

Detailed Data Tables: People Born Outside the US

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, 2013, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. 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 previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual 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. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	603	58%	94	9%	346	33%	1,043
2003	573	61%	81	9%	279	30%	933
2004	542	60%	98	11%	263	29%	903
2005	521	60%	77	9%	270	31%	868
2006	479	62%	57	7%	242	31%	778
2007	448	62%	57	8%	221	30%	726
2008	435	61%	67	9%	214	30%	716
2009	410	61%	48	7%	211	32%	669
2010	402	62%	44	7%	207	32%	653
2011	404	61%	39	6%	214	33%	657

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-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 1/1/13

Table 2. Males diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	448	63%	59	8%	199	28%	706
2003	442	70%	39	6%	148	24%	629
2004	434	68%	63	10%	140	22%	637
2005	417	66%	53	8%	163	26%	633
2006	373	67%	40	7%	144	26%	557
2007	346	67%	39	8%	134	26%	519
2008	359	69%	41	8%	123	24%	523
2009	340	67%	31	6%	134	27%	505
2010	328	70%	34	7%	107	23%	469
2011	321	68%	27	6%	125	26%	473

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-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 1/1/13

Table 3. Females diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹ 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	155	46%	35	10%	147	44%	337
2003	131	43%	42	14%	131	43%	304
2004	108	41%	35	13%	123	46%	266
2005	104	44%	24	10%	107	46%	235
2006	106	48%	17	8%	98	44%	221
2007	102	49%	18	9%	87	42%	207
2008	76	39%	26	13%	91	47%	193
2009	70	43%	17	10%	77	47%	164
2010	74	40%	10	5%	100	54%	184
2011	83	45%	12	7%	89	48%	184

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-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 1/1/13

Table 4. People living with HIV/AIDS on December 31, 2012 by place of birth: Massachusetts¹

Place of Birth:	HIV/AIDS	
	N	%
US	12,166	66%
Puerto Rico/US Dependency ²	1,929	10%
Non-US	4,365	24%
Total³	18,460	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 Ninety-eight percent of people living with HIV/AIDS 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 2% were born in an unknown dependency.

³ 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013.

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

Table 5. Non-US born people diagnosed with HIV infection by gender and region of birth: Massachusetts^{1, 2}, 2009–2011²

Region of Birth:	Male		Female		State Total	
	N	%	N	%	N	%
Caribbean Basin	91	25%	96	36%	187	30%
Central & South America	119	33%	24	9%	143	23%
Central & South Asia	15	4%	-- ³	-- ³	16	3%
North Africa & Middle East	6	2%	0	0%	-- ³	-- ³
North America & Europe	29	8%	-- ³	-- ³	33	5%
Pacific Rim	3	1%	-- ³	-- ³	-- ³	-- ³
Southeast Asia	16	4%	5	2%	21	3%
Sub-Saharan Africa	74	20%	132	50%	206	33%
Unspecified	13	4%	-- ³	-- ³	16	3%
Total	366	100%	266	100%	632	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 Numbers less than five for 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 1/1/13

Table 6. Non-US born people living with HIV/AIDS on December 31, 2012 by gender and region of birth: Massachusetts¹

Region of Birth:	Male		Female		State Total	
	N	%	N	%	N	%
Caribbean Basin	773	30%	655	36%	1,428	33%
Central & South America	770	30%	192	11%	962	22%
Central & South Asia	58	2%	8	<1%	66	2%
North Africa & Middle East	22	1%	-- ²	-- ²	25	1%
North America & Europe	211	8%	42	2%	253	6%
Pacific Rim	11	<1%	-- ²	-- ²	15	<1%
Southeast Asia	118	5%	39	2%	157	4%
Sub-Saharan Africa	548	21%	827	46%	1,375	32%
Unspecified	53	2%	31	2%	84	2%
Total³	2,564	100%	1,801	100%	4,365	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 Numbers less than five for populations of less than 50,000 are suppressed for the assurance of confidentiality.

³ 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013

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

Table 7. Non-US born people diagnosed with HIV infection by leading countries of birth: Massachusetts¹, 2009–2011²

Rank	Country of Birth	Number of HIV Dx ³ among Non-US	% of Total HIV Diagnoses among Non-US
1	Haiti	111	18%
2	Brazil	60	9%
3	Dominican Republic	57	9%
4	Cape Verde	40	6%
5	Uganda	36	6%
6	Ghana	21	3%
7	Kenya	21	3%
8	El Salvador	20	3%
9	Ethiopia	17	3%
9	Guatemala	17	3%
	Total	632	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.

³HIV Dx = HIV diagnoses

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

Table 8. People diagnosed with HIV infection by Health Service Region (HSR)¹ of residence at diagnosis and place of birth: Massachusetts², 2009–2011³

HSR	US		Puerto Rico/ US Dependency ⁴		Non-US		Total
	N	%	N	%	N	%	N
Boston HSR	388	64%	29	5%	187	31%	604
Central HSR	95	56%	15	9%	61	36%	171
Metro West HSR	177	54%	9	3%	139	43%	325
Northeast HSR	168	52%	22	7%	136	42%	326
Southeast HSR	193	69%	9	3%	76	27%	278
Western HSR	151	74%	35	17%	19	9%	205
Prison ⁵	43	62%	12	17%	14	20%	69
MA Total⁶	1,216	61%	131	7%	632	32%	1,979

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/profile2006/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 Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 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 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. Prison includes only persons who were diagnosed with HIV/AIDS while in a correctional facility

⁵ 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. Prison includes only persons who were diagnosed with HIV/AIDS while in a correctional facility

⁶ Totals include individuals whose Health Service Region of residence is unknown; 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013.

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

Table 9. People living with HIV/AIDS on December 31, 2012 by Health Service Region (HSR)¹ of residence at diagnosis and place of birth: Massachusetts²

HSR	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
Boston HSR	3,957	68%	346	6%	1,527	26%	5,830
Central HSR	977	61%	284	18%	337	21%	1,598
Metro West HSR	1,611	61%	74	3%	943	36%	2,628
Northeast HSR	1,629	56%	367	13%	896	31%	2,892
Southeast HSR	1,895	75%	151	6%	474	19%	2,520
Western HSR	1,411	69%	498	25%	123	6%	2,032
Prison ⁴	682	71%	209	22%	65	7%	956
MA Total⁵	12,166	66%	1,929	10%	4,365	24%	18,460

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/profile2006/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 Ninety-four percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, and 6% were born in an unknown dependency

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. Prison includes only persons who were diagnosed with HIV/AIDS while in a correctional facility

⁵ Totals include individuals whose Health Service Region of residence is unknown; 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013

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

Table 10. Percentage distribution of Non-US born people diagnosed with HIV infection by world region of birth¹ and health service region:² Massachusetts³, 2009–2011⁴

	Caribbean Basin	C ⁵ &S ⁶ America	N ⁷ America & Europe	Southeast Asia	Sub-Saharan Africa
Boston HSR	36%	35%	21%	-- ⁸	22%
Central HSR	4%	-- ⁸	-- ⁸	0%	19%
Metro West HSR	14%	29%	33%	-- ⁸	21%
Northeast HSR	29%	17%	-- ⁸	43%	19%
Southeast HSR	13%	9%	18%	-- ⁸	14%
Western HSR	-- ⁸	-- ⁸	-- ⁸	-- ⁸	-- ⁸
Prison	-- ⁸	5%	0%	-- ⁸	-- ⁸
Total N⁹	187	143	33	21	206

¹ World Regions of Central & South Asia, North Africa & Middle East, and Pacific Rim are not included in this analysis because small numbers make the data difficult to interpret

² 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.

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.

⁴ 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.

⁵ C=Central

⁶ S=South

⁷ N=North

⁸ Numbers less than five for populations of less than 50,000 are suppressed for the assurance of confidentiality.

⁹ Totals include individuals whose Health Service Region of residence is unknown.

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

Table 11. Percentage distribution of non-US born people living with HIV/AIDS on December 31, 2012 by world region of birth¹ and health service region:² Massachusetts³

	Caribbean Basin	C ⁴ &S ⁵ America	N ⁶ America & Europe	Southeast Asia	Sub-Saharan Africa
Boston HSR	43%	43%	33%	25%	23%
Central HSR	4%	-- ⁸	3%	10%	13%
Metro West HSR	17%	22%	32%	12%	27%
Northeast HSR	22%	17%	17%	41%	22%
Southeast HSR	10%	9%	9%	-- ⁸	11%
Western HSR	2%	-- ⁸	5%	5%	3%
Prison	2%	-- ⁸	2%	-- ⁸	1%
Total N⁷	1,428	962	66	157	1,375

¹ World Regions of Central & South Asia, North Africa & Middle East, and Pacific Rim are not included in this analysis because small numbers make the data difficult to interpret

² 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.

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.

⁴ C=Central

⁵ S=South

⁶ N=North

⁷ Totals include individuals whose Health Service Region of residence is unknown; 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013

⁸ Numbers less than five for 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 1/1/13

Table 12. Ten cities/towns¹ in Massachusetts² with the highest proportion of HIV infection diagnoses among people born outside the US: 2009–2011³

Rank	City/Town	Number of HIV Dx among Non-US Born	Total Number of HIV Dx	Percent of Total HIV Dx
1	Framingham	16	24	67%
2	Brockton	40	62	65%
3	Everett	13	22	59%
4	Somerville	16	28	57%
5	Lynn	26	46	57%
6	Malden	14	25	56%
7	Waltham	20	36	56%
8	Lawrence	30	55	55%
9	Chelsea	11	23	48%
9	Medford	11	23	48%

¹ Among cities/towns with over 20 reported HIV Infection diagnoses in the years 2009–2011. Note: reflects the city/town of a person's residence at the time of report (not necessarily current residence). People diagnosed while at a correctional facility are not included.

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.

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

Table 13. People diagnosed with HIV infection, place of birth by gender, race/ethnicity and exposure mode: Massachusetts,¹ 2009–2011²

	US Born		Puerto Rico/ US Dependency ³		Non-US Born	
	N	%	N	%	N	%
By Gender:						
Male	989	81%	92	70%	366	58%
Female	227	19%	39	30%	266	42%
By Race/Ethnicity:						
White (non-Hispanic)	691	57%	-- ⁷	-- ⁷	60	9%
Black (non-Hispanic)	328	27%	-- ⁷	-- ⁷	336	53%
Hispanic	170	14%	129	98%	189	30%
Asian/Pacific Islander	19	2%	0	0%	-- ⁷	-- ⁷
Other/Unknown	8	1%	0	0%	-- ⁷	-- ⁷
By Exposure Mode:						
Male Sex with Male (MSM)	641	53%	26	20%	141	22%
Injection Drug Use (IDU)	120	10%	33	25%	9	1%
MSM/IDU	43	4%	-- ⁷	-- ⁷	6	1%
Total Heterosexual Sex (HTSX)	94	8%	31	24%	124	20%
• HTSX w/ an injection drug user	30	2%	9	7%	8	1%
• HTSX w/ bisexual male (females only)	-- ⁷	-- ⁷	0	0%	-- ⁷	-- ⁷
• Other HTSX ⁴	-- ⁷	-- ⁷	0	0%	-- ⁷	-- ⁷
• HTSX w/ a person w/ HIV or AIDS	57	5%	22	17%	112	18%
Blood/Blood products	0	0%	0	0%	-- ⁷	-- ⁷
Pediatric	9	1%	-- ⁷	-- ⁷	-- ⁷	-- ⁷
Total Undetermined	309	25%	36	27%	348	55%
• Presumed HTSX ⁵	56	5%	9	7%	150	24%
• Undetermined ⁶	253	21%	27	21%	198	31%
Total	1,216	100%	131	100%	632	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 Ninety-nine percent of people diagnosed with HIV infection from 2009–2011 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.

⁴ Includes heterosexual sex with a person who received blood/blood products.

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 five for 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 1/1/13

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/eohhs/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 14. People living with HIV/AIDS on December 31, 2012, place of birth by gender, race/ethnicity, and exposure mode: Massachusetts¹

	US born		Puerto Rico/ US Dependency ²		Non-US born	
By Gender:	N	%	N	%	N	%
Male	9,307	77%	1,274	66%	2,564	59%
Female	2,859	23%	655	34%	1,801	41%
By Race/Ethnicity:	N	%	N	%	N	%
White (non-Hispanic)	7,531	62%	14	1%	484	11%
Black (non-Hispanic)	3,002	25%	16	1%	2,498	57%
Hispanic	1,468	12%	1,899	98%	1,139	26%
Asian/Pacific Islander	79	1%	0	0%	230	5%
Other/Unknown	86	1%	0	0%	14	<1%
By Exposure Mode:	N	%	N	%	N	%
Male Sex with Male (MSM)	5,592	46%	202	10%	927	21%
Injection Drug Use (IDU)	2,660	22%	927	48%	166	4%
MSM/IDU	523	4%	67	3%	37	1%
Total Heterosexual Sex (HTSX)	1,249	10%	409	21%	989	23%
• HTSX w/ an injection drug user	575	5%	210	11%	100	2%
• HTSX w/ bisexual male (females only)	35	<1%	-- ⁶	-- ⁶	8	<1%
• HTSX w/ a person w/ HIV or AIDS	27	<1%	-- ⁶	-- ⁶	15	<1%
• Other HTSX ³	612	5%	193	10%	866	20%
Blood/Blood products	-- ⁶	-- ⁶	-- ⁶	-- ⁶	12	<1%
Pediatric	278	2%	19	1%	40	1%
Occupational	-- ⁶	-- ⁶	-- ⁶	-- ⁶	0	0%
Total Undetermined	1,806	15%	303	16%	2,194	50%
• Presumed HTSX ⁴	558	5%	116	6%	926	21%
• Undetermined ⁵	1,248	10%	187	10%	1,268	29%
Total⁷	12,166	100%	1,929	100%	4,365	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 Ninety-six percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, and 3% were born in an unknown dependency.

³ Includes heterosexual sex with a person who received blood/blood products.

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 Numbers less than five for populations of less than 50,000 are suppressed for the assurance of confidentiality.

⁷ 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013.

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

Table 15. Non-US born people diagnosed with HIV infection, gender by mode of exposure and race/ethnicity: Massachusetts,¹ 2009–2011²

Mode of Exposure:	Male		Female	
	N	%	N	%
Male Sex with Male (MSM)	141	39%	N/A ³	N/A
Injection Drug Use (IDU)	7	2%	-- ⁶	-- ⁶
MSM/IDU	6	2%	N/A	N/A
Heterosexual Sex (HTSX)	35	10%	89	33%
Blood/Blood products	-- ⁶	-- ⁶	0	0%
Pediatric	-- ⁶	-- ⁶	-- ⁶	-- ⁶
Total Undetermined	175	48%	173	65%
• Presumed HTSX ⁴	N/A	N/A	150	56%
• Undetermined ⁵	175	48%	23	9%
Race/Ethnicity	N	%	N	%
White (non-Hispanic)	56	15%	-- ⁶	-- ⁶
Black (non-Hispanic)	139	38%	197	74%
Hispanic	135	37%	54	20%
Asian/Pacific Islander	-- ⁶	-- ⁶	8	3%
Other/Unknown	-- ⁶	-- ⁶	-- ⁶	-- ⁶
Total	366	100%	266	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 N/A = Not Applicable

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 Numbers less than five for 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 1/1/13

Table 16. Non-US born people living with HIV/AIDS on December 31, 2012, gender by mode of exposure and race/ethnicity: Massachusetts¹

Mode of Exposure:	Male		Female	
	N	%	N	%
Male Sex with Male (MSM)	927	36%	N/A ²	N/A
Injection Drug Use (IDU)	115	4%	51	3%
MSM/IDU	37	1%	N/A	N/A
Heterosexual Sex (HTSX)	324	13%	665	37%
Other	26	1%	26	1%
Total Undetermined	1,135	44%	1,059	59%
• Presumed HTSX ³	N/A	N/A	926	51%
• Undetermined ⁴	1,135	44%	133	7%
Race/Ethnicity	N	%	N	%
White (non-Hispanic)	411	16%	73	4%
Black (non-Hispanic)	1,129	44%	1,369	76%
Hispanic	840	33%	299	17%
Asian/Pacific Islander	177	7%	53	3%
Other/Unknown	7	<1%	7	<1%
Total⁵	2,564	100%	1,801	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 N/A = Not Applicable

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 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013

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

Table 17. Percentage distribution of Non-US born people diagnosed with HIV infection by world region of birth¹ and mode of exposure: Massachusetts,² 2009–2011³

	Caribbean Basin	C ⁴ &S ⁵ America	N ⁶ America & Europe	Southeast Asia	Sub-Saharan Africa
Male-to-Male Sex (MSM)	10% ₉	45% ₉	64% ₉	38% ₉	4% ₉
Injection Drug Use (IDU)	-- ₉	-- ₉	-- ₉	-- ₉	-- ₉
MSM/IDU	0%	-- ₉	-- ₉	-- ₉	-- ₉
Heterosexual Sex (HTSX)	24%	11% ₉	-- ₉	-- ₉	27% ₉
Other	-- ₉	-- ₉	0%	-- ₉	-- ₉
Total Undetermined	64%	-- ₉	21%	43%	67%
• Presumed HTSX ⁷	30%	9%	-- ₉	-- ₉	34%
• Undetermined ⁸	34%	31%	-- ₉	-- ₉	33%
Total N	187	143	33	21	206

¹ World Regions of Central & South Asia, North Africa & Middle East, and Pacific Rim are not included in this analysis because small numbers make the data difficult to interpret

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 C=Central

⁵ S=South

⁶ N=North

⁷ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁸ 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.

⁹ Numbers less than five for 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 1/1/13

Table 18. Percentage distribution of Non-US born people living with HIV/AIDS on December 31, 2012 by world region of birth¹ and mode of exposure: Massachusetts²

	Caribbean Basin	C ³ & S ⁴ America	N ⁵ America & Europe	Southeast Asia	Sub-Saharan Africa
Male-to-Male Sex (MSM)	10%	50%	56%	31%	4%
Injection Drug Use (IDU)	4%	3%	12%	8%	2%
MSM/IDU	1%	-- ⁸	-- ⁸	-- ⁸	-- ⁸
Heterosexual Sex (HTSX)	28%	14%	10%	18%	27%
Other	1%	-- ⁸	-- ⁸	-- ⁸	-- ⁸
Total Undetermined	56%	31%	17%	42%	65%
• Presumed HTSX ⁶	22%	10%	4%	9%	34%
• Undetermined ⁷	34%	22%	13%	33%	31%
Total N⁹	1,428	962	66	157	1,375

¹ World Regions of Central & South Asia, North Africa & Middle East, and Pacific Rim are not included in this analysis because small numbers make the data difficult to interpret

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 C=Central

⁴ S=South

⁵ N=North

⁶ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁷ 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.

⁸ Numbers less than five for populations of less than 50,000 are suppressed for the assurance of confidentiality.

⁹ 2013 Epidemiologic Profile Fact Sheets released in October 2013 and later include one additional prevalent HIV/AIDS case compared to releases earlier in 2013

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

Table 19. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by place of birth: Massachusetts¹, 2009–2011²

Place of Birth:	HIV and AIDS Diagnosed within 2 Months	All HIV Infection Diagnoses	% Diagnosed with HIV and AIDS within 2 Months
	N	N	%
United States	363	1,216	30%
Puerto Rico/US Dependency ³	36	131	27%
Non-US	227	632	36%
Total	626	1,979	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 three-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 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.

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

Table 20. Reported AIDS cases by place of birth and year of diagnosis: Massachusetts¹, selected years, 1985–2011

Year:	US Born		Puerto Rico/ US Dependency ²		Non-US Born		Total
	N	%	N	%	N	%	N
1985	185	82%	12	5%	28	12%	225
1990	837	80%	116	11%	99	9%	1,052
1995	1,021	77%	175	13%	130	10%	1,326
2002	407	59%	79	12%	200	29%	686
2003	373	62%	72	12%	157	26%	602
2004	449	65%	89	13%	153	22%	691
2005	414	61%	83	12%	181	27%	678
2006	406	63%	64	10%	174	27%	644
2007	338	62%	53	10%	155	28%	546
2008	274	62%	47	11%	118	27%	439
2009	294	66%	45	10%	106	24%	445
2010	234	59%	48	12%	115	29%	397
2011	219	57%	27	7%	136	36%	382

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 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 1/1/13

Table 21. Deaths among persons reported with HIV/AIDS by place of birth and year of death: Massachusetts¹, 2002–2011

Year of Death	US		Puerto Rico/ US Dependency ²		Non-US		Total
	N	%	N	%	N	%	N
2002	282	77%	52	14%	34	9%	368
2003	302	78%	52	13%	34	9%	388
2004	257	75%	57	17%	29	8%	343
2005	236	74%	59	18%	26	8%	321
2006	244	77%	44	14%	28	9%	316
2007	229	80%	35	12%	22	8%	286
2008	207	73%	40	14%	35	12%	282
2009	214	75%	38	13%	32	11%	284
2010	195	76%	39	15%	21	8%	255
2011	156	75%	30	14%	22	11%	208

¹ Effective January 1, 2011, the Massachusetts Department of Public Health, Office of 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 diagnosed and reported in Massachusetts.

² 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 unspecified dependency.

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

Table 22. World region of birth by countries of birth with at least 10 people living with HIV/AIDS on December 31, 2012: Massachusetts¹	
World Region of Birth	Countries of Birth with \geq 10 People Living with HIV/AIDS in Massachusetts
Caribbean Basin	Barbados, Cuba, Dominican Republic, Haiti, Jamaica, Trinidad & Tobago
Central & South America	Argentina, Brazil, Columbia, El Salvador, Guatemala, Honduras, Mexico, Peru, Venezuela
Central & South Asia	China, India
North Africa & Middle East	Lebanon
North America & Europe	Canada, France, Germany, Greece, Ireland, Italy, Portugal, Russia, Spain, United Kingdom
Pacific Rim	Philippines
Southeast Asia	Cambodia, Myanmar, Vietnam, Thailand
Sub-Saharan Africa	Angola, Cameroon, Cape Verde, Congo, Cote d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Liberia, Malawi, Nigeria, Rwanda, Somalia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe
¹ Effective January 1, 2011, the Massachusetts Department of Public Health, Office of 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 diagnosed and reported in Massachusetts. Data Source: MDPH HIV/AIDS Surveillance Program; data as of 1/1/13	