

## Who is being concurrently diagnosed? 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 while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

People who are first diagnosed and reported to the state HIV/AIDS surveillance program with a diagnosis of HIV infection at the same time that they are diagnosed with AIDS are considered “concurrently diagnosed.” In the data that follow, a person is

considered to have been concurrently diagnosed with HIV infection and AIDS if the initial diagnosis of HIV infection was followed by an AIDS-defining condition within two months. The concurrently diagnosed population may have sought care late in the progression of HIV disease compared to those who have not been concurrently diagnosed.

**Table 1. People diagnosed with HIV and AIDS within two months, and all people diagnosed with HIV infection by gender, race/ethnicity, and mode of exposure: Massachusetts,<sup>1</sup> 2007–2009<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infections diagnosed	% diagnosed with HIV and AIDS within two months
<b>Gender:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male	454	1342	34%
Female	138	480	29%
<b>Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	219	743	29%
Black (non-Hispanic)	197	595	33%
Hispanic/Latino	160	433	37%
Asian/Pacific Islander	15	44	34%
<b>Exposure Mode:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male-to-male sex (MSM)	213	744	29%
Injection Drug Use (IDU)	53	172	31%
MSM/IDU	10	58	17%
Heterosexual Sex	68	214	32%
Other <sup>3</sup>	0	10	0%
Total Undetermined	248	624	40%
• Presumed heterosexual sex <sup>4</sup>	62	198	31%
• Undetermined <sup>5</sup>	186	426	44%
<b>Total<sup>6</sup></b>	<b>592</b>	<b>1,822</b>	<b>32%</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Other includes pediatric and blood/blood products

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

<sup>5</sup> 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.

<sup>6</sup> Totals include people of unspecified race/ethnicity

Data Source: MDPH HIV/AIDS Surveillance Program, 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/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 2. People diagnosed with HIV infection and AIDS within two months by race/ethnicity<sup>1</sup> and place of birth: Massachusetts,<sup>2</sup> 2007–2009<sup>3</sup>**

Race/Ethnicity:	US		Puerto Rico/ US Dependency <sup>4</sup>		Non-US		Total
	N	%	N	%	N	%	N
White non-Hispanic	201	92%	0	0%	18	8%	<b>219</b>
Black non-Hispanic	83	42%	0	0%	114	58%	<b>197</b>
Hispanic/Latino	46	29%	50	31%	64	40%	<b>160</b>
Asian/Pacific Islander	3	20%	0	0%	12	80%	<b>15</b>
<b>Total<sup>5</sup></b>	<b>334</b>	<b>56%</b>	<b>50</b>	<b>8%</b>	<b>208</b>	<b>35%</b>	<b>592</b>

<sup>1</sup> Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers  
<sup>2</sup> 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.  
<sup>3</sup> 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.  
<sup>4</sup> 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.  
<sup>5</sup> Totals include people of other/unspecified race/ethnicity  
 Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

**Table 3. People diagnosed with HIV and AIDS within two months, and all people diagnosed with HIV infection, by place of birth and age at HIV/AIDS concurrent diagnosis: Massachusetts,<sup>1</sup> 2007–2009<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infections diagnosed	% diagnosed with HIV and AIDS within two months
<b>Place of Birth:</b>	<b>N</b>	<b>N</b>	<b>%</b>
US Born	334	1,114	30%
Puerto Rico and other US Dependencies <sup>3</sup>	50	151	33%
Non-US Born	208	557	37%
<b>Age at Diagnosis:</b>	<b>N</b>	<b>N</b>	<b>%</b>
0-12	0	9	0%
13-19	5	35	14%
20-24	26	161	16%
25-29	48	220	22%
30-34	63	238	26%
35-39	79	255	31%
40-44	110	287	38%
45-49	114	281	41%
50-54	69	167	41%
55-59	34	87	39%
60+	44	82	54%
<b>Total</b>	<b>592</b>	<b>1,822</b>	<b>32%</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

**Table 4. People diagnosed with HIV and AIDS within two months, and all people diagnosed with HIV infection, by gender and race/ethnicity: Massachusetts,<sup>1</sup> 2007–2009<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infections diagnosed	% diagnosed with HIV and AIDS within two months
<b>Males by Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	192	643	30%
Black (non-Hispanic)	124	354	35%
Hispanic/Latino	123	304	40%
Asian/Pacific Islander	14	36	39%
<b>Total Male<sup>3</sup></b>	<b>454</b>	<b>1,342</b>	<b>34%</b>
<b>Females by Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	27	100	27%
Black (non-Hispanic)	73	241	30%
Hispanic/Latina	37	129	29%
Asian/Pacific Islander	1	8	13%
<b>Total Female<sup>3</sup></b>	<b>138</b>	<b>480</b>	<b>29%</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Totals include American Indian/Alaska Native and people of unspecified race/ethnicity

<sup>4</sup> Percentages calculated from a numerator of less than 5 are unstable and therefore not presented

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11