



## Men Who Have Sex with Men

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### Introduction

The HIV/AIDS epidemic was first recognized among men who have sex with men (MSM). Although the overall number of cases attributed to male-to-male sex has decreased over time, it is the predominant mode of exposure in Massachusetts among people recently diagnosed with HIV infection. Male-to-male sex accounts for the largest proportion (34%) of HIV exposures among people diagnosed with HIV infection within the three year period 2001 to 2003. Among all people living with HIV/AIDS on July 1, 2004, male-to-male sex accounts for 36% of reported exposures.

### General Statistics:

- Within the three year period 2001 to 2003, 929 of the people diagnosed with HIV infection were men who have sex with men, accounting for 34% of all reported exposures and 50% of exposures among men in Massachusetts. Of the 929 HIV-infected MSM, 7% (N=62) also have been reported to have injected drugs.
- As of July 1, 2004, there were 5,350 men living with HIV/AIDS where HIV infection was attributed to male-to-male sex, representing 36% of all people living with HIV/AIDS in Massachusetts, and 51% of men living with HIV/AIDS. Of these 5,350 men, 9% (N=486) have also injected drugs.

### Regional Distribution:

Male-to-male sex is the most frequently reported mode of exposure in the Boston, Metrowest, Northeast and Southeast Health Service Regions among people recently diagnosed with HIV infection as well as those currently living with HIV/AIDS.

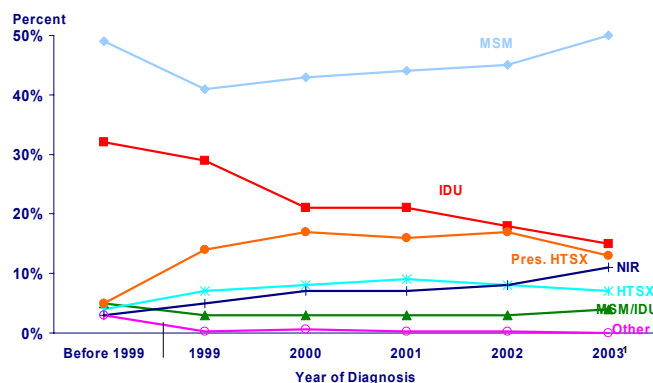
Among cities with over 20 people diagnosed with HIV infection within the three year period 2001 to 2003, the following have the highest proportions of persons whose HIV infection is attributed to male-to-male sex (N=number of HIV-infected reported to be MSM):

Provincetown	100%	(N=30)
Medford	81%	(N=22)
Quincy	48%	(N=14)
Boston	45%	(N=369)
Somerville	40%	(N=16)
Revere	39%	(N=14)
Everett	38%	(N=9)
Malden	36%	(N=16)
Fall River	33%	(N=13)
Cambridge	31%	(N=16)

### Diagnosis of HIV Infection over Time

The proportion of HIV diagnoses among men who were reported to have engaged in male-to-male sex (not including those with a history of injection drug use) rose from 41% in 1999 to 50% in 2003.

**Figure 1 Percentage Distribution of Males Diagnosed with HIV Infection by Exposure Mode and Year of Diagnosis: MA, Before 1999, 1999-2003<sup>1</sup>**



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. <sup>1</sup> 2003 Data are preliminary; Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 7/1/04

## Race/Ethnicity:

- Race/ethnicity of MSM diagnosed with HIV infection within the three year period 2001 to 2003 was:
  - 72% white (non-Hispanic)
  - 11% black (non-Hispanic)
  - 15% Hispanic
  - 2% other
- Of all men recently diagnosed with HIV infection attributed to male-to-male sex, the majority (72%) are white. Among men recently diagnosed with HIV infection and exposed through other modes, the largest proportions are black (40%), and Hispanic (30%).
- The distribution across race/ethnicity of MSM living with HIV/AIDS is similar to that for MSM recently diagnosed: 74% percent are white (non-Hispanic), 12% are black (non-Hispanic), 12% are Hispanic, and 2% are of other race/ethnicity.

## Age at HIV Diagnosis:

- Eight percent (N=70) of MSM diagnosed with HIV infection within the years 2001 to 2003 were diagnosed during adolescence (13-24 years), as compared to 4% (N=38) of men reportedly exposed by other means.
- The proportion of MSM recently diagnosed with HIV infection during adolescence varies by race/ethnicity: 12% (N=17) of Hispanic MSM and 13% (N=13) of black MSM with HIV infection were diagnosed between the ages of 13 and 24 years compared to 6% (N=38) of HIV-infected white MSM.
- Seventeen percent of MSM recently diagnosed with HIV infection were in their 20s, 46% in their 30s, 26% in their 40s, and 9% at the age of 50 years or older.

## 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.

- The proportion of respondents to the Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) reporting male-to-male sex who used a condom at last intercourse increased from 34% in 2000 to 46% in 2002, and then decreased to 39% in 2003.
- Thirty-seven percent of respondents to the 2002 and 2003 BRFSS who reported male-to-male sex reported three or more sex partners compared to 7% of male respondents with exclusively female sex partners.
- Forty-three percent of respondents to the 2002 and 2003 BRFSS who reported male-to-male sex also reported condom use at last sexual encounter compared to 27% of male respondents with exclusively female sex partners.
- Among high school-aged respondents to the 2003 Massachusetts Youth Risk Behavior Survey (YRBS) reporting male-to-male sex:
  - 30% used a condom at last intercourse compared to 62% of sexually active males with only female partners;
  - 37% reported alcohol/drug use at last intercourse compared to 32% of other sexually active males;
  - 41% reported having four or more sexual partners compared to 19% of other males;
  - 25% reported having ever been diagnosed with an STD compared to 5% of other males; and
  - 89% reported ever having sexual intercourse compared to 72% of other males.

*Note: The behavioral statistics above should be interpreted with caution due to the small sample sizes (See detailed data tables for sample size by question).*

**Syphilis Incidence:** Recent outbreaks of syphilis among men who have sex with men in Massachusetts are a potential indicator of unprotected sex and elevated risk for HIV infection.

- The number of infectious syphilis cases reported among MSM increased over five-fold during the four-year period from 2000 (N=33) to 2003 (N=178).
- The proportion of reported infectious syphilis cases among MSM increased from 23% in 2000 to 68% in 2003.
- From 2001 to 2003, the proportion of reported infectious syphilis cases among MSM that were also living with HIV infection increased from 12% to 41%.

#### **State-Funded HIV Counseling and Testing:**

- Of 42,433 HIV tests performed in year 2003, 9% (N=3,779) were among men reporting sex with men, of which 3.0% were positive.

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

### **AIDS Diagnoses over Time**

- The proportion of MSM among reported AIDS diagnoses (including those who injected drugs) declined from 41% in 1993 to 24% in 2000. From 2001 to 2003, men who have sex with men accounted for 27% to 28% of people diagnosed and reported with AIDS.

### **Mortality with AIDS**

- From 1993 to 2003, the proportion of AIDS deaths represented by MSM (including those who injected drugs) decreased from 49% to 24%.

### **Data Sources:**

HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) MDPH HIV/AIDS Surveillance Program, Data as of July 1, 2003

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 Education, Youth Risk Behavior Survey

Syphilis Data: MDPH Division of Sexually Transmitted Disease Prevention

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

### **Additional References of Interest:**

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Semple, SJ, Patterson TL, Grant I. Binge Use of Methamphetamine Among HIV-Positive Men Who Have Sex with Men: Pilot Data and HIV Prevention Implications. *AIDS Education and Prevention*. 2003;15:133-147.

*For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile," available online at [www.mass.gov/dph/aids](http://www.mass.gov/dph/aids)*