

Regional HIV/AIDS Epidemiologic Profile of Central HSR, 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 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: Central HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	1,594	60%
People Reported with HIV or AIDS who are Deceased	1,066	40%
Total Number of People Reported with HIV Infection or AIDS	2,660	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: Central HSR, Massachusetts²

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Central HSR, MA	6.6	57.0
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
Central HSR, MA	185.8	1,594
Massachusetts Total	277.5	18,170

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 1/1/12

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

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	1,169	40	68
2002	1,238	39	110
2003	1,289	35	86
2004	1,335	39	85
2005	1,367	40	69
2006	1,419	29	80
2007	1,449	30	60
2008	1,476	29	56
2009	1,510	25	59
2010	1,546	20	56

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 1/1/12

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: Central HSR, Massachusetts²

HIV Infection Diagnoses			PLWHA	
Gender:	N	%	N	%
Male	104	61%	982	62%
Female	67	39%	612	38%
Place of Birth:	N	%	N	%
US	91	53%	970	61%
Puerto Rico/US Dependency ³	25	15%	305	19%
Non-US	55	32%	319	20%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	58	34%	678	43%
Black (non-Hispanic)	64	37%	387	24%
Hispanic/Latino	44	26%	505	32%
Asian/Pacific Islander	5	3%	-- ⁷	-- ⁷
Other/Undetermined ⁴	0	0%	-- ⁷	-- ⁷
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	47	27%	373	23%
Injection Drug Use (IDU)	20	12%	465	29%
MSM/IDU	-- ⁷	-- ⁷	47	3%
Heterosexual Sex	32	19%	300	19%
Other	-- ⁷	-- ⁷	47	3%
Total Undetermined	63	37%	362	23%
• Presumed Heterosexual Sex ⁵	27	16%	166	10%
• Undetermined ⁶	36	21%	196	12%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2011	
Under 13	3	2%	2	<1%
13 to 19	4	2%	15	1%
20 to 24	20	12%	28	2%
25 to 29	15	9%	44	3%
30 to 34	17	10%	78	5%
35 to 39	19	11%	127	8%
40 to 44	30	18%	215	13%
45 to 49	25	15%	317	20%
50 to 54	22	13%	330	21%
55 to 59	8	5%	235	15%
60+	8	5%	203	13%
Total	171	100%	1,594	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 Includes American Indian/Alaska Native, other and 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.

⁷ 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 1/1/12

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

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	495	50%	183	30%
Black (non-Hispanic)	188	19%	199	33%
Hispanic/Latino	280	29%	225	37%
Asian/Pacific Islander	-- ³	-- ³	-- ³	-- ³
Other/Undetermined ²	-- ³	-- ³	-- ³	-- ³
Total	982	100%	612	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 American Indian/Alaska Native, other and unspecified race/ethnicity.

³ 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 1/1/12

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

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	373	38%	N/A	N/A
Injection drug use (IDU)	287	29%	178	29%
MSM/IDU	47	5%	N/A	N/A
Heterosexual sex	76	8%	224	37%
Other	25	3%	22	4%
Total Undetermined	174	18%	188	31%
• Presumed heterosexual sex ²	N/A	N/A	166	27%
• Undetermined ³	174	18%	22	4%
Total	982	100%	612	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: Central HSR, Massachusetts¹, 2001–2010²

	Male		Female		Total
	N	%	N	%	
2001	50	74%	18	26%	68
2002	65	59%	45	41%	110
2003	46	53%	40	47%	86
2004	50	59%	35	41%	85
2005	48	70%	21	30%	69
2006	50	63%	30	38%	80
2007	36	60%	24	40%	60
2008	32	57%	24	43%	56
2009	39	66%	20	34%	59
2010	33	59%	23	41%	56

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 1/1/12

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

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2001	32	47%	14	21%	19	28%	68
2002	40	36%	35	32%	34	31%	110
2003	34	40%	28	33%	21	24%	86
2004	34	40%	26	31%	25	29%	85
2005	31	45%	21	30%	15	22%	69
2006	24	30%	30	38%	23	29%	80
2007	24	40%	22	37%	13	22%	60
2008	22	39%	17	30%	15	27%	56
2009	20	34%	21	36%	16	27%	59
2010	16	29%	26	46%	13	23%	56

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 1/1/12

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

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2001	36	53%	12	18%	20	29%	68
2002	58	53%	16	15%	36	33%	110
2003	50	58%	11	13%	25	29%	86
2004	45	53%	15	18%	25	29%	85
2005	36	52%	11	16%	22	32%	69
2006	38	48%	12	15%	30	38%	80
2007	30	50%	7	12%	23	38%	60
2008	29	52%	12	21%	15	27%	56
2009	36	61%	7	12%	16	27%	59
2010	26	46%	6	11%	24	43%	56

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 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: Central HSR, 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	17	25%	19	28%	-- ⁵	-- ⁵	16	24%	-- ⁵	-- ⁵	7	10%	8	12%	68
2002	20	18%	25	23%	-- ⁵	-- ⁵	18	16%	-- ⁵	-- ⁵	18	16%	24	22%	110
2003	19	22%	15	17%	-- ⁵	-- ⁵	11	13%	-- ⁵	-- ⁵	17	20%	17	20%	86
2004	16	19%	19	22%	-- ⁵	-- ⁵	21	25%	-- ⁵	-- ⁵	15	18%	12	14%	85
2005	23	33%	17	25%	0	0%	6	9%	0	0%	12	17%	11	16%	69
2006	22	28%	12	15%	-- ⁵	-- ⁵	12	15%	-- ⁵	-- ⁵	17	21%	16	20%	80
2007	21	35%	8	13%	0	0%	9	15%	0	0%	12	20%	10	17%	60
2008	14	25%	11	20%	-- ⁵	-- ⁵	11	20%	-- ⁵	-- ⁵	8	14%	10	18%	56
2009	20	34%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	11	19%	-- ⁵	-- ⁵	7	12%	12	20%	59
2010	13	23%	5	9%	-- ⁵	-- ⁵	10	18%	-- ⁵	-- ⁵	12	21%	14	25%	56

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 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Central HSR, 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	27	68	40%
2002	38	110	35%
2003	30	86	35%
2004	31	85	36%
2005	29	69	42%
2006	29	80	36%
2007	25	60	42%
2008	27	56	48%
2009	22	59	37%
2010	18	56	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: Central HSR, 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	44	104	42%
Female	23	67	34%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	23	58	40%
Black (non-Hispanic)	29	64	45%
Hispanic/Latino	12	44	27%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	39	91	43%
Puerto Rico/US Dependencies ⁴	8	25	32%
Non-US	20	55	36%
Total	67	171	39%

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-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.

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 1/1/12