

Regional HIV/AIDS Epidemiologic Profile of Lowell, Massachusetts: 2011

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 that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts 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 41% of recent HIV diagnoses among females 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, 2010 Lowell, Massachusetts²

	N	%
People Living with HIV/AIDS	478	63%
People Reported with HIV or AIDS who are Deceased	282	37%
Total Number of People Reported with HIV Infection or AIDS	760	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 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Lowell, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Lowell, MA	14.2	15
Massachusetts Total	9.4	607.3

HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Lowell, MA	452.0	478
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence 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 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Lowell, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	330	11	37
2001	348	15	33
2002	369	8	29
2003	395	9	35
2004	417	12	34
2005	437	8	28
2006	447	10	20
2007	458	6	17
2008	464	11	17
2009	469	6	11

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 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Lowell, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	24	53%	282	59%
Female	21	47%	196	41%
Place of Birth:	N	%	N	%
US	13	29%	188	39%
Puerto Rico/US Dependency ³	7	16%	115	24%
Non-US	25	56%	175	37%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	6	13%	120	25%
Black (non-Hispanic)	18	40%	145	30%
Hispanic/Latino	13	29%	174	36%
Other/Undetermined ⁴	8	18%	39	8%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	10	22%	70	15%
Injection Drug Use (IDU)	5	11%	134	28%
MSM/IDU	-- ⁷	-- ⁷	11	2%
Heterosexual Sex	-- ⁷	-- ⁷	94	20%
Other	0	0%	16	3%
Total Undetermined	25	56%	153	32%
• Presumed Heterosexual Sex ⁵	9	20%	60	13%
• Undetermined ⁶	16	36%	93	19%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	0	0%	-- ⁷	-- ⁷
13 to 19	-- ⁷	-- ⁷	-- ⁷	-- ⁷
20 to 24	-- ⁷	-- ⁷	12	3%
25 to 29	0	0%	10	2%
30 to 34	10	22%	31	6%
35 to 39	14	31%	65	14%
40 to 44	9	20%	107	22%
45 to 49	-- ⁷	-- ⁷	99	21%
50 to 54	-- ⁷	-- ⁷	73	15%
55 to 59	-- ⁷	-- ⁷	34	7%
60+	0	0%	36	8%
Total	45	100%	478	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-seven 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 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, 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.

⁷ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Lowell, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	82	29%	38	19%
Black (non-Hispanic)	61	22%	84	43%
Hispanic/Latino	115	41%	59	30%
Other/Undetermined ²	24	9%	15	8%
Total	282	100%	196	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 Asian/Pacific Islander, 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 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Lowell, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	70	25%	N/A	N/A
Injection drug use (IDU)	91	32%	43	22%
MSM/IDU	11	4%	N/A	N/A
Heterosexual sex	27	10%	67	34%
Other	7	2%	9	5%
Total Undetermined	76	27%	77	39%
• Presumed heterosexual sex ²	N/A	N/A	60	31%
• Undetermined ³	76	27%	17	9%
Total	282	100%	196	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 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Lowell, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	24	65%	13	35%	37
2001	23	70%	10	30%	33
2002	14	48%	15	52%	29
2003	20	57%	15	43%	35
2004	18	53%	16	47%	34
2005	15	54%	13	46%	28
2006	12	60%	8	40%	20
2007	8	47%	9	53%	17
2008	11	65%	6	35%	17
2009	5	45%	6	55%	11

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 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Lowell, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	10	27%	14	38%	8	22%	5	14%	37
2001	-- ⁴	-- ⁴	12	36%	12	36%	-- ⁴	-- ⁴	33
2002	3	10%	16	55%	5	17%	5	17%	29
2003	8	23%	19	54%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2004	-- ⁴	-- ⁴	15	44%	8	24%	-- ⁴	-- ⁴	34
2005	-- ⁴	-- ⁴	11	39%	9	32%	-- ⁴	-- ⁴	28
2006	-- ⁴	-- ⁴	6	30%	6	30%	-- ⁴	-- ⁴	20
2007	-- ⁴	-- ⁴	8	47%	5	29%	-- ⁴	-- ⁴	17
2008	2	12%	5	29%	5	29%	5	29%	17
2009	1	9%	5	45%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	11

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.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Lowell, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	11	30%	7	19%	19	51%	37
2001	9	27%	7	21%	17	52%	33
2002	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21	72%	29
2003	-- ⁴	-- ⁴	-- ⁴	-- ⁴	19	54%	35
2004	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21	62%	34
2005	-- ⁴	-- ⁴	-- ⁴	-- ⁴	14	50%	28
2006	-- ⁴	-- ⁴	-- ⁴	-- ⁴	5	25%	20
2007	-- ⁴	-- ⁴	-- ⁴	-- ⁴	9	53%	17
2008	-- ⁴	-- ⁴	-- ⁴	-- ⁴	10	59%	17
2009	-- ⁴	-- ⁴	-- ⁴	-- ⁴	6	55%	11

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.

³ Ninety-seven 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 3% were born in an unknown dependency.

⁴ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Lowell, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
2000	5	14%	7	19%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	7	19%	13	35%	37
2001	-- ⁵	-- ⁵	5	15%	-- ⁵	-- ⁵	11	33%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	9	27%	33
2002	-- ⁵	14	48%	0	0%	-- ⁵	-- ⁵	7	24%	29					
2003	6	17%	6	17%	0	0%	7	20%	0	0%	5	14%	11	31%	35
2004	7	21%	-- ⁵	-- ⁵	0	0%	8	24%	-- ⁵	-- ⁵	7	21%	8	24%	34
2005	-- ⁵	-- ⁵	5	18%	0	0%	7	25%	0	0%	7	25%	7	25%	28
2006	5	25%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	5	25%	20				
2007	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	6	35%	17
2008	-- ⁵	0	0%	-- ⁵	-- ⁵	6	35%	17							
2009	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	11

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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.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

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 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Lowell, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	11	37	30%
2001	14	33	42%
2002	16	29	55%
2003	11	35	31%
2004	15	34	44%
2005	13	28	46%
2006	10	20	50%
2007	5	17	29%
2008	5	17	29%
2009	5	11	45%

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 1/1/11

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: Lowell, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	10	24	42%
Female	5	21	24%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	3	6	50%
Black (non-Hispanic)	5	18	28%
Hispanic/Latino	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	8	25	32%
Total	15	45	33%

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

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11