**Massachusetts Department of Public Health**

**Bureau of Infectious Disease and Laboratory Sciences**

**2018 Massachusetts HIV/AIDS Epidemiologic Profile**

**Detailed Data Tables and Technical Notes:**

**Women**

**Suggested citation:**

Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences. 2018 Massachusetts HIV/AIDS Epidemiologic Profile, Detailed Data Tables and Technical Notes: Women <https://www.mass.gov/lists/hivaids-epidemiologic-profiles> Published September 2018. Accessed [date].

**Massachusetts Department of Public Health**

**Bureau of Infectious Disease and Laboratory Sciences**

305 South Street  
Jamaica Plain, MA 02130

**To speak to the on-call epidemiologist**

Tel: (617) 983-6800

**Questions about infectious disease reporting**

Tel: (617) 983-6801

**Questions about this report**

Tel: (617) 983-6560

**Requests for additional data**

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

**Slide sets for 2018 Epidemiologic Profile Reports**

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

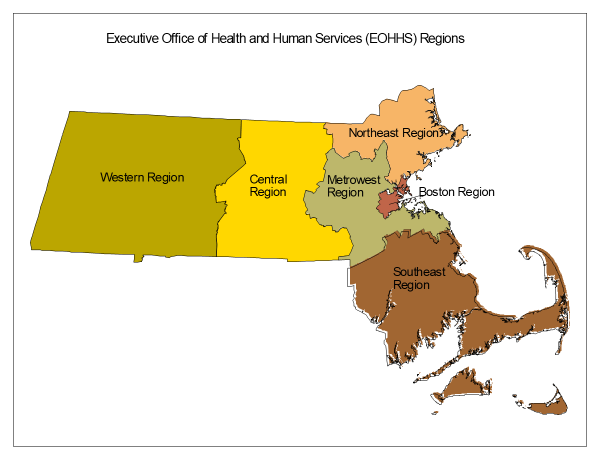
**Individuals living with HIV infection by current residence:**

## As of January 1, 2018, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease and Laboratory Sciences (BIDLS), HIV/AIDS fact sheets, epidemiologic reports, and other HIV data presentations include all individuals living with HIV infection who are currently residing in Massachusetts. These prevalent cases include those who may have been first diagnosed in another state. Reports of incidence or new diagnoses will continue to include only individuals who are first diagnosed in Massachusetts. Please note that HIV/AIDS fact sheets, data reports, and presentations published from 2011 to 2017 include only cases first diagnosed in Massachusetts.

**Presumed heterosexual:**

The presumed heterosexual risk category is used exclusively for women to identify HIV exposure mode when sex with men was the only reported risk factor, there was no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners were unknown. The rationale for the application of the presumed heterosexual risk category to women only has been addressed in the MDPH Office of HIV/AIDS report “Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts.” (2010) <http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf>.

## Configuration of Health Service Regions (HSR)



|  |  |  |
| --- | --- | --- |
| Table 1. Number and percentage distribution of individuals diagnosed with HIV infection by sex at birth and gender: Massachusetts,1 2014–20162 | | |
| Sex at Birth: | N | % |
| Male sex at birth | 1,409 | 74% |
| Female sex at birth | 490 | 26% |
|  |  |  |
| Gender: | **N** | **%** |
| Cisgender2 | 1,879 | 99% |
| Transgender | 20 | 1% |
| **Total** | **1,899** | **100%** |
|  | | |
| 1 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  2 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  3 Persons whose gender identity corresponds with the sex the person had or was identified as having at birth.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | |

|  |  |  |
| --- | --- | --- |
| Table 2. Number and percentage distribution of individuals living with HIV infection on January 1, 2018 by sex at birth and gender: Massachusetts1 | | |
| Sex at Birth: | N | % |
| Male sex at birth | 15,810 | 71% |
| Female sex at birth | 6,302 | 29% |
|  |  |  |
| Gender: | **N** | **%** |
| Cisgender2 | 22,005 | >99% |
| Transgender | 107 | <1% |
| **Total** | **22,112** | **100%** |
|  | | |
| 1 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  2 Persons whose gender identity corresponds with the sex the person had or was identified as having at birth.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 3. Number and percentage of individuals diagnosed with HIV infection by sex at birth1 and year of diagnosis: Massachusetts2, 2007–20163** | | | | | |
|  | **Men** | | **Women** | |  |
|  | **N** | **%** | **N** | **%** | **Total** |
|  |  |  |  |  |  |
| 2007 | 544 | 71% | 222 | 29% | **766** |
| 2008 | 556 | 73% | 206 | 27% | **762** |
| 2009 | 537 | 76% | 170 | 24% | **707** |
| 2010 | 512 | 71% | 214 | 29% | **726** |
| 2011 | 503 | 72% | 195 | 28% | **698** |
| 2012 | 526 | 73% | 192 | 27% | **718** |
| 2013 | 515 | 74% | 181 | 26% | **696** |
| 2014 | 490 | 75% | 163 | 25% | **653** |
| 2015 | 445 | 74% | 160 | 26% | **605** |
| 2016 | 474 | 74% | 167 | 26% | **641** |
|  | | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 4. Individuals diagnosed with HIV infection by sex at birth1 and exposure mode: Massachusetts2, 2014–20163** | | | | | | |
|  | **Men** | | **Women** | | **State Total** | |
| Exposure mode: | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |
| Male-to-male sex (MSM) | 850 | 60% | N/A | N/A | 850 | 45% |
| Injection drug use (IDU) | 94 | 7% | 53 | 11% | 147 | 8% |
| MSM/IDU | 52 | 4% | N/A | N/A | 52 | 3% |
| Heterosexual sex | 42 | 3% | 74 | 15% | 116 | 6% |
| Total NIR/other | 365 | 26% | 360 | 73% | 725 | 38% |
| - Pres. HTSX4 | N/A | N/A | 218 | 44% | 218 | 11% |
| - NIR5 | 365 | 26% | 142 | 29% | 507 | 27% |
| **Total6** | **1,409** | **100%** | **490** | **100%** | **1,899** | **100%** |
|  | | | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 Includes only cases first diagnosed in Massachusetts.  3 Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 Includes a woman sex with men of unknown HIV status or risk. This category is limited to women.  5 Includes a man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.  6 Total includes pediatric and blood/blood products exposure modes.  Pres. HTSX = Presumed Heterosexual Sex; N/A = Not Applicable, NIR=No Identified Risk  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), Data as of 1/1/18 | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 5. Number and percentage of individuals living with HIV infection on January 1, 2018 by sex at birth1 and exposure mode: Massachusetts2** | | | | |
|  | **Men** | | **Women** | |
| Exposure mode: | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| Male-to-male sex (MSM) | 8,682 | 55% | N/A | N/A |
| Injection drug use (IDU) | 2,443 | 15% | 1,279 | 20% |
| MSM/IDU | 862 | 5% | N/A | N/A |
| Heterosexual sex | 901 | 6% | 2,209 | 35% |
| Other | 243 | 2% | 204 | 3% |
| Total NIR/other | 2,679 | 17% | 2,610 | 41% |
| * Presumed heterosexual sex3 | N/A | N/A | 1,979 | 31% |
| * NIR4 | 2,679 | 17% | 631 | 10% |
| **Total** | **15,810** | **100%** | **6,302** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  3 Includes a woman having sex with a man of unknown HIV status or risk. This category is limited to women only.  4 Includes a man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.  N/A = Not Applicable; NIR = No Identified Risk  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 6. Number and percentage of women diagnosed with HIV infection by race/ethnicity1 and exposure mode: Massachusetts2, 2014–20163 | | | | | | |
|  | White (NH) | | Black (NH) | | Hispanic/Latina | |
| Exposure mode: | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |
| Injection drug use | 43 | 36% | 5 | 2% | 5 | 5% |
| Heterosexual sex | 18 | 15% | 31 | 12% | 22 | 20% |
| Total NIR | 56 | 47% | 212 | 85% | 83 | 75% |
| Presumed heterosexual sex4 | 30 | 25% | 135 | 54% | 49 | 45% |
| NIR5 | 26 | 22% | 77 | 31% | 34 | 31% |
| Total6 | **118** | **100%** | **250** | **100%** | **110** | **100%** |
|  | | | | | | |
| 1 Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 Includes a woman having sex with a man of unknown HIV status or risk. This category is limited to women.  5 Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up.  6 Totals include pediatric and blood/blood products exposure modes andnumbers suppressed to protect privacy.  (NH) = Non-Hispanic  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 7. Number and percentage of women living with HIV infection on January 1, 2018 by race/ethnicity1 and exposure mode: Massachusetts2 | | | | | | | | |
|  | White (NH) | | Black (NH) | | Hispanic/Latina | | API | |
| Exposure mode: | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |  |  |
| Injection drug use | 573 | 40% | 261 | 9% | 424 | 23% | <5 | N/A |
| Heterosexual sex | 436 | 30% | 937 | 33% | 779 | 43% | 34 | 36% |
| Other | 49 | 3% | 92 | 3% | 53 | 3% | ≥55 | N/A |
| Total NIR/other | 375 | 26% | 1,592 | 55% | 569 | 31% | 51 | 54% |
| Pres. HTSX3 | 247 | 17% | 1,262 | 44% | 423 | 23% | 30 | 32% |
| NIR4 | 128 | 9% | 330 | 11% | 146 | 8% | 21 | 22% |
| Total6 | **1,433** | **100%** | **2,882** | **100%** | **1,825** | **100%** | **95** | **100%** |
|  |  |  |  |  |  |  |  |  |
| 1 Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  3 Includes a woman having sex with a man of unknown HIV status or risk. This category is limited to women only.  4 Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up, and those with confirmed occupational risk.  5 Value >5 that was suppressed to protect privacy.  6 Total includes numbers suppressed to protect privacy.  (NH) = Non-Hispanic, API = Asian/Pacific Islander, NIR = No Identified Risk, Pres. HTSX = Presumed Heterosexual Sex  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 8. Number and percentage of individuals diagnosed with HIV infection by sex at birth1 and race/ethnicity**: **Massachusetts2, 2014–20163** | | | | |
|  | **Men** | | **Women** | |
| Race/Ethnicity: | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| White, non-Hispanic | 590 | 42% | 118 | 24% |
| Black, non-Hispanic | 346 | 25% | 250 | 51% |
| Hispanic/Latino | 389 | 28% | 110 | 22% |
| Asian/Pacific Islander | 62 | 4% | 11 | 2% |
| Other/Unknown | 22 | 2% | 1 | <1% |
| **Total** | **1,409** | **100%** | **490** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 9. Number and percentage of individuals living with HIV infection on January 1, 2018 by sex at birth1 and race/ethnicity: Massachusetts2** | | | | |
|  | **Men** | | **Women** | |
| Race/Ethnicity: | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| White, non-Hispanic | 7,670 | 49% | 1,433 | 23% |
| Black, non-Hispanic | 3,595 | 23% | 2,882 | 46% |
| Hispanic/Latino | 4,021 | 25% | 1,825 | 29% |
| Asian/Pacific Islander | 372 | 2% | 95 | 2% |
| Other/Unknown | 152 | 1% | 67 | 1% |
| **Total** | **15,810** | **100%** | **6,302** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | |

**Explanation of age adjusted rates**

A “rate” of a disease per 100,000 population is a useful way to compare groups with substantially different population sizes rather than relying on the raw number of cases. For example, the number of individuals living with HIV infection on January 1, 2018 who are Hispanic/Latino, is 5,846 whereas the number of individuals living with HIV infection who are white (non-Hispanic) is 9,103. Although the *number* of individuals living with HIV infection who are Hispanic/Latino in Massachusetts is smaller than the number of individuals living with HIV infection who are white (non-Hispanic), we also need to consider that there are far fewer individuals of Hispanic/Latino heritage living in Massachusetts than white (non-Hispanic) individuals. Hispanic/Latino individuals represent 10% of the Massachusetts population compared to white (non-Hispanic) individuals who represent 78% of the population[[1]](#footnote-1). If HIV/AIDS had the same impact on the Hispanic/Latino population of the state as on the white (non-Hispanic), then there should be eight times as many cases in white (non-Hispanic) individuals, but there are less than twice as many. By calculating a rate which takes into consideration the differences in the population size, it is evident that the number of individuals living with HIV infection for every 100,000 Hispanic/Latino individuals in Massachusetts is much higher than the rate for every 100,000 white (non-Hispanic) individuals. This is called a "crude rate" and is calculated by dividing the number of individuals living with HIV infection by the population of interest (the total number of Hispanic/Latino individuals in Massachusetts, for example) and multiplying by 100,000. (See example 1.A below).

## Example 1.A: Calculation of crude HIV prevalence rate for white (non-Hispanic) individuals, Massachusetts (177.4 per 100,000)

|  |  |
| --- | --- |
| Crude HIV prevalence rate for white (non-Hispanic) individuals | = (number of white (non-Hispanic) individuals living with HIV infection ÷ population size of white (non-Hispanic) individuals)×100,000 |
|  | = (9,103/5,132,633)×100,000 |
|  | = (.0017736)×100,000 |
|  | = **177.4** |

However, sometimes, in addition to the population size being different, the age composition of the populations is different. In Massachusetts, black (non-Hispanic) and Hispanic/Latino populations are generally younger than white (non-Hispanic). The median age of black (non-Hispanic) individuals (29.7 years) and Hispanic/Latino individuals (24.5 years) is younger than that of white (non-Hispanic) individuals (38.8 years). Therefore, it is necessary to “age-adjust” the HIV prevalence rate to get a true comparison of the impact of the disease across racial/ethnic groups without an effect from the differences in age composition. Age-adjustment of rates minimizes the distortion created by differences in age composition.

Age-adjusted rates are calculated by weighting the age-specific rates for a given population by the age distribution of a standard population. The weighted age-specific rates are then added to produce the adjusted rate for all ages combined. (See example 1.B below).

## Example 1.B: Calculation of age-adjusted HIV prevalence rate for white (non-Hispanic) individuals, Massachusetts (147.7 per 100,000)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | D | E |
| Age group (in years) | # of prevalent HIV/AIDS cases | Population (2010) | 2000 US standard population weight | Age-adjusted rate ((B÷C×D)×100,000)) |
| <1 | 0 | 48,010 | 0.013818 | 0.00 |
| 1-4 | 0 | 200,452 | 0.055317 | 0.00 |
| 5-14 | 3 | 571,967 | 0.145565 | 0.08 |
| 15-24 | 52 | 677,899 | 0.138646 | 1.06 |
| 25-34 | 674 | 603,245 | 0.135573 | 15.15 |
| 35-44 | 1,082 | 676,064 | 0.162613 | 26.03 |
| 45-54 | 2,680 | 841,315 | 0.134834 | 42.95 |
| 55-64 | 3,318 | 697,852 | 0.087247 | 41.48 |
| 65-74 | 1,094 | 403,518 | 0.066037 | 17.90 |
| 75-84 | 183 | 275,380 | 0.044842 | 2.82 |
| 85+ years | 17 | 136,931 | 0.015508 | 0.19 |
| **Total** | **9,103** | 5,132,633 | 1.000000 | **147.7** |

To see the effect of age-distribution on prevalence rates see Tables 10 and 11 below for a comparison of crude and age-adjusted rates by race/ethnicity.

|  |  |  |
| --- | --- | --- |
| Table 10. Crude and age-adjusted HIV prevalence per 100,000 population1 on January 1, 2018 by race/ethnicity and sex at birth2: Massachusetts3 | | |
| **State Total:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White, non-Hispanic | 177.4 | 147.7 |
| Black, non-Hispanic | 1,559.3 | 1,624.7 |
| Hispanic/Latino | 931.4 | 1,261.5 |
| Asian/Pacific Islander | 129.9 | 134.1 |
|  |  |  |
| **Total prevalence** | **337.7** | **302.9** |
|  |  |  |
| **Men:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White, non-Hispanic | 309.3 | 257.5 |
| Black, non-Hispanic | 1,791.8 | 1,952.6 |
| Hispanic/Latino | 1,305.1 | 1,870.1 |
| Asian/Pacific Islander | 216.2 | 222.2 |
|  |  |  |
| **Total prevalence among men** | **499.3** | **448.5** |
|  |  |  |
| **Women:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White, non-Hispanic | 54.0 | 46.2 |
| Black, non-Hispanic | 1,342.0 | 1,359.1 |
| Hispanic/Latina | 571.1 | 747.9 |
| Asian/Pacific Islander | 50.6 | 54.4 |
|  |  |  |
| **Total prevalence among women** | **186.4** | **168.9** |
|  | | |
| 1 The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.  2 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  3 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences; Data as of 1/1/18 | | |

|  |  |  |
| --- | --- | --- |
| Table 11. Crude and age-adjusted rates of diagnosis of HIV infection per 100,000 population1 by race/ethnicity and sex at birth2: Average annual rate 2014–20163, Massachusetts4 | | |
| **State total:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White (non-Hispanic) | 4.6 | 4.6 |
| Black (non-Hispanic) | 47.8 | 46.8 |
| Hispanic/Latino | 26.5 | 26.7 |
| Asian/Pacific Islander | 6.8 | 6.9 |
|  |  |  |
| **Total rate** | **9.7** | **9.7** |
|  |  |  |
| **Men:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White (non-Hispanic) Men | 7.9 | 7.8 |
| Black (non-Hispanic) Men | 57.5 | 56.2 |
| Hispanic/Latino Men | 42.1 | 41.6 |
| Asian/Pacific Islander Men | 12.0 | 10.4 |
|  |  |  |
| **Total rate among men** | **14.8** | **14.6** |
|  |  |  |
| **Women:** | Crude rate per 100,000 | Age-adjusted rate per 100,000 |
|  |  |  |
| White (non-Hispanic) Women | 1.5 | 1.6 |
| Black (non-Hispanic) Women | 38.8 | 38.0 |
| Hispanic/Latina Women | 11.5 | 12.5 |
| Asian/Pacific Islander Women | 2.0 | 2.0 |
|  |  |  |
| **Total rate among women** | **4.8** | **4.9** |
|  | | |
| 1 The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.  2 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 Includes only cases first diagnosed in Massachusetts.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences; Data as of 1/1/18 | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 12. Number and percentage distribution of individuals diagnosed with HIV infection by sex at birth1 and place of birth: Massachusetts2,2014–20163** | | | | |
|  | **Men** | | **Women** | |
| Race/Ethnicity: | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| United States (US) | 897 | 64% | 220 | 45% |
| Puerto Rico/US Dependency4 | 70 | 5% | 25 | 5% |
| Non-US | 442 | 31% | 245 | 50% |
| **Total** | **1,409** | **100%** | **490** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 All individuals diagnosed with HIV infection from 2014–2016 who were born in a US dependency were born in Puerto Rico.  Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), Data are current as of 1/1/18 and may be subject to change | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 13. Number and percentage of individuals living with HIV infection on January 1, 2018 by sex at birth1 and place of birth: Massachusetts2** | | | | |
|  | **Men** | | **Women** | |
| Place of Birth: | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| United States (US) | 10,832 | 69% | 3,106 | 49% |
| Puerto Rico/US Dependency3 | 1,511 | 10% | 805 | 13% |
| Non-US | 3,467 | 22% | 2,391 | 38% |
| **Total** | **15,810** | **100%** | **6,302** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  3 Ninety-nine percent of individuals living with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 14. Number and percentage of women diagnosed with HIV infection by race/ethnicity1 and place of birth: Massachusetts2, 2014–20163** | | | | | | |
|  | **US** | | **Puerto Rico/**  **US Dependency4** | | **Non-US** | |
| Race/Ethnicity: | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |
| White (NH) | 107 | 91% | 0 | 0% | 11 | 9% |
| Black (NH) | 69 | 28% | 0 | 0% | 181 | 72% |
| Hispanic/Latino | 39 | 35% | 25 | 23% | 46 | 42% |
| **All Women5** | **220** | **45%** | **25** | **5%** | **245** | **50%** |
|  | | | | | | |
| 1 Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 All individuals diagnosed with HIV infection from 2014–2016 who were born in a US dependency were born in Puerto Rico.  5 Totals include individuals of American Indian/Alaska Native and Other/Unknown race/ethnicity andnumbers suppressed to protect privacy.  6 Value >5 that was suppressed to protect privacy.  (NH) = Non-Hispanic  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 15. Number and percentage of women diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts1, 2007–20162** | | | | | | | |
|  | **US** | | **Puerto Rico/**  **US Dependency3** | | **Non-US** | |  |
|  | **N** | **%** | **N** | **%** | **N** | **%** | **Total** |
|  |  |  |  |  |  |  |  |
| 2007 | 105 | 47% | 19 | 9% | 98 | 44% | **222** |
| 2008 | 81 | 39% | 23 | 11% | 102 | 50% | **206** |
| 2009 | 74 | 44% | 21 | 12% | 75 | 44% | **170** |
| 2010 | 83 | 39% | 10 | 5% | 121 | 57% | **214** |
| 2011 | 93 | 48% | 10 | 5% | 92 | 47% | **195** |
| 2012 | 76 | 40% | 16 | 8% | 100 | 52% | **192** |
| 2013 | 82 | 45% | 13 | 7% | 86 | 48% | **181** |
| 2014 | 70 | 43% | 11 | 7% | 82 | 50% | **163** |
| 2015 | 66 | 41% | 9 | 6% | 85 | 53% | **160** |
| 2016 | 84 | 50% | 5 | 3% | 78 | 47% | **167** |
|  |  |  |  |  |  |  |  |
| 1 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  2 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.  3 Ninety-nine percent of individuals diagnosed with HIV infection from 2007–2016 who were born in a US dependency were born in Puerto Rico, 1% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table 16. Number and percentage distribution of individuals diagnosed with HIV infection by sex at birth1 and age at HIV diagnosis: Massachusetts2, 2014–20163 | | | | |
|  | Men | | Women | |
| Age in years | **N** | **%** | **N** | **%** |
|  |  |  |  |  |
| <134 | 5 | <1% | 2 | <1% |
| 13–19 | 37 | 3% | 19 | 4% |
| 20–24 | 182 | 13% | 39 | 8% |
| 25–29 | 243 | 17% | 71 | 14% |
| 30–34 | 190 | 13% | 68 | 14% |
| 35–39 | 157 | 11% | 71 | 14% |
| 40–44 | 138 | 10% | 43 | 9% |
| 45–49 | 168 | 12% | 57 | 12% |
| 50–54 | 133 | 9% | 45 | 9% |
| 55–59 | 81 | 6% | 30 | 6% |
| 60–64 | 41 | 3% | 24 | 5% |
| 65–69 | 17 | 1% | 16 | 3% |
| 70+ | 17 | 1% | 5 | 1% |
| **Total** | **1,409** | **100%** | **490** | **100%** |
|  | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 More than 99% of HIV infections diagnosed under age 13 were among non-US born children who were first infected abroad, and were not new perinatal infections.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 17. Number and percentage of individuals living with HIV infection on January 1, 2018 by current age and sex at birth1: Massachusetts2 | | | | | | |
|  | **Men** | | **Women** | | **State Total** | |
| Age in years | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |
| <13 | 11 | <1% | 13 | <1% | 24 | <1% |
| 13–19 | 40 | <1% | 30 | <1% | 70 | <1% |
| 20–24 | 176 | 1% | 98 | 2% | 274 | 1% |
| 25–29 | 629 | 4% | 207 | 3% | 836 | 4% |
| 30–34 | 879 | 6% | 279 | 4% | 1,158 | 5% |
| 35–39 | 1,018 | 6% | 505 | 8% | 1,523 | 7% |
| 40–44 | 1,146 | 7% | 633 | 10% | 1,779 | 8% |
| 45–49 | 1,804 | 11% | 873 | 14% | 2,677 | 12% |
| 50–54 | 2,876 | 18% | 1,131 | 18% | 4,007 | 18% |
| 55–59 | 3,076 | 19% | 1,076 | 17% | 4,152 | 19% |
| 60–64 | 2,139 | 14% | 782 | 12% | 2,921 | 13% |
| 65–69 | 1,198 | 8% | 381 | 6% | 1,579 | 7% |
| 70+ | 818 | 5% | 294 | 5% | 1,112 | 5% |
| **Total** | **15,810** | **100%** | **6,302** | **100%** | **22,112** | **100%** |
|  | | | | | | |
| 1 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 18. Number and percentage distribution of women diagnosed with HIV infection by race/ethnicity and age at HIV diagnosis: Massachusetts1, 2014–20162 | | | | | | |
|  | White NH | | Black NH | | Hispanic/Latina | |
| Age in years | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |
| Under 133 | 0 | 0% | 2 | 1% | 0 | 0% |
| 13–19 | 4 | 3% | 11 | 4% | 4 | 4% |
| 20–24 | 11 | 9% | 17 | 7% | 11 | 10% |
| 25–29 | 27 | 23% | 32 | 13% | 12 | 11% |
| 30–34 | 17 | 14% | 31 | 12% | 18 | 16% |
| 35–39 | 16 | 14% | 37 | 15% | 15 | 14% |
| 40–44 | 7 | 6% | 22 | 9% | 14 | 13% |
| 45–49 | 12 | 10% | 31 | 12% | 11 | 10% |
| 50–54 | 12 | 10% | 25 | 10% | 5 | 5% |
| 55–59 | 3 | 3% | 16 | 6% | 11 | 10% |
| 60–64 | 4 | 3% | 18 | 7% | 2 | 2% |
| 65–69 | 4 | 3% | 5 | 2% | 6 | 5% |
| 70+ | 1 | 1% | 3 | 1% | 1 | 1% |
| **Total** | **118** | **100%** | **250** | **100%** | **110** | **100%** |
|  | | | | | | |
| 1 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  2 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  3 More than 99% of HIV infections diagnosed under age 13 were among non-US born children who were first infected abroad, and were not new perinatal infections.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 19. Number and percentage of individuals diagnosed with HIV infection by Health Service Region (HSR)1 and sex at birth2:** **Massachusetts3, 2014–20164** | | | | | |
|  | **Men** | | **Women** | | **Total** |
| Health Service Region: | **N** | **%** | **N** | **%** | **N** |
|  |  |  |  |  |  |
| Boston HSR | 390 | 75% | 129 | 25% | **519** |
| Central HSR | 117 | 72% | 45 | 28% | **162** |
| Metro West HSR | 235 | 77% | 70 | 23% | **305** |
| Northeast HSR | 273 | 71% | 113 | 29% | **386** |
| Southeast HSR | 211 | 71% | 85 | 29% | **296** |
| Western HSR | 154 | 79% | 41 | 21% | **195** |
| Prisons5 | 29 | 81% | 7 | 19% | **36** |
| **Mass. Total** | **1,409** | **74%** | **490** | **26%** | **1,899** |
|  |  |  |  |  |  |
| 1 Reflects the health service region of a person’s current residence as of 1/1/18. See technical notes for configuration of health service regions2 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  3 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  4 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  5 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 20. Percentage distribution of women diagnosed with HIV infection by Health Service Region (HSR)1 and exposure mode: Massachusetts2, 2014–20163 | | | | | | | | | | | |
|  | **IDU** | | **HTSX** | | **Other** | | **Pres.**  **HTSX4** | | **NIR5** | | **Total** |
| **HSR** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Boston | 11 | 9% | 13 | 10% | 0 | 0% | 63 | 49% | 42 | 33% | **129** |
| Central | <5 | N/A | ≥5 | N/A | 0 | 0% | 27 | 60% | 9 | 20% | **45** |
| Metro West | ≥5 | N/A | 9 | 13% | <5 | N/A | 28 | 40% | 26 | 37% | **70** |
| Northeast | 16 | 14% | 16 | 14% | <5 | N/A | 44 | 39% | ≥5 | N/A | **113** |
| Southeast | 9 | 11% | 18 | 21% | 0 | 0% | 38 | 45% | 20 | 24% | **85** |
| Western | 5 | 12% | 10 | 24% | 0 | 0% | 18 | 44% | 8 | 20% | **41** |
| Prison6 | 5 | 71% | <5 | N/A | 0 | 0% | 0 | 0% | <5 | N/A | **7** |
| Total | **53** | **11%** | **74** | **15%** | **<5** | **N/A** | **218** | **44%** | **142** | **29%** | **490** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Reflects the health service region of a person’s residence at the time of report (not necessarily current residence). See technical notes for configuration of health service regions.  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 Includes a woman having sex with a man of unknown HIV status or risk. This category is limited to women.  5 Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.  6 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility.  IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex; NIR = No Identified Risk  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | | | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 21. Number and percentage of individuals living with HIV infection on January 1, 2018 by Health Service Region (HSR)1 and sex at birth2:** **Massachusetts3** | | | | | |
|  | **Men** | | **Women** | | **Total** |
| Health Service Region | **N** | **%** | N | **%** | **N** |
|  |  |  |  |  |  |
| Boston HSR | 4,724 | 77% | 1,418 | 23% | **6,145** |
| Central HSR | 1,268 | 64% | 723 | 36% | **1,991** |
| Metro West HSR | 2,337 | 71% | 967 | 29% | **3,304** |
| Northeast HSR | 2,581 | 68% | 1,241 | 32% | **3,822** |
| Southeast HSR | 2,393 | 71% | 981 | 29% | **3,374** |
| Western HSR | 1,670 | 66% | 852 | 34% | **2,522** |
| Prison4 | 820 | 88% | 117 | 12% | **937** |
| **Massachusetts Total5** | **15,810** | **71%** | **6,302** | **29%** | **22,112** |
|  |  |  |  |  |  |
| 1 Reflects the health service region of a person’s current residence as of 1/1/18. See technical notes for configuration of health service regions  2 Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=107 transgender individuals living with HIV infection).Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/18).  3 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.  4 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV infection while in a correctional facility. These data do not reflect current incarceration status.  5 Mass. total includes individuals living with HIV infection with unknown residence.  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data as of 1/1/18 and may be subject to change | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 22. Percentage distribution of women living with HIV infection on January 1, 2018 by Health Service Region (HSR)1 and exposure mode: Massachusetts2** | | | | | | | | | | | |
|  | **IDU** | | **HTSX** | | **Other** | | **Pres.**  **HTSX3** | | **NIR4** | | **Total** |
| **HSR** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Boston | 250 | 18% | 466 | 33% | 45 | 3% | 500 | 35% | 157 | 11% | **1,418** |
| Central | 165 | 23% | 263 | 36% | ≥5 | N/A | 229 | 32% | ≥5 | N/A | **723** |
| Metro West | 141 | 15% | 319 | 33% | 31 | 3% | 364 | 38% | 112 | 12% | **967** |
| Northeast | 197 | 16% | 416 | 34% | 43 | 3% | 421 | 34% | 164 | 13% | **1,241** |
| Southeast | 224 | 23% | 372 | 38% | 30 | 3% | 269 | 27% | 86 | 9% | **981** |
| Western | 207 | 24% | 360 | 42% | 28 | 3% | 190 | 22% | 67 | 8% | **852** |
| Prison5 | 93 | 79% | 12 | 10% | <5 | N/A | 6 | 5% | ≥5 | N/A | **117** |
| **Total** | **1,279** | **20%** | **2,209** | **35%** | **204** | **3%** | **1,979** | **31%** | **631** | **10%** | **6,302** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Reflects the health service region of a person’s residence at the time of report (not necessarily current residence). See technical notes for configuration of health service regions.  2 HIV prevalence data include all individuals who were residing in Massachusetts as of 1/1/18, regardless of where they were first diagnosed.3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  3 Includes a woman having sex with a man of unknown HIV status or risk. This category is limited to women.  4 Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.  5 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex; NIR = No Identified Risk Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding), data are current as of 1/1/18 and may be subject to change | | | | | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 23. Rank of the ten cities/towns1 in Massachusetts2 by the highest proportion of women among HIV infection diagnoses (HIV Dx): 2014–20163** | | | | |
| **Rank** | **City/Town** | **Number of HIV Dx among women** | **Total Number of HIV Dx** | **Percent of Total HIV Dx** |
|  |  |  |  |  |
| 1 | Malden | 13 | 30 | 43% |
| 2 | Waltham | 11 | 26 | 42% |
| 3 | Brockton | 31 | 79 | 39% |
| 4 | Lawrence | 25 | 69 | 36% |
| 5 | Lynn | 17 | 48 | 35% |
| 6 | Lowell | 26 | 80 | 33% |
| 7 | Cambridge | 8 | 26 | 31% |
| 8 | Worcester | 28 | 96 | 29% |
| 9 | Boston | 118 | 460 | 26% |
| 10 | New Bedford | 10 | 39 | 26% |
|  | All other cities4 | 203 | 946 | 21% |
|  | All Women in MA | **490** | **1,899** | **26%** |
|  |  |  |  |  |
| 1 Among cities/towns with over 20 reported HIV infection diagnoses in the years 2014–2016. Note: reflects the city/town of a person’s residence at the time of report (not necessarily current residence). Individuals diagnosed while at a correctional facility are not included.  2 New HIV diagnoses include only individuals who were first diagnosed in Massachusetts.  3 Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.  4 All other cities include diagnoses made in a correctional facility  Data Source: MDPH Bureau of Infectious Disease and Laboratory Sciences (percentages may not add up to 100% due to rounding); Data are current as of 1/1/18 and may be subject to change | | | | |

***Technical Notes:***

The following tables include data from the Behavioral Risk Factor Surveillance System (BRFSS), a random-digit-dial telephone survey of Massachusetts residents through anonymous telephone interviews from 2015 to 2016. This ongoing survey covers a broad range of topic areas (including risk related to sexual activity) and is part of a CDC-funded national survey program. See

<http://www.mass.gov/eohhs/gov/departments/dph/programs/admin/dmoa/health-survey/brfss/> for more information.

Sex with multiple partners has historically been correlated with other predictors of HIV transmission. Reducing numbers of sexual partners has been an HIV/STD prevention intervention strategy, as has increasing condom use. Data regarding the prevalence of each of these behaviors follows.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 24. Number of sexual partners in the past year1, women ages 18–64 years,** **Massachusetts, 2015–2016** | | | | |
|  | **%0 Partners** | **%1 Partner** | **%2 + Partners** | **n2** |
| **Total Females** | **24.2% (21.1 – 27.2)** | **67.9% (64.5 – 71.3)** | **7.9% (5.9 – 10.0)** | **1,892** |
|  |  |  |  |  |
| Age in Years: | **%0 Partners** | **%1 Partner** | **%2 + Partners** | **n** |
|  |  |  |  |  |
| 18–24 | 31.3% (22.0 – 40.6) | 47.7% (37.9 – 57.4) | 21.0% (13.6 – 28.5) | **146** |
| 25–34 | 7.8% (3.5 – 12.1) | 78.4% (70.9 – 85.8) | 13.8% (7.3 – 20.3) | **281** |
| 35–44 | 8.1% (4.5 – 11.6) | 87.1% (82.4 – 91.7) | 4.9% (2.0 – 7.8) | **305** |
| 45–64 | 34.0% (29.4 – 38.7) | 64.1% (59.3 – 68.8) | 1.9% (0.4 – 3.4 | **1,107** |
|  |  |  |  |  |
| Race/Ethnicity: | **%0 Partners** | **%1 Partner** | **%2 + Partners** | **n** |
|  |  |  |  |  |
| White (non-Hispanic) | 20.9% (17.8 – 24.1) | 70.9% (67.2 – 74.7) | 8.1% (5.7 – 10.6) | **1,463** |
| Black (non-Hispanic) | 32.6% (20.9 – 44.4) | 53.5% (40.4 – 66.6) | 13.9% (2.6 – 25.2) | **123** |
| Hispanic/Latino | 33.1% (22.8 – 43.4) | 63.1% (52.9 – 73.2) | 3.8% (1.1 – 6.6) | **192** |
|  |  |  |  |  |
| Sex of Partner4: | **%0 Partners** | **%1 Partner** | **%2 + Partners** | **n** |
|  |  |  |  |  |
| Same sex | Not Applicable | --3 | --3 | **52** |
| Opposite sex | Not Applicable | 91.3% (89.0 – 93.7) | 8.7% (6.3 – 11.0) | **1,255** |
|  |  |  |  |  |
| 1 “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 individuals a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex.  2 Only respondents with known values are included in this table. Column sub-totals may not equal overall total due to missing values.  3 Unstable estimates with N < 50 or relative standard error >30% are suppressed  4 Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year  Data source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2015–2016 | | | | |

|  |  |  |
| --- | --- | --- |
| Table 25. Condom use at last sex by sex and number of partners, adults ages 18–641: Massachusetts, 2015–2016 | | |
|  | **% Used Condom** | **Total n2** |
| **Total:** | **24.8% (22.1 – 27.5)** | **2,720** |
| **Sex:** | **% Used Condom** | **Total n** |
|  |  |  |
| Male | 27.8% (23.9 – 31.7) | **1,404** |
| Male, 1 Partner | 22.0% (18.2 – 25.9) | **1,168** |
| Male, 2+ Partners | 53.8% (42.6 – 65.0) | **221** |
| Female | 21.5% (17.9 – 25.2) | **1,316** |
| Female, 1 Partner | 18.5% (14.9 – 22.0) | **1,208** |
| Female, 2+ Partners | 47.9% (34.1 – 61.7) | **105** |
|  |  |  |
| 1 Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year  2 Only respondents with known values are included in this table; Column sub-totals may not equal overall total due to missing values  3 Unstable estimates with N < 50 or relative standard error >30% are suppressed  Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2015–2016 | | |

***Technical Notes:***

Tables 24 includes data from the Massachusetts Youth Risk Behavior Survey (MYRBS) among students in randomly selected Massachusetts public high schools and conducted every odd year. This anonymous survey is administered by the Massachusetts Department of Elementary and Secondary Education in collaboration with the Centers for Disease Control and Prevention and focuses on risk behaviors that may affect the health and/or safety of high school students. See http://www.doe.mass.edu/cnp/hprograms/yrbs/ for more information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table 26. Percentage of female high school students reporting sexual behaviors to the Massachusetts Youth Risk Behavior Survey: Massachusetts  *Calendar Year 2017* | | | | |
| **Behavior:** | **Percent** | **95% Confidence Interval** | | **n** |
|  |  | Lower limit | Upper limit |  |
| Ever having sexual intercourse | 34.9% | 30.7% | 39.3% | 1,484 |
| Having sexual intercourse before age 13 | 1.3% | 0.7% | 2.3% | 1,481 |
| Having had sexual intercourse with 4+ partners during their life | 5.3% | 3.8% | 7.3% | 1,485 |
| Having sexual intercourse in the past 3 months | 26.3% | 22.7% | 30.1% | 1,481 |
| Using a condom at last sexual intercourse1 | 54.6% | 60.5% | 48.6% | 379 |
| Drinking alcohol or using drugs at last sexual intercourse1 | 18.2% | 13.8% | 23.7% | 324 |
| Not using any method to prevent pregnancy at last sexual intercourse1 | 9.3% | 6.0% | 14.1% | 374 |
|  |  | | | |
| 1 Among youth reporting sexual intercourse in the past three months  Data Source: Massachusetts Department of Elementary and Secondary Education | | | | |

1. The denominators for prevalence calculations are based on year 2010 population estimates from the MDPH Bureau of Health Information, Statistics, Research and Evaluation [↑](#footnote-ref-1)