



Adolescents and Young Adults

Introduction

The proportion of HIV infections diagnosed among adolescents and young adults 13–24 years old in Massachusetts increased slightly from 9% in 2002 to 12% in 2011 but still remains below the national average.ⁱ Twelve percent of people diagnosed and reported with HIV infection in Massachusetts between 2009 and 2011 were 13–24 years old compared to 20% nationally.ⁱⁱ From 2002 to 2011, while the overall number of HIV diagnoses in Massachusetts declined by 37%, the number of 13–24 year olds diagnosed with HIV infection ranged from a high of 92 in 2002 to a low of 67 in 2005, with 81 cases reported in 2011.

Compared to persons diagnosed as older adults, adolescents and young adults differ with respect to exposure mode and gender. In terms of exposure mode, male-to-male sex accounts for a greater proportion of recent diagnoses among male adolescents and young adults (78%) than among men 25 years old and older (53%). Females account for 23% of adolescents and young adults recently diagnosed with HIV infection, compared to 27% of people diagnosed at age 25 years and older. The following statements describe adolescents and young adults recently diagnosed with HIV infection and those known to be living with HIV/AIDS in Massachusetts.

General Statistics:

- Within the three-year period 2009 to 2011, 228 adolescents and young adults 13–24 years of age were diagnosed with HIV infection, accounting for 12% of all diagnoses reported in Massachusetts during that time period.
- On December 31, 2012, 410 (2%) people living with HIV/AIDS were 13–24 years old. Of people living with HIV/AIDS in Massachusetts, 1,815(10%) were diagnosed with HIV infection between ages 13 and 24 years.

Regional Distribution:

- The percent of people diagnosed with HIV infection within the three-year period 2009 to 2011 as adolescents and young adults is similar for all Health Service Regions (HSR)ⁱⁱⁱ: 14% in the Central HSR, 13% in the Boston and Western HSRs, 12% in the Southeast HSR, 10% in the Northeast HSR, and 9% in the Metro West HSR.

Among cities with at least 5 people diagnosed with HIV infection at ages 13–24 years within the three-year period 2009 to 2011, the following have the highest proportions of people diagnosed with HIV infection at ages 13–24 years (N=number of HIV infection diagnoses at ages 13–24 years):

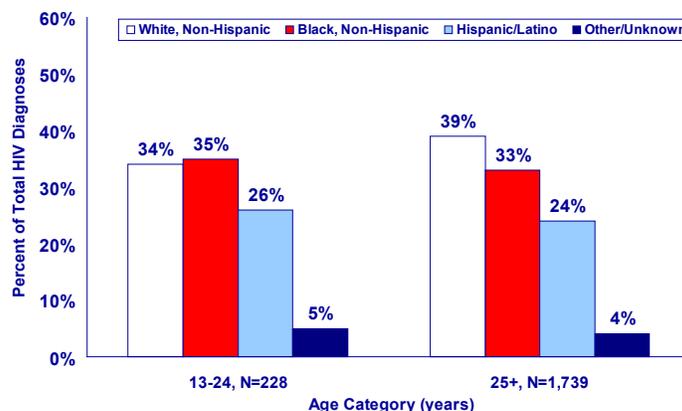
- Fall River 19% (N=5)
- Holyoke 16% (N=5)
- Boston 13% (N=73)
- Worcester 13% (N=11)
- Lynn 11% (N=5)
- Springfield 10% (N=10)
- Lowell 10% (N=5)
- Brockton 8% (N=5)

- Within the three-year period 2009 to 2011, the city of Boston had the largest number of people diagnosed with HIV infection between the ages of 13–24 years (N=73), accounting for 32% of all HIV diagnoses made in this age group in Massachusetts.

Race and Ethnicity:

- The racial/ethnic distribution of adolescents and young adults diagnosed with HIV infection within the three-year period 2009 to 2011 is similar to that of people diagnosed at age 25 years or older: 34% were white (non-Hispanic), 35% were black (non-Hispanic), and 26% were Hispanic/Latino compared to 39%, 33% and 24%, respectively, of people diagnosed at age 25 years or older.

Figure 1. People Diagnosed with HIV Infection Within the Years 2009 to 2011 by Age at HIV Diagnosis and Race/Ethnicity: Massachusetts



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13





Massachusetts HIV/AIDS Data Fact Sheet

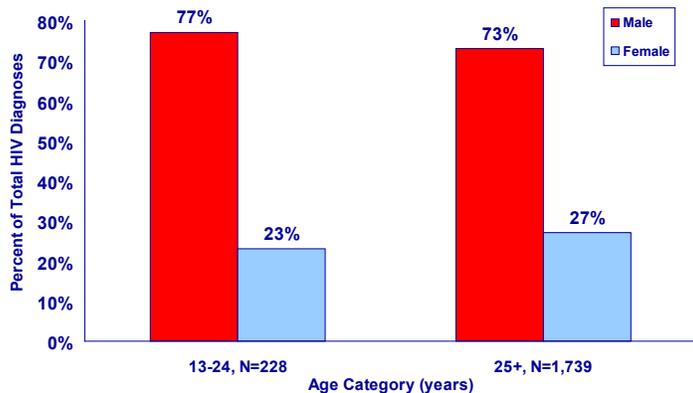
Adolescents and Young Adults

- Among youth living with HIV/AIDS who were 13 to 24 years of age on December 31, 2012, 42% were black (non-Hispanic), compared to 30% of people age 25 years or older living with HIV/AIDS, and 31% were Hispanic/Latino, compared to 24% of people age 25 years or older living with HIV/AIDS.

Gender:

- Adolescents and young adults diagnosed with HIV infection within the three-year period 2009 to 2011 were 77% male and 23% female, compared to 73% of people diagnosed with HIV infection at age 25 years or older who were male and 27% who were female.

Figure 2. People Diagnosed with HIV Infection Within the Years 2009 to 2011 by Age at HIV Diagnosis and Gender: Massachusetts



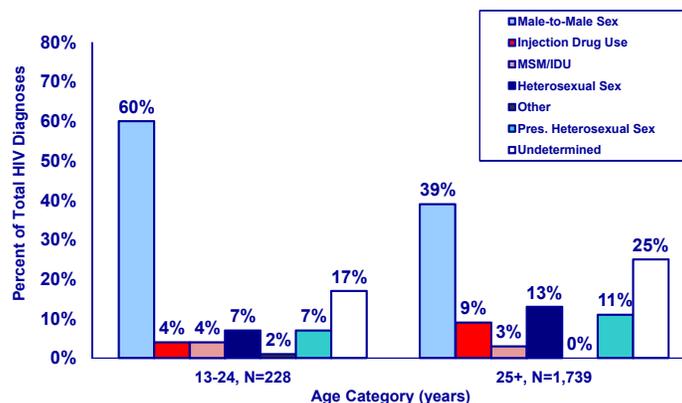
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

- Among individuals living with HIV/AIDS who were 13–24 years old on December 31, 2012, 40% were female, compared to 28% of those age 25 years and older.

Exposure Mode:

- A greater proportion of adolescents and young adults, compared to adults 25 years or older, were recently diagnosed with HIV infection with exposure mode of male-to-male sex (60% vs. 39%). A smaller proportion had undetermined exposure mode (17% vs. 25%) or was exposed through injection drug use (4% vs. 9%) or through heterosexual sex with partners with known risk or HIV status (7% vs. 13%).

Figure 3. People Diagnosed with HIV Infection Within the Years 2009 to 2011 by Age at HIV Diagnosis and Mode of Exposure: Massachusetts



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

- Seventy-eight percent of recently diagnosed adolescent and young adult males were exposed through male-to-male sex compared to 53% of recently diagnosed males aged 25 years or older.
- Among individuals living with HIV/AIDS who were 13–24 years old on December 31, 2012, smaller proportions were exposed through injection drug use (<1% vs. 21%) and male-to-male sex (23% vs. 37%) than among those 25 years old and older.
- Fifty-nine percent (N=240) of 13–24 year olds living with HIV/AIDS were born to HIV-infected mothers and exposed at or around birth, compared to less than one percent (N=71) of individuals living with HIV/AIDS age 25 years old and older.
- Of the 240 individuals living with HIV/AIDS who were 13–24 years old on December 31, 2012:
 - Fifty-one percent are male and 49% are female.
 - Forty-four percent are black (non-Hispanic), 34% are Hispanic/Latino, and 21% are white (non-Hispanic).

Exposure Mode and Gender:

- A higher proportion of adolescent and young adult males diagnosed with HIV infection within the three-year period 2009 to 2011 were exposed to HIV through male-to-male sex compared to men age 25 years old and older (78% vs. 53%). Conversely, a lower proportion were exposed through injection drug use (1% among 13–24 year olds vs. 8% among 25+ year olds).



For detailed data tables and technical notes see Appendix
 Massachusetts Department of Public Health Office of HIV/AIDS
 250 Washington St. 3rd Floor Boston, MA 02108
 617-624-5300 FAX 617-624-5399 www.mass.gov/dph/aids





Massachusetts HIV/AIDS Data Fact Sheet

Adolescents and Young Adults

- A larger proportion of adolescent and young adult females diagnosed with HIV infection within the three-year period 2009 to 2011 were exposed through injection drug use compared to women age 25 years old and older (15% vs. 10%). A smaller proportion were exposed to HIV through heterosexual sex^{iv} (27% among 13-24 year olds vs. 34% among 25+ year olds).

Exposure Mode and Race/Ethnicity:

- Male-to-male sex is the predominant exposure mode for people of all race/ethnicities age 13–24 years diagnosed with HIV infection within the three-year period 2009 to 2011. During this time period male-to-male sex accounted for:
 - 66% of exposures among white (non-Hispanic) adolescents and young adults,
 - 53% of exposures among black (non-Hispanic) adolescents and young adults, and
 - 57% of exposures among Hispanic/Latino adolescents and young adults.
- Heterosexual sex accounted for 13% of recently diagnosed HIV exposures among Hispanic/Latino youth age 13-24 years, 5% among black (non-Hispanic) youth, and 4% of exposures among white (non-Hispanic) youth.
- Presumed heterosexual sex (females only) accounted for 13% of recently diagnosed HIV exposures among black (non-Hispanic) youth, 7% among Hispanic/Latino youth, and 4% of exposures among white (non-Hispanic) youth.
- Injection drug use accounted for 8% of recently diagnosed HIV exposures among white (non-Hispanic) youth age 13-24 years, 5% among Hispanic/Latino youth, and no exposures among black (non-Hispanic) youth.
- The largest proportion of recent HIV diagnoses with undetermined exposure was among black (non-Hispanic) youth at 25%, followed by Hispanic/Latino youth at 15%, and white (non-Hispanic) youth at 12%.

Adolescents at Risk of HIV Infection

Behavioral Risk Factors: According to school-based behavioral surveys, adolescents in Massachusetts are engaging in behaviors that may place them at risk for HIV infection.

- There have been small or no fluctuations in the following reported sexual behaviors between 2003 and 2011:
 - condom use at last intercourse (57% in 2003 and 58% in 2011),
 - ever had sexual intercourse (41% in 2003 and 42% in 2011),
 - sexual intercourse before age 13 (5% in 2003 and 4% in 2011),
 - four or more lifetime sexual partners (10% in 2003 and 11% in 2011),
 - sexual intercourse in the past three months (30% in 2003 and in 2011),
 - alcohol or drug use at last intercourse (25% in 2003 and 23% in 2011),
 - ever been or gotten someone pregnant (4% in 2003 and 5% in 2011), and
 - ever had sexual contact against their will (10% in 2003 and in 2011).
- In addition to infection risks associated with sharing injection equipment, both injection and non-injection substance use has been documented to drive sexual risk for HIV and hepatitis C infection. Among 2,729 high school-aged respondents to the 2011 Massachusetts Youth Risk Behavior Survey (MYRBS), 5% reported ever using cocaine, 2% reported ever using heroin and 2% reported ever using a needle to inject drugs.
- The proportion of MYRBS respondents reporting injection drug use has remained stable at 2% to 3% between the years 2003 and 2011.

State-Funded HIV Counseling and Testing:

- Of 65,404 HIV tests performed in 2011, 26% (N=17,263) were among 13–24 year olds, of which 0.2% tested HIV positive. Comparatively, 1.1% of tests performed among people age 25 years old or older tested HIV positive.

Data Sources

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program, Data as of January 1, 2013

Youth Risk Behavior Survey Data: Massachusetts Department of Elementary and Secondary Education, Youth Risk Behavior Survey

HIV Counseling and Testing Data: MDPH Office of HIV/AIDS, Office of Research and Evaluation



For detailed data tables and technical notes see Appendix
Massachusetts Department of Public Health Office of HIV/AIDS
250 Washington St. 3rd Floor Boston, MA 02108
617-624-5300 FAX 617-624-5399 www.mass.gov/dph/aids





Massachusetts HIV/AIDS Data Fact Sheet

Adolescents and Young Adults

ⁱ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

ⁱⁱ Centers for Disease Control and Prevention. HIV Surveillance Report, 2011; vol. 23. <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>. Published February 2013. Accessed [7/5/13].

ⁱⁱⁱ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). HSRs are regions defined geographically to facilitate targeted health service planning. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at <http://www.mass.gov/eohhs/docs/dph/aids/2006-profiles/app-hrs-maps.pdf> for configuration of health service regions.

^{iv} The category of presumed heterosexual is used exclusively for females, to define HIV exposure mode in cases when sex with males is the only reported risk factor for HIV infection.



For detailed data tables and technical notes see Appendix
Massachusetts Department of Public Health Office of HIV/AIDS
250 Washington St. 3rd Floor Boston, MA 02108
617-624-5300 FAX 617-624-5399 www.mass.gov/dph/aids

