

2010 Profile of HIV/AIDS in Michigan

HIV Incidence Estimates

Data from HIV/AIDS Reporting System (eHARS) & Incidence Data

Overview:

HIV incidence rates have been estimated nationally and in Michigan for 2006. It is estimated that Michigan had 870 new infections in 2006 for an overall HIV incidence rate of 10.4 cases per 100,000 ages 13 and older, using 2006 intercensal estimates. While unacceptably high, this rate contrasts with the national overall rate of 22.8 cases per 100,000 population (56,300 new infections for 2006), which is more than double Michigan's rate.

HIV incidence estimates are based on reported cases and a minimum number of cases are required to release estimates for a particular category such as sex, race, age or risk. Thus, the reporting of HIV incidence estimates at the state level is more limited than what can be reported at a national level. Some groups in subcategories must be combined to satisfy the minimum number of reported cases required to release estimates.

For 2006, Michigan has produced HIV incidence estimates for the following subcategories:

Males and Females

Blacks and All Other Race/Ethnicity Groups

Age groups 13-29, 30-39 and 40+

MSM and Other/Unknown Modes of Transmission

See Table 10a on page 3-91.

Sex:

Males in Michigan were infected with HIV in 2006 at a rate more than four times that of females. The rate in males was 17.2 per 100,000 compared to 3.9 per 100,000 in females. Of the 870 new infections estimated to have occurred in 2006, 700 (80 percent) were in males and 170 (20 percent) were in females.

Race:

Of the 870 new infections estimated to have occurred in Michigan in 2006, 480 (55 percent) were in black persons (even though black persons comprise only 14 percent of Michigan's general population) and 390 (45 percent) were in other racial/ethnic groups. This translates to an HIV infection rate in black persons that is nearly eight times all other race/ethnicity groups. The rate among black persons was 42.3 per 100,000 compared to 5.4 per 100,000 for others. In order to satisfy the minimum number of cases required to report an estimate whites, Hispanic and all other racial/ethnic groups comprise the "All Other" subcategory.

Age at Diagnosis:

HIV incidence estimates in Michigan point to high infection rate among the young. Twenty-nine percent of new infections in 2006 were in persons between 13 and 29 years, resulting in an estimated infection rate of 10.3 per 100,000 for that group, although the highest rates of infection were among 30–39 year olds. Twenty-five percent of new infections in 2006 were in persons in their 30s, producing an estimated infection rate of 16.5 per 100,000 population. Persons estimated to be infected with HIV over the age of 40 comprise 45 percent of the new infections for 2006 for a rate of 8.4 per 100,000.

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Mode of Transmission:

An estimated 43 percent of the new infections in 2006 occurred in men who have sex with men (MSM). All other risk subcategories had to be combined into “Other/Unknown” to satisfy the minimum number of cases required to report an estimate for the group. Fifty-six percent fall into this group for 2006. The group includes injection drug users (IDU), MSM/IDU, Heterosexual Transmission and Unknown.

Compared to National Data:

The most highly impacted groups in Michigan tend to mirror what is seen nationally. Across the U.S. in 2006, 73 percent of new infections occurred in males; 45 percent in black persons; 53 percent among males who have sex with other males (MSM); and 34 percent in persons under age 30. See Table 10b on page 3-91.

The significant racial/ethnic disparities seen in Michigan were also seen nationwide where the black population bears a disproportionate burden of HIV infection. Nationally, black persons were estimated to have an infection rate of 83.7 per 100,000 in 2006 compared with 29.3 per 100,000 among Hispanics and 11.5 per 100,000 among whites. Additionally, the HIV incidence rate among black females was 14.7 times the rate among whites females and 3.9 times the rate among Hispanics females.

Please refer to the Morbidity and Mortality Weekly Report (MMWR) from September 12, 2008/Vol. 57/No. 36 for further analysis of national data on subgroups. (Note that national and statewide HIV incidence estimates are not directly comparable for modes of transmission. The national incidence estimates redistributed cases with unknown mode of transmission into known categories while Michigan did not.) Sometime in 2011 we expect to release incidence estimates for more recent years.

Table 10a: Michigan[#] 2006 HIV Incidence* Estimate for Persons 13 and Older at HIV Diagnosis

	<i>Num</i>	<i>%</i>	<i>Rate</i> [^]
SEX			
Male	700	80%	17.2
Female	170	20%	3.9
RACE/ETHNICITY			
Black	480	55%	42.3
All Other Race/Ethnicity Groups	390	45%	5.4
AGE AT HIV DIAGNOSIS			
13-29 years	250	29%	10.3
30-39 years	220	25%	16.5
40 years and older	390	45%	8.4
MODE OF TRANSMISSION			
MSM	370	43%	na
Other/Unknown	490	56%	na
Total	870	100%	10.4

Table 10b: U.S.[#] 2006 HIV Incidence* Estimate for Persons 13 and Older at HIV Diagnosis

	<i>Num</i>	<i>%</i>	<i>Rate</i> [^]
SEX			
Male	41,400	73%	34.3
Female	15,000	27%	11.9
RACE/ETHNICITY			
White	19,600	35%	11.5
Black	24,900	45%	83.7
Hispanic	9,700	17%	29.3
Asian/Pacific Islander	1,200	2%	10.3
American Indian/Alaskan Native	290	1%	14.6
AGE AT HIV DIAGNOSIS			
13-29	19,200	34%	26.8
30-39	17,400	31%	42.6
40-49	13,900	35%	30.7
50 +	5,800	10%	6.5
MODE OF TRANSMISSION			
MSM	28,700	53%	na
IDU	6,600	12%	na
MSM/IDU	2,100	4%	na
Heterosexual	16,800	31%	na
TOTAL	56,300	100%	22.8

Note: The categories displayed in this table satisfy the minimum requirements of 200 reported HIV cases, 40 incidence tests and 10 recent incidence results.

[#]These numbers have been adjusted for reporting delay as in the 2002-2006 MI Trends. Numbers are estimates and rounded to the nearest ten. All subcategories may not add up to the Michigan estimated total.

*Estimate of recent HIV infections in 2006

[^]Rate per 100,000 population age 13 and older, 2006 intercensal estimates