

Regional HIV/AIDS Epidemiologic Profile of Northeast Health Service Region (HSR), Massachusetts: 2015

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2014: Northeast HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	3,147	63%
People Reported with HIV or AIDS who are Deceased	1,824	37%
Total Number of People Reported with HIV Infection or AIDS	4,971	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² 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.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 2. Average annual rate of HIV infection diagnosis from 2011 to 2013 and HIV/AIDS prevalence rate on 12/31/14¹: Northeast HSR, Massachusetts²

Average annual HIV diagnosis rate from 2011–2013	Average rate per 100,000	Average annual number of HIV diagnoses
Northeast HSR, MA	10.1	130.7
Massachusetts Total	10.7	701.3

HIV/AIDS prevalence rate on 12/31/14	Rate per 100,000	Number of people living with HIV/AIDS
Northeast HSR, MA	244.2	3,147
Massachusetts Total	301.5	19,737

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 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.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2004–2013, Northeast HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2004	2,259	48	159
2005	2,371	46	158
2006	2,468	45	142
2007	2,535	52	119
2008	2,639	35	139
2009	2,716	35	112
2010	2,780	51	115
2011	2,854	44	118
2012	2,966	30	142
2013	3,039	25	132

¹ Number of people living with HIV/AIDS on 12/31 of each year

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 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.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 4. People diagnosed with HIV infection from 2011–2013¹ and people living with HIV/AIDS on December 31, 2014 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Northeast HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	266	68%	2,100	67%
Female	126	32%	1,047	33%
Place of Birth:	N	%	N	%
US	213	54%	1,760	56%
Puerto Rico/US Dependency ³	28	7%	381	12%
Non-US	151	39%	1,006	32%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	147	38%	1,333	42%
Black (non-Hispanic)	101	26%	773	25%
Hispanic/Latino	124	32%	905	29%
Asian/Pacific Islander	16	4%	110	3%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	152	39%	1,034	33%
Injection Drug Use (IDU)	29	7%	479	15%
MSM/IDU	11	3%	89	3%
Heterosexual Sex	47	12%	489	16%
Other	2	1%	71	2%
Total Undetermined	151	39%	985	31%
• Presumed Heterosexual Sex ⁴	49	13%	363	12%
• Undetermined ⁵	102	26%	622	20%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2014	
Under 13	1	<1%	5	<1%
13 to 19	10	3%	14	<1%
20 to 24	37	9%	51	2%
25 to 29	56	14%	108	3%
30 to 34	50	13%	166	5%
35 to 39	47	12%	211	7%
40 to 44	51	13%	317	10%
45 to 49	57	15%	580	18%
50 to 54	40	10%	668	21%
55 to 59	17	4%	492	16%
60+	26	7%	535	17%
Total⁶	392	100%	3,147	100%

¹ 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.

² 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.

³ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female 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 American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Northeast HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,088	52%	245	23%
Black (non-Hispanic)	350	17%	423	40%
Hispanic/Latino	573	27%	332	32%
Asian/Pacific Islander	74	4%	36	3%
Total²	2,100	100%	1,047	100%

¹ 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.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 6. People living with HIV/AIDS on December 31, 2014 by gender and exposure mode: Northeast HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	1,034	49%	N/A	N/A
Injection drug use (IDU)	305	15%	174	17%
MSM/IDU	89	4%	N/A	N/A
Heterosexual sex	132	6%	357	34%
Other	35	2%	36	3%
Total Undetermined	505	24%	480	46%
• Presumed heterosexual sex ²	N/A	N/A	363	35%
• Undetermined ³	505	24%	117	11%
Total	2,100	100%	1,047	100%

¹ 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.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female 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

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Northeast HSR, Massachusetts¹, 2004–2013²

	Male		Female		Total
	N	%	N	%	
2004	95	60%	64	40%	159
2005	97	61%	61	39%	158
2006	96	68%	46	32%	142
2007	74	62%	45	38%	119
2008	91	65%	48	35%	139
2009	77	69%	35	31%	112
2010	79	69%	36	31%	115
2011	82	69%	36	31%	118
2012	91	64%	51	36%	142
2013	93	70%	39	30%	132

¹ 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.

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.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Northeast HSR, Massachusetts¹, 2004–2013²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2004	55	35%	51	32%	44	28%	159
2005	56	35%	53	34%	45	28%	158
2006	60	42%	42	30%	38	27%	142
2007	45	38%	28	24%	42	35%	119
2008	39	28%	46	33%	40	29%	139
2009	36	32%	33	29%	36	32%	112
2010	44	38%	33	29%	29	25%	115
2011	38	32%	32	27%	41	35%	118
2012	52	37%	41	29%	42	30%	142
2013	57	43%	28	21%	41	31%	132

¹ 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.

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 Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Northeast HSR, Massachusetts¹, 2004–2013²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2004	79	50%	11	7%	69	43%	159
2005	74	47%	13	8%	71	45%	158
2006	85	60%	10	7%	47	33%	142
2007	62	52%	13	11%	44	37%	119
2008	63	45%	11	8%	65	47%	139
2009	59	53%	9	8%	44	39%	112
2010	60	52%	10	9%	45	39%	115
2011	63	53%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	118
2012	72	51%	15	11%	55	39%	142
2013	78	59%	9	7%	45	34%	132

¹ 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.

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-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Northeast HSR, Massachusetts¹, 2004–2013²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2004	40	25%	19	12%	-- ⁵	-- ⁵	27	17%	-- ⁵	-- ⁵	24	15%	44	28%	159
2005	42	27%	14	9%	-- ⁵	-- ⁵	27	17%	-- ⁵	-- ⁵	26	16%	45	28%	158
2006	48	34%	14	10%	-- ⁵	-- ⁵	20	14%	-- ⁵	-- ⁵	21	15%	35	25%	142
2007	38	32%	17	14%	-- ⁵	-- ⁵	15	13%	-- ⁵	-- ⁵	16	13%	31	26%	119
2008	45	32%	6	4%	5	4%	19	14%	0	0%	21	15%	43	31%	139
2009	44	39%	6	5%	-- ⁵	-- ⁵	15	13%	-- ⁵	-- ⁵	14	13%	30	27%	112
2010	37	32%	9	8%	5	4%	19	17%	0	0%	15	13%	30	26%	115
2011	40	34%	9	8%	-- ⁵	-- ⁵	13	11%	-- ⁵	-- ⁵	14	12%	39	33%	118
2012	55	39%	12	8%	-- ⁵	-- ⁵	19	13%	-- ⁵	-- ⁵	19	13%	32	23%	142
2013	57	43%	8	6%	-- ⁵	-- ⁵	15	11%	-- ⁵	-- ⁵	16	12%	31	23%	132

¹ 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.

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 Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female 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.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Northeast HSR, Massachusetts¹, 2004–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	78	159	49%
2005	58	158	37%
2006	53	142	37%
2007	43	119	36%
2008	38	139	27%
2009	34	112	30%
2010	46	115	40%
2011	50	118	42%
2012	45	142	32%
2013	32	132	24%

¹ 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.

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.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Northeast HSR, Massachusetts,¹ 2011–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	84	266	32%
Female	43	126	34%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	41	147	28%
Black (non-Hispanic)	37	101	37%
Hispanic/Latino	44	124	35%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	58	213	27%
Puerto Rico/US Dependencies ⁴	10	28	36%
Non-US	59	151	39%
Total	127	392	32%

¹ 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.

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 Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15