

## Table of Contents: HIV/AIDS Statistics of Persons Diagnosed in Michigan

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## General HIV Terms

### 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 HIV 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 1,916 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 17,000. 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 13,070 = (76.9% X 17,000). Since the estimates are rounded to the nearest 10, totals may not equal 17,000. The minimum estimate is 10.

## 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, *Vacant*; for information call Vivian Griffin (313) 876-0352

### STARHS (Serologic Testing Algorithm for Recent HIV Seroconversion)

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

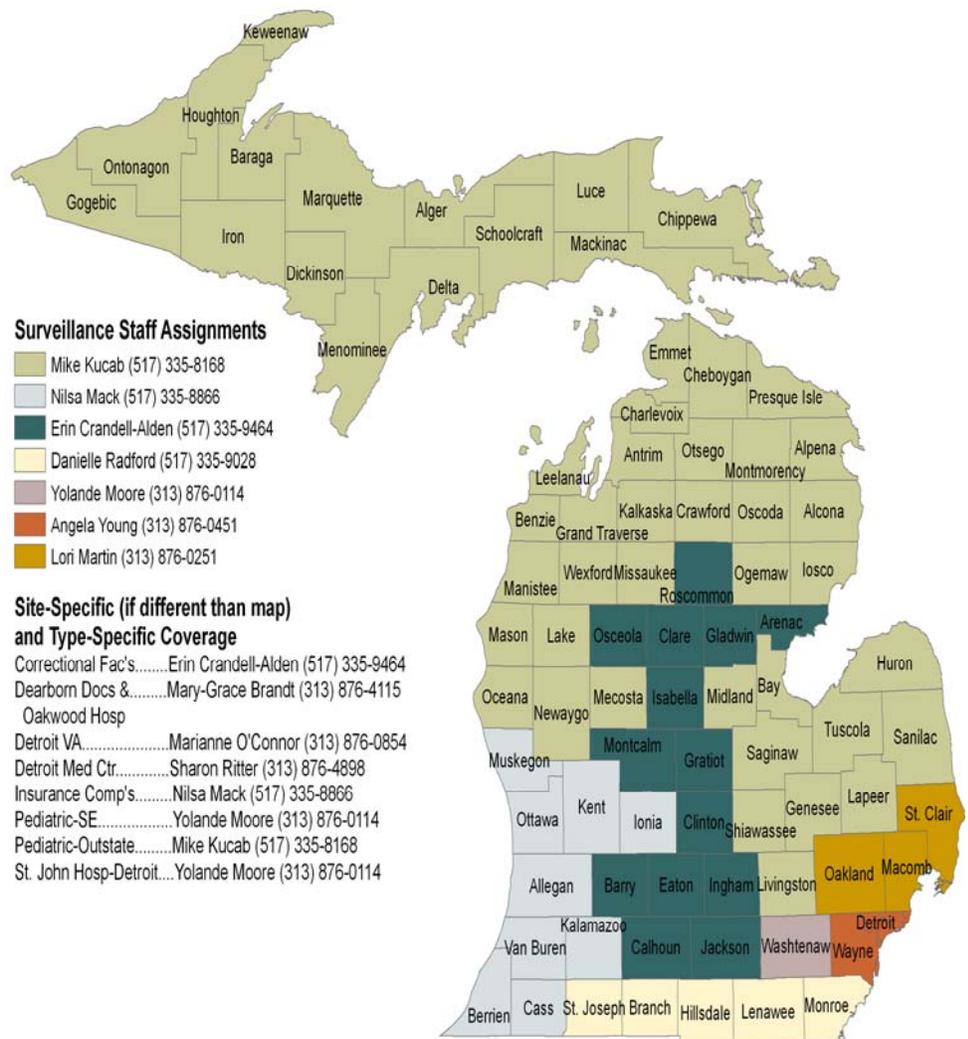
Michigan STARHS Coordinator, Marianne O'Connor (313) 876-0854

### 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**

	<b>ESTIMATED PREVALENCE*</b>		<b>REPORTED PREVALENCE</b>						<b>CENSUS 2006 ESTIMATES</b>	
	<b>Number</b>	<b>Rate per 100,000†</b>	<b>HIV, not AIDS</b>		<b>AIDS</b>		<b>Total</b>		<b>Number Percent</b>	
			<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>		
<b>RACE/ ETHNICITY<sup>§</sup></b>										
White	6,090	78	2,212	(35%)	2,499	(36%)	4,711	(36%)	7,846,335	(78%)
Black	9,980	701	3,698	(59%)	4,021	(58%)	7,719	(59%)	1,424,394	(14%)
Hispanic	660	168	223	(4%)	284	(4%)	507	(4%)	393,281	(4%)
Asian/PI	70	30	27	(0%)	31	(0%)	58	(0%)	237,073	(2%)
Am Indian/AN	60	111	27	(0%)	17	(0%)	44	(0%)	54,231	(1%)
Multi/Unk/Other	140	N/A	57	(1%)	52	(1%)	109	(1%)	140,329	(1%)
<b>SEX &amp; RACE</b>										
Males	13,070	263	4,656	(75%)	5,455	(79%)	10,111	(77%)	4,969,692	(49%)
White Males	5,290	137	1,862	(30%)	2,232	(32%)	4,094	(31%)	3,873,261	(38%)
Black Males	7,080	1051	2,551	(41%)	2,922	(42%)	5,473	(42%)	673,766	(7%)
Hispanic Males	510	245	164	(3%)	227	(3%)	391	(3%)	208,505	(2%)
Other Males	200	93	79	(1%)	74	(1%)	153	(1%)	214,160	(2%)
Females	3,930	77	1,588	(25%)	1,449	(21%)	3,037	(23%)	5,125,951	(51%)
White Females	800	20	350	(6%)	267	(4%)	617	(5%)	3,973,074	(39%)
Black Females	2,900	386	1,147	(18%)	1,099	(16%)	2,246	(17%)	750,628	(7%)
Hispanic Fmls	150	81	59	(1%)	57	(1%)	116	(1%)	184,776	(2%)
Other Females	70	32	32	(1%)	26	(0%)	58	(0%)	217,473	(2%)
<b>RISK*</b>										
Male-Male Sex	7,930	N/A	2,762	(44%)	3,372	(49%)	6,134	(47%)	N/A	N/A
Injection Drug Use	2,090	N/A	682	(11%)	937	(14%)	1,619	(12%)	N/A	N/A
MSM/IDU	740	N/A	249	(4%)	327	(5%)	576	(4%)	N/A	N/A
Blood Products	180	N/A	55	(1%)	87	(1%)	142	(1%)	N/A	N/A
Heterosexual	2,970	N/A	1,164	(19%)	1,136	(16%)	2,300	(17%)	N/A	N/A
HRH	2,210	N/A	826	(13%)	880	(13%)	1,706	(13%)	N/A	N/A
PH-Female	770	N/A	338	(5%)	256	(4%)	594	(5%)	N/A	N/A
Perinatal	200	N/A	105	(2%)	46	(1%)	151	(1%)	N/A	N/A
Undetermined	2,880	N/A	1,227	(20%)	999	(14%)	2,226	(17%)	N/A	N/A
PH-Male	1,500	N/A	565	(9%)	597	(9%)	1,162	(9%)	N/A	N/A
Unknown	1,380	N/A	662	(11%)	402	(6%)	1,064	(8%)	N/A	N/A
<b>AGE AT HIV DIAGNOSIS</b>										
0 - 12 years	220	N/A	117	(2%)	55	(1%)	172	(1%)	N/A	N/A
13 - 19 years	610	N/A	291	(5%)	181	(3%)	472	(4%)	N/A	N/A
20 - 24 years	2,020	N/A	896	(14%)	666	(10%)	1,562	(12%)	N/A	N/A
25 - 29 years	2,810	N/A	1,063	(17%)	1,114	(16%)	2,177	(17%)	N/A	N/A
30 - 39 years	6,250	N/A	2,173	(35%)	2,662	(39%)	4,835	(37%)	N/A	N/A
40 - 49 years	3,660	N/A	1,238	(20%)	1,593	(23%)	2,831	(22%)	N/A	N/A
50 - 59 years	1,160	N/A	380	(6%)	520	(8%)	900	(7%)	N/A	N/A
60 years and over	250	N/A	83	(1%)	113	(2%)	196	(1%)	N/A	N/A
Unspecified	10	N/A	3	(0%)	0	(0%)	3	(0%)	N/A	N/A
<b>TOTAL</b>	<b>17,000</b>	<b>168</b>	<b>6,244 (100%)</b>		<b>6,904 (100%)</b>		<b>13,148 (100%)</b>		<b>10,095,643 (100%)</b>	

\*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.

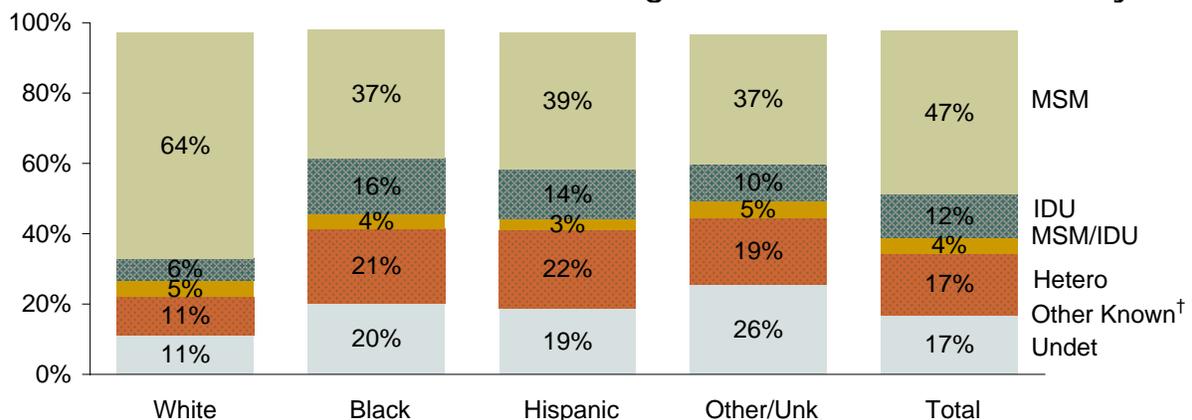
†To calculate "1 out of x" statements for rate, divide the census number by the estimated prevalence. For example, for non-Hispanic whites: 7,846,335 / 6,090 = 1288. Thus, an estimated 1 out of every 1,288 non-Hispanic white persons in Michigan are living with HIV.

§ 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.

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

<b>MALES</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Male Subtotal</b>	
Male-Male sex	3,038	(74%)	2,820	(52%)	198	(51%)	78	(51%)	6,134	(61%)
Injecting Drug Use	178	(4%)	743	(14%)	52	(13%)	12	(8%)	985	(10%)
Male-Male Sex/IDU	227	(6%)	323	(6%)	16	(4%)	10	(7%)	576	(6%)
Blood Products	81	(2%)	32	(1%)	4	(1%)	2	(1%)	119	(1%)
Heterosexual*	99	(2%)	353	(6%)	36	(9%)	4	(3%)	492	(5%)
Perinatal	15	(0%)	64	(1%)	2	(1%)	3	(2%)	84	(1%)
Undetermined	456	(11%)	1,138	(21%)	83	(21%)	44	(29%)	1,721	(17%)
<i>PH-Male</i>	272	(7%)	802	(15%)	66	(17%)	22	(14%)	1,162	(11%)
<i>Unknown</i>	184	(4%)	336	(6%)	17	(4%)	22	(14%)	559	(6%)
<b>Male Subtotal</b>	<b>4,094</b>	<b>(40%)</b>	<b>5,473</b>	<b>(54%)</b>	<b>391</b>	<b>(4%)</b>	<b>153</b>	<b>(2%)</b>	<b>10,111</b>	<b>(100%)</b>
<b>FEMALES</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Female Subtotal</b>	
Injecting Drug Use	110	(18%)	495	(22%)	19	(16%)	10	(17%)	634	(21%)
Blood Products	14	(2%)	6	(0%)	2	(2%)	1	(2%)	23	(1%)
Heterosexual	407	(66%)	1,288	(57%)	77	(66%)	36	(62%)	1,808	(60%)
<i>HRH</i>	314	(51%)	820	(37%)	60	(52%)	20	(34%)	1,214	(40%)
<i>PH-Female</i>	93	(15%)	468	(21%)	17	(15%)	16	(28%)	594	(20%)
Perinatal	13	(2%)	47	(2%)	6	(5%)	1	(2%)	67	(2%)
Undetermined*	73	(12%)	410	(18%)	12	(10%)	10	(17%)	505	(17%)
<b>Female Subtotal</b>	<b>617</b>	<b>(20%)</b>	<b>2,246</b>	<b>(74%)</b>	<b>116</b>	<b>(4%)</b>	<b>58</b>	<b>(2%)</b>	<b>3,037</b>	<b>(100%)</b>
<b>TOTAL</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Risk Total</b>	
Male-Male sex	3,038	(64%)	2,820	(37%)	198	(39%)	78	(37%)	6,134	(47%)
Injecting Drug Use	288	(6%)	1,238	(16%)	71	(14%)	22	(10%)	1,619	(12%)
Male-Male Sex/IDU	227	(5%)	323	(4%)	16	(3%)	10	(5%)	576	(4%)
Blood Products	95	(2%)	38	(0%)	6	(1%)	3	(1%)	142	(1%)
Heterosexual	506	(11%)	1,641	(21%)	113	(22%)	40	(19%)	2,300	(17%)
<i>HRH</i>	413	(9%)	1,173	(15%)	96	(19%)	24	(11%)	1,706	(13%)
<i>PH-Female</i>	93	(2%)	468	(6%)	17	(3%)	16	(8%)	594	(5%)
Perinatal	28	(1%)	111	(1%)	8	(2%)	4	(2%)	151	(1%)
Undetermined	529	(11%)	1,548	(20%)	95	(19%)	54	(26%)	2,226	(17%)
<i>PH-Male</i>	272	(6%)	802	(10%)	66	(13%)	22	(10%)	1,162	(9%)
<i>Unknown</i>	257	(5%)	746	(10%)	29	(6%)	32	(15%)	1,064	(8%)
<b>RACE TOTAL</b>	<b>4,711</b>	<b>(36%)</b>	<b>7,719</b>	<b>(59%)</b>	<b>507</b>	<b>(4%)</b>	<b>211</b>	<b>(2%)</b>	<b>13,148</b>	<b>(100%)</b>

\*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**

<b>MALES</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Male Subtotal</b>	
0 - 12 years	25	(1%)	69	(1%)	2	(1%)	4	(3%)	100	(1%)
13 - 19 years	54	(1%)	255	(5%)	9	(2%)	3	(2%)	321	(3%)
20 - 24 years	374	(9%)	727	(13%)	38	(10%)	19	(12%)	1,158	(11%)
25 - 29 years	680	(17%)	880	(16%)	77	(20%)	30	(20%)	1,667	(16%)
30 - 39 years	1,668	(41%)	1,913	(35%)	165	(42%)	62	(41%)	3,808	(38%)
40 - 49 years	942	(23%)	1,171	(21%)	69	(18%)	27	(18%)	2,209	(22%)
50 - 59 years	277	(7%)	384	(7%)	23	(6%)	6	(4%)	690	(7%)
60 years and over	74	(2%)	72	(1%)	8	(2%)	2	(1%)	156	(2%)
<b>Total*</b>	<b>4,094</b>	<b>(40%)</b>	<b>5,471</b>	<b>(54%)</b>	<b>391</b>	<b>(4%)</b>	<b>153</b>	<b>(2%)</b>	<b>10,109</b>	<b>(100%)</b>

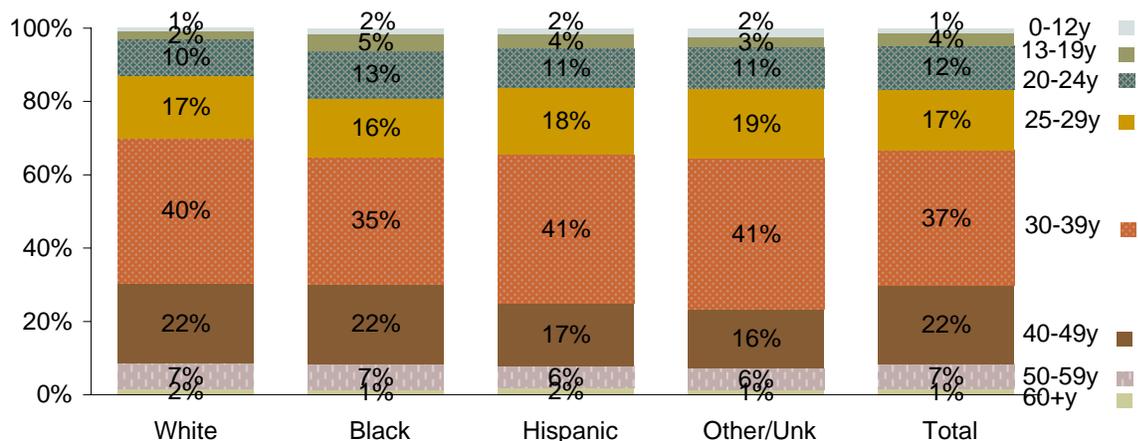
  

<b>FEMALES</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Female Subtotal</b>	
0 - 12 years	14	(2%)	51	(2%)	6	(5%)	1	(2%)	72	(2%)
13 - 19 years	36	(6%)	101	(4%)	11	(9%)	3	(5%)	151	(5%)
20 - 24 years	111	(18%)	272	(12%)	16	(14%)	5	(9%)	404	(13%)
25 - 29 years	126	(20%)	358	(16%)	16	(14%)	10	(17%)	510	(17%)
30 - 39 years	193	(31%)	768	(34%)	41	(35%)	25	(43%)	1,027	(34%)
40 - 49 years	90	(15%)	507	(23%)	18	(16%)	7	(12%)	622	(20%)
50 - 59 years	37	(6%)	161	(7%)	6	(5%)	6	(10%)	210	(7%)
60 years and over	9	(1%)	28	(1%)	2	(2%)	1	(2%)	40	(1%)
<b>Total*</b>	<b>616</b>	<b>(20%)</b>	<b>2,246</b>	<b>(74%)</b>	<b>116</b>	<b>(4%)</b>	<b>58</b>	<b>(2%)</b>	<b>3,036</b>	<b>(100%)</b>

<b>TOTAL</b>	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other or Unknown</b>		<b>Age Total</b>	
0 - 12 years	39	(1%)	120	(2%)	8	(2%)	5	(2%)	172	(1%)
13 - 19 years	90	(2%)	356	(5%)	20	(4%)	6	(3%)	472	(4%)
20 - 24 years	485	(10%)	999	(13%)	54	(11%)	24	(11%)	1,562	(12%)
25 - 29 years	806	(17%)	1,238	(16%)	93	(18%)	40	(19%)	2,177	(17%)
30 - 39 years	1,861	(40%)	2,681	(35%)	206	(41%)	87	(41%)	4,835	(37%)
40 - 49 years	1,032	(22%)	1,678	(22%)	87	(17%)	34	(16%)	2,831	(22%)
50 - 59 years	314	(7%)	545	(7%)	29	(6%)	12	(6%)	900	(7%)
60 years and over	83	(2%)	100	(1%)	10	(2%)	3	(1%)	196	(1%)
<b>RACE TOTAL *</b>	<b>4,710</b>	<b>(36%)</b>	<b>7,717</b>	<b>(59%)</b>	<b>507</b>	<b>(4%)</b>	<b>211</b>	<b>(2%)</b>	<b>13,145</b>	<b>(100%)</b>

\*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**

Year	<i>HIV/AIDS</i>			<i>AIDS</i>		
	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	70	17	81	50	17	53
1985	379	63	397	98	63	88
1986	487	102	782	168	99	157
1987	719	182	1,319	318	174	301
1988	901	263	1,957	492	254	539
1989	1,301	380	2,878	689	370	858
1990	1,437	453	3,862	794	433	1,219
1991	1,447	536	4,773	962	515	1,666
1992	1,495	662	5,606	1,232	630	2,268
1993	1,308	822	6,092	1,124	776	2,616
1994	1,211	901	6,402	1,009	843	2,782
1995	1,192	911	6,683	1,059	843	2,998
1996	1,126	632	7,177	852	583	3,267
1997	1,048	469	7,756	732	419	3,580
1998	909	399	8,266	643	351	3,872
1999	751	363	8,654	574	317	4,129
2000	919	379	9,194	644	328	4,445
2001	895	380	9,709	569	313	4,701
2002	776	296	10,189	574	268	5,007
2003	877	262	10,804	595	227	5,375
2004	904	250	11,458	557	209	5,723
2005	922	261	12,119	691	230	6,184
2006	840	206	12,753	630	182	6,632
2007	515	120	<b>13,148</b>	372	100	<b>6,904</b>
<b>TOTAL</b>	<b>22,464</b>	<b>9,316</b>		<b>15,455</b>	<b>8,551</b>	

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 13,148. The prevalence of AIDS, which is a subset of HIV/AIDS prevalence, is 6,904.

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**

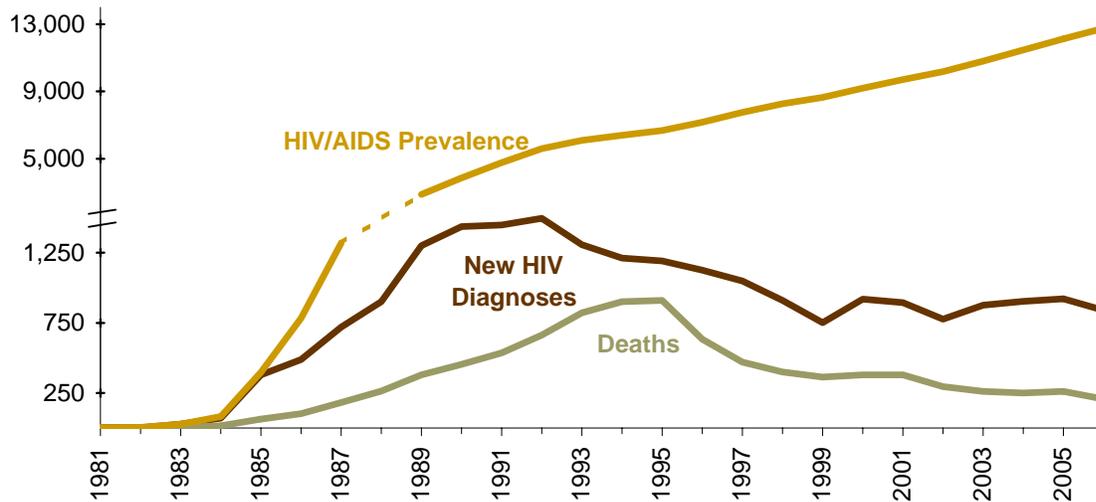
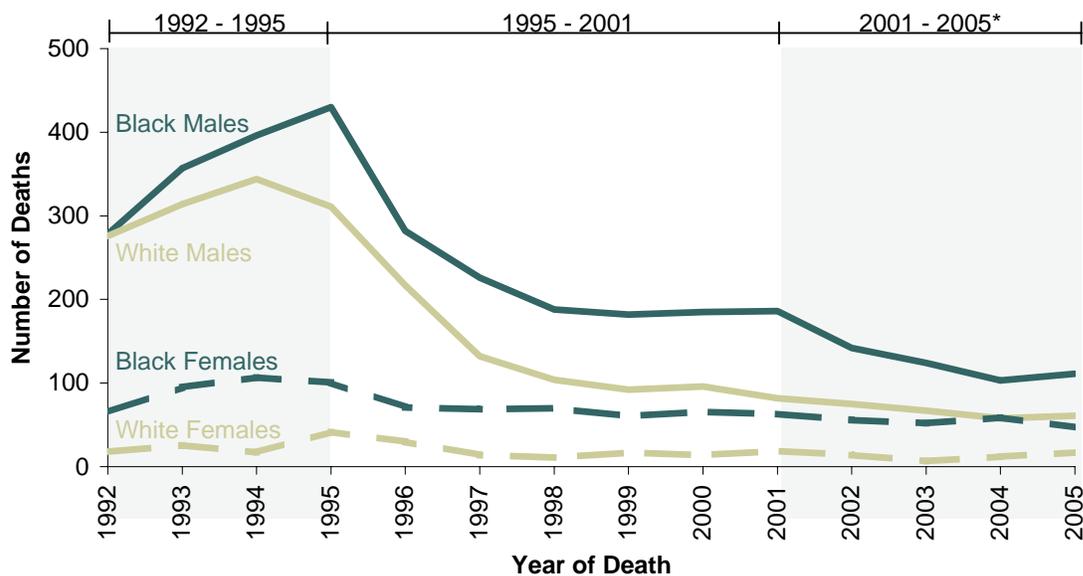


Figure 4 (below) shows the number of HIV-infected Michigan residents who have been reported as deceased by a local health department, the department of vital records via a data match or death certificate, or an alternate source. The number of deaths increased in all race/sex groups from the beginning 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 since 2001 (40%), even in comparison to white males (26%), 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**



\*Although some 2006 death data are currently available, they are not complete enough to include here

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

	2006						CUMULATIVE (through 2006)					
	Male		Female		Total		Male		Female		Total	
<b>RACE/ETHNICITY</b>												
White	229	(35%)	37	(19%)	266	(32%)	7,171	(41%)	901	(20%)	8,072	(37%)
Black	378	(59%)	143	(74%)	521	(62%)	9,403	(54%)	3,395	(75%)	12,798	(58%)
Hispanic	25	(4%)	8	(4%)	33	(4%)	595	(3%)	158	(3%)	753	(3%)
Asian	4	(1%)	1	(1%)	5	(1%)	55	(0%)	15	(0%)	70	(0%)
Am Indian	4	(1%)	2	(1%)	6	(1%)	46	(0%)	17	(0%)	63	(0%)
Multi/Unk	6	(1%)	3	(2%)	9	(1%)	147	(1%)	46	(1%)	193	(1%)
<b>RISK<sup>§</sup></b>												
Male-Male Sex	375	(58%)	N/A	--	375	(45%)	10,132	(58%)	N/A	--	10,132	(46%)
Injection Drug Use	30	(5%)	15	(8%)	45	(5%)	2,578	(15%)	1,473	(33%)	4,051	(18%)
MSM/IDU	13	(2%)	N/A	--	13	(2%)	1,225	(7%)	N/A	--	1,225	(6%)
Blood Products	0	(0%)	0	(0%)	0	(0%)	388	(2%)	64	(1%)	452	(2%)
Heterosexual	16	(2%)	104	(54%)	120	(14%)	699	(4%)	2,305	(51%)	3,004	(14%)
HRH	16	(2%)	38	(20%)	54	(6%)	699	(4%)	1,650	(36%)	2,349	(11%)
PH-Female	N/A	--	66	(34%)	66	(8%)	N/A	--	655	(14%)	655	(3%)
Perinatal	0	(0%)	3	(2%)	3	(0%)	122	(1%)	99	(2%)	221	(1%)
Undetermined	212	(33%)	71	(37%)	283	(34%)	2,273	(13%)	591	(13%)	2,864	(13%)
PH-Male	109	(17%)	N/A	--	109	(13%)	1,488	(9%)	N/A	--	1,488	(7%)
Unknown	103	(16%)	71	(37%)	174	(21%)	785	(5%)	591	(13%)	1,376	(6%)
<b>AGE AT HIV DIAGNOSIS</b>												
0 - 12 years	2	(0%)	3	(2%)	5	(1%)	166	(1%)	103	(2%)	269	(1%)
13 - 19 years	48	(7%)	5	(3%)	53	(6%)	368	(2%)	176	(4%)	544	(2%)
20 - 24 years	87	(13%)	20	(10%)	107	(13%)	1,502	(9%)	492	(11%)	1,994	(9%)
25 - 29 years	79	(12%)	25	(13%)	104	(12%)	2,821	(16%)	698	(15%)	3,519	(16%)
30 - 39 years	177	(27%)	59	(30%)	236	(28%)	6,811	(39%)	1,621	(36%)	8,432	(38%)
40 - 49 years	182	(28%)	51	(26%)	233	(28%)	4,074	(23%)	1,020	(23%)	5,094	(23%)
50 - 59 years	56	(9%)	26	(13%)	82	(10%)	1,299	(7%)	326	(7%)	1,625	(7%)
60 years and over	15	(2%)	5	(3%)	20	(2%)	374	(2%)	95	(2%)	469	(2%)
Unspecified	0	(0%)	0	(0%)	0	(0%)	2	(0%)	1	(0%)	3	(0%)
<b>DISEASE STATUS<sup>‡</sup></b>												
AIDS - Same time	192	(30%)	41	(21%)	233	(28%)	6,985	(40%)	1,341	(30%)	8,326	(38%)
AIDS - Short lag	61	(9%)	7	(4%)	68	(8%)	1,245	(7%)	344	(8%)	1,589	(7%)
AIDS - Long lag	7	(1%)	3	(2%)	10	(1%)	4,258	(24%)	1,134	(25%)	5,392	(25%)
HIV, not AIDS	386	(60%)	143	(74%)	529	(63%)	4,929	(28%)	1,713	(38%)	6,642	(30%)
<b>TOTAL</b>	<b>646</b>	<b>(77%)</b>	<b>194</b>	<b>(23%)</b>	<b>840</b>	<b>(100%)</b>	<b>17,417</b>	<b>(79%)</b>	<b>4,532</b>	<b>(21%)</b>	<b>21,949</b>	<b>(100%)</b>

\*Includes deceased cases

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

NOTE: &lt;5 and \*\* = 1, 2, 3, or 4 cases

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

COUNTY	EST PREV Number	REPORTED PREVALENCE				CENSUS 2006 EST	COUNTY	EST PREV Number	REPORTED PREVALENCE				CENSUS 2006 EST
		HIV, Not AIDS	AIDS	Total	Rate*				HIV, Not AIDS	AIDS	Total	Rate*	
Alcona	10	0	1	1	9	11,759	Lenawee	60	22	23	45	44	102,191
Alger	10	0	1	1	10	9,665	Livingston	60	22	22	44	24	184,511
Allegan	100	32	43	75	66	113,501	Luce	10	0	0	0	0	6,684
Alpena	10	1	1	2	7	30,067	Mackinac	10	0	1	1	9	11,050
Antrim	10	3	5	8	33	24,463	Macomb	700	239	273	512	61	832,861
Arenac	10	1	1	2	12	17,024	Manistee	20	5	8	13	52	25,067
Baraga	10	2	4	6	69	8,742	Marquette	20	12	6	18	28	64,675
Barry	30	6	13	19	32	59,899	Mason	20	4	7	11	38	29,045
Bay	80	31	24	55	51	108,390	Mecosta	20	8	5	13	31	42,252
Benzie	10	1	0	1	6	17,652	Menominee	10	3	1	4	16	24,696
Berrien	300	97	123	220	136	161,705	Midland	30	8	14	22	26	83,792
Branch	20	10	2	12	26	45,875	Missaukee	10	3	1	4	26	15,197
Calhoun	150	55	52	107	78	137,991	Monroe	70	19	32	51	33	155,035
Cass	40	15	13	28	55	51,329	Montcalm	20	6	11	17	27	63,977
Charlevoix	20	8	5	13	49	26,422	Montmorency	10	0	4	4	38	10,478
Cheboygan	10	3	4	7	26	27,282	Muskegon	140	51	52	103	59	175,231
Chippewa	10	5	4	9	23	38,674	Newaygo	20	7	11	18	36	49,840
Clare	20	7	6	13	42	31,307	Oakland	1,930	672	737	1,409	116	1,214,255
Clinton	40	18	13	31	44	69,909	Oceana	10	6	4	10	35	28,639
Crawford	10	0	3	3	20	14,928	Ogemaw	10	1	2	3	14	21,665
Delta	20	4	8	12	31	38,156	Ontonagon	10	1	1	2	28	7,202
Dickinson	10	0	1	1	4	27,447	Osceola	10	2	2	4	17	23,584
Eaton	60	21	26	47	44	107,237	Oscoda	10	1	0	1	11	9,140
Emmet	10	3	5	8	24	33,607	Otsego	10	4	5	9	36	24,711
Genesee	640	230	237	467	106	441,966	Ottawa	120	40	50	90	35	257,671
Gladwin	10	2	5	7	26	27,008	Presque Isle	10	1	2	3	21	14,144
Gogebic	10	1	0	1	6	16,524	Roscommon	20	4	9	13	50	26,064
Grand Traverse	60	23	22	45	53	84,952	Saginaw	200	72	75	147	71	206,300
Gratiot	10	2	3	5	12	42,107	Sanilac	20	4	7	11	25	44,448
Hillsdale	10	5	3	8	17	47,206	Schoolcraft	10	1	0	1	11	8,744
Houghton	10	2	4	6	17	35,334	Shiawassee	30	7	13	20	27	72,912
Huron	10	1	2	3	9	34,143	St. Clair	110	42	38	80	47	171,725
Ingham	500	200	165	365	132	276,898	St. Joseph	40	11	17	28	45	62,777
Ionia	20	6	10	16	25	64,821	Tuscola	10	4	4	8	14	57,878
Iosco	10	2	1	3	11	26,831	Van Buren	60	21	22	43	54	79,018
Iron	10	0	1	1	8	12,377	Washtenaw	590	214	216	430	125	344,047
Isabella	30	14	11	25	38	65,818	Wayne Total	8,840	2,964	3,474	6,438	326	1,971,853
Jackson	150	55	57	112	68	163,851	Wayne, excl. Detroit	1,710	547	698	1,245	113	1,100,732
Kalamazoo	350	136	122	258	107	240,720	Detroit	7,130	2,417	2,776	5,193	596	871,121
Kalkaska	10	3	1	4	23	17,330	Wexford	20	5	7	12	38	31,994
Kent	950	313	381	694	116	599,524							
Keweenaw	10	0	0	0	0	2,183							
Lake	10	3	6	9	76	11,793	<b>PRISONS</b>	770	420	341	761	N/A	N/A
Lapeer	40	13	13	26	28	93,761	<b>UNKNOWN</b>	10	4	1	5	N/A	N/A
Leelanau	10	0	4	4	18	22,112	<b>TOTAL</b>	<b>17,000</b>	<b>6,244</b>	<b>6,904</b>	<b>13,148</b>	<b>130</b>	<b>10,095,643</b>

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



**TABLE 7. Perinatal HIV Exposures by Year of Birth, 2000 - 2006**

	2000	2001	2002	2003	2004	2005	2006
<b>NUMBER DELIVERIES/BIRTHS</b>							
Infants	70	73	55	57	56	71	46
Mothers	69	72	55	56	51	65	44
<b>RESIDENCE AT BIRTH</b>							
Southeast Michigan	52 (74%)	40 (55%)	35 (64%)	36 (63%)	37 (66%)	42 (59%)	27 (59%)
Out-State Michigan	18 (26%)	33 (45%)	20 (36%)	21 (37%)	19 (34%)	29 (41%)	19 (41%)
<b>INFANTS' RACE</b>							
White, Non-Hispanic	12 (17%)	9 (12%)	11 (20%)	9 (16%)	7 (13%)	9 (13%)	7 (15%)
Black, Non-Hispanic	49 (70%)	55 (75%)	37 (67%)	44 (77%)	46 (82%)	57 (80%)	31 (67%)
Other	9 (13%)	9 (12%)	7 (13%)	4 (7%)	3 (5%)	5 (7%)	8 (17%)
<b>MOTHERS' MODE OF TRANSMISSION*</b>							
Injecting Drug Use	12 (17%)	7 (10%)	5 (9%)	6 (11%)	3 (6%)	7 (11%)	2 (5%)
High Risk Heterosexual	39 (57%)	46 (64%)	32 (58%)	28 (50%)	13 (25%)	31 (48%)	17 (39%)
Undetermined	18 (26%)	19 (26%)	18 (33%)	21 (38%)	35 (69%)	27 (42%)	25 (57%)

\*Not reported in this table is one mother's mode of transmission of 'Blood Products' for an infant born in 2003

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](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, 2000 - 2006**