

**TABLE 1: Characteristics of Michigan Residents Living with HIV or AIDS
 as of July 1, 2006**

	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Reported Living with AIDS ³		Reported Living with HIV not AIDS ³	
			Number	Percent	Number	Percent
MICHIGAN TOTAL	16,200	163	6,336	100%	6,008	100%
SEX						
Male	12,410	255	5,007	79%	4,452	74%
Female	3,790	75	1,329	21%	1,556	26%
BEHAVIOR						
Male-Male Sex	7,500	N/A	3,100	49%	2,615	44%
Injecting Drug Use ⁴	2,110	N/A	909	14%	696	12%
IDU w/ heterosexual	980	N/A	417	7%	332	6%
IDU w/o heterosexual	1,120	N/A	492	8%	364	6%
Male-Male Sex/IDU	740	N/A	310	5%	251	4%
Blood Products	150	N/A	71	1%	40	1%
Heterosexual ⁵	2,170	N/A	816	13%	835	14%
Partner IDU	650	N/A	245	4%	251	4%
Partner Bisexual	130	N/A	40	1%	58	1%
Partner Rec'd Bld	50	N/A	20	0%	20	0%
Partner HIV +	1,330	N/A	511	8%	506	8%
Perinatal	190	N/A	40	1%	103	2%
Undetermined	Not Applicable	N/A	1,090	17%	1,468	24%
Presumed Heterosexual ⁶	Not Applicable	N/A	870	14%	1,028	17%
Other ⁷	Not Applicable	N/A	220	3%	440	7%
AGE AT DIAGNOSIS						
0 -12 years	200	11	35	1%	115	2%
13 -19 years	420	41	69	1%	253	4%
20 -24 years	1,520	236	327	5%	833	14%
25 -29 years	2,320	354	720	11%	1,051	17%
30 -34 years	3,060	432	1,197	19%	1,138	19%
35 -39 years	3,160	401	1,382	22%	1,026	17%
40 -44 years	2,430	300	1,127	18%	728	12%
45 -49 years	1,510	205	719	11%	431	7%
50 -54 years	900	142	436	7%	247	4%
55 -59 years	390	80	182	3%	112	2%
60 -64 years	180	48	89	1%	46	1%
65 years and over	100	8	53	1%	25	0%
Unspecified	Not Applicable	N/A	0	(0%)	3	0%
RACE / ETHNICITY						
White, Non-Hisp.	5,800	74	2,309	36%	2,110	35%
Black, Non-Hisp.	9,450	674	3,699	58%	3,505	58%
Hispanic	610	188	252	4%	209	3%
Asian/Pacific Islander	80	45	31	0%	28	0%
American Indian	60	112	12	0%	30	0%
Unspecified/Multi-race	Not Applicable	N/A	33	(1%)	126	(2%)

* See Technical Notes for footnotes to Table 1.

**TABLE 2a: Michigan Residents Living with HIV or AIDS by County, as of 7/1/06
 and Residents Ever Diagnosed with AIDS, 1981 to Date**

Residence at Time of Diagnosis	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Persons Living with AIDS ³	Persons Living with HIV not AIDS ³	Persons Ever Diagnosed with AIDS
Total Michigan	16,200	163.0	6,336	6,008	14,653
Alcona	10	----	0	0	3
Alger	10	----	1	0	1
Allegan	90	85.2	39	27	78
Alpena	10	----	1	1	8
Antrim	10	----	5	3	10
Arenac	10	----	1	1	4
Baraga	10	----	4	2	8
Barry	30	52.9	13	7	25
Bay	70	63.5	22	29	55
Benzie	10	----	0	1	2
Berrien	280	172.4	108	96	204
Branch	20	43.7	1	10	13
Calhoun	130	94.2	46	44	111
Cass	40	78.3	12	14	21
Charlevoix	20	76.7	5	7	7
Cheboygan	10	----	4	1	6
Chippewa	10	----	5	4	8
Clare	20	64.0	5	7	9
Clinton	50	77.2	14	20	28
Crawford	10	----	2	0	4
Delta	20	51.9	7	5	9
Dickinson	10	----	1	0	5
Eaton	60	57.9	17	24	35
Emmet	10	----	5	3	9
Genesee	610	139.9	200	235	458
Gladwin	10	----	5	1	7
Gogebic	10	----	0	1	7
Grand Traverse	60	77.3	22	23	41
Gratiot	10	----	3	2	9
Hillsdale	10	----	3	5	15
Houghton	10	----	4	2	8
Huron	10	----	2	0	8
Ingham	480	171.8	145	200	350
Ionia	20	32.5	10	4	21
Iosco	10	----	1	2	2
Iron	10	----	0	0	2
Isabella	30	47.4	9	10	21
Jackson	150	94.7	50	59	105
Kalamazoo	340	142.5	117	127	252
Kalkaska	10	----	2	3	5
Kent	910	158.4	337	312	714
Keweenaw	10	----	0	0	0

1. This estimate includes all persons living with HIV or AIDS, including those not yet diagnosed. The minimum estimate given is 10 persons.
2. Rates are calculated per 100,000 population in 2000. Rates are unreliable for counties with the minimum estimated prevalence of 10, and are therefore not listed.
3. Includes reports of HIV infection or AIDS that contain patient name or are otherwise unduplicated.

**TABLE 2b: Michigan Residents Living with HIV or AIDS by County, as of 7/1/06
 and Residents Ever Diagnosed with AIDS, 1981 to Date**

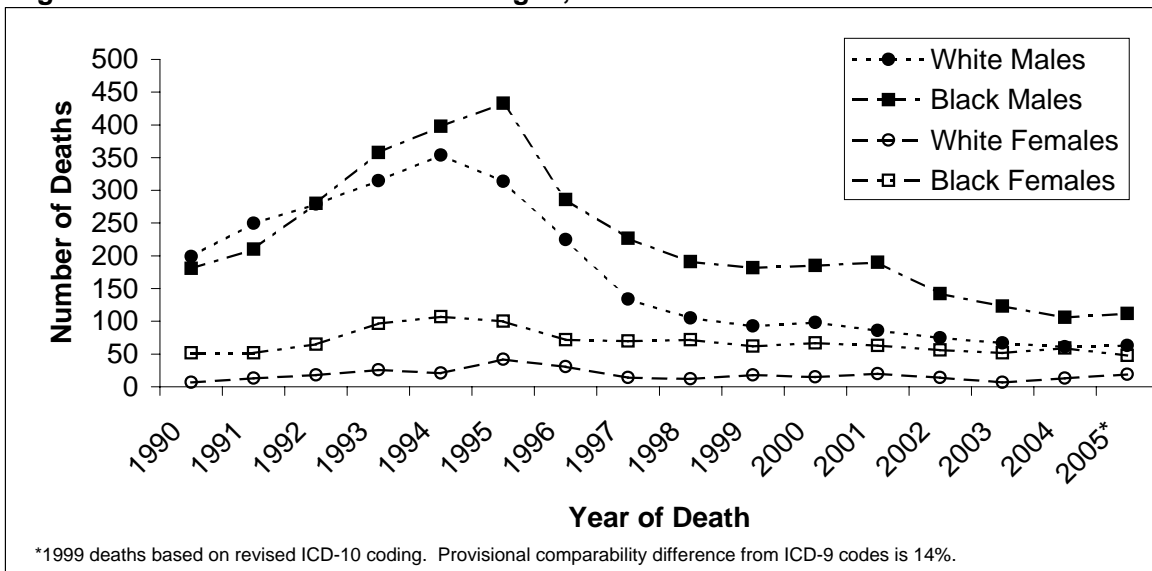
Residence at Time of Diagnosis	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Persons Living with AIDS ³	Persons Living with HIV not AIDS ³	Persons Ever Diagnosed with AIDS
TOTAL MICHIGAN	16,200	163.0	6,336	6,008	14,653
Lake	10	----	6	3	11
Lapeer	30	34.1	12	10	23
Leelanau	10	----	4	0	14
Lenawee	50	50.6	20	19	41
Livingston	50	31.9	17	18	37
Luce	10	----	0	0	1
Mackinac	10	----	1	0	2
Macomb	640	81.2	242	216	548
Manistee	20	81.5	8	4	12
Marquette	30	46.4	6	12	20
Mason	20	70.7	8	4	11
Mecosta	20	49.3	5	8	14
Menominee	10	----	0	3	4
Midland	30	36.2	15	8	30
Missaukee	10	----	1	3	3
Monroe	70	48.0	29	18	67
Montcalm	20	32.6	11	6	24
Montmorency	10	----	3	0	4
Muskegon	140	82.3	46	51	101
Newaygo	20	41.8	10	6	22
Oakland	1,820	152.4	654	648	1,353
Oceana	10	----	4	6	9
Ogemaw	10	----	1	1	3
Ontonagon	10	----	1	1	1
Osceola	10	----	2	2	8
Oscoda	10	----	0	1	2
Otsego	10	----	5	4	9
Ottawa	110	46.2	47	35	105
Presque Isle	10	----	1	1	3
Roscommon	20	78.5	9	3	15
Saginaw	200	95.2	68	74	173
Sanilac	20	44.9	7	4	14
Schoolcraft	10	----	0	1	2
Shiawassee	30	41.8	13	8	22
St. Clair	100	60.9	32	43	85
St. Joseph	40	64.1	15	13	35
Tuscola	10	----	3	4	11
Van Buren	60	78.7	23	22	46
Washtenaw	550	170.3	198	193	404
Wayne	1,590	143.3	638	501	1,407
City of Detroit	6,910	726.4	2,627	2,318	6,635
Wexford	10	----	6	4	8
PRISONS ⁴	750	N/A	310	436	625
Unknown	10	N/A	0	4	1

1. This estimate includes all persons living with HIV or AIDS, including those not yet diagnosed. The minimum estimate given is 10 persons.
2. Rates are calculated per 100,000 population in 2000. Rates are unreliable for counties with the minimum estimated prevalence of 10, and are therefore not listed.
3. Includes reports of HIV infection or AIDS that contain patient name or are otherwise unduplicated.
4. The category PRISONS includes those persons who were in prison at the time of their HIV or AIDS diagnosis.

TABLE 3: Michigan Residents Reported Living with HIV or AIDS: Sex by Race by Behavior

MALES:	White		Black		Hispanic		Other/Unknown or Multi-race		TOTAL	
Male-Male Sex	2,886	75%	2,578	51%	177	50%	74	38%	5,715	60%
Injecting Drug Use	175	5%	735	14%	47	13%	13	7%	970	10%
Male-Male Sex/IDU	221	6%	316	6%	16	5%	8	4%	561	6%
Blood Recipient	73	2%	17	0%	1	0%	3	2%	94	1%
Heterosexual	93	2%	346	7%	35	10%	6	3%	480	5%
Perinatal	14	0%	59	1%	2	1%	3	2%	78	1%
Undetermined	379	10%	1,023	20%	73	21%	86	45%	1,561	17%
<i>Presumed Heterosexual</i>	240	6%	749	15%	58	17%	28	15%	1,075	11%
<i>Other</i>	139	4%	274	5%	15	4%	58	30%	486	5%
Male Subtotal	3,841	(41%)	5,074	(54%)	351	(4%)	193	(2%)	9,459	100%
FEMALES:	White		Black		Hispanic		Other/Unknown or Multi-race		TOTAL	
Injecting Drug Use	107	19%	500	23%	19	17%	9	13%	635	22%
Blood Recipient	10	2%	6	0%	1	1%	0	0%	17	1%
Heterosexual	300	52%	793	37%	58	53%	20	30%	1171	41%
Perinatal	12	2%	46	2%	6	5%	1	1%	65	2%
Undetermined	149	26%	785	37%	26	24%	37	55%	997	35%
<i>Presumed Heterosexual</i>	124	21%	657	31%	22	20%	20	30%	823	29%
<i>Other</i>	25	4%	128	6%	4	4%	17	25%	174	6%
Female Subtotal	578	(20%)	2,130	(74%)	110	(4%)	67	(2%)	2,885	100%
GRAND TOTAL	4,419	36%	7,204	58%	461	4%	260	2%	12,344	100%

Figure 2: HIV-Related Deaths in Michigan, 1990-2005



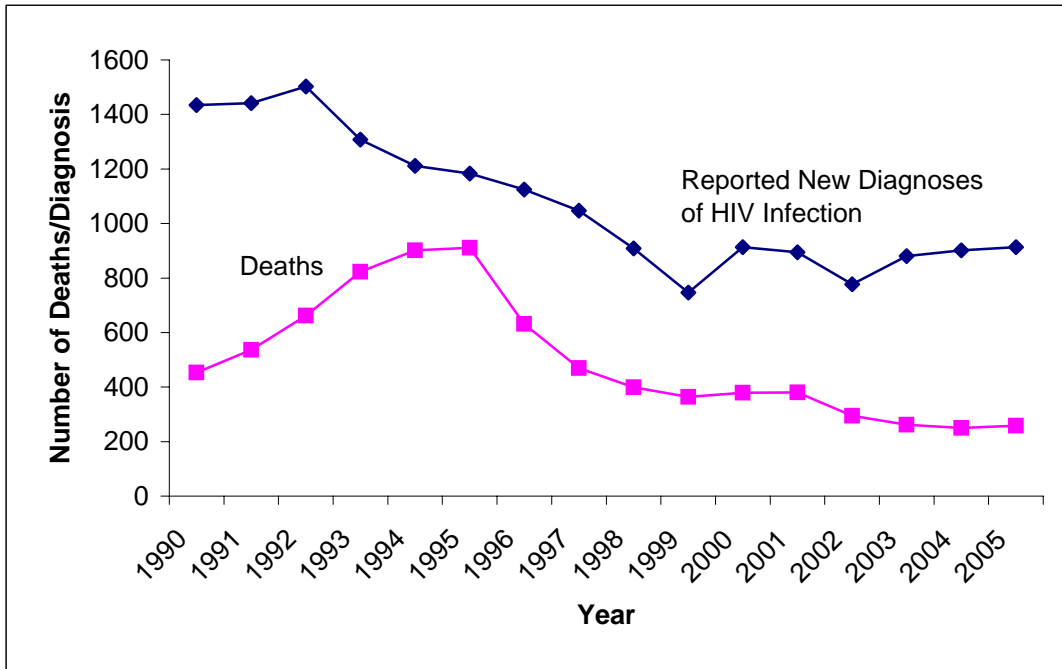
Mortality Trends
 HIV-related deaths declined among all groups between 1995 and 2004. These data (MDCH HIV/AIDS reporting system) show the trend among white men, black men, black women, and white women. From the peak in 1995 to 2004 there were declines among all groups: white men (81%), black men (76%), white women (69%), and black women (41%). There were too few deaths to show other groups. *Deaths for 2005 may be incomplete.

TABLE 4: States and Territories With Most AIDS Cases Ever Reported to CDC, 1981-12/31/04

State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹
1. NY	166,814	879	6. IL	31,020	250	11. MA	18,339	389	16. CT	13,890	408
2. CA	135,221	399	7. PA	30,526	249	12. DC ²	16,259	2,842	17. OH	16,655	120
3. FL	96,712	605	8. GA	28,248	345	13. LA	16,066	360	18. MI ³	13,631	137
4. TX	64,479	309	9. PR ²	28,202	740	14. VA	15,740	222	19. SC	12,089	301
5. NJ	47,224	561	10. MD	27,550	520	15. NC	14,078	175	20. TN	11,126	196

1. Cumulative Rate per 100,000 Population, 2000 Census. The average U.S. rate was 326.3.
 2. Abbreviations include PR for Puerto Rico, and DC for District of Columbia.
 3. Michigan annual rate per 100,000 population ranks 31st among U.S. states and territories.

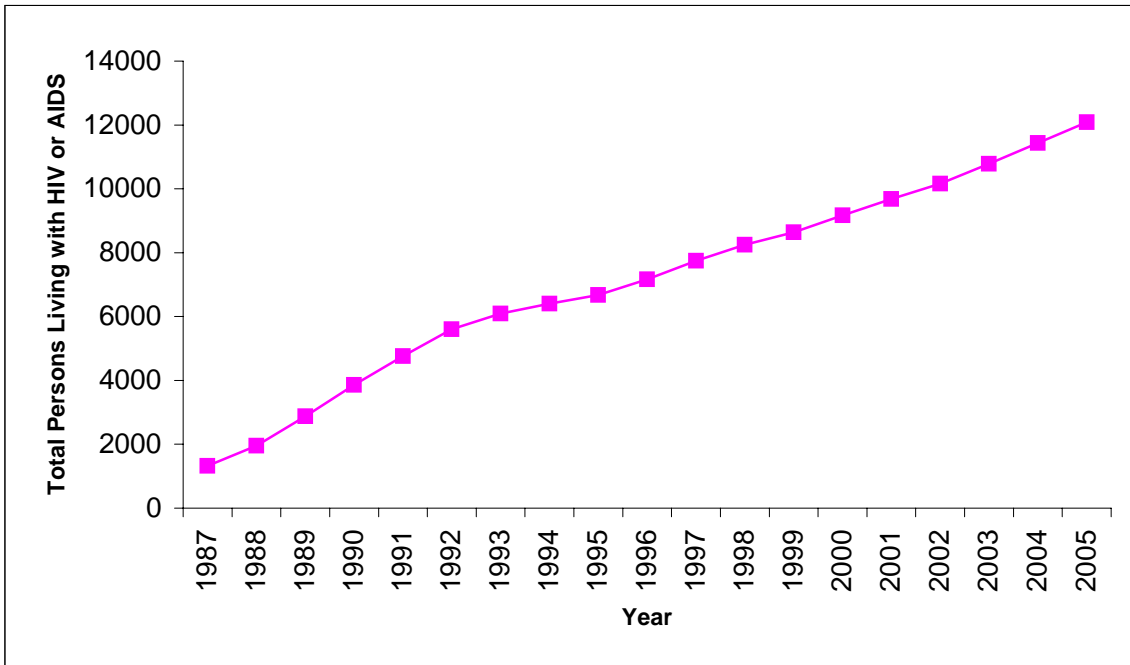
Figure 3: Michigan HIV Deaths, and New HIV Diagnoses, by Year, 1990-2005



Deaths and Diagnoses
 The numbers of deaths due to HIV infection and AIDS have declined 72 percent from 1995 to 2005 primarily due to effective therapies. Meanwhile, the number of persons diagnosed with HIV infection each year was roughly level between 2000 and 2004 at 890 persons. The number of new diagnoses currently reported for 2005 is 913.

*1999 deaths based on revised ICD-10 coding. Provisional comparability difference from ICD-9 codes is 14%.

Figure 4: Reported Number of Michigan Residents Living with HIV or AIDS



Number of Infected Persons Is Increasing
 The total number of persons reported with a diagnosis of HIV infection or AIDS is increasing. This is caused by the two factors shown in Figure 3: the number of persons diagnosed exceeds the number who die each year, leading to increased prevalence. Currently we estimate there are about 16,200 persons living with HIV or AIDS in Michigan. This graph shows 12,344 living cases who have been diagnosed and reported.

TABLE 5: Characteristics of Michigan and U.S. Residents Ever Diagnosed with AIDS, 1981 to Date

	MI AIDS : 1981-7/1/2006			U.S. AIDS : 1981-12/31/2004 ¹		
	Cases	Percent	Rate ²	Cases	Percent	Rate ²
TOTAL	14,653	100%	147.4	918,286	100%	326.3
SEX						
Male	11,982	82%	245.9	742,094	81%	537.5
Female	2,671	18%	52.7	176,190	19%	122.9
Unknown	0	0%	---	1	0%	---
TRANSMISSION						
Male-Male Sex	7,085	48%	N/A	402,722	44%	N/A
Injecting Drug Use	3,052	21%	N/A	219,053	24%	N/A
Male-Male Sex/IDU	918	6%	N/A	60,038	7%	N/A
Blood Products ³	292	2%	N/A	15,319	2%	N/A
Heterosexual ⁴	1,430	10%	N/A	117,887	13%	N/A
Perinatal ⁵	102	1%	N/A	8,576	1%	N/A
Undetermined ⁶	1,774	12%	N/A	94,691	10%	N/A
AGE AT DIAGNOSIS						
0 -12 years	112	1%	6.0	⊗	N/A	N/A
13 -19 years	114	1%	11.3	⊗	N/A	N/A
20 -24 years	590	4%	91.6	⊗	N/A	N/A
25 -34 years	4,586	31%	336.7	⊗	N/A	N/A
35 -44 years	5,776	39%	361.4	⊗	N/A	N/A
45 -54 years	2,610	18%	190.8	⊗	N/A	N/A
55 -64 years	677	5%	78.4	⊗	N/A	N/A
65 years and older	188	1%	15.4	⊗	N/A	N/A
Unknown	0	0%	N/A	⊗	N/A	N/A
RACE/ETHNICITY						
White, Non-Hisp.	5,617	38%	72.0	367,121	40%	188.7
Black, Non-Hisp.	8,449	58%	602.6	349,375	38%	1029.2
Hispanic	461	3%	142.3	165,051	18%	467.5
Asian	51	0%	28.7	6,791	1%	67.1
American Indian	36	0%	67.4	2,882	0%	139.3
Unknown/Other	39	0%	22.3	1,654	0%	30.5

⊗ Due to changes in the national statistics released by the Centers for Disease Control and Prevention these figures are no longer available.

1. U.S. figures are produced by the federal Centers for Disease Control and Prevention. Additional detail is available through the CDC web page at www.cdc.gov/nchstp/hiv_aids/stats/hasrlinc.htm.
2. Cumulative rates per 100,000 population are calculated using 2000 Census figures. Populations and rates are not available (N/A) for behaviors.
3. Blood products received for coagulation disorder (225 MI; 5,657 U.S.) or transfusion (67 MI; 9,662 U.S.).
4. A heterosexual partner is known to be: an injecting drug user (514 MI; 35,616 U.S.), a bisexual man (73 MI; 4,617 U.S.), a recipient of infected blood products (37 MI; 1,806 U.S.), or HIV positive with unknown behavior history (806 MI; 75,848 U.S.)
5. Perinatal transmission occurs from HIV-infected mothers to infants before or at birth, or from breast milk.
6. Patient risks are under investigation, or no risk was identified. Included are persons with documented exposure in the health care setting (2 MI; 36 U.S.), or receipt of donor products other than blood (14 U.S.).

Table 6: Michigan Infants Born to HIV-Infected Mothers

Year of Birth	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006 ²
TOTAL										
Total Infants Reported	75	68	64	70	70	55	52	54	67	11
Total Mothers Reported	75	68	62	69	69	54	52	49	60	11
RESIDENCE AT TIME OF BIRTH¹										
Detroit MSA	53	48	40	52	39	35	34	36	40	6
Outside the Detroit MSA	22	20	24	18	31	20	18	18	27	5
RACE OF CHILD										
White, Non-Hisp.	15	13	13	12	9	10	10	6	8	1
Black, Non-Hisp.	56	49	45	49	52	37	38	45	53	9
Hispanic, Asian, Am. Indian, Unk.	4	6	6	9	9	8	4	3	6	1

1- Detroit Metropolitan Statistical Area includes Wayne, Oakland, Macomb, Monroe, Lapeer, and St. Clair counties.
 2- Data for 2006 are incomplete at this time.

Figure 5: Efforts to Prevent HIV Transmission to Infants

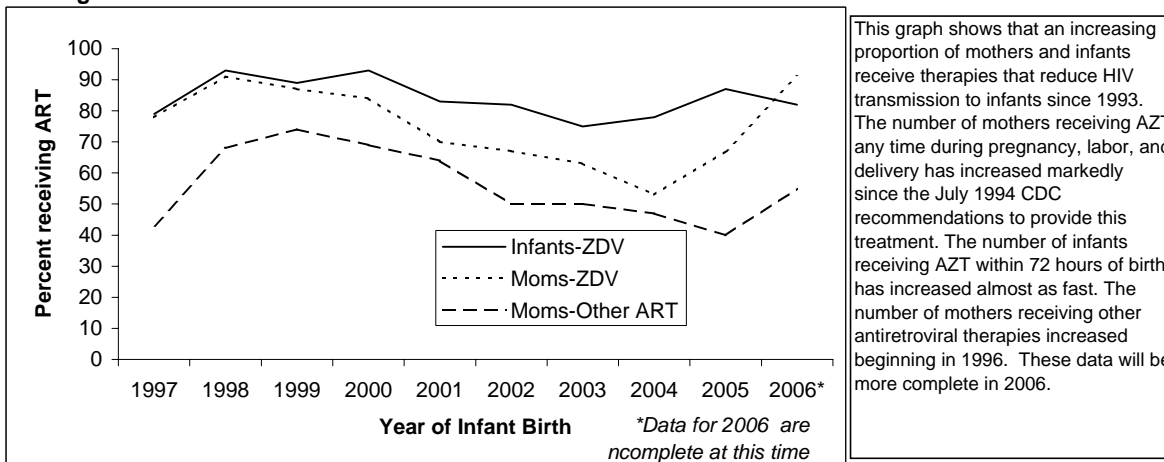
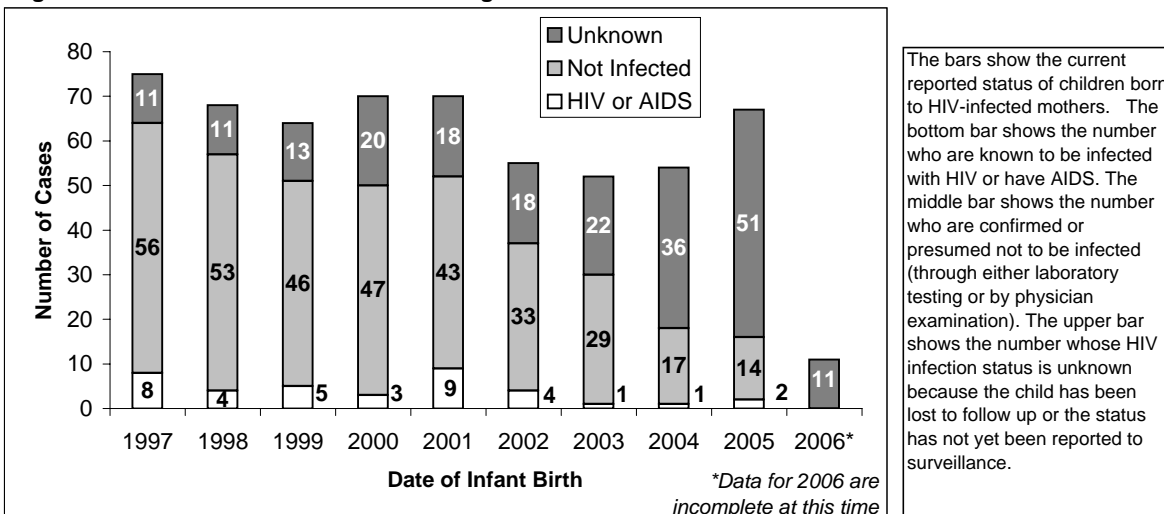


Figure 6: Confirmed Infection Status Among Infants Born to HIV-Infected Mothers



TECHNICAL NOTES

Reports of HIV infection and AIDS are submitted to state and local health departments under Michigan law by providers making the diagnoses. Confidential case reports have been actively solicited for AIDS since 1986 and for HIV infection since April 1992. HIV reports passively collected between April 1989 and March 1992 are also included in these calculations. Anonymous HIV reports (without name or other identifier) are excluded from the calculations because we cannot estimate duplication, update status, or obtain missing data. A total of 1,584 complete anonymous reports are currently in our database.

Footnotes for Table 1:

1. This estimate includes all persons living in Michigan at diagnosis of HIV or AIDS, including those not reported or not yet diagnosed. All estimates are rounded to the nearest ten, and the minimum estimate given is 10. The formula used to gain these estimates was updated October 2003 and January 2004 so that numbers are only rounded at the end of the estimate calculation and so that cases with no identified risk are no longer part of the equation. This may result in minor variations when compared to past estimates.
2. Rates are calculated per 100,000 population in 2000.
3. Includes reports that contain patient name or are otherwise unduplicated.
4. The IDU risk category is further sub-divided to indicate the number and percentage of persons who also had a sexual partner who is considered to be a "high risk" heterosexual, (i.e., partner is an IDU, a bisexual male (for females), a recipient of HIV infected blood or blood products or a person who is known to be infected with HIV).
5. The heterosexual category includes only those persons with "high risk" heterosexual partners as defined in footnote 4.
6. This subset of undetermined includes persons who had heterosexual sex but their partner(s) risk is unknown. This includes unconfirmed exposures in the healthcare setting (1).
7. Includes persons with confirmed exposure in the health care setting (2) and pediatric cases with probable sexual mode of transmission (3).

HIV Prevalence Estimates for Michigan

Since April 2005, MDCH has been implementing PA 514, which requires 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, bringing the number of reported cases closer to the previously calculated prevalence estimates. However, since this procedure is still new, MDCH has not had enough months of complete laboratory reporting to fully evaluate the impact of PA 514 on the HIV/AIDS prevalence estimates. Consequently, MDCH does not have sufficient data to recalculate the current prevalence estimate and it remains at 16,200. This estimate will be recalculated for in 2006 at which time MDCH should have sufficient data to evaluate the impact of PA 514. The estimate is 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 20 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 16,200. For example, 77 percent of combined HIV and AIDS reports are among men. Therefore, with rounding, the number of HIV-infected men in Michigan is estimated to be 12,460 = (77% X 16,200). Since the estimates are rounded to the nearest 10, totals may not equal 16,200. The minimum estimate is 10. *NOTE: Because the estimate has not been recalculated, the above formula may not be accurate for data appearing in the July 2006 quarterly statistics.

TECHNICAL NOTES (Continued)

TABLES 1, 2, 3 AND FIGURE 1: HIV AND AIDS AMONG MICHIGAN RESIDENTS

These tables describe Michigan residents living with HIV infection or AIDS, by sex, mode of transmission, age, race, and residence. For tables 1 and 2, the estimated total number of HIV-infected persons is shown in column 2, the rate is shown in column 3, the numbers of persons reported living with AIDS is in column 4, and the number reported living with HIV infection is in column 5. The estimated number living with HIV or AIDS for each county (from column 2) is shown in Figure 1. In Michigan, there have been two cases in which exposure to HIV has been confirmed by the CDC to have occurred in the health care setting. There has been one case which was unable to be confirmed by the CDC so is considered to be a possible exposure in the health care setting.

TABLES 2 and 5: PERSONS EVER DIAGNOSED WITH AIDS

These tables describe all Michigan residents who were diagnosed with AIDS, most of whom have died. The final column of Table 2 (Cumulative AIDS) shows these cases by residence. Table 5 shows sex, race, mode of transmission, and age when diagnosed for Michigan and the U.S.

FIGURES 2 AND 3: HIV-RELATED DEATHS IN MICHIGAN, 1990-2005

The number of Michigan residents whose underlying cause of death is HIV or AIDS is shown, by race and sex (Figure 2), and total only (Figure 3). Deaths occurring from 1999 to 2001 are based on revised ICD-10 coding. The ICD-9/ICD-10 comparability ratio is 1.14. Being that the codings are not 100% comparable, any changes in HIV/AIDS mortality between 1998 and 1999 should be interpreted with caution, because a portion of the change in mortality is directly attributable to changes in the coding (Grigg et al. [Coding Changes and Apparent HIV/AIDS Mortality Trends in Florida, 1999](#). JAMA 2001; 286(15): 1839).

FIGURE 3: HIV INFECTIONS BY YEAR OF DIAGNOSIS

Figure 3 shows the estimated number of persons diagnosed with HIV infection each year. The number of persons diagnosed with HIV infection, adjusted for reporting delays, was stable between 2000 and 2004 at 890 cases. Data before 1994 (a compressed reporting period) and after 1998 (too incomplete) are not reliable for making these estimates.

FIGURE 4: REPORTED NUMBER OF MICHIGAN RESIDENTS WITH HIV INFECTION OR AIDS

The total number of living persons with a diagnosis of HIV infection changes as some persons are newly diagnosed and some persons die (see Figure 3).

TABLE 6: PERINATAL DATA

Infants born to HIV-infected mothers are described, first by residence and race. Prevention efforts to identify infected women during pregnancy and to treat with ZDV are listed next. Most of these infants are not themselves infected.