

HIV infection among Wisconsin men who have sex with men

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Introduction

Wisconsin statutes require health care providers to report persons who are diagnosed with HIV infection to the State Epidemiologist. The HIV Surveillance Unit of the Wisconsin AIDS/HIV Program collects and analyzes the data from these reports.

After a decline throughout the 1990's, newly reported HIV infection cases increased in two of three years between 2002 and 2004. The 417 new cases reported in 2004 was the highest number in Wisconsin since 1997 and represented an increase of 24% compared to 2001. Historically, a majority of reported cases of HIV infection in Wisconsin have been among men who have sex with men (MSM). The entire increase in reported HIV cases since 2001 was attributed to an estimated increase of 48% in cases among MSM. Reported cases decreased by 11% among other males and by 8% among females.

This report examines the epidemiology of HIV infection among MSM in Wisconsin by race/ethnicity between 1995 and 2004. An additional report in this issue (page 4) describes HIV infection rates among MSM by race/ethnicity at publicly-funded HIV Counseling, Testing, and Referral sites in Wisconsin between January 1, 2000 and December 31, 2004.

Some cases of HIV infection are initially reported without a risk-exposure due to lack of acknowledged risk by individuals, incomplete reporting by clinicians, or reporting restrictions. In this report, cases with unknown risk have been statistically allocated across risk groups.

This adjustment assumes that within a given year the sex-specific risk distribution of cases without identified risk is the same as the sex-specific risk distribution of cases with known risk. As a consequence of this adjustment, the numbers shown for individual risk groups are estimates.

Results

From 1995 through 2004, 4,083 persons with HIV infection¹ were reported in Wisconsin. Among all persons with HIV infection, a total of 2,184 (53.5%) were MSM (Table 1).² Two hundred fifty-five (11.7%) MSM reported with HIV infection reported a history of drug injection.

Table 1: Reported cases of HIV infection by exposure category, all cases reported between January 1, 1995 and December 31, 2004, Wisconsin

Risk Exposure Category	Cases	Percent
Men who have sex with men	2,184	53.49%
-No history of drug injection	1,929	

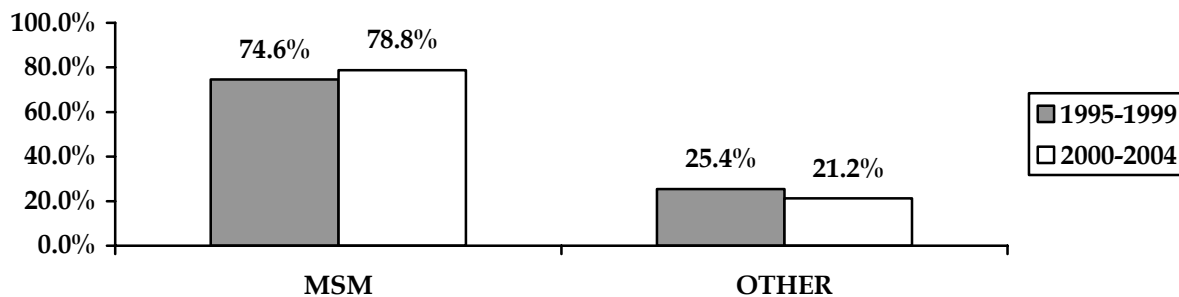
¹ In this report, "HIV infection" refers to persons with laboratory confirmed HIV infection regardless of whether or not they meet the CDC AIDS case definition.

² In this report, unless otherwise stated, MSM includes MSM who also report injection drug use.

<i>-History of drug injection</i>		
	255	
Heterosexual contact	650	15.92%
Unknown risks	608	14.89%
Injection drug use	562	13.76%
Mother with/at risk	39	0.96%
Hemophilia/coagulation disorder	23	0.56%
Receipt of blood, blood components, or tissue	17	0.42%
Total	4,083	100%

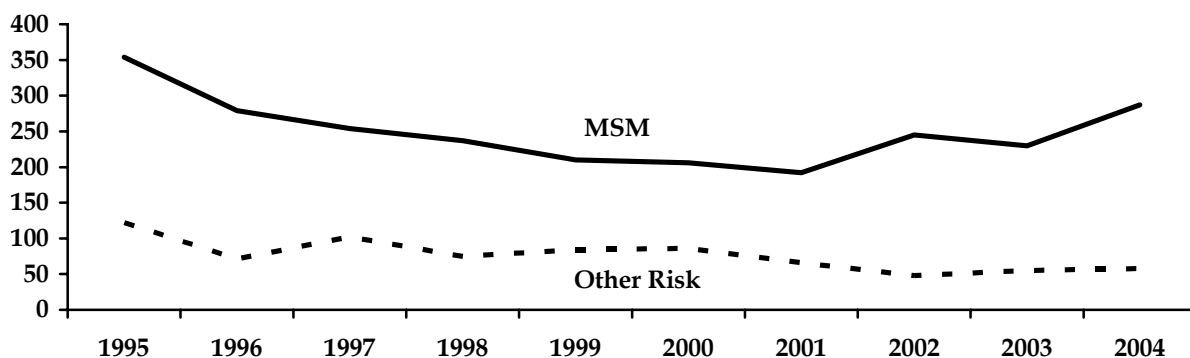
Male-to-male sexual contact is the most frequently reported risk exposure for persons reported with HIV infection in Wisconsin. Among male cases, the percentage of reported cases of HIV infections among MSM has increased in recent years. (Figure 1). Between 1995 and 1999, 74.6% of males reported with HIV infection were MSM, compared to 78.8% between 2000 and 2004.

Figure 1: Percentage of reported cases of HIV infection in males by exposure category during two time periods, Wisconsin



The number of MSM reported with HIV infection decreased from 1995 until 2001 (Figure 2). In 2002, an estimated 192 cases were reported among MSM, the lowest number in over ten years. Between 2001 and 2004, the estimated number of MSM cases increased by 48% while cases attributed to other risk exposure has remained fairly constant.

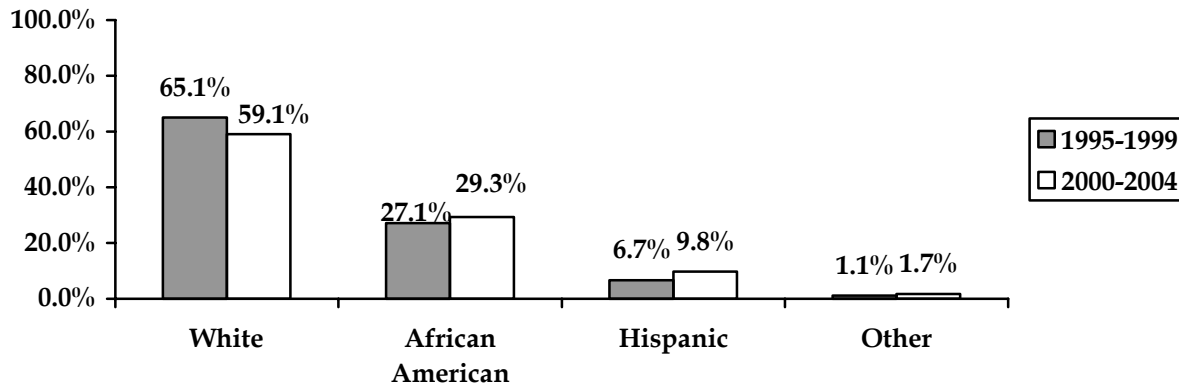
Figure 2: Reported cases of HIV infection in males by year of first report and risk exposure category, Wisconsin



Throughout the epidemic, a majority of MSM cases reported in Wisconsin has been among whites. However, the percentage of reported MSM cases among racial/ethnic minorities has

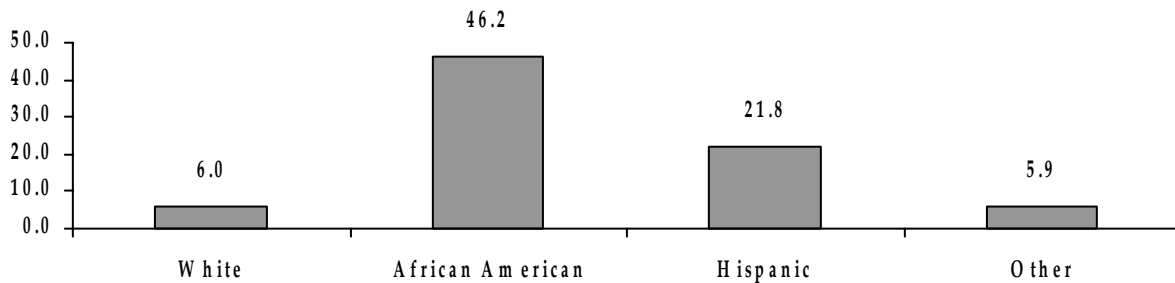
increased. Among MSM reported between 2000 and 2004, 29.3% were African American, 9.8% were Hispanic, and 1.7% were another race (Figure 3).

Figure 3: Percentage of reported cases of HIV infection among MSM, by race/ethnicity during two time periods, Wisconsin



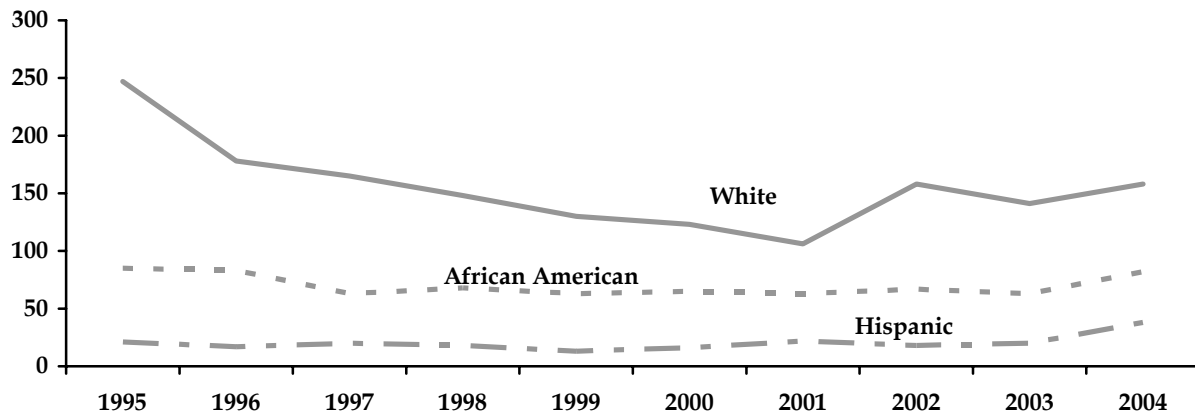
In the 2000 United States census, 12.2% of the Wisconsin male population was classified as racial/ethnic minorities; however, over 40% of reported MSM cases of HIV infection are among minority populations. Consequently, reported MSM HIV infection rates (i.e. cases per 100,000 males in the population) are higher for the African American and Hispanic population than for the white population (Figure 4). Among African American males, the reported rate of MSM with HIV infection was nearly eight-fold higher than the rate among white males. The rate among Hispanic males was nearly four-fold greater than among white males.

Figure 4: Average number of HIV infection cases reported 2000-2004 among MSM (per 100,000 males in the population) by race/ethnicity, Wisconsin



The majority of the decline in reported cases of HIV infection among MSM from 1995 to 2001 was among white men (Figure 5). Between 2001 and 2004, the number of reported MSM cases increased among whites, African Americans and Hispanics with the majority of the increase attributed to whites. However, from 2003 to 2004 the number of Hispanic cases doubled and the number of African American cases increased by thirty percent while White cases increased just twelve percent.

Figure 5: Reported cases of HIV infection among MSM by year of first report and race/ethnicity, Wisconsin



Conclusion

The data presented in this article show an increase in the number of reported HIV infections among MSM in Wisconsin over the past four years. This increase is seen among all races/ethnicities. The rates of HIV infection continue to show a disproportionate number of infected persons among racial/ethnic minority populations. This increase in infections among MSM is not unique to Wisconsin, as many other areas of the country are witnessing a similar trend.³

A potential explanation for the increase in HIV infections among MSM may be that some MSM are less concerned about becoming infected with HIV and may be more inclined to engage in high-risk behaviors. The recent improvements in HIV treatment may contribute to the growing

³ Centers for Disease Control and Prevention. HIV/AIDS among men who have sex with men. [fact sheet on the Internet]. July 2005 [cited Oct 11, 2005]. Available from <http://www.cdc.gov/hiv/PUBS/Facts/msm.htm>.

lack of concern among some young MSM who may no longer view HIV infection as the deadly disease experienced by the previous generation of MSM.

Other possible explanations for the increase of HIV infection in MSM are drug use, especially methamphetamine use and increasing syphilis rates among MSM. Syphilis is a concern because it facilitates the transmission of HIV infection and because syphilis transmission may be a marker for high risk sexual behavior.

The data presented here suggest that efforts to prevent HIV infection in Wisconsin should continue to be directed at all populations but intensified for MSM. The larger and disproportionate increase in HIV cases from 2003 to 2004 among minority populations indicates a need for culturally-specific prevention interventions for MSM from racial/ethnic minorities.

HIV testing patterns by race/ethnicity among MSM accessing Wisconsin HIV counseling, testing, and referral sites

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Background

Wisconsin 2004 HIV case surveillance data indicates a 24% increase in reported cases of HIV infection when compared to 2001 surveillance data. Since 2001, HIV cases among men who have sex with men (MSM) increased 48% while cases decreased by 11% among other males and 8% among females. The increase in reported cases of HIV infection among MSM, as seen in Wisconsin and other parts of the nation, is prompting the re-examination of HIV prevention efforts, including HIV Counseling, Testing and Referral (CTR) services, directed at MSM.

The number of tests conducted by the Wisconsin HIV CTR Program has remained constant at approximately 19,000 each year since 1999, a time when the CTR Program was restructured to reach groups most at risk for HIV infection. The restructure has been successful in increasing testing among MSM and other high risk groups. The number of MSM tested since 2000 increased 22%. Between 2001 and 2003, the number of MSM testing positive increased 31%. In 2002, MSM identified with HIV infection through HIV CTR sites was equivalent to 20% of all HIV cases in MSM reported to the state. In 2004, cases of MSM identified with HIV infection through HIV CTR sites was equivalent to 30% of all reported cases of HIV in MSM in Wisconsin.¹ The majority of new HIV cases among MSM continue to be reported through private clinicians. However, recent data suggests that the Wisconsin CTR program plays an increasing role in identifying cases of HIV infection among MSM.

¹ New cases of HIV infection among MSM tested anonymously are not reported to the state. These cases become part of the surveillance data if they are confidentially tested or reported when clients access HIV treatment services.

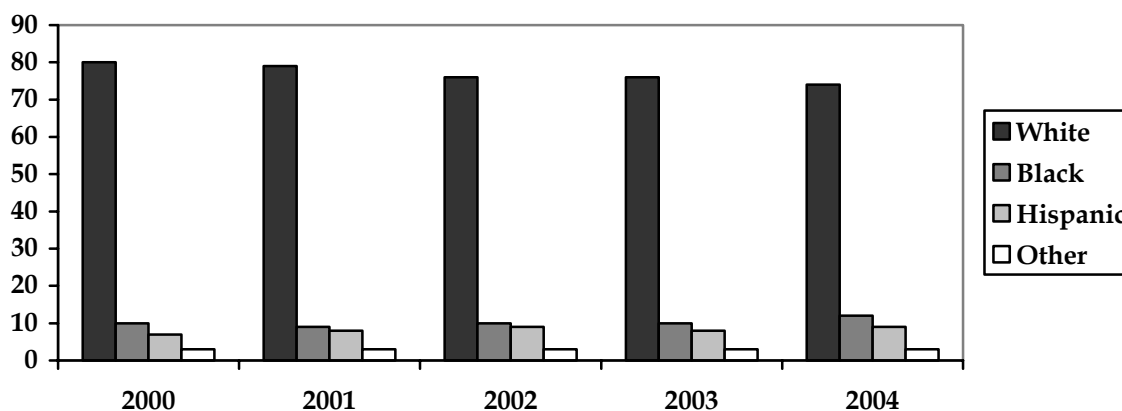
This article examines characteristics of MSM served by publicly funded HIV CTR sites in Wisconsin. Data from the Wisconsin HIV CTR Program from January 1, 2000 through December 31, 2004 were analyzed to compare the race/ethnicity of MSM tested at HIV CTR sites with that of MSM testing positive.² This article also focuses on determining if testing among MSM accessing HIV CTR sites has been equitable along race and ethnicity and if it is consistent with state surveillance data. This article complements the lead surveillance article in this issue of the AIDS/HIV Update (see cover) and which addresses HIV infection rates among MSM in Wisconsin.

Results from CTR data

The percent of MSM tested at HIV CTR sites has changed modestly by race/ethnicity since 2000. However, the race/ethnicity of MSM testing positive at HIV CTR sites has changed notably during the past five years.

In 2000, 80% of MSM testers at HIV CTR sites were white. This subsequently declined to 79% in 2001, 76% in 2002 and 2003, and 74% in 2004. Since 2000, the percent of MSM testers who were African American ranged from a low of 9% in 2001 to a high of 12% in 2004. The percent MSM testers who were Hispanic/Latino ranged from a low of 7% in 2000 to a high of 9% in 2004. The percent of MSM testers who were Asian/Pacific Islanders has consistently averaged 2%, while that of MSM testers who were Native American averaged 1%. Figure 1 illustrates the percent of MSM testing by race/ethnicity and year.

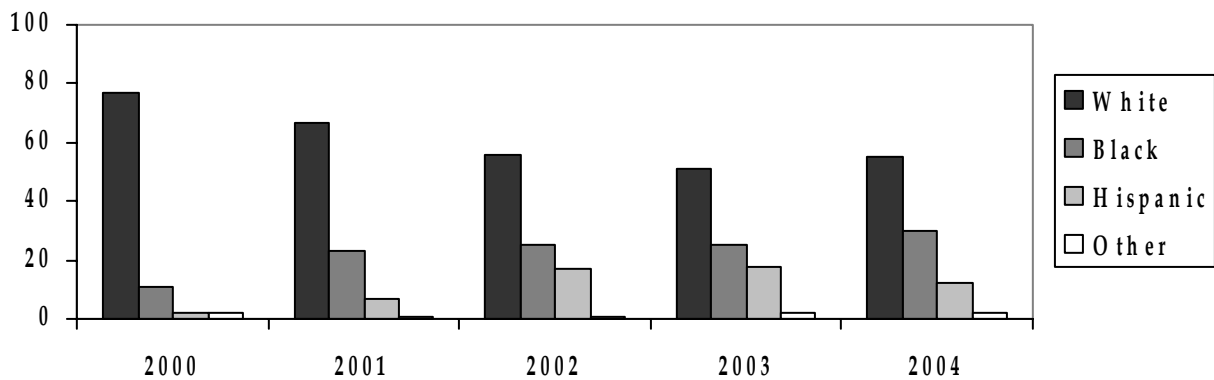
Figure 1. Percent of all MSM tested at Wisconsin HIV CTR sites by race/ethnicity, 2000-2004



The percent of all MSM testing positive who are white and who tested at HIV CTR sites has, for the most part, decreased over time while the percent of all MSM testing positive and who are African American or Hispanic/Latino has increased. During the five-year period, the percent of MSM who were Asians/Pacific Islanders or Native Americans testing positive was essentially unchanged. Figure 2 illustrates the percent of all MSM testing positive at HIV CTR sites by race/ethnicity and year.

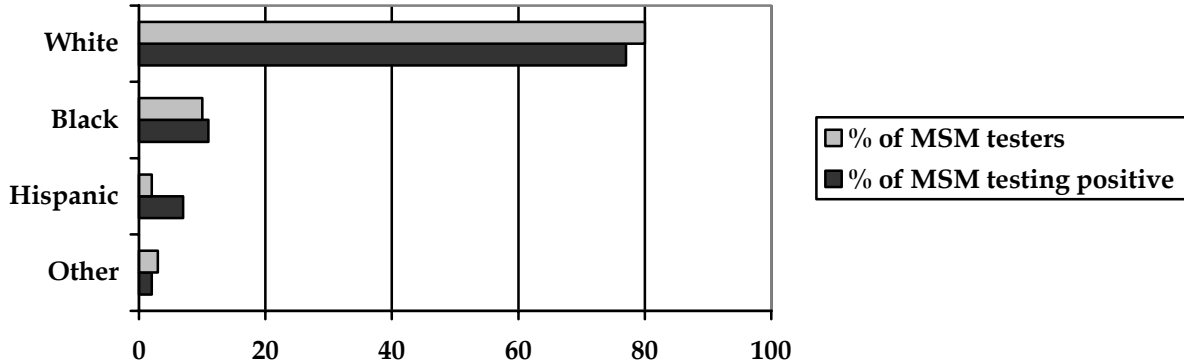
² Data includes only men who have identified as having sex with men at the time of testing. This includes MSM with injection drug risks. It also includes transgender persons who identified their gender as male. No attempt was made to adjust data to include persons that were tested and identified no risk or those categorized as having an unidentified risk.

Figure 2. Percent of all positive test results among MSM at Wisconsin CTR sites, by race/ethnicity and year



In 2000, the percent of MSM testers by race/ethnicity was fairly consistent with the percent of MSM testing positive by race/ethnicity. For example, 80% percent of the MSM testers and 77% of MSM testing positives were white. Similarly, 10% of MSM tested and 11% of MSM testing positive were African American (Figure 3).

Figure 3. Percent of all MSM testers and percent of all MSM testing positive, by race/ethnicity, Wisconsin HIV CTR sites, 2000



Beginning in 2001, the percent of all MSM who were African American or Hispanic/Latino among all MSM testing positive at CTR sites becomes disproportionate to that of white MSM. Nine percent of MSM testers in 2001 were African American, while 23% of MSM testing positive were African American. Among Hispanic/Latinos, the disparity peaked in 2003 when Hispanic/Latino MSM comprised 8% of MSM testers and 18% of MSM testing positive. Since 2003, the disparity for Hispanic/Latino MSM testers has decreased considerably. Disparities were not evident among Asian/Pacific Islander MSM testers or Native American MSM testers. Both groups represented 1-2% of MSM testers and 0-1% of the MSM testing positive at HIV CTR sites. It should also be noted that in 2004 the percent of MSM testing positive who were white increased by 4%. Figure 4 illustrates patterns for proportion of MSM testers and the proportion of total MSM testing positive over time whites, African Americans, and Hispanic/Latinos.

Figure 4. White MSM -- Percent of all MSM testers who were white and percent of all MSM testing positive that were white, Wisconsin HIV CTR sites, 2000-2004

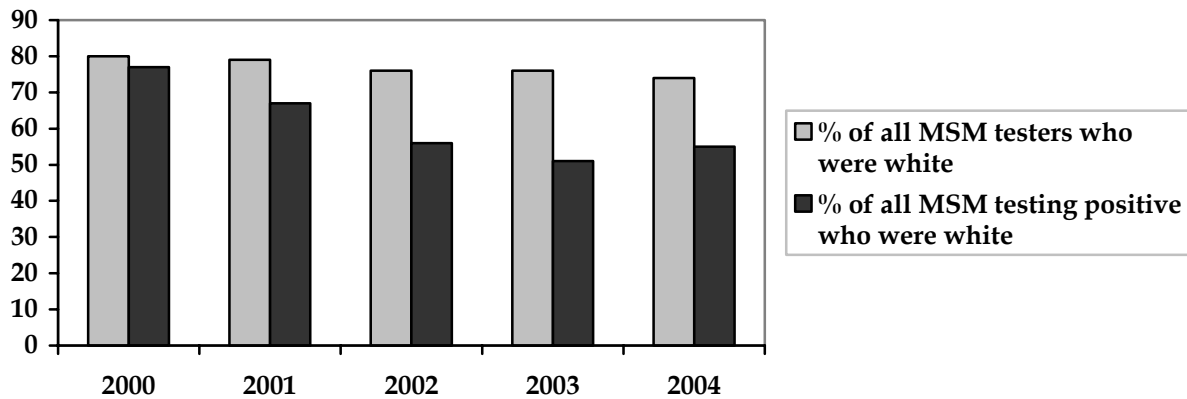


Figure 5. African American MSM -- Percent of all MSM testers who were African American and percent of all MSM testing positive who were African American, Wisconsin HIV CTR sites, 2000-2004

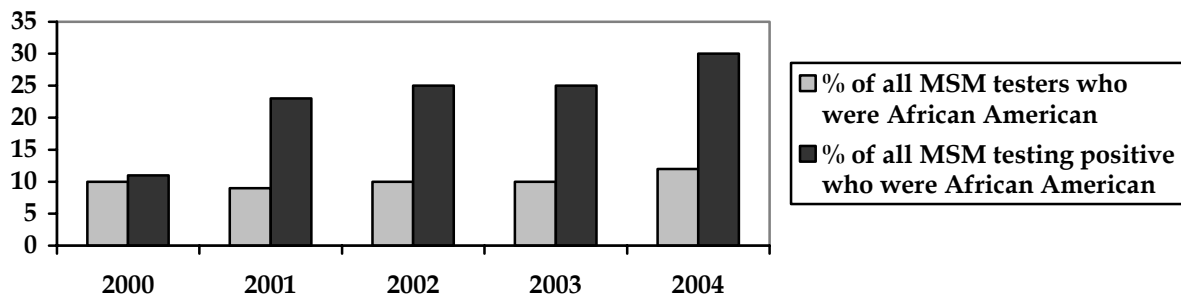
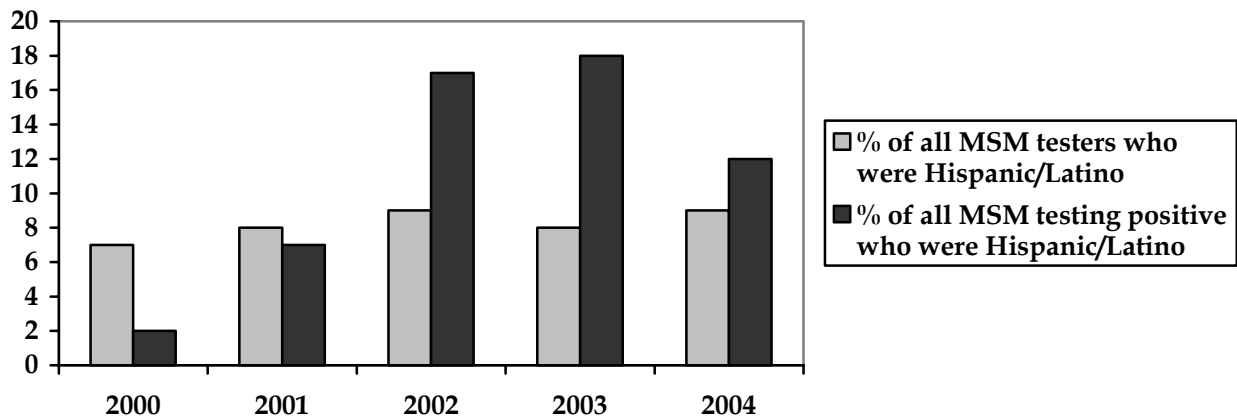


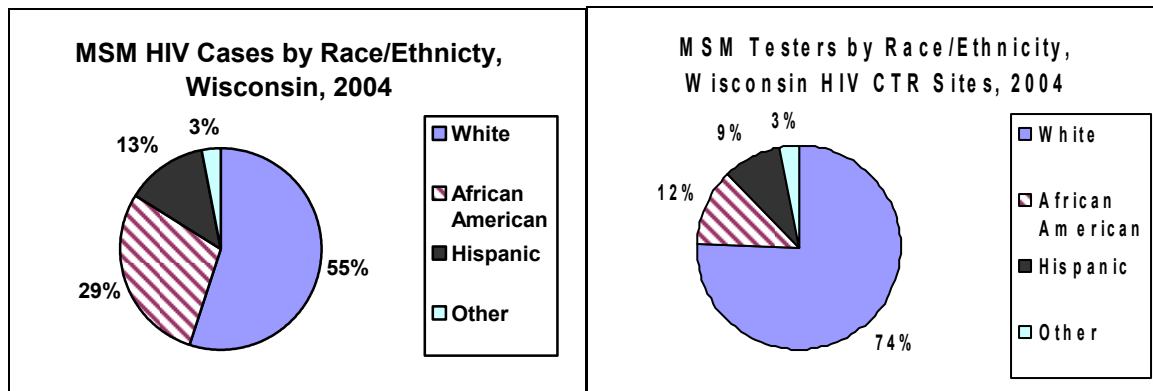
Figure 6. Hispanic MSM -- Percent of all MSM testers who were Hispanic/Latino and percent of all MSM testing positive who were Hispanic/Latino, Wisconsin HIV CTR sites, 2000-2004



Conclusions

Data on the racial/ethnic characteristics of MSM testers at publicly funded HIV CTR services compared with the racial/ethnic characteristics of those who test positive suggests the need to examine the accessibility of Wisconsin HIV CTR services. Wisconsin HIV CTR service utilization data along with Wisconsin HIV case surveillance data (Figure 7) will help guide program planning and implementation efforts directed at ensuring equitable access to HIV CTR services for Wisconsin MSM.

Figure 7. MSM HIV cases by race/ethnicity and MSM testers at HIV CTR sites by race/ethnicity, Wisconsin, 2004



The Wisconsin HIV CTR Program has been successful in increasing testing among MSM. To ensure effective and equitable HIV testing services in the future, the HIV CTR Program needs to increase access for MSM of color, particularly African Americans with MSM risks.

For additional information regarding the Wisconsin HIV CTR Program, contact Jim Stodola at 608-261-9429 (phone) or email stodojm@dhfs.state.wi.us.