

**TABLE 1: Characteristics of Michigan Residents Living with HIV or AIDS
 as of January 1, 2003**

	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Reported Living with AIDS ³		Reported Living with HIV not AIDS ³	
			Number	Percent ⁴	Number	Percent ⁴
MICHIGAN TOTAL	15,500	156	5,057	100%	5,460	100%
SEX						
Male	11,940	245	4,046	80%	4,069	75%
Female	3,570	70	1,011	20%	1,391	25%
BEHAVIOR						
Male-Male Sex	8,530	N/A	2458	57%	2252	53%
Injecting Drug Use ⁵	3,100	N/A	881	20%	797	19%
IDU w/ heterosexual	1,400	N/A	389	9%	358	8%
IDU w/o heterosexual	1,710	N/A	492	11%	439	10%
Male-Male Sex/IDU	930	N/A	281	7%	275	6%
Blood Products	160	N/A	78	2%	48	1%
Heterosexual ⁶	2,480	N/A	578	13%	784	18%
Partner IDU	780	N/A	194	5%	246	6%
Partner Bisexual	160	N/A	27	1%	41	1%
Partner Rec'd Bld	50	N/A	12	0%	18	0%
Partner HIV +	1,550	N/A	345	8%	479	11%
Perinatal	160	N/A	32	1%	96	2%
Undetermined ⁴	Not Applicable	N/A	749	(15%)	1208	(22%)
Presumed Heterosexual ⁷	Not Applicable	N/A	581	(11%)	807	(15%)
Other ⁸	Not Applicable	N/A	168	(3%)	401	(7%)
AGE AT DIAGNOSIS						
0 -12 years	160	9	33	1%	115	2%
13 -19 years	310	31	46	1%	177	3%
20 -24 years	1,400	217	225	4%	713	13%
25 -29 years	2,480	379	609	12%	1054	19%
30 -34 years	3,260	461	1086	21%	1116	20%
35 -39 years	3,100	394	1122	22%	995	18%
40 -44 years	2,330	287	906	18%	626	11%
45 -49 years	1,240	169	539	11%	335	6%
50 -54 years	780	123	302	6%	194	4%
55 -59 years	310	64	111	2%	82	2%
60 -64 years	160	42	51	1%	34	1%
65 years and over	70	6	27	1%	19	0%
Unspecified ⁴	Not Applicable		0	(0%)	0	(0%)
RACE / ETHNICITY						
White, Non-Hisp.	5,580	71	1,954	39%	1,884	35%
Black, Non-Hisp.	8,990	641	2,870	57%	3,240	61%
Hispanic	620	191	200	4%	172	3%
Asian	50	28	22	0%	13	0%
American Indian	60	112	10	0%	27	1%
Unspecified ⁴	Not Applicable	N/A	1	(0%)	124	(2%)

* See Technical Notes for footnotes to Table 1.

**TABLE 2a: Michigan Residents Living with HIV or AIDS by County, as of 1/1/03
 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	15,500	156.0	5,057	5,460	12,623
Alcona	10	----	1	0	3
Alger	10	----	1	0	1
Allegan	100	94.6	40	22	78
Alpena	10	----	1	2	8
Antrim	10	----	2	1	6
Arenac	10	----	0	2	2
Baraga	10	----	4	3	8
Barry	30	52.9	10	7	22
Bay	70	63.5	20	26	52
Benzie	10	----	0	1	2
Berrien	250	153.9	79	80	165
Branch	10	----	1	8	13
Calhoun	150	108.7	39	56	96
Cass	30	58.7	9	13	17
Charlevoix	10	----	3	6	5
Cheboygan	10	----	2	0	5
Chippewa	10	----	2	6	4
Clare	10	----	3	5	8
Clinton	30	46.3	14	8	25
Crawford	10	----	2	0	4
Delta	20	51.9	6	7	7
Dickinson	10	----	3	2	5
Eaton	40	38.6	14	14	31
Emmet	10	----	5	3	9
Genesee	580	133.0	163	207	399
Gladwin	10	----	1	1	3
Gogebic	10	----	1	2	7
Grand Traverse	60	77.3	17	22	35
Gratiot	10	----	2	3	8
Hillsdale	10	----	1	5	13
Houghton	10	----	4	3	8
Huron	10	----	2	0	8
Ingham	440	157.4	120	159	328
Ionia	20	32.5	8	4	18
Iosco	10	----	1	2	2
Iron	10	----	0	1	2
Isabella	20	----	6	5	17
Jackson	150	94.6	41	51	93
Kalamazoo	330	138.3	109	99	231
Kalkaska	10	----	1	3	4
Kent	780	135.8	248	249	598
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 and AIDS that contain patient name or are otherwise unduplicated.

**TABLE 2b: Michigan Residents Living with HIV or AIDS by County, as of 1/1/03
 and Residents Ever Diagnosed with AIDS, 1981 to Date**

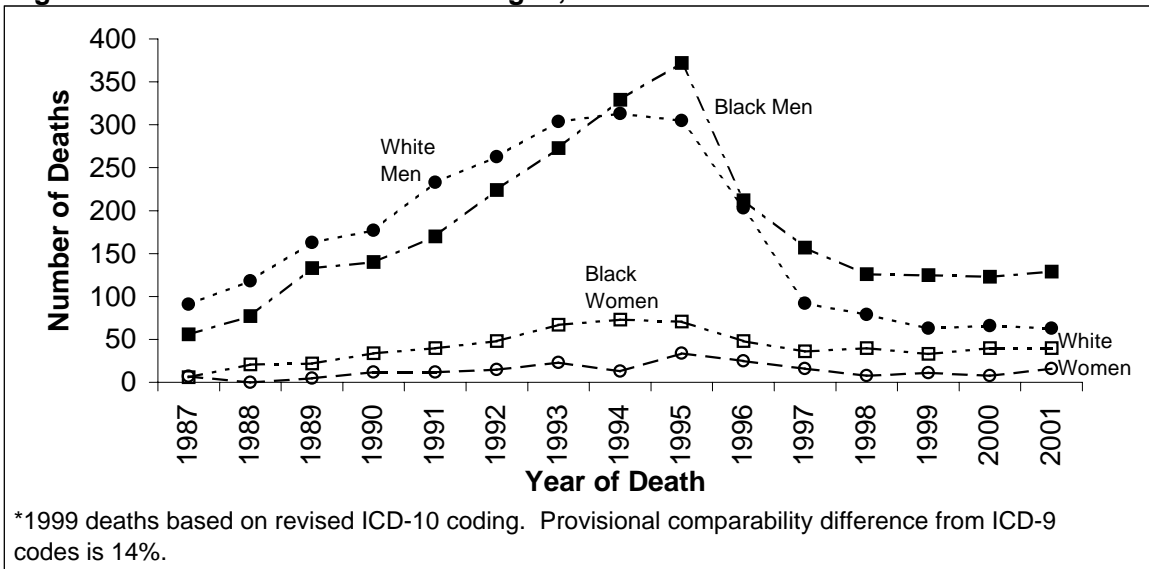
Residence at Time of Diagnosis	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Persons Living with AIDS ³	Persons Living with HIV not AIDS ³	Persons Ever Diagnosed with AIDS
TOTAL MICHIGAN	15,500	156.0	5,057	5,460	12,623
Lake	10	----	5	4	9
Lapeer	20	22.8	4	9	13
Leelanau	10	----	5	0	13
Lenawee	60	60.7	18	21	40
Livingston	40	25.5	12	14	31
Luce	10	----	0	0	1
Mackinac	10	----	1	0	2
Macomb	570	72.3	183	177	476
Manistee	20	81.5	6	4	9
Marquette	20	30.9	4	9	17
Mason	20	70.7	8	4	11
Mecosta	20	49.3	4	6	11
Menominee	10	----	0	4	3
Midland	30	36.2	14	8	25
Missaukee	10	----	1	5	3
Monroe	60	41.1	29	12	62
Montcalm	30	49.0	10	11	20
Montmorency	10	----	2	0	3
Muskegon	130	76.4	35	45	81
Newaygo	20	41.8	8	5	22
Oakland	1,620	135.7	488	542	1,142
Oceana	10	----	4	4	9
Ogemaw	10	----	1	1	3
Ontonagon	10	----	0	1	0
Osceola	10	----	3	1	8
Oscoda	10	----	0	1	2
Otsego	10	----	5	3	8
Ottawa	100	42.0	38	25	93
Presque Isle	10	----	0	0	2
Roscommon	10	----	6	3	13
Saginaw	210	100.0	61	69	154
Sanilac	20	12.2	6	4	12
Schoolcraft	10	----	1	1	3
Shiawassee	30	65.9	10	7	17
St. Clair	100	60.9	25	37	69
St. Joseph	40	55.8	13	10	34
Tuscola	20	34.3	6	5	13
Van Buren	80	104.9	24	25	46
Washtenaw	490	151.8	157	154	352
Wayne	1,500	72.8	511	442	1,206
City of Detroit	6,880	723.2	2,143	2,218	5,752
Wexford	10	----	2	5	4
PRISONS	690	N/A	217	472	477
Unknown	10	N/A	1	4	2

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 and AIDS that contain patient name or are otherwise unduplicated.

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

MALES:	White		Black		Hispanic		Other or Unknown		TOTAL	
Male-Male Sex	2,450	74%	2,073	48%	129	45%	58	39%	4,710	58%
Injecting Drug Use	170	5%	776	18%	56	20%	6	4%	1,008	12%
Male-Male Sex/IDU	213	6%	322	7%	15	5%	6	4%	556	7%
Blood Recipient	82	2%	23	1%	0	0%	2	1%	107	1%
Heterosexual	80	2%	271	6%	28	10%	6	4%	385	5%
Perinatal	11	0%	53	1%	2	1%	0	0%	66	1%
Undetermined	311	9%	844	19%	56	20%	72	48%	1,283	16%
<i>Presumed Heterosexual</i>	183	6%	590	14%	43	15%	23	15%	839	10%
<i>Other</i>	128	4%	254	6%	13	5%	49	33%	444	5%
Male Subtotal	3,317	(41%)	4,362	(54%)	286	(4%)	150	(2%)	8,115	100%
FEMALES:	White		Black		Hispanic		Other or Unknown		TOTAL	
Injecting Drug Use	125	24%	521	30%	17	20%	7	15%	670	28%
Blood Recipient	11	2%	8	0%	0	0%	0	0%	19	1%
Heterosexual	261	50%	652	37%	50	58%	14	30%	977	41%
Perinatal	11	2%	45	3%	5	6%	1	2%	62	3%
Undetermined	113	22%	522	30%	14	16%	25	53%	674	28%
<i>Presumed Heterosexual</i>	96	18%	429	25%	13	15%	11	23%	549	23%
<i>Other</i>	17	3%	93	5%	1	1%	14	30%	125	5%
Female Subtotal	521	(22%)	1,748	(73%)	86	(4%)	47	(2%)	2,402	100%
GRAND TOTAL	3,838	36%	6,110	58%	372	4%	197	2%	10,517	100%

Figure 2: HIV-Related Deaths in Michigan, 1987-2001



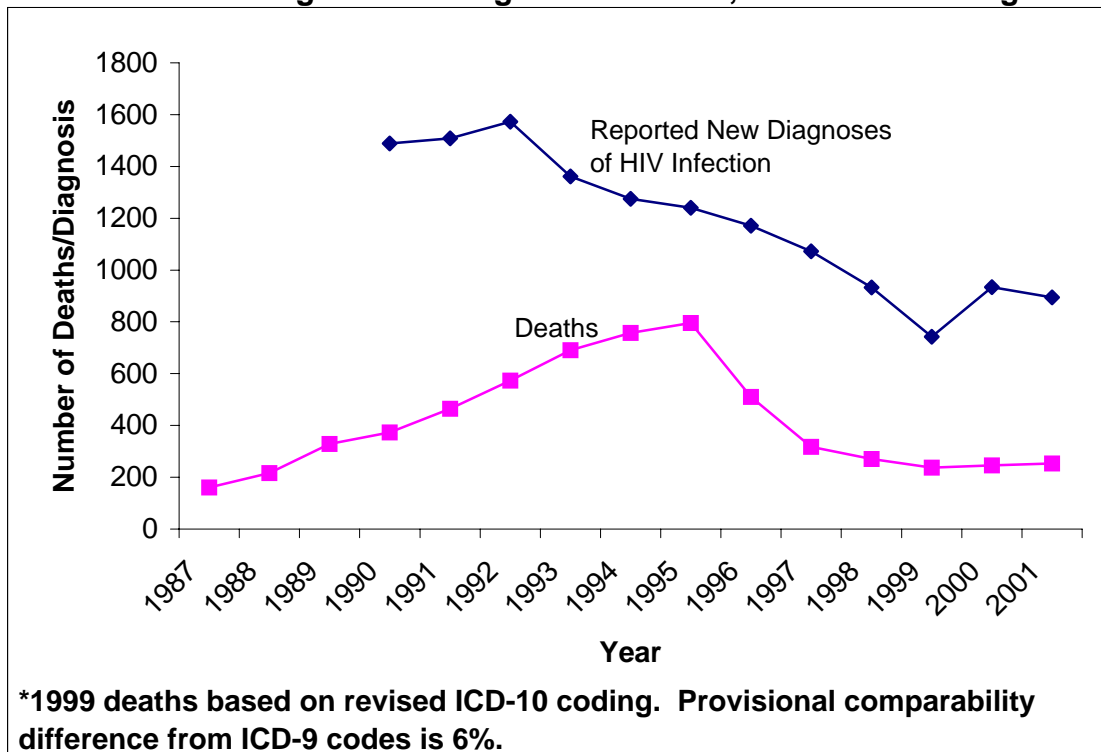
Mortality Trends
 HIV-related deaths declined sharply among all groups between 1995 and 1997, and less sharply between 1998 and 2000. These data (MDCH Division for Vital Records and Health Statistics) show the trend among white men, black men, black women, and white women. There was a statistical difference in the 1995-2001 declines among white men (79%), black men (65%), and women (47%). There were too few deaths to show other groups.

TABLE 4: States and Territories With Most AIDS Cases Ever Reported to CDC, 1981-12/31/01

State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹
1. NY	142,164	749.2	6. IL	25,009	201.4	11. MA	16,247	255.9	16. OH	11,394	100.4
2. CA	119,828	353.8	7. PR ²	24,883	653.3	12. DC ²	13,100	2,290.0	17. MI ³	11,322	113.9
3. FL	80,416	503.2	8. PA	24,660	200.8	13. VA	13,088	184.9	18. NC	10,436	129.7
4. TX	53,987	258.9	9. GA	22,837	279.0	14. LA	12,645	283.0	19. WA	9,533	161.7
5. NJ	42,143	500.8	10. MD	21,601	407.8	15. CT	11,571	339.8	20. SC	9,527	237.5

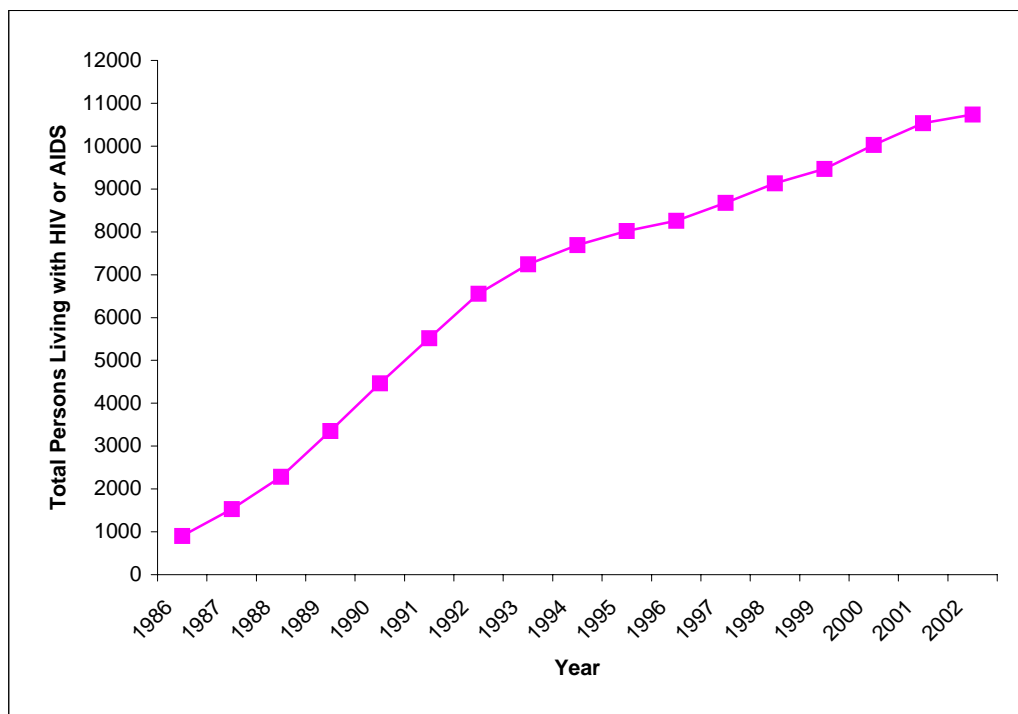
1. Cumulative Rate per 100,000 Population, 2000 Census. The average U.S. rate was 299.30.
 2. Abbreviations include PR for Puerto Rico, and DC for District of Columbia.
 3. Michigan annual rate per 100,000 population ranks 31st among U.S. states and territories.

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



Deaths and Diagnoses
 The numbers of deaths due to HIV infection and AIDS have declined 60 percent in 1996-97 and an additional 10 percent in 1998-2000, primarily due to effective therapies. Meanwhile, the number of persons diagnosed with HIV infection each year was roughly level between 1995-1997 at 1,100 persons, but has since declined to 894 cases.

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 15,500 persons living with HIV or AIDS in Michigan. This graph shows about 10,517 who have been diagnosed and reported.

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

	MI AIDS : 1981-1/1/2003			U.S. AIDS : 1981-12/1/2001 ¹		
	Cases	Percent	Rate ²	Cases	Percent	Rate ²
TOTAL	12,623	100%	127.0	816,149	100%	290.0
SEX						
Male	10,469	83%	214.8	670,687	82%	485.8
Female	2,154	17%	42.5	145,461	18%	101.5
Unknown	0	0%	---	1	0%	---
TRANSMISSION						
Male-Male Sex	6,205	49%	N/A	368,971	45%	N/A
Injecting Drug Use	2,803	22%	N/A	201,326	25%	N/A
Male-Male Sex/IDU	826	7%	N/A	51,293	6%	N/A
Blood Products ³	293	2%	N/A	14,880	2%	N/A
Heterosexual ⁴	1,099	9%	N/A	90,131	11%	N/A
Perinatal ⁵	93	1%	N/A	8,284	1%	N/A
Undetermined ⁶	1,304	10%	N/A	81,264	10%	N/A
AGE AT DIAGNOSIS						
0 - 4 years	70	1%	10.4	6,975	1%	36.4
5 -12 years	39	0%	3.3	2,099	0%	6.4
13 -19 years	83	1%	8.2	4,428	1%	15.7
20 -24 years	461	4%	71.6	28,665	4%	151.2
25 -29 years	1,632	13%	249.3	105,060	13%	542.1
30 -34 years	2,561	20%	362.0	179,164	22%	873.5
35 -39 years	2,792	22%	354.6	182,857	22%	805.3
40 -44 years	2,224	18%	274.2	136,145	17%	606.7
45 -49 years	1,349	11%	183.6	80,242	10%	399.4
50 -54 years	750	6%	118.5	42,780	5%	243.3
55 -59 years	332	3%	68.3	23,280	3%	172.8
60 -64 years	180	1%	47.7	12,898	2%	119.4
65 and over	150	1%	12.3	11,555	1%	33.0
Unknown	---	---	---	1	0%	---
RACE/ETHNICITY						
White, Non-Hisp.	5,073	40%	65.0	343,889	42%	176.8
Black, Non-Hisp.	7,109	56%	507.0	313,180	38%	922.5
Hispanic	373	3%	115.2	149,752	18%	424.2
Asian	33	0%	18.6	6,157	1%	60.8
American Indian	34	0%	63.6	2,537	0%	122.6
Unknown	1	0%	0.6	634	0%	11.7

1. U.S. figures are produced by the federal Centers for Disease Control and Prevention every six months. 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 (224 MI; 5,528 U.S.) or transfusion (69 MI; 9,352 U.S.).
4. A heterosexual partner is known to be: an injecting drug user (422 MI; 31,557 U.S.), a bisexual man (57 MI; 3,801 U.S.), a recipient of infected blood products (29 MI; 1,559 U.S.), or HIV positive with unknown behavior history (591 MI; 53,214 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; 137 U.S.), or receipt of donor products other than blood (13 U.S.).

Table 6: Michigan Infants Born to HIV-Infected Mothers

Year of Birth	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL										
Total Infants Reported	81	57	52	57	75	67	62	70	61	34
Total Mothers Reported	80	56	52	57	74	67	61	69	60	31
RESIDENCE AT TIME OF BIRTH¹										
Detroit MSA	54	43	32	44	53	47	39	52	37	22
Outside the Detroit MSA	27	14	20	13	22	20	23	18	24	12
RACE OF CHILD										
White	17	10	10	8	16	13	11	13	9	3
Black	59	45	42	47	57	50	45	50	45	28
Hispanic, Asian, Am. Indian, Unk.	5	2	0	2	2	4	6	7	7	3

¹ - Detroit Metropolitan Statistical Area includes Wayne, Oakland, Macomb, Monroe, Lapeer, and St. Clair counties.

Figure 5: Efforts to Prevent HIV Transmission to Infants

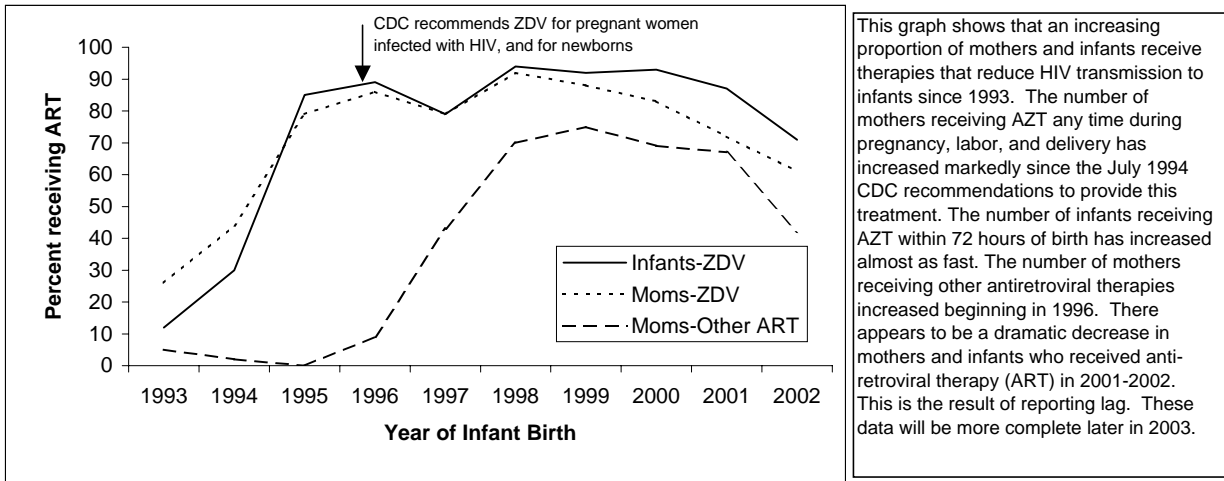
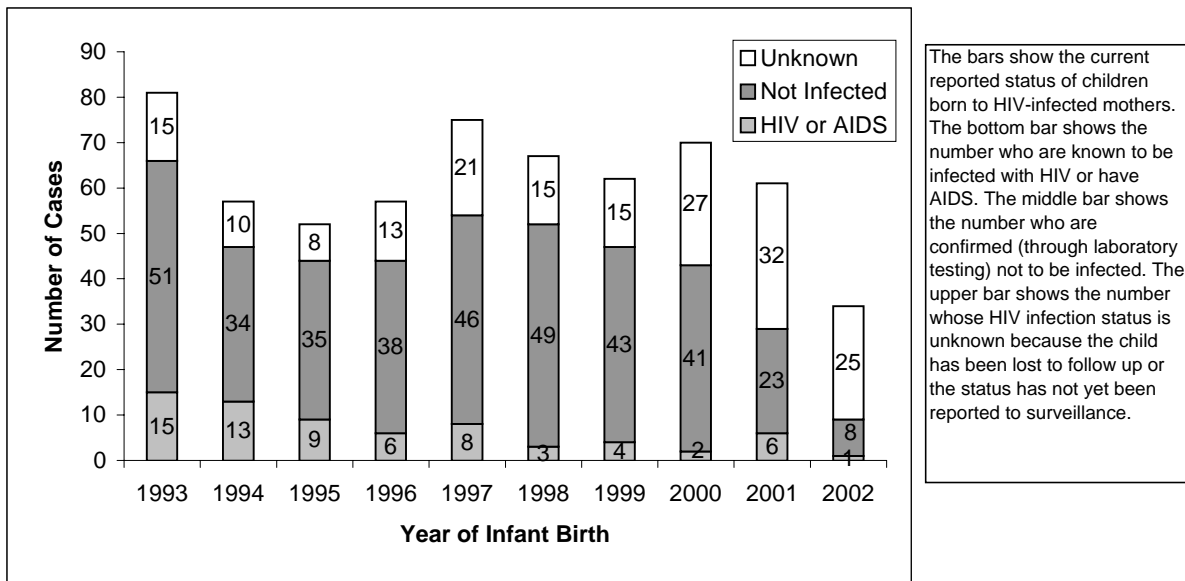


Figure 6: Confirmed Infection Status Among Infants Born to HIV-Infected Mothers



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 1,293 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. See below for explanation of this estimate.
2. Rates are calculated per 100,000 population in 2000.
3. Includes reports that contain patient name or are otherwise unduplicated.
4. Age, sex, race, and behavior percentages are calculated excluding missing data. The percentages of total cases missing this demographic information are given in parentheses.
5. 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).
6. The heterosexual category includes only those persons with "high risk" heterosexual partners as defined in footnote 5.
7. This subset of undetermined includes persons who had heterosexual sex but their partner(s) risk is unknown. This includes unconfirmed occupational exposures (1).
8. Includes persons with confirmed exposure in the health care setting in the U.S. (2) or other countries (1), and pediatric cases with probable sexual mode of transmission (2).

HIV Prevalence Estimates for Michigan

MDCH estimates that there are up to 15,500 HIV-infected persons (including those with AIDS) living in Michigan. This estimate is based on adding the following three components and rounding: 1) the number of cases living with HIV/AIDS as of 01/01/03 (10,517), 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 30 percent of the total cases living with HIV/AIDS (identical to the CDC estimate). The estimate of HIV-infected persons is identical to the estimate given in January of 2002. This is the result of 1) MDCH adding over 700 deaths to the HIV/AIDS Reporting System, from a match with the Division of Vital Statistics and 2) increased case finding activities due to the filling of surveillance positions

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 15,500. 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 11,935 = (77% X 15,500). Since the estimates are rounded to the nearest 10, totals may not equal 15,500. The minimum estimate is 10.

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 gender, race, mode of transmission, and age when diagnosed for Michigan and the U.S.

FIGURES 2 AND 3: HIV-RELATED DEATHS IN MICHIGAN, 1984-2001

Source: MDCH Division for Vital Records and Health Statistics. 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, adjusted for reporting delays. The number of persons diagnosed with HIV infection was roughly level between 1995 and 1997 at 1,100 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 AZT are listed next. Most of these infants are not themselves infected. Finally, the graph shows the confirmed infection status of these children.