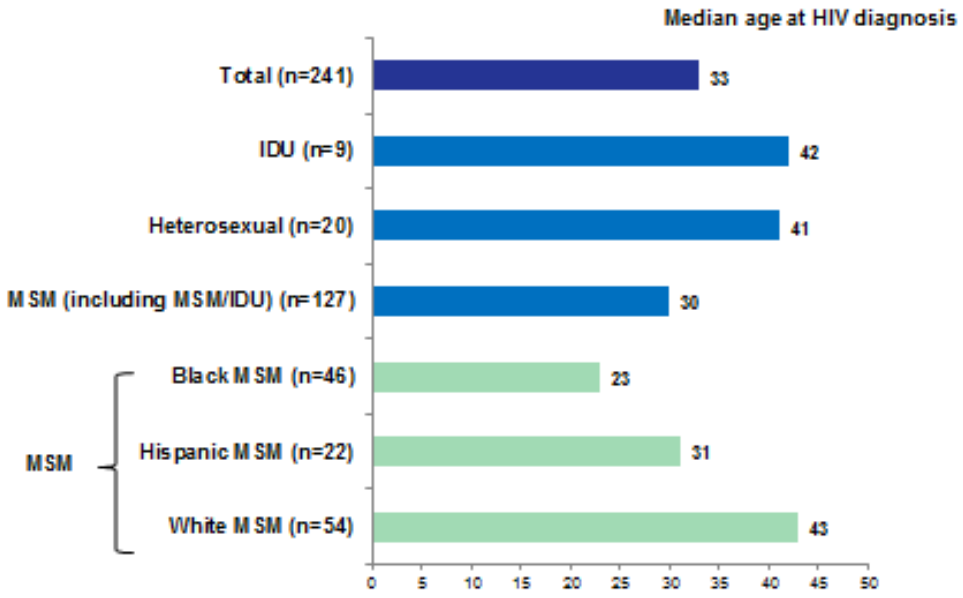
Wisconsin Department of Health Services AIDS/HIV Surveillance Annual Review

New diagnoses, prevalent cases, and deaths through December 31, 2012

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



* Excludes cases with unknown risk exposure.

AIDS/HIV Program
Wisconsin Department of Health Services
April 2013

Table of Contents

Executive Summary

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

The annual Wisconsin AIDS/HIV surveillance review presents recent changes in surveillance methods and surveillance data regarding HIV/AIDS diagnoses in 2012, prevalent cases, and deaths in Wisconsin through December 31, 2012.

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 AIDS/HIV 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.

- 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. High-risk heterosexual contact accounted for 21%, and injection drug use (IDU, excluding MSM/IDU) accounted for 7% of 2012 diagnoses.

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.

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. 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.

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 8,500.

The impact of HIV on the population varies by demographic group. 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).

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

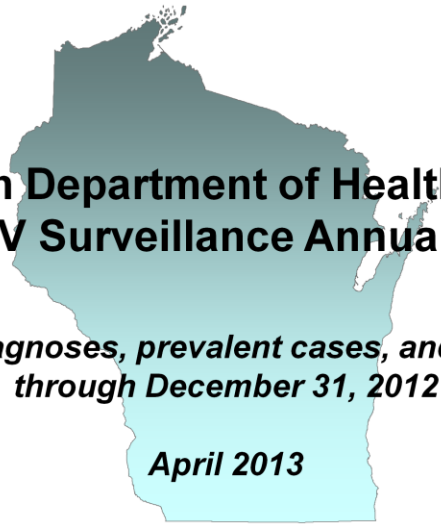
HIV prevalence data should guide HIV care and treatment services. As of the end of 2012, 6,549 people were reported with HIV and presumed to be living in Wisconsin. The fact that 40% of persons living with HIV in Wisconsin are age 50 or older indicates that HIV care providers must attend to patients' health conditions related to aging as well as their HIV disease.

For additional information

The full report, *Wisconsin Department of Health Services AIDS/HIV 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/



Wisconsin Department of Health Services
AIDS/HIV Surveillance Annual Review

New diagnoses, prevalent cases, and deaths through December 31, 2012

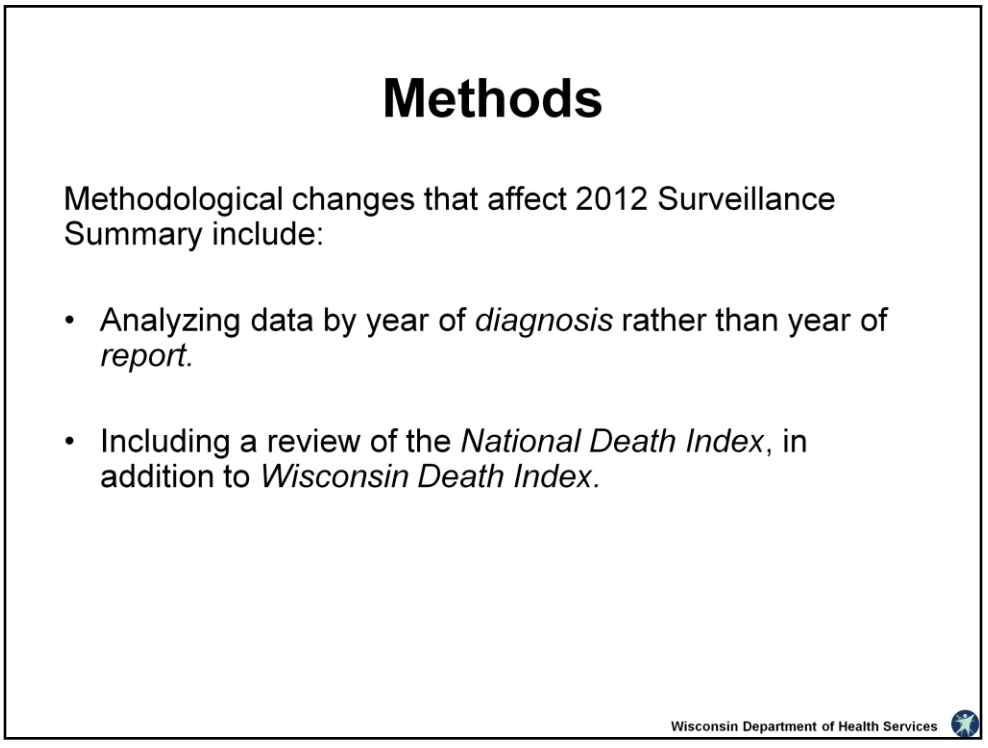
April 2013

BACKGROUND AND OVERVIEW OF HIV CASES IN WISCONSIN

Wisconsin Department of Health Services

Introduction

- This annual review relies on HIV and AIDS diagnoses reported to the Wisconsin Department of Health Services AIDS/HIV Surveillance System through 2012.
- The annual review is intended to assist planners of HIV prevention and care services to better serve those at risk of and living with HIV, to ensure effective use of existing resources, and to seek additional resources where most needed.
- The tables and technical notes at the end of the PDF version of the annual review provide additional information. http://www.dhs.wisconsin.gov/aids-hiv/Stats/index.htm



Two changes in surveillance methods affect the data presented in the 2012 Wisconsin AIDS/HIV surveillance summary in contrast to previous surveillance summaries. The first change is the reporting of data by year of *HIV diagnosis* rather than the year when *cases were actually 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.

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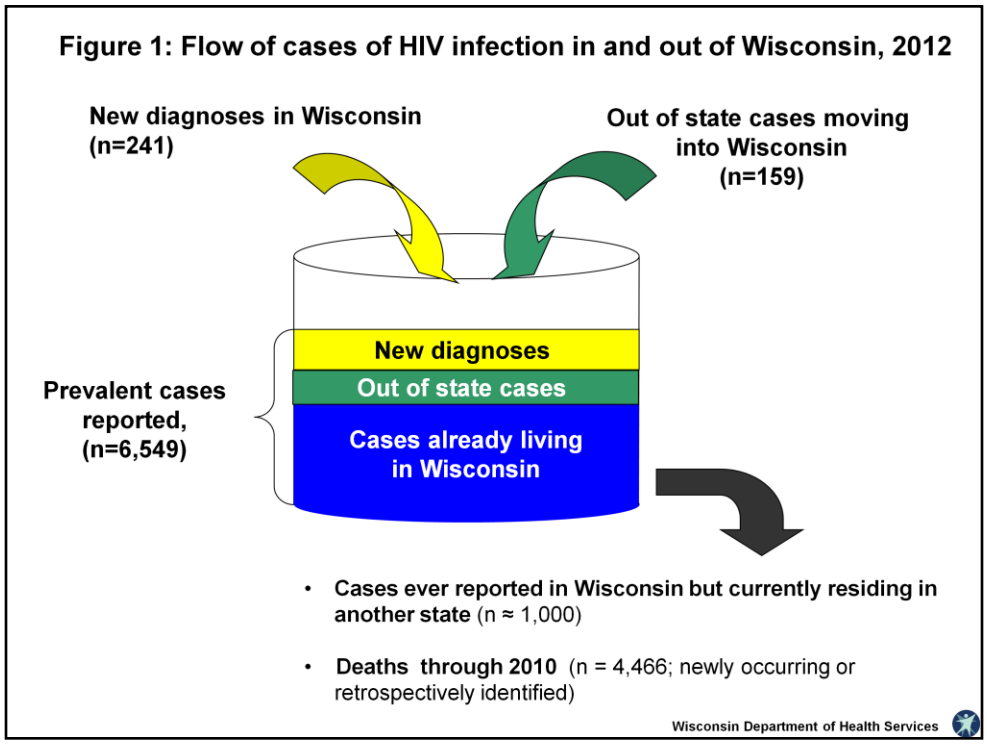
Deaths: Each year, HIV surveillance staff review the Wisconsin Death Index to determine whether persons have died in Wisconsin who were previously reported with HIV and presumed to be alive. In 2012, staff conducted matches to the National Death Index in addition to the Wisconsin Index. An additional 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.



More than 12,000 persons have been reported with HIV in Wisconsin since the beginning of the epidemic, reflecting the overall burden of HIV on the state. These include 8,996 cases (75%) first diagnosed in Wisconsin, as well as 3,019 cases (25%) first diagnosed elsewhere. Nearly 4,500 people with HIV infection died between 1983 and 2010 (the most recent year for which accurate data are available).

In 2012, 241 cases of HIV were diagnosed in Wisconsin. In addition, 159 cases were diagnosed elsewhere and then moved into the state.

The 241 cases diagnosed in 2012 in Wisconsin are addressed in the first section of the report highlighting new diagnoses. When planning for HIV prevention and testing strategies, it is important to focus on these cases—those infections that might have been prevented or diagnosed earlier within the state.

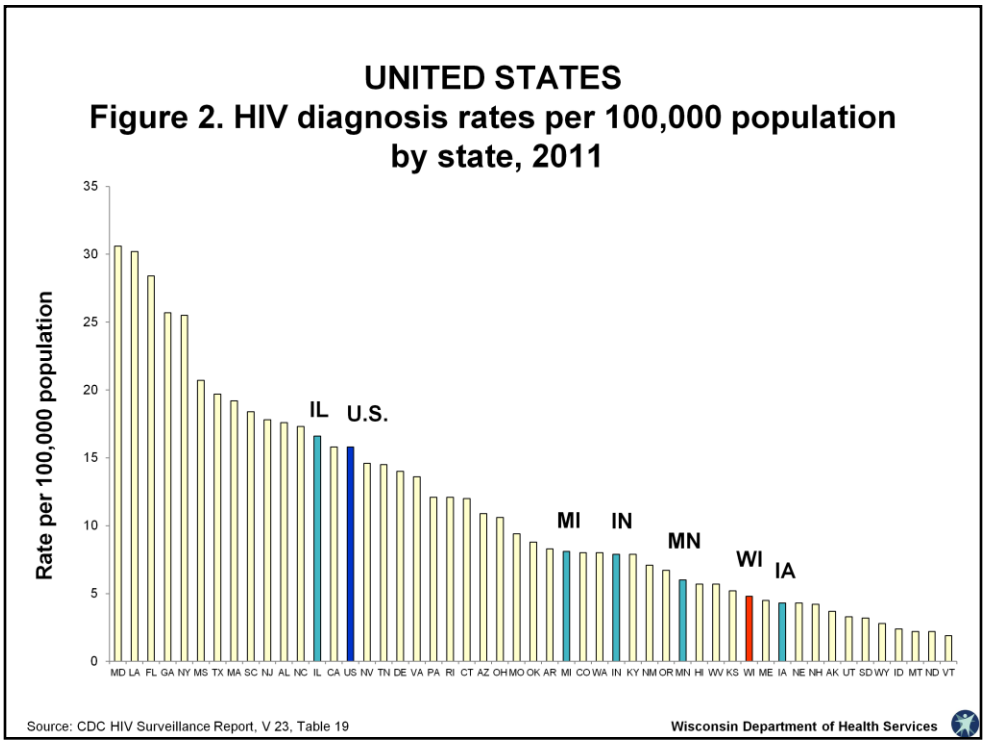
By contrast, when planning care and treatment services, the focus should be on prevalent cases, those living with HIV in Wisconsin, irrespective of where they were diagnosed. Services are designed to ensure that all people diagnosed with HIV are linked to and maintained in high-quality HIV care. The number of people reported and presumed to be living with HIV in Wisconsin at the end of 2012 was 6,549.

However CDC estimates that 18% of people living with HIV are unaware of their infection so the actual number of people living with HIV infection in Wisconsin is probably closer to 8,000.

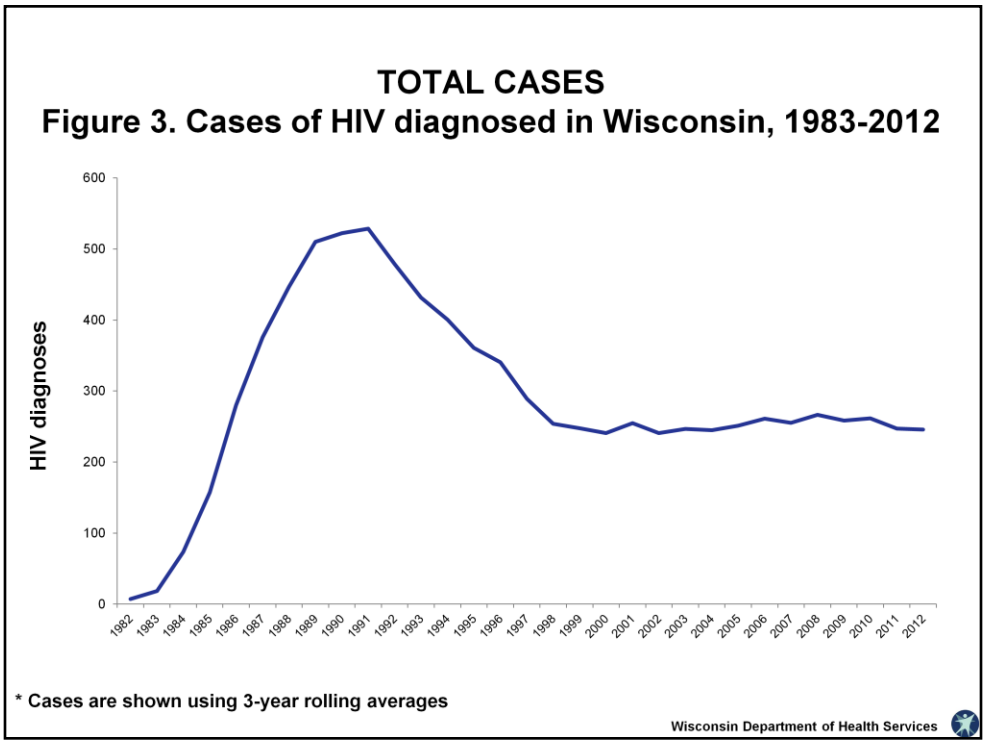
NEW HIV DIAGNOSES

These include cases of HIV diagnosed in Wisconsin in 2012

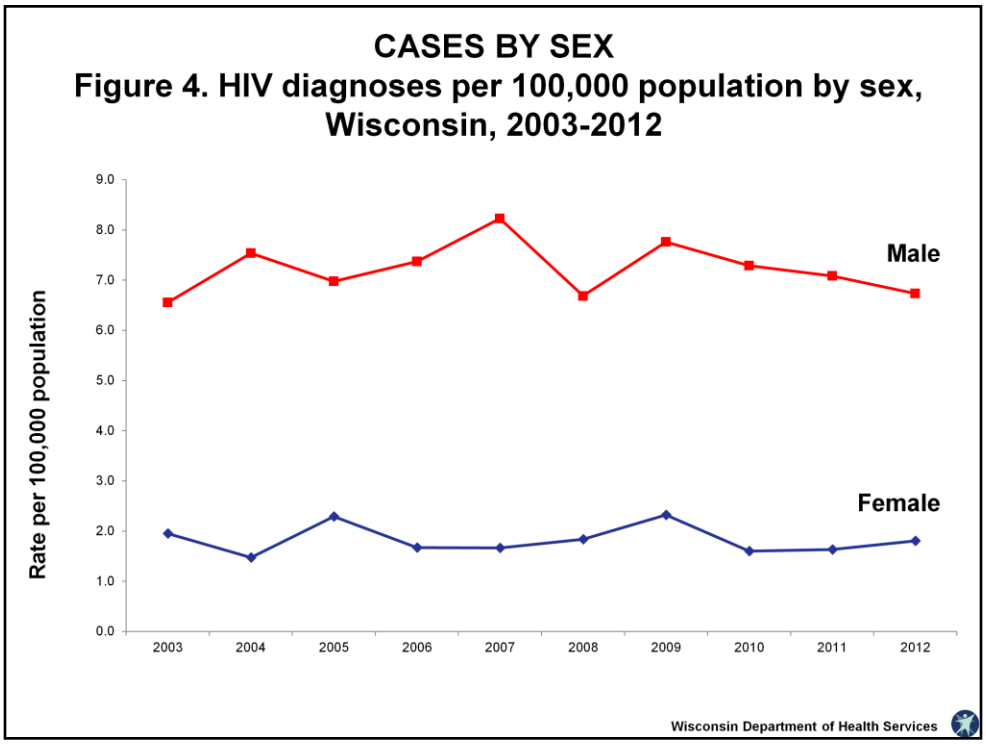
Wisconsin Department of Health Services



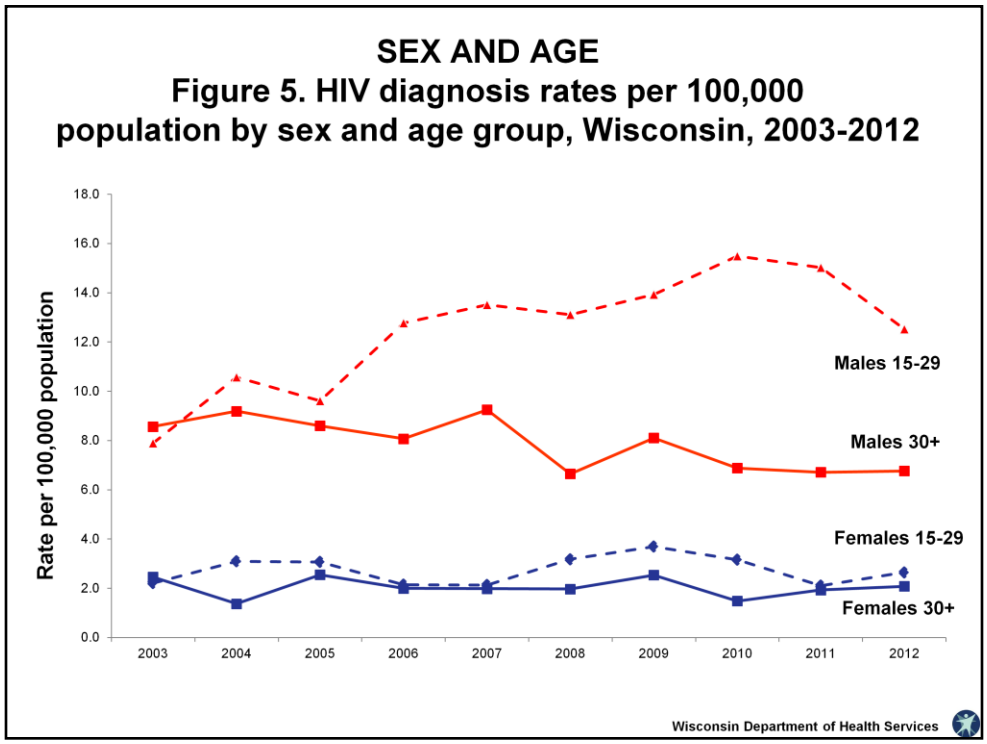
Wisconsin's rate of HIV diagnosis (4.8 per 100,000) is less than one-third that of the nation as whole (15.8 per 100,000), less than one sixth that of Maryland (30.6 per 100,000), the state with the highest rate, and 13th from the bottom of the 50 states.



Cases of HIV diagnosed in Wisconsin rose rapidly in the 1980s, peaked in the early 1990s, declined through the 1990s, and have remained stable in the most recent decade. In 2012, 241 cases of HIV were diagnosed in Wisconsin. Between 2003 and 2012, the number of diagnoses has varied between a low of 232 in 2003 and a high of 284 in 2009, with an average of 253 diagnoses per year.

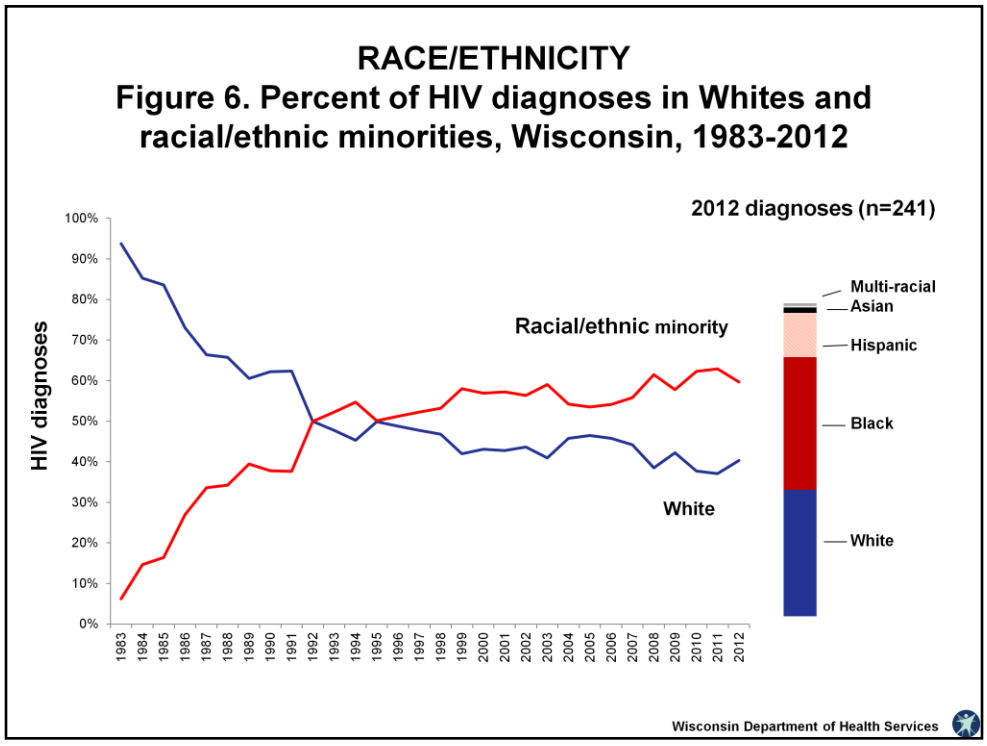


In 2012 in Wisconsin, the rate of HIV diagnosis in males was nearly four times higher than in females. HIV diagnoses have remained largely stable in both males and females over the course of the decade. Important differences in trends by age group, sex, race/ethnicity, and risk exposure are described in the slides that follow.

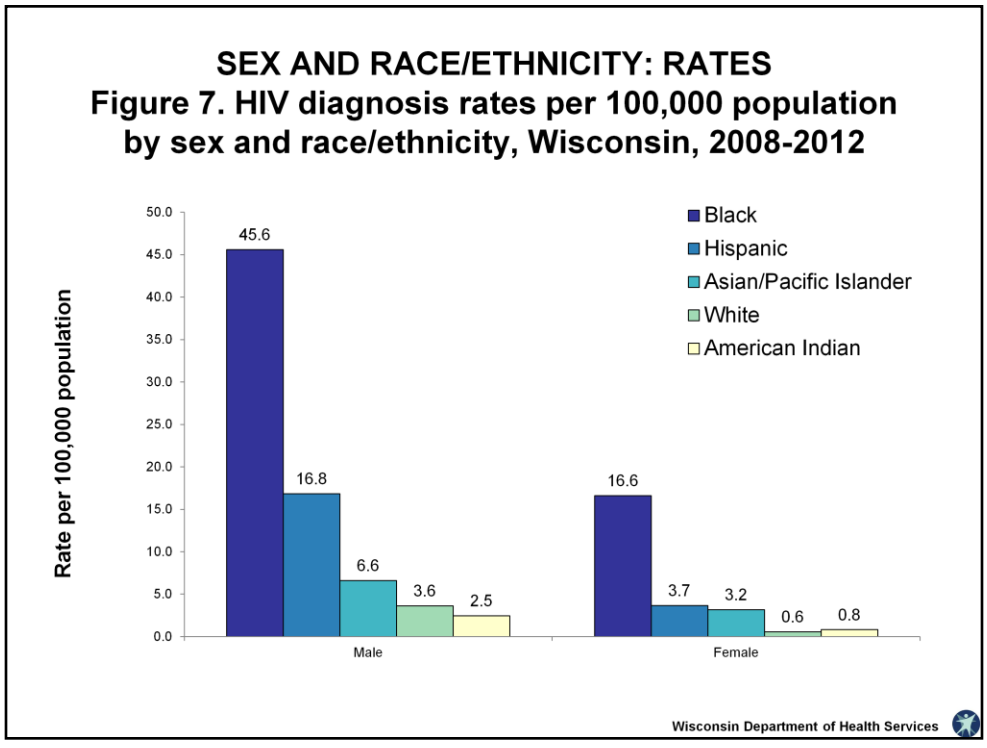


This figure shows trends in HIV diagnosis rates for males and females in the younger (15-29) and older (30 and older) age groups. In 2012, the rate of diagnosis in younger males was 12.5 per 100,000, nearly twice that of older males (6.8). Rates in 2012 for younger and older females were 2.6 and 2.1 per 100,000, respectively.

Rates in younger males increased from 2003 until 2010 and then declined between 2010 and 2012. Rates declined in older males over the course of the decade and remained level in females of both age groups.

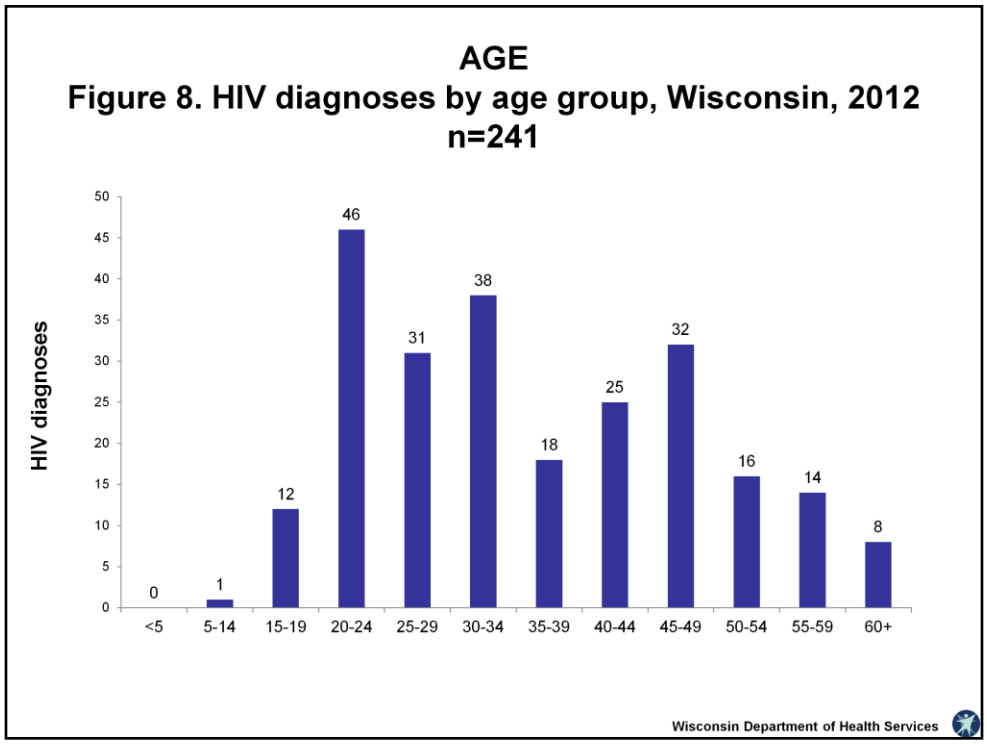


In the 1980s, the majority of diagnoses occurred among Whites. Since the early-1990s, the number of diagnoses in racial/ethnic minorities has exceeded those in Whites and in 2012, racial/ethnic minorities accounted for 60% of diagnoses, compared to representing 17% of the state's population. Blacks accounted for 42% of 2012 diagnoses, Whites for 40%, Hispanics for 14%, Asians for 2%, and multi-racial individuals for 2%. There were no diagnoses among American Indians in 2012.



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.

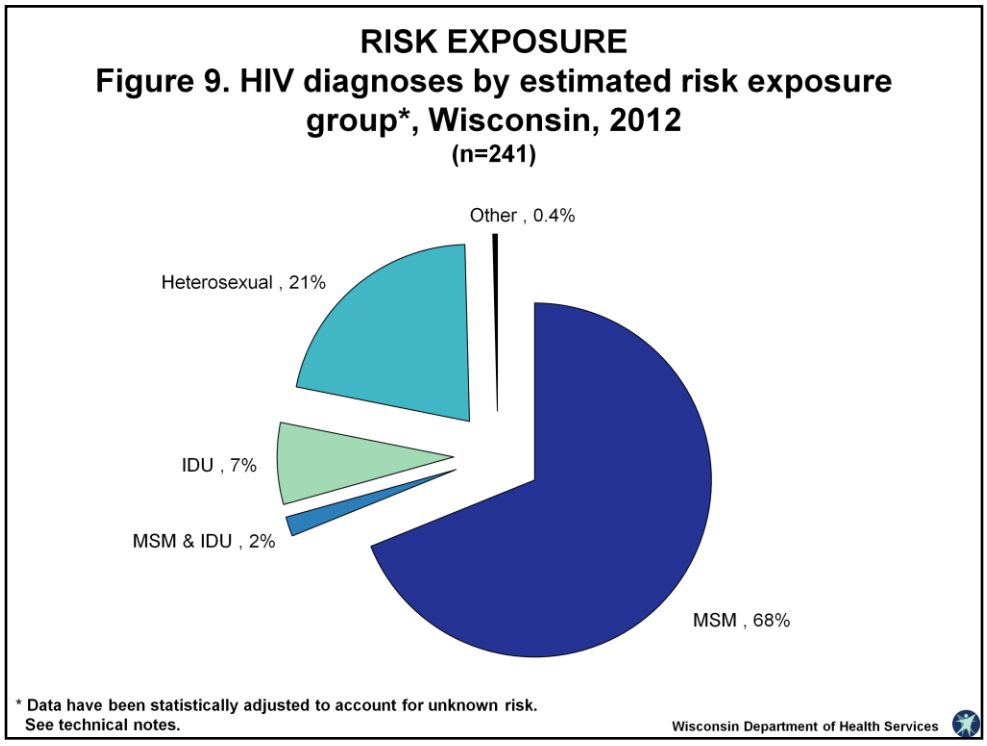
Among females, the disparity is even greater; the rate of HIV infection was more than 25-fold greater for Blacks and more than five-fold greater for both Hispanics and Asians compared to Whites. Rates for American Indians fluctuate because of the small case numbers.



This figure shows the number of diagnoses by age group in 2012. The 15-29 year age group accounted for 29% of diagnoses, the 30-44 year age group for 33% of diagnoses, and the 45+ year age group for 29% of diagnoses.

The median age of diagnosis in 2012 varied by sex and racial/ethnic group as shown in the table below. The median age of diagnosis is 41 for females and 32 for males, and in both sexes is youngest among Blacks (age 38 for females; age 26 for males). The number of diagnoses in Asians, American Indians, and those of mixed race is too small to be able to show median age.

Number and median age at HIV diagnosis by sex and race/ethnicity, Wisconsin, 2012			
Sex	Racial/ethnic group	2012 diagnoses	
		n	**Median age**
Female	All races/ethnicities	52	**41**
	Black	29	**38**
	White	17	**42**
Male	All races/ethnicities	191	**32**
	Black	74	**26**
	Hispanic	29	**32**
	White	81	**32**

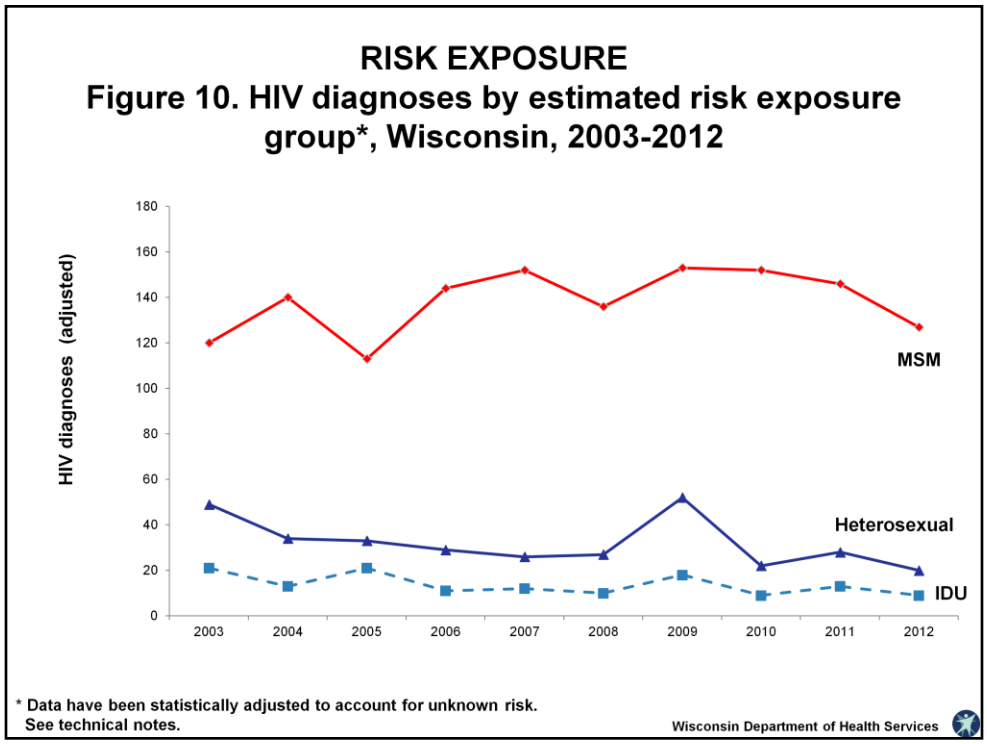


Historically, the population most affected by HIV infection in Wisconsin has been men who have sex with men (MSM). After adjusting for the 85 (35%) diagnoses with unknown risk in 2012 (see technical notes), 70% of HIV cases were among MSM—including 68% among MSM without a history of injection drug use, and 2% among MSM who reported injection drug use (MSM/IDU). Heterosexual contact accounted for 21%, and injection drug use (IDU, excluding MSM/IDU) accounted for 7% of 2012 diagnoses.

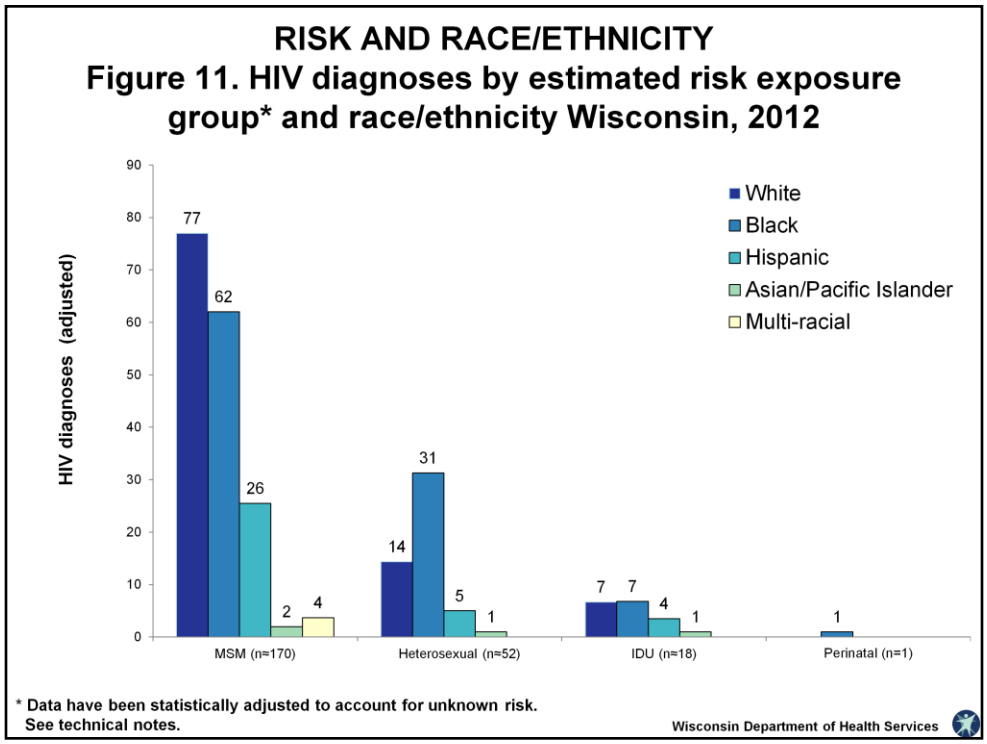
The risk category “heterosexual" refers to high-risk heterosexual contact; it is restricted to males and females who report a history of opposite-sex contact with a high risk partner, such as an injection drug user, a bisexual male, a person with hemophilia or a person with HIV infection.

Early in the epidemic, HIV transmission occurred among blood transfusion recipients and persons with hemophilia who received contaminated blood products. Since screening of the blood supply began in 1985, HIV transmission among transfusion recipients and persons with hemophilia has been very rare. No new hemophilia or transfusion-associated cases have been reported since 2007.

Perinatal (mother-to-child) HIV transmission in Wisconsin has declined since the advent of treatments in the mid-1990s. Since 2002, there have been 10 cases of perinatal transmission reported among infants born in Wisconsin hospitals, the last of which was born in 2009. One case of mother-to-child transmission was diagnosed in Wisconsin in 2012. The child was in the 10-14 year age range and was born in another state but diagnosed within Wisconsin in 2012.

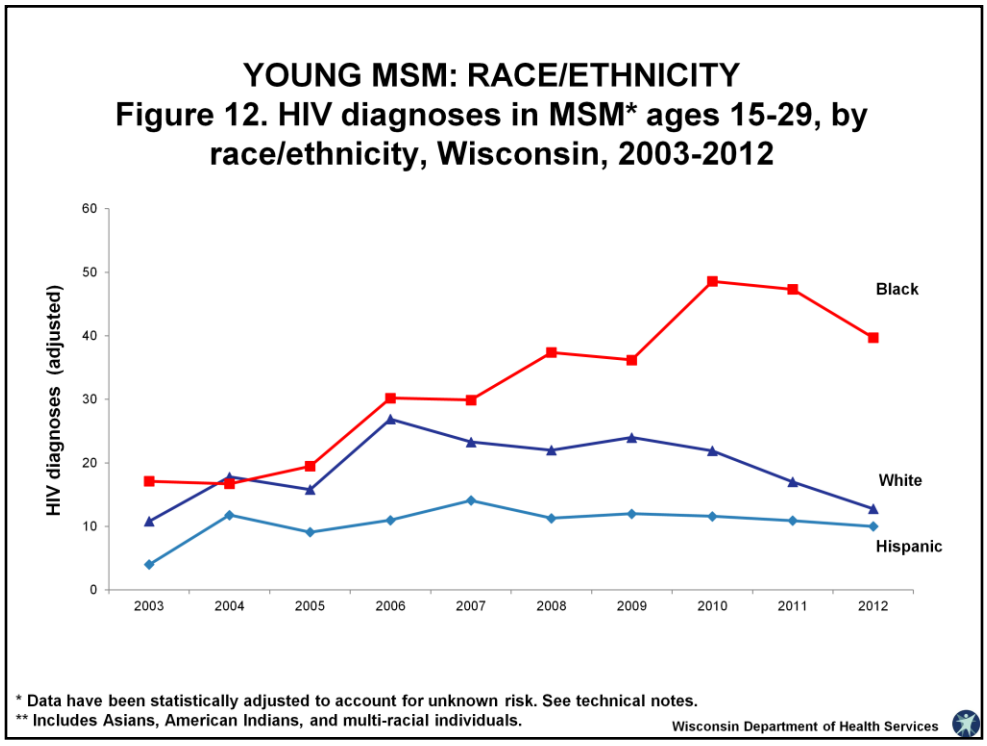


HIV diagnoses among men who have sex with men (MSM) increased for most of the previous decade and then declined between 2009 and 2012 to nearly the level of diagnoses in 2003. By contrast, diagnosis of infections attributed to high-risk heterosexual contact and injection drug use both declined by nearly 60% between 2003 and 2012.



This figure shows the number of adjusted 2012 diagnoses by both risk and race/ethnicity. The largest number of diagnoses in Wisconsin occurred in White MSM, followed by Black MSM, Blacks with high-risk heterosexual risk, and Hispanic MSM.

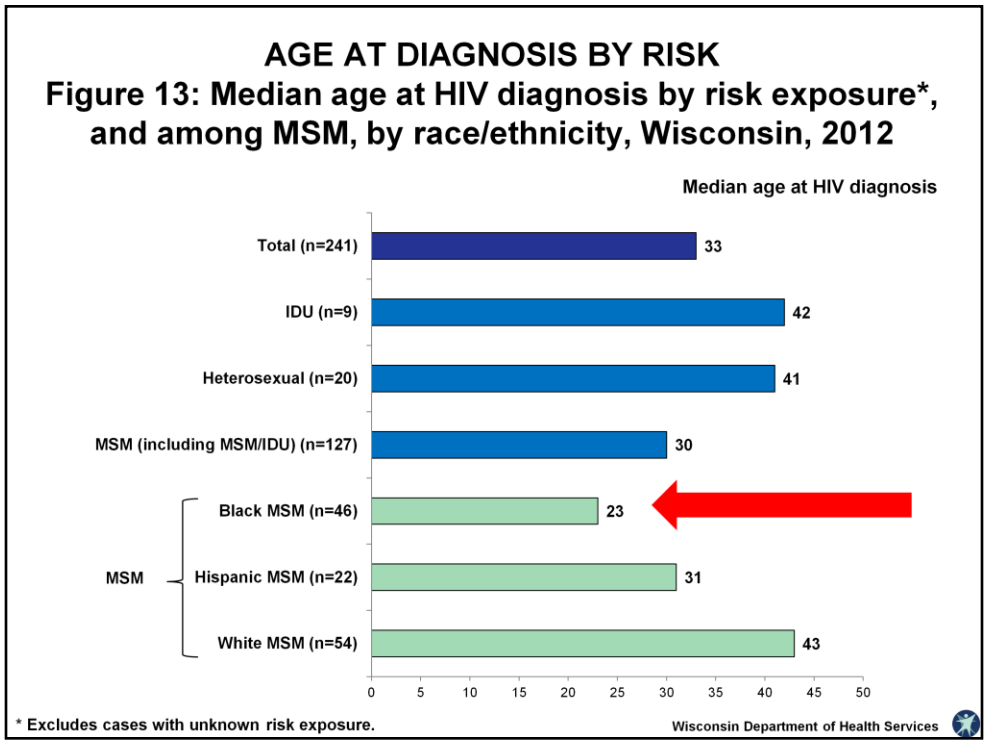
Because this figure uses imputed data, the percentages and median ages provided below are estimates. Of the imputed diagnoses among high-risk heterosexuals, half were among Black women, with an estimated median age in that group of 34 years of age. One quarter were among White women, with an estimated median age of 41. Black men accounted for 13% of diagnoses in this group, and had a median age of 30.



Young men of color account for a disproportionate percentage of cases among men who have sex with men (MSM) under age 30. In 2012, Blacks accounted for 58% of diagnoses among young MSM, Hispanics for 15%, and other racial groups for 8% (versus accounting for 8%, 8%, and 5% respectively of the male population, ages 15-29). Whites accounted for 19% of cases (versus 77% of the male population ages 15-29).

HIV diagnoses among young Black MSM increased from 2003 until 2010 — a nearly tripling of diagnoses over the eight-year period, and then declined between 2010 and 2012. While the decline is encouraging, a trend of two years should be interpreted with caution.

Diagnoses increased modestly in young White MSM between 2003 and 2006 and then declined from 2006 to 2012. In Hispanic MSM, diagnoses have remained stable since 2004. Total diagnoses among young MSM who are Asian, American Indian, and Mixed Race combined average about 4 cases per year.



The median age of diagnosis—the age at which half of diagnoses are younger and half are older is age 33, but varies by risk exposure group:

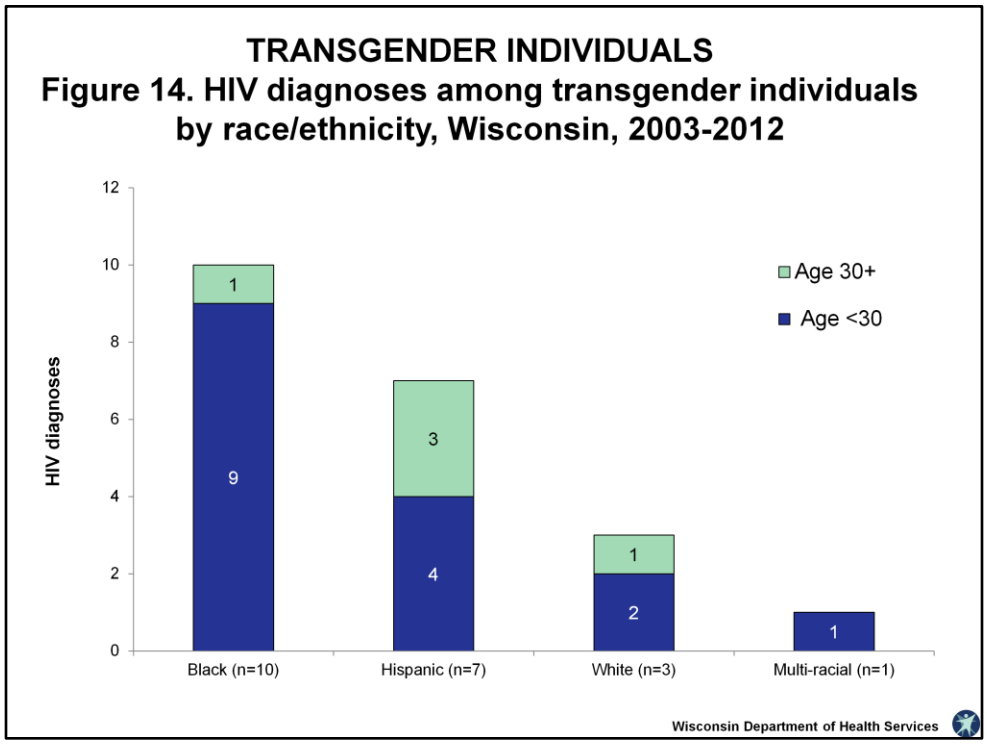
- IDUs: age 42
- High-risk heterosexuals: age 41
- MSM: age 30

Nearly half (47%) of diagnoses in MSM occurred in men under age 30, compared to 30% and 22% respectively of high-risk heterosexuals and injection drug users (IDUs).

Among MSM, the median age of diagnosis also varies considerably:

- Black MSM: age 23
- Hispanic MSM: age 31
- White MSM: age 43

Among Black MSM diagnosed with HIV in 2012, 59% were under age 25 and 20% were ages 25-29; only 21% were age 30 or older. Among Hispanic and White MSM, 46% and 16% respectively were under age 30.

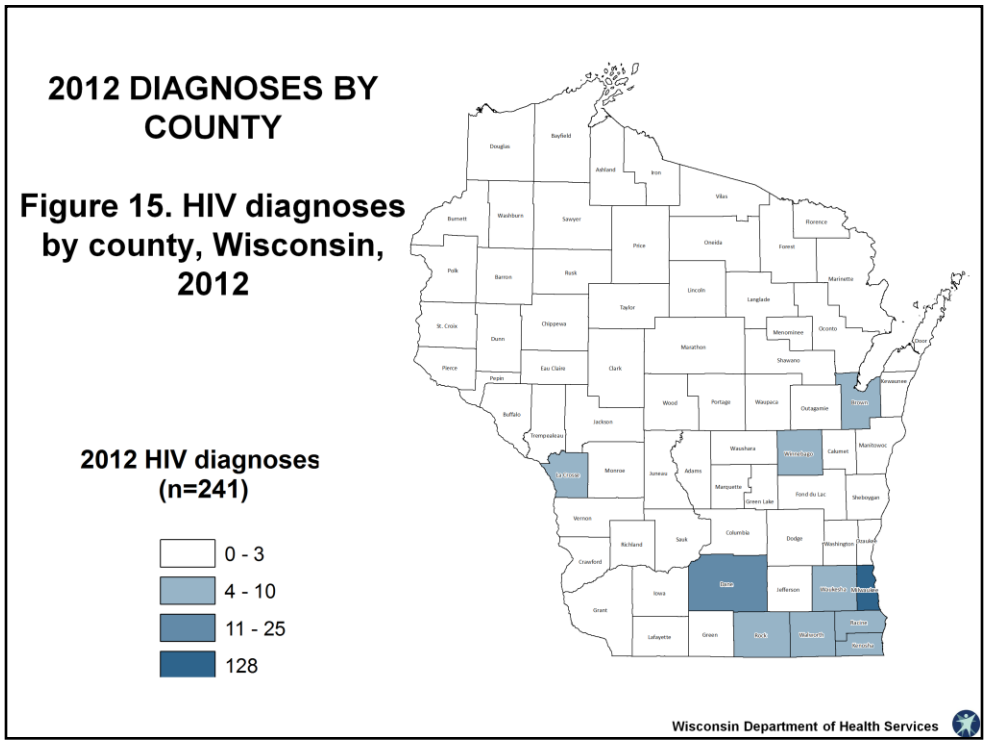


The term “transgender” refers to people whose gender identity does not conform to their sex assigned at birth. It includes people who self-identify as male-to-female or transgender women; female-to-male or transgender men; and many other gender nonconforming identities. A transgender person may have the anatomy of their sex at birth, the other sex, or a combination. Gender identity and sexual orientation are separate, distinct concepts with gender identity referring to an individual’s sense of themselves and sexual orientation referring to an individual’s attractions and partnering.

A total of 31 known transgender individuals have been diagnosed with HIV in Wisconsin between 1983 and 2012; 21 of these diagnoses occurred between 2003 and 2012. Nineteen diagnoses were among male-to-female individuals; 17 of these had MSM only risk; one had MSM/IDU risk and one had unknown risk. Two diagnoses were female-to-male individuals; one had high-risk heterosexual exposure and one had unknown risk exposure.

Blacks accounted for nearly half of diagnoses among transgender individuals in the past decade and 9 of 10 of these nearly were under age 30. Hispanics accounted for one-third of diagnoses among transgender individuals.

Previous slides showing diagnoses for males and females used *sex at birth*, the analysis presented on this slide is based on *current gender*.



Since the beginning of the HIV epidemic, cases of HIV have been diagnosed in all 72 counties in Wisconsin. In 2012, HIV cases were reported from 34 counties. However, the distribution of reporting is uneven; Milwaukee County cases accounted for 53%, Dane County for 10%, and Waukesha, Kenosha, and Racine Counties each for 4%. All other counties accounted for fewer than 3% of diagnoses.

Milwaukee County had an HIV diagnosis more than six times higher than the rest of the state (13.4 per 100,000 in Milwaukee vs. 2.4 in Wisconsin excluding Milwaukee County).

Summary of HIV diagnoses in Wisconsin, 2012

- 2012 diagnoses in Wisconsin: 241
- Sex:
  - Males, 78% of new diagnoses
  - Males and females – stable rates, 2003-2012
- Gender:
  - 21 diagnoses in transgender individuals, 2003-2012
- Race/Ethnicity:
  - Males: Rates in Blacks 10 times and Hispanics 5 times higher than in Whites
  - Females: Rates in Blacks 25 times and Hispanics and Asians 5 times higher than in Whites
- Geography
  - Diagnosis rates in Milwaukee 6 times higher than in Wisconsin excluding Milwaukee County

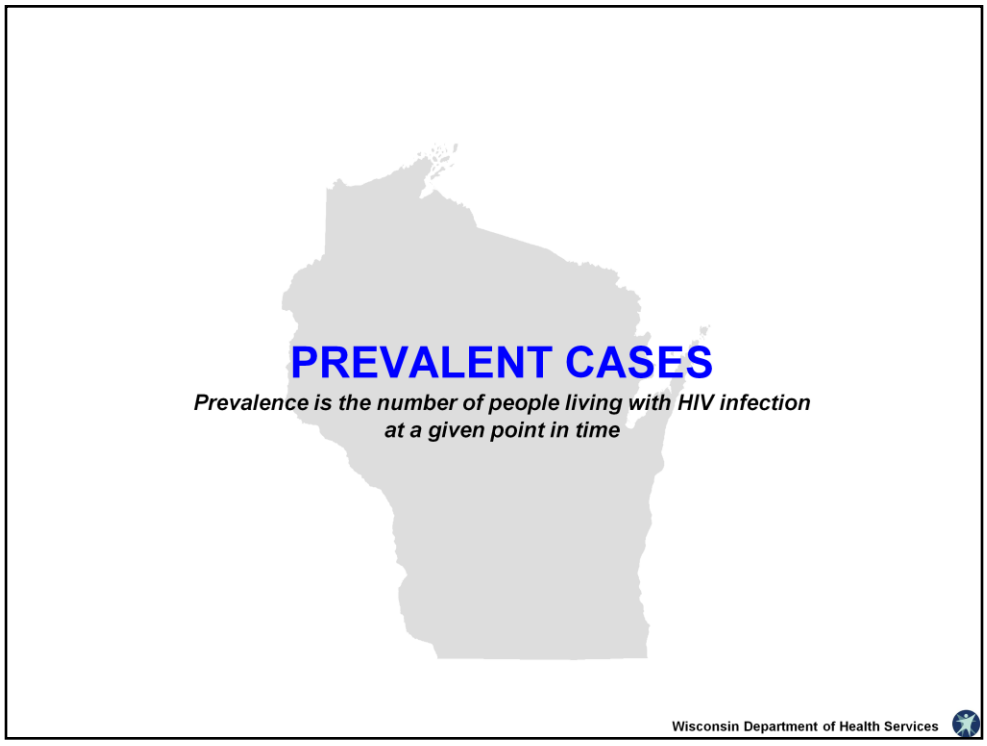
Summary of HIV diagnoses by risk exposure in Wisconsin, 2012

Risk	Median age at diagnosis by risk
Men who have sex with men, 70%	33
High-risk heterosexual, 21%	42
Injection drug users, 7%	41

MSM by race/ethnicity (all ages)	Median age by race
Whites, 45%	43
Blacks, 36%	23
Hispanics, 15%	31
Asians, 2%	--

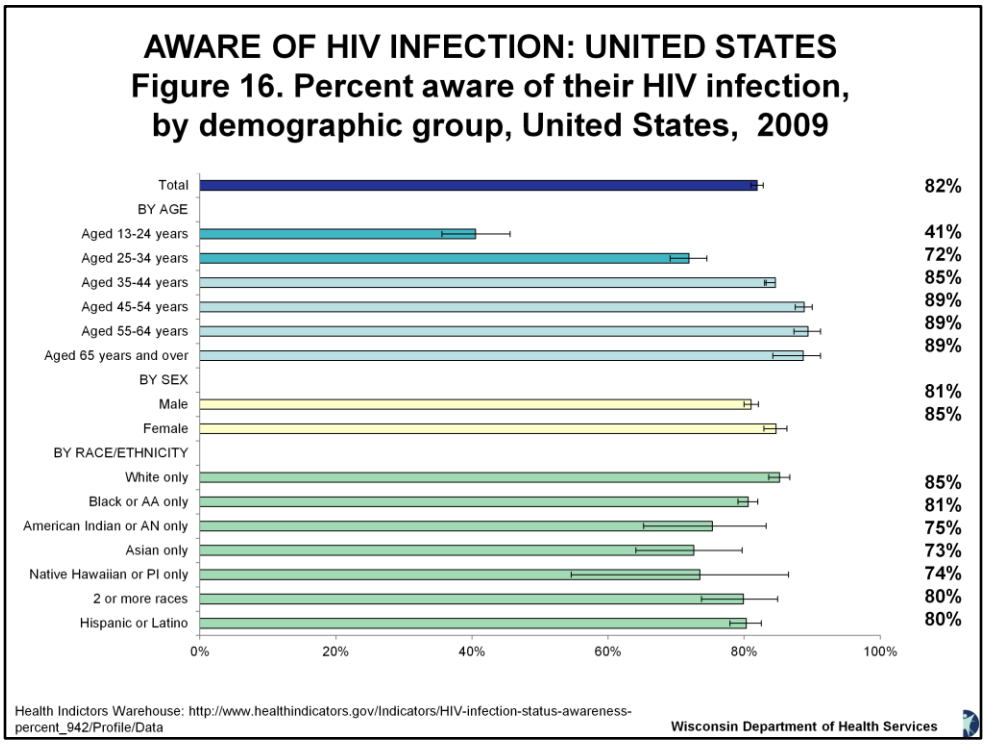
- Black MSM under age 30
  - 58% of 2012 diagnoses (8% of male population, ages 15-29)
  - Diagnoses tripled 2003-2010, declined modestly 2010 – 2012
  - Median age at diagnosis, 23

Wisconsin Department of Health Services



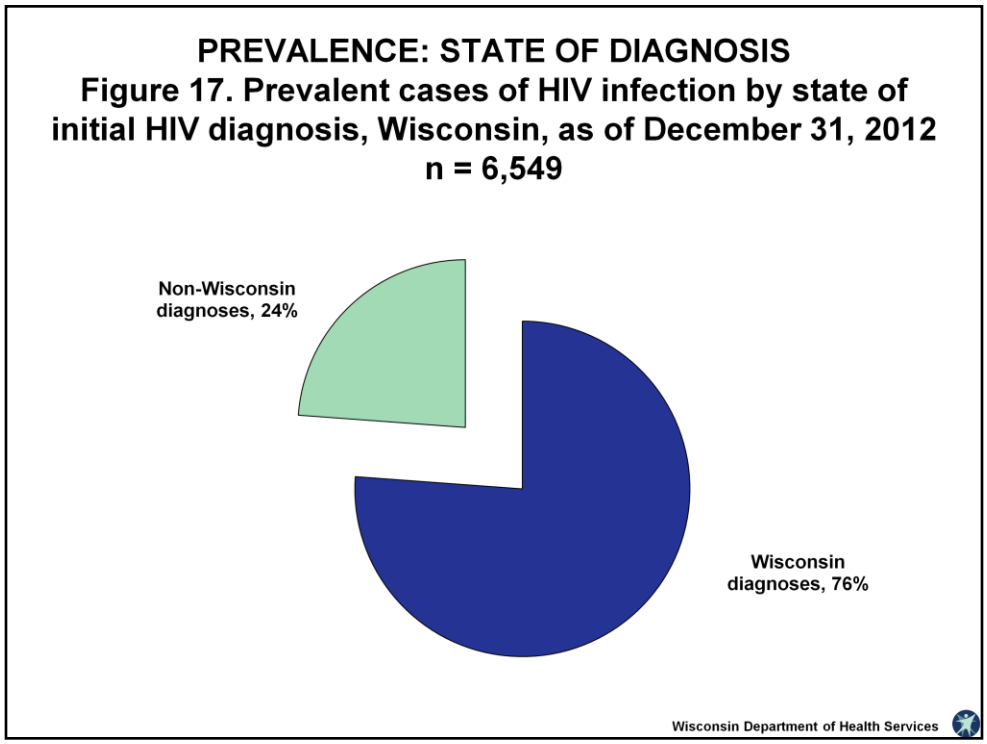
Reported HIV prevalence usually increases each year in Wisconsin because the number of new HIV diagnoses and people with HIV moving into the state is greater than the number of deaths and people with HIV moving out of the state. However Wisconsin's reported HIV prevalence remained level from 2011 (n=6,550) to 2012 (n=6,549).

This was due to identification of 235 additional persons who were found to have died at some point since the early 1980s. The 235 deaths represents 2% of the 12,000 cases ever reported in Wisconsin.



CDC estimates that 82% of people living with HIV are aware of their infection, meaning that nearly one in five people living with HIV is not aware of their infection. That percentage varies considerably by demographic group. The characteristic most affected is age group: less than half (41%) of people ages 13-24, and 72% of people ages 25-34 with HIV are aware of their infection, while 89% of people ages 45 and older are aware of their infection. These findings have implications for planning of HIV testing services.

Once people are aware of their infection, they are at lower risk of transmitting HIV for two reasons. They are more likely to reduce their risk behaviors, and they have the opportunity to be receive medical care, including taking HIV medications which reduces viral load.



As of December 31, 2012, 6,549 individuals reported with HIV or AIDS were presumed to be alive and living in Wisconsin.

Three out of four (76%) prevalent cases received their first verifiable HIV diagnosis in Wisconsin; 24% received their initial HIV diagnosis in another state and subsequently moved to Wisconsin. Of Wisconsin's 1,563 prevalent cases originally diagnosed with HIV in another state, more than half were diagnosed in one of the five following states: Illinois (n=279), Minnesota (n=95), Florida (n=82) California (n=79), or Texas (n=57).

The 6,549 cases excludes those who are known to have died or who are known to have moved to another state.

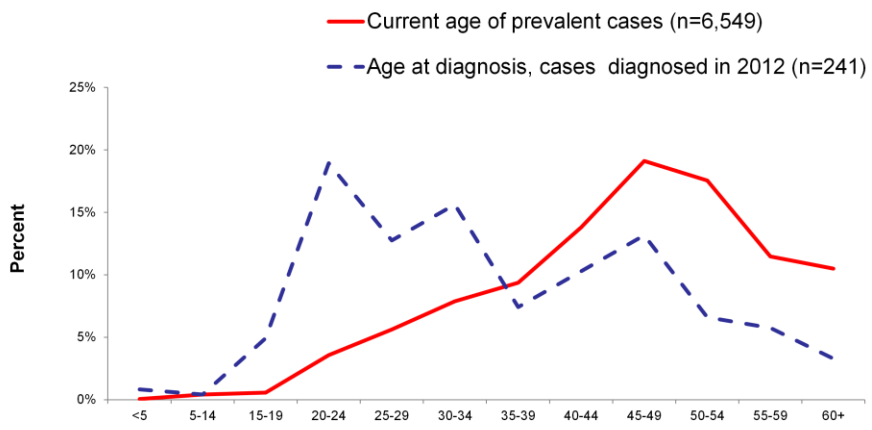
It also excludes those who do not know they are infected with HIV. The CDC estimates that 18% of all persons living with HIV do not know they are infected, meaning that an additional 1,500 people are estimated to be living with HIV in Wisconsin but are unaware of their status. Thus the total number of people living with HIV in Wisconsin is estimated to be 8,000 persons at the end of 2012.

Wisconsin has an estimated HIV prevalence (among reported cases only) of 106 per 100,000. This is about one-third that of all U.S. states (339 per 100,000).[1]

1. CDC HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2011 Vol. 23, Table 21

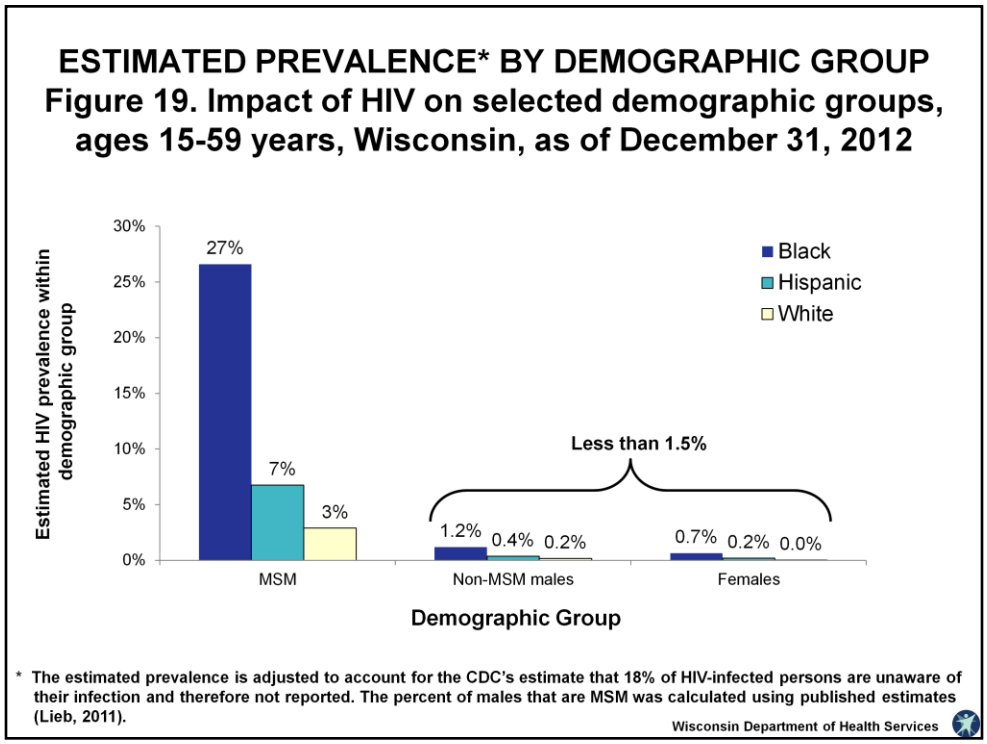
PREVALENCE: AGE

Figure 18. Prevalent cases of HIV infection by current age as of 12/31/2012 and cases reported during 2012 by age at diagnosis, Wisconsin



Wisconsin Department of Health Services

Of Wisconsin's known prevalent HIV cases, 10% are under 30 years of age, 50% are between the ages of 30 and 49 years, and 40% are ages 50 years or older. Thus services for people living with HIV need to address health conditions of aging in addition to HIV infection.



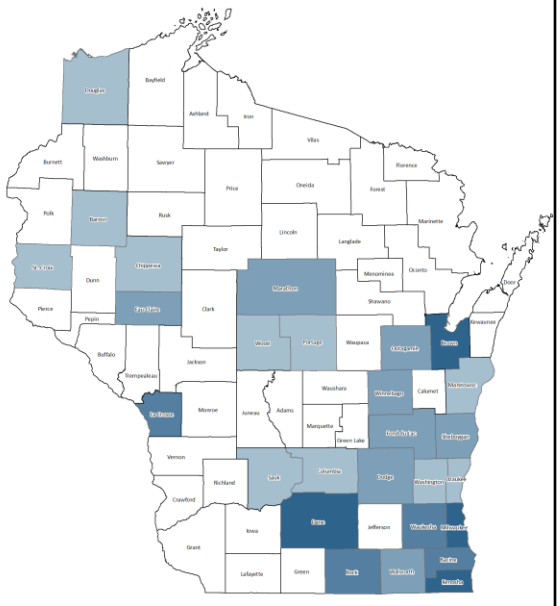
Disparities in HIV prevalence occur both *between* MSM and other demographic groups and by race/ethnicity *within* each demographic group. More than one in four (27%) Black MSM in Wisconsin is estimated to be HIV positive, compared to 7% of Hispanic MSM and 3% of White MSM. Fewer than one in 1,000 females 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).

These percentages are based on published estimates of the percent of Wisconsin adolescent and adult males that are MSM (Black, 4.3%, Hispanic, 5.3%, and White, 5.6%)[1], and CDC's estimate that 18% of people living with HIV are unaware of their status.[2]

1. Lieb S. et al. Statewide estimation of populations of MSM in the United States. Public Health Reports 2011;126(1):60–72.
2. Health Indictors Warehouse: http://www.healthindicators.gov/Indicators/HIV-infection-status-awareness-percent_942/Profile/Data

PREVALENCE: GEOGRAPHY

Figure 20. Reported cases of HIV infection presumed to be alive by county, Wisconsin, as of December 31, 2012



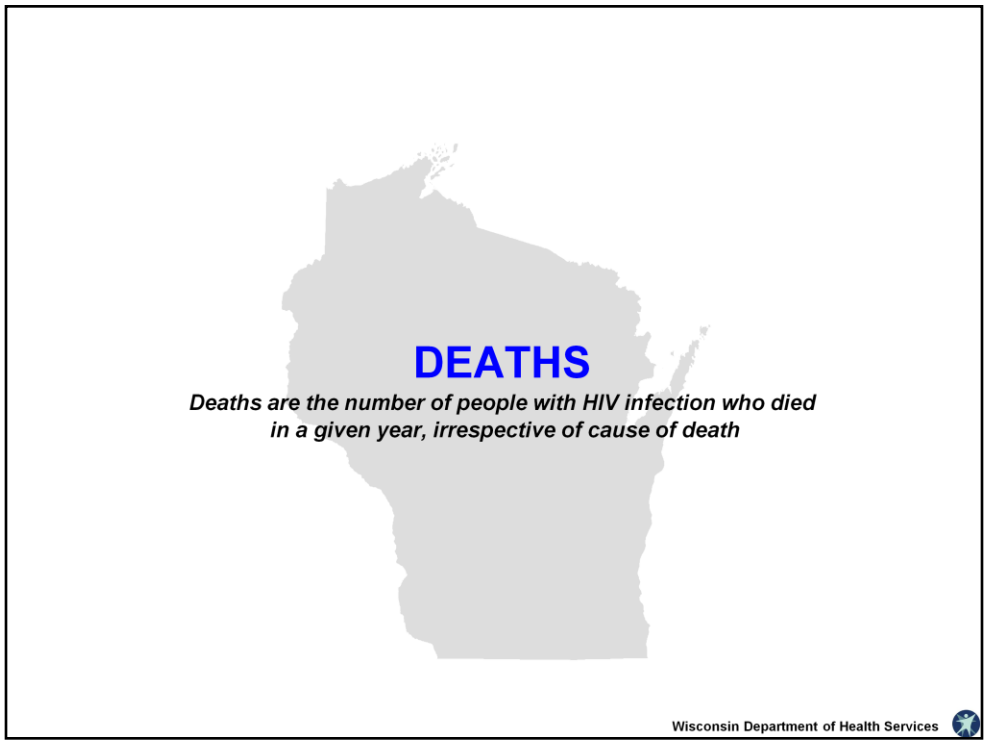
Persons reported and living with HIV in Wisconsin, 2012 (n=6,035*)

- 0 - 20
- 21 - 40
- 41 - 100
- 101 - 200
- 201 - 3014

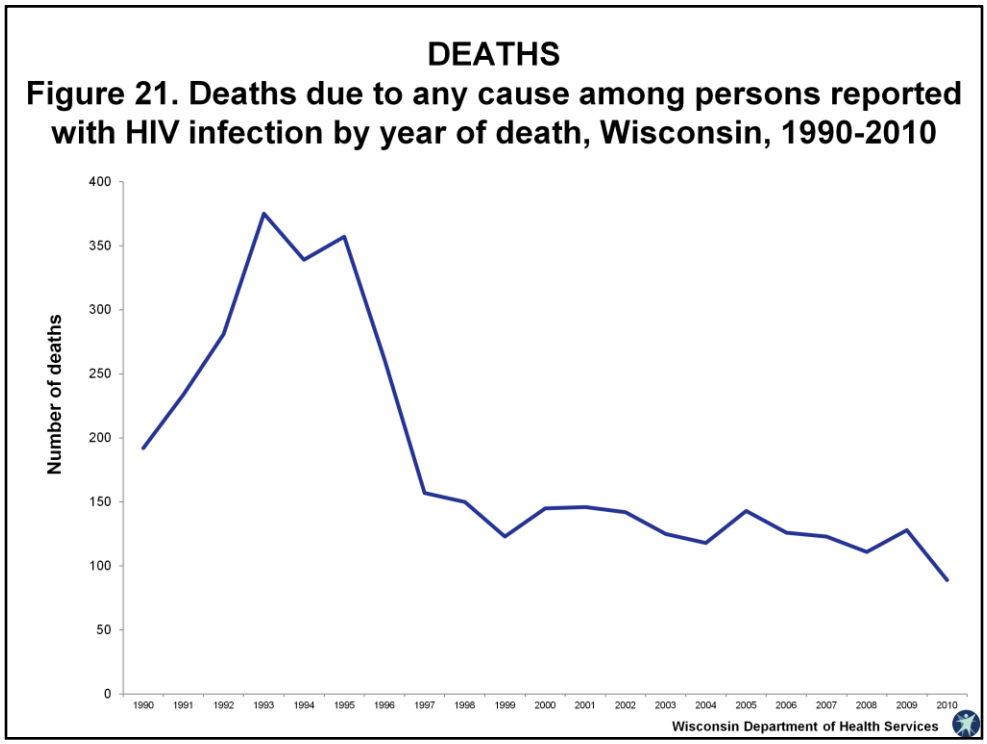
*Excludes 228 cases with the Wisconsin Department of Corrections as the last known address and 285 cases where county of residence is unknown.

Wisconsin Department of Health Services

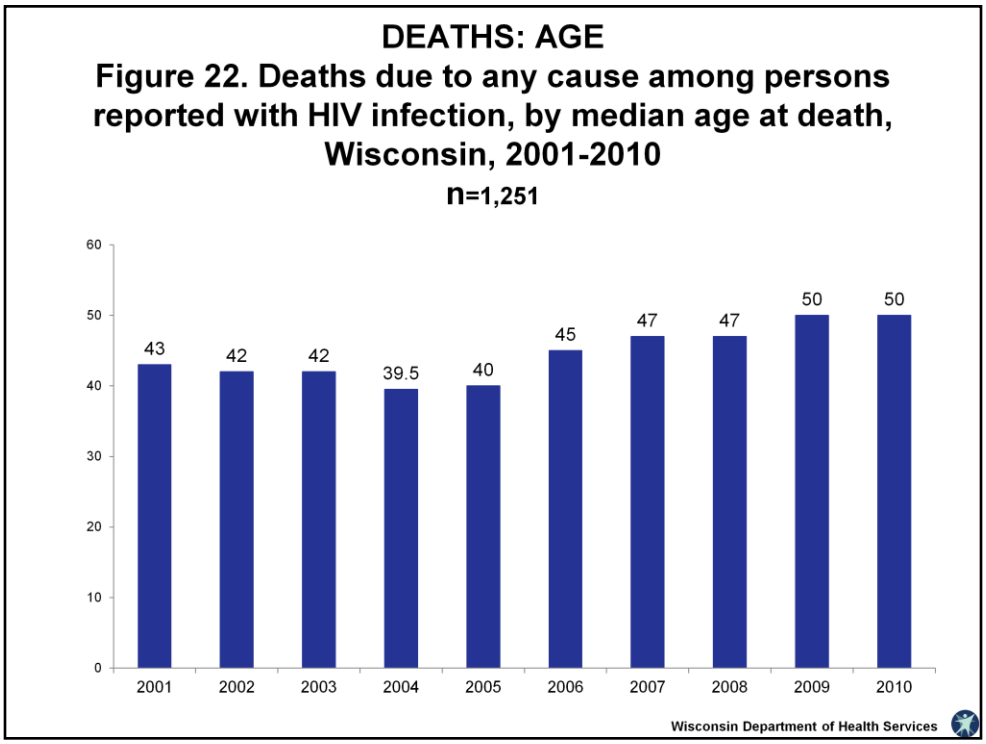
Nearly half (48%) of all prevalent cases live in Milwaukee County; Dane County is next highest, with 12%. Kenosha County has 4% of prevalent HIV cases, the Wisconsin Department of Corrections, Brown, Racine, and Waukesha counties each have 3%; Rock and La Crosse each have 2%; and all other counties have 1% or fewer prevalent cases.



As mentioned previously, a match to the National Death Index identified an additional 235 deaths among the 12,000 people ever reported in Wisconsin with HIV infection. These were deaths that occurred in other states.



Deaths due to any cause among persons reported with HIV infection in Wisconsin have declined since the early- to mid-1990s. In 2010, 89 deaths among persons reported with HIV infection in Wisconsin are known to have occurred. This is 76% fewer than the 375 deaths in 1993, the peak year. Because of reporting delays, 2010 is the most recent year for which reliable data are available.



There were 1,251 deaths due to any cause among persons reported with HIV infection during the period 2001 to 2010.

The median age of death has increased over time, from age 37 in 1990 to age 43 in 2001 to age 50 in 2010.

Summary of HIV Prevalence and Deaths as of 12/31/2012

- PREVALENT CASES
  - Wisconsin, one-third rate of U.S. states
  - 6,549 reported + 1,500 estimated unaware of HIV infection ≈ 8,000
- Age
  - 40% are age 50 or older
- Estimated HIV positive by risk and race
  - General population: 2 in 1,000
  - Blacks: Non-MSM males, 1.2%; females, 0.7%
  - MSM: Black, 27%; Hispanic, 7%; White, 3%
- Geography:
  - Milwaukee County: 48%; Dane County, 12%; all other 4% or less
- DEATHS
  - 89 in HIV-infected individuals in 2010

Wisconsin Department of Health Services 

Tables

Reported Cases of HIV Infection
Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	10,246	100.0%	1,307	261.4	100.0%	4.6	241	100.0%	4.2	6,549	100.0%	114.7
Disease Status(g)												
(Missing)	613	6.0%	1	0.2	0.1%	0.0	0	0.0%	0.0	0	0.0%	0.0
HIV	7,066	69.0%	990	198.0	75.7%	3.5	169	70.1%	3.0	3,139	47.9%	55.0
AIDS	2,567	25.1%	316	63.2	24.2%	1.1	72	29.9%	1.3	3,410	52.1%	59.7
Sex at Birth												
Female	1,749	17.1%	260	52.0	19.9%	1.8	52	21.6%	1.8	1,314	20.1%	45.7
Male	8,497	82.9%	1,047	209.4	80.1%	7.5	189	78.4%	6.7	5,235	79.9%	184.6
Race/Ethnicity												
White	5,449	53.2%	525	105.0	40.2%	2.2	98	40.7%	2.1	3,092	47.2%	65.2
African American	3,521	34.4%	535	107.0	40.9%	31.4	101	41.9%	28.5	2,490	38.0%	701.9
Hispanic	1,032	10.1%	180	36.0	13.8%	11.6	34	14.1%	9.8	784	12.0%	225.1
American Indian	72	0.7%	5	1.0	0.4%	2.6	0	0.0%	0.0	39	0.6%	79.4
Asian/Pacific Islander	93	0.9%	34	6.8	2.6%	5.4	4	1.7%	2.9	70	1.1%	51.6
Multi-racial	78	0.8%	28	5.6	2.1%	8.2	4	1.7%	5.0	73	1.1%	91.2
Unknown	1	0.0%	0	0.0	0.0%	-	0	0.0%	-	1	0.0%	-
Age(h)												
<5	78	0.8%	5	1.0	0.4%	0.3	0	0.0%	0.0	4	0.1%	1.1
5-14	34	0.3%	3	0.6	0.2%	0.1	1	0.4%	0.1	27	0.4%	3.6
15-19	287	2.8%	80	16.0	6.1%	4.0	12	5.0%	3.0	37	0.6%	9.3
20-24	1,192	11.6%	233	46.6	17.8%	11.4	46	19.1%	11.9	234	3.6%	60.3
25-29	1,940	18.9%	190	38.0	14.5%	10.3	31	12.9%	8.4	368	5.6%	99.1
30-34	2,097	20.5%	166	33.2	12.7%	9.8	38	15.8%	10.6	516	7.9%	143.3
35-39	1,786	17.4%	157	31.4	12.0%	8.9	18	7.5%	5.4	613	9.4%	184.4
40-44	1,198	11.7%	162	32.4	12.4%	8.3	25	10.4%	6.6	904	13.8%	240.1
45-49	779	7.6%	134	26.8	10.3%	6.1	32	13.3%	7.6	1,252	19.1%	296.7
50-54	423	4.1%	83	16.6	6.4%	3.9	16	6.6%	3.6	1,150	17.6%	260.0
55-59	236	2.3%	60	12.0	4.6%	3.2	14	5.8%	3.5	752	11.5%	189.3
60+	196	1.9%	34	6.8	2.6%	0.6	8	3.3%	0.7	688	10.5%	61.0
Risk exposure												
MSM	5,514	53.8%	715	143.0	54.7%	-	124	51.5%	-	3,366	51.4%	-
IDU	1,309	12.8%	62	12.4	4.7%	-	9	3.7%	-	657	10.0%	-
MSM & IDU	634	6.2%	27	5.4	2.1%	-	3	1.2%	-	390	6.0%	-
Heterosexual	1,240	12.1%	156	31.2	11.9%	-	20	8.3%	-	933	14.2%	-
Other/Unknown	1,549	15.1%	347	69.4	26.5%	-	85	35.3%	-	1,203	18.4%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	7,662	-
2003	257	4.7
2004	260	4.7
2005	276	5.0
2006	254	4.6
2007	280	5.0
2008	243	4.3
2009	284	5.0
2010	252	4.4
2011	248	4.3
2012	241	4.2

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
Males, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	8,497	100.0%	1,047	209.4	100.0%	7.5	189	100.0%	6.7	5,235	100.0%	184.6
Disease Status(g)												
(Missing)	585	6.9%	1	0.2	0.1%	0.0	0	0.0%	0.0	0	0.0%	0.0
HIV	5,709	67.2%	779	155.8	74.4%	5.5	132	69.8%	4.7	2,464	47.1%	86.9
AIDS	2,203	25.9%	267	53.4	25.5%	1.9	57	30.2%	2.0	2,771	52.9%	97.7
Sex at Birth												
Female	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Male	8,497	100.0%	1,047	209.4	100.0%	7.5	189	100.0%	6.7	5,235	100.0%	184.6
Race/Ethnicity												
White	4,890	57.5%	461	92.2	44.0%	3.9	81	42.9%	3.4	2,687	51.3%	114.4
African American	2,633	31.0%	388	77.6	37.1%	46.6	72	38.1%	41.3	1,820	34.8%	1,045.0
Hispanic	799	9.4%	155	31.0	14.8%	18.9	29	15.3%	15.9	603	11.5%	330.6
American Indian	49	0.6%	4	0.8	0.4%	4.1	0	0.0%	0.0	25	0.5%	101.9
Asian/Pacific Islander	68	0.8%	21	4.2	2.0%	6.8	3	1.6%	4.5	46	0.9%	69.4
Multi-racial	57	0.7%	18	3.6	1.7%	10.7	4	2.1%	10.2	53	1.0%	135.4
Unknown	1	0.0%	0	0.0	0.0%	-	0	0.0%	-	1	0.0%	-
Age(h)												
<5	36	0.4%	2	0.4	0.2%	0.5	0	0.0%	0.0	3	0.1%	1.7
5-14	24	0.3%	1	0.2	0.1%	0.3	1	0.5%	0.3	9	0.2%	2.4
15-19	198	2.3%	65	13.0	6.2%	6.3	11	5.8%	5.4	24	0.5%	11.8
20-24	959	11.3%	204	40.8	19.5%	19.7	39	20.6%	19.7	195	3.7%	98.4
25-29	1,606	18.9%	153	30.6	14.6%	16.2	24	12.7%	12.7	291	5.6%	154.4
30-34	1,771	20.8%	123	24.6	11.7%	14.1	32	16.9%	17.4	403	7.7%	219.5
35-39	1,527	18.0%	125	25.0	11.9%	14.0	15	7.9%	8.9	431	8.2%	255.9
40-44	1,017	12.0%	128	25.6	12.2%	12.9	17	9.0%	8.9	705	13.5%	371.0
45-49	654	7.7%	103	20.6	9.8%	9.4	25	13.2%	11.8	1,036	19.8%	490.9
50-54	361	4.2%	67	13.4	6.4%	6.2	11	5.8%	5.0	932	17.8%	422.1
55-59	192	2.3%	49	9.8	4.7%	5.2	10	5.3%	5.0	639	12.2%	322.1
60+	152	1.8%	27	5.4	2.6%	1.1	4	2.1%	0.8	563	10.8%	109.7
Risk exposure												
MSM	5,514	64.9%	715	143.0	68.3%	-	124	65.6%	-	3,366	64.3%	-
IDU	904	10.6%	34	6.8	3.2%	-	5	2.6%	-	418	8.0%	-
MSM & IDU	634	7.5%	27	5.4	2.6%	-	3	1.6%	-	390	7.4%	-
Heterosexual	361	4.2%	52	10.4	5.0%	-	4	2.1%	-	264	5.0%	-
Other/Unknown	1,084	12.8%	219	43.8	20.9%	-	53	28.0%	-	797	15.2%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	6,441	-
2003	197	7.3
2004	218	8.0
2005	210	7.6
2006	206	7.4
2007	231	8.3
2008	191	6.8
2009	218	7.8
2010	206	7.3
2011	201	7.1
2012	189	6.7

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
Females, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	1,749	100.0%	260	52.0	100.0%	1.8	52	100.0%	1.8	1,314	100.0%	45.7
Disease Status(g)												
(Missing)	28	1.6%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
HIV	1,357	77.6%	211	42.2	81.2%	1.5	37	71.2%	1.3	675	51.4%	23.5
AIDS	364	20.8%	49	9.8	18.8%	0.3	15	28.8%	0.5	639	48.6%	22.2
Sex at Birth												
Female	1,749	100.0%	260	52.0	100.0%	1.8	52	100.0%	1.8	1,314	100.0%	45.7
Male	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Race/Ethnicity												
White	559	32.0%	64	12.8	24.6%	0.5	17	32.7%	0.7	405	30.8%	16.9
African American	888	50.8%	147	29.4	56.5%	16.9	29	55.8%	16.1	670	51.0%	371.0
Hispanic	233	13.3%	25	5.0	9.6%	3.4	5	9.6%	3.0	181	13.8%	109.1
American Indian	23	1.3%	1	0.2	0.4%	4.1	0	0.0%	0.0	14	1.1%	56.9
Asian/Pacific Islander	25	1.4%	13	2.6	5.0%	4.1	1	1.9%	1.4	24	1.8%	34.6
Multi-racial	21	1.2%	10	2.0	3.8%	5.8	0	0.0%	0.0	20	1.5%	48.9
Age(h)												
<5	42	2.4%	3	0.6	1.2%	0.6	0	0.0%	0.0	1	0.1%	0.6
5-14	10	0.6%	2	0.4	0.8%	0.3	0	0.0%	0.0	18	1.4%	5.0
15-19	89	5.1%	15	3.0	5.8%	1.5	1	1.9%	0.5	13	1.0%	6.7
20-24	233	13.3%	29	5.8	11.2%	2.9	7	13.5%	3.7	39	3.0%	20.5
25-29	334	19.1%	37	7.4	14.2%	4.1	7	13.5%	3.8	77	5.9%	42.1
30-34	326	18.6%	43	8.6	16.5%	5.2	6	11.5%	3.4	113	8.6%	64.0
35-39	259	14.8%	32	6.4	12.3%	3.7	3	5.8%	1.8	182	13.9%	110.9
40-44	181	10.3%	34	6.8	13.1%	3.5	8	15.4%	4.3	199	15.1%	106.7
45-49	125	7.1%	31	6.2	11.9%	2.8	7	13.5%	3.3	216	16.4%	102.4
50-54	62	3.5%	16	3.2	6.2%	1.5	5	9.6%	2.3	218	16.6%	98.4
55-59	44	2.5%	11	2.2	4.2%	1.2	4	7.7%	2.0	113	8.6%	56.8
60+	44	2.5%	7	1.4	2.7%	0.3	4	7.7%	0.7	125	9.5%	20.3
Risk exposure												
MSM	0	0.0%	0	0.0	0.0%	-	0	0.0%	-	0	0.0%	0.0
IDU	405	23.2%	28	5.6	10.8%	-	4	7.7%	-	239	18.2%	-
MSM & IDU	0	0.0%	0	0.0	0.0%	-	0	0.0%	-	0	0.0%	0.0
Heterosexual	879	50.3%	104	20.8	40.0%	-	16	30.8%	-	669	50.9%	-
Other/Unknown	465	26.6%	128	25.6	49.2%	-	32	61.5%	-	406	30.9%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	1,221	-
2003	60	2.2
2004	42	1.5
2005	66	2.4
2006	48	1.7
2007	49	1.7
2008	52	1.8
2009	66	2.3
2010	46	1.6
2011	47	1.6
2012	52	1.8

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
Whites, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	5,449	100.0%	525	105.0	100.0%	2.2	98	100.0%	2.1	3,092	100.0%	65.2
Disease Status(g)												
(Missing)	502	9.2%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
HIV	3,482	63.9%	372	74.4	70.9%	1.6	62	63.3%	1.3	1,468	47.5%	30.9
AIDS	1,465	26.9%	153	30.6	29.1%	0.6	36	36.7%	0.8	1,624	52.5%	34.2
Sex at Birth												
Female	559	10.3%	64	12.8	12.2%	0.5	17	17.3%	0.7	405	13.1%	16.9
Male	4,890	89.7%	461	92.2	87.8%	3.9	81	82.7%	3.4	2,687	86.9%	114.4
Race/Ethnicity												
White	5,449	100.0%	525	105.0	100.0%	2.2	98	100.0%	2.1	3,092	100.0%	65.2
African American	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Hispanic	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Multi-racial	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Age(h)												
<5	22	0.4%	1	0.2	0.2%	0.4	0	0.0%	0.0	0	0.0%	0.0
5-14	14	0.3%	0	0.0	0.0%	0.0	0	0.0%	0.0	4	0.1%	0.7
15-19	76	1.4%	11	2.2	2.1%	0.7	0	0.0%	0.0	7	0.2%	2.3
20-24	470	8.6%	55	11.0	10.5%	3.4	9	9.2%	3.0	37	1.2%	12.3
25-29	979	18.0%	74	14.8	14.1%	5.0	9	9.2%	3.1	109	3.5%	37.5
30-34	1,111	20.4%	65	13.0	12.4%	4.8	16	16.3%	5.6	189	6.1%	66.5
35-39	1,042	19.1%	70	14.0	13.3%	4.8	10	10.2%	3.8	249	8.1%	93.5
40-44	683	12.5%	85	17.0	16.2%	5.0	10	10.2%	3.2	394	12.7%	124.3
45-49	476	8.7%	66	13.2	12.6%	3.4	21	21.4%	5.7	631	20.4%	170.7
50-54	274	5.0%	42	8.4	8.0%	2.2	10	10.2%	2.5	602	19.5%	151.9
55-59	158	2.9%	36	7.2	6.9%	2.1	8	8.2%	2.2	425	13.7%	117.6
60+	144	2.6%	20	4.0	3.8%	0.4	5	5.1%	0.5	442	14.3%	41.8
Risk exposure												
MSM	3,711	68.1%	349	69.8	66.5%	-	52	53.1%	-	2,028	65.6%	-
IDU	368	6.8%	30	6.0	5.7%	-	4	4.1%	-	189	6.1%	-
MSM & IDU	355	6.5%	17	3.4	3.2%	-	2	2.0%	-	220	7.1%	-
Heterosexual	384	7.0%	34	6.8	6.5%	-	5	5.1%	-	269	8.7%	-
Other/Unknown	631	11.6%	95	19.0	18.1%	-	35	35.7%	-	386	12.5%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	4,361	-
2003	105	2.2
2004	126	2.7
2005	127	2.7
2006	116	2.4
2007	122	2.6
2008	96	2.0
2009	120	2.5
2010	95	2.0
2011	92	1.9
2012	98	2.1

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
African Americans, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	3,521	100.0%	535	107.0	100.0%	31.4	101	100.0%	28.5	2,490	100.0%	701.9
Disease Status(g)												
(Missing)	82	2.3%	1	0.2	0.2%	0.3	0	0.0%	0.0	0	0.0%	0.0
HIV	2,693	76.5%	444	88.8	83.0%	26.1	76	75.2%	21.4	1,234	49.6%	347.8
AIDS	746	21.2%	90	18.0	16.8%	5.3	25	24.8%	7.0	1,256	50.4%	354.0
Sex at Birth												
Female	888	25.2%	147	29.4	27.5%	16.9	29	28.7%	16.1	670	26.9%	371.0
Male	2,633	74.8%	388	77.6	72.5%	46.6	72	71.3%	41.3	1,820	73.1%	1,045.0
Race/Ethnicity												
White	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
African American	3,521	100.0%	535	107.0	100.0%	31.4	101	100.0%	28.5	2,490	100.0%	701.9
Hispanic	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Multi-racial	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Age(h)												
<5	33	0.9%	2	0.4	0.4%	3.0	0	0.0%	0.0	3	0.1%	9.6
5-14	13	0.4%	2	0.4	0.4%	1.6	1	1.0%	1.6	17	0.7%	26.9
15-19	172	4.9%	56	11.2	10.5%	33.0	11	10.9%	32.3	21	0.8%	61.6
20-24	533	15.1%	137	27.4	25.6%	91.7	25	24.8%	79.7	153	6.1%	487.8
25-29	686	19.5%	70	14.0	13.1%	51.6	17	16.8%	62.8	193	7.8%	713.2
30-34	719	20.4%	63	12.6	11.8%	53.4	12	11.9%	46.9	226	9.1%	883.6
35-39	539	15.3%	50	10.0	9.3%	43.0	5	5.0%	21.7	226	9.1%	978.9
40-44	383	10.9%	49	9.8	9.2%	44.7	12	11.9%	51.6	353	14.2%	1,518.6
45-49	234	6.6%	50	10.0	9.3%	46.5	7	6.9%	31.4	458	18.4%	2,055.0
50-54	117	3.3%	31	6.2	5.8%	31.8	5	5.0%	23.1	419	16.8%	1,938.9
55-59	49	1.4%	15	3.0	2.8%	19.6	4	4.0%	23.1	244	9.8%	1,407.6
60+	43	1.2%	10	2.0	1.9%	6.5	2	2.0%	5.8	177	7.1%	509.0
Risk exposure												
MSM	1,345	38.2%	247	49.4	46.2%	-	45	44.6%	-	969	38.9%	-
IDU	675	19.2%	17	3.4	3.2%	-	2	2.0%	-	316	12.7%	-
MSM & IDU	210	6.0%	6	1.2	1.1%	-	1	1.0%	-	119	4.8%	-
Heterosexual	607	17.2%	84	16.8	15.7%	-	11	10.9%	-	472	19.0%	-
Other/Unknown	684	19.4%	181	36.2	33.8%	-	42	41.6%	-	614	24.7%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	2,505	-
2003	103	32.6
2004	87	27.3
2005	100	31.0
2006	92	28.3
2007	104	31.6
2008	103	31.0
2009	111	33.2
2010	114	32.3
2011	103	29.0
2012	101	28.5

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
Hispanics, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	1,032	100.0%	180	36.0	100.0%	11.6	34	100.0%	9.8	784	100.0%	225.1
Disease Status(g)												
(Missing)	27	2.6%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
HIV	699	67.7%	120	24.0	66.7%	7.8	24	70.6%	6.9	333	42.5%	95.6
AIDS	306	29.7%	60	12.0	33.3%	3.9	10	29.4%	2.9	451	57.5%	129.5
Sex at Birth												
Female	233	22.6%	25	5.0	13.9%	3.4	5	14.7%	3.0	181	23.1%	109.1
Male	799	77.4%	155	31.0	86.1%	18.9	29	85.3%	15.9	603	76.9%	330.6
Race/Ethnicity												
White	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
African American	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Hispanic	1,032	100.0%	180	36.0	100.0%	11.6	34	100.0%	9.8	784	100.0%	225.1
American Indian	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Multi-racial	0	0.0%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Age(h)												
<5	16	1.6%	0	0.0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
5-14	6	0.6%	1	0.2	0.6%	1.3	0	0.0%	0.0	3	0.4%	3.9
15-19	34	3.3%	10	2.0	5.6%	7.2	0	0.0%	0.0	7	0.9%	22.4
20-24	141	13.7%	31	6.2	17.2%	22.9	7	20.6%	23.5	30	3.8%	100.7
25-29	219	21.2%	32	6.4	17.8%	22.7	3	8.8%	9.7	51	6.5%	164.1
30-34	220	21.3%	25	5.0	13.9%	18.3	10	29.4%	32.4	78	9.9%	252.4
35-39	170	16.5%	27	5.4	15.0%	23.1	3	8.8%	11.2	113	14.4%	423.7
40-44	113	10.9%	24	4.8	13.3%	25.6	3	8.8%	14.0	125	15.9%	583.3
45-49	56	5.4%	13	2.6	7.2%	21.8	4	11.8%	24.1	143	18.2%	862.0
50-54	23	2.2%	6	1.2	3.3%	17.7	1	2.9%	7.6	106	13.5%	802.5
55-59	25	2.4%	7	1.4	3.9%	21.6	2	5.9%	21.2	69	8.8%	731.9
60+	9	0.9%	4	0.8	2.2%	13.1	1	2.9%	5.9	58	7.4%	341.5
Risk exposure												
MSM	365	35.4%	93	18.6	51.7%	-	22	64.7%	-	303	38.6%	-
IDU	239	23.2%	12	2.4	6.7%	-	2	5.9%	-	132	16.8%	-
MSM & IDU	50	4.8%	1	0.2	0.6%	-	0	0.0%	-	38	4.8%	-
Heterosexual	200	19.4%	24	4.8	13.3%	-	3	8.8%	-	152	19.4%	-
Other/Unknown	178	17.2%	50	10.0	27.8%	-	7	20.6%	-	159	20.3%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	660	-
2003	42	18.3
2004	35	14.5
2005	43	17.1
2006	38	14.4
2007	43	15.6
2008	33	11.5
2009	37	12.4
2010	27	8.0
2011	40	11.5
2012	34	9.8

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
Asian/Pacific Islanders, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	93	100.0%	34	6.8	100.0%	5.4	4	100.0%	2.9	70	100.0%	51.6
Disease Status(g)												
HIV	69	74.2%	25	5.0	73.5%	4.0	-	-	-	40	57.1%	29.5
AIDS	24	25.8%	9	1.8	26.5%	1.4	-	-	-	30	42.9%	22.1
Sex at Birth												
Female	25	26.9%	13	2.6	38.2%	4.1	-	-	-	24	34.3%	34.6
Male	68	73.1%	21	4.2	61.8%	6.8	-	-	-	46	65.7%	69.4
Race/Ethnicity												
White	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
African American	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Hispanic	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
American Indian	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Asian/Pacific Islander	93	100.0%	34	6.8	100.0%	5.4	-	-	-	70	100.0%	51.6
Multi-racial	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Age(h)												
<5	2	2.2%	1	0.2	2.9%	8.5	-	-	-	0	0.0%	0.0
5-14	0	0.0%	0	0.0	0.0%	0.0	-	-	-	2	2.9%	8.7
15-19	1	1.1%	1	0.2	2.9%	7.8	-	-	-	0	0.0%	0.0
20-24	19	20.4%	6	1.2	17.6%	8.6	-	-	-	8	11.4%	50.3
25-29	19	20.4%	5	1.0	14.7%	9.9	-	-	-	6	8.6%	42.5
30-34	20	21.5%	10	2.0	29.4%	19.1	-	-	-	8	11.4%	68.1
35-39	13	14.0%	4	0.8	11.8%	10.5	-	-	-	13	18.6%	129.5
40-44	6	6.5%	2	0.4	5.9%	12.2	-	-	-	9	12.9%	104.0
45-49	6	6.5%	3	0.6	8.8%	23.3	-	-	-	5	7.1%	69.4
50-54	4	4.3%	1	0.2	2.9%	21.0	-	-	-	12	17.1%	221.6
55-59	3	3.2%	1	0.2	2.9%	27.8	-	-	-	3	4.3%	64.8
60+	0	0.0%	0	0.0	0.0%	0.0	-	-	-	4	5.7%	39.8
Risk exposure												
MSM	35	37.6%	11	2.2	32.4%	-	-	-	-	26	37.1%	-
IDU	3	3.2%	1	0.2	2.9%	-	-	-	-	3	4.3%	-
MSM & IDU	1	1.1%	1	0.2	2.9%	-	-	-	-	1	1.4%	-
Heterosexual	23	24.7%	9	1.8	26.5%	-	-	-	-	17	24.3%	-
Other/Unknown	31	33.3%	12	2.4	35.3%	-	-	-	-	23	32.9%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	37	-
2003	3	2.9
2004	6	5.6
2005	4	3.7
2006	5	4.4
2007	7	6.1
2008	6	5.0
2009	8	6.6
2010	6	4.5
2011	7	5.2
2012	4	2.9

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Reported Cases of HIV Infection
American Indians, Wisconsin, 1983-2012

	New Diagnoses by Year of Diagnosis(a)									Prevalence(c)		
	1983-2012(b)		2007-2011				2012					
	Cases	%	Cases	Avg(d)	%	Rate(e)	Cases	%	Rate(e)	Cases	%	Rate(e)
Total cases(f)	72	100.0%	5	1.0	100.0%	2.6	0	0.0%	0.0	39	100.0%	79.4
Disease Status(g)												
(Missing)	2	2.8%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
HIV	49	68.1%	3	0.6	60.0%	3.1	-	-	-	24	61.5%	48.9
AIDS	21	29.2%	2	0.4	40.0%	2.0	-	-	-	15	38.5%	30.5
Sex at Birth												
Female	23	31.9%	1	0.2	20.0%	4.1	-	-	-	14	35.9%	56.9
Male	49	68.1%	4	0.8	80.0%	4.1	-	-	-	25	64.1%	101.9
Race/Ethnicity												
White	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
African American	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Hispanic	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
American Indian	72	100.0%	5	1.0	100.0%	2.6	-	-	-	39	100.0%	79.4
Asian/Pacific Islander	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Multi-racial	0	0.0%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
Age(h)												
<5	3	4.2%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
5-14	1	1.4%	0	0.0	0.0%	0.0	-	-	-	0	0.0%	0.0
15-19	1	1.4%	1	0.2	20.0%	23.5	-	-	-	1	2.6%	23.5
20-24	11	15.3%	0	0.0	0.0%	0.0	-	-	-	1	2.6%	24.6
25-29	18	25.0%	1	0.2	20.0%	25.5	-	-	-	1	2.6%	27.5
30-34	17	23.6%	0	0.0	0.0%	0.0	-	-	-	4	10.3%	118.2
35-39	12	16.7%	0	0.0	0.0%	0.0	-	-	-	7	17.9%	221.0
40-44	4	5.6%	0	0.0	0.0%	0.0	-	-	-	7	17.9%	203.0
45-49	2	2.8%	0	0.0	0.0%	0.0	-	-	-	6	15.4%	161.1
50-54	2	2.8%	2	0.4	40.0%	30.6	-	-	-	5	12.8%	143.8
55-59	1	1.4%	1	0.2	20.0%	38.3	-	-	-	5	12.8%	180.5
60+	0	0.0%	0	0.0	0.0%	0.0	-	-	-	2	5.1%	34.9
Risk exposure												
MSM	21	29.2%	3	0.6	60.0%	-	-	-	-	9	23.1%	-
IDU	18	25.0%	1	0.2	20.0%	-	-	-	-	11	28.2%	-
MSM & IDU	10	13.9%	0	0.0	0.0%	-	-	-	-	5	12.8%	-
Heterosexual	15	20.8%	0	0.0	0.0%	-	-	-	-	10	25.6%	-
Other/Unknown	8	11.1%	1	0.2	20.0%	-	-	-	-	4	10.3%	-

Year of HIV Diagnosis	Cases	Rate(e)
Before 2003	61	-
2003	2	4.3
2004	2	4.3
2005	1	2.1
2006	1	2.1
2007	1	2.1
2008	1	2.0
2009	0	0.0
2010	1	2.1
2011	2	4.1
2012	0	0.0

a. New diagnoses include only individuals whose initial HIV report was made in Wisconsin.

b. The first cases of HIV infection in Wisconsin were reported in 1983. Thus, these represent cumulative cases through the specified date.

c. Prevalent cases include all cases presumed to be alive and living in Wisconsin, regardless of the state of initial HIV report.

d. The average annual cases in the specified period.

e. Cases per 100,000 population. Rates not available for risk exposure groups.

f. Demographic and risk exposure breakdown not shown if statewide total is less than 5 cases.

g. Disease status when first diagnosed with HIV infection, except for prevalent cases, where it is the current disease status.

h. Age when first diagnosed with HIV infection, except for prevalent cases, where it is the current age.

Technical notes

This report is compiled by the Wisconsin AIDS/HIV Program and is based on HIV infection case surveillance data collected by the Wisconsin Division of Public Health (DPH). In Wisconsin, state statutes require health care providers to report cases of AIDS and HIV infection to the DPH. Data in this report are compiled from case report forms completed by health care providers. This information is usually self-reported by patients. All data are provisional and subject to change as additional case information becomes available.

Completeness of reporting for AIDS cases in Wisconsin is estimated to be over 98% but may vary by geographic region, risk exposure categories, and demographic groups. Completeness of reporting may be somewhat less for persons with HIV infection who do not meet the Centers for Disease Control and Prevention (CDC) surveillance case definition for AIDS. Thus, at any time, reported cases of HIV infection represent only part of the total number of diagnosed cases and because additional cases remain undiagnosed, reported HIV infection underestimates total HIV infection morbidity.

Newly diagnosed cases

Previously the annual surveillance summary described newly diagnosed cases by year of report. Beginning with the 2012 surveillance summary, the Wisconsin AIDS/HIV Program describes newly diagnosed cases by year of diagnosis. Previous years' data were also reanalyzed to conform to the new method. This change was made to match surveillance methods used by CDC and most other states.

HIV diagnoses are included in the annual report if:

- The case was diagnosed in Wisconsin during the year of analysis; and
- The case was determined to be a *confirmed* case of HIV or AIDS; and
- Wisconsin is the first state of verifiable, name-based, HIV report. Also included are individuals diagnosed in another country but for whom Wisconsin is the first US state of residence and therefore first US-based HIV report. These practices conform to CDC's guidelines for case residency assignment.

Prevalent cases

Cases of HIV infection are included in the prevalence calculation for a given year if:

- The case was determined to be a confirmed case of HIV or AIDS; and
- The case was presumed to be alive at the time of analysis (i.e. no documentation of death has been received and the case did not match any records in local or national death data); and
- The most recent address information available for the case suggests that he/she currently resides in Wisconsin.
- Because of delays in reporting of deaths, the number of cases presumed alive should be considered provisional.

Current disease category

- In this report, "HIV infection" refers to all persons with laboratory confirmed HIV infection. This includes both AIDS and non-AIDS cases. Cases classified as "AIDS" includes only cases which meet the CDC surveillance case definition for AIDS.

Age

- For diagnoses, age is the age at time of HIV diagnosis. For prevalent cases, or those "presumed alive", age is the age on December 31, 2012.

Risk exposure

- For surveillance purposes, cases are counted only once in a hierarchy of exposure categories. Persons with more than one reported mode of exposure to HIV are classified in the first category in the hierarchy as defined by CDC.
- The risk exposure category “MSM” includes men who report having sex with men with no history of injection drug use. This includes men who report sex with both men and women.
- The risk exposure category “MSM&IDU” includes men who report having sex with men who also have a history of injection drug use.
- The risk exposure category “IDU” includes females and non-MSM males who report a history of injection drug use.
- The risk category “high-risk heterosexual contact" is restricted to males and females who report a history of heterosexual contact with a high risk partner, such as an injection drug user, a bisexual male, a person with hemophilia or persons with HIV infection.
- The risk exposure category "Other" includes persons with hemophilia, persons who have been exposed to HIV through a blood transfusion or tissue/organ transplant, and children who were born to mothers with, or at risk of, HIV infection.
- The risk exposure category "Unknown" includes cases currently under investigation; cases with incomplete exposure history because the patients refused interview, died before they could be interviewed, or were lost to follow-up; cases for whom follow-up exposure history is available but no exposure mode was identified; and cases with exposure categories not listed in the hierarchy.
- In some instances this report uses imputed risk exposure. Imputed risk is derived using a method that stratifies cases by sex, race/ethnicity, metropolitan category, and year of report and assumes that cases with unknown risk exposure within each stratum have risk exposures similar to cases with known risk exposure. It is important to note that imputed risk exposures are estimates not actual case counts. Imputed risk exposures are subject to change as more information becomes available. This method conforms to CDC’s method of addressing cases with unknown risk.

Rates

- In this report rates are defined as cases per 100,000 population, except where noted. Population denominators used to calculate rates are from the 2010 US Census. Use caution when comparing rates calculated from a small number (i.e., less than five) cases.
- Rates are not calculated for risk exposure groups because population sizes are not available.

Case Residency

- Cases that meet the definition of newly diagnosed (see Newly diagnosed cases section above) are assigned to the county in which they resided when they were first diagnosed with HIV infection (including concurrent HIV/AIDS diagnoses)
- Cases that meet the definition of prevalent cases (see Prevalent cases section above) are assigned to the county based on the last known address.

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