



# Massachusetts HIV/AIDS Data Fact Sheet

## Men Who Have Sex with Men

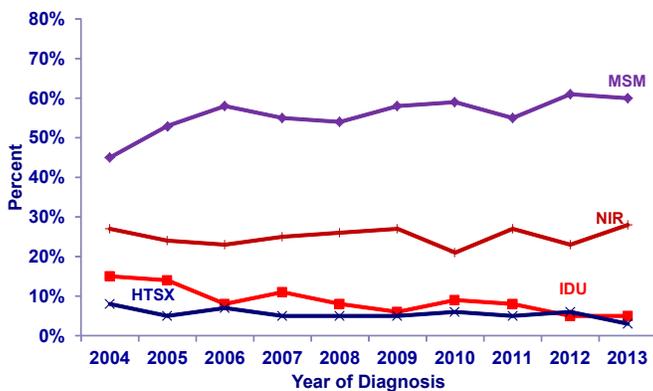
### Fast Facts

- MSM remain at high risk for HIV infection in Massachusetts.
- MSM represented 46% of all new infections in 2013.
- The estimated rate of new HIV infection in MSM is 38 times that in men who have not had sex with men.

### Introduction

Male-to-male sex remains the predominant reported risk for HIV infection in all Health Service Regions of Massachusetts. Overall, from 2004 to 2013, the proportion of all HIV infection diagnoses with male-to-male sex as the reported risk increased from 32% in 2004 to 46% in 2013. Among men, the proportion of HIV infection diagnoses with male-to-male sex as the reported risk increased from 49% in 2004 to 60% in 2013 (Figure 1). From 2004 to 2013, while the overall number of HIV diagnoses in Massachusetts declined by 24%, the number of HIV diagnoses attributed to male-to-male sex remained fairly stable at around 300 cases per year (low of 276 in 2011, high of 349 in 2005).<sup>i</sup>

**Figure 1. Percentage Distribution of Men Diagnosed with HIV Infection by Selected Reported Risk and Year of Diagnosis: Massachusetts, 2004–2013**

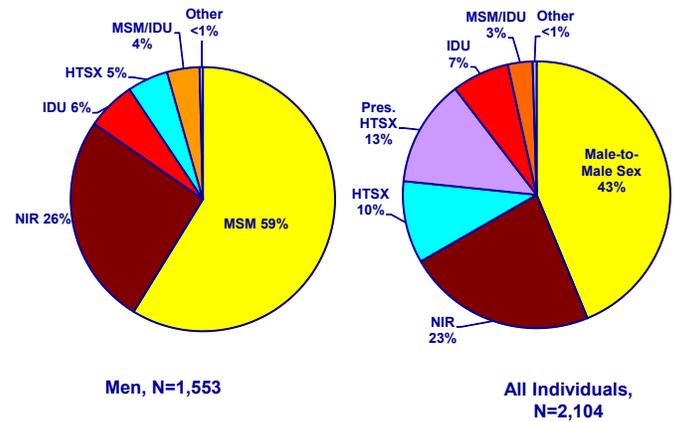


Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

### Reported Risk:

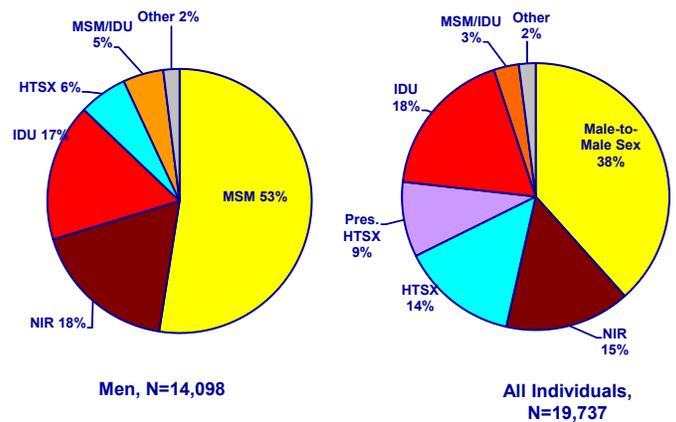
- See Figures 2 and 3 for a comparison of reported risk among men and all individuals recently diagnosed with HIV infection and living with HIV/AIDS.

**Figure 2. All Individuals and Men Diagnosed with HIV Infection Within the Years 2011–2013 by Reported Risk: Massachusetts**



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

**Figure 3. All Individuals and Men Living with HIV/AIDS on 12/31/14 by Reported Risk: Massachusetts**



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15



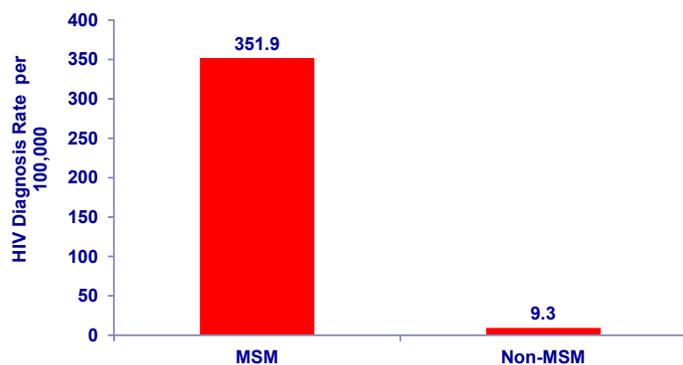


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### Disparate Impact:

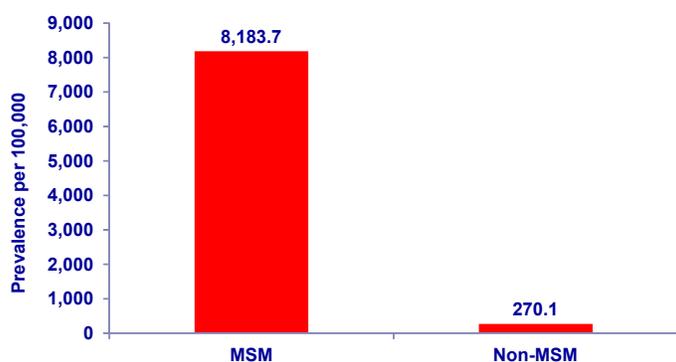
**Figure 4. Estimated<sup>1</sup> Average Annual HIV Diagnosis Rate per 100,000 Population: MSM Compared to non-MSM (men only) Ages 18–64 Years: Massachusetts, 2011–2013**



<sup>1</sup> Multiple source estimation method for MSM rate (BRFSS, US Census)  
NH= Non-Hispanic, Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

- At 351.9 cases per 100,000 population, the estimated average annual rate of HIV diagnosis from 2011 to 2013 among MSM (ages 18-64) is 38 times the rate of infection in non-MSM men (9.3 per 100,000).<sup>ii</sup>

**Figure 5. Estimated<sup>1</sup> HIV/AIDS Prevalence Rate per 100,000 Population: MSM Compared to non-MSM (men only) Ages 18–64 Years: Massachusetts, January 1, 2015**

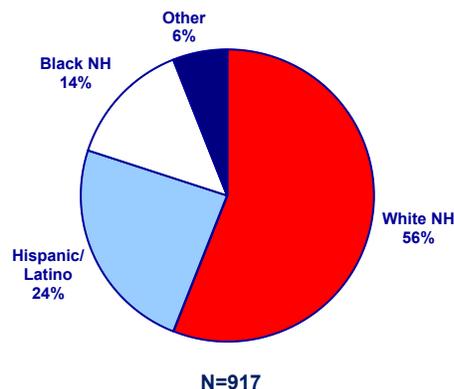


<sup>1</sup> Multiple source estimation method for MSM rate (BRFSS, 2010 US Census)  
NH= Non-Hispanic, Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

- At 8,183.7 cases per 100,000 population, the estimated HIV/AIDS prevalence rate among MSM (ages 18-64) is 30 times the rate of non-MSM men (270.1 per 100,000).<sup>ii</sup>

### Race/Ethnicity:

**Figure 6. Men diagnosed with HIV infection from 2011–2013 with MSM as the reported risk by race/ethnicity: Massachusetts**



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

### Place of Birth:

The distribution of place of birth of MSM diagnosed with HIV infection within the three-year period 2011 to 2013 was:

- 73% United States
- 4% Puerto Rico or another US dependency
- 12% Outside the US and territories
- The distribution of place of birth among MSM living with HIV/AIDS was: 82% percent born in the US, 3% born in Puerto Rico or another US dependency, and 15% born outside of the US.
- The distribution of place of birth varies by race/ethnicity among MSM diagnosed with HIV infection. Forty-one percent of Hispanic/Latino MSM diagnosed with HIV infection within the three-year period 2011 to 2013 were born outside the US and 18% were born in Puerto Rico or another US dependency, compared to 25% of black (non-Hispanic) MSM born outside the US and none in Puerto Rico or other US dependency, and 10% of white (non-Hispanic) MSM born outside the US and none in Puerto Rico or other US dependency.



For detailed data tables and technical notes see Appendix  
Massachusetts Department of Public Health Office of HIV/AIDS  
250 Washington St. 3rd Floor Boston, MA 02108  
617-624-5300 FAX 617-624-5399 [www.mass.gov/dph/aids](http://www.mass.gov/dph/aids)





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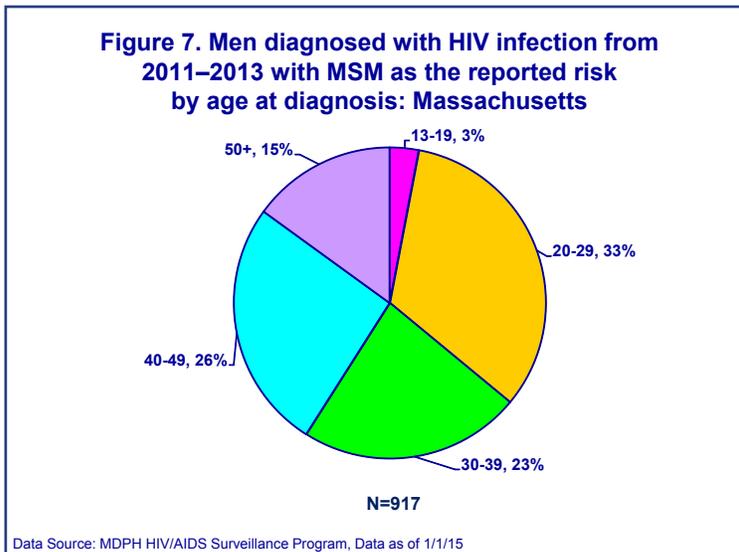
## Men Who Have Sex with Men

### Male-to-Male Sex among Youth:

- Among men diagnosed with HIV infection during adolescence and young adulthood (13–24 years), within the three-year period 2011 to 2013, male-to-male sex was the most frequently reported mode of exposure at 79% (N=173). Among men diagnosed with HIV infection aged 25 years or older, male-to-male sex accounted for 56% (N=744) of exposures during this time period.
- Eighty-four percent (N=73) of white (non-Hispanic), 74% (N=43) of black (non-Hispanic), and 71% (N=45) of Hispanic/Latino adolescent and young adult men recently reported with HIV diagnoses between 2011 and 2013 had infection attributed to male-to-male sex.

### Age at HIV Diagnosis:

- See Figure 7 for the age distribution of MSM recently diagnosed with HIV infection.



### Regional Distribution:

- Male-to-male sex accounted for 51% of HIV infection diagnoses in the Boston Health Service Region (HSR)<sup>iii</sup>, 47% in the Metro West HSR, 43% in the Southeast HSR, 37% in the Western HSR, 39% in the Northeast HSR, and 37% in the Central HSR.

- Among those living with HIV/AIDS, male-to-male sex was the most frequently reported mode of exposure in the Boston (48%), Metro West (42%), Southeast (40%) and Northeast (33%) Health Service Regions. In the Central and Western HSR, male-to-male sex and injection drug use contribute equally.

In cities with over 20 people diagnosed with HIV infection within the three-year period 2011 to 2013, the following have the highest proportions of persons whose HIV infection was attributed to male-to-male sex (N=number of HIV-infected men reported as MSM risk, not including those with an additional history of injection drug use):

- Provincetown 89% (N=23)
- Cambridge 61% (N=23)
- Fall River 60% (N=15)
- Quincy 59% (N=19)
- Boston 52% (N=293)
- Somerville 51% (N=19)
- Medford 48% (N=10)
- Everett 46% (N=11)
- Malden 46% (N=15)
- Framingham 39% (N=9)

### Risk of HIV Infection:

**Behavioral Risk:** According to behavioral surveys, MSM in Massachusetts engage in behaviors that place them at risk for HIV infection. *Please note the data in this section should be interpreted with caution due to small sample sizes and wide confidence intervals.*

- In 2013, 4.4% of male respondents to the Behavioral Risk Factor Surveillance System (BRFSS) (N=1,702) reported sex with men in the previous 12 months.<sup>iv</sup>
- Forty percent of respondents to the 2012 and 2013 BRFSS who reported male-to-male sex reported condom use at last sexual encounter, compared to 27% of male respondents with exclusively female sex partners.
- In 2013, 7% of sexually active male high-school aged respondents to the Massachusetts Youth Risk Behavior Survey (YRBS) reported male-to-male sex at any point in their lifetime.



For detailed data tables and technical notes see Appendix  
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- Among respondents to the 2011 and 2013 YRBS reporting male-to-male sex:<sup>v</sup>
  - 42% used a condom at last intercourse, compared to 67% of men reporting only female partners;
  - 42% reported alcohol/drug use at last intercourse, compared to 28% of men reporting only female partners;
  - 30% reported having four or more lifetime sexual partners, compared to 20% of men reporting only female partners;
  - 7% reported having ever been diagnosed with an STD, compared to 2% of men reporting only female partners; and
  - 15% reported having sexual intercourse before age 13, compared to 9% of men reporting only female partners.

**Syphilis Incidence:** Recent outbreaks of syphilis among MSM in Massachusetts are an indicator of unprotected sex and elevated risk for HIV infection.

- The number of annually reported cases of infectious syphilis in self-identified MSM more than tripled during the ten-year period from 2004 (N=152) to 2013 (N=536).
- The proportion of self-identified MSM among reported infectious syphilis cases increased from 29% in 2004 to 76% in 2013.
- In 2013, 43% of infectious syphilis cases among self-identified MSM were also diagnosed with HIV infection.

### Data Sources

HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) HIV/AIDS Surveillance Program; data as of January 1, 2015

Behavioral Risk Factor Surveillance Survey Data: MDPH Bureau of Health Statistics, Research and Evaluation, Behavioral Risk Factor Surveillance System

Youth Risk Behavior Survey Data: Massachusetts Department of Elementary and Secondary Education, Youth Risk Behavior Survey

Syphilis Data: MDPH Division of Sexually Transmitted Disease Prevention

<sup>i</sup> Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>ii</sup> Denominators for MSM rate calculations were estimated by applying the average proportion of men, ages 18-64 years, reporting same-sex partner (or opposite and same-sex partner) on the 2011 and 2012 Massachusetts BRFSS (4.9%) to the number of 18-64 year old men in Massachusetts as reported in the 2010 Census (2,064,804). See detailed data tables and technical notes for detailed calculations.

<sup>iii</sup> Reflects the health service region of a person's residence at the time of report (not necessarily current residence). HSRs are regions defined geographically to facilitate targeted health service planning. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at <http://www.mass.gov/eohhs/docs/dph/aids/2006-profiles/app-hrs-maps.pdf> for configuration of health service regions.

<sup>iv</sup> 2013 behavioral risk data are from the 2013 Massachusetts Behavioral Risk Factor Surveillance System, for more information see: Office of Data Management and Outcomes Assessment, Massachusetts Department of Public Health. A Profile of Health Among Massachusetts Adults, 2013 Results from the Behavioral Risk Factor Surveillance System, Massachusetts Youth 2013. October 2014, <http://www.mass.gov/eohhs/docs/dph/behavioral-risk/report-2013.pdf>

<sup>v</sup> 2013 behavioral risk data are from the 2013 Massachusetts Youth Risk Behavior Survey, for more information see: Massachusetts Department of Elementary and Secondary Education, Massachusetts Department of Public Health. Health and Risk Behaviors of Massachusetts Youth 2013. May 2014, <http://www.doe.mass.edu/cnp/hprograms/yrbs/2013report.pdf>



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