Summary of the Wisconsin HIV/AIDS Surveillance Annual Review:
New Diagnoses, Prevalent Cases and Deaths Reported through December 31, 2015

The annual Wisconsin HIV/AIDS surveillance review presents cases of HIV newly diagnosed during 2015, prevalent cases as of December 31, 2015, and deaths through 2014 among Wisconsin residents. Reporting annually on HIV 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 ensure efficient use of resources. For planning HIV prevention, testing, and linkage 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. 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 first diagnosed.

NEW DIAGNOSES

Trend: During 2015, 225 new cases of HIV infection were diagnosed in Wisconsin. Between 2009 and 2015, both the number and the rate of new infections declined. The number of new diagnoses over the last decade ranged from a low of 221 in 2014 to a high of 284 in 2009, with an average of 247 new diagnoses per year. The HIV diagnosis rate in Wisconsin was the ninth lowest among the 50 states in 2014.

Sex: Seven times as many males as females were diagnosed with HIV during 2015 (196 males and 29 females). Between 2006 and 2015, the HIV diagnosis rate increased among younger (ages 13-29) males, and declined among older (ages 30-59) males and females. The diagnosis rate fluctuated for younger females.

Gender: Since 1982, 37 known transgender individuals have been diagnosed with HIV in Wisconsin. During 2006–2015, there were 30 new HIV diagnoses in this population. Thirteen of the 30 were Black, 10 were Hispanic, and 21 were under age 30 at the time of diagnosis.

Racial/ethnic groups: HIV infection disproportionately affects racial/ethnic minorities. During 2015, 62% of new diagnoses were among racial/ethnic minorities, despite minorities making up just 17% of Wisconsin’s population. During 2011-2015 the HIV diagnosis rate for males was 13-fold higher among Blacks, 6-fold higher among Hispanics, and 2-fold higher among Asians and American Indians compared to Whites. For females, the HIV diagnosis rate was 25-fold higher among Blacks and 8-fold higher among Hispanics compared to Whites.
Age: The median age at HIV diagnosis was 31 years in 2015 but varied considerably by risk exposure group. The median age at diagnosis was 29 years for men who have sex with men (MSM) overall, 33 years for those with high-risk heterosexual contact, and 54 years for those with a history of injection drug use.

Risk: After adjusting for unknown risk, MSM accounted for 80% of new diagnoses in 2015, including 3% among MSM who also injected drugs. High-risk heterosexual contact and injection drug use (excluding MSM/PWID) accounted for the other 16% and 4% of new diagnoses, respectively. From 2006 to 2015 the number of HIV diagnoses was stable among MSM, and declined among those with high-risk heterosexual contact and people who inject drugs.

Geography: During 2015, HIV cases were diagnosed in 33 of the 72 counties in Wisconsin. However, the distribution was uneven: Milwaukee County cases accounted for 53% of new diagnoses, Dane County for 9%, Kenosha County for 6% and Rock County for 4%. The Department of Corrections and all other counties each accounted for fewer than 4% of diagnoses.

Disease status at diagnosis: The proportion of individuals who progressed to AIDS within 12 months of HIV diagnosis declined from 38% in 2012 to 28% in 2014. The proportion of concurrent HIV and AIDS diagnoses also declined, from 30% in 2012 to 18% in 2015. These cases represent individuals living for several years with undiagnosed HIV infection, which may lead to poorer health outcomes and increased opportunities for disease transmission.

Diagnosed outside of Wisconsin: In addition to the 225 cases diagnosed in Wisconsin during 2015, 209 individuals previously diagnosed with HIV infection moved to Wisconsin from another state.
PEOPLE LIVING WITH HIV INFECTION

As of the end of 2015, 6,868 individuals reported with HIV or AIDS were presumed to be alive and living in Wisconsin. Three-quarters (74%) of these were first diagnosed in Wisconsin; the others were initially diagnosed elsewhere. The Centers for Disease Control and Prevention (CDC) estimates that 12.8% of people living with HIV (PLHIV) are unaware of their HIV status. Thus, an estimated 1,000 individuals in the state are unaware of their HIV infection, so the total number of PLHIV in Wisconsin is estimated to be about 7,900.

HIV prevalence varies by demographic group. More than one in three (36%) Black MSM is estimated to be living with HIV, compared to 10% of Hispanic and 4% of White MSM. Fewer than 1 in 1,000 females and non-MSM males in Wisconsin are HIV-positive. Within the non-MSM groups, the prevalence is highest among Blacks, at about 1.3%.

Nearly half (47%) of all PLHIV reside in Milwaukee County. Dane County has the second highest proportion (12%), followed by Kenosha and Brown counties, with 4% each. Racine, Waukesha, and Rock counties and the Wisconsin Department of Corrections each have 3% of the state's prevalent cases. All other counties have 2% or fewer of the state's HIV cases.

Deaths

Deaths occurring in Wisconsin among people living with HIV have declined markedly since the early 1990s. Deaths peaked in 1993 (373 deaths). In 2014, the most recent year with complete data, 81 deaths among people living with HIV are known to have occurred in Wisconsin. HIV as the underlying cause of death is also on the decline—41 of the 81 reported deaths in 2014 were attributed to something other than HIV, while 40 had HIV indicated as the underlying cause of death. The median age at death rose from age 37 in 1990 to age 45 in 2006 to age 57 in 2014, indicating that people are living longer with HIV.

IMPLICATIONS

HIV Diagnoses

Trends in recent cases first diagnosed in Wisconsin should guide planning for HIV prevention. The number of new diagnoses among young Black MSM continues to increase, although the annual
increase was less steep in recent years than it was in the beginning of the decade. In addition, the proportion of all new diagnoses attributed to male-male sexual contact continues to rise, meaning HIV in Wisconsin is increasingly becoming a disease of gay and bisexual men. These results suggest that MSM, especially young MSM of color, should be the top priority for HIV prevention efforts in Wisconsin.

Maintaining prevention efforts in those with high-risk heterosexual behaviors and those who inject drugs is also important. While the number of new cases of HIV in PWID continues to decline, increases in cases of hepatitis C and heroin overdoses in young adult PWIDs in rural parts of Wisconsin underscore the risk that HIV cases could increase in PWIDs. Thus it is important to provide effective prevention services to PWID to prevent both HIV and hepatitis C.

**HIV Prevalence**

HIV prevalence data should guide planning for HIV care and treatment services. At the end of 2015, 6,868 people were reported with HIV and presumed to be living in Wisconsin. The fact that 47% of the PLHIV 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 AIDS/HIV Program website (https://www.dhs.wisconsin.gov/aids-hiv/data.htm) includes annotated PowerPoint slides and county-level summary reports. Other reports regarding HIV are also available on this site.


General information about HIV prevention and care services in Wisconsin: https://www.dhs.wisconsin.gov/aids-hiv/index.htm

Information about hepatitis C: https://www.dhs.wisconsin.gov/viral-hepatitis/hcv-program.htm