



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

Massachusetts HIV/AIDS Epidemiologic Profile: Data as of 2/1/2021 Population Report: Racial and Ethnic Minorities

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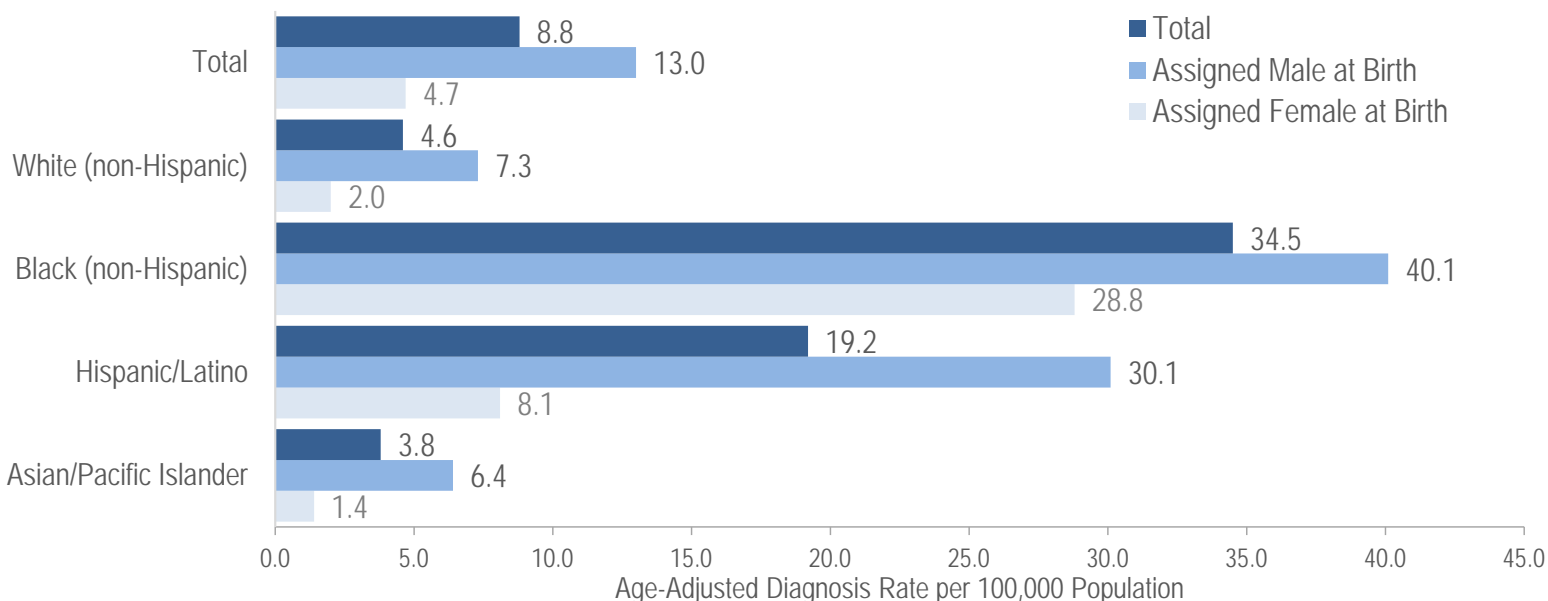
RACIAL AND ETHNIC MINORITIES

The racial and ethnic minorities fact sheet focuses on black (non-Hispanic), Hispanic/Latino, and Asian and Pacific Islander individuals recently diagnosed (2017–2019) and living with HIV infection (as of 12/31/19) and presents these data alongside new diagnosis and living with HIV data for white (non-Hispanic) individuals to illustrate persistent racial and ethnic health disparities. Analyses for American Indian/Alaskan Native and mixed-race individuals are not presented due to small numbers (N<5 and N=39 recent HIV diagnoses, respectively; N=37 and N=220 persons living with HIV infection, respectively).

N=548	30%	of new HIV diagnoses from 2017–2019 were among black (non-Hispanic) individuals	N=6,958	30%	of persons living with HIV infection as of 12/31/2019 were among black (non-Hispanic)
N=510	28%	of new HIV diagnoses from 2017–2019 were among Hispanic/Latino individuals	N=6,213	27%	of persons living with HIV infection as of 12/31/2019 were among Hispanic/Latino individuals
N=69	4%	of new HIV diagnoses from 2017–2019 were among Asian/Pacific Islanders	N=541	2%	of persons living with HIV infection as of 12/31/2019 were among Asian/Pacific Islanders

RATES PER 100,000 POPULATION

FIGURE 1. Average age-adjusted HIV diagnosis rate per 100,000 populationⁱ by sex assigned at birth and race/ethnicity, Massachusetts 2017–2019 (N=1,819)



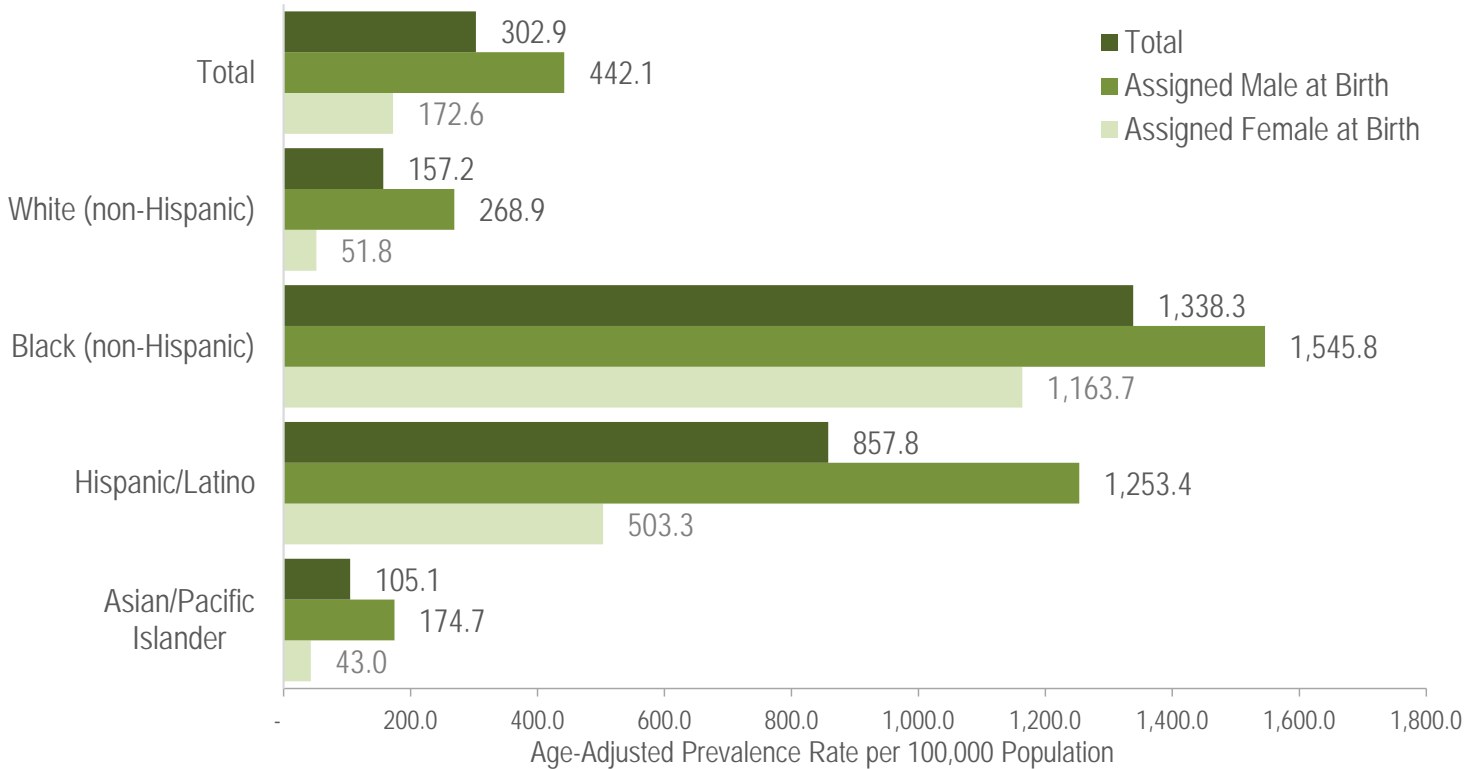
ⁱ As of 1/1/2020, BIDLS calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report published Oct 2016). Note that rates and trends calculated using previous methods cannot be compared to these. All rates are age-adjusted using the 2000 US standard population.

KEY FACTS

- There were large disparities in average annual age-adjusted HIV diagnosis rates for 2017 to 2019 by race/ethnicity: the rates among black (non-Hispanic) individuals and Hispanic/Latino individuals were eight and four times that of white (non-Hispanic) individuals, respectively.
- With respect to differences based on race/ethnicity and sex assigned at birth, the average annual age-adjusted HIV diagnosis rates for 2017 to 2019 among black (non-Hispanic) and Hispanic/Latina individuals assigned female at birth (AFAB) were 14 and four times that of white (non-Hispanic) individuals AFAB, respectively. Among black (non-Hispanic) and Hispanic/Latino individuals assigned male at birth (AMAB), the average age-adjusted HIV diagnosis rates were five and four times greater than the rate among white (non-Hispanic) individuals AMAB, respectively.

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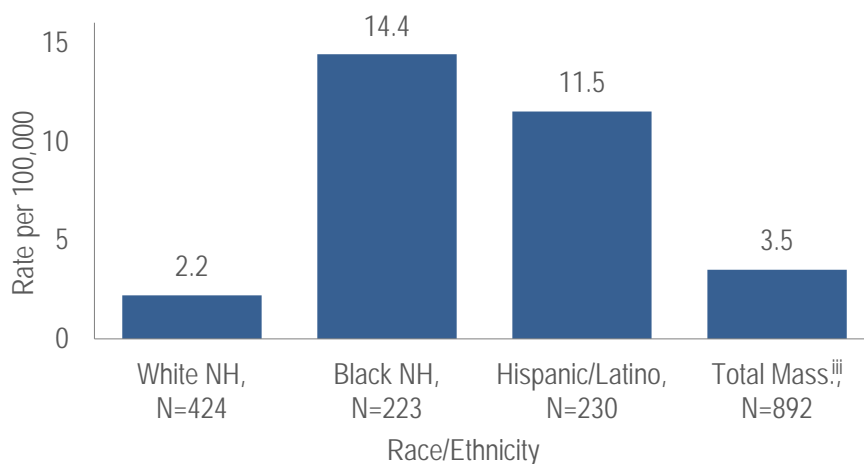
FIGURE 2. Age-adjusted HIV prevalence rates per 100,000 populationⁱ by sex assigned at birth and race/ethnicity, Massachusetts 2019 (N= 23,291)



KEY FACTS

- In 2019, there were large disparities in age-adjusted prevalence rates by race/ethnicity: the rates among black (non-Hispanic) individuals and Hispanic/Latino individuals were nine and five times that of white (non-Hispanic individuals), respectively.
- With respect to differences based on race/ethnicity and sex assigned at birth, the age-adjusted HIV prevalence rates among black (non-Hispanic) and Hispanic/Latina individuals AFAB were 22 and 10 times greater than the rate among white (non-Hispanic) individuals AFAB, respectively. Among black (non-Hispanic) and Hispanic/Latino individuals AMAB, the age-adjusted HIV prevalence rates were six and five times greater than the rate among white (non-Hispanic) individuals AMAB, respectively.

FIGURE 3. Average age-adjusted death rate per 100,000 populationⁱ among people reported with HIV by race/ethnicity,ⁱⁱ Massachusetts 2017–2019



- The age-adjusted average death rates from 2017 to 2019 among black (non-Hispanic) and Hispanic/Latino individuals reported with HIV were seven and five times greater than the rate among white (non-Hispanic) individuals, respectively.

ⁱ As of 1/1/2020, BIDLs calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report published Oct 2016). Note that rates and trends calculated using previous methods cannot be compared to these. All rates are age-adjusted using the 2000 US standard population.

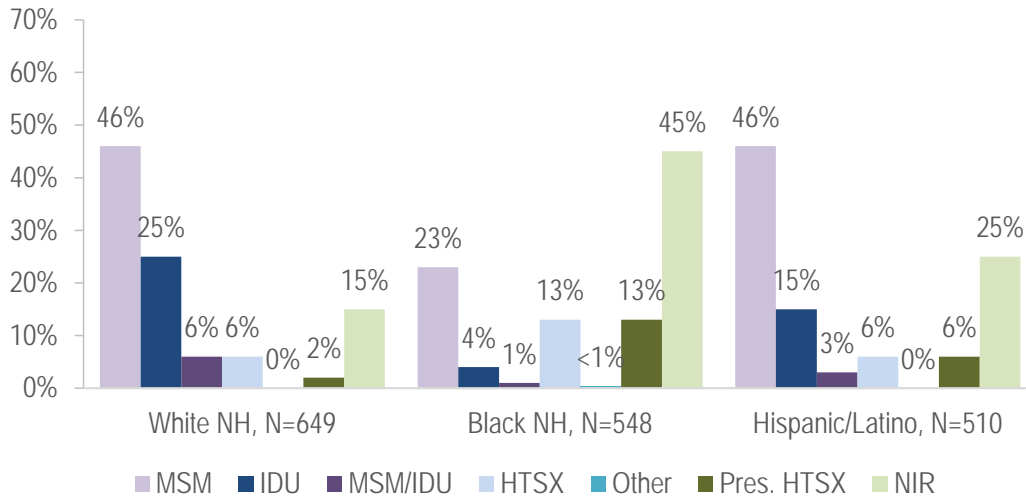
ⁱⁱ Death rate for Asian/Pacific Islander (API) is not presented because the numerator <12 and therefore must be interpreted with caution

ⁱⁱⁱ Total includes API and individuals of other/unknown race/ethnicity (N=15); NH=non-Hispanic

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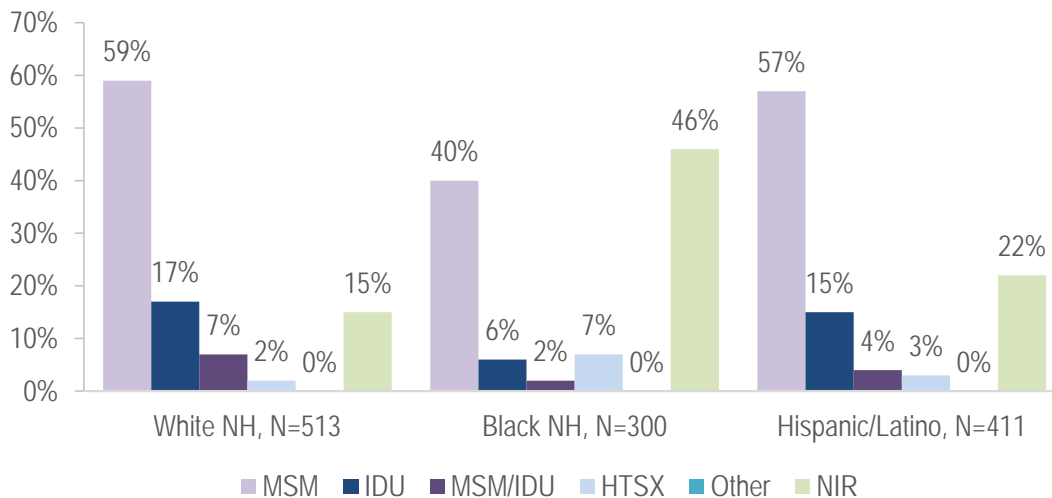
EXPOSURE MODE

FIGURE 4. Individuals diagnosed with HIV infection by exposure mode and race/ethnicity, Massachusetts 2017–2019



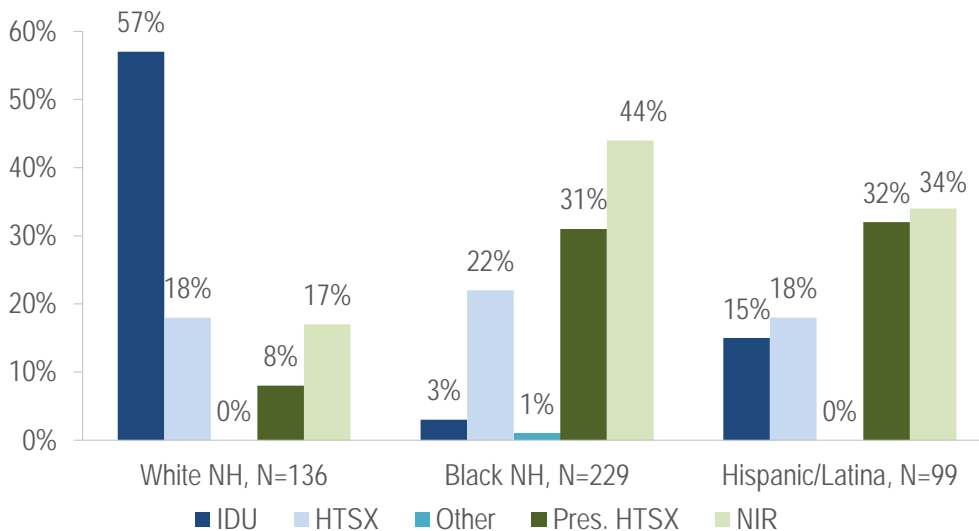
- While the predominant exposure mode among white (non-Hispanic) and Hispanic/Latino individuals recently diagnosed with HIV infection was male-to-male sex (MSM, both 46%), the largest proportion of black (non-Hispanic) individuals had no identified risk (NIR) (45%).

FIGURE 5. Individuals AMAB diagnosed with HIV infection by exposure mode and race/ethnicity, Massachusetts 2017–2019



- MSM was the most frequently reported exposure mode among white (non-Hispanic) and Hispanic/Latino individuals AMAB (59% and 57%, respectively). The largest proportion of black (non-Hispanic) individuals AMAB had NIR (46%) for exposure mode.

FIGURE 6. Individuals AFAB diagnosed with HIV infection by exposure mode and race/ethnicity, Massachusetts 2017–2019

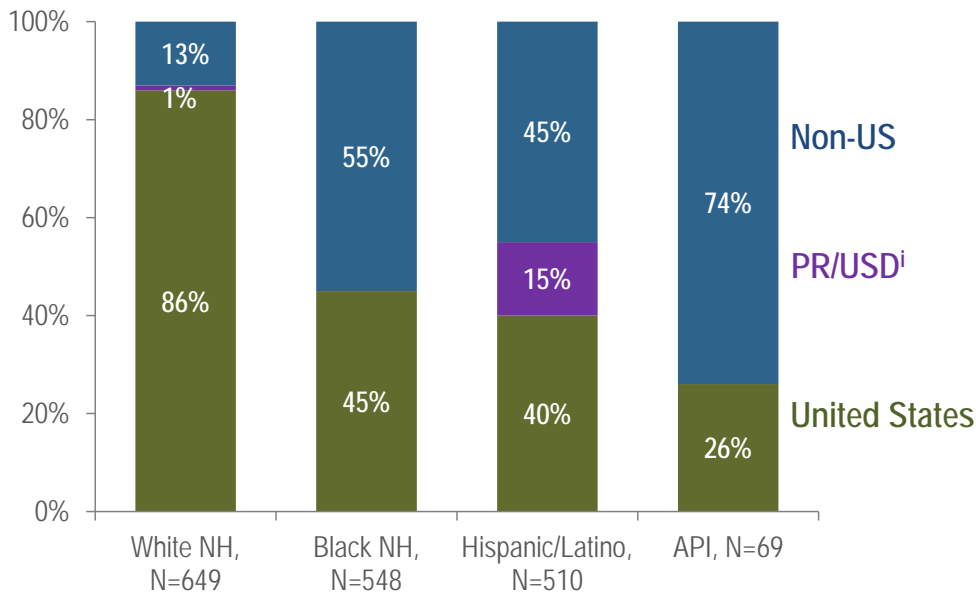


- Injection drug use was the predominant exposure mode among white (non-Hispanic) individuals AFAB recently diagnosed with HIV infection, while NIR followed by presumed heterosexual sex accounted for the largest proportions among both black (non-Hispanic) and Hispanic/Latina individuals AFAB.

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PLACE OF BIRTH

FIGURE 7. Percentage of individuals diagnosed with HIV infection by race/ethnicity and place of birth, Massachusetts 2017–2019



KEY FACT

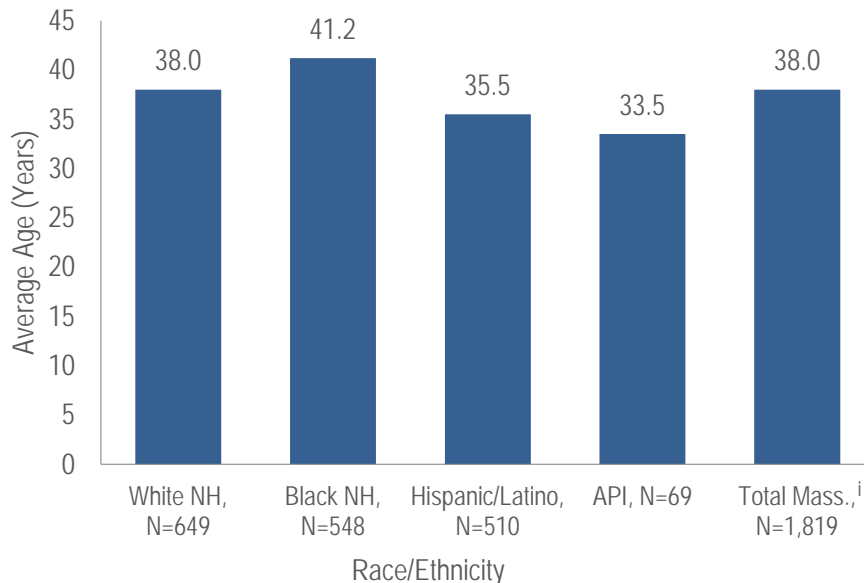
- Seventy-four percent of Asian/Pacific Islander individuals diagnosed with HIV infection during 2017–2019 were born outside the US, compared to 55% of black (non-Hispanic), 45% of Hispanic/Latino, and 13% of white (non-Hispanic) individuals.

ⁱ PR/USD = Puerto Rico/US Dependency; all individuals diagnosed with HIV infection from 2017-2019 who were born in PR/USD were born in Puerto Rico, API=Asian/Pacific Islander, NH=non-Hispanic

- The majority of the 304 non-US born black (non-Hispanic) individuals diagnosed with HIV infection from 2017 to 2019 were from sub-Saharan Africa (57%) or the Caribbean (39%).
- The majority of the 228 non-US born Hispanic/Latino individuals were from Central and South America (64%) or the Caribbean (34%).

AGE

FIGURE 8. Average age at HIV infection diagnosis by race/ethnicity, Massachusetts 2017–2019



- The average age at HIV diagnosis from 2017 to 2019 was younger for Asian/Pacific Islander and Hispanic/Latino individuals diagnosed with HIV infection (33.5 and 35.5 years, respectively) compared to black (non-Hispanic) and white (non-Hispanic) individuals (41.2 and 38.0 years, respectively).

ⁱ Total includes individuals of other/unknown race/ethnicity (N=43)

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AREA OF RESIDENCE

TABLE 1. Massachusetts cities/townsⁱ with the highest percentage of HIV diagnoses among black (non-Hispanic) individuals, 2017–2019

	HIV Diagnoses Among Black NH Individuals (N)	HIV Diagnoses Among Black NH Individuals as Percent of Total HIV Diagnoses (%)
Massachusetts Total	548	30%
Top Cities/Towns		
Brockton	65	76%
Waltham	18	72%
Lynn	20	43%
Boston	161	41%
Worcester	41	39%
Malden	10	30%
Everett	9	29%
New Bedford	7	28%
Lowell	24	26%
Quincy	7	25%
All Other Cities/Towns ⁱⁱ	186	20%

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 from 2017 to 2019, Brockton and Waltham had the highest percentages of HIV diagnoses among black (non-Hispanic) individuals at over 70% each.

TABLE 2. Massachusetts cities/townsⁱ with the highest percentage of HIV diagnoses among Hispanic/Latino individuals, 2017–2019

	HIV Diagnoses Among Hispanic/Latino Individuals (N)	HIV Diagnoses Among Hispanic/Latino Individuals as Percent of Total HIV Diagnoses (%)
Massachusetts Total	510	28%
Top Cities/Towns		
Chelsea	18	78%
Lawrence	46	74%
Revere	15	58%
Springfield	44	55%
Worcester	37	36%
Lynn	16	34%
Boston	129	33%
Fall River	10	32%
Cambridge	10	30%
Framingham	7	27%
All Other Cities/Towns ⁱⁱ	178	18%

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 from 2017 to 2019, Chelsea and Lawrence had the highest percentages of HIV diagnoses among Hispanic/Latino individuals at over 70% each.

INFORMATION FROM ADDITIONAL DATA SOURCES

Behavioral Risk Factors: Recent statewide surveys describe sexual and drug use behaviors among racial/ethnic minorities in Massachusetts.

Massachusetts Behavioral Risk Factor Surveillance Survey (BRFSS): A continuous 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.

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- Sexually active adults ages 18–64 years who responded to the BRFSS from 2017 to 2019 reported the following rates of sexual behaviors. Only one statistically significant difference emerged between racial/ethnic groups: black (non-Hispanic) and Hispanic/Latino respondents were more likely to report condom use than white (non-Hispanic) respondents.

TABLE 3. Percentageⁱ (95% confidence interval) and number of respondents ages 18–64 years reporting sexual behaviors to the BRFSS by race/ethnicity, Massachusetts 2017–2019

	White (non-Hispanic)	Black (non-Hispanic)	Hispanic/Latino
Two or more sexual partners in past year ⁱⁱ	9.7% (8.4%–11.0%), n=4,004	16.1% (11.0%–21.2%), n=305	8.3% (5.6%–11.0%), n=563
Condom use at last sex ⁱⁱⁱ	19.6% (17.7%–21.5%), n=3,067	35.0% (27.2%–42.7%), n=216	32.1% (26.4%–37.8%), n=403

ⁱ% = percent of total responding “yes” to specified question

ⁱⁱ “Number of sexual partners in past year” is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex.

ⁱⁱⁱ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year

Data Source: Office of Data Management and Outcomes Assessment, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS). For more information, see: Office of Data Management and Outcomes Assessment, Massachusetts Department of Public Health. *A Profile of Health Among Massachusetts Adults, 2019, Results from the Behavioral Risk Factor Surveillance System*, December 2020, <https://www.mass.gov/lists/brfss-statewide-reports-and-publications#2019->

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.*

- Respondents to the 2019 YRBS reported the following rates of sexual behaviors. Only one statistically significant difference emerged between racial/ethnic groups: Hispanic/Latino respondents were more likely to report having sexual intercourse before age 13 than white (non-Hispanic) respondents.

TABLE 4. Percentageⁱ (95% confidence interval) and numberⁱⁱ of respondents reporting sexual behaviors to the YRBS by race/ethnicity, Massachusetts 2019

	White (non-Hispanic)	Black (non-Hispanic)	Hispanic/Latino
Ever had sexual intercourse	35.9% (31.3%–40.7%), n=1,039	33.8% (27.0%–40.8%), n=250	45.8% (37.5%–54.4%), n=371
Sexual intercourse before age 13	1.3% (0.6%–2.9%), n=1,041	5.9% (2.3%–14.3%), n=252	5.3% (3.1%–8.9%), n=371
4 or more lifetime sexual intercourse partners	7.6% (5.7%–10.1%), n=1,032	8.6% (5.0%–14.4%), n=248	9.5% (6.0%–14.6%), n=371
Condom use at last sexual intercourse	43.2% (35.3%–51.5%), n=227	Results not presented for n<100	61.0%(50.4%–70.7%), n=101
Drank alcohol or used drugs before last sexual intercourse	25.2% (20.4%–30.6%), n=230	Results not presented for n<100	21.6% (14.8%–30.4%), n=105

ⁱ% = percent of total responding “yes” to specified question

ⁱⁱ n = total number of respondents (unweighted) by sex of partner for each question. The number of respondents for each question varies because some survey participants do not answer all questions.

Data Source: Centers for Disease Control and Prevention (CDC). 2019 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on 10/21/2020, CDC, Accessed at Youth Online, <https://nccd.cdc.gov/Youthonline/App/Default.aspx>.