



# Massachusetts HIV/AIDS Data Fact Sheet

## Men Who Have Sex with Men

### Introduction

The HIV/AIDS epidemic was first recognized among men who have sex with men (MSM). Male-to-male sex remains the predominant reported mode of exposure in Massachusetts, with the proportion of HIV diagnoses attributed to male-to-male sex increasing over time. From 1999 to 2008, the proportion of all HIV infection diagnoses with male-to-male sex as an exposure mode increased from 28% to 42%. Among males, the proportion of HIV infection diagnoses with male-to-male sex as the reported exposure mode increased from 41% in 1999 to 57% in 2008.

From 2001 to 2006, while the overall number of HIV diagnoses in Massachusetts declined by 26%, the number of HIV diagnoses among MSM remained stable at around 320 to 340 cases.

### General Statistics:

- Within the three-year period 2006 to 2008, 786 of people diagnosed with HIV infection were exposed through male-to-male sex, accounting for 40% of all cases and 55% of HIV infections among men. An additional 56 men were reported to have been exposed through male-to-male sex and injection drug use (MSM/IDU), accounting for 3% of all cases and 4% of HIV infections among men.
- On December 31, 2009, there were 6,316 men living with HIV/AIDS in whom HIV infection was attributed to male-to-male sex, representing 35% of all people living with HIV/AIDS in Massachusetts and 49% of men living with HIV/AIDS. An additional 608 MSM living with HIV/AIDS were reported to have also used injection drugs, accounting for 3% of all people living with HIV/AIDS and 5% of men.

### Regional Distribution:

- Male-to-male sex was the most frequently reported mode of exposure in the Boston, Metrowest, Northeast, Southeast and Western Health Service Regions among people recently diagnosed with HIV infection. This marks the first time in recent years that male-to-male sex is the predominant exposure mode in the Western and Northeast Health Service Regions. Among those living with HIV/AIDS, it was the most frequently reported mode of exposure in the Boston, Metrowest, Northeast and Southeast Health Service Regions.

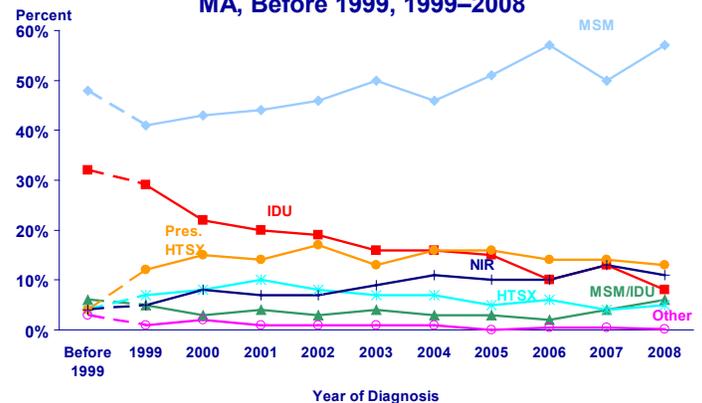
Among cities with over 20 people diagnosed with HIV infection within the three-year period 2006 to 2008, the following have the highest proportions of persons whose HIV infection was attributed to male-to-male sex (N=number of HIV-infected men reported to be MSM, not including those with a history of injection drug use):

• Provincetown	95.2%	(N=20)
• Somerville	60.0%	(N=24)
• Everett	60.0%	(N=15)
• Medford	60.0%	(N=15)
• Cambridge	58.3%	(N=28)
• Boston	53.8%	(N=303)
• Malden	41.7%	(N=15)
• Waltham	36.0%	(N=9)
• Quincy	35.7%	(N=10)
• Lynn	34.1%	(N=14)

### Diagnosis of HIV Infection over Time:

- The proportion of men diagnosed with HIV infection who were reported to have engaged in male-to-male sex increased from 41% in 1999 to 57% in 2008.

**Figure 1. Percentage Distribution of Males Diagnosed with HIV Infection by Exposure Mode and Year of Diagnosis: MA, Before 1999, 1999–2008**



Note: a dashed line is used to distinguish between pre-1999 data (which is an aggregate of multiple years) and annual data for subsequent years. Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/10





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### Race/Ethnicity:

- The distribution of race/ethnicity among MSM diagnosed with HIV infection within the three-year period 2006 to 2008 was:
  - 65% white (non-Hispanic)
  - 12% black (non-Hispanic)
  - 20% Hispanic
  - 3% other
- The distribution of race/ethnicity among MSM living with HIV/AIDS is similar to that among MSM recently diagnosed with HIV infection: 72% percent are white (non-Hispanic), 12% are black (non-Hispanic), 14% are Hispanic and 2% are of other race/ethnicity.

### Age at HIV Diagnosis:

- Of males diagnosed with HIV infection during adolescence (13–24 years) within the three-year period 2006 to 2008, male-to-male sex was the most frequently reported mode of exposure at 74% (N=99). MSM/IDU accounted for an additional 5% (N=12) of exposures in this age group.
- The proportion of adolescent males recently diagnosed with HIV infection who were reported with male-to-male sex exposure mode varies by race/ethnicity, with 79% (N=42) of white (non-Hispanic), 76% (N=28) of black non-Hispanic, and 69% (N=27) of Hispanic adolescent males reported with HIV diagnoses attributed to male-to-male sex.
- Almost two-thirds (61%) of MSM recently diagnosed with HIV infection were between the ages of 30 and 49 years. An additional 25% were diagnosed in their 20's, 9% in their 50s, and 3% were 60 years or older.

### Place of Birth:

- The distribution of place of birth of MSM diagnosed with HIV infection within the three-year period 2006 to 2008 was:
  - 79% United States
  - 4% Puerto Rico or another US dependency
  - 17% Outside the US and territories

- The distribution of place of birth among MSM living with HIV/AIDS was similar to that among MSM recently diagnosed with HIV infection: 85% percent were born in the US, 3% were born in Puerto Rico or another US dependency and 12% were born outside of the US.
- The distribution of place of birth varies by race/ethnicity among MSM diagnosed with HIV infection. Forty-five percent of Hispanic MSM diagnosed with HIV infection within the three-year period 2006 to 2008 were born outside the US, compared to 21% of black (non-Hispanic) MSM and 6% of white (non-Hispanic) MSM.

### Risk of HIV Infection:

**Behavioral Risk:** According to behavioral surveys, MSM in Massachusetts are engaging in behaviors that put them at risk for HIV infection.

- From 2000 to 2008, the proportion of male respondents to the Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) reporting sex with males in the previous 12 months ranged from 4.3% to 9.4%.
- From 2000 to 2008, the proportion of BRFSS respondents reporting male-to-male sex who used a condom at last sexual encounter ranged from 32% to 56%.
- An average of 28% percent of respondents to the 2007 and 2008 BRFSS who reported male-to-male sex reported two or more sex partners, compared to an average of 9% of male respondents with exclusively female sex partners.
- An average of 33% of respondents to the 2007 and 2008 BRFSS who reported male-to-male sex reported condom use at last sexual encounter, compared to an average of 24% of male respondents with exclusively female sex partners.
- From 1993 to 2007, the proportion of male high-school aged respondents to the Massachusetts Youth Risk Behavior Survey (YRBS) reporting male to male sex at any point in their lifetime ranged from 2.5% to 4.9%.





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- Among respondents to the 2007 YRBS reporting male-to-male sex:
  - 39% used a condom at last intercourse, compared to 65% of sexually active males with only female partners;
  - 50% reported alcohol/drug use at last intercourse, compared to 26% of other sexually active males;
  - 37% reported having four or more lifetime sexual partners, compared to 23% of other males;
  - 11% reported having ever been diagnosed with an STD, compared to 3% of other males; and
  - 35% reported having sexual intercourse before age 13, compared to 13% of other males.<sup>i</sup>

**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 reported cases of infectious syphilis in self-identified MSM increased over nine-fold during the eight-year period from 2000 (N=33) to 2008 (N=302).
- The proportion of self-identified MSM among reported infectious syphilis cases increased from 23% in 2000 to 82% in 2008.
- From 2001 to 2008, the proportion of reported infectious syphilis cases among self-identified MSM who were also living with HIV infection increased from 12% to 41%.

### HIV-Related Morbidity and Mortality among Men Who Have Sex with Men:

**AIDS Diagnoses:** An AIDS diagnosis signifies disease progression and may be an indicator of treatment failure, limited access to medical care or delayed entry to medical care.

- From 1999 to 2008, the proportion of MSM among reported AIDS diagnoses increased from 25% to 36%.

### Mortality with HIV/AIDS

- From 1999 to 2008, the proportion of MSM among people with HIV/AIDS who died remained fairly stable between 16% and 22%.

### Data Sources:

HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) HIV/AIDS Surveillance Program; data as of January 1, 2010

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

HIV Counseling and Testing Data: MDPH Office of HIV/AIDS, Office of Research and Evaluation

### Additional References of Interest:

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<sup>i</sup> These statistics should be interpreted with caution due to small sample sizes (see detailed data tables for sample size by question).

