

**TABLE 1: Characteristics of Michigan Residents Living with HIV or AIDS
 as of July 1, 2001**

	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	13,500	145	4,844	100%	5,249	100%
GENDER						
Male	10,400	230	3,901	81%	3,903	74%
Female	3,110	65	943	19%	1,346	26%
BEHAVIOR						
Male-Male Sex	7,160	N/A	2330	55%	2103	51%
Injecting Drug Use	2,970	N/A	973	23%	888	21%
Male-Male Sex/IDU	810	N/A	272	6%	265	6%
Blood Products	270	N/A	85	2%	52	1%
Heterosexual	2,030	N/A	533	13%	756	18%
Perinatal	140	N/A	31	1%	87	2%
Undetermined ^{4,5}	Not Applicable		620	(13%)	1098	(21%)
AGE AT DIAGNOSIS						
0 -12 years	140	8	33	1%	100	2%
13 -19 years	270	28	40	1%	170	3%
20 -24 years	1,220	173	207	4%	665	13%
25 -29 years	2,160	283	573	12%	1015	19%
30 -34 years	2,840	350	1066	22%	1100	21%
35 -39 years	2,700	360	1044	22%	957	18%
40 -44 years	2,030	309	891	18%	603	11%
45 -49 years	1,220	233	519	11%	340	6%
50 -54 years	540	127	271	6%	167	3%
55 -59 years	270	69	111	2%	75	1%
60 -64 years	140	35	52	1%	30	1%
65 years and over	140	13	37	1%	27	1%
Unspecified ⁴	Not Applicable		0	(0%)	0	(0%)
RACE / ETHNICITY						
White, Non-Hisp.	5,000	66	1,921	40%	1,774	35%
Black, Non-Hisp.	7,830	606	2,715	56%	3,174	62%
Hispanic	410	203	180	4%	159	3%
Asian	130	124	17	0%	9	0%
American Indian	130	234	10	0%	26	1%
Unspecified ⁴	Not Applicable		1	(0%)	107	(2%)

1. This estimate includes all persons living in Michigan at diagnosis of HIV or AIDS, including those not reported or not yet diagnosed. The minimum estimate given is 140 persons (which is one percent of the state total). See page 10 for explanation of this estimate.
2. Rates are calculated per 100,000 population in 1990.
3. Includes reports that contain patient name or are otherwise unduplicated. See page 10 for information on anonymous reports.
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. Includes persons with 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).

**TABLE 2a: Michigan Residents Living with HIV or AIDS by County, as of 7/1/01
 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	13,500	145.2	4,844	5,249	11,577
Alcona	20	----	1	0	3
Alger	20	----	1	0	1
Allegan	80	88.4	40	18	72
Alpena	20	----	2	3	8
Antrim	20	----	2	1	6
Arenac	20	----	0	3	2
Baraga	20	----	5	2	8
Barry	20	----	8	5	20
Bay	70	62.7	22	28	51
Benzie	20	----	0	1	2
Berrien	210	130.1	64	80	139
Branch	20	----	2	7	12
Calhoun	130	95.6	39	52	90
Cass	30	60.6	7	12	15
Charlevoix	20	----	3	5	5
Cheboygan	20	----	1	0	4
Chippewa	20	----	3	7	4
Clare	20	----	4	5	7
Clinton	30	51.8	13	6	24
Crawford	20	----	2	0	2
Delta	20	----	5	7	6
Dickinson	20	----	3	2	5
Eaton	40	43.1	12	13	29
Emmet	20	----	3	3	7
Genesee	520	120.8	157	202	366
Gladwin	20	----	2	2	3
Gogebic	20	----	2	1	7
Grand Traverse	50	77.8	14	23	31
Gratiot	20	----	2	3	8
Hillsdale	20	----	3	5	12
Houghton	20	----	3	3	7
Huron	20	----	2	0	8
Ingham	410	145.4	124	162	308
Ionia	20	----	8	5	18
Iosco	20	----	1	2	2
Iron	20	----	0	1	2
Isabella	20	----	4	5	14
Jackson	110	73.5	36	39	85
Kalamazoo	280	125.3	108	90	221
Kalkaska	20	----	1	2	4
Kent	650	129.8	229	227	558
Keweenaw	20	----	0	0	0

1. This estimate includes all persons living with HIV or AIDS, including those not yet diagnosed. The minimum estimate given is 20 persons (0.1 percent of the Michigan total rounded up to nearest 10). See page 10 for calculation of this estimate.
2. Rates are calculated per 100,000 population in 1990. Rates are unreliable for counties with the minimum estimated prevalence of 20, 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 7/1/01
 and Residents Ever Diagnosed with AIDS, 1981 to Date**

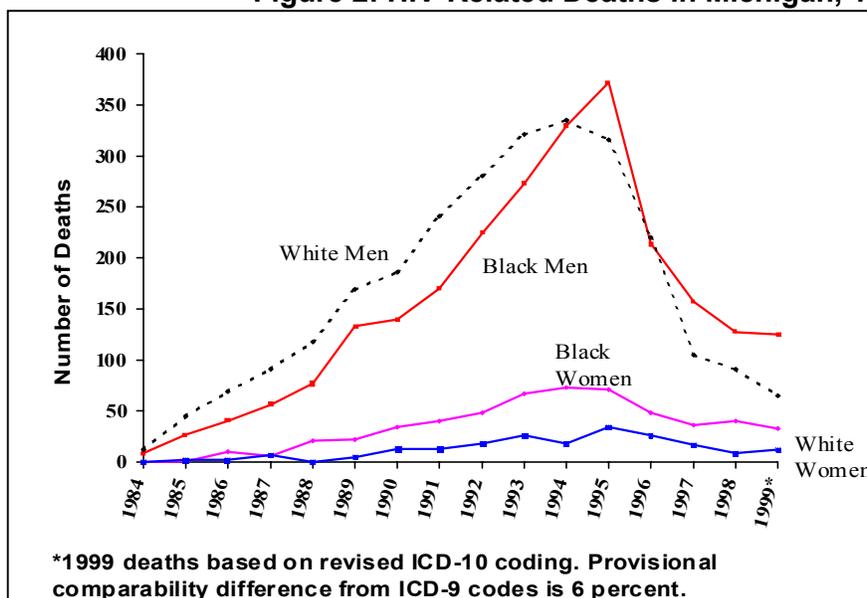
Residence at Time of Diagnosis	Estimate of HIV Prevalence ¹	Estimated Prevalence Rate ²	Persons Living with AIDS ³	Persons Living with HIV not AIDS ³	Persons Ever Diagnosed with AIDS
Total Michigan	13,500	145.2	4,844	5,249	11,577
Lake	20	----	5	3	8
Lapeer	20	----	4	8	13
Leelanau	20	----	5	0	12
Lenawee	50	54.7	18	18	37
Livingston	30	25.9	12	10	30
Luce	20	----	0	0	1
Mackinac	20	----	1	0	2
Macomb	480	66.9	179	157	435
Manistee	20	----	6	5	9
Marquette	20	----	4	8	16
Mason	20	----	9	5	11
Mecosta	20	----	5	5	11
Menominee	20	----	0	3	3
Midland	30	39.7	14	8	24
Missaukee	20	----	1	5	3
Monroe	40	29.9	24	7	55
Montcalm	30	56.5	10	9	18
Montmorency	20	----	0	1	1
Muskegon	100	62.9	32	41	75
Newaygo	20	----	8	6	20
Oakland	1,420	131.0	468	518	1,040
Oceana	20	----	4	2	9
Ogemaw	20	----	1	1	3
Ontonagon	20	----	0	0	0
Osceola	20	----	3	0	7
Oscoda	20	----	0	1	1
Otsego	20	----	4	3	7
Ottawa	80	42.6	31	22	81
Presque Isle	20	----	0	0	2
Roscommon	20	----	6	3	12
Saginaw	180	84.9	54	70	139
Sanilac	20	----	3	5	9
Schoolcraft	20	----	1	1	3
Shiawassee	20	----	10	7	16
St. Clair	70	48.1	20	32	58
St. Joseph	30	50.9	14	10	33
Tuscola	20	----	4	6	11
Van Buren	70	99.9	23	23	44
Washtenaw	430	152.0	159	143	337
Wayne	1,330	122.7	499	426	1,108
City of Detroit	6,050	588.5	2,067	2,149	5,263
Wexford	20	----	3	2	4
PRISONS	690	N/A	195	494	430

1. This estimate includes all persons living with HIV or AIDS, including those not yet diagnosed. The minimum estimate given is 20 persons (0.1 percent of the Michigan total rounded up to nearest 10). See page 10 for calculation of this estimate.
2. Rates are calculated per 100,000 population in 1990. Rates are unreliable for counties with the minimum estimated prevalence of 20, 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: Gender by Race by Behavior

MALES:	White	Black	Hispanic	Other or Unknown	TOTAL
Male-Male Sex	2,350 73%	1,920 46%	113 43%	50 39%	4,433 57%
Injecting Drug Use	187 6%	885 21%	55 21%	7 6%	1,134 15%
Male-Male Sex/IDU	206 6%	311 7%	15 6%	5 4%	537 7%
Blood Recipient	91 3%	25 1%	1 0%	2 2%	119 2%
Heterosexual	83 3%	267 6%	29 11%	3 2%	382 5%
Perinatal	10 0%	49 1%	2 1%	0 0%	61 1%
Undetermined	279 9%	752 18%	47 18%	60 47%	1,138 15%
Male Subtotal	3,206 (41%)	4,209 (54%)	262 (3%)	127 (2%)	7,804 100%
FEMALES:	White	Black	Hispanic	Other or Unknown	TOTAL
Injecting Drug Use	125 26%	577 34%	18 23%	7 16%	727 32%
Blood Recipient	12 2%	6 0%	0 0%	0 0%	18 1%
Heterosexual	252 52%	599 36%	43 56%	13 30%	907 40%
Perinatal	10 2%	43 3%	3 4%	1 2%	57 2%
Undetermined	90 18%	455 27%	13 17%	22 51%	580 25%
Female Subtotal	489 (21%)	1,680 (73%)	77 (3%)	43 (2%)	2,289 100%
GRAND TOTAL	3,695 37%	5,889 58%	339 3%	170 2%	10,093 100%

Figure 2: HIV-Related Deaths in Michigan, 1984-1998



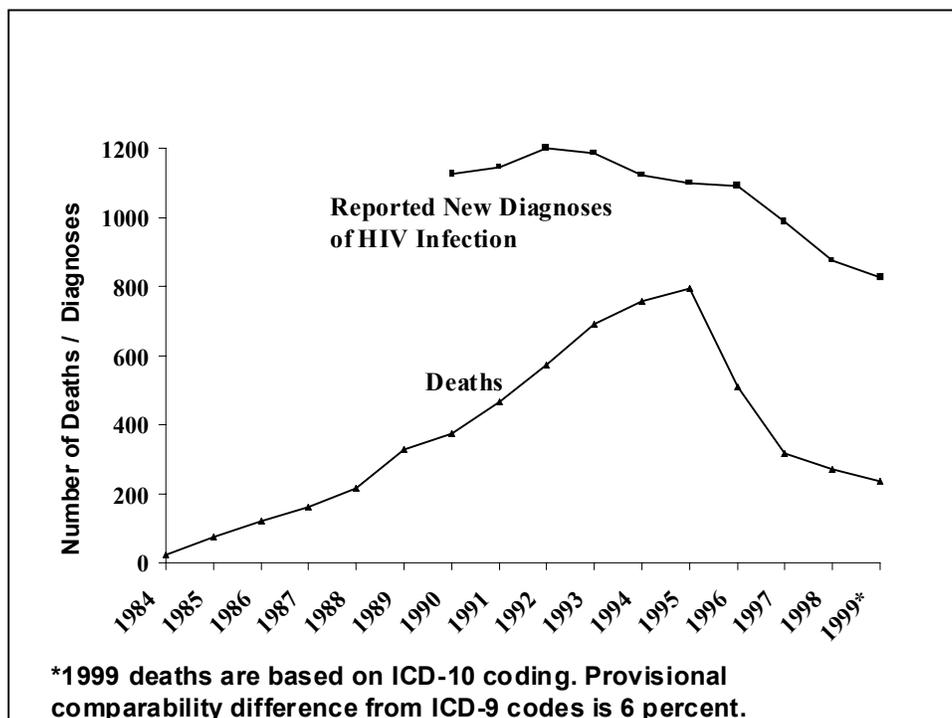
Mortality Trends
 HIV-related deaths declined sharply among all groups between 1995 and 1997, and less sharply in 1998-99. These data (MDCH Division for Vital Records and Health Statistics) show the trend among white men, black men, black women, and white women. There was a statistical difference in the 1995-99 declines among white men (79 percent), black men (66 percent), and women (57 percent). There were too few deaths to show other groups.

TABLE 4: States and Territories With Most AIDS Cases Ever Reported to CDC, 1981-6/30/00

State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹	State	Cases	Rate ¹
1. NY	139,248	774.0	6. IL	24,425	213.7	11. MA	15,907	264.4	16. OH	11,101	102.3
2. CA	117,521	394.9	7. PR ²	24,061	683.2	12. DC ²	12,616	2,078.8	17. MI ³	10,820	116.4
3. FL	78,043	603.2	8. PA	23,678	199.3	13. VA	12,586	203.4	18. NC	10,075	152.0
4. TX	52,667	310.1	9. GA	22,197	342.6	14. LA	12,306	291.6	19. WA	9,280	190.7
5. NJ	41,245	533.6	10. MD	20,833	435.7	15. CT	11,314	344.2	20. SC	9,154	262.5

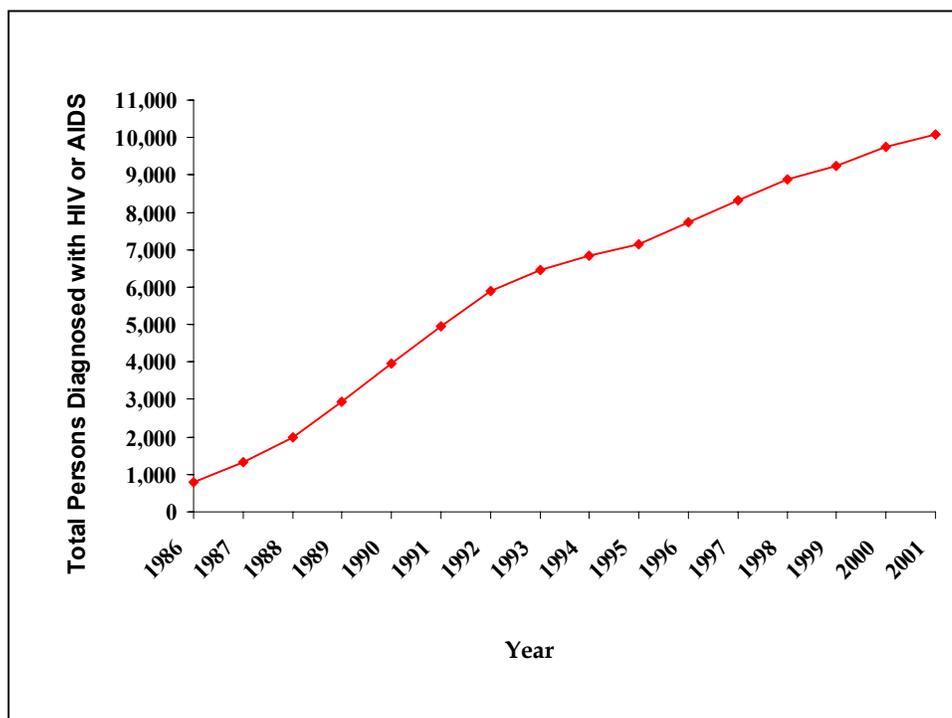
1 Cumulative Rate per 100,000 Population, 1990 Census. The average U.S. rate was 303.1.
 2 Abbreviations include PR for Puerto Rico, and DC for District of Columbia.
 3 Michigan annual rate per 100,000 population ranks 39th among U.S. states and territories.

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



Deaths and Diagnoses
 The numbers of deaths due to HIV infection and AIDS declined 60 percent in 1996-97, and an additional 10 percent in 1998-99, primarily due to effective therapies. Meanwhile, the number of persons diagnosed with HIV infection each year was unchanged from 1990 to 1996 at about 1,100 persons, but has declined since that

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. As shown above in Figure 3, the number diagnosed exceeds the number who die each year, leading to increased prevalence. Currently we estimate there are about 13,500 persons living with HIV or AIDS in Michigan. This graph shows about 10,000 who have been diagnosed and reported.

TABLE 5: Characteristics of Michigan and U.S. Residents Ever Diagnosed with AIDS

	MI AIDS : 1981-7/1/2001			U.S. AIDS : 1981-7/1/2000 ¹		
	Cases	Percent	Rate ²	Cases	Percent	Rate ²
MICHIGAN TOTAL	11,577	100%	124.5	753,907	100%	303.1
GENDER						
Male	9,668	84%	214.2	624,714	83%	515.3
Female	1,909	16%	39.9	129,190	17%	101.3
Unknown	0	0%	---	3	0%	---
TRANSMISSION						
Male-Male Sex	5,739	50%	N/A	348,657	46%	N/A
Injecting Drug Use	2,650	23%	N/A	189,242	25%	N/A
Male-Male Sex/IDU	762	7%	N/A	47,820	6%	N/A
Blood Products ³	285	2%	N/A	14,404	2%	N/A
Heterosexual ⁴	975	8%	N/A	78,210	10%	N/A
Perinatal ⁵	91	1%	N/A	8,192	1%	N/A
Undetermined ⁶	1,075	9%	N/A	67,382	9%	N/A
AGE AT DIAGNOSIS						
0 - 4 years	70	1%	10.0	6,812	1%	37.1
5 -12 years	37	0%	3.4	1,992	0%	7.0
13 -19 years	74	1%	7.7	3,865	1%	15.9
20 -24 years	419	4%	59.4	26,518	4%	139.4
25 -29 years	1,526	13%	199.7	99,587	13%	467.3
30 -34 years	2,410	21%	297.4	168,723	22%	771.7
35 -39 years	2,558	22%	341.5	168,778	22%	845.4
40 -44 years	2,026	18%	308.3	124,398	17%	706.2
45 -49 years	1,217	11%	232.4	72,128	10%	519.9
50 -54 years	646	6%	152.2	38,118	5%	335.8
55 -59 years	299	3%	76.1	20,971	3%	199.1
60 -64 years	161	1%	40.1	11,636	2%	109.6
65 and over	134	1%	12.1	10,378	1%	33.2
Unknown	----	----	----	3	0%	----
RACE/ETHNICITY						
White, Non-Hisp.	4,763	41%	63.0	324,822	43%	172.7
Black, Non-Hisp.	6,424	55%	497.3	282,720	38%	967.7
Hispanic	334	3%	165.7	137,575	18%	615.4
Asian	26	0%	24.8	5,546	1%	79.6
American Indian	29	0%	52.1	2,234	0%	124.5
Unknown	1	0%	----	1,010	0%	----

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 1990 Census figures. Populations and rates are not available (N/A) for behaviors.
3. Blood products received for coagulation disorder (217 MI; 5,357 U.S.) or transfusion (68 MI; 9,047 U.S.).
4. A heterosexual partner is known to be: an injecting drug user (391 MI; 29,066 U.S.), a bisexual man (55 MI; 3,465 U.S.), a recipient of infected blood products (29 MI; 1,466 U.S.), or HIV positive with unknown behavior history (500 MI; 44,213 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 or probable exposure in the health care setting (3 MI; 194 U.S.), or receipt of donor products other than blood (13 U.S.), or pediatric cases with probable sexual mode of transmission.

Table 6: Michigan Infants Born to HIV-Infected Mothers (most infants do not become infected)

Year of Birth	1993	1994	1995	1996	1997	1998	1999	2000	2001 ²
TOTAL									
Total Infants Reported	81	55	52	57	74	67	60	66	21
Total Mothers Reported	80	55	52	57	74	67	59	66	21
RESIDENCE AT TIME OF BIRTH¹									
Detroit MSA	54	43	32	44	53	47	38	51	16
Outside the Detroit MSA	27	12	20	13	21	20	22	15	5
RACE OF CHILD									
White	17	9	10	8	16	13	10	11	3
Black	59	44	42	47	56	50	44	49	15
Hispanic, Asian, Am. Indian, Unk.	5	2	0	2	2	4	6	6	3

1- Detroit Metropolitan Statistical Area includes Wayne, Oakland, Macomb, Monroe, Lapeer, and St. Clair counties.
 2- Data for 2001 is incomplete at this time.

Figure 5: Efforts to Prevent HIV Transmission to Infants

This graph shows an increasing proportion of mothers and infants receive therapies that reduce HIV transmission to infants. The number of mothers receiving AZT any time during pregnancy, labor, and delivery has increased markedly since the July 1994 CDC recommendations to provide this treatment. The number of infants receiving AZT within 72 hours of birth has increased almost as fast. The number of mothers receiving other antiretroviral therapies increased beginning in 1996.

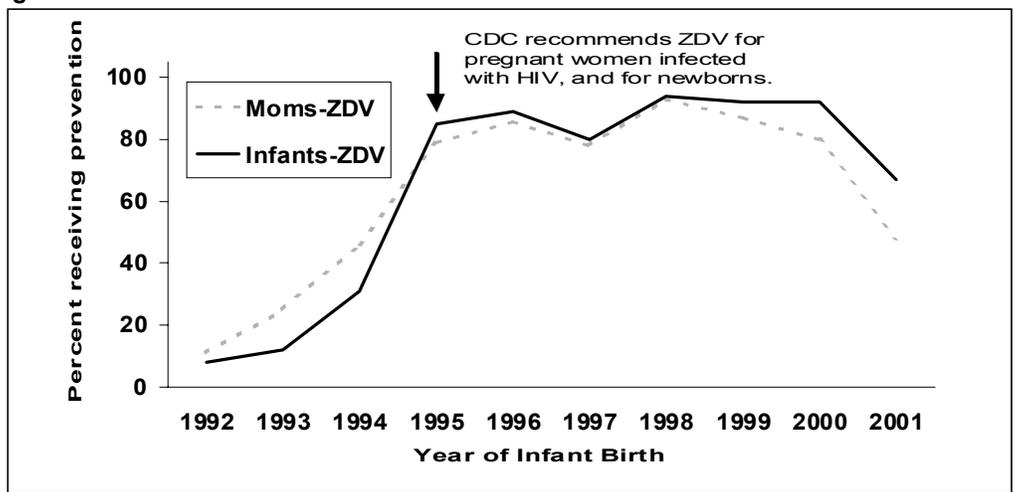


Figure 6: Confirmed Infection Status Among Infants Born to HIV-Infected Mothers

The bars show the current reported status of children born to HIV-infected mothers. Data for 2001 is incomplete. The bottom bar shows the number who are known to be infected with HIV or have AIDS. The middle bar shows the number who are confirmed (through laboratory testing) not to be infected, or presumed (by physician examination) not to be infected. The upper bar shows the number whose HIV infection status is unknown because the child has been lost to follow up or the status has not yet been reported to surveillance.

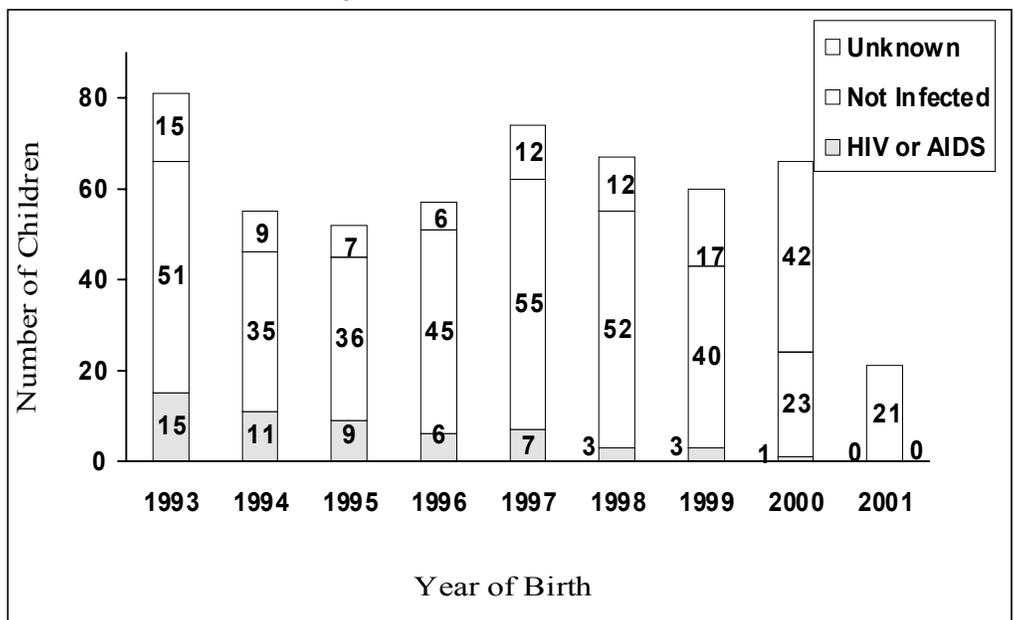


TABLE 7: Clinic- and Population-Based HIV Seroprevalence Survey Data

Type and Location of Site	Percent Positive by Year											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
CLINIC BASED												
Berrien STD ¹	-	-	-	-	-	-	-	-	0.2			
Detroit STD	2.4	1.9	1.7	2.0	1.8	1.4	1.4	0.9	1.2	0.8	0.8	1.2
Oakland STD #1	2.8	1.3	1.0	0.9	0.8	0.4						
Oakland STD #2	1.5	0.6	0.5	0.6	0.3							
Saginaw STD	-	-	-	-	-	-	-	-	0.2			
St. Clair STD	0.1	0.0	0.1	0.0	0.0							
Wayne County STD	-	-	0.9	1.0	1.0	0.4	0.9	0.4	0.5			
Macomb STD #1	-	0.8	0.6	0.5	0.6							
Macomb STD #2	-	0.7	0.3	0.2	0.0							
Detroit Drug Treatment Center												
----Injecting Drug Use	5.8	8.1	12.4	7.6	5.4	5.4	5.8	5.4	8.2	5.6	4.0	3.1
----Non Injecting Drug Use					3.6	3.3	2.4	2.4	3.7	2.8	2.9	2.5
Project Life Drug Treatment Center												
----Injecting Drug Use	-	-	-	-	-	-	2.1	2.0				
----Non Injecting Drug Use	-	-	-	-	-	-	0.0	1.5				
Western Michigan Drug Treatment	-	-	-	-	-	-	-	-	-	-	1.3	
Detroit Medical Center Tuberculosis	-	45.0	41.2	50.0								
Detroit Tuberculosis	-	-	2.2	4.0	8.2	6.7						
Detroit Women's Health #1	-	0.5	0.5	0.5	0.0							
Detroit Women's Health #2	-	0.0	0.1	0.0	0.0							
Oakland Women's Health #1	0.0	0.0	0.1	0.0	0.0							
Oakland Women's Health #2	0.0	0.0	0.0	0.0	0.0							
St. Clair Women's Health	0.0	0.2	0.0	0.0	0.0							
Detroit Adolescent	-	-	0.2	0.8	0.2							
Detroit Medical Center Adolescent	-	-	-	-	-	-	0.0	0.0				
Wayne Youth Home	-	-	-	-	-	-	0.1					
Wayne County Jail												1.7
POPULATION BASED												
SCBW ^{2,3}												
January-June	-	0.08	0.06	0.07	0.07	0.07	0.05	0.04	0.04 ³	0.06 ³	n.d.	0.05
July-December	0.06	0.07	0.06	0.06	0.05	0.05	0.04	n.d.	n.d.	n.d.	n.d.	n.d.

1. STD = Sexually Transmitted Disease Clinic
2. SCBW = Survey of Child-Bearing Women. This survey was not done (n.d.) during some time periods.
3. Rates are estimated from three months data in 1996-97.

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 1,185 complete anonymous reports are currently in our database.

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.

HIV Prevalence Estimates for Michigan

MDCH estimates that there are up to 13,500 HIV-infected persons (including those with AIDS) living in Michigan. This estimate is based in part on statewide maternal antibody seroprevalence survey data. It is supported by national estimates of HIV infection and rates of new AIDS diagnoses and deaths.

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 13,500. 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 10,400 = (77% X 13,500). Since the estimates are rounded to the nearest 10, totals may not equal 13,500. If a given demographic group accounts for one percent or fewer of total reports, the estimate is rounded to 140. If the number of confidential HIV/AIDS reports from any county is 0.1 percent or fewer of total reports, the estimate is rounded to 20.

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, 1984-1997

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 gender (Figure 2), and total only (Figure 3).

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 about 1,100 annually between 1990 and 1996, but has dropped slightly in 1997-1999. Data after 1999 are incomplete and too for making reliable 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.

TABLE 7: HIV SEROPREVALENCE SURVEY DATA

Since 1988, blinded HIV seroprevalence surveys have been conducted in selected health clinics throughout Michigan. Each survey is conducted for three months to one year, depending on sample size, and provides recent estimates of HIV prevalence for specific populations. The Survey of Childbearing Women (SCBW) is also blinded, and it measures trends of HIV seroprevalence among women of childbearing age.