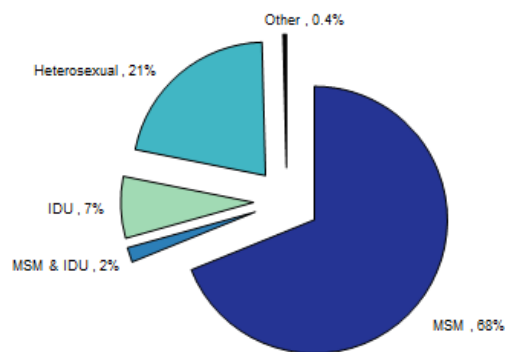
In 2012, 241 cases of HIV infection were diagnosed in Wisconsin. Between 2003 and 2012, the number of diagnoses ranged from a low of 232 in 2003 to a high of 284 in 2009, with an average of 253 diagnoses per year.

Four times as many males as females were diagnosed in 2012, consistent with data from the past decade. Diagnosis rates remain level in both younger and older females, increased in younger males, and declined in older males.

HIV infection disproportionately affects racial/ethnic minorities. Among males, the rate of HIV diagnoses during 2008-2012 was more than ten-fold greater among Blacks and five-fold greater among Hispanics compared to Whites. Among females, the disparity is even greater; the rate of HIV infection was more than 25-fold greater for Blacks and more than five-fold greater for both Hispanics and Asians compared to Whites. Rates for American Indians fluctuate because of the small case numbers.

Men who have sex with men (MSM) accounted for 70% of new diagnoses in 2012, including 2% of diagnoses among MSM who were also injection drug users (Figure 1). High-risk heterosexual contact accounted for 21%, and injection drug use (IDU, excluding MSM/IDU) accounted for 7% of 2012 diagnoses.

Figure 1. HIV diagnoses by estimated risk exposure group*, Wisconsin, 2012
(n=241)



* Data have been statistically adjusted to account for unknown risk. See technical notes.

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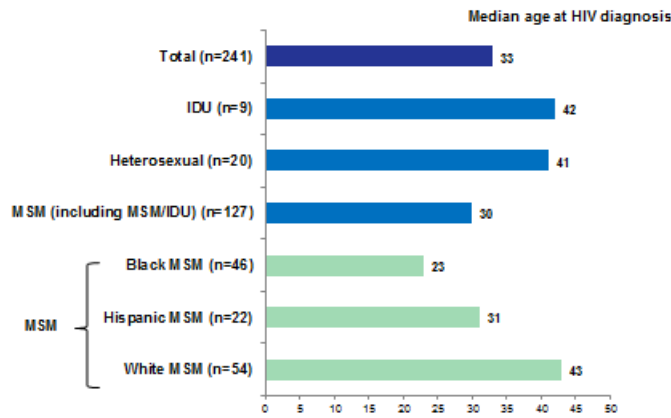
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HIV diagnoses among MSM increased during most of the previous decade and then declined between 2009 and 2012 to nearly the level of diagnoses in 2003. By contrast, diagnoses of infections attributed to high-risk heterosexual contact and injection drug use both declined by nearly 60% between 2003 and 2012.

HIV diagnoses nearly tripled in young Black MSM between 2003 and 2010 and declined modestly from 2010 to 2012. New diagnoses declined in White MSM and remained level in Hispanic MSM over the last five years.

The median age at diagnosis (the age at which half of cases are younger and half are older) varied considerably by risk exposure group -- MSM: age 33; high-risk heterosexuals: age 41; and IDUs: age 42 (Figure 2).

Figure 2: Median age at HIV diagnosis by risk exposure*, and among MSM, by race/ethnicity, Wisconsin, 2012



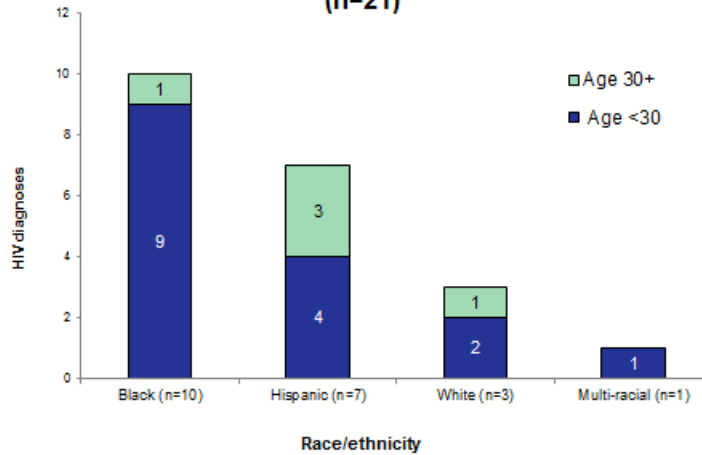
* Excludes cases with unknown risk exposure.

Among MSM, the median age varied by race/ethnicity— Black MSM: age 23; Hispanic MSM: age 31; and White MSM: age 43. Among Black MSM, 59% were under age 25 when diagnosed, 20% were ages 25-29, and 22% were aged 30 or older. By contrast, 46% of Hispanic MSM and 16% of White MSM were under age 30 at diagnosis.

For the first time, the surveillance summary presents data about HIV diagnoses among transgender persons (Figure 3). Since 1983, 31 known transgender individuals have been diagnosed with HIV in Wisconsin. During 2003–2012, there were 21 diagnoses in this population; 19 of these have been among male-to-female transgender individuals. Male-to-male sex is the predominant risk factor. Ten of the 21 were Black and nine were under age 30 at diagnosis.

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Figure 3. HIV diagnoses among transgender persons by race/ethnicity, Wisconsin, 2003-2012 (n=21)



In 2012, HIV cases were reported from 34 of the 72 counties in Wisconsin. However, the distribution of reporting is uneven-- Milwaukee County cases accounted for 53%, Dane County 10%, and Waukesha, Kenosha, and Racine Counties each 4%. All other counties accounted for fewer than 3% of diagnoses. The rate of diagnosis in Milwaukee is more than six times higher than in Wisconsin excluding Milwaukee County.

HIV cases moving into Wisconsin

In addition to the 241 cases diagnosed in Wisconsin in 2012, 157 individuals previously diagnosed with HIV infection moved to Wisconsin from another state, consistent with data in recent years.

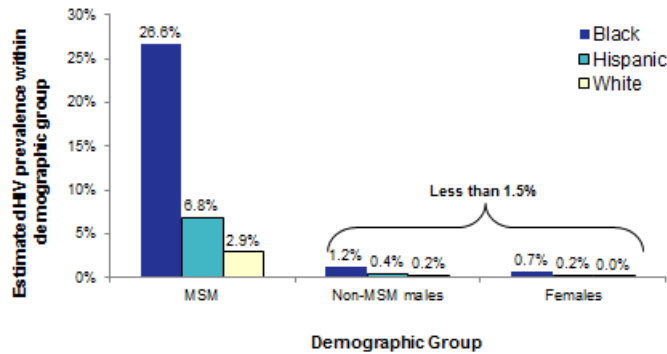
Persons living with HIV infection

As of the end of 2012, 6,549 individuals reported with HIV or AIDS were presumed to be alive and living in Wisconsin. Three-quarters (76%) of these were first diagnosed in Wisconsin; the others were initially diagnosed elsewhere. CDC estimates that 18% of people living with HIV are unaware of their HIV status, thus the total number of people living with HIV in Wisconsin is estimated to be 8,000.

The impact of HIV on the population varies by demographic group (Figure 4). One-in-four (27%) Black MSM is estimated to be HIV-positive, compared to 7% of Hispanic and 3% of White MSM. Less than one in 1,000 females and non-MSM males in Wisconsin is HIV positive. Within these groups, the percentages are highest among Blacks (1.2% of non-MSM males and 0.7% of females).

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Figure 4. Impact of HIV on selected demographic groups, ages 15-59 years, Wisconsin, as of December 31, 2012



* The estimated prevalence is adjusted to account for the CDC's estimate that 18% of HIV-infected persons are unaware of their infection and therefore not reported. The percent of males that are MSM was calculated using published estimates (Lieb, 2011).

Nearly half (48%) of prevalent cases live in Milwaukee County; 12% in Dane County, 4% in Kenosha, 3% in the Wisconsin Department of Corrections, and 3% or fewer in all other counties.

Deaths

Deaths due to any cause among people reported with HIV infection have declined markedly since the early 1990s. Deaths peaked in 1993 (373 deaths). In 2010, the most recent year with complete data, 89 deaths are known to have occurred in Wisconsin. The median age of death rose from age 37 in 1990 to age 43 in 2001 to age 50 in 2010.

IMPLICATIONS

HIV diagnoses

Trends in recent cases first diagnosed in Wisconsin should guide planning for HIV prevention. The steep rise in diagnoses and decline in median age of diagnosis in young MSM, especially young Black MSM, suggests that this population should be the top priority for HIV prevention efforts in Wisconsin. The decline in median age of diagnosis may reflect both acquisition of HIV at a younger age and diagnosis closer to the time of infection, suggesting that recent efforts to better target HIV testing in young MSM have met with some success. Maintaining prevention efforts in those with high risk heterosexual behaviors and injection drug users (IDUs) is also important. The number of new cases of HIV in injection drug users continues to decline but recent clusters of hepatitis C in IDUs in rural parts of Wisconsin underscore the risk that HIV cases could increase in IDUs and the importance of providing effective prevention services for both HIV and hepatitis C.

HIV prevalence

HIV prevalence data should guide HIV care and treatment services. As of the end of 2012, 6,549 people were reported with HIV and presumed to be living in Wisconsin. The fact that 40% of persons living with

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HIV in Wisconsin age 50 or older indicates that HIV care providers must attend to patients' health conditions related to aging as well as their HIV disease.

For additional information

The full report, *Wisconsin Department of Health Services HIV/AIDS Surveillance Annual Review New Diagnoses, Prevalent Cases and Deaths through December 31, 2012*, which includes annotated slides, tables and technical notes, is available at <http://www.dhs.wisconsin.gov/aids-hiv/Stats/index.htm>. Other reports regarding HIV and hepatitis C are also available on this site.

CDC's HIV surveillance web page is at:

<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm>

General information about HIV prevention and care services in Wisconsin is available at:

<http://www.dhs.wisconsin.gov/aids-hiv/>

