WISCONSIN AIDS/HIV PROGRAM NOTES

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Routine HIV testing recommendations and HIV testing rates in Wisconsin

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This article summarizes Centers for Disease Control and Prevention (CDC) recommendations regarding routine HIV testing and presents data regarding HIV testing among Wisconsin adults and reported risk behaviors.

Routine HIV testing recommendations

The CDC estimates over one million individuals are living with HIV in the United States and that approximately 18% of these individuals are unaware of their infection. For several years, the number of individuals newly-infected with HIV annually has remained stable at approximately 50,000 infections per year. Critically important approaches to combat the epidemic include:

1. identifying undiagnosed infections through routine HIV testing in clinical settings, and
2. linking infected individuals to medical care and treatment.

Early treatment of infected individuals with HIV medications can dramatically lower the level of virus in the body and lower the chance of passing HIV to others.

In 2006, the CDC released Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings (*Morbidity and Mortality Weekly Report* (*MMWR*) September 22, 2006; 55:RR-14) and recommended that all persons between the ages of 13 and 64 be screened for HIV by their healthcare provider at least once during their lifetime. Persons at high risk for HIV infection should be screened annually. Consistent with recent literature, the Wisconsin AIDS/HIV Program also recommends that men who have sex with men (MSM) test at least twice a year. To decrease barriers to HIV testing in healthcare settings, the CDC recommended the use of "opt-out" consent for HIV testing rather than written informed consent.

The Wisconsin legislature responded to these recommendations in 2010 by eliminating the statutory requirement for written informed consent for HIV testing. Wisconsin healthcare providers now only need to obtain verbal consent for testing similar to "opt-out" consent recommended by the CDC. Common questions and requirements for verbal consent for HIV testing can be found at the Wisconsin AIDS/HIV Program website at http://www.dhs.wisconsin.gov/aids-hiv/ClinicianResources/FAQTestingHealthCareSettings.htm.

A barrier to routine HIV testing in healthcare settings has been lack of coverage by some health insurance carriers for the HIV test. In 2008, the Wisconsin AIDS/HIV Program reviewed coverage for routine HIV screening by third-party payers and found approximately 43% of Wisconsin residents had health insurance that covered routine HIV testing. In addition to private insurance, Medicaid also pays for routine HIV testing in Wisconsin.

Insurance coverage will increase with the recent decision by the United States Preventive Services Task Force (USPSTF) recommending HIV screening of all adults between the ages of 15 and 65 years. The USPSTF identified this as a Grade A recommendation, indicating that there is a substantial benefit to improve patient health outcomes. Under the Affordable Care Act, new health insurance policies and plans must cover preventive services that are identified by the USPSTF as Grade A or B with no cost-sharing requirement to the patient.

Estimates of routine HIV testing and HIV risk behaviors in Wisconsin

Methods

The Wisconsin Behavioral Risk Factor Survey (BRFS) is an annual telephone survey of state residents ages 18 and older carried out in conjunction with CDC. Respondents ages 18-64 were asked if they have ever been tested for HIV and if they had been in any of the following high risk situations in the past year:

- used intravenous drugs,
- were treated for a sexually transmitted or venereal disease,
- have given or received money or drugs in exchange for sex, or
- had anal sex without a condom in the past year.

Respondents were not asked to identify which risk behaviors they had.

This article provides population-level estimates for HIV testing and risk behaviors for Wisconsin adults by a variety of demographic characteristics:

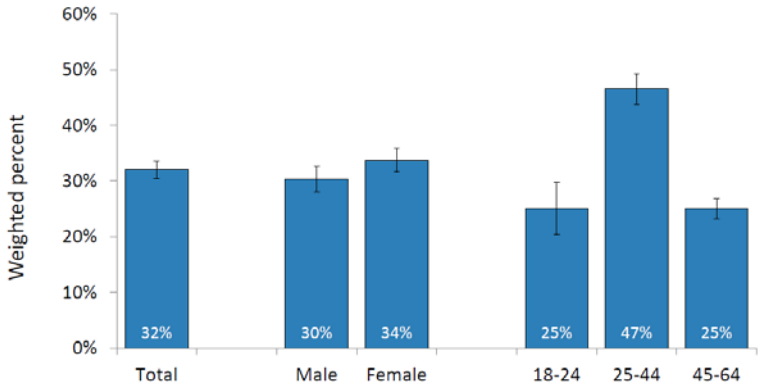
- overall;
- for males and females;
- for three age groups: 18-24, 25-44, and 45-64;
- by race/ethnicity;
- by income level: low (< $20,000); middle ($20,000-$74,999), and high ($75,000 or greater);
- by sexual orientation (lesbian, gay, bisexual, heterosexual);
- by disability status; and
- by level of urbanization: Milwaukee County, smaller metropolitan counties (n=24 counties), and non-metropolitan counties (n=47 counties).

Data were analyzed using SAS 9.2. The years and datasets used for the analysis vary because of methodologic issues.[1] Confidence intervals, shown using error bars in the graphs, indicate the level of uncertainty. When confidence intervals for two groups such as males and females do not overlap, differences are significant. Estimates with large error bars (indicating a higher level of uncertainty) should be interpreted with caution.[2]

Results: HIV testing

Figure 1 shows the percent of Wisconsin adults ever tested for HIV overall by sex and by age group. One-third of Wisconsin adults aged 18-64 have ever been tested for HIV. Rates do not differ significantly by sex but do by age group. Nearly half of adults aged 25-44 have been tested, compared to one-in-four young (18-24) and middle-aged (45-64) adults.

Figure 1: Lifetime HIV testing among Wisconsin adults, aged 18-64, by sex and age group, 2009-2011



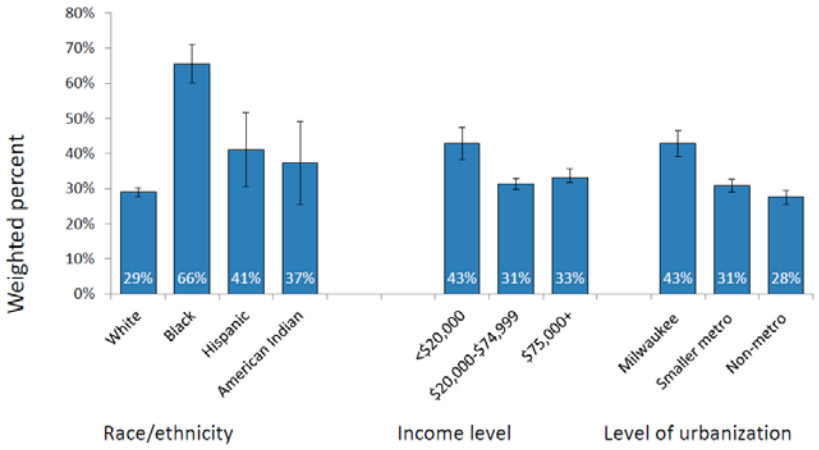
Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2009-2011 combined landline-cell dataset

As shown in Figure 2, HIV testing rates among Blacks are significantly higher than those among other racial/ethnic groups. Estimates for Asians are not shown because there are too few cases to produce reliable estimates. Low-income respondents have higher testing rates than the middle and high income brackets. Testing rates among Milwaukee County residents are higher than those among residents of smaller metropolitan and non-metropolitan counties.

[1] The data presented in this article come from two different datasets. A combined landline and cell phone dataset for the years 2009-2011 was used for analyses regarding total population, males and females, and age groups. For analyses by the remaining characteristics, a 2008-2011 landline dataset was used because the questionnaire administered to cell phone sample respondents prior to 2010 was a reduced version of the landline questionnaire and certain items critical to the present analysis were not included.

[2] In accord with CDC's guidelines for presenting BRFS data, estimates are considered unreliable and are not shown if the relative standard error (standard error/mean) >30% or the N of the denominator is <50.

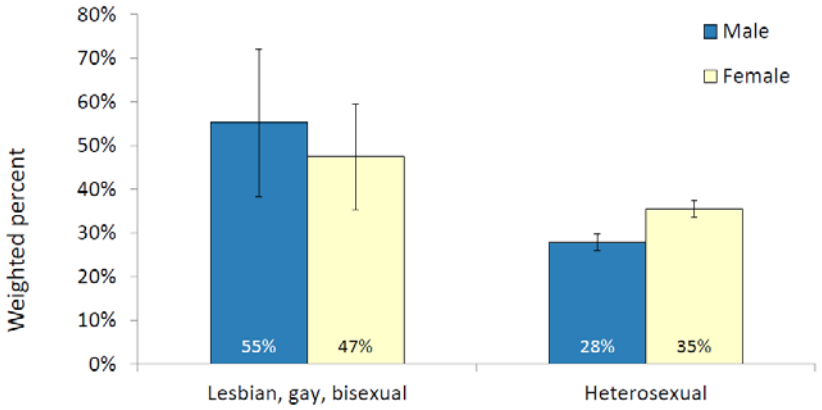
Figure 2: Lifetime HIV testing among Wisconsin adults, aged 18-64, by race/ethnicity, socio-economic status, and level of urbanization, 2009-2011



Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2008-2011 landline-only dataset

Figure 3 provides estimates of the percent ever tested for HIV by sexual orientation and sex. Testing rates among gay and bisexual men are significantly higher than among heterosexual men. Among heterosexuals, rates are higher among women than among men.

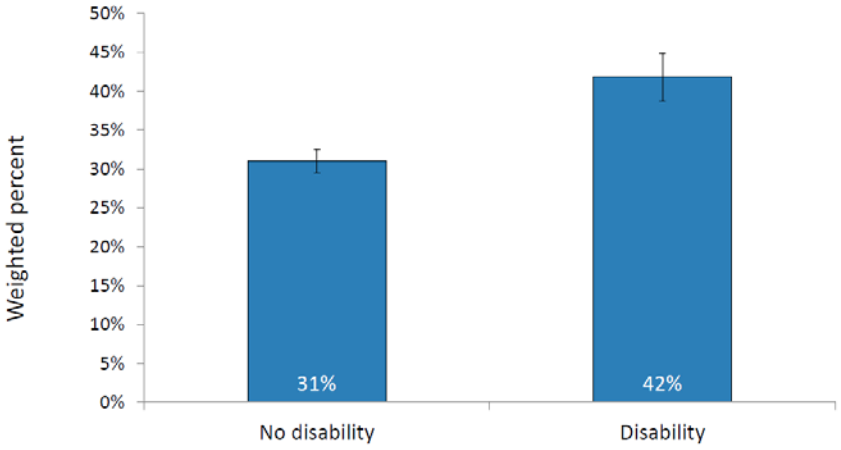
Figure 3: Lifetime HIV testing among Wisconsin adults, aged 18-64, by sexual orientation and sex, 2008-2011



Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2008-2011 landline only dataset.

Figure 4 shows the percent ever tested for HIV by disability status. Testing rates are significantly higher among those with a disability than among those without.

Figure 4: Lifetime HIV testing among Wisconsin adults, aged 18-64, by disability status, 2008-2011

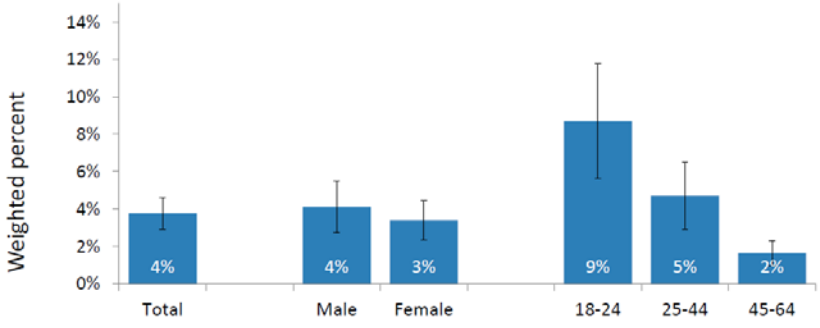


Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2008-2011 landline only dataset.

Results: HIV risk behaviors

This section addresses HIV risk behaviors by demographic characteristic. As shown in Figure 5, about 4% of Wisconsin adults ages 18 and older acknowledge HIV risk behaviors in the past year. Estimates do not differ significantly by sex. Young adults aged 18-24 had risk behavior rates higher than those of middle-aged adults aged 45-64.

Figure 5: Any HIV risk behaviors* in the previous year among Wisconsin adults, aged 18-64, by sex and age group, 2009-2011

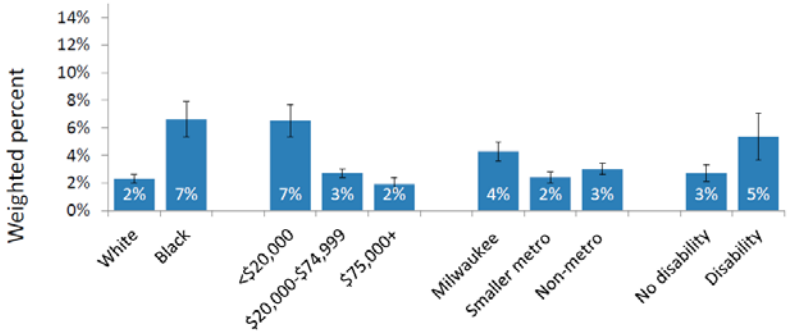


* HIV risk behaviors listed include injection drug use, an STD, trading sex for drugs or money, or unprotected anal sex

Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2009-2011 combined landline-cell dataset

Figure 6 provides estimates by race/ethnicity, income, level of urbanization, and disability status. Risk behaviors among Blacks are significantly higher than those among Whites, as are rates for low-income respondents, Milwaukee County residents, and individuals with a disability. Estimates for racial/ethnic groups other than Blacks and Whites, and by sexual orientation, were considered to be statistically unreliable and are not shown.

Figure 6: Any HIV risk behaviors* in previous year among Wisconsin adults, by race/ethnicity, socio-economic status**, level of urbanization**, and disability status, 2008-2011**



* HIV risk behaviors listed include injection drug use, an STD, trading sex for drugs or money, or unprotected anal sex
** Age-adjusted
Source: Wisconsin Department of Health Services, Behavioral Risk Factor Survey (BRFS); 2008-2011 landline only dataset.

Summary of findings

- One-third of Wisconsin adults have ever been tested for HIV and
- about 4% of adults have engaged in an HIV risk behavior in the past year.

Testing and risk levels vary by population, but in general, populations with higher levels of risk behaviors also have higher rates of testing. Groups with higher rates of both testing and risk behaviors include:

- Blacks;
- low-income individuals;
- residents of Milwaukee County;
- individuals with a disability; and
- lesbian, gay, and bisexual individuals.

Young adults are an exception to the association between rates of testing and of risk behaviors. Adults aged 18-24 have the highest level of HIV risk behaviors of any age group yet testing rates are significantly lower than those in the 25-44 year age group and comparable to those in the 45-64 year age group.

Recommendation

Prior to the passage of the Affordable Care Act, the majority of Wisconsin residents had health care coverage for routine HIV testing through private health insurance or Medicaid. With identification by USPSTF of routine HIV testing as a Grade A recommendation, the majority of health insurance plans will cover HIV testing. Given the diminishing financial barriers to HIV screening, health care providers should offer HIV testing to all patients with unknown HIV status.

With the high rates of risk behaviors and low rates of testing among young people, a concerted effort should be placed on routine testing among those in their teens and twenties. Populations with high risk behaviors include men who have sex with men (MSM), Blacks, Milwaukee residents, low-income individuals, and people with disabilities.

Acknowledgements

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