



Massachusetts Department of Public Health Bureau of Infectious Disease and Laboratory Sciences

Massachusetts HIV Epidemiologic Profile: Data as of 1/1/2023 Population Report: Adolescents and Young Adults

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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>

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>

ADOLESCENTS AND YOUNG ADULTS

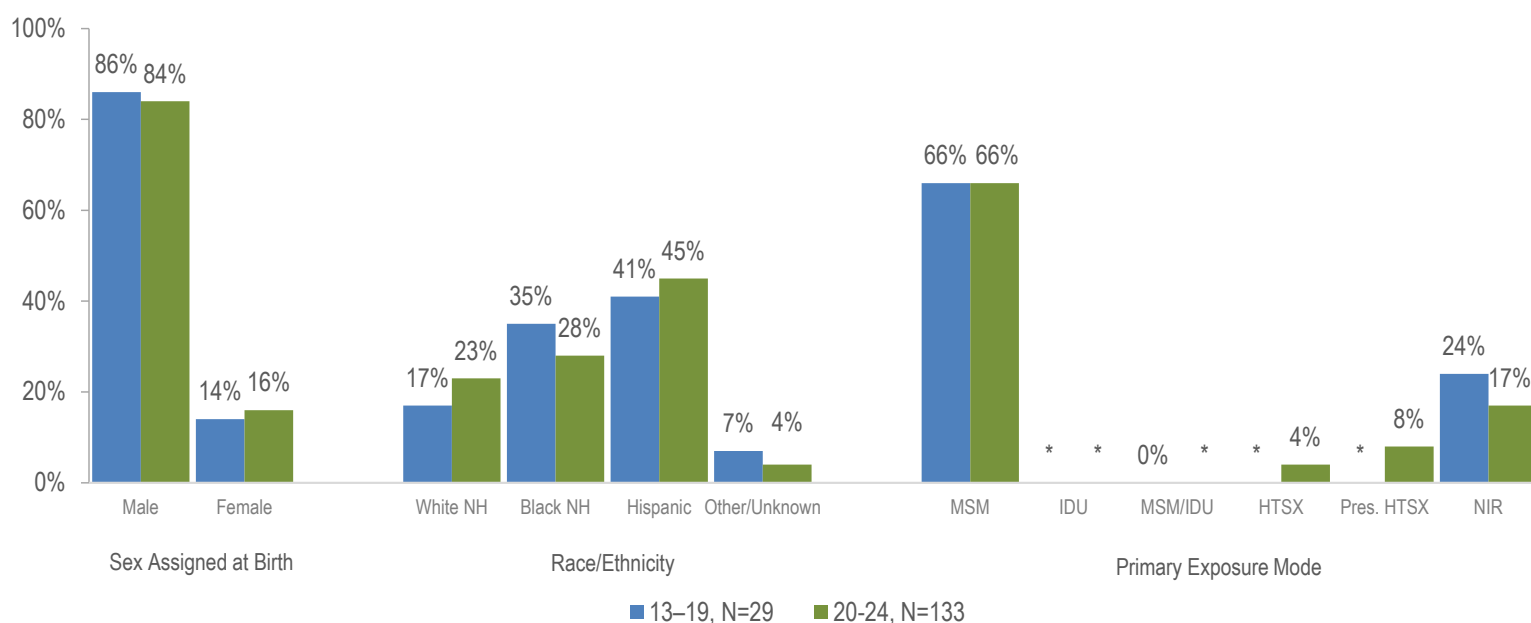
HIV INCIDENCE AND PREVALENCE AMONG ADOLESCENTS AND YOUNG ADULTS

N=162* **11%** of 1,419 new HIV diagnoses from 2019–2021 were among adolescents and young adults (aged 13 to 24 years)

N=319* **1%** of 23,393 persons living with HIV infection in MA as of 12/31/2021 were adolescents and young adults (aged 13 to 24 years)

KEY FINDING: Nationally, from 2019 to 2021, 20% of HIV infections were diagnosed among adolescents and young adults (aged 13 to 24 years),ⁱ compared to 11% in Massachusetts.

FIGURE 1. Individuals diagnosed with HIV infection at age 13–19 years vs. 20–24 years by sex assigned at birth, race/ethnicity, and exposure mode, Massachusetts 2019–2021



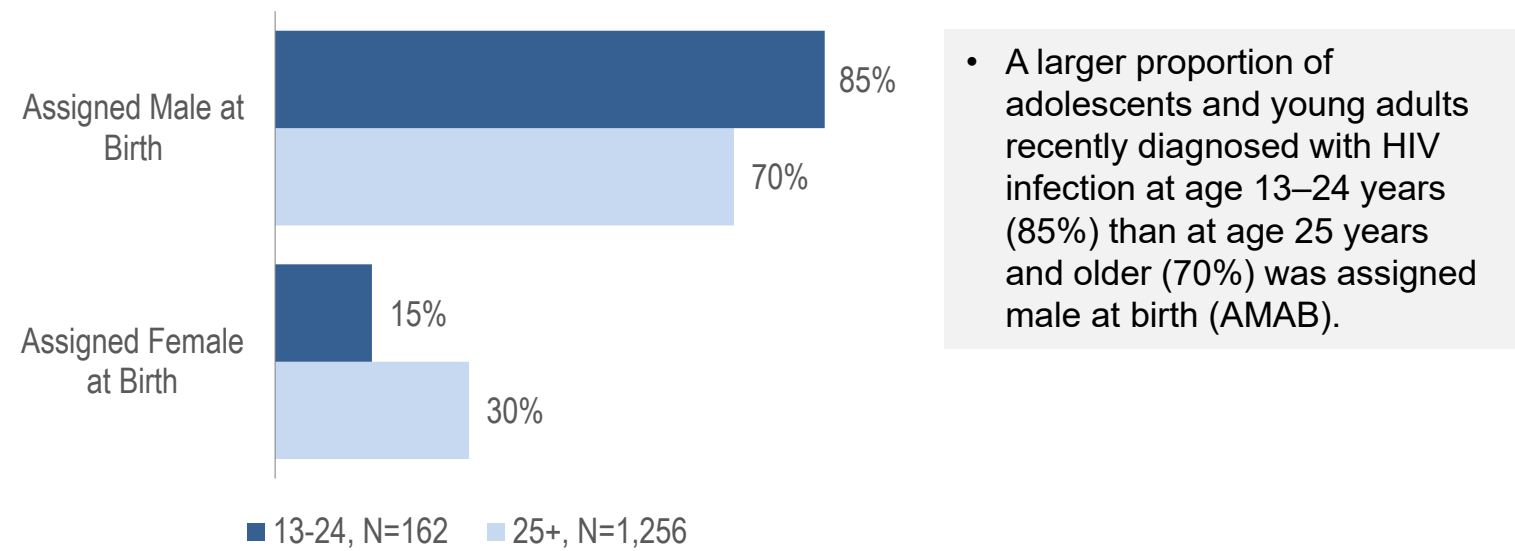
- Among adolescents and young adults (aged 13–24 years) recently diagnosed with HIV infection (2019–2021), 82% (N=133) were 20 to 24 years of age and 18% (N=29) were 13 to 19 years of age. Additionally, 4% (N=7) were considered minors (under 18 years of age) and 96% (N=155) were 18 years of age or older.
- The distribution by assigned sex at birth was similar for youth recently diagnosed with HIV infection at age 13–19 years and those diagnosed at age 20–24 years.
- A larger proportion of youth recently diagnosed with HIV infection at age 13–19 years (35%) than at age 20–24 years (28%) was black (non-Hispanic).
- The proportion of youth recently diagnosed with HIV infection at age 13–19 years with no identified risk for HIV exposure mode (24%) was greater than that among youth diagnosed at age 20–24 years (17%).

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of 2020 and 2021 data

ⁱ CDC. Diagnoses of HIV Infection in the United States and Dependent Areas, 2021. HIV Surveillance Report 2023; 34. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-34/index.html> Accessed [11/14/23].

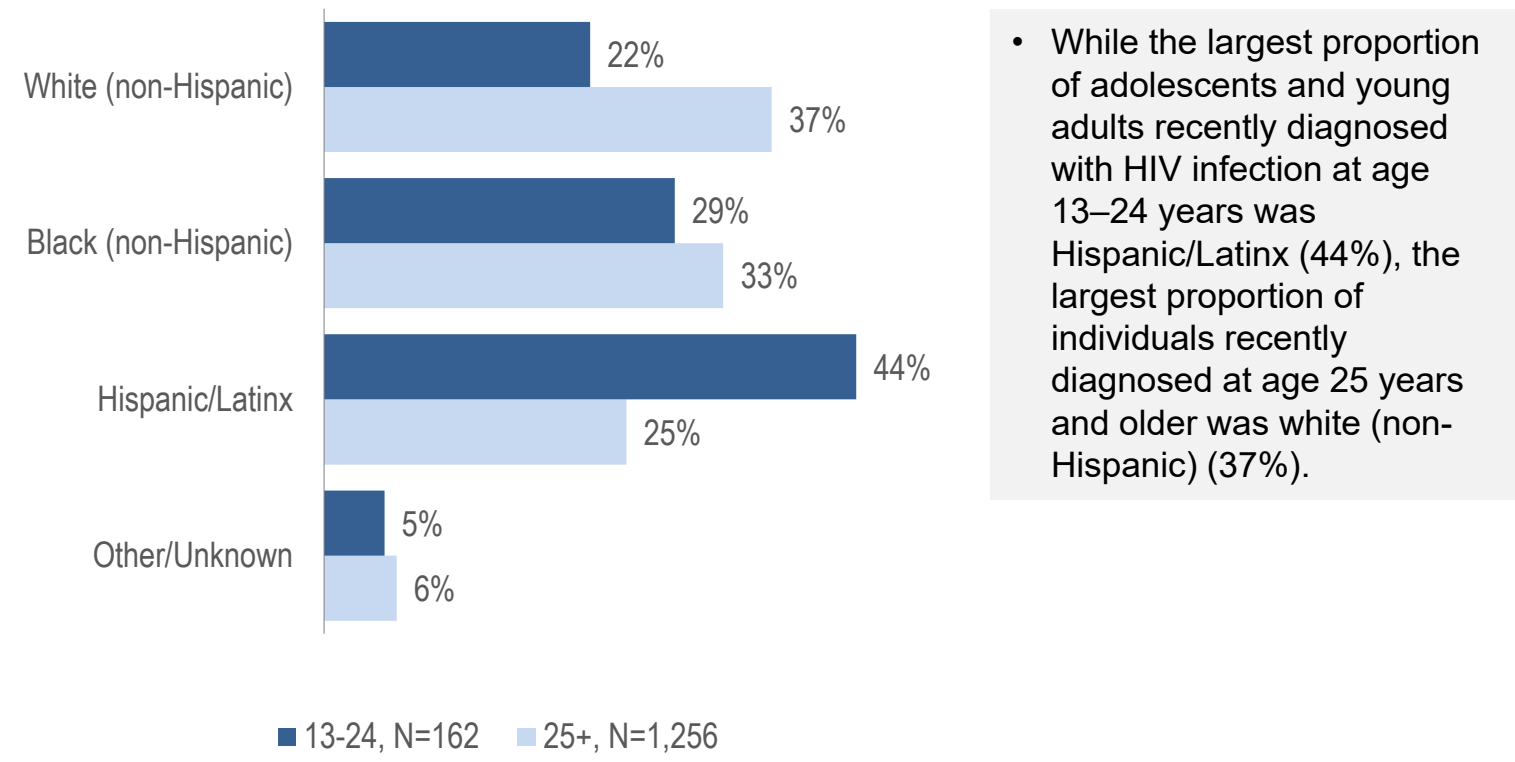
SEX ASSIGNED AT BIRTH

FIGURE 2. HIV infection diagnoses by age at HIV diagnosis and sex assigned at birth, Massachusetts 2019–2021*



RACE/ETHNICITY

FIGURE 3. HIV infection diagnoses by age at HIV diagnosis and race/ethnicity, Massachusetts 2019–2021

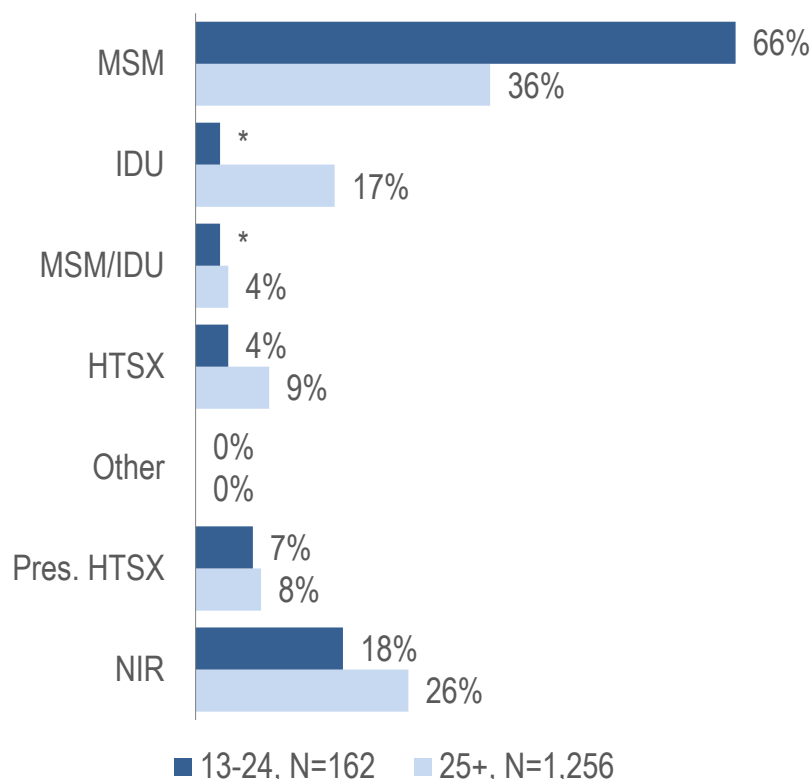


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ADOLESCENTS AND YOUNG ADULTS

EXPOSURE MODE

FIGURE 4. HIV infection diagnoses by age at HIV diagnosis and exposure mode, Massachusetts 2019–2021**



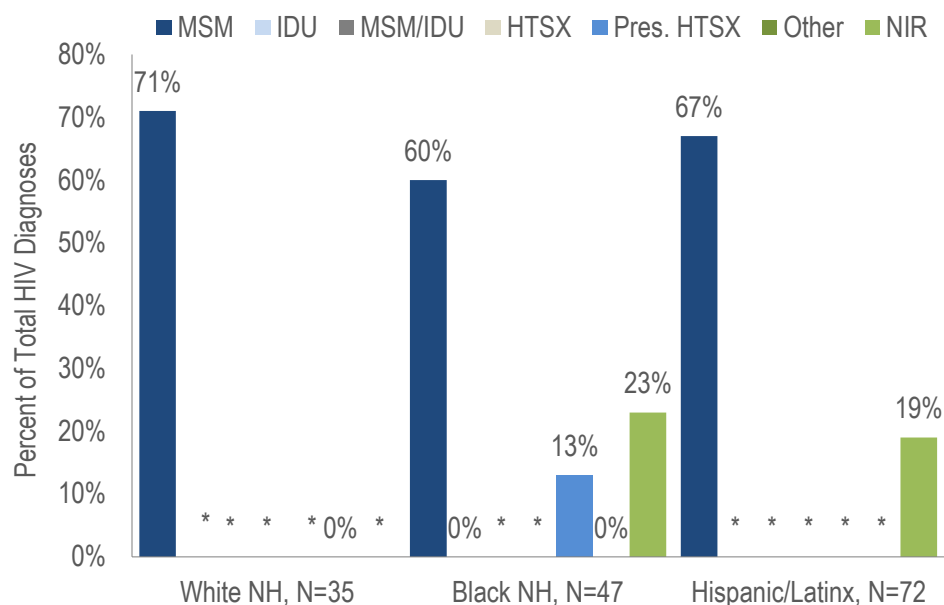
KEY FINDING

- A larger proportion of individuals AMAB recently diagnosed with HIV infection at age 13–24 years (78%, N=107/137) than at age 25 years and older (51%, N=449/885) had MSM exposure mode.

- MSM is the primary exposure mode for adolescents recently diagnosed with HIV infection.

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 5. HIV infection diagnoses among individuals aged 13–24 years by race/ethnicity and exposure mode, Massachusetts 2019–2021



- Nineteen to 23% of Hispanic/Latinx and Black adolescents (respectively) recently diagnosed with HIV infection were reported with an exposure mode of No Identified Risk, underscoring the importance to learn more about factors contributing to their vulnerability for HIV exposure.

- The proportion of adolescents and young adults (aged 13–24 years) recently diagnosed with MSM exposure mode was 71% among white (non-Hispanic) youth, 60% among Hispanic/Latinx youth, and 67% among black (non-Hispanic) youth.

* Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Percentages do not add up to 100% due to suppressed values

** Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of 2020 and 2021 data

ADOLESCENTS AND YOUNG ADULTS

PLACE OF RESIDENCE

TABLE 1. Massachusetts cities/townsⁱ with the highest percentage of HIV diagnoses among adolescents and young adults (13–24 years old), 2019–2021

	HIV Diagnoses Among Adolescents and Young Adults 13–24 Years (N)	HIV Diagnoses Among Adolescents and Young Adults 13–24 Years as Percent of Total HIV Diagnoses in City/Town (%)
Massachusetts Total	162	11%
Top Cities/Towns		
Springfield	9	18%
Worcester	12	15%
Lawrence	6	14%
Lynn	6	14%
Brockton	8	13%
All Other Cities/Towns ⁱⁱ	121	11%

ⁱ City/town is based on residence at HIV infection diagnosis.

ⁱⁱ All Other Cities/Towns includes individuals diagnosed in a correctional facility

- Among cities and towns with at least 20 reported HIV diagnoses in 2019–2021 and at least 5 diagnoses among adolescents and young adults aged 13–24 years, Springfield and Worcester had the largest proportions of HIV infections diagnosed in this age group, at 18% and 15%, respectively.

INFORMATION FROM ADDITIONAL DATA SOURCES

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 that may threaten the health and safety of young people.

Please note, caution should be used in the interpretation of 2021 YRBS data due to the effect of the COVID-19 pandemic. COVID-19 precautions might have reduced school and student participation, although more schools were sampled in 2021 than in previous cycles. Additionally, COVID-19 may have affected student behavior.

Sexual behaviors

- Respondents to the 2021 Massachusetts YRBS reported the following rates of sexual behaviors:
 - condom use at last intercourse: 58.0% (95% CI: 52.8%–63.3%, n=468);
 - alcohol or drug use at last intercourse: 20.7% (95% CI: 17.6%–23.7%, n=432);
 - having four or more lifetime sexual partners: 4.3% (95% CI: 3.4%–5.3%, n=2,883); and
 - sexual intercourse before age 13: 2.7% (95% CI: 2.1%–3.3%, n=2,897).

Drug use

Both injection and non-injection substance use have been documented to increase risk for HIV and hepatitis C virus infection.

- Respondents to the 2021 Massachusetts YRBS reported the following rates of drug use:
 - ever using cocaine: 1.3% (95% CI: 0.7%–1.8%, n=3,096);
 - ever using ecstasy 2.0% (95% CI: 1.3%–2.8%, n=3,086);
 - ever using methamphetamines: 0.8% (95% CI: 0.4%–1.2%, n=2,688); and
 - ever using heroin: 0.6% (95% CI: 0.3%–1.0%, n=3,090).

Data Source for Youth Risk Behavior Survey Data: Massachusetts Department of Elementary and Secondary Education and Massachusetts Department of Public Health, Office of Data Management and Outcomes Assessment

*Please consider the impact of the COVID-19 pandemic on infectious disease screening, treatment, and surveillance in the interpretation of 2020 and 2021 data

HIV Surveillance Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences, data are current as of 1/1/2023 and may be subject to change