

## **Regional HIV/AIDS Epidemiologic Profile of Southeast 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 AIDS<sup>1</sup> by mortality status on December 31, 2014: Southeast HSR, Massachusetts<sup>2</sup>**

	<b>N</b>	<b>%</b>
People Living with HIV/AIDS	2,723	58%
People Reported with HIV or AIDS who are Deceased	1,979	42%
<b>Total Number of People Reported with HIV Infection or AIDS</b>	<b>4,702</b>	<b>100%</b>

<sup>1</sup> 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

<sup>2</sup> 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 12/31/14<sup>1</sup>: Southeast HSR, Massachusetts<sup>2</sup>**

<b>Average annual HIV diagnosis rate from 2011–2013</b>	<b>Average rate per 100,000</b>	<b>Average annual number of HIV diagnoses</b>
Southeast HSR, MA	8.1	103.0
Massachusetts Total	10.7	701.3

  

<b>HIV/AIDS prevalence rate on 12/31/14</b>	<b>Rate per 100,000</b>	<b>Number of people living with HIV/AIDS</b>
Southeast HSR, MA	215.0	2,723
Massachusetts Total	301.5	19,737

<sup>1</sup> 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.

<sup>2</sup> 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/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2004–2013, Southeast HSR, Massachusetts<sup>3</sup>**

<b>Year</b>	<b>HIV/AIDS Prevalence</b>	<b>Deaths among those with HIV/AIDS</b>	<b>Diagnosis of HIV Infection</b>
2004	2,079	52	117
2005	2,135	55	111
2006	2,210	45	120
2007	2,289	40	119
2008	2,336	51	98
2009	2,406	49	119
2010	2,449	48	91
2011	2,511	32	94
2012	2,572	41	102
2013	2,616	31	113

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

<sup>2</sup> 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.

<sup>3</sup> 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 2011–2013<sup>1</sup> 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: Southeast HSR, Massachusetts<sup>2</sup>**

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	229	74%	1,928	71%
Female	80	26%	795	29%
Place of Birth:	N	%	N	%
US	192	62%	2,012	74%
Puerto Rico/US Dependency <sup>3</sup>	21	7%	161	6%
Non-US	96	31%	550	20%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	150	49%	1,632	60%
Black (non-Hispanic)	96	31%	621	23%
Hispanic/Latino	53	17%	422	15%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	132	43%	1,080	40%
Injection Drug Use (IDU)	20	6%	520	19%
MSM/IDU	-- <sup>7</sup>	-- <sup>7</sup>	88	3%
Heterosexual Sex	25	8%	411	15%
Other	-- <sup>7</sup>	-- <sup>7</sup>	54	2%
Total Undetermined	120	39%	570	21%
• Presumed Heterosexual Sex <sup>4</sup>	47	15%	217	8%
• Undetermined <sup>5</sup>	73	24%	353	13%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2014	
Under 13	0	0%	1	<1%
13 to 19	12	4%	9	<1%
20 to 24	30	10%	37	1%
25 to 29	26	8%	84	3%
30 to 34	38	12%	99	4%
35 to 39	23	7%	177	7%
40 to 44	39	13%	220	8%
45 to 49	60	19%	408	15%
50 to 54	29	9%	630	23%
55 to 59	32	10%	498	18%
60+	20	6%	560	21%
<b>Total<sup>6</sup></b>	<b>309</b>	<b>100%</b>	<b>2,723</b>	<b>100%</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

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

<sup>5</sup> 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.

<sup>6</sup> Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>7</sup> 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 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Southeast HSR, Massachusetts<sup>1</sup>**

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,284	67%	348	44%
Black (non-Hispanic)	332	17%	289	36%
Hispanic/Latino	282	15%	140	18%
Asian/Pacific Islander	14	1%	5	1%
<b>Total<sup>2</sup></b>	<b>1,928</b>	<b>100%</b>	<b>795</b>	<b>100%</b>

<sup>1</sup> 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.

<sup>2</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>**

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	1,080	56%	N/A	N/A
Injection drug use (IDU)	306	16%	214	27%
MSM/IDU	88	5%	N/A	N/A
Heterosexual sex	119	6%	292	37%
Other	32	2%	22	3%
Total Undetermined	303	16%	267	34%
• Presumed heterosexual sex <sup>2</sup>	N/A	N/A	217	27%
• Undetermined <sup>3</sup>	303	16%	50	6%
<b>Total</b>	<b>1,928</b>	<b>100%</b>	<b>795</b>	<b>100%</b>

<sup>1</sup> 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.

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

<sup>3</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	Male		Female		Total
	N	%	N	%	
2004	88	75%	29	25%	117
2005	91	82%	20	18%	111
2006	86	72%	34	28%	120
2007	93	78%	26	22%	119
2008	70	71%	28	29%	98
2009	87	73%	32	27%	119
2010	69	76%	22	24%	91
2011	63	67%	31	33%	94
2012	73	72%	29	28%	102
2013	93	82%	20	18%	113

<sup>1</sup> 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.

<sup>2</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total <sup>3</sup>
	N	%	N	%	N	%	N
2004	62	53%	24	21%	28	24%	117
2005	66	59%	28	25%	15	14%	111
2006	68	57%	30	25%	16	13%	120
2007	65	55%	29	24%	23	19%	119
2008	52	53%	33	34%	12	12%	98
2009	64	54%	33	28%	21	18%	119
2010	52	57%	26	29%	12	13%	91
2011	50	53%	29	31%	10	11%	94
2012	47	46%	36	35%	16	16%	102
2013	53	47%	31	27%	27	24%	113

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	US		Puerto Rico/ US Dependency <sup>3</sup>		Non-US		Total
	N	%	N	%	N	%	N
2004	79	68%	12	10%	26	22%	117
2005	82	74%	7	6%	22	20%	111
2006	83	69%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	120
2007	76	64%	6	5%	37	31%	119
2008	63	64%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	98
2009	83	70%	5	4%	31	26%	119
2010	69	76%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	91
2011	61	65%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	94
2012	58	57%	9	9%	35	34%	102
2013	73	65%	10	9%	30	27%	113

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX <sup>3</sup>		Undeter- mined <sup>4</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2004	46	39%	15	13%	-- <sup>5</sup>	-- <sup>5</sup>	14	12%	-- <sup>5</sup>	-- <sup>5</sup>	11	9%	27	23%	<b>117</b>
2005	51	46%	16	14%	-- <sup>5</sup>	-- <sup>5</sup>	13	12%	-- <sup>5</sup>	-- <sup>5</sup>	5	5%	21	19%	<b>111</b>
2006	59	49%	13	11%	-- <sup>5</sup>	-- <sup>5</sup>	9	8%	-- <sup>5</sup>	-- <sup>5</sup>	15	13%	23	19%	<b>120</b>
2007	53	45%	15	13%	-- <sup>5</sup>	-- <sup>5</sup>	17	14%	-- <sup>5</sup>	-- <sup>5</sup>	8	7%	23	19%	<b>119</b>
2008	38	39%	8	8%	7	7%	17	17%	0	0%	11	11%	17	17%	<b>98</b>
2009	47	39%	9	8%	-- <sup>5</sup>	-- <sup>5</sup>	19	16%	-- <sup>5</sup>	-- <sup>5</sup>	12	10%	29	24%	<b>119</b>
2010	45	49%	10	11%	-- <sup>5</sup>	-- <sup>5</sup>	10	11%	-- <sup>5</sup>	-- <sup>5</sup>	9	10%	14	15%	<b>91</b>
2011	39	41%	5	5%	-- <sup>5</sup>	-- <sup>5</sup>	9	10%	-- <sup>5</sup>	-- <sup>5</sup>	16	17%	22	23%	<b>94</b>
2012	38	37%	9	9%	5	5%	8	8%	0	0%	18	18%	24	24%	<b>102</b>
2013	55	49%	6	5%	-- <sup>5</sup>	-- <sup>5</sup>	8	7%	-- <sup>5</sup>	-- <sup>5</sup>	13	12%	27	24%	<b>113</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>4</sup> 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.

<sup>5</sup> 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: Southeast HSR, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	47	117	40%
2005	38	111	34%
2006	47	120	39%
2007	40	119	34%
2008	35	98	36%
2009	39	119	33%
2010	31	91	34%
2011	33	94	35%
2012	34	102	33%
2013	40	113	35%

<sup>1</sup> 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.

<sup>2</sup> 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: Southeast HSR, Massachusetts,<sup>1</sup> 2011–2013<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
<b>Gender:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male	78	229	34%
Female	29	80	36%
<b>Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	43	150	29%
Black (non-Hispanic)	36	96	38%
Hispanic/Latino	21	53	40%
Asian/Pacific Islander	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Other/Undetermined <sup>3</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
<b>Place of Birth:</b>	<b>N</b>	<b>N</b>	<b>%</b>
US	58	192	30%
Puerto Rico/US Dependencies <sup>4</sup>	9	21	43%
Non-US	40	96	42%
<b>Total</b>	<b>107</b>	<b>309</b>	<b>35%</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>4</sup> 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.

<sup>5</sup> 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