

Who is most at risk of HIV infection? Detailed data tables and technical notes

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 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 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 41% 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.

Background on HIV reporting system

On January 1, 1999 the Massachusetts Department of Public Health (MDPH) started requiring healthcare providers to submit case report forms, with demographic and risk

information on individuals diagnosed with HIV infection, as they had been doing for AIDS since 1983. Existing cases of HIV infection diagnosed through 1998 also were to be reported by the end of 1999. When comparing HIV infection diagnosed before 1999 to HIV infection diagnosed after 1999, one should consider the differences in HIV reporting requirements for these two time periods. Since HIV was not reported at diagnosis prior to 1999 and clinical providers were given a relatively short time frame within which to report all prevalent HIV cases, the pre-1999 data are considered less complete than data reported after 1999. Additionally, pre-1999 HIV infection diagnoses do not include people who were diagnosed with HIV infection and who died before 1999 without being reported with AIDS, nor do they include individuals who were no longer receiving HIV-related health care in Massachusetts at the point when HIV (non-AIDS) reporting became mandatory.

Caveats of the data

While trends in new HIV diagnoses are the best indicator for those who are presently most at risk of HIV infection, HIV surveillance reflects only incident diagnoses among people who are in care and not the actual incidence of new infections. Like AIDS diagnoses, HIV infection diagnoses are not a direct measure of incidence of infection itself. People may be living with HIV infection for many years prior to being tested and seeking care, at which point the case is considered a “diagnosis” and reported to the MDPH HIV/AIDS Surveillance Program. Furthermore, as with early data for AIDS cases, the data from the first few years of a new reporting system can be unstable, and caution should be used in interpretation. During the time a reporting system is in its infancy, there is a greater likelihood that fluctuations in data are attributable to reporting patterns and clinician education efforts rather than actual changes in incidence.

Additionally, one must consider the effects of reporting lag when reviewing the 2009 HIV infection diagnoses. As Massachusetts providers who report HIV infections were still transitioning as of January 1, 2007 from code to name-based reporting, the 2009 HIV diagnosis data are less complete than one would typically expect by January 1, 2011. Although Massachusetts regulations require providers to submit HIV case reports in a timely fashion, many 2009 HIV infection diagnoses will be reported to the surveillance program after the release of this Epidemiologic Profile. Thus, the 2009 data presented in this report may represent an undercount. Therefore, although the data that follow report a substantial decline in the number of HIV infection diagnoses in the past year, it is possible that the true incidence of HIV infection diagnosis has declined much less. Previous analyses of Massachusetts HIV/AIDS case data have suggested that the distribution of HIV infection by race/ethnicity, gender and exposure mode for cases reported more than 6 months after diagnosis was not substantially different than the distribution of HIV cases reported within 6 months. However, implementation of a new reporting system in 2007 may have led to differential reporting within these categories as providers serving various populations reported at different rates at the beginning of the new reporting system. As such, caution should be exercised when considering changes in HIV diagnosis trends for 2009.

Table 1. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts¹ 2000–2009²					
	Male		Female		Total
	N	%	N	%	
2000	833	70%	360	30%	1,193
2001	699	70%	299	30%	998
2002	715	68%	341	32%	1,056
2003	641	68%	302	32%	943
2004	651	71%	272	29%	923
2005	632	73%	233	27%	865
2006	545	72%	211	28%	756
2007	457	72%	179	28%	636
2008	458	74%	161	26%	619
2009	427	75%	140	25%	567

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

	White NH		Black NH		Hispanic/ Latino		API		Other/Und.		Total
	N	%	N	%	N	%	N	%	N	%	
2000	462	39%	420	35%	280	23%	26	2%	5	<1%	1,193
2001	412	41%	326	33%	233	23%	24	2%	3	<1%	998
2002	405	38%	371	35%	251	24%	23	2%	6	1%	1,056
2003	380	40%	318	34%	226	24%	12	1%	7	1%	943
2004	363	39%	304	33%	239	26%	13	1%	4	<1%	923
2005	345	40%	290	34%	213	25%	17	2%	0	0%	865
2006	324	43%	227	30%	187	25%	14	2%	4	1%	756
2007	261	41%	203	32%	159	25%	12	2%	1	<1%	636
2008	254	41%	205	33%	135	22%	20	3%	5	1%	619
2009	228	40%	187	33%	139	25%	12	2%	1	<1%	567

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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.

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 1/1/11

Table 3. Males diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/ Latino		API		Other/Und.		Total
	N	%	N	%	N	%	N	%	N	%	
2000	383	46%	235	28%	187	22%	24	3%	4	<1%	833
2001	336	48%	178	25%	163	23%	19	3%	3	<1%	699
2002	333	47%	196	27%	166	23%	17	2%	3	<1%	715
2003	319	50%	166	26%	143	22%	8	1%	5	1%	641
2004	316	49%	166	25%	156	24%	10	2%	3	<1%	651
2005	306	48%	164	26%	148	23%	14	2%	0	0%	632
2006	280	51%	117	21%	134	25%	11	2%	3	1%	545
2007	219	48%	118	26%	111	24%	8	2%	1	<1%	457
2008	225	49%	119	26%	93	20%	17	4%	4	1%	458
2009	199	47%	117	27%	100	23%	11	3%	0	0%	427

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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.

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 1/1/11

Table 4. Females diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/ Latina		API		Other/Und.		Total
	N	%	N	%	N	%	N	%	N	%	
2000	79	22%	185	51%	93	26%	2	1%	1	<1%	360
2001	76	25%	148	49%	70	23%	5	2%	0	0%	299
2002	72	21%	175	51%	85	25%	6	2%	3	1%	341
2003	61	20%	152	50%	83	27%	4	1%	2	1%	302
2004	47	17%	138	51%	83	31%	3	1%	1	<1%	272
2005	39	17%	126	54%	65	28%	3	1%	0	0%	233
2006	44	21%	110	52%	53	25%	3	1%	1	<1%	211
2007	42	23%	85	47%	48	27%	4	2%	0	0%	179
2008	29	18%	86	53%	42	26%	3	2%	1	1%	161
2009	29	21%	70	50%	39	28%	1	1%	1	1%	140

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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.

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 1/1/11

Table 5. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	749	63%	133	11%	311	26%	1,193
2001	615	62%	107	11%	276	28%	998
2002	616	58%	97	9%	343	32%	1,056
2003	573	61%	93	10%	277	29%	943
2004	566	61%	98	11%	259	28%	923
2005	517	60%	75	9%	273	32%	865
2006	471	62%	64	8%	221	29%	756
2007	381	60%	53	8%	202	32%	636
2008	384	62%	52	8%	183	30%	619
2009	349	62%	46	8%	172	30%	567

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.

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. Males diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	560	67%	94	11%	179	21%	833
2001	454	65%	77	11%	168	24%	699
2002	460	64%	63	9%	192	27%	715
2003	442	69%	52	8%	147	23%	641
2004	452	69%	61	9%	138	21%	651
2005	419	66%	51	8%	162	26%	632
2006	367	67%	47	9%	131	24%	545
2007	301	66%	36	8%	120	26%	457
2008	319	70%	32	7%	107	23%	458
2009	289	68%	31	7%	107	25%	427

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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-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.

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. Females diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹ 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	189	53%	39	11%	132	37%	360
2001	161	54%	30	10%	108	36%	299
2002	156	46%	34	10%	151	44%	341
2003	131	43%	41	14%	130	43%	302
2004	114	42%	37	14%	121	44%	272
2005	98	42%	24	10%	111	48%	233
2006	104	49%	17	8%	90	43%	211
2007	80	45%	17	9%	82	46%	179
2008	65	40%	20	12%	76	47%	161
2009	60	43%	15	11%	65	46%	140

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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-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.

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 exposure mode and year of diagnosis: 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	352	30%	262	22%	30	3%	199	17%	21	2%	124	10%	205	17%	1,193
2001	308	31%	195	20%	29	3%	171	17%	15	2%	100	10%	180	18%	998
2002	325	31%	194	18%	26	2%	183	17%	7	1%	121	11%	200	19%	1,056
2003	314	33%	150	16%	26	3%	124	13%	13	1%	132	14%	184	20%	943
2004	302	33%	141	15%	23	2%	123	13%	12	1%	117	13%	205	22%	923
2005	336	39%	115	13%	22	3%	106	12%	5	1%	97	11%	184	21%	865
2006	316	42%	93	12%	15	2%	93	12%	5	1%	95	13%	139	18%	756
2007	244	38%	83	13%	19	3%	75	12%	4	1%	71	11%	140	22%	636
2008	259	42%	56	9%	25	4%	77	12%	4	1%	66	11%	132	21%	619
2009	241	43%	33	6%	14	2%	62	11%	2	<1%	61	11%	154	27%	567

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 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 1/1/11

Note: The category of “presumed heterosexual” is used in Massachusetts to re-assign females who are reported with an exposure of heterosexual sex, but only with a partner of unknown HIV status or behavioral risk. Massachusetts uses the category of presumed heterosexual to distinguish these female cases from other undetermined cases about which we know less. Prior to January 1, 2011, the presumed heterosexual category was also used to report HIV data in males. The rationale for the application of the presumed heterosexual exposure mode category to females only has been addressed in the MDPH OHA report “Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts.” (2010) http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf. Nationally, the Centers for Disease Control and Prevention categorize “presumed heterosexual” cases as “no identified risk” (NIR). As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual, as it is still not clear what the exposure risk was for females in this category. Although a person may not report other risk behaviors, such as injection drug use to a health care provider, it does not exclude the possibility that an individual has experienced these other risks. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a limited patient-provider relationship or stigma.

Table 9. Males diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Undeter- mined ³		To- tal
	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	352	42%	184	22%	30	4%	65	8%	12	1%	190	23%	833
2001	308	44%	134	19%	29	4%	71	10%	6	1%	151	22%	699
2002	325	45%	136	19%	26	4%	57	8%	5	1%	166	23%	715
2003	314	49%	102	16%	26	4%	42	7%	10	2%	147	23%	641
2004	302	46%	95	15%	23	4%	48	7%	5	1%	178	27%	651
2005	336	53%	85	13%	22	3%	32	5%	0	0%	157	25%	632
2006	316	58%	50	9%	15	3%	41	8%	2	<1%	121	22%	545
2007	244	53%	54	12%	19	4%	25	5%	2	<1%	113	25%	457
2008	259	57%	34	7%	25	5%	24	5%	4	1%	112	24%	458
2009	241	56%	20	5%	14	3%	21	5%	1	<1%	130	30%	427

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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 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
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. Females diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2000–2009²

	IDU		HTSX		Other		Pres. HTSX ³		Undeter-mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N
2000	78	22%	134	37%	9	3%	124	34%	15	4%	360
2001	61	20%	100	33%	9	3%	100	33%	29	10%	299
2002	58	17%	126	37%	2	1%	121	35%	34	10%	341
2003	48	16%	82	27%	3	1%	132	44%	37	12%	302
2004	46	17%	75	28%	7	3%	117	43%	27	10%	272
2005	30	13%	74	32%	5	2%	97	42%	27	12%	233
2006	43	20%	52	25%	3	1%	95	45%	18	9%	211
2007	29	16%	50	28%	2	1%	71	40%	27	15%	179
2008	22	14%	53	33%	0	0%	66	41%	20	12%	161
2009	13	9%	41	29%	1	1%	61	44%	24	17%	140

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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 those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up.

IDU = 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 by age at diagnosis: Massachusetts¹, 2000–2009²

Year	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
2000	15	1%	27	2%	62	5%	132	11%	214	18%	283	24%	215	18%	111	9%	68	6%	31	3%	35	3%	1,193
2001	11	1%	16	2%	54	5%	105	11%	194	19%	227	23%	172	17%	126	13%	56	6%	14	1%	23	2%	998
2002	4	<1%	22	2%	72	7%	126	12%	191	18%	225	21%	181	17%	107	10%	65	6%	36	3%	27	3%	1,056
2003	9	1%	16	2%	56	6%	96	10%	158	17%	203	22%	160	17%	125	13%	64	7%	27	3%	29	3%	943
2004	10	1%	18	2%	62	7%	98	11%	137	15%	181	20%	163	18%	121	13%	67	7%	37	4%	29	3%	923
2005	5	1%	9	1%	62	7%	93	11%	141	16%	149	17%	177	20%	119	14%	55	6%	33	4%	22	3%	865
2006	4	1%	19	3%	59	8%	91	12%	86	11%	135	18%	133	18%	111	15%	57	8%	38	5%	23	3%	756
2007	3	<1%	11	2%	55	9%	67	11%	77	12%	113	18%	107	17%	99	16%	50	8%	27	4%	27	4%	636
2008	4	1%	12	2%	52	8%	95	15%	82	13%	65	11%	100	16%	89	14%	63	10%	32	5%	25	4%	619
2009	2	<1%	12	2%	54	10%	58	10%	79	14%	77	14%	80	14%	93	16%	54	10%	28	5%	30	5%	567

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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.

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

Table 12. Males diagnosed with HIV infection by age at diagnosis: Massachusetts¹, 2000–2009²

Year	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
2000	7	1%	12	1%	31	4%	79	9%	144	17%	202	24%	164	20%	87	10%	53	6%	28	3%	26	3%	833
2001	4	1%	10	1%	25	4%	72	10%	130	19%	174	25%	123	18%	89	13%	43	6%	13	2%	16	2%	699
2002	2	<1%	11	2%	41	6%	76	11%	118	17%	162	23%	132	18%	75	10%	50	7%	25	3%	23	3%	715
2003	6	1%	8	1%	33	5%	53	8%	108	17%	152	24%	113	18%	80	12%	50	8%	20	3%	18	3%	641
2004	4	1%	8	1%	42	6%	62	10%	89	14%	145	22%	118	18%	87	13%	42	6%	31	5%	23	4%	651
2005	0	0%	6	1%	39	6%	68	11%	100	16%	115	18%	137	22%	92	15%	39	6%	22	3%	14	2%	632
2006	2	<1%	9	2%	37	7%	60	11%	61	11%	104	19%	103	19%	83	15%	44	8%	24	4%	18	3%	545
2007	1	<1%	4	1%	42	9%	50	11%	47	10%	85	19%	78	17%	73	16%	41	9%	17	4%	19	4%	457
2008	4	1%	10	2%	44	10%	70	15%	55	12%	45	10%	75	16%	69	15%	46	10%	23	5%	17	4%	458
2009	1	<1%	8	2%	45	11%	45	11%	57	13%	58	14%	58	14%	77	18%	38	9%	18	4%	22	5%	427

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 13. Females diagnosed with HIV infection by age at diagnosis: Massachusetts¹, 2000–2009²

Year	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	8	2%	15	4%	31	9%	53	15%	70	19%	81	23%	51	14%	24	7%	15	4%	3	1%	9	3%	360
2001	7	2%	6	2%	29	10%	33	11%	64	21%	53	18%	49	16%	37	12%	13	4%	1	<1%	7	2%	299
2002	2	1%	11	3%	31	9%	50	15%	73	21%	63	18%	49	14%	32	9%	15	4%	11	3%	4	1%	341
2003	3	1%	8	3%	23	8%	43	14%	50	17%	51	17%	47	16%	45	15%	14	5%	7	2%	11	4%	302
2004	6	2%	10	4%	20	7%	36	13%	48	18%	36	13%	45	17%	34	13%	25	9%	6	2%	6	2%	272
2005	5	2%	3	1%	23	10%	25	11%	41	18%	34	15%	40	17%	27	12%	16	7%	11	5%	8	3%	233
2006	2	1%	10	5%	22	10%	31	15%	25	12%	31	15%	30	14%	28	13%	13	6%	14	7%	5	2%	211
2007	2	1%	7	4%	13	7%	17	9%	30	17%	28	16%	29	16%	26	15%	9	5%	10	6%	8	4%	179
2008	0	0%	2	1%	8	5%	25	16%	27	17%	20	12%	25	16%	20	12%	17	11%	9	6%	8	5%	161
2009	1	1%	4	3%	9	6%	13	9%	22	16%	19	14%	22	16%	16	11%	16	11%	10	7%	8	6%	140

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 14. People diagnosed with HIV infection by Health Service Region (HSR)¹: Massachusetts¹, 2000–2009²

Year	Boston		Central		Metro West		Northeast		Southeast		Western		Prisons ³		Total ⁴
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	397	33%	92	8%	166	14%	165	14%	167	14%	142	12%	64	5%	1,193
2001	314	31%	69	7%	122	12%	161	16%	161	16%	126	13%	45	5%	998
2002	351	33%	111	11%	145	14%	165	16%	150	14%	105	10%	29	3%	1,056
2003	299	32%	89	9%	136	14%	158	17%	112	12%	117	12%	32	3%	943
2004	268	29%	83	9%	126	14%	156	17%	118	13%	129	14%	42	5%	923
2005	278	32%	68	8%	136	16%	135	16%	108	12%	103	12%	37	4%	865
2006	229	30%	73	10%	99	13%	126	17%	112	15%	91	12%	26	3%	756
2007	185	29%	53	8%	105	17%	96	15%	103	16%	77	12%	17	3%	636
2008	185	30%	48	8%	103	17%	111	18%	87	14%	61	10%	24	4%	619
2009	169	30%	52	9%	101	18%	88	16%	93	16%	48	8%	15	3%	567

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 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁴ Totals include 2 people of unknown HSR

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

People diagnosed with HIV infection from 2007–2009

Table 15. People diagnosed with HIV infection by gender and race/ethnicity: Massachusetts¹, 2007–2009²

Race/Ethnicity:	Male		Female	
	N	%	N	%
White, non-Hispanic	643	48%	100	21%
Black, non-Hispanic	354	26%	241	50%
Hispanic/Latino	304	23%	129	27%
Asian/Pacific Islander	36	3%	8	2%
Other/Unknown	5	<1%	2	<1%
Total	1,342	100%	480	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 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

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

Table 16. People diagnosed with HIV infection by gender and exposure mode: Massachusetts¹, 2007–2009²

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	744	55%	N/A	N/A
Injection drug use (IDU)	108	8%	64	13%
MSM/IDU	58	4%	N/A	N/A
Heterosexual sex	70	5%	144	30%
Other	7	1%	3	1%
Total undetermined/other	355	26%	269	56%
• Presumed Heterosexual Sex ²	N/A	N/A	198	41%
• Undetermined ³	355	26%	71	15%
Total	1,342	100%	480	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 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 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.

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 17. People diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2007–2009³

Race/Ethnicity:	US		Puerto Rico/ US Dependency ⁴		Non-US		Total
	N	%	N	%	N	%	N
White NH	685	92%	1	<1%	57	8%	743
Black NH	274	46%	2	<1%	319	54%	595
Hispanic/Latino	139	32%	148	34%	146	34%	433
API	11	25%	0	0%	33	75%	44

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 Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

³ 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.

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.

NH = Non-Hispanic, API = Asian/Pacific Islander

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

Table 18. Males diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2007–2009³

Race/Ethnicity:	US		Puerto Rico/US Dependency ⁴		Non-US		Total
	N	%	N	%	N	%	N
White NH	594	92%	1	<1%	48	7%	643
Black NH	202	57%	2	1%	150	42%	354
Hispanic/Latino	100	33%	96	32%	108	36%	304
API	8	22%	0	0%	28	78%	36
All Males⁵	909	68%	99	7%	334	25%	1,342

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

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 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.

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 Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

NH = Non-Hispanic, API = Asian/Pacific Islander

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

Table 19. Females diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2007–2009³

Race/Ethnicity:	US		Puerto Rico/US Dependency ⁴		Non-US		Total
	N	%	N	%	N	%	N
White NH	91	91%	0	0%	9	9%	100
Black NH	72	30%	0	0%	169	70%	241
Hispanic/Latina	39	30%	52	40%	38	29%	129
All Females⁵	205	43%	52	11%	223	46%	480

¹ Data for American Indian/Alaska Native, Asian/Pacific Islander and Other/Unknown race/ethnicity are not presented due to small numbers.

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 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.

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 Totals include people of American Indian/Alaska Native, Asian/Pacific Islander and Other/Unknown race/ethnicity. NH = Non-Hispanic, API = Asian/Pacific Islander

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

Table 20. People diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2007–2009³

Exposure Mode:	White NH		Black NH		Hispanic/ Latino		API	
	N	%	N	%	N	%	N	%
Male-to-male sex (MSM)	475	64%	109	18%	136	31%	22	50%
Injection drug use (IDU)	67	9%	28	5%	73	17%	-- ⁶	-- ⁶
MSM/IDU	44	6%	5	1%	9	2%	0	0%
Heterosexual sex	40	5%	102	17%	70	16%	-- ⁶	-- ⁶
Other	2	<1%	7	1%	1	<1%	0	0%
Total undetermined/other	115	15%	344	58%	144	33%	-- ⁶	43%
• Presumed heterosexual sex ⁴	28	4%	127	21%	38	9%	-- ⁶	-- ⁶
• Undetermined ⁵	87	12%	217	36%	106	24%	-- ⁶	-- ⁶
Total	743	100%	595	100%	433	100%	44	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

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 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.

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 Percentages calculated from a numerator of less than 5 and a denominator of less than 100 are not presented.

NH = Non-Hispanic, API = Asian/Pacific Islander

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

Table 21. Males diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2007–2009³

Exposure Mode:	White NH		Black NH		Hispanic/Latino		API	
	N	%	N	%	N	%	N	%
Male-to-male sex (MSM)	475	74%	109	31%	136	45%	22	61%
Injection drug use (IDU)	34	5%	21	6%	49	16%	-- ⁴	-- ⁴
MSM/IDU	44	7%	5	1%	9	3%	0	0%
Heterosexual sex	11	2%	36	10%	23	8%	0	0%
Other	2	<1%	4	1%	1	<1%	-- ⁴	-- ⁴
Undetermined ⁵	77	12%	179	51%	86	28%	12	33%
Total	643	100%	354	100%	304	100%	36	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.
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 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.
⁴ Percentages calculated from a numerator of less than 5 and a denominator of less than 100 are not presented.
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.
 NH = Non-Hispanic, API = Asian/Pacific Islander
 Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 22. Females diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2007–2009³

Exposure Mode:	White NH		Black NH		Hispanic/Latina	
	N	%	N	%	N	%
Injection drug use	33	33%	7	3%	24	19%
Heterosexual sex	29	29%	66	27%	47	36%
Other	0	0%	3	1%	0	0%
Total undetermined/other	38	38%	165	68%	58	45%
• Presumed heterosexual sex ⁴	28	28%	127	53%	38	29%
• Undetermined ⁵	10	10%	38	16%	20	16%
Total	100	100%	241	100%	129	100%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

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 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.

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

⁵ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up.

NH = Non-Hispanic, API = Asian/Pacific Islander

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

Table 23. People diagnosed with HIV infection by Health Service Region (HSR)¹ and gender: Massachusetts², 2007–2009³

Health Service Region:	Male		Female		Total
	N	%	N	%	N
Boston HSR	432	80%	107	20%	539
Central HSR	95	62%	58	38%	153
Metro West HSR	224	72%	85	28%	309
Northeast HSR	192	65%	103	35%	295
Southeast HSR	216	76%	67	24%	283
Western HSR	134	72%	52	28%	186
Prisons ⁴	48	86%	8	14%	56
Mass. Total	1,342	74%	480	26%	1,822

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

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 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

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 24. Percentage distribution of people diagnosed with HIV infection by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts², 2007–2009³

	White NH	Black NH	Hispanic/ Latino	API	Other/Und.	Total
Boston HSR	39%	40%	19%	2%	<1%	539
Central HSR	39%	34%	24%	3%	0%	153
Metro West HSR	44%	37%	16%	4%	0%	309
Northeast HSR	32%	29%	34%	4%	<1%	295
Southeast HSR	54%	27%	17%	1%	1%	283
Western HSR	38%	20%	39%	1%	1%	186
Prisons ⁴	32%	27%	38%	2%	2%	56
Mass. Total	41%	33%	24%	2%	<1%	1,822

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

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 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.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

NH = Non-Hispanic, API = Asian/Pacific Islander, Other/Und. = Other/Undetermined

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

Table 25. Percent of people diagnosed with HIV infection by Health Service Region (HSR)¹ and exposure mode: Massachusetts², 2007–2009³

Health Service Region:	MSM	IDU	MSM/ IDU	HTSX	Other	Pres. HTSX ⁴	Undet. ⁵	Total
Boston HSR	50%	7%	4%	9%	1%	8%	22%	539
Central HSR	32%	13%	2%	15%	2%	15%	21%	153
Metro West HSR	41%	5%	4%	13%	1%	13%	24%	309
Northeast HSR	34%	8%	2%	13%	0%	15%	28%	295
Southeast HSR	42%	9%	3%	13%	0%	11%	22%	283
Western HSR	40%	13%	1%	12%	1%	11%	23%	186
Prison ⁶	7%	46%	11%	11%	0%	2%	23%	56
Mass. Total	41%	9%	3%	12%	1%	11%	23%	1,822

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

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 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.

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 HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility

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; Undet. = Undetermined

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

Profile of people testing for HIV at publicly-funded sites

Technical Notes:

Program utilization data for HIV/AIDS prevention services describe people who utilize these services and who may be at risk for HIV infection. The following tables contain data on clients utilizing state-funded counseling and testing sites. These settings include community health centers, hospitals, jails and sexually transmitted disease clinics. An estimated 30% of people who get tested for HIV infection in Massachusetts get tested at one of these sites; therefore, these data are not representative of all people testing for HIV infection in Massachusetts. It is important to note that the data presented in this section represent tests performed and not individual clients; therefore the data may contain more than one test for some people.

Table 26. Number and percent of positive HIV tests¹ by gender, race/ethnicity, age of client and risk category: Massachusetts, 2009			
HIV Tests by Gender of Client:	Total Tests	Total Positive Results²	Percent Positive
Male	36,227	403	1.1%
Female	23,394	199	0.9%
Transgender	128	1	0.8%
Unknown ²	801	12	1.5%
HIV Tests by Race/Ethnicity of Client:	Total Tests	Total Positive Results	Percent Positive
White, non-Hispanic	21,468	192	0.9%
Black, non-Hispanic	17,014	187	1.1%
Latino/Hispanic	16,609	193	1.2%
Asian	1,338	7	0.5%
Native Hawaiian/Pacific Islander	713	0	0.0%
American Indian/Alaska Native	181	0	0.0%
Multi-race	446	7	1.6%
Unknown ³	2,781	29	1.0%
HIV Tests by Age of Client, in Years:	Total Tests	Total Positive Results	Percent Positive
Under 13	231	0	0.0%
13 to 19	4,637	22	0.5%
20 to 24	11,662	64	0.5%
25 to 29	10,750	57	0.5%
30 to 34	7,802	80	1.0%
35 to 39	6,440	68	1.1%
40 to 44	5,490	94	1.7%
45 to 49	4,733	89	1.9%
50 to 54	3,199	64	2.0%
55 to 59	1,755	30	1.7%
60 +	1,863	24	1.3%
Unknown ³	1,988	23	1.2%
Total⁴	60,550	615	1.0%
¹ Tests performed at publicly funded HIV counseling and testing sites ² Positive tests include both new and previously known positive tests based on client self report ³ Unknown indicates that the data were missing or unreadable ⁴ Data exclude xx HIV tests done on a new form currently being piloted Data Source: MDPH Office of HIV/AIDS HIV Counseling and Testing Program; data as of			

Technical Notes:

The following tables include data about number of sexual partners and condom use as reported by Massachusetts residents through anonymous telephone interviews in 2007 and 2008. This ongoing random-digit-dial telephone survey, the Behavioral Risk Factor Surveillance System (BRFSS), covers a broad range of topic areas (including sexually-related risk) and is part of a CDC-funded national survey program.

Sex with multiple partners has historically been correlated with other predictors of HIV transmission. Reducing numbers of sexual partners has been an HIV/STD prevention intervention strategy, as has increasing condom use. Data regarding the prevalence of each of these behaviors follows.

Table 27. Number of sexual partners in past year¹ among adult BRFSS respondents ages 18–64 years: Massachusetts, 2008–2009				
	0 Partners	1 Partner	2 + Partners	N²
Total:	17%	76%	7%	7,327
Age in Years:	0 Partners	1 Partner	2 + Partners	N
18–24	29.1%	51.2%	19.7%	383
25–34	8.4%	81.3%	10.4%	1,031
35–44	6.2%	89.7%	4.0%	1,660
45–64	21.8%	75.5%	2.7%	4,253
Sex:	0 Partners	1 Partner	2 + Partners	N
Male	14.7%	74.9%	10.4%	2,790
Female	18.8%	76.9%	4.3%	4,537
Race/Ethnicity:	0 Partners	1 Partner	2 + Partners	N
White, non-Hispanic	15.9%	77.7%	6.4%	5,807
Black, non-Hispanic	18.0%	65.3%	16.8%	417
Hispanic	22.3%	67.4%	10.2%	783
Asian	16.8%	77.5%	5.7%	127
¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex. ² Only respondents with known values are included in this table. Column sub-totals may not equal overall total due to missing values. Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008–2009				

Table 28. Number of sexual partners in the past year¹, male BRFSS respondents ages 18–64: Massachusetts, 2008–2009				
	0 Partners	1 Partner	2+ Partners	N²
Total Males	15%	75%	10%	2,790
Age in Years:	0 Partners	1 Partner	2+ Partners	N
18–24	32.1%	41.8%	26.1%	168
25–34	7.0%	76.3%	16.7%	351
35–44	5.5%	88.1%	6.3%	616
45–64	17.0%	79.1%	4.0%	1,636
Race/Ethnicity³:	0 Partners	1 Partner	2+ Partners	N
White, non-Hispanic	14.1%	77.3%	8.6%	2,254
Black, non-Hispanic	11.9%	62.1%	26.0%	149
Hispanic	19.4%	63.1%	17.5%	234
Sex of Partner⁴:	0 Partners	1 Partner	2+ Partners	N
Same Sex	Not Applicable	82.3%	17.7%	112
Opposite Sex	Not Applicable	88.4%	11.6%	2,167
<p>¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex.</p> <p>² Only respondents with known values are included in this table. Column sub-totals may not equal the overall total due to missing values.</p> <p>³ Data for Asian respondents is not presented due to small numbers.</p> <p>⁴ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year</p> <p>Data source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008–2009</p>				

Table 29. Number of sexual partners in the past year¹, female BRFSS respondents ages 18–64 Massachusetts, 2008–2009				
	0 Partners	1 Partner	2+ Partners	N²
Total Females	19%	77%	4%	4,537
Age in Years:	0 Partners	1 Partner	2+ Partners	N
18–24	26.3%	59.7%	14.0%	215
25–34	9.6%	85.6%	4.8%	610
35–44	6.9%	91.4%	1.7%	1,044
45–64	26.5%	72.1%	1.4%	2,617
Race/Ethnicity³:	0 Partners	1 Partner	2+ Partners	N
White, non-Hispanic	17.6%	78.0%	4.4%	3,553
Black, non-Hispanic	24.9%	68.8%	6.3%	268
Hispanic	25.1%	71.5%	3.3%	549
Sex of Partner⁴:	0 Partners	1 Partner	2+ Partners	N
Same sex	Not Applicable	92.1%	7.9%	89
Opposite sex	Not Applicable	95.3%	4.7%	3,164
¹ “Number of sexual partners in past year” is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex. ² Only respondents with known values are included in this table. Column sub-totals may not equal overall total due to missing values. ³ Data for Asian respondents is not presented due to small numbers. ⁴ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year Data source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008–2009				

Table 30. Condom use at last sex, BRFSS respondents ages 18–64¹: Massachusetts, 2008–2009		
	% Used Condom	Total N²
Total:	23.4%	5,568
Sex:	% Used Condom	Total N
Male	27.5%	2,308
Female	19.2%	3,260
Race/Ethnicity³:	% Used Condom	Total N
White, non-Hispanic	20.7%	4,464
Black, non-Hispanic	44.5%	302
Hispanic	28.2%	562
Number of Partners:	% Used Condom	Total N
1	19.6%	5,142
2	51.8%	213
3+	64.6%	168
Sex of Partner:	% Used Condom	Total N
Male Respondent Reporting Sex with Male	29.2%	116
Male Respondent Reporting Sex with Female	27.3%	2,177
Female Respondent Reporting Sex with Female	20.4%	88
Female Respondent Reporting Sex with Male	19.3%	3,160
¹ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year ² Only respondents with known values are included in this table; Column sub-totals may not equal overall total due to missing values ³ Data for Asian respondents is not presented due to small numbers Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008–2009		

Table 31. Ever tested for HIV¹, BRFSS respondents age 18–64: Massachusetts, 1994–2009

Year:	Total N ²	% Ever Tested for HIV
1994	2,595	30.0%
1995	2,429	36.7%
1996	2,659	38.7%
1997	2,718	46.1%
1998	3,840	42.3%
1999	5,605	46.2%
2000	5,618	47.8%
2001	5,787	46.4%
2002	5,906	47.0%
2003	6,281	46.7%
2004	6,454	46.2%
2005	6,508	41.4%
2006	8,751	36.8%
2007	13,801	43.6%
2008	13,534	40.6%
2009	10,358	43.3%

¹ This question was one of the core federal questions posed to all respondents to the annual BRFSS between the ages of 18-64

² Respondents with missing values for this item were not included in this table.

Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 1994–2009

Table 32. Ever tested for HIV by number of sexual partners in past year¹, BRFSS respondents age 18–64: Massachusetts, 2008–2009

	Total N ²	% Ever Tested for HIV
Total:	23,892	41.8%
Number of Partners:	Total N	% Ever Tested for HIV
0	1,673	24.2%
1	5,035	42.4%
2	210	58.4%
3+	169	64.6%

¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex.

² Total number of participants that responded to both number of sexual partners and ever tested for HIV

Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008–2009