Michigan Department of Community Health

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QUARTERLY HIV/AIDS REPORT, MICHIGAN

APRIL 2008

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NEW WEBSITE http://www.michigan.gov/hivstd **NEW WEBSITE**

General HIV

AIDS (Acquired Immune Deficiency Syndrome)
Diagnosis with any one of 26 different opportunistic illnesses which are indicative of a severe immune deficiency, or a laboratory test demonstrating severe immune deficiency (i.e. CD4 count <200 or CD4 percent <14%)

Case Definitions for HIV and AIDS
Standard definitions used by all states. Specific information is required in order to count a case of HIV infection or AIDS, including a method to uniquely identify an individual. Each person is counted as either HIV infected without AIDS or HIV infected with AIDS. Once a person meets the AIDS case definition, this person is always counted as an AIDS case, even if his/her health improves.

HAART
Highly Active Antiretroviral Therapy

HIV (Human Immunodeficiency Virus)
Diagnosis with HIV by positive HIV screening and confirmatory test or positive result or detectable quantity on virologic test

Pediatric Cases
Children < 13 years at the time of diagnosis

Epidemiology Terms

Epidemiology
The study of the distribution, determinates, and frequency of disease in humans.

GIS (Geographic Information System)
The display and analysis of geographic data in map format.

Incidence
Number of persons who become infected with a disease in a certain period of time, usually a year.

New Diagnoses
Number of cases newly diagnosed over a given period of time, usually a year. In HIV surveillance, new diagnoses do not necessarily represent new infections, as newly diagnosed cases may have been infected for many years. Thus, only some newly diagnosed cases are also incident cases.

Prevalence
Total number of persons currently living with a disease at one point in time. See page ii for a description of estimated prevalence in Michigan.

Public Health Surveillance
The ongoing collection, analysis, interpretation, dissemination, and evaluation of population-based information about persons with a condition or risk factor of public health concern.

Rate
Count of infected cases divided by the number of persons in the population (infected and uninfected). This calculation is multiplied by a multiple of 10, usually 1,000 or 100,000. Allows one to weigh the relationship between prevalence or number of new diagnoses and population.

Administrative Info

CDC
U.S. Centers for Disease Control and Prevention

eHARS (HIV/AIDS Reporting System)
A standardized database developed by CDC for national reporting of HIV/AIDS

HAPIS
HIV/AIDS Prevention and Intervention Section

MDCH
Michigan Department of Community Health

Risk Categories

Blood Recipient
All hemophiliacs, blood transfusion recipients, and organ recipients who received blood products prior to 1985 and all persons documented to have ever received an infected organ or unit of blood

Heterosexual

HRH (High Risk Heterosexuals)
Males and females whose sexual partners are known to be HIV-infected or at high risk for HIV. The partners meet one of the following criteria: a history of sexual contact with bi-sexual males (for females), IDU, hemophiliacs, HIV+ transfusion recipients, or other HIV+ persons of unknown risk

PH (Presumed Heterosexual)-Female
Females whose only reported risk is heterosexual contact, and their male partners' risk and HIV status is unknown

IDU (Injection Drug User)
Persons who have a history of injecting drugs

Perinatal
HIV transmission from mother to child during birth or through breastfeeding.

MSM (Men who have sex with men)
Males who have a history of sexual contact with other men or with both men and women

MSM/IDU
MSM who also have a history of injecting drugs

Undetermined

PH (Presumed Heterosexual)-Male
Males whose only reported risk is heterosexual contact, and their female partners' risk and HIV status is unknown

Unknown
Males and females with no identified risk

HIV Surveillance in Michigan

Background

Reports of HIV infection and AIDS are submitted to state and local health departments under Michigan law by providers making the diagnoses. In addition, MDCH implemented PA 514 in April 2005, requiring laboratories to report HIV test results. The addition of laboratory reporting to the HIV surveillance system has increased the case reports received and has improved reporting completeness. Anonymous HIV reports (without name or other identifier) are excluded from this report because we cannot estimate duplication, update status, or obtain missing data. A total of 1,927 complete anonymous reports have been reported in Michigan.

HIV Prevalence Estimates for Michigan

HIV prevalence estimates in this report are based on adding the following three components and rounding: 1) the number of cases living with HIV/AIDS, 2) the number of known HIV+ cases not yet reported, estimated at 10 percent of the reported living HIV/AIDS cases, and 3) the number of HIV+ cases that have not yet been tested, estimated at 25 percent of the total cases living with HIV/AIDS (identical to the CDC estimate).

Categorical estimates of HIV infection are calculated from the distribution of reported cases among each group of confidentially-reported persons living with HIV or AIDS. The proportion of total cases is multiplied by 18,000. For example, 77 percent of combined HIV and AIDS reports are among men. Therefore, the number of HIV-infected men in Michigan is estimated to be 13,860 = (76.99% X 18,000). Since the estimates are rounded to the nearest 10, totals may not equal 18,000. The minimum estimate is 10.

Prison estimates of HIV infection are calculated differently than the above mentioned categorical estimates. Because all prisoners are tested for HIV upon entry to prison, there is no need to apply estimates to account for unreported and untested cases to the reported prison cases. Therefore, the prison prevalence estimate is calculated by rounding the reported number of persons living with HIV/AIDS who were diagnosed in prison to the nearest 10.

County estimates of HIV infection are calculated similarly to the categorical estimates; however, for county calculations the proportion of cases in a particular county is multiplied by the statewide estimate minus the prison estimate (18,000 - 780 = 17,220). For example, 10.81% of HIV/AIDS cases were living in Oakland county at diagnosis. Therefore, the number of HIV-infected persons who were living in Oakland county at the time of diagnosis is estimated to be 1,860 (10.81% x 17,220). Since the estimates are rounded to the nearest 10, the county totals may not equal 17,220. The method of calculating prevalence estimates for county of residence was revised as of the April 2008, and thus county estimates presented prior to this data may differ from current and future estimates.

Michigan HIV Surveillance Activities

Core HIV Surveillance

Population-based surveillance system of diagnosed adult, adolescent, and pediatric HIV/AIDS cases.

MMP (Medical Monitoring Project)

Project providing information on needs, risk behaviors, barriers to utilization of services, and quality of care, as well as other data, among HIV-positive persons in care in Michigan.

Michigan MMP Coordinator, Kevin Coles (313) 876-0117

NHBS (National HIV Behavioral Surveillance)

Surveillance system to monitor selected behaviors and access to prevention services among groups of uninfected persons at highest risk for HIV infection: MSM, IDU, and Heterosexuals Living in High Risk Areas.

Michigan NHBS Coordinator, Emily Higgins (313) 876-0176

STARHS (Serologic Testing Algorithm for Recent HIV Seroconversion)

HIV Incidence Surveillance that will enable estimation of new HIV infections in Michigan.

Michigan STARHS Coordinator, Marianne O'Connor (313) 876-0854

VARHS (Variant, Atypical, and Resistant HIV Surveillance)

Surveillance of drug-resistant and sub-type HIV strains using viral genotyping of remnant sera.

Michigan VARHS Coordinator, Mary-Grace Brandt (313) 876-4115

HIV Surveillance Staff Contacts

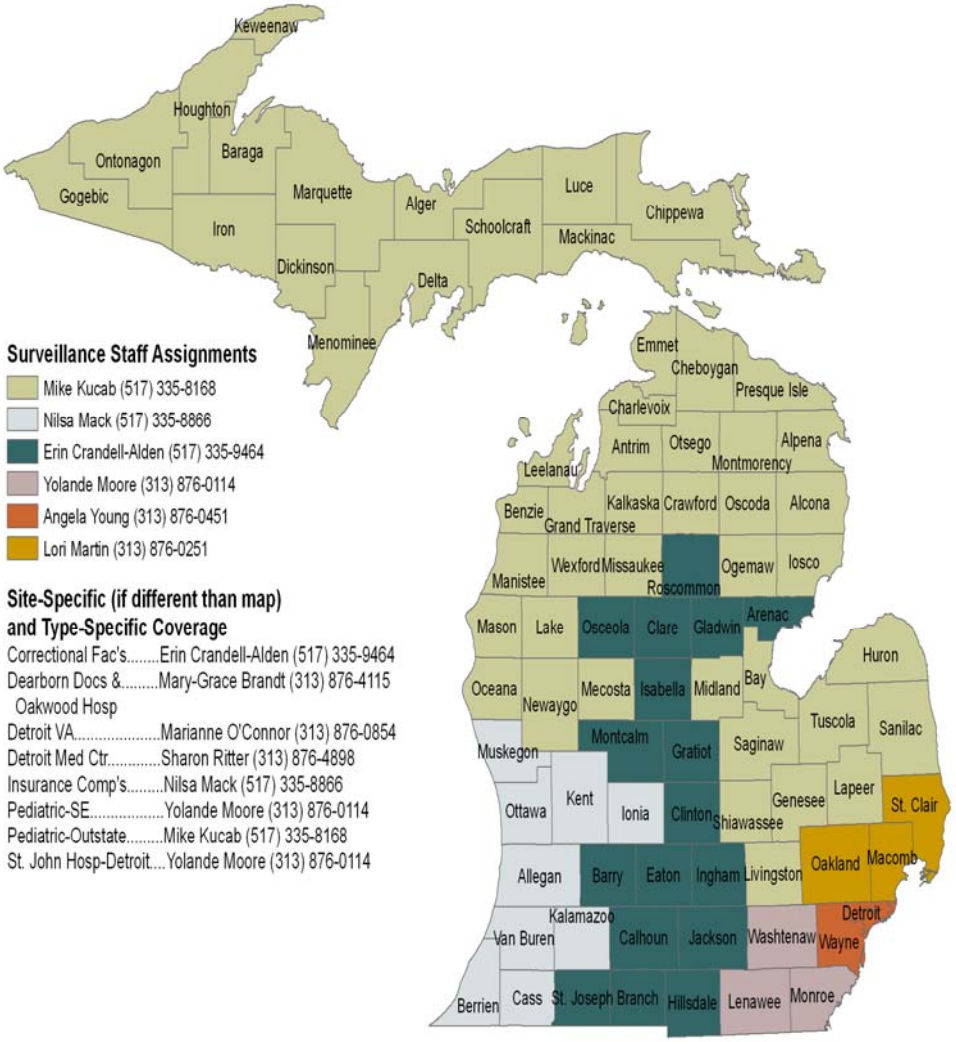


TABLE 1. Demographic Information on Prevalent HIV/AIDS Cases

	EST PREV*	REPORTED PREVALENCE							CENSUS 2006 ESTIMATES	
		HIV, not AIDS		AIDS		Total				
	Number	Number	Percent	Number	Percent	Number	Percent	Rate per 100,000†	Number	Percent
RACE/ ETHNICITY§										
White	6,430	2,235	(35%)	2,584	(36%)	4,819	(36%)	61	7,846,335	(78%)
Black	10,560	3,762	(59%)	4,154	(58%)	7,916	(59%)	556	1,424,394	(14%)
Hispanic	700	231	(4%)	297	(4%)	528	(4%)	134	393,281	(4%)
Asian/PI	90	31	(0%)	33	(0%)	64	(0%)	27	237,073	(2%)
Am Indian/AN	60	27	(0%)	18	(0%)	45	(0%)	83	54,231	(1%)
Multi/Unk/Other	170	66	(1%)	60	(1%)	126	(1%)	N/A	140,329	(1%)
SEX & RACE										
Males	13,860	4,746	(75%)	5,650	(79%)	10,396	(77%)	209	4,969,692	(49%)
White Males	*5,590*	*1,887*	*(30%)*	*2,302*	*(32%)*	*4,189*	*(31%)*	*108*	*3,873,261*	*(38%)*
Black Males	*7,500*	*2,598*	*(41%)*	*3,026*	*(42%)*	*5,624*	*(42%)*	*835*	*673,766*	*(7%)*
Hispanic Males	*550*	*172*	*(3%)*	*238*	*(3%)*	*410*	*(3%)*	*197*	*208,505*	*(2%)*
Other Males	*230*	*89*	*(1%)*	*84*	*(1%)*	*173*	*(1%)*	*81*	*214,160*	*(2%)*
Females	4,140	1,606	(25%)	1,496	(21%)	3,102	(23%)	61	5,125,951	(51%)
White Females	*840*	*348*	*(5%)*	*282*	*(4%)*	*630*	*(5%)*	*16*	*3,973,074*	*(39%)*
Black Females	*3,060*	*1,164*	*(18%)*	*1,128*	*(16%)*	*2,292*	*(17%)*	*305*	*750,628*	*(7%)*
Hispanic Fmls	*160*	*59*	*(1%)*	*59*	*(1%)*	*118*	*(1%)*	*64*	*184,776*	*(2%)*
Other Females	*80*	*35*	*(1%)*	*27*	*(0%)*	*62*	*(0%)*	*29*	*217,473*	*(2%)*
RISK*										
Male-Male Sex	8,450	2,847	(45%)	3,491	(49%)	6,338	(47%)	N/A	N/A	N/A
Injection Drug Use	2,190	684	(11%)	962	(13%)	1,646	(12%)	N/A	N/A	N/A
MSM/IDU	790	248	(4%)	342	(5%)	590	(4%)	N/A	N/A	N/A
Blood Products	130	34	(1%)	63	(1%)	97	(1%)	N/A	N/A	N/A
Heterosexual	3,160	1,179	(19%)	1,190	(17%)	2,369	(18%)	N/A	N/A	N/A
HRH	*2,330*	*828*	*(13%)*	*916*	*(13%)*	*1,744*	*(13%)*	*N/A*	*N/A*	*N/A*
PH-Female	*830*	*351*	*(6%)*	*274*	*(4%)*	*625*	*(5%)*	*N/A*	*N/A*	*N/A*
Perinatal	200	105	(2%)	47	(1%)	152	(1%)	N/A	N/A	N/A
Undetermined	3,080	1,255	(20%)	1,051	(15%)	2,306	(17%)	N/A	N/A	N/A
PH-Male	*1,610*	*574*	*(9%)*	*635*	*(9%)*	*1,209*	*(9%)*	*N/A*	*N/A*	*N/A*
Unknown	*1,460*	*681*	*(11%)*	*416*	*(6%)*	*1,097*	*(8%)*	*N/A*	*N/A*	*N/A*
AGE AT HIV DIAGNOSIS										
0 - 12 years	230	116	(2%)	57	(1%)	173	(1%)	N/A	N/A	N/A
13 - 19 years	680	313	(5%)	197	(3%)	510	(4%)	N/A	N/A	N/A
20 - 24 years	2,150	928	(15%)	687	(10%)	1,615	(12%)	N/A	N/A	N/A
25 - 29 years	2,970	1,081	(17%)	1,143	(16%)	2,224	(16%)	N/A	N/A	N/A
30 - 39 years	6,550	2,179	(34%)	2,735	(38%)	4,914	(36%)	N/A	N/A	N/A
40 - 49 years	3,880	1,261	(20%)	1,650	(23%)	2,911	(22%)	N/A	N/A	N/A
50 - 59 years	1,260	385	(6%)	558	(8%)	943	(7%)	N/A	N/A	N/A
60 years and over	270	86	(1%)	119	(2%)	205	(2%)	N/A	N/A	N/A
Unspecified	10	3	(0%)	0	(0%)	3	(0%)	N/A	N/A	N/A
AREA OF RESIDENCE AT DIAGNOSIS¥										
Detroit Metro	11,170	4,036	(64%)	4,721	(66%)	8,757	(65%)	197	4,439,490	(44%)
Out-State	5,060	1,888	(30%)	2,077	(29%)	3,965	(29%)	74	5,369,451	(53%)
Prison	780	426	(7%)	348	(5%)	774	(6%)	N/A	N/A	N/A
Unknown	10	2	(0%)	0	(0%)	2	(0%)	N/A	N/A	N/A
TOTAL	**18,000**	**6,352**	**(100%)**	**7,146**	**(100%)**	**13,498**	**(100%)**	**134**	**10,095,643**	**(100%)**

**See pages i and ii for descriptions of prevalence estimate calculations and risk category groupings. Risk categories used in Michigan are newly defined as of the July 2007 quarter.*

† To calculate "1 out x" statements for rate, divide the census number by the estimated prevalence. For example, for non-Hispanic whites: 7,846,335 / 6,430 = 1220. Thus, an estimated 1 out of every 1,220 non-Hispanic white persons in Michigan are living with HIV.

§ In this report, persons described as white, black, Asian/Pacific Islander (PI), or American Indian/Alaska Native (AN) are all non-Hispanic; persons described as Hispanic might be of any race.

¥ Detroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.

TABLE 2. Sex, Race, and Risk Among Prevalent HIV/AIDS Cases

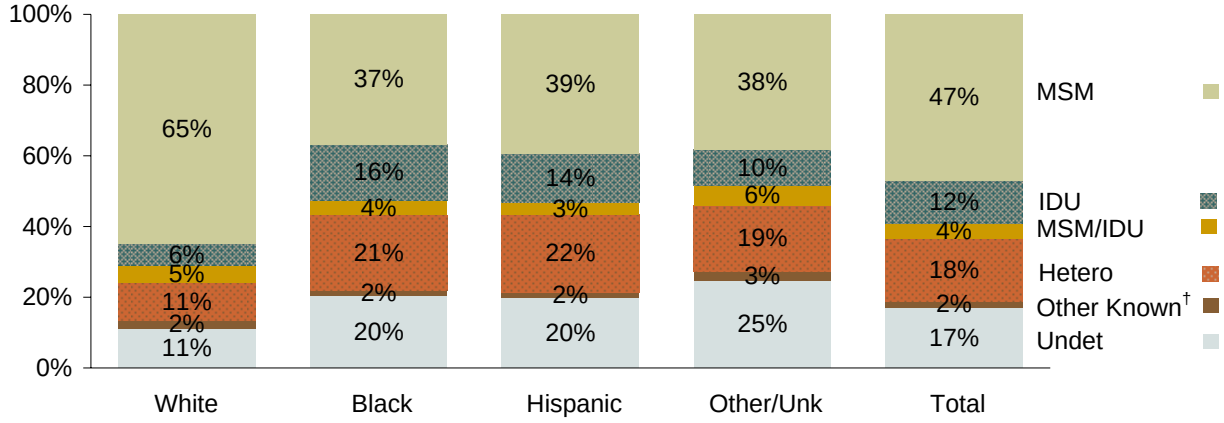
MALES	White		Black		Hispanic		Other or Unknown		Male Subtotal	
Male-Male sex	3,126	(75%)	2,914	(52%)	208	(51%)	90	(52%)	6,338	(61%)
Injecting Drug Use	183	(4%)	757	(13%)	53	(13%)	13	(8%)	1,006	(10%)
Male-Male Sex/IDU	232	(6%)	327	(6%)	18	(4%)	13	(8%)	590	(6%)
Blood Products	66	(2%)	15	(0%)	1	(0%)	2	(1%)	84	(1%)
Heterosexual*	104	(2%)	362	(6%)	37	(9%)	4	(2%)	507	(5%)
Perinatal	15	(0%)	65	(1%)	2	(0%)	3	(2%)	85	(1%)
Undetermined	463	(11%)	1,184	(21%)	91	(22%)	48	(28%)	1,786	(17%)
PH-Male	*275*	*(7%)*	*838*	*(15%)*	*70*	*(17%)*	*26*	*(15%)*	*1,209*	*(12%)*
Unknown	*188*	*(4%)*	*346*	*(6%)*	*21*	*(5%)*	*22*	*(13%)*	*577*	*(6%)*
Male Subtotal	**4,189**	**(40%)**	**5,624**	**(54%)**	**410**	**(4%)**	**173**	**(2%)**	**10,396**	**(100%)**

FEMALES	White		Black		Hispanic		Other or Unknown		Female Subtotal	
Injecting Drug Use	113	(18%)	496	(22%)	20	(17%)	11	(18%)	640	(21%)
Blood Products	9	(1%)	4	(0%)	0	(0%)	0	(0%)	13	(0%)
Heterosexual	418	(66%)	1,325	(58%)	79	(67%)	40	(65%)	1,862	(60%)
HRH	*320*	*(51%)*	*834*	*(36%)*	*62*	*(53%)*	*21*	*(34%)*	*1,237*	*(40%)*
PH-Female	*98*	*(16%)*	*491*	*(21%)*	*17*	*(14%)*	*19*	*(31%)*	*625*	*(20%)*
Perinatal	13	(2%)	47	(2%)	6	(5%)	1	(2%)	67	(2%)
Undetermined*	77	(12%)	420	(18%)	13	(11%)	10	(16%)	520	(17%)
Female Subtotal	**630**	**(20%)**	**2,292**	**(74%)**	**118**	**(4%)**	**62**	**(2%)**	**3,102**	**(100%)**

TOTAL	White		Black		Hispanic		Other or Unknown		Risk Total	
Male-Male sex	3,126	(65%)	2,914	(37%)	208	(39%)	90	(38%)	6,338	(47%)
Injecting Drug Use	296	(6%)	1,253	(16%)	73	(14%)	24	(10%)	1,646	(12%)
Male-Male Sex/IDU	232	(5%)	327	(4%)	18	(3%)	13	(6%)	590	(4%)
Blood Products	75	(2%)	19	(0%)	1	(0%)	2	(1%)	97	(1%)
Heterosexual	522	(11%)	1,687	(21%)	116	(22%)	44	(19%)	2,369	(18%)
HRH	*424*	*(9%)*	*1,196*	*(15%)*	*99*	*(19%)*	*25*	*(11%)*	*1,744*	*(13%)*
PH-Female	*98*	*(2%)*	*491*	*(6%)*	*17*	*(3%)*	*19*	*(8%)*	*625*	*(5%)*
Perinatal	28	(1%)	112	(1%)	8	(2%)	4	(2%)	152	(1%)
Undetermined	540	(11%)	1,604	(20%)	104	(20%)	58	(25%)	2,306	(17%)
PH-Male	*275*	*(6%)*	*838*	*(11%)*	*70*	*(13%)*	*26*	*(11%)*	*1,209*	*(9%)*
Unknown	*265*	*(5%)*	*766*	*(10%)*	*34*	*(6%)*	*32*	*(14%)*	*1,097*	*(8%)*
RACE TOTAL	***4,819***	***(36%)***	***7,916***	***(59%)***	***528***	***(4%)***	***235***	***(2%)***	***13,498***	***(100%)***

**In the male subset all cases in the heterosexual category are HRH because the PH-Female category is not applicable to males and, likewise, in the female subset, all cases in the undetermined category are of unknown risk because the PH-Male category is not applicable to females.*

FIGURE 1. Mode of HIV Transmission Among Prevalent HIV/AIDS Cases by Race



†The 'Other Known' category in Figure 1 is a combination of 'Blood Products' and 'Perinatal' from Table 2

TABLE 3. Sex, Race, and Age at HIV Diagnosis Among Prevalent HIV/AIDS Cases

MALES	White		Black		Hispanic		Other or Unknown		Male Subtotal	
0 - 12 years	25	(1%)	70	(1%)	2	(0%)	4	(2%)	101	(1%)
13 - 19 years	55	(1%)	283	(5%)	12	(3%)	4	(2%)	354	(3%)
20 - 24 years	378	(9%)	759	(14%)	41	(10%)	23	(13%)	1,201	(12%)
25 - 29 years	694	(17%)	900	(16%)	80	(20%)	32	(18%)	1,706	(16%)
30 - 39 years	1,686	(40%)	1,936	(34%)	171	(42%)	71	(41%)	3,864	(37%)
40 - 49 years	984	(23%)	1,195	(21%)	71	(17%)	31	(18%)	2,281	(22%)
50 - 59 years	289	(7%)	403	(7%)	25	(6%)	6	(3%)	723	(7%)
60 years and over	78	(2%)	76	(1%)	8	(2%)	2	(1%)	164	(2%)
Total*	**4,189**	**(40%)**	**5,622**	**(54%)**	**410**	**(4%)**	**173**	**(2%)**	**10,394**	**(100%)**

FEMALES	White		Black		Hispanic		Other or Unknown		Female Subtotal	
0 - 12 years	14	(2%)	51	(2%)	6	(5%)	1	(2%)	72	(2%)
13 - 19 years	37	(6%)	105	(5%)	11	(9%)	3	(5%)	156	(5%)
20 - 24 years	113	(18%)	279	(12%)	17	(14%)	5	(8%)	414	(13%)
25 - 29 years	126	(20%)	366	(16%)	15	(13%)	11	(18%)	518	(17%)
30 - 39 years	197	(31%)	785	(34%)	41	(35%)	27	(44%)	1,050	(34%)
40 - 49 years	95	(15%)	509	(22%)	18	(15%)	8	(13%)	630	(20%)
50 - 59 years	38	(6%)	169	(7%)	7	(6%)	6	(10%)	220	(7%)
60 years and over	9	(1%)	28	(1%)	3	(3%)	1	(2%)	41	(1%)
Total*	**629**	**(20%)**	**2,292**	**(74%)**	**118**	**(4%)**	**62**	**(2%)**	**3,101**	**(100%)**

TOTAL	White		Black		Hispanic		Other or Unknown		Age Total	
0 - 12 years	39	(1%)	121	(2%)	8	(2%)	5	(2%)	173	(1%)
13 - 19 years	92	(2%)	388	(5%)	23	(4%)	7	(3%)	510	(4%)
20 - 24 years	491	(10%)	1,038	(13%)	58	(11%)	28	(12%)	1,615	(12%)
25 - 29 years	820	(17%)	1,266	(16%)	95	(18%)	43	(18%)	2,224	(16%)
30 - 39 years	1,883	(39%)	2,721	(34%)	212	(40%)	98	(42%)	4,914	(36%)
40 - 49 years	1,079	(22%)	1,704	(22%)	89	(17%)	39	(17%)	2,911	(22%)
50 - 59 years	327	(7%)	572	(7%)	32	(6%)	12	(5%)	943	(7%)
60 years and over	87	(2%)	104	(1%)	11	(2%)	3	(1%)	205	(2%)
RACE TOTAL*	***4,818***	***(36%)***	***7,914***	***(59%)***	***528***	***(4%)***	***235***	***(2%)***	***13,495***	***(100%)***

**Not included in this table are one white female and two black male cases of unknown age at diagnosis*

FIGURE 2. Age at HIV Diagnosis Among Prevalent HIV/AIDS Cases by Race

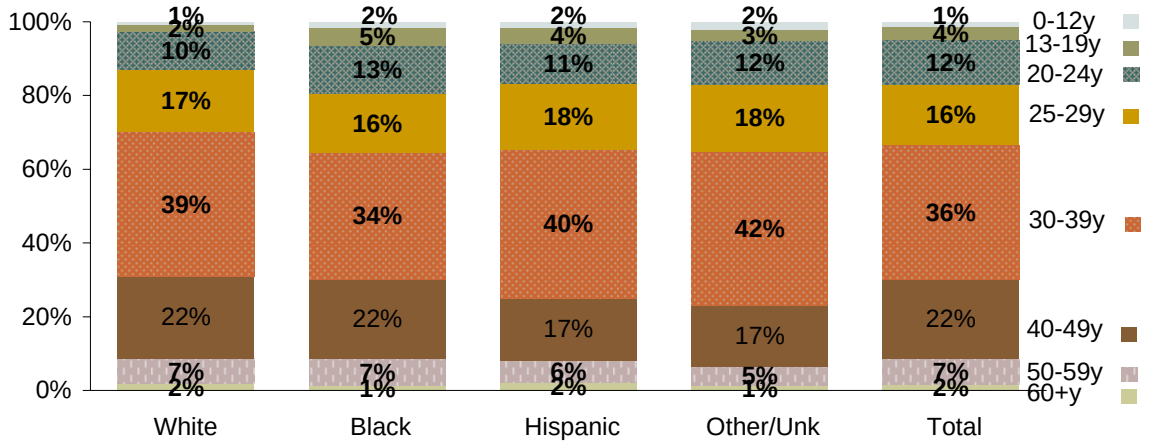


TABLE 4. New Diagnoses, Deaths, and Prevalence of HIV/AIDS by Year

	HIV/AIDS			AIDS		
Year	New HIV Diagnoses	Deaths	Prevalence	New AIDS Diagnoses	Deaths	Prevalence
1981	4	2	2	3	2	1
1982	3	0	5	2	0	3
1983	28	5	28	22	5	20
1984	71	17	82	50	17	53
1985	380	63	399	99	63	89
1986	487	102	784	168	99	158
1987	719	182	1,321	318	174	302
1988	903	263	1,961	492	254	540
1989	1,300	380	2,881	689	370	859
1990	1,437	453	3,865	794	433	1,220
1991	1,446	536	4,775	962	515	1,667
1992	1,495	662	5,608	1,232	630	2,269
1993	1,308	822	6,094	1,124	776	2,617
1994	1,212	901	6,405	1,010	843	2,784
1995	1,193	911	6,687	1,059	843	3,000
1996	1,125	632	7,180	852	583	3,269
1997	1,048	469	7,759	733	419	3,583
1998	909	399	8,269	644	351	3,876
1999	751	363	8,657	573	317	4,132
2000	919	379	9,197	646	328	4,450
2001	895	380	9,712	568	313	4,705
2002	776	296	10,192	573	268	5,010
2003	883	262	10,813	596	227	5,379
2004	904	250	11,467	557	209	5,727
2005	927	262	12,132	694	231	6,190
2006	846	210	12,768	635	184	6,641
2007	814	172	13,410	582	151	7,072
2008	105	17	***13,498***	88	14	***7,146***
TOTAL	***22,888***	***9,390***		***15,765***	***8,619***	

The prevalence of HIV in Michigan has steadily increased, since persons with HIV are living longer. This is largely due to improved anti-retroviral therapy.

The increase in HIV prevalence is also reflected in Figure 3 on page 5, which shows that the number of persons diagnosed, while stable for the last several years, is greater than the number of deaths each year. This directly contributes to the increase in prevalence. The current reported prevalence of HIV/AIDS in Michigan is 13,498. The prevalence of AIDS, which is a subset of HIV/AIDS prevalence, is 7,146.

As implied, the HIV/AIDS section displays data on all persons with HIV, including those with AIDS, as well as those who have not been diagnosed with AIDS. Thus, persons represented in the AIDS section are also represented in the HIV/AIDS section. The number of reported deaths includes deaths directly attributable to presence of HIV/AIDS as well as deaths due to other causes.

NOTE: Reporting for recent years may not be complete. Data are not adjusted to account for reporting delays.

FIGURE 3. New Diagnoses, Deaths, and Prevalence of HIV/AIDS by Year

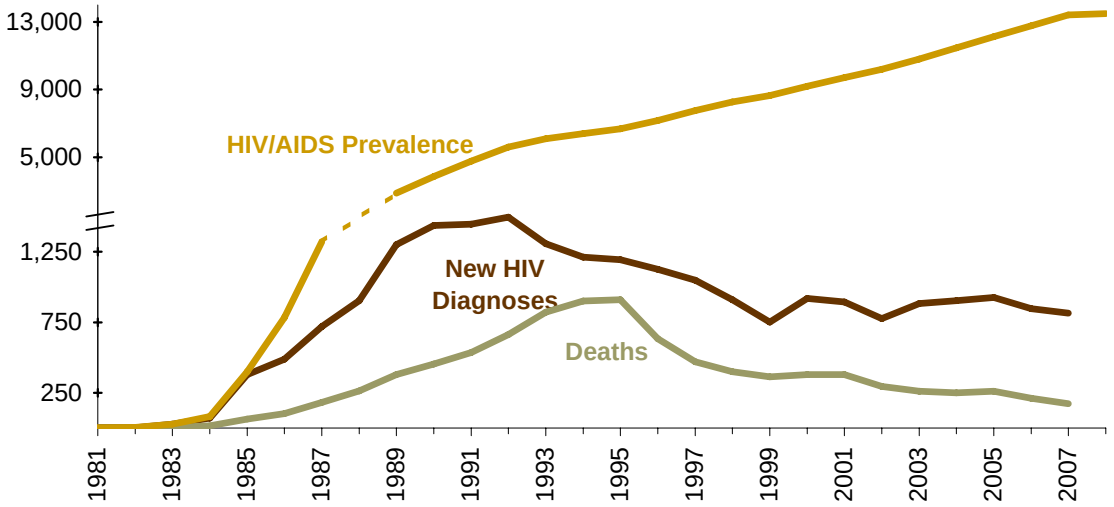


Figure 4 (below) shows the number of HIV-infected Michigan residents who have been reported as deceased by a local health department, the department of vital records via a data match or death certificate, or an alternate source. The number of deaths increased in all race/sex groups from the beginning of the epidemic through approximately 1994-1995. The number of deaths decreased markedly between 1995 and 1998 and then were relatively stable until 2001. It should be noted that the percent decrease in deaths among white males (74%) between 1995 and 2001 was more pronounced than the percent decrease among black males (57%), and the percent decrease among white females (55%) was larger than the percent decrease among black females (38%). Encouragingly, the number of deaths in black males has fallen substantially from 2001 to 2005 (40%), even in comparison to white males (24%), black females (25%), and white females (11%), but the number of deaths among black males still exceeds that of any other race/sex group.

FIGURE 4. HIV/AIDS Deaths by Race/Sex

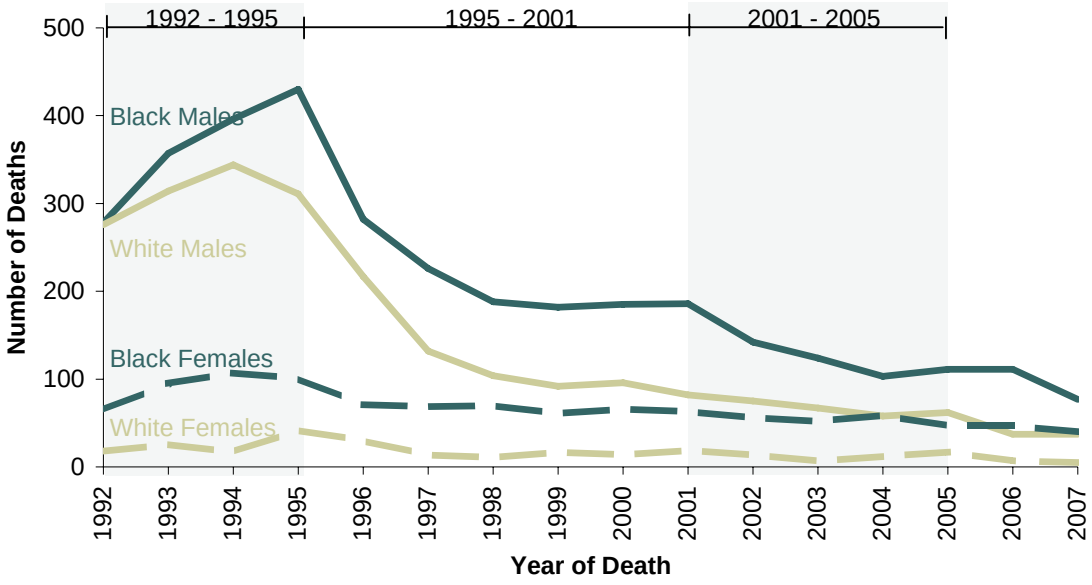


TABLE 5. Demographic Information on Persons Ever Diagnosed* with HIV

	2007†						CUMULATIVE (through 2007)					
	Male		Female		Total		Male		Female		Total	
RACE/ETHNICITY												
White	229	(36%)	35	(19%)	264	(32%)	7,395	(41%)	932	(20%)	8,327	(37%)
Black	355	(56%)	135	(75%)	490	(60%)	9,766	(54%)	3,532	(75%)	13,298	(58%)
Hispanic	37	(6%)	5	(3%)	42	(5%)	635	(4%)	163	(3%)	798	(4%)
Asian	4	(1%)	2	(1%)	6	(1%)	61	(0%)	17	(0%)	78	(0%)
Am Indian	0	(0%)	1	(1%)	1	(0%)	48	(0%)	17	(0%)	65	(0%)
Multi/Unk	8	(1%)	3	(2%)	11	(1%)	165	(1%)	52	(1%)	217	(1%)
RISK§												
Male-Male Sex	370	(58%)	N/A	--	370	(45%)	10,567	(58%)	N/A	--	10,567	(46%)
Injection Drug Use	36	(6%)	15	(8%)	51	(6%)	2,644	(15%)	1,506	(32%)	4,150	(18%)
MSM/IDU	11	(2%)	N/A	--	11	(1%)	1,253	(7%)	N/A	--	1,253	(5%)
Blood Products	0	(0%)	0	(0%)	0	(0%)	306	(2%)	37	(1%)	343	(2%)
Heterosexual	24	(4%)	104	(57%)	128	(16%)	739	(4%)	2,430	(52%)	3,169	(14%)
HRH	*24*	*(4%)*	*38*	*(21%)*	*62*	*(8%)*	*739*	*(4%)*	*1,707*	*(36%)*	*2,446*	*(11%)*
PH-Female	*N/A*	*--*	*66*	*(36%)*	*66*	*(8%)*	*N/A*	*--*	*723*	*(15%)*	*723*	*(3%)*
Perinatal	3	(0%)	0	(0%)	3	(0%)	126	(1%)	99	(2%)	225	(1%)
Undetermined	189	(30%)	62	(34%)	251	(31%)	2,435	(13%)	641	(14%)	3,076	(14%)
PH-Male	*109*	*(17%)*	*N/A*	*--*	*109*	*(13%)*	*1,591*	*(9%)*	*N/A*	*--*	*1,591*	*(7%)*
Unknown	*80*	*(13%)*	*62*	*(34%)*	*142*	*(17%)*	*844*	*(5%)*	*641*	*(14%)*	*1,485*	*(7%)*
AGE AT HIV DIAGNOSIS												
0 - 12 years	3	(0%)	0	(0%)	3	(0%)	169	(1%)	103	(2%)	272	(1%)
13 - 19 years	59	(9%)	9	(5%)	68	(8%)	424	(2%)	185	(4%)	609	(3%)
20 - 24 years	90	(14%)	16	(9%)	106	(13%)	1,595	(9%)	508	(11%)	2,103	(9%)
25 - 29 years	70	(11%)	25	(14%)	95	(12%)	2,895	(16%)	721	(15%)	3,616	(16%)
30 - 39 years	145	(23%)	58	(32%)	203	(25%)	6,967	(39%)	1,680	(36%)	8,647	(38%)
40 - 49 years	166	(26%)	46	(25%)	212	(26%)	4,241	(23%)	1,065	(23%)	5,306	(23%)
50 - 59 years	77	(12%)	22	(12%)	99	(12%)	1,380	(8%)	349	(7%)	1,729	(8%)
60 years and over	23	(4%)	5	(3%)	28	(3%)	397	(2%)	101	(2%)	498	(2%)
Unspecified	0	(0%)	0	(0%)	0	(0%)	2	(0%)	1	(0%)	3	(0%)
DISEASE STATUS¥												
AIDS - Same time	155	(24%)	46	(25%)	201	(25%)	7,139	(40%)	1,393	(30%)	8,532	(37%)
AIDS - Short lag	55	(9%)	17	(9%)	72	(9%)	1,309	(7%)	360	(8%)	1,669	(7%)
AIDS - Long lag	1	(0%)	0	(0%)	1	(0%)	4,378	(24%)	1,165	(25%)	5,543	(24%)
HIV, not AIDS	422	(67%)	118	(65%)	540	(66%)	5,244	(29%)	1,795	(38%)	7,039	(31%)
AREA OF RESIDENCE AT DIAGNOSIS£												
Detroit Metro	421	(67%)	128	(71%)	549	(67%)	11,881	(66%)	3,416	(72%)	15,297	(67%)
Out-State	191	(30%)	51	(28%)	242	(30%)	5,121	(28%)	1,195	(25%)	6,316	(28%)
Prison/Unknown	21	(3%)	2	(1%)	23	(3%)	1,068	(6%)	102	(2%)	1,170	(5%)
TOTAL	**633**	**(78%)**	**181**	**(22%)**	**814**	**(100%)**	**18,070**	**(79%)**	**4,713**	**(21%)**	**22,783**	**(100%)**

**Includes deceased cases*

†Data for cases diagnosed in 2007 may be incomplete at this time

§ See page i for description of risk category groupings. Risk categories used in Michigan are newly defined as of the July 2007 quarter.

¥ The definitions of disease status are as follows:

AIDS - Same time = Concurrent HIV and AIDS diagnoses (diagnoses within the same month)

AIDS - Short lag = AIDS diagnosed 1 month to 12 months after HIV diagnosis

AIDS - Long lag = AIDS diagnosed more than 12 months after HIV diagnosis

HIV, not AIDS = Has not been diagnosed with AIDS

£ Detroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.

*NOTE: <5 and ** = 1, 2, 3, or 4 cases*

TABLE 6. Prevalent HIV/AIDS Cases According to County of Residence at Diagnosis

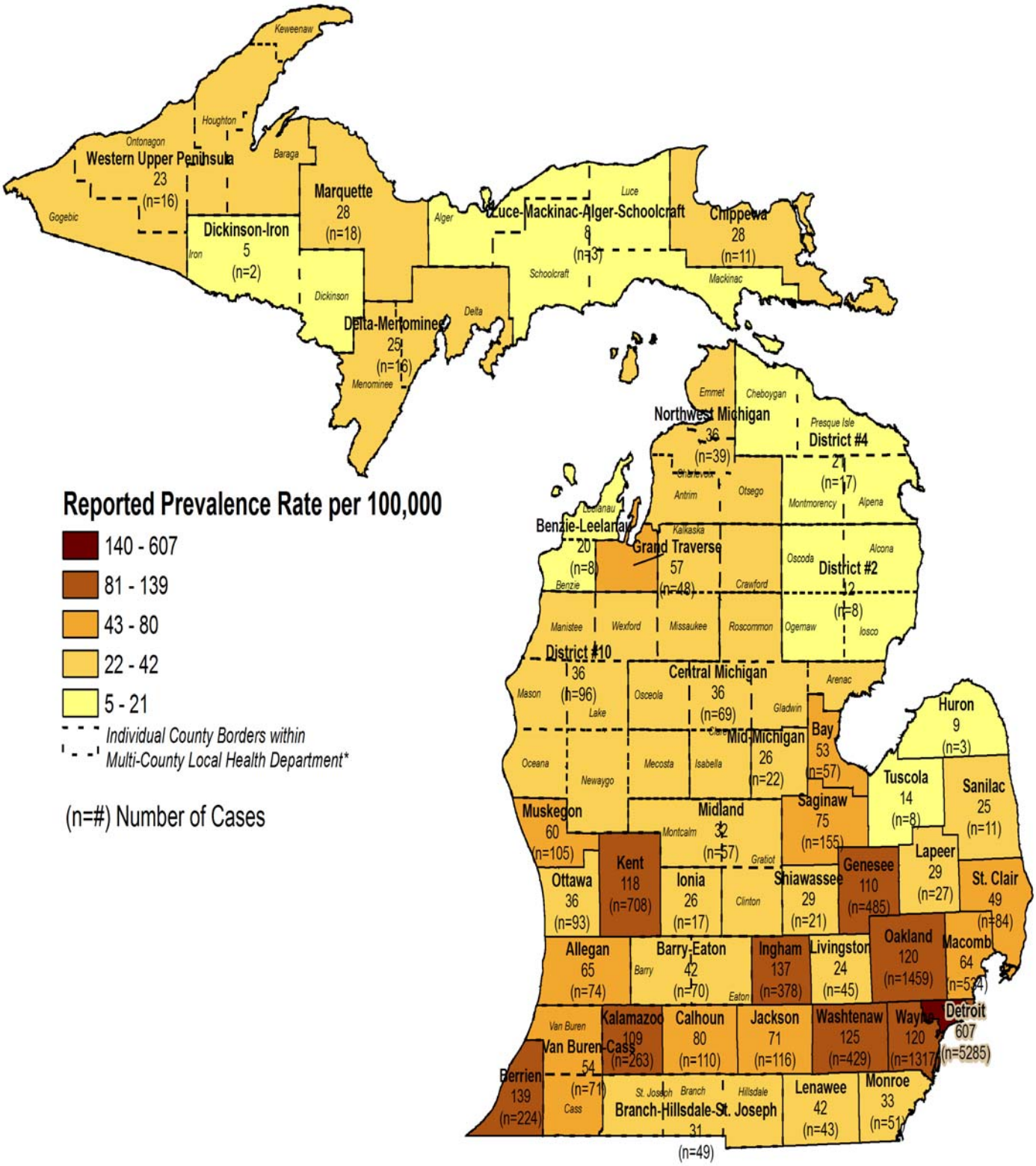
COUNTY	EST PREV	REPORTED PREVALENCE				CENSUS 2006 EST	COUNTY	EST PREV	REPORTED PREVALENCE				CENSUS 2006 EST
	Number	HIV, Not AIDS	AIDS	Total	Rate*			Number	HIV, Not AIDS	AIDS	Total	Rate*	
Alcona	10	0	1	1	9	11,759	Livingston	60	21	24	45	24	184,511
Alger	10	0	1	1	10	9,665	Luce	10	0	0	0	0	6,684
Allegan	90	32	42	74	65	113,501	Mackinac	10	0	1	1	9	11,050
Alpena	10	1	2	3	10	30,067	Macomb	680	252	282	534	64	832,861
Antrim	10	4	5	9	37	24,463	Manistee	20	5	7	12	48	25,067
Arenac	10	1	1	2	12	17,024	Marquette	20	12	6	18	28	64,675
Baraga	10	2	4	6	69	8,742	Mason	10	3	7	10	34	29,045
Barry	30	7	13	20	33	59,899	Mecosta	20	9	5	14	33	42,252
Bay	70	31	26	57	53	108,390	Menominee	10	3	1	4	16	24,696
Benzie	10	1	2	3	17	17,652	Midland	30	8	14	22	26	83,792
Berrien	290	94	130	224	139	161,705	Missaukee	10	3	2	5	33	15,197
Branch	20	10	2	12	26	45,875	Monroe	70	19	32	51	33	155,035
Calhoun	140	54	56	110	80	137,991	Montcalm	20	6	11	17	27	63,977
Cass	40	15	14	29	56	51,329	Montmorency	10	0	4	4	38	10,478
Charlevoix	20	5	8	13	49	26,422	Muskegon	130	49	56	105	60	175,231
Cheboygan	10	2	5	7	26	27,282	Newaygo	20	7	11	18	36	49,840
Chippewa	10	7	4	11	28	38,674	Oakland	1,860	693	766	1,459	120	1,214,255
Clare	20	6	9	15	48	31,307	Oceana	10	6	4	10	35	28,639
Clinton	40	19	15	34	49	69,909	Ogemaw	10	1	2	3	14	21,665
Crawford	10	0	3	3	20	14,928	Ontonagon	10	1	1	2	28	7,202
Delta	20	4	8	12	31	38,156	Osceola	10	2	2	4	17	23,584
Dickinson	10	0	1	1	4	27,447	Oscoda	10	1	0	1	11	9,140
Eaton	60	23	27	50	47	107,237	Otsego	10	4	5	9	36	24,711
Emmet	10	3	5	8	24	33,607	Ottawa	120	41	52	93	36	257,671
Genesee	620	241	244	485	110	441,966	Presque Isle	10	1	2	3	21	14,144
Gladwin	10	2	6	8	30	27,008	Roscommon	20	4	10	14	54	26,064
Gogebic	10	1	1	2	12	16,524	Saginaw	200	77	78	155	75	206,300
Grand Traverse	60	23	25	48	57	84,952	Sanilac	10	4	7	11	25	44,448
Gratiot	10	3	3	6	14	42,107	Schoolcraft	10	1	0	1	11	8,744
Hillsdale	10	4	3	7	15	47,206	Shiawassee	30	7	14	21	29	72,912
Houghton	10	2	4	6	17	35,334	St. Clair	110	46	38	84	49	171,725
Huron	10	1	2	3	9	34,143	St. Joseph	40	13	17	30	48	62,777
Ingham	480	205	173	378	137	276,898	Tuscola	10	4	4	8	14	57,878
Ionia	20	7	10	17	26	64,821	Van Buren	50	18	24	42	53	79,018
Iosco	10	2	1	3	11	26,831	Washtenaw	550	209	220	429	125	344,047
Iron	10	0	1	1	8	12,377	Wayne Total	8,420	3,013	3,589	6,602	335	1,971,853
Isabella	30	15	11	26	40	65,818	*Wayne, excl. Detroit*	1,680	*574*	*743*	*1,317*	*120*	*1,100,732*
Jackson	150	56	60	116	71	163,851	*Detroit*	*6,740*	*2,439*	*2,846*	*5,285*	*607*	*871,121*
Kalamazoo	340	138	125	263	109	240,720	Wexford	10	4	7	11	34	31,994
Kalkaska	10	3	1	4	23	17,330							
Kent	900	317	391	708	118	599,524	**Detroit Metro**[†]	11,170	4,036	4,721	8,757	197	4,439,490
Keweenaw	10	0	0	0	0	2,183	**Out-State**[†]	5,060	1,888	2,077	3,965	70	5,656,153
Lake	10	3	6	9	76	11,793							
Lapeer	30	13	14	27	29	93,761	**Prisons**[£]	780	426	348	774	N/A	N/A
Leelanau	10	0	5	5	23	22,112	**Unknown**	10	2	0	2	N/A	N/A
Lenawee	50	20	23	43	42	102,191	***TOTAL***	***18,000***	***6,352***	***7,146***	***13,498***	***134***	***10,095,643***

**Rate is reported prevalence per 100,000 and is not an estimate*

[†] *Detroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.*

[£] The Prevalence Estimate for prisons is calculated differently from the remainder of the state. Please see the Front Matter (p. ii) for a further explanation.

FIGURE 5. Reported HIV Prevalence and Prevalence Rates by Residence at Diagnosis



**To mitigate the effect of small numbers of cases, reported HIV prevalence rates and case numbers for multi-county health departments are listed for the health department as a whole and not the individual counties.*

TABLE 7. Perinatal HIV Exposures by Year of Birth, 2002 - 2008

	2002	2003	2004	2005	2006	2007	2008†
NUMBER DELIVERIES/BIRTHS							
Infants	57	66	56	71	48	19	3
Mothers	57	65	51	65	46	16	3
RESIDENCE AT BIRTH							
Southeast Michigan	36 (63%)	45 (68%)	37 (66%)	42 (59%)	29 (60%)	7 (37%)	0 (0%)
Out-State Michigan	21 (37%)	21 (32%)	19 (34%)	29 (41%)	19 (40%)	12 (63%)	3 (100%)
INFANTS' RACE							
White, Non-Hispanic	11 (19%)	10 (15%)	7 (13%)	9 (13%)	7 (15%)	3 (16%)	2 (67%)
Black, Non-Hispanic	38 (67%)	51 (77%)	46 (82%)	57 (80%)	33 (69%)	15 (79%)	1 (33%)
Other	8 (14%)	5 (8%)	3 (5%)	5 (7%)	8 (17%)	1 (5%)	0 (0%)
MOTHERS' MODE OF TRANSMISSION*							
Injecting Drug Use	5 (9%)	6 (9%)	3 (6%)	7 (11%)	2 (4%)	1 (6%)	0 (0%)
High Risk Heterosexual	33 (58%)	30 (46%)	13 (25%)	31 (48%)	17 (37%)	2 (13%)	1 (33%)
Undetermined	19 (33%)	28 (43%)	35 (69%)	27 (42%)	27 (59%)	13 (81%)	2 (67%)

**Not reported in this table is one mother's mode of transmission of 'Blood Products' for an infant born in 2003*
† Reporting for 2008 is incomplete at this time.

Table 7 displays the characteristics of all infants born to HIV positive women as well as characteristics of their mothers. Figure 6 indicates the current infection status of these infants -- the bottom portion of the bars showing number confirmed to be infected with HIV and/or diagnosed with AIDS; the middle portion showing those not to be infected with HIV or AIDS through laboratory testing or physician exam; and the top portion showing the number whose HIV infection status is unknown due to loss to follow up or infection status reporting delay.

Since 1994, the CDC and other organizations involved in perinatal HIV transmission have recommended that HIV-positive pregnant women receive doses of zidovudine (ZDV or AZT) prenatally and at labor and delivery and that children born to these women receive ZDV neonatally. Despite these recommendations, only 57% of births to HIV-positive women are documented by MDCH to have received all three arms of therapy. For more information, please see the annual Missed Opportunity report, which can be found at: http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2982_46000_46003-166892--,00.html

FIGURE 6. Infection Status of Perinatal HIV Exposures, 2002 - 2008