



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

**Massachusetts HIV/AIDS Epidemiologic Profile:
Data as of 1/1/2020
Population Report: Persons Who Inject Drugs**

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Requests for additional data

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

Slide sets for HIV/AIDS Epidemiologic Profile Reports

<https://www.mass.gov/lists/hivaids-epidemiologic-profiles>

PERSONS WHO INJECT DRUGS (PWID)

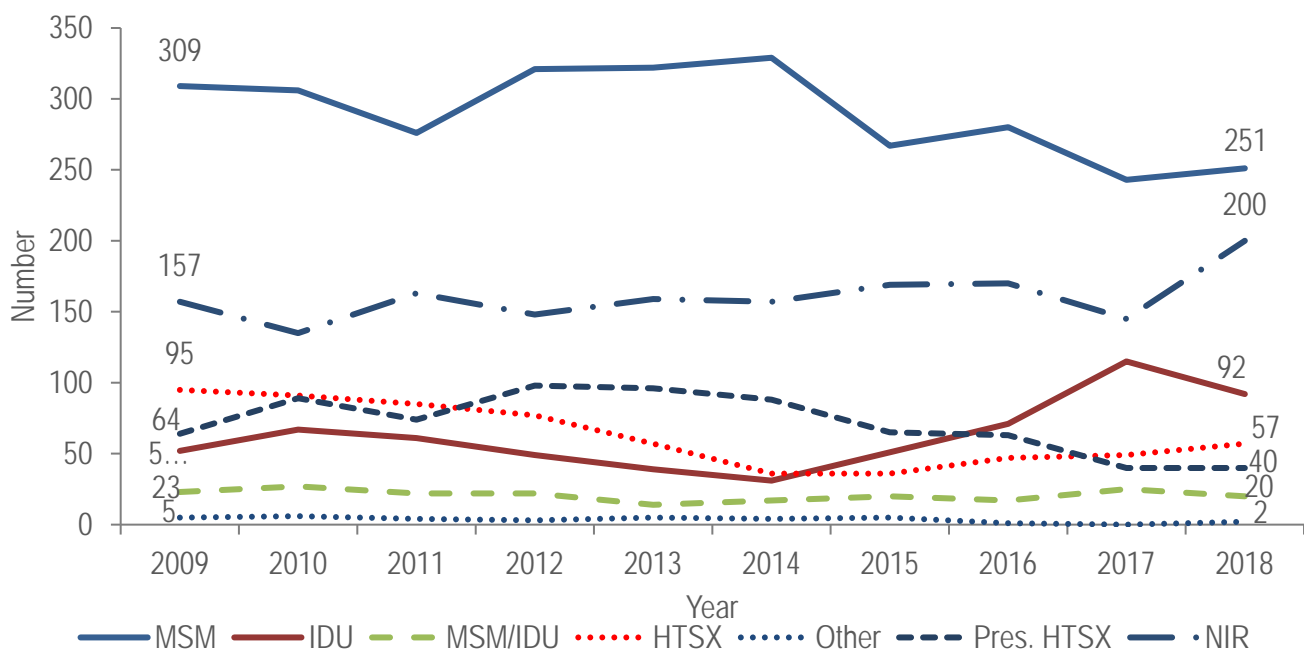
OUTBREAK AMONG PWID

- An outbreak of HIV infection was identified in the northeastern cities of Lawrence and Lowell among persons who inject drugs (PWID), involving 129 individuals diagnosed with HIV infection during January 1, 2015–June 30, 2018. Ninety-four (73%) were diagnosed with HIV infection between 20 and 39 years, 55 (43%) were assigned female at birth (AFAB), and 87 (67%) were white (non Hispanic). Close to 90% of these individuals also had evidence of hepatitis C exposure at some point.ⁱ
- Following an intensive and targeted public health response, the number of HIV infection diagnoses attributed to injection drug use (IDU) in the northeast has decreased. However, in late 2018, a new cluster of HIV infection was identified among homeless and recently incarcerated PWID living or receiving care in Boston and Worcester. As the cluster continues to grow, MDPH is working with local health departments, community stakeholders, and medical providers to investigate cases, and to provide medical follow up, linkage to care and partner services, as well as referral to other needed services, such as housing and substance use disorder treatment.ⁱⁱ

N=278 14% of new HIV diagnoses from 2016–2018 among individuals who reported IDU as their primary exposure mode

N=3,751 16% of persons living with HIV infection in MA as of 12/31/2018 reported IDU as their primary exposure mode

FIGURE 1. Individuals diagnosed with HIV infection by exposure mode: Massachusetts, 2009–2018



KEY FACT

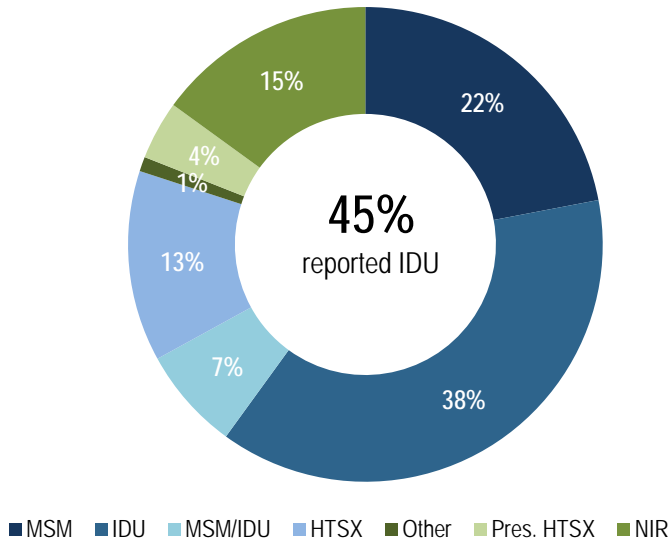
- After declining by 40% from 2009 (N=52) to 2014 (N=31), the number of reported cases with injection drug use (IDU) as the primary exposure mode peaked at 115 in 2017 and then decreased to 92 in 2018.

ⁱ For more information, see: Charles Alpren et al. “Opioid Use Fueling HIV Transmission in an Urban Setting: An Outbreak of HIV Infection Among People Who Inject Drugs—Massachusetts, 2015–2018”, *American Journal of Public Health* 110, no. 1 (January 1, 2020): pp. 37-44. <https://doi.org/10.2105/AJPH.2019.305366>

ⁱⁱ For more information, see: Statewide Clinical Advisory: HIV Transmission Through Injection Drug Use in Massachusetts, February 5, 2019, available at: <https://www.mass.gov/doc/statewide-clinical-advisory-hiv-transmission-through-injection-drug-use-in-massachusetts/download>

PERSONS WHO INJECT DRUGS

FIGURE 2. Deaths among individuals reported with HIV/AIDS by exposure mode: Massachusetts, 2018 (N=292)



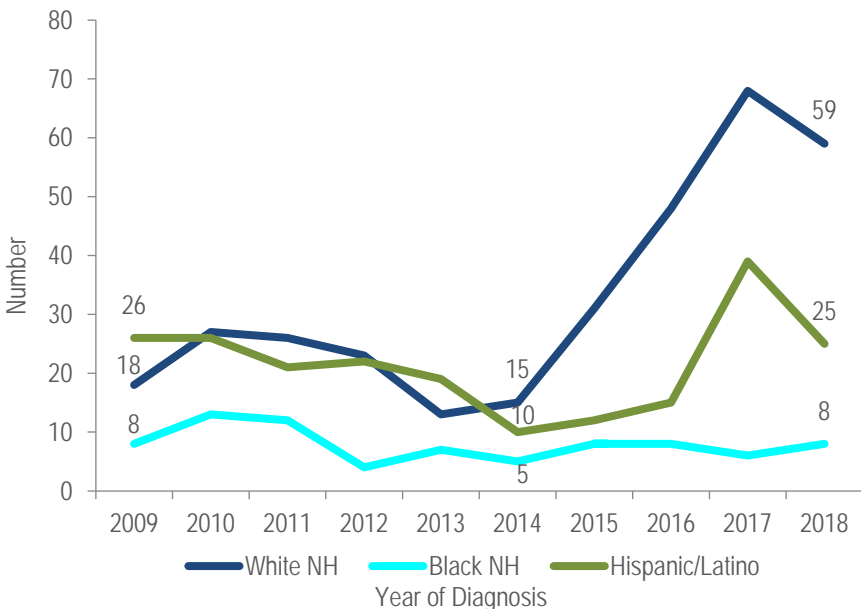
KEY FACT

- IDU exposure mode accounted for the largest proportion of deaths among individuals reported with HIV/AIDS. In 2018, 38% of deaths among individuals with HIV/AIDS were reported with an exposure mode of IDU and an additional 7% were reported with an exposure mode of MSM/IDU, compared to 14% and 3%, respectively, of new HIV diagnoses.

RACE/ETHNICITY

- Sixty-three percent of 278 individuals diagnosed with HIV infection attributed to IDU during 2016–2018 were white (non-Hispanic), 28% were Hispanic/Latino, 8% were black (non-Hispanic), and 1% were of other or unknown race/ethnicity.
- Among 3,751 persons living with HIV infection on 12/31/18 that was attributed to IDU, 35% were white (non-Hispanic), 42% were Hispanic/Latino, 22% were black (non-Hispanic), and 2% were of other or unknown race/ethnicity.

FIGURE 3. Number of individuals diagnosed with HIV infection with IDU exposure mode by race/ethnicity and year of diagnosis: Massachusetts, 2009–2018



KEY FACT

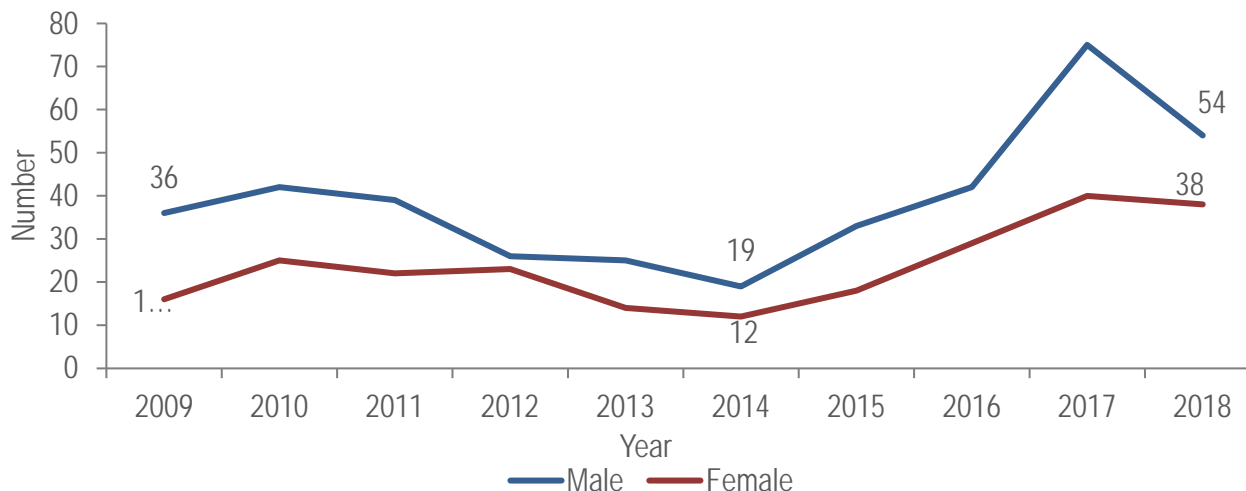
- From 2014 to 2018, the number of HIV infection diagnoses with IDU exposure mode among black (non-Hispanic) individuals remained fairly stable while the number among white (non-Hispanic) individuals quadrupled and the number among Hispanic/Latino individuals nearly tripled.

PERSONS WHO INJECT DRUGS

SEX ASSIGNED AT BIRTH

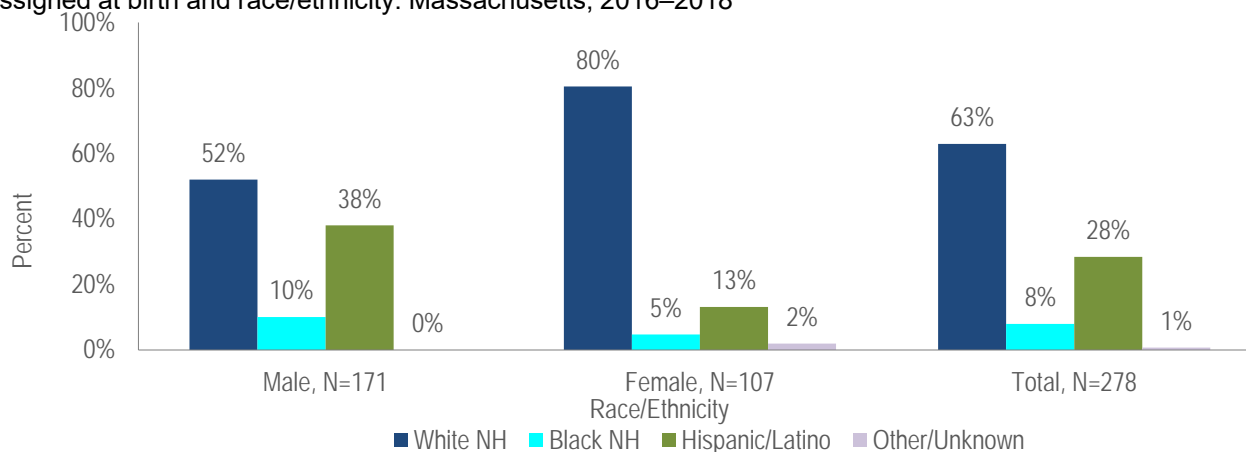
- Sixty-two percent of 278 individuals diagnosed with HIV infection attributed to IDU during 2016 to 2018 were assigned male at birth (AMAB) and 38% were AFAB.
- Similarly, 65% of 3,751 persons living with HIV infection on 12/31/18 that was attributed to IDU were AMAB and 35% were AFAB.

FIGURE 4. HIV diagnoses among individuals with IDU exposure mode by sex assigned at birth: Massachusetts, 2009–2018



- The number of HIV infection diagnoses with IDU exposure mode among individuals AMAB nearly quadrupled from 19 in 2014 to a peak of 75 in 2017 and then decreased by 28% to 54 in 2018. Comparatively, the number of diagnoses with IDU exposure mode among individuals AFAB more than tripled from 12 in 2014 to 40 in 2017, and then remained relatively stable at 38 in 2018.
- The percentage of HIV diagnoses with IDU exposure mode among individuals AFAB increased from 31% in 2009 to 41% in 2018, while the percentage among individuals AMAB decreased from 69% to 59%.

FIGURE 5. Percentage distribution of individuals diagnosed with HIV infection with IDU exposure mode by sex assigned at birth and race/ethnicity: Massachusetts, 2016–2018

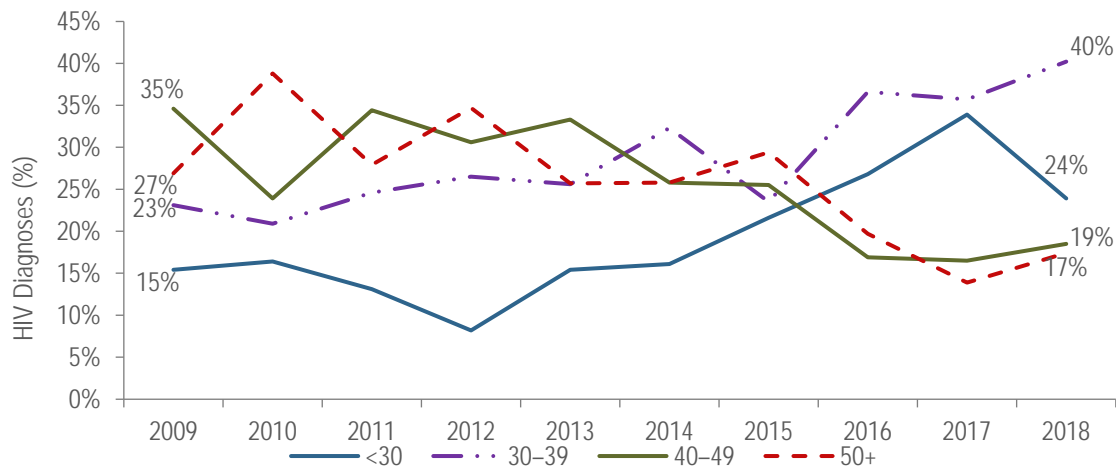


- Eighty percent of individuals AFAB diagnosed with HIV infection with IDU exposure mode during 2016 to 2018 were white (non-Hispanic), 13% were Hispanic/Latina, and 5% were black (non-Hispanic) compared to 52%, 38%, and 10% of individuals AMAB, respectively.

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AGE

FIGURE 6. HIV diagnoses among individuals with IDU exposure mode by age at diagnosis: Massachusetts, 2009–2018 (Total N=628)



- The percentage of HIV infection diagnoses with IDU exposure mode among individuals under 30 years of age increased from 15% in 2009 to 34% in 2017 and then decreased to 24% in 2018.

AREA OF RESIDENCE

TABLE 1. Massachusetts cities/townsⁱ with the highest percentage of HIV diagnoses attributed to IDU, 2016–2018

	HIV diagnoses attributed to IDU (N)	HIV diagnoses attributed to IDU as percent of total HIV Diagnoses (%)
Massachusetts Total	278	14%
Top Cities/Towns		
Lowell	40	40%
Lawrence	31	40%
Brockton	13	13%
Lynn	6	13%
Springfield	12	12%
All Other Cities/Townsⁱⁱ	176	12%

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

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

- Among areas with at least 5 individuals diagnosed with HIV infection attributed to IDU during 2016 to 2018, Lowell and Lawrence had the highest percentage, both at 40%. Both cities were involved in an outbreak of HIV infection among PWID in the northeastern part of the state from 2015 through 2018.

INFORMATION FROM ADDITIONAL DATA SOURCES

Opioid Statistics

Opioids include heroin, opioid-based prescription painkillers, and other unspecified opioids that may or may not be injected.

Opioid-Related Overdose Deaths

- After reaching a 20-year high of 2,102 in 2016, the number of confirmed and estimated opioid-related overdose deaths in Massachusetts decreased slightly to 2,015 in 2019.
- In 2019, the Massachusetts Department of Public Health (MDPH) estimated that the rate of opioid-related overdose deaths stabilized compared with 2018. This followed an estimated 2% decline in the rate of opioid-related overdose deaths from 2017 (29.6 per 100,000) to 2018 (29.1 per 100,000).

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The rate for 2019 (28.9 per 100,000) represented an estimated 6% decrease from 2016 (30.6 per 100,000).

Data Source: MDPH Registry of Vital Records and Statistics, Data Brief: Opioid-Related Overdose Deaths Among Massachusetts Residents, Posted: June 2020, available at <https://www.mass.gov/lists/current-opioid-statistics>

Emergency Medical Services (EMS) Data:

- The proportion of EMS incidents that were opioid-related increased on average 7.2% per quarter from 2013 until 2016 and the number of all EMS incidents involving naloxone administration increased on average 7.4% per quarter from 2013 through the third quarter of 2016. In 2016, both the proportion of EMS incidents that were opioid-related as well as the overall number of EMS incidents involving the administration of naloxone began slightly decreasing. In 2019, the greatest number of suspected opioid-related incidents treated by EMS continued to be among individuals AMAB aged 25–34, accounting for 24% of opioid-related incidents with a known age and sex.

Data Source: MDPH Bureau of Health Care Safety and Quality, MA Opioid-Related EMS Incidents 2013-2019, Posted: June 2020, available at <https://www.mass.gov/lists/current-opioid-statistics>

Injection Drug Use among Program Participants:

Syringe Services Program (SSP) Participants

- Among 2,665 clients who received HIV testing at state-funded SSPs in state fiscal year 2019:
 - 64% were men, 34% were women, and 2% were transgender or another gender;
 - 13% were aged 18–24 years, 34% 25–34 years, 25% 35–44 years, 17% 45–54 years, 8% 55–64 years, 2% 65 years and older, and 1% unknown age;
 - 57% were white (non-Hispanic), 22% were Hispanic/Latino, 15% were black (non-Hispanic), 4% were other or more than one race/ethnicity and 2% were of unknown race/ethnicity.

Data Source: MDPH, BIDLS, Office of Health Care Planning; data as of 10/16/2020

Substance Use Disorder Treatment Admissions

- The percentage of clients admitted to state-licensed substance use disorder treatment programs reporting the use of a needle to inject drugs within a year of admission increased from 39% (N=41,222/105,482) in state fiscal year 2010 to 50% (N=48,497/97,973) in state fiscal year 2016, and then decreased to 42% (N=43,095/102,206) in state fiscal year 2019.
- The percentage of admissions to state-licensed substance use disorder treatment programs for heroin use treatment increased from 40% (N=42,235/105,459) of total admissions in state fiscal year 2010 to 54% (53,371/97,997) in state fiscal year 2016, and then decreased to 47% (N=48,194/102,215) in state fiscal year 2019.ⁱ
- Eighty-nine percent of individuals admitted to state-funded substance use disorder treatment programs in fiscal year 2019, who reported needle use within the past year, were unemployed (N=33,421/37,609), compared to 68% of those admitted who did not report needle use (N=32,462/47,556); 33% (N=14,109/42,557) were homeless compared to 17% (N=10,121/58,610) of those who did not report needle use.

ⁱ Total number of admissions excludes missing/unknown values for each variable and therefore differs depending on the variable.

Data Source: MDPH, Bureau of Substance Addiction Services, Office of Statistics and Evaluation, Data are current as of 9/29/2020 and may be subject to change; Based on EISM submissions through: 7/31/2020