Massachusetts HIV/AIDS Epidemiologic Profile:
Data as of 2/1/2021
Population Report: Adolescents and Young Adults

Suggested citation:

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Requests for additional data

Slide sets for HIV/AIDS Epidemiologic Profile Reports
https://www.mass.gov/lists/hivaids-epidemiologic-profiles
Nationally, from 2017 to 2019, 21% of HIV infections were diagnosed among adolescents and young adults (aged 13 to 24 years), compared to 13% 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 2017–2019

- Among adolescents and young adults (aged 13–24 years) recently diagnosed with HIV infection (2017–2019), 85% (N=208) were 20 to 24 years of age and 15% (N=37) were 13 to 19 years of age.
- The distribution by sex assigned 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 smaller proportion of youth diagnosed with HIV infection at age 13–19 years than at age 20–24 years was white (non-Hispanic) (24% vs. 32%), and a larger proportion was Hispanic/Latino (46% vs. 37%).
- The proportion of youth recently diagnosed with HIV infection at age 13–19 years with no identified risk for HIV exposure mode (30%) was nearly double that among youth diagnosed at age 20–24 years (16%).

**SEX ASSIGNED AT BIRTH**

**FIGURE 2.** HIV infection diagnoses by age at HIV diagnosis and sex assigned at birth, Massachusetts 2017–2019

- A larger proportion of adolescents and young adults recently diagnosed with HIV infection at age 13–24 years (82%) than at age 25 years and older (72%) was assigned male at birth (AMAB).

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**RACE/ETHNICITY**

**FIGURE 3. HIV infection diagnoses by age at HIV diagnosis and race/ethnicity, Massachusetts 2017–2019**

- White (non-Hispanic): 31% at 13-24, 37% at 25+
- Black (non-Hispanic): 23% at 13-24, 31% at 25+
- Hispanic/Latino: 27% at 13-24, 38% at 25+
- Other/Unknown: 9% at 13-24, 5% at 25+

**EXPOSURE MODE**

**FIGURE 4. HIV infection diagnoses by age at HIV diagnosis and exposure mode, Massachusetts 2017–2019**

- MSM: 37% at 13-24, 60% at 25+
- IDU: 15% at 13-24, 3% at 25+
- MSM/IDU: 3% at 13-24, 4% at 25+
- HTSX: 9% at 13-24, 2% at 25+
- Other: 0% at 13-24, 0% at 25+
- Pres. HTSX: 7% at 13-24, 5% at 25+
- NIR: 29% at 13-24, 18% at 25+

**KEY FACT**

- A larger proportion of individuals recently diagnosed with HIV infection at age 13–24 years (60%) than at age 25 years and older (37%) had MSM exposure mode.

- A larger proportion of individuals AMAB recently diagnosed with HIV infection at age 13–24 years (73%, N=148/202) than at age 25 years and older (51%, N=574/1,127) had MSM exposure mode.
**AREAS OF RESIDENCE**

**FIGURE 5.** HIV infection diagnoses among individuals aged 13–24 years by race/ethnicity and exposure mode, Massachusetts 2017–2019

- The proportion of adolescents and young adults (aged 13–24 years) recently diagnosed with MSM exposure mode was 61% among Hispanic/Latino youth, 56% among white (non-Hispanic) youth, and 55% among black (non-Hispanic) youth.

- IDU was the exposure mode for a larger proportion of adolescents and young adults (aged 13–24 years) recently diagnosed with HIV among white (non-Hispanic) youth (25%) than among other race/ethnicities.

**TABLE 1.** Massachusetts cities/townsi with the highest percentage of HIV diagnoses among adolescents and young adults (13–24 years old), 2017–2019

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>HIV Diagnoses Among 13–24 Year-Olds (N)</th>
<th>HIV Diagnoses Among 13–24 Year-Olds as Percent of Total HIV Diagnoses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts Total</td>
<td>245</td>
<td>13%</td>
</tr>
<tr>
<td>Top Cities/Towns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springfield</td>
<td>19</td>
<td>24%</td>
</tr>
<tr>
<td>Framingham</td>
<td>6</td>
<td>23%</td>
</tr>
<tr>
<td>Waltham</td>
<td>5</td>
<td>20%</td>
</tr>
<tr>
<td>Quincy</td>
<td>5</td>
<td>18%</td>
</tr>
<tr>
<td>Worcester</td>
<td>17</td>
<td>16%</td>
</tr>
<tr>
<td>Lawrence</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>Cambridge</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Malden</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>All Other Cities/Townsii</td>
<td>173</td>
<td>12%</td>
</tr>
</tbody>
</table>

* 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.

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1. City/town is based on residence at HIV infection diagnosis.
2. All Other Cities/Towns includes individuals diagnosed in a correctional facility.
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.

Sexual behaviors

- Respondents to the 2019 Massachusetts YRBS reported the following rates of sexual behaviors:
  - ever having sexual intercourse: 36.9% (95% Confidence Interval [CI]: 32.8%–41.3%, n=1,946);
  - sexual intercourse in the past three months: 26.9% (95% CI: 23.6%–30.4% n=1,943);
  - condom use at last intercourse: 51.4% (95% CI: 45.3%–57.4%, n=427);
  - alcohol or drug use at last intercourse: 23.4% (95% CI: 19.5%–27.9%, n=434);
  - having four or more lifetime sexual partners: 7.8% (95% CI: 6.3%–9.5%, n=1,938); and
  - sexual intercourse before age 13: 2.5% (95% CI: 1.7%–3.4%, n=1,951).

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 2019 Massachusetts YRBS reported the following rates of drug use:
  - ever using marijuana: 41.9% (95% CI: 37.5%–46.4%, n=1,917);
  - ever using cocaine: 3.7% (95% CI: 2.8%–5.0%, n=1,937);
  - ever using ecstasy 3.4% (95% CI: 2.4%–4.9%, n=1,933);
  - ever using methamphetamines: 2.2% (95% CI: 1.4%–3.5%, n=2,162); and
  - ever using heroin: 1.9% (95% CI: 1.2%–3.0%, n=2,152).