Summary of the HIV/AIDS Surveillance Annual Review: New Diagnoses, Prevalent Cases and Deaths Reported through December 31, 2013

The annual Wisconsin HIV/AIDS surveillance review presents cases of HIV/AIDS newly diagnosed in 2013, prevalent cases through December 31, 2013, and deaths through 2011 in Wisconsin. 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. For planning 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 currently 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, both for their own health and to reduce the risk of further transmission.

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.

- Diagnoses in young Black MSM nearly tripled from 2004 to 2013.
- Half of Black MSM diagnosed in Wisconsin in 2013 had not reached their 24th birthday at their time of diagnosis.
- Black MSM accounted for 63% of HIV diagnoses in young MSM in 2013 (whereas Blacks account for only 8% of the young male population, ages 15-29 in Wisconsin).
- Nearly one in three (32%) Black MSM ages 15-59 is estimated to be living with HIV, compared to 8% of Hispanic MSM, 3% of White MSM in the same age group.

2013 Diagnoses

Trend: In 2013, 255 cases of HIV infection were diagnosed in Wisconsin. Between 2004 and 2013, the number of diagnoses ranged from a low of 225 in 2012 to a high of 284 in 2009, with an average of 253 diagnoses per year.

Sex: Four times as many males as females were diagnosed in 2013, consistent with data from the past decade. The only age/sex group with statistically significant changes in diagnoses between 2004 and 2013 was males under age 30; diagnoses increased by 38% in this group.

Gender: Since 1983, 32 known transgender individuals have been diagnosed with HIV in Wisconsin. During 2004–2013, there were 22 diagnoses in this population. Ten of the 22 were Black and nine of these were under age 30 at diagnosis.

Racial/ethnic groups: HIV infection disproportionately affects racial/ethnic minorities. Among males, the rate of HIV diagnoses during 2009-2013 was more than ten-fold greater among Blacks and five-fold greater among Hispanics compared to Whites. Among females, the disparity was even greater; the rate of HIV infection was more than 25-fold greater among Blacks and more than five-fold greater among Hispanics and Asians compared to Whites. Rates for American Indians and Asians fluctuated because of the small case numbers.

Risk: MSM accounted for 90% of new diagnoses among men in 2013, including 2% of diagnoses among MSM who were also injection drug users. Injection drug use (not including MSM/IDU) and high-risk heterosexual contact accounted for the other 10% of new diagnoses in roughly equal proportions. High-risk heterosexual contact accounted for 79% and injection drug use for 21% of 2013 diagnoses among women. (Figure 1) HIV diagnoses nearly tripled in young Black MSM between 2004 and 2013 and remained stable or declined in other risk and age groups.

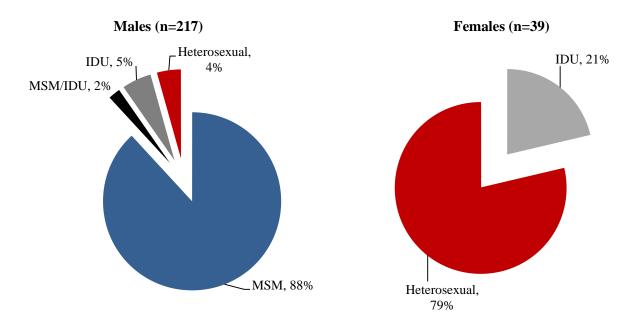


Figure 1: HIV diagnoses* by sex and estimated risk exposure group*, Wisconsin, 2013

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

Age: The median age at diagnosis (the age at which half of cases are younger and half are older) was 34 in 2013 but varied considerably by risk exposure group. For MSM, it was age 30 but for high-risk heterosexuals and IDUs, it was in the 40s. Among MSM, the median age was 24 among Blacks and in the 30s among Hispanic and White MSM.

Geography: In 2013, HIV cases were diagnosed in 29 of the 72 counties in Wisconsin. However, the distribution was uneven- Milwaukee County cases accounted for 51% of new diagnoses, Dane County for 12%, Racine for 5%, and Kenosha and Brown Counties each for 3%. The Department of Corrections and all other counties

accounted for fewer than 3% of diagnoses. The rate of diagnosis in Milwaukee is more than five times higher than Wisconsin excluding Milwaukee County.

Late testers

In more than one in three people (35%-37%) diagnosed with HIV in 2011 and 2012, the disease progressed to AIDS within one year of their initial HIV diagnosis, including those with concurrent HIV and AIDS diagnoses. Early diagnosis is important for optimal health outcomes for the infected individual and for reducing the risk of further disease transmission.

HIV cases moving into Wisconsin

In addition to the 255 cases diagnosed in Wisconsin in 2013, 140 individuals previously diagnosed with HIV infection moved to Wisconsin from another state, consistent with data in recent years.

Persons living with HIV infection

Overview: As of the end of 2013, 6,758 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 15.8% of people living with HIV are unaware of their HIV status. Thus, an estimated 1,270 in the state are unaware of their HIV infection, so the total number of people living with HIV in Wisconsin is estimated to be 8,030.

Age: Of Wisconsin's known prevalent HIV cases, 10% are under age 30, 50% are 30- 49 years of age, and 40% are age 50 or older. Thus services for people living with HIV need to address health conditions of aging in addition to HIV infection. (By contrast, among 2013 diagnoses, 36% were under age 30, 45% were age 30-49, and 18% were age 50 and older.) (Figure 2)

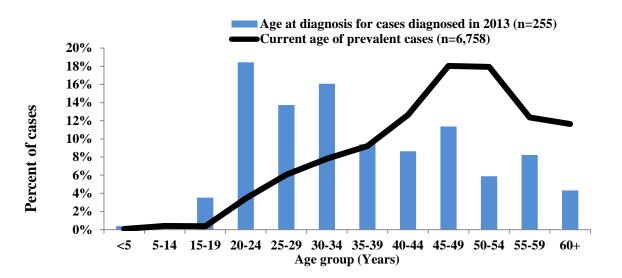
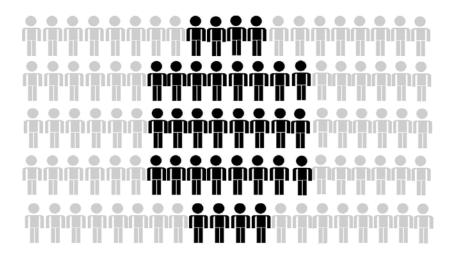


Figure 2. Prevalent cases of HIV infection by current age as of 12/31/2013 and cases reported during 2013 by age at diagnosis, Wisconsin

Demographic group: HIV prevalence varies by demographic group. One-in-three (32%) Black MSM is estimated to be HIV-positive (Figure 3), compared to 8% 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 rate is highest among Blacks—about 5 in 1,000.

Figure 3. HIV prevalence* in Black men who have sex with men in Wisconsin as of 12/31/2013



* The estimated prevalence is adjusted to account for the CDC's estimate that 15.8% 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).

Geography: Nearly half (49%) of prevalent cases live in Milwaukee County, 12% in Dane County, 4% in Kenosha, 3% in Brown and Racine Counties, and less than 3% in the Wisconsin Department of Corrections and 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 2011, the most recent year with complete data, 130 deaths are known to have occurred in Wisconsin, consistent with the average of 127 deaths each year between 2004 and 2011. The median age of death rose from age 37 in 1990 to age 42 in 2002 to age 51 in 2011.

IMPLICATIONS

HIV diagnoses

Trends in recent cases first diagnosed in Wisconsin should guide planning for HIV prevention. The steep rise in diagnoses in young black MSM and the young median age at diagnosis in Black MSM suggest that young Black MSM should be the top priority for HIV prevention efforts in Wisconsin. The young median age at 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. While the number of new cases of HIV in injection drug users continues to decline, increases in cases of hepatitis C and heroin overdoses in young adult IDUs in rural parts of Wisconsin underscore the risk that HIV cases could increase in IDUs. Thus it is important to provide effective prevention services to persons who inject drugs to prevent both HIV and hepatitis C.

HIV prevalence

HIV prevalence data should guide HIV care and treatment services. As of the end of 2013, 6,758 people were reported with HIV and presumed to be living in Wisconsin. The fact that 40% of persons living with HIV in Wisconsin are 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, 2013,* which includes annotated slides, tables and technical notes, is available at <u>http://www.dhs.wisconsin.gov/aids-hiv/Stats/index.htm</u>. Other reports regarding HIV and hepatitis C are also available on this site.

CDC's HIV surveillance web page is at: <u>http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm</u> General information about HIV prevention and care services in Wisconsin is available at: <u>http://www.dhs.wisconsin.gov/aids-hiv/</u>



Wisconsin Department of Health Services