

Regional HIV/AIDS Epidemiologic Profile of Massachusetts: 2012

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 Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 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 of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males 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. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2011: Massachusetts²

	N	%
People Living with HIV/AIDS	18,170	59%
People Reported with HIV or AIDS who are Deceased	12,620	41%
Total Number of People Reported with HIV Infection or AIDS	30,790	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 1/1/12

Table 2. Average annual rate of HIV infection diagnosis from 2008 to 2010 and HIV/AIDS prevalence rate on 12/31/11¹: Massachusetts²

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate on 12/31/11	Rate per 100,000	Number of people living with HIV/AIDS
Massachusetts Total	282.3	18,170

¹ The denominators for rate calculations are based on year 2005 population estimates from the MDPH Bureau of Health 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 1/1/12

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2001–2010, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	13,191	411	985
2002	13,886	361	1,056
2003	14,434	383	931
2004	15,002	337	905
2005	15,558	312	868
2006	16,029	313	784
2007	16,446	283	700
2008	16,864	275	693
2009	17,254	263	653
2010	17,670	232	648

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 10 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 1/1/12

Table 4. People diagnosed with HIV infection from 2008–2010¹ and people living with HIV/AIDS on December 31, 2011 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	1,453	73%	12,917	71%
Female	541	27%	5,253	29%
Place of Birth:	N	%	N	%
US	1,208	61%	12,007	66%
Puerto Rico/US Dependency ³	170	9%	1,989	11%
Non-US	616	31%	4,174	23%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	768	39%	7,966	44%
Black (non-Hispanic)	659	33%	5,382	30%
Hispanic/Latino	500	25%	4,460	25%
Asian/Pacific Islander	61	3%	287	2%
Other/Undetermined ⁴	6	<1%	75	<1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	789	40%	6,498	36%
Injection Drug Use (IDU)	187	9%	3,863	21%
MSM/IDU	56	3%	605	3%
Heterosexual Sex	251	13%	2,613	14%
Other	19	1%	413	2%
Total Undetermined	692	35%	4,178	23%
• Presumed Heterosexual Sex ⁵	219	11%	1520	8%
• Undetermined ⁶	473	24%	2658	15%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2011	
Under 13	15	1%	34	<1%
13 to 19	45	2%	124	1%
20 to 24	170	9%	280	2%
25 to 29	225	11%	486	3%
30 to 34	257	13%	915	5%
35 to 39	262	13%	1,369	8%
40 to 44	303	15%	2,428	13%
45 to 49	309	15%	3,740	21%
50 to 54	201	10%	3,750	21%
55 to 59	109	5%	2,595	14%
60+	98	5%	2,449	13%
Total	1,994	100%	18,170	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-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Other/Undetermined American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ 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.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	6,595	51%	1,371	26%
Black (non-Hispanic)	3,059	24%	2,323	44%
Hispanic/Latino	2,992	23%	1,468	28%
Asian/Pacific Islander	222	2%	65	1%
Other/Undetermined ²	49	<1%	26	<1%
Total	12,917	100%	5,253	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 Other/Undetermined includes American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 6. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	6,498	50%	N/A	N/A
Injection drug use (IDU)	2,562	20%	1,301	25%
MSM/IDU	605	5%	N/A	N/A
Heterosexual sex	769	6%	1,844	35%
Other	231	2%	189	4%
Total Undetermined	2,252	17%	1,919	37%
• Presumed heterosexual sex ²	N/A	N/A	1,520	29%
• Undetermined ³	2,252	17%	399	8%
Total	12,917	100%	5,253	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 1/1/12

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts¹, 2001–2010²

	Male		Female		Total
	N	%	N	%	
2001	686	70%	299	30%	985
2002	714	68%	342	32%	1,056
2003	629	68%	302	32%	931
2004	634	70%	271	30%	905
2005	637	73%	231	27%	868
2006	567	72%	217	28%	784
2007	497	71%	203	29%	700
2008	507	73%	186	27%	693
2009	489	75%	164	25%	653
2010	457	71%	191	29%	648

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 10 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 1/1/12

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2001–2010²

	White NH		Black NH		Hispanic/ Latino		API		Total ³
	N	%	N	%	N	%	N	%	N
2001	407	41%	321	33%	229	23%	23	2%	985
2002	411	39%	368	35%	250	24%	22	2%	1,056
2003	373	40%	321	34%	220	24%	12	1%	931
2004	344	38%	304	34%	241	27%	14	2%	905
2005	344	40%	289	33%	216	25%	17	2%	868
2006	334	43%	237	30%	194	25%	15	2%	784
2007	284	41%	227	32%	170	24%	17	2%	700
2008	274	40%	232	33%	158	23%	25	4%	693
2009	248	38%	222	34%	165	25%	18	3%	653
2010	246	38%	205	32%	177	27%	18	3%	648

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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 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

NH = Non-Hispanic, API = Asian/Pacific Islander, AI/AN = American Indian/Alaskan Native, Other/Und. = Other/Undetermined

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2001–2010²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2001	600	61%	102	10%	283	29%	985
2002	612	58%	97	9%	347	33%	1,056
2003	566	61%	88	9%	277	30%	931
2004	544	60%	96	11%	265	29%	905
2005	520	60%	80	9%	268	31%	868
2006	486	62%	60	8%	238	30%	784
2007	425	61%	59	8%	216	31%	700
2008	424	61%	65	9%	204	29%	693
2009	394	60%	52	8%	207	32%	653
2010	390	60%	53	8%	205	32%	648

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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 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2001–2010²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	304	31%	193	20%	30	3%	172	17%	15	2%	95	10%	176	18%	985
2002	324	31%	193	18%	29	3%	182	17%	7	1%	123	12%	198	19%	1,056
2003	307	33%	147	16%	29	3%	129	14%	13	1%	126	14%	180	19%	931
2004	289	32%	142	16%	21	2%	133	15%	12	1%	111	12%	197	22%	905
2005	336	39%	118	14%	23	3%	108	12%	5	1%	93	11%	185	21%	868
2006	330	42%	97	12%	18	2%	94	12%	5	1%	96	12%	144	18%	784
2007	268	38%	93	13%	20	3%	79	11%	5	1%	77	11%	158	23%	700
2008	276	40%	69	10%	26	4%	86	12%	7	1%	73	11%	156	23%	693
2009	278	43%	49	8%	15	2%	85	13%	5	1%	63	10%	158	24%	653
2010	235	36%	69	11%	15	2%	80	12%	7	1%	83	13%	159	25%	648

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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 10 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.

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 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Massachusetts¹, 2001–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2001	370	985	38%
2002	375	1,056	36%
2003	309	931	33%
2004	321	905	35%
2005	309	868	36%
2006	281	784	36%
2007	251	700	36%
2008	209	693	30%
2009	208	653	32%
2010	209	648	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 ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

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: Massachusetts,¹ 2008–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	474	1,453	33%
Female	152	541	28%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	234	768	30%
Black (non-Hispanic)	220	659	33%
Hispanic/Latino	150	500	30%
Asian/Pacific Islander	21	61	34%
Place of Birth:	N	N	%
US	374	1,208	31%
Puerto Rico/US Dependencies ³	47	170	28%
Non-US	205	616	33%
Total⁴	626	1,994	31%

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 Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Totals include 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 1/1/12