Massachusetts HIV Epidemiologic Profile:
Data as of 7/1/2024
Population Report: Men Who Have Sex with Men

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Tel: (617) 983-6999

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Questions about infectious disease reporting
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HIV Data Dashboard
https://www.mass.gov/info-details/hiv-data-dashboard

Requests for additional data

https://www.mass.gov/lists/infectious-disease-data-reports-and-requests

Slide sets for HIV Epidemiologic Profile Reports
https://www.mass.gov/lists/hivaids-epidemiologic-profiles

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[i] Providers may use this number to report individuals newly diagnosed with a notifiable sexually transmitted infection, including HIV, or request partner services. Partner services is a free and confidential service for individuals recently diagnosed with a priority infection. The client-centered program offers counseling, linkage to other health and social services, anonymous notification of partners who were exposed and assistance with getting testing and treatment. For more information, see: https://www.mass.gov/service-details/partner-services-program-information-for-healthcare-providers)

MEN WHO HAVE SEX WITH MEN

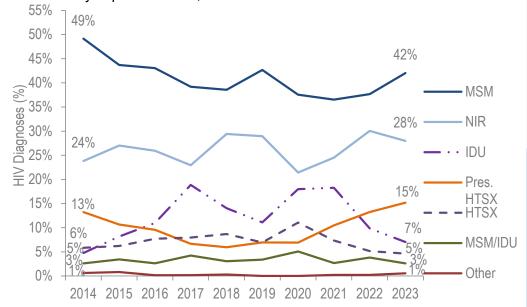## HIV INCIDENCE AND PREVALENCE AMONG MSM

N=559* **39%** of 1,435 new HIV diagnoses from 2021–2023 were among individuals with MSM exposure mode
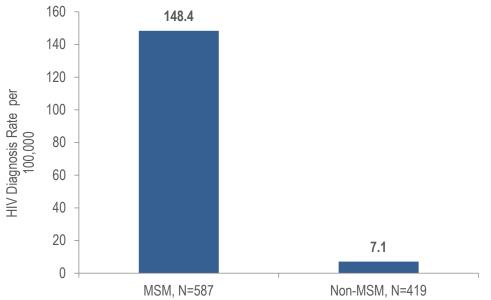
N=9,656 **40%** of 24,119 persons living with HIV infection in MA as of 12/31/2023 were reported with MSM exposure mode

FIGURE 1. Percentage distribution of individuals diagnosed with HIV infection by exposure mode, Massachusetts 2014–2023

Individuals Diagnosed with HIV Infection 2014–2023: N=5,582, MSM=Male-to-Male Sex; IDU=Injection Drug Use; HTSX=Heterosexual Sex; Pres. HTSX=presumed heterosexual exposure, includes individuals assigned female at birth with a negative history of injection drug use who report having sex with an individual that identifies as male of unknown HIV status and risk; NIR=No Identified Risk

FIGURE 2. Estimated[i] average HIV diagnosis rate per 100,000 population, MSM compared to non-MSM (males only) ages 18–64 years, Massachusetts 2021–2023

[i] Multiple source estimation method for MSM rate (2021-2023 BRFSS); as of 1/1/2020 BIDLS calculates rates using University of Massachusetts Donahue Institute population estimates using a modified Hamilton-Perry model. Note that rates calculated using previous population denominators cannot be compared to these. Please note that individuals AMAB with no identified risk for HIV infection were included in the non-MSM category for rate calculations.

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of data from 2020 to 2023

- Among individuals assigned male at birth (AMAB), MSM was the exposure mode for 54% (N=559/1,039), and MSM/IDU an additional 4% (N=43/1,039), of HIV infection diagnoses from 2021 to 2023.*

KEY FACT

- From 2014 to 2023, MSM exposure mode accounted for the largest percentage of HIV diagnoses each year (with a low of 37% [N=164/449] in 2021 and a high of 49% [N=320/651] in 2014).
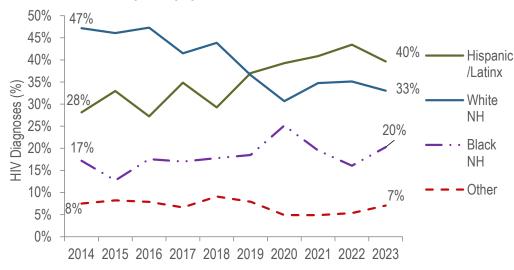
KEY FACT

- At 148.4 per 100,000 population (95% confidence interval [CI]: 123.0–190.8 per 100,000), the estimated average rate of HIV diagnosis from 2021 to 2023 among MSM (ages 18–64 years) was 21 times the rate of infection in men who did not report sex with men (7.1 per 100,000 [95% CI: 7.0–7.2 per 100,000]).

- At 6,635.5 per 100,000 population (95%CI:5,500.5–8,531.4 per 100,000), the estimated HIV prevalence rate among MSM (ages 18–64) was 27 times the rate in men who did not report sex with men (246.1 per 100,000 [95%CI:242.5–249.6 per 100,000]).

MEN WHO HAVE SEX WITH MEN

RACE/ETHNICITY

- Forty-one percent of 559 MSM diagnosed with HIV infection during 2021–2023* were Hispanic/Latinx, 34% were White (non-Hispanic), 19% were Black (non-Hispanic), 4% were Asian/Pacific Islander, and 1% was of other or unknown race/ethnicity.
- Among 9,656 MSM living with HIV infection on 12/31/2023, 56% were White (non-Hispanic), 24% were Hispanic/Latinx, 14% were Black (non-Hispanic), 3% were Asian/Pacific Islander, and 2% were of other or unknown race/ethnicity.

FIGURE 3. Individuals diagnosed with HIV infection with MSM exposure mode by race/ethnicity and year of diagnosis, Massachusetts 2014–2023

MSM Diagnosed with HIV Infection 2014-2023: N=2,309, MSM=Male-to-male sex, NH=non-Hispanic
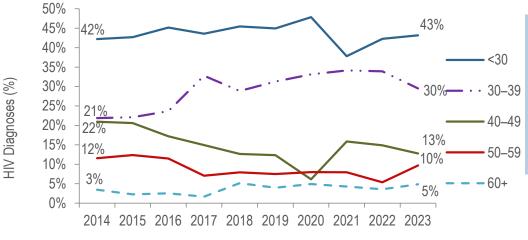
KEY FACT
- From 2014 to 2023, the proportion of individuals AMAB diagnosed with HIV infection with MSM exposure mode who identified as Hispanic/Latinx increased from 28% to 40%, while the proportion who identified as White (non-Hispanic) decreased from 47% to 33%. The proportion who identified as Black (non-Hispanic) fluctuated, increasing from 17% in 2014 to 25% in 2020 and then decreasing to 20% in 2023.

AGE

- From 2021 to 2023, among individuals AMAB diagnosed with HIV infection during adolescence and young adulthood (13–24 years), MSM was the most frequently reported mode of exposure at 79% (N=107/135). Among individuals AMAB diagnosed with HIV infection aged 25 years or older, MSM accounted for 50% (N=452/902) of diagnoses during the same time period.

FIGURE 4. Individuals diagnosed with HIV infection with MSM exposure mode by age at diagnosis and year of diagnosis, Massachusetts 2014–2023

MSM Diagnosed with HIV Infection 2014-2023: N=2,309

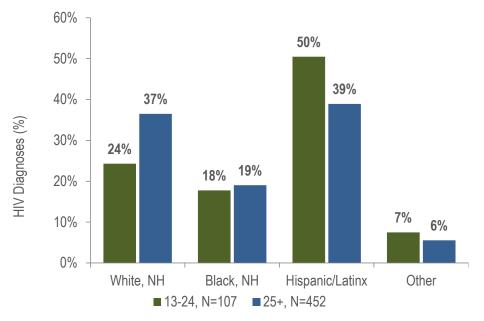**KEY FACT**
- Every year from 2014 to 2023, the largest proportion of MSM who were diagnosed with HIV infection were younger than 30 years of age.

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of data from 2020 to 2023

FIGURE 5. Individuals diagnosed with HIV infection with MSM exposure mode by age at diagnosis and race/ethnicity, Massachusetts 2021–2023
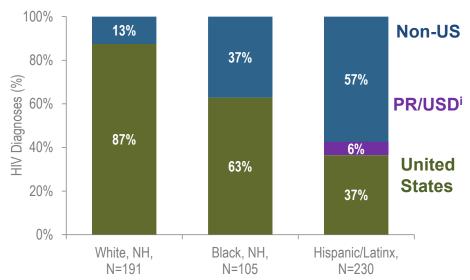

Other includes Asian/Pacific Islander, American Indian/Alaska Native, and unknown.
NH = Non-Hispanic

- A larger proportion of MSM diagnosed with HIV infection between the ages of 13 and 24 years was Hispanic/Latinx (50%), as compared to MSM diagnosed at age 25 years or older (39%).

- The average age of HIV diagnosis was younger for Asian/Pacific Islander, Black (non-Hispanic), and Hispanic/Latinx individuals AMAB recently diagnosed with MSM exposure mode (30.6, 31.5, and 32.8 years, respectively) compared to White (non-Hispanic) individuals AMAB with MSM exposure mode (39.0 years).

PLACE OF BIRTH

- The distribution of place of birth of 559 MSM diagnosed with HIV infection during 2021–2023* was: 59% born in the US, 38% born outside of the US, and 3% born in Puerto Rico.
- The distribution of place of birth among 9,656 MSM living with HIV infection on 12/31/2023 was: 72% born in the US, 24% born outside of the US, and 4% born in Puerto Rico or another US dependency.

FIGURE 6. Individuals diagnosed with HIV infection with MSM exposure mode by race/ethnicity and place of birth, Massachusetts 2021–2023
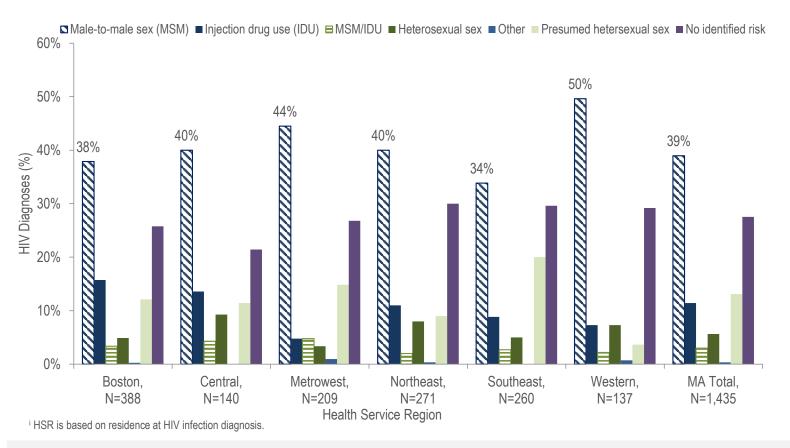

[i] 94% of individuals diagnosed with HIV infection from 2021–2023 who were born in a US dependency were born in Puerto Rico, PR/USD=Puerto Rico/US Dependency

KEY FACT
- Fifty-seven percent of Hispanic/Latinx MSM recently diagnosed with HIV infection were non-US born, compared to 37% of Black (non-Hispanic) MSM and 13% of White (non-Hispanic) MSM. An additional 6% of Hispanic/Latinx MSM were born in Puerto Rico, compared to none of White (non-Hispanic) and Black (non-Hispanic) MSM.

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of data from 2020 to 2023

PLACE OF RESIDENCE

FIGURE 7. HIV infection diagnoses by Health Service Region[i] and exposure mode, Massachusetts 2021–2023

[i] HSR is based on residence at HIV infection diagnosis.

- MSM was the predominant exposure mode for HIV infection in all Health Service Regions of Massachusetts.

TABLE 1. Massachusetts cities/towns[i] with the highest percentage of HIV diagnoses among MSM, 2021–2023

	HIV Diagnoses Among MSM (N)	HIV Diagnoses Among MSM as Percent of Total HIV Diagnoses in City/Town(%)
Massachusetts Total	559	39%
Top Cities/Towns[ii]		
Everett	13	62%
Malden	16	55%
Chelsea	11	52%
Framingham	11	50%
Springfield	29	50%
Worcester	29	41%
Lowell	17	40%
New Bedford	11	37%
Boston	126	36%
Lawrence	11	31%
All Other Cities/Towns[iii]	285	38%

[i] City/town is based on residence at HIV infection diagnosis.
[ii] Among cities and towns with more than 20 total HIV diagnoses from 2021–2023
[iii] All Other Cities/Towns includes individuals diagnosed in a correctional facility

- Among cities and towns with more than 20 reported HIV diagnoses from 2021 to 2023,* Everett, Malden, and Chelsea had the highest percentages of HIV diagnoses among MSM. Each had over half of new HIV diagnoses attributed to MSM exposure mode.

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of data from 2020 to 2023

INFORMATION FROM ADDITIONAL DATA SOURCES

Behavioral Risk Factors: Recent statewide surveys describe sexual and drug use behaviors among MSM in Massachusetts.

Massachusetts Behavioral Risk Factor Surveillance Survey (BRFSS): *An annual, anonymous telephone survey of adults ages 18 and older that collects data on a variety of health risk factors, preventive behaviors, chronic conditions, and emerging public health issues.*

- Among sexually active individuals AMAB ages 18–64 years who responded to the BRFSS from 2021 to 2023:

  - 6.3% (95% confidence interval [CI]: 4.9% – 7.6%, n=2,043) reported having sex with individuals AMAB or with both individuals AMAB and AFAB;

  - 40.0% (95% CI: 28.6%–51.4%, n=139) who reported having sex with individuals AMAB or with both individuals AMAB and AFAB reported condom use at last sexual encounter, compared to 24.1% (95% CI: 21.7%–26.6%, n=1,885) of sexually active individuals AMAB who reported sex with individuals AFAB only; and

  - 56.7% (95% CI: 45.9%–67.4%, n=142) who reported having sex with individuals AMAB or with both individuals AMAB and AFAB reported two or more sexual partners in the past year, compared to 14.5% (95% CI: 12.1%–16.9%, n=1,871) of sexually active individuals AMAB who reported sex with individuals AFAB only.

Data Source: Office of Data Management and Outcomes Assessment, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS). For more information, see: Health Survey Program, Office of Data Management and Outcomes Assessment, Massachusetts Department of Public Health. A Profile of Health Among Massachusetts Adults, 2022, Results from the Behavioral Risk Factor Surveillance System, December 2023, https://www.mass.gov/doc/a-profile-of-health-among-massachusetts-adults-2022/download

Massachusetts Youth Risk Behavior Survey (YRBS): *An anonymous survey of public high school students conducted every odd year that collects data on health-related behaviors.*

Sexual behaviors/identity

- In 2023, 74.1% (95% CI: 71.2%–77.0%) of public high school students (n=2,997) identified as heterosexual, 11.9% (95% CI: 10.3%–13.5%) identified as bisexual, 4.7% (95% CI: 3.8%–5.7%) identified as something else, 4.0% (95% CI: 3.1%–4.9%) were not sure of (questioning) their sexual identity, 3.4% (95% CI: 2.5%–4.3%) identified as gay or lesbian, and 1.8% (95% CI: 1.2%–2.5%) did not understand the question.

Data Source: Massachusetts Department of Elementary and Secondary Education (DESE) and Massachusetts Department of Public Health Office of Data Management and Outcomes Assessment. For more information, see: https://www.doe.mass.edu/sfs/yrbs/

HIV Surveillance Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences, data are current as of 7/1/2024 and may be subject to change

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