2002 Epidemiologic Profiles of HIV/AIDS in Michigan

Michigan Department of Community Health

HIV/AIDS Surveillance Section / Bureau of Epidemiology
http://www.michigan.gov/mdch

STATE OF MICHIGAN

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To: Readers of the 2002 HIV/AIDS Epidemiologic Profiles

From: HIV/AIDS Surveillance Section Staff
Communicable Disease and Immunization Division
Bureau of Epidemiology

Summer 2002

This year the HIV/AIDS Surveillance Section is providing prevention and care planning groups with epidemiologic profiles of the State of Michigan, the eight regions and the Department of Corrections. These profiles review the key epidemiologic points in the state and each of the eight regions**.** In this year's profiles the term HIV disease is used to mean all HIV infected persons, including those who have AIDS.

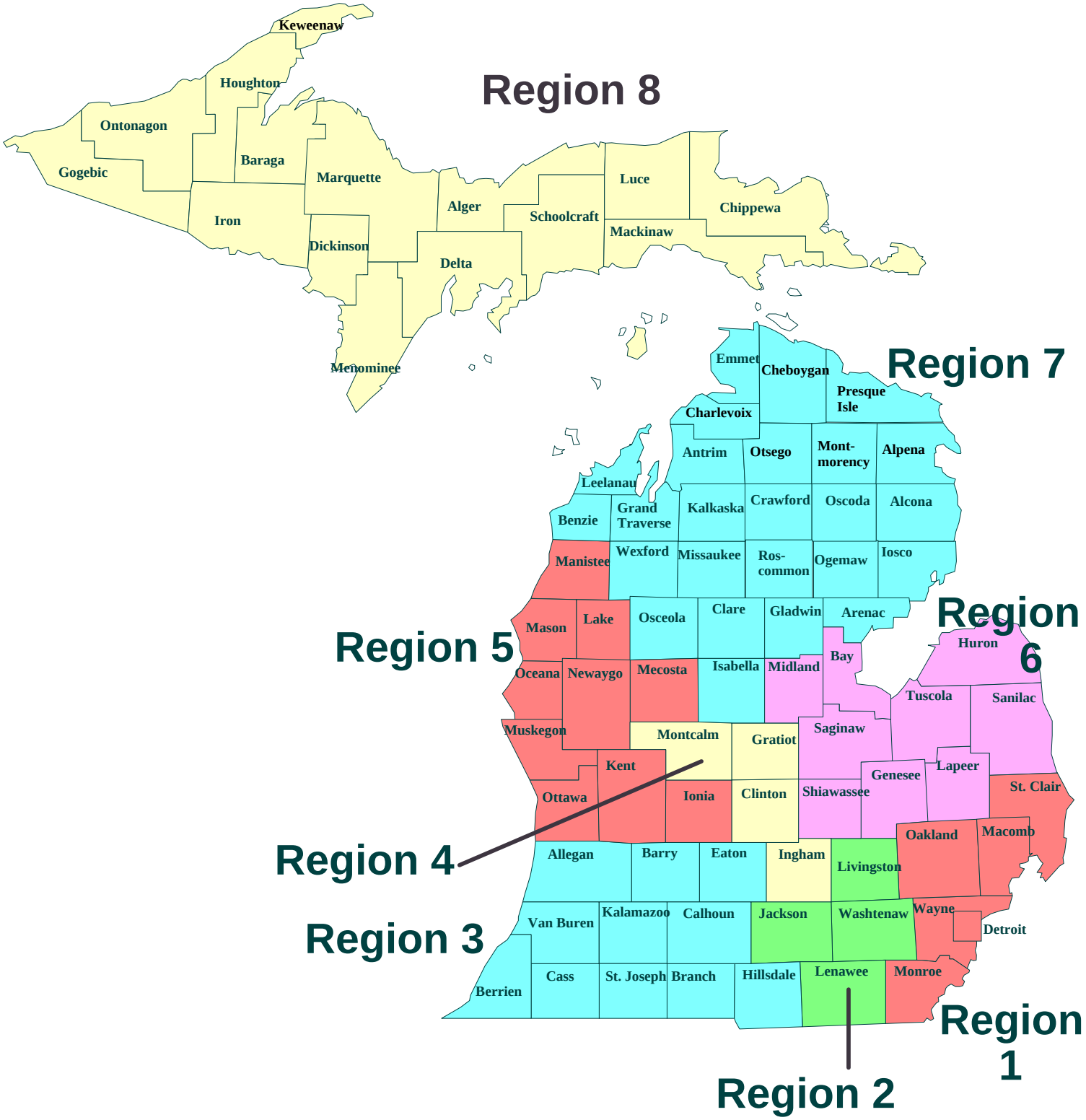
This year's profiles use a simplified method for ranking the priority of behavioral groups. The rank was based solely upon the percentage of total reported HIV/AIDS cases for each behavioral group.

In order to measure prevention achievements, the number of persons who become newly infected ideally would be followed over time. Since surveillance is unable to measure new infections, trends are analyzed among those newly diagnosed with HIV disease between 1996 and 2000. In addition, the HIV/AIDS Surveillance Section will continue to track trends in new AIDS cases since these trends measure changes in treatment effectiveness and access.

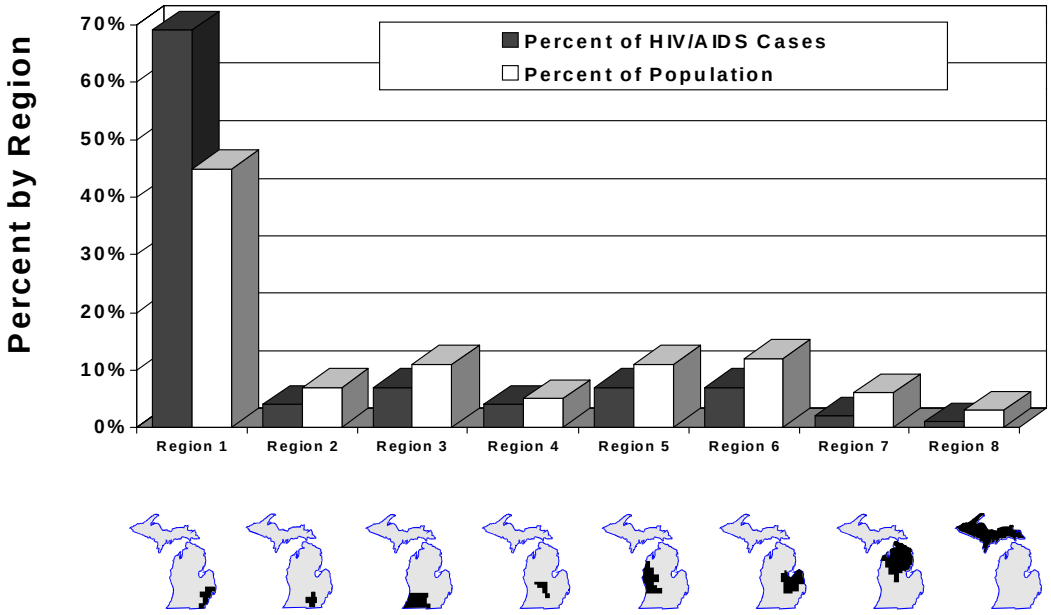
A main focus of this year's profile has been readability and ease of use. To assist readers in finding the information they are seeking, a table of contents is available for each profile and material has been divided into sections. Other additions this year include a small section on bisexual behaviors and rural vs. urban in the statewide profile. Updated data from the Supplement to HIV/AIDS Project (SHAS) is available in the Statewide and Region 1 profiles. SHAS is an interview study that collects additional information that many planning groups find useful. STD data are in the statewide profile only.

Staff from the MDCH HIV/AIDS Surveillance Section is available to assist the regions in interpretation of these profiles as well as to provide additional analyses. Questions or comments about these profiles should be directed to your regional contact. Ideas on ways to improve them are always welcome. With your assistance, surveillance data will continue to guide HIV prevention strategies and resource allocation in Michigan. For the statewide profile and Regions 1-2, please call (313) 876-0353. For the statewide profile and Regions 3-8, please call (517) 335-8165.

The Eight HIV Planning Regions for Care and Prevention



Michigan Live HIV/AIDS Cases and Population by Region, 01/01/02



2002 Profile of HIV/AIDS in Michigan

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2002 Profile of HIV/AIDS in Michigan

Statewide Summary of Epidemic for Michigan

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 15,500 people living with HIV/AIDS in the state, of which 10,749 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 825 new cases annually. The number of HIV related deaths declined significantly in 1996 and 1997, but decreased very little from 1998-2000. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 1 has more cases (of the 10,749 cases reported statewide) compared with the general population that lives there as expressed in the bar graph on the cover page for this profile. Each of the other seven regions has fewer cases compared with the general population distribution.

- **How does the epidemic in Michigan compare with national and worldwide statistics?** Approximately 850,000 persons in the United States are believed infected with HIV, including 40,000 new infections each year. The number living with HIV has increased because of new treatments that prolong life. In addition, more than 450,000 persons have died from this epidemic since 1980. Michigan is ranked approximately 17th in total number of cases and 29th by cumulative rate per 100,000 population.

  As of December 2001, the Joint United Nations Programme on HIV/AIDS estimated there are 40 million persons worldwide infected with HIV, including one million children. An estimated 5 million new infections occurred in 2001, of which 95 percent were in developing nations. Most new infections worldwide are heterosexually transmitted, and about half are among women. There were 3 million deaths in 2001, bringing the cumulative total to 22 million deaths since the beginning of the epidemic.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Michigan. The guiding question used in this process is, “In which populations can strategies prevent the most infections from occurring?” Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 60 percent of all HIV/AIDS cases with a known mode of transmission (5,329 out of 8,848). The MSM behavioral group continues to be the most affected behavioral group statewide even though the number of new cases indicates a level trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 28 percent are IDUs (2,511 out of 8,848). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** Heterosexual cases constitute 15 percent of the total number of cases with a known mode of transmission (1,333 out of 8,848) and are defined as HIV-infected persons whose heterosexual sex partners are known to be IDUs, bisexual men and/or HIV+ individuals. The trend in heterosexual transmission also appears to be level.

**These numbers include MSM/IDU in totals and percent calculations.*

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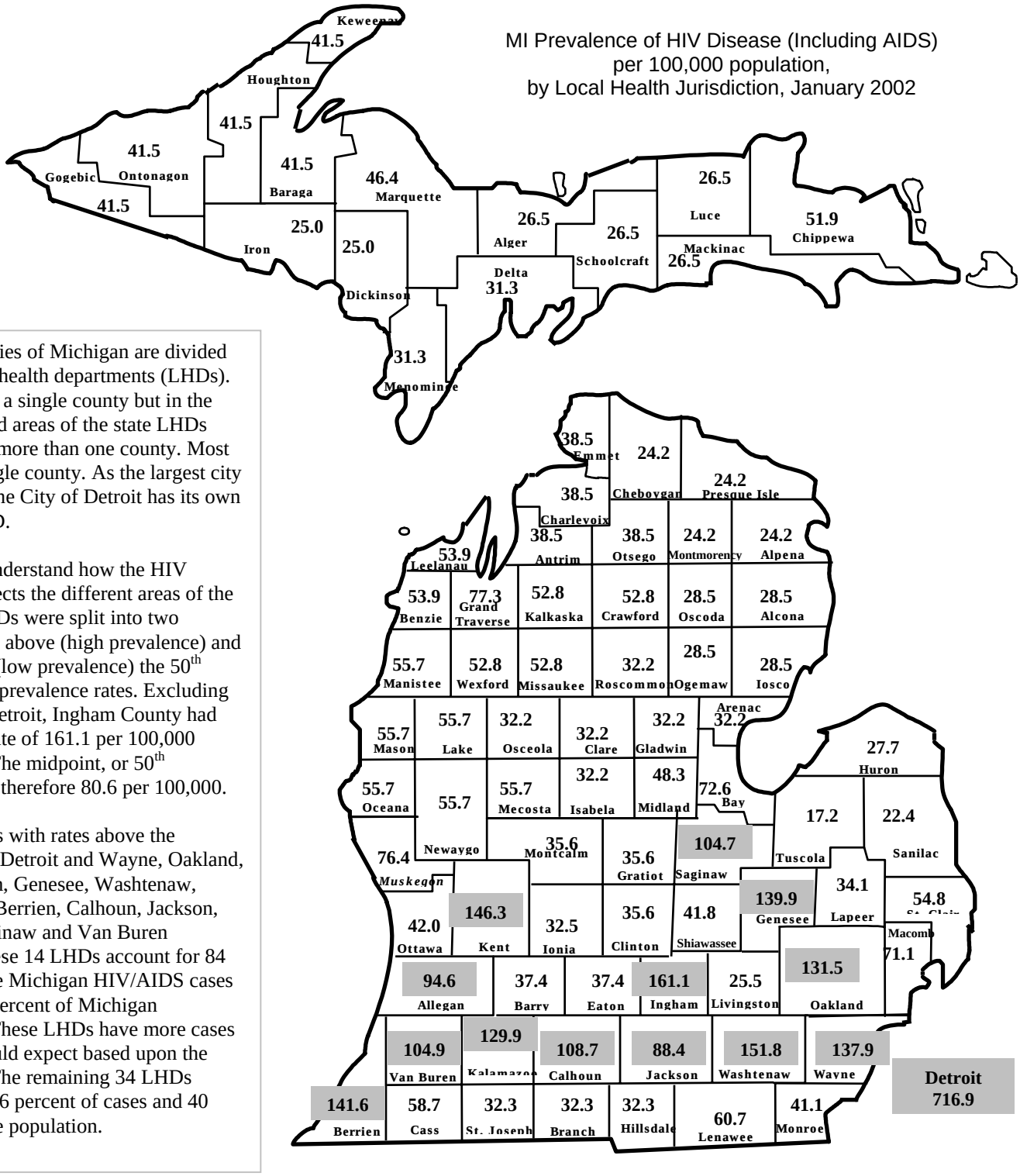
Distribution of HIV/AIDS Prevalence by Local Health Jurisdiction

Data from HIV/AIDS Reporting System



The 83 counties of Michigan are divided into 48 local health departments (LHDs). Most contain a single county but in the less populated areas of the state LHDs may contain more than one county. Most contain a single county. As the largest city in the state, the City of Detroit has its own separate LHD.

In order to understand how the HIV epidemic affects the different areas of the state, the LHDs were split into two groups, those above (high prevalence) and those below (low prevalence) the 50th percentile of prevalence rates. Excluding the City of Detroit, Ingham County had the highest rate of 161.1 per 100,000 population. The midpoint, or 50th percentile, is therefore 80.6 per 100,000.

The 14 LHDs with rates above the midpoint are Detroit and Wayne, Oakland, Kent, Ingham, Genesee, Washtenaw, Kalamazoo, Berrien, Calhoun, Jackson, Allegan, Saginaw and Van Buren counties. These 14 LHDs account for 84 percent of the Michigan HIV/AIDS cases but only 60 percent of Michigan population. These LHDs have more cases than you would expect based upon the population. The remaining 34 LHDs account for 16 percent of cases and 40 percent of the population.

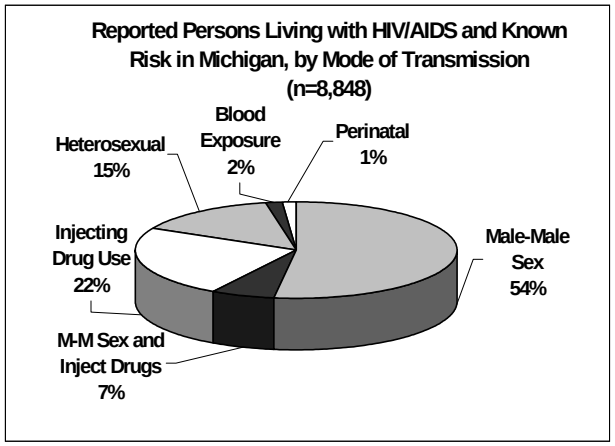
2002 Profile of HIV/AIDS in Michigan

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Current surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, when multiple risk information on men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.

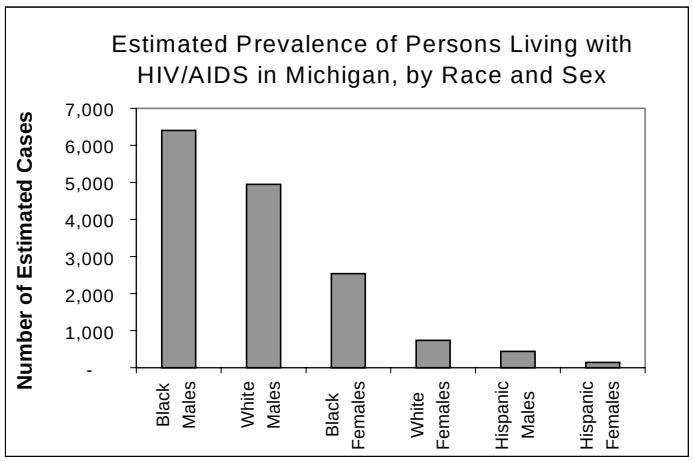
The pie chart indicates the number of people living with HIV/AIDS in Michigan by mode of transmission for the 8,848 cases for which the risk was identifiable.

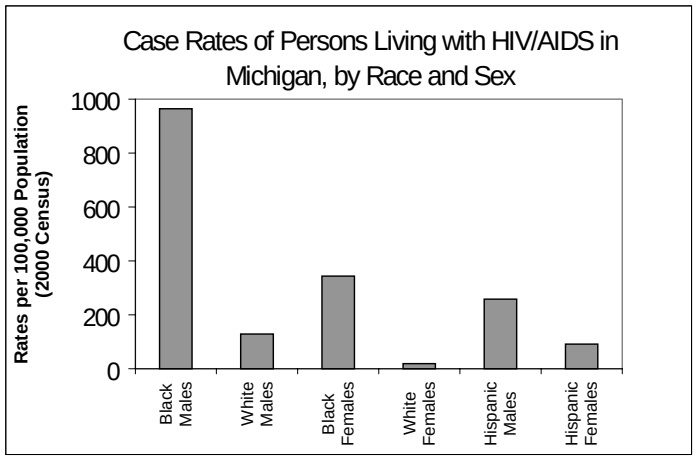


- This chart demonstrates that over half (61 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 7 percent who also injected drugs.
- Almost a third (29 percent) are injecting drug users, including 7 percent who are also MSM. Forty-three percent of non-MSM IDUs also have high risk heterosexual sex partners. (See Table 1, page 23.)
- Fifteen percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System





These bar graphs show the impact of this epidemic on six race and sex groups.

- Black males have both the highest rate per 100,000 population (965) and the highest estimated number (6,400) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Black females have the second highest rate (344) and the third highest estimated number (2,540) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (258) and the fifth highest estimated number (440) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- White males have the fourth highest rate (129) and the second highest estimated number (4,950) of cases.
- Hispanic females have the fifth highest rate (91) and the lowest estimated number (140) of HIV/AIDS.
- White females have the lowest rate (19) and the fourth highest estimated number (740) of HIV/AIDS cases.

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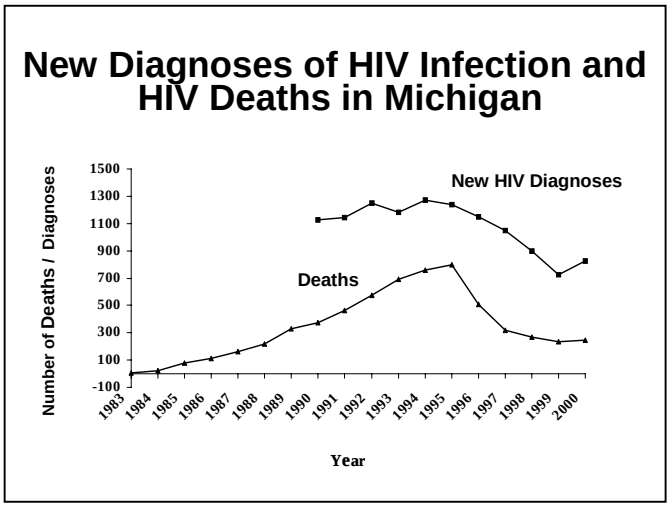
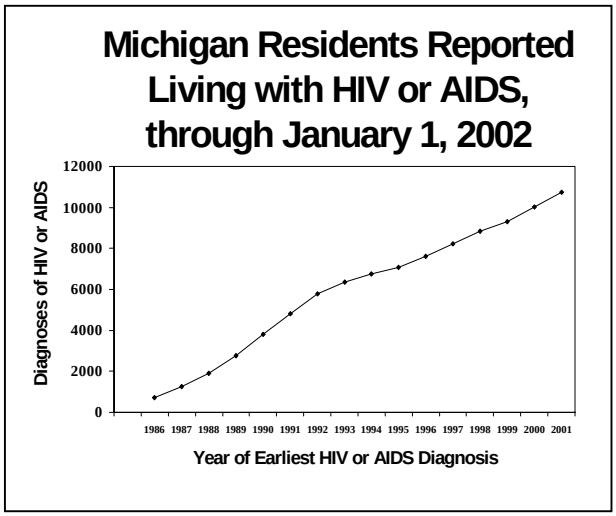
Trends in HIV/AIDS Data

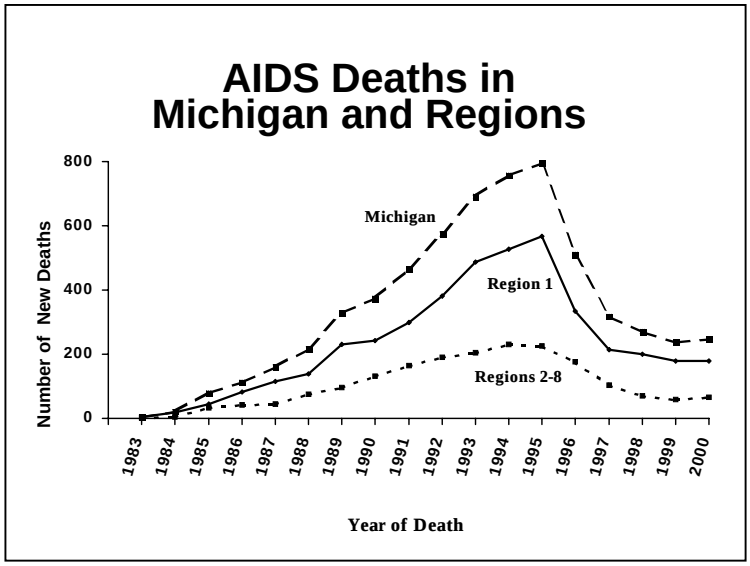
Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level 1996-2000.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. The total number of persons diagnosed with HIV infection was about 1,200 persons annually 1990-1996 and then declined and leveled out to about 825 persons in 2000 (the slight increase from 1999 to 2000 has shown no significant trend).

- *The total number of persons living with HIV/AIDS has reached an all-time high and continues to increase because new HIV infections are stable but HIV related deaths are dropping.* The graph to the right shows this increase using reported HIV and AIDS cases. These cases comprise everyone reported with HIV in Michigan with a name or other identifier, including those who also meet the AIDS case definition. Persons who were reported anonymously or those who have not been diagnosed are not represented in this graph.





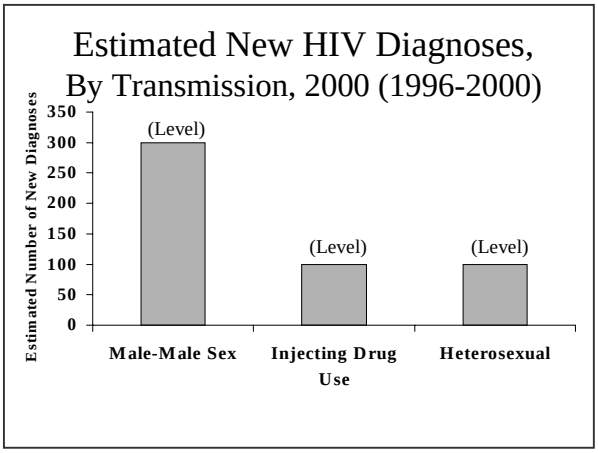
- *The number of HIV related deaths decreased 66 percent between 1995 and 2000.* In the graph to the left, the top line reflects the total deaths for the state of Michigan (the sum of the two lower lines). The middle line represents the number of deaths in Region 1 while the bottom line consists of the deaths from the remaining Regions (2-8).

2002 Profile of HIV/AIDS in Michigan

Trends in HIV/AIDS Data (Continued)

Data from HIV/AIDS Reporting System (HARS)

Transmission of HIV 1996-2000: Among persons with a known risk for HIV transmission, new diagnoses among men who have sex with men are stable with 300 new diagnoses in the year 2000. The proportion of persons infected heterosexually and via IDU is level at 100 new diagnoses in the year 2000. New diagnoses are level among men who both have sex with men and inject drugs, however they are not included in this graph. In addition, fewer than 1 percent of new diagnoses were among persons who first acquired HIV from blood products received either before 1985 in the U.S. or in other countries.



Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	73%	77%
Females	27%	23%
Whites	30%	37%
Blacks	62%	58%
Hispanics	5%	4%
Other Minorities	2%	1%
Race Unknown	1%	1%
White Males	25%	32%
Black Males	43%	41%
Hispanic Males	3%	3%
Other Minority Males	1%	0%
Unknown Race Males	1%	1%
White Females	5%	5%
Black Females	20%	16%
Hispanic Females	1%	1%
Other Minority Fem.	1%	0%
Unknown Race Fem.	0%	0%
0-12 years*	2%	1%
13-19 years*	1%	1%
20-24 years*	3%	4%
25-44 years*	61%	67%
45+ years*	33%	27%
Total HIV Infected	6,929	10,749

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2001, 6,929 HIV-infected persons were reported receiving Ryan White services in the state of Michigan. A comparison also shows that persons receiving Ryan White services were more likely than the reported population to be female or black.

Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (10,749), it is apparent that not all reported persons are receiving RWCA-funded services.

** "Years" within this table refers to current age, not age at diagnosis.*

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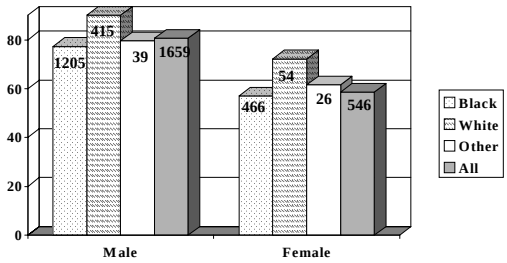
Information from Interviews with HIV-Infected Persons in SE Michigan

Data from Supplement to HIV/AIDS Surveillance Project (SHAS)

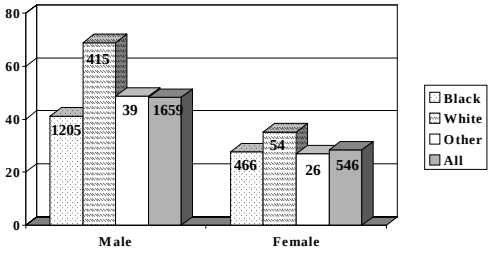
Data presented in this section are from the Supplement to HIV/AIDS Surveillance Project (SHAS) from 1990-2000. HIV-infected persons in Region 1 who present for care at one of three sites, two large tertiary medical centers and one neighborhood clinic system, are eligible for a one-time interview. Data are collected on demographic and socioeconomic factors, drug use (alcohol, ingested and/or injected drugs), needle sharing and cleaning, access to drug treatment, sexual behaviors, condom use, medical and social services, compliance with drug therapies, and, for women, reproductive history and child health. Prevention and care planning groups are encouraged to contact the MDCH HIV/AIDS Surveillance Section for additional data from this project. A summary of the 1990-2000 SHAS data is also available on-line at: www.michigan.gov/mdch.

- At the time of the interview 57 percent had AIDS and 43 percent had HIV/not AIDS; 75 percent are male and 75 percent are black.
- Among the 1,659 male interviewees, 81 percent had greater than or equal to 12 years of education, 36 percent were employed at the time of interview, and 49 percent had an income of $10,000 or more.
- Among the 546 female interviewees, 59 percent had greater than or equal to 12 years of education, 21 percent were employed at the time of interview and 29 percent had an income of $10,000 or more.

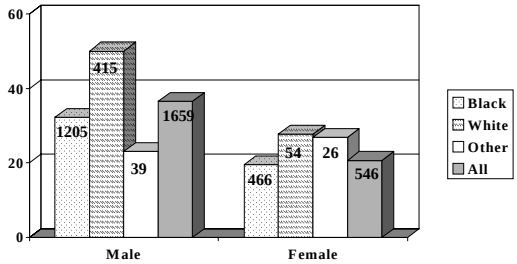
Percent of Interviewees with Greater than 12 Years of Education by Race and Sex in SE Michigan, 1990-2000



Percent of Interviewees with an Income of $10,000 or More by Race and Sex in SE Michigan, 1999-2000



Percent of Interviewees Employed at the Time of Interview by Race and Sex in SE Michigan, 1999-2000



Note: Numbers on the bars are the total number of interviewees in each sex and race group.

2002 Profile of HIV/AIDS in Michigan

Sexually Transmitted Diseases

Data from HIV & STD Surveillance

Several sexually transmitted diseases (STDs) are more common than HIV infection and have a short incubation period. Therefore, reviewing their patterns of transmission can provide additional information regarding recent sexual behavior and potential risk not available from HIV/AIDS data. Studies have shown that the risk of both acquiring and spreading HIV is two to five times greater in people with STDs. Aggressive STD treatment in a community can help to reduce the rate of new HIV infections.

During 2001 alone, there were over 31,000 cases of chlamydia and 17,000 cases of gonorrhea reported in Michigan. For both diseases, the highest rates of infection were among persons age 15-24. This age group comprises 14 percent of the Michigan population but accounted for 57 percent of gonorrhea and 72 percent of chlamydia cases.

Syphilis was diagnosed much less frequently (428 cases in 2001). Approximately equal proportions of cases were diagnosed and reported among the 5-year age groups between 20 and 54 years as shown in Table 4 on Page 28.

The rates of chlamydia, gonorrhea, and syphilis among blacks were much higher than among whites. Even though over one-third of gonorrhea cases and approximately one-half of chlamydia cases were missing race information, the rates (number of cases per population) among blacks remain higher even if all unknown cases were among whites. Of the syphilis cases reported in 2001, for which almost all cases had race reported, 90 percent were among blacks.

Forty-seven percent of gonorrhea cases and 62 percent of syphilis cases were male. However, approximately 80 percent of reported chlamydia cases were female. This is likely because more women than men are screened for chlamydia.

The STD data are displayed in Tables 4 and 5 on pages 28 and 29.

TB and HIV

Data from TB Registry & HARS

As the HIV/AIDS epidemic continues to grow, there are indications of a correlation between those infected with HIV and the resurgence of tuberculosis. There are now a cumulative total of 437 persons known to be co-infected with HIV and TB. These include:

- 350 males (80 percent) and 87 females.
- 354 blacks (81 percent), 58 whites (13 percent), 23 Hispanics, and 2 Asians.
- 293 (67 percent) of the persons have died.
- Age at diagnosis of HIV: Three (<1 percent) were 0-10 years, eight (2 percent) were 10-19 years, 81 (19 percent) were in their 20s, 201 (46 percent) were in their 30s, 110 (25 percent) were in their 40s, 25 (6 percent) were in their 50s, 7 (2 percent) were in their 60s, and one (<1 percent) was 70+ years.
- Residence at diagnosis of HIV: Eighty percent were in Region 1. More specifically, these were: 292 Detroit (68 percent), 30 Wayne, 20 Oakland, 8 Jackson, 21 Kent, 8 Washtenaw, 13 Berrien, 8 Genesee, 8 Ingham, 3 Calhoun, 6 St. Clair, 2 Saginaw, and one each Allegan, Branch, Grand Traverse, Hillsboro, Hillsdale, Kalamazoo, Monroe, Muskegon, and Sussex. Nine had no county listed or were diagnosed with HIV in another state.
- 348 (80 percent) and 89 (20 percent) of persons co-infected with HIV and TB with pulmonary tuberculosis and extrapulmonary tuberculosis respectively.

2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Supplement to HIV/AIDS Surveillance Project (SHAS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Michigan. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 7,680 MSM living with HIV disease in Michigan. This includes 850 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

The percent of MSM who are HIV infected and attended the Sexually Transmitted Diseases (STD) clinics at local health departments in southeast Michigan has been quite high. These rates are 10 percent in Wayne County outside of Detroit (average 1993 –1996), 24 percent in Oakland County (average 1991-1993) and 29 percent (average 1993-1999) in the City of Detroit. Although data from these seroprevalence surveys provide valuable information about clinic attendees, the results cannot be generalized to all MSM. The findings are based on a select group of men at the highest risk for contracting HIV — MSM who engage in unprotected sex and have contracted other STDs. In addition, this behavior is likely under-reported at STD clinics, complicating the implications of these rates. This under-reporting leads to a small number of known MSM being included in these surveys annually (an average of approximately 25 for Detroit and under 20 each for Wayne and Oakland County clinics). Even so, these results suggest that the percent of MSM who are HIV positive is higher than any other behavioral group discussed in these profiles.

Race/Ethnicity:

Having sex with other men infected most males in Michigan. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU of all races (total cases equaling 5,329), white males (2,742) comprise the majority (51 percent) of men in this combined category; blacks (2,380) account for more than a third (45 percent). See Table 2, page 26.

Age: Among those reporting male-male sex, the highest percent of all living cases of HIV/AIDS is found among those aged 30-39 (45 percent). MSM is the predominant mode of transmission for males aged 13 and up. See Table 3, page 27.

Geographic Distribution:

Just under two-thirds (63 percent) of HIV-infected MSM statewide reside in Region 1. In both the high and low HIV/AIDS prevalence areas (see map on Page 2), MSM comprise the single largest mode of transmission. Within high prevalence counties MSM are over half of the cases with a known risk (60 percent) while in the lower prevalence counties two-thirds (68 percent) of reported persons living with HIV/AIDS are MSM.

Trends and Conclusions:

MDCH estimates that there were about 300 new HIV infections in the year 2000 among men who have sex with men. These cases are equally divided between white and black MSM. These numbers were level from 1996-2000.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older, since older men are more likely to be HIV-infected than are younger males.

2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group: MSM (Discussion of Bisexuals)

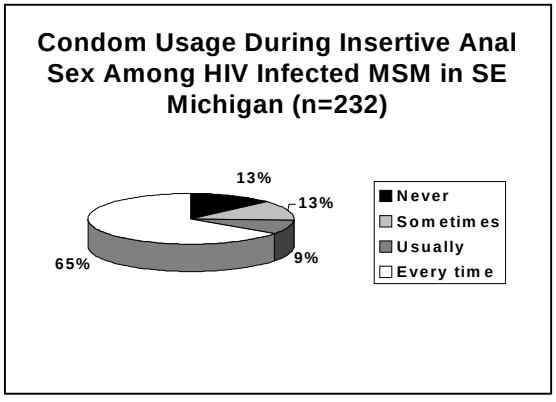
Data Supplement to HIV/AIDS Surveillance Project (SHAS)
& HIV/AIDS Reporting System (HARS)

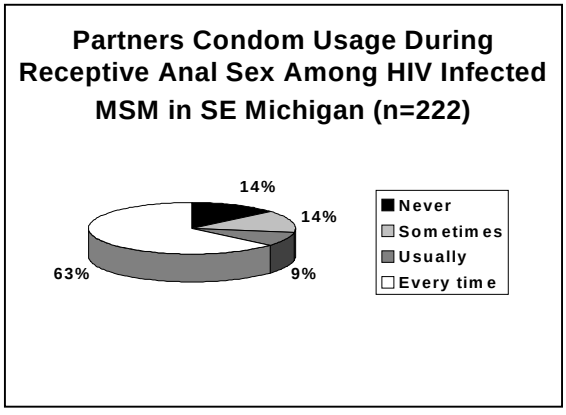
In an effort to help focus prevention activities, we present the data that are available on bisexual behavior among HIV-infected men in Michigan. Detailed behavioral data on MSM in southeast Michigan are available from the SHAS interview study (described on page 6). The SHAS interview asks HIV-infected persons directly about specific behaviors. It is conducted only in SE Michigan and therefore is not representative of all HIV-infected persons in the state. Of all male SHAS respondents, 59 percent report having sex with other men in the five years prior to the interview. Twenty-nine percent of black MSM also report having sex with women, while 17 percent of white MSM report having sex with women.

Case reporting data are collected statewide but has only limited information on male bisexual behavior. Case reports are usually completed by health care providers reviewing medical records rather than through extensive interviews of the infected person. Only 59 percent of all case reports have complete answers to both questions, "has the patient had sex with men," and "has the patient had sex with women." Based on these complete forms, 35 percent of all MSM reported also having sex with women since 1977. These complete forms also show that 4 percent of women report having sex with bisexual men. There are no changes over time. These data from case reporting should be viewed as minimum estimates of these behaviors. Nonetheless, they suggest that more HIV infected women have sex with bisexual men than the surveillance system collects.

Ranked Behavioral Group: MSM: A Look at Condom Usage

Additional behavioral data on MSM in southeast Michigan are available from the SHAS interview study described on page 6 of this profile. Among MSM interviewed, we asked questions regarding condom use with male partners. As shown in the graphs below, of 232 respondents only 65 percent reported using condoms “every time” in the past year when they participated in insertive anal sex with a male partner. Therefore, 35 percent of the HIV infected MSM reported condom use with a range from “usually” to “never”. Of the 222 respondents who participated in receptive anal sex with a male partner, 63 percent reported that their partner used a condom. This also indicates that 37 percent of respondents report that condom usage, while engaging in receptive anal sex is not consistent, and ranges from “usually” to “never”.





2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Supplement to HIV/AIDS Surveillance Project (SHAS)

Number of Cases

Injecting drug users (IDUs) are the number two ranked behavioral group in Michigan and account for almost a third of reported infected persons with a known risk. MDCH estimates there are approximately 3,620 IDUs living with HIV disease in Michigan. This estimate includes 850 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals, infants, and MSM. Over one-third (43 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 1,333 cases with reported heterosexual risk, 446 individuals (34 percent) also reported having IDU as partners. Sixty-two percent of perinatally infected infants (infants infected at birth) have an IDU as a mother or have a mother whose partner is an IDU.

When these linked populations are considered, IDU-related transmission accounts for 28 percent **(**3,039 cases) of people reported with HIV disease and having a known risk in Michigan. This is similar to the nationwide picture.

Western Michigan Drug Treatment HIV Seroprevalence Study:

From June 1998 to March 1999 an anonymous, unlinked HIV seroprevalence study was conducted among 1,120 persons receiving drug treatment through a drug and alcohol treatment center in Kent County. From these participants 1,115 HIV test results were available and revealed an overall seroprevalence of 1.3 percent (15 persons).

One-fifth of all clients had ever injected drugs, and 61 percent of IDUs had injected in the last 12 months, with heroin being the primary drug injected. Six HIV-infected persons (40 percent) had ever injected drugs, and three of these had injected in the last 12 months. One-third of IDU, including three HIV-infected IDU, had shared works since 1978.

HIV seroprevalence was higher among IDU than non-IDU (2.6 percent versus 1 percent), but the majority of the HIV-infected (60 percent) did not report injecting drugs and their risk factors were not known. Although HIV seroprevalence among white males was low in this population, they accounted for the largest proportion of IDU and the largest proportion of IDU who share needles.

Of the 1,120 persons in the study, 825 persons were tested for hepatitis C virus (HCV), and 202 (25%) were positive. Of the 14 HIV-infected persons who were tested, 8 (57%) were co-infected with HCV. HCV seroprevalence was much higher among persons who had injected drugs (61%) than among persons using non-injected drugs (14%).

Race/Ethnicity and Sex:

Of the 2,511 IDU HIV/AIDS cases, 1,227 are black men (49 percent), 598 are black women (24 percent), 429 are white men (17 percent), 131 are white women (5 percent), 82 are Hispanic men (3 percent) and 22 are Hispanic women (1 percent). In total, nearly three quarters (1,825 cases) of the cases occur in black IDU. (Twenty-two cases were of unknown race. Refer to Table 2, page 24.) Approximately two-thirds of the cases are men (70 percent) and one-third are women (30 percent). Among the 758 women who's HIV infection has been attributed to IDU, over half (51 percent) were reported with high-risk heterosexual sex partners.

Additional behavioral data on IDUs and other drug users in southeast Michigan is known from the SHAS interview (See graphs on next page). Of the 2,205 persons interviewed in SHAS, 25 percent injected drugs at some time during their lives.

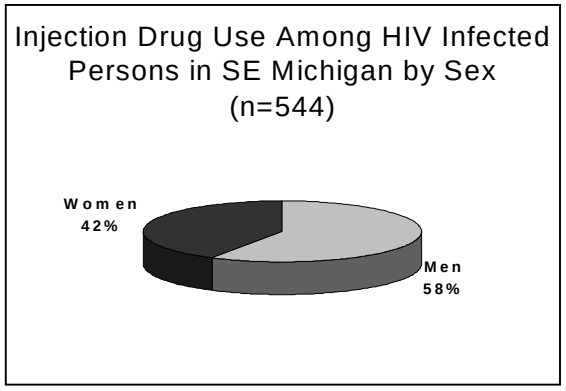
2002 Profile of HIV/AIDS in Michigan

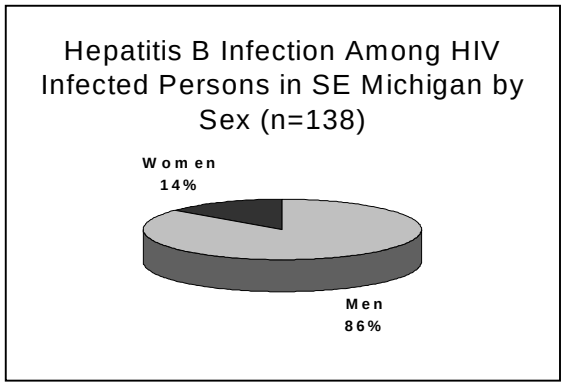
Ranked Behavioral Group: IDU (Continued)

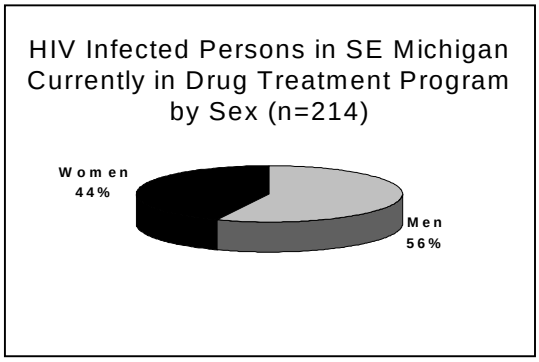
Race/Ethnicity, and Sex (Continued):

This 25 percent was mostly comprised of males (58 percent). Of 138 respondents, 86 percent of men and 14 percent of women reported also being infected with Hepatitis B. When clients were asked about current participation in drug treatment programs, 214 persons (10 percent) responded in the affirmative. Questions used to screen interviewees for potential alcoholism reveal that 22 percent of female and 21 percent of male interviewees are potential alcoholics.

Other drug use information shows that 65 percent of females and 56 percent of males used some kind of illegal drug in the past. Among these respondents, the non-injected primary drug for women was crack cocaine and for men marijuana, followed by crack. Further SHAS data describing the drug use behaviors of participants in this study are available online at www.michigan.gov/mdch.







Age:

Among men with a known risk in each age group over 19 years, IDU is the second most common mode of transmission. Thirty-eight percent of all the male IDU cases are recorded among men in their forties (23 percent of these were MSM/IDU).

IDU is the predominant mode of transmission for women aged 30-39 years (44 percent of cases with known risk). Among the 594 females IDUs in this age group, 52 percent of them also reported high risk heterosexual partners. There are very few cases of HIV/AIDS attributed to IDU among persons who were teenagers at the time of their HIV diagnosis (15) and one third of those are among MSM/IDU; the proportion among those in their twenties is small (15 percent of cases with a known risk). See Table 3, page 27.

2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group: IDU (Continued)

Geographic Distribution:

IDU is a more common mode of transmission in the higher prevalence areas of the state (see map on page 2). Within high prevalence counties, just under a third of cases with a known risk (28 percent) are IDU, while in the lower prevalence counties 19 percent of persons living with HIV/AIDS are IDU. These percentages include IDU males who are also MSM.

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (not including MSM/IDU) has remained level with approximately 100 new HIV infections in the year 2000. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs. In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

With a high of 12.4 percent in 1990 to a low of 3.1 percent in 1999, an average of 6.4 percent of IDUs referred through the Detroit Health Department drug treatment Central Intake Facility test positive for HIV (for the years 1988-1999). This has not changed statistically over time. The infection rate among IDUs who are not in treatment is unknown.

2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group/Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three-ranked behavioral group in Michigan. Heterosexual sex accounts for 15 percent of reported infected persons with a known risk. MDCH estimates that 1,920 persons living with HIV disease in Michigan were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 1,180 infected persons who are classified as IDUs but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. Among reported cases, the dual risk IDU/heterosexual cases comprise 9 percent of all reported HIV/AIDS cases with a known risk and are 53 percent men and 47 percent women.

The rate of HIV positives measured among heterosexual attendees of the Detroit STD clinic, who are likely among the highest risk heterosexuals in the state, averaged just under 1 percent (0.9 percent) positive in the annual seroprevalence surveys done 1993-1999. Seroprevalence surveys done in 1996 at the Berrien and Saginaw counties STD clinics (Regions 3 and 6 respectively) each measured lower seropositive rates of 0.2 percent with the few positives being among black women at each clinic. Rates of HIV infection among heterosexuals outside of these two counties and the Detroit metropolitan area are likely even lower.

Race/Ethnicity and Sex:

Among females reported with HIV/AIDS and a known risk, over half (53 percent) of cases are contracted heterosexually. A slightly smaller proportion of females, 42 percent, were infected through IDU. Among women with a known risk, 22 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 1,333 men and women living with HIV/AIDS and infected heterosexually, 33 percent reported their heterosexual partner as injecting drug users, 5 percent as bisexual men (this applies to women only) and 2 percent as persons infected through blood products. Over half (59 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 23 percent of all reported HIV/AIDS cases in Michigan, they have consistently accounted for over two-thirds of heterosexually acquired infections -- currently 71 percent.

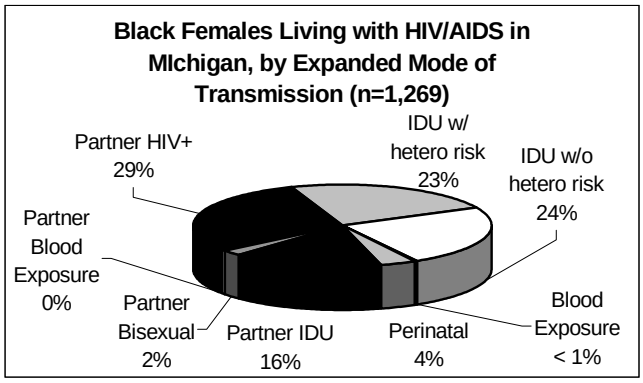
Nearly one half of black women were infected heterosexually (49 percent). Sixty-four percent of Hispanic women and 63 percent of white women, nearly two-thirds of each group, were infected through heterosexual sex.

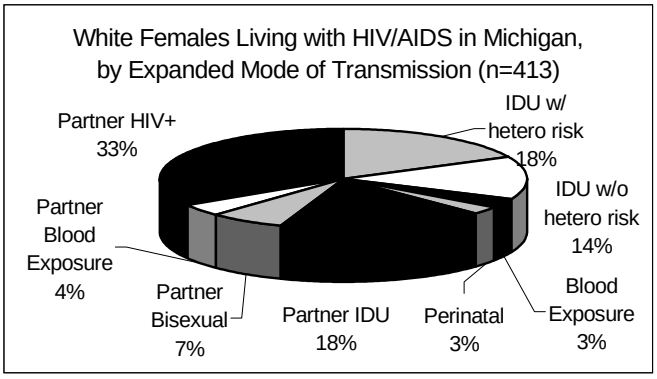
Most heterosexual cases of HIV/AIDS are black--65 percent of female and 69 percent of male heterosexually transmitted HIV/AIDS cases. It should be noted that the percent of men infected heterosexually is low--6 percent of cases among men of all races with a known risk.

2002 Profile of HIV/AIDS in Michigan

Ranked Behavioral Group: Heterosexuals (Continued)

The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a male partner who is HIV-infected, a bisexually active man, or an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected black and white women with known risk are shown in the two pie charts below.





Age:

For women between the ages of 13 and 29, heterosexual transmission is the predominant mode. Among women 30-49, IDU supercedes heterosexual transmission.

Geographic Distribution:

The 1,090 persons living with HIV/AIDS who acquired HIV heterosexually (prisoners excluded) are located proportionately throughout the state. In the high and low prevalence areas (see map on page 2), they comprise 15 percent and 14 percent, respectively, of cases reported with a known risk.

Trends and Conclusions:

MDCH estimates that the number of new HIV infections attributable to heterosexual transmission was level with approximately 100 cases in the year 2000. Although the proportion of new cases attributable to heterosexual transmission is increasing (not significantly), from 14 percent in 1994 to 21 percent in the year 2000, it is still a lower proportion of cases than among MSM (54 percent) and almost identical to IDU (22 percent).

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with men who have sex with men, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether the total number of heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Michigan

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Black persons comprise the majority of those living with HIV/AIDS in Michigan. They comprise 14 percent of Michigan's population yet make up over half (58 percent) of the cases of HIV/AIDS. MDCH estimates 8,950 blacks live with HIV/AIDS in Michigan. The rate of HIV infection among blacks is 638 per 100,000 population, nine times higher than the rate among whites. MDCH estimates that as many as one out of 100 black males and one out of 300 black females may be HIV-infected.

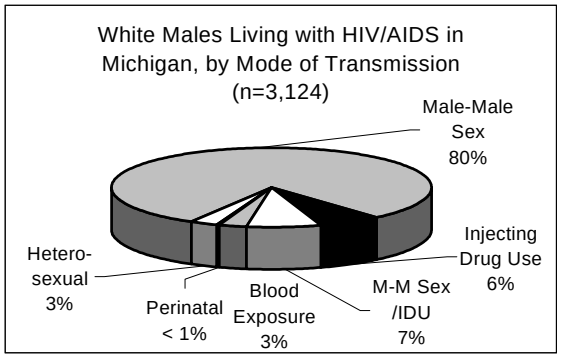
White persons comprise over a third (37 percent) of reported HIV/AIDS cases and 79 percent of Michigan's population. MDCH estimates 5,690 whites live with HIV/AIDS in the state. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (73 per 100,000 population). MDCH estimates that as many as one out of 770 white males and one out of 5,400 white females may be HIV-infected.

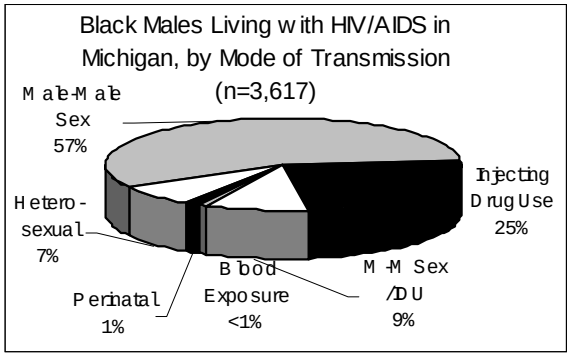
Hispanics comprise 4 percent of cases and 3 percent of the population. MDCH estimates 570 Hispanics live with HIV/AIDS in Michigan. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (176 per 100,000 population). MDCH estimates that as many as one out of 390 Hispanic males and one out of 1,100 Hispanic females may be HIV-infected.

Most persons living with HIV/AIDS in Michigan through 2001 are male (77 percent) and this proportion has decreased over time from 85 percent in 1991. Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 23 percent of the infected population in Michigan.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission among those with known transmission (refer to page 14 for black and white female distributions).





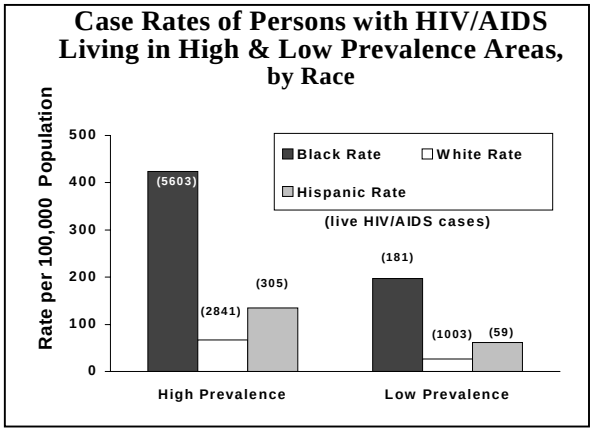
- The majority of the 8,320 male HIV/AIDS cases are black (53 percent), 41 percent white, 4 percent Hispanic and 2 percent are other or unknown race with known risk.

- The majority of the 2,429 female HIV/AIDS cases with known risk are black (73 percent), just under one-quarter (21 percent) are white, four percent are Hispanic and two percent are other or unknown race (refer to page 14 for female heterosexual transmission breakdown.)

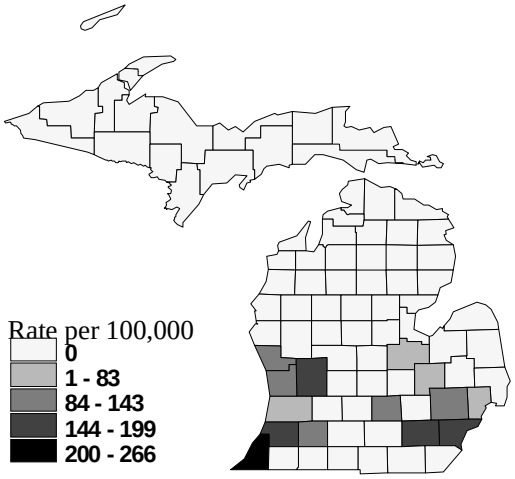
2002 Profile of HIV/AIDS in Michigan

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases by Race/Ethnicity:



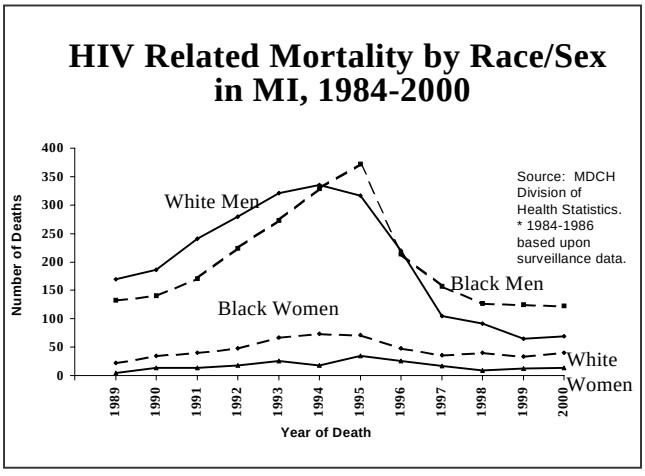
Looking at the proportions of cases by race in a particular area of the state (i.e., number of black cases/total number of cases) does not fully measure the impact of this disease. This is because the proportions of whites and blacks living in high and low prevalence areas are different. Therefore, instead of proportions, rates are used (number of black cases/total number of blacks living in that area). The bar graph shows that the HIV/AIDS case rate among blacks is five to seven times higher than the rate among whites in both high and low prevalence areas of the state, even though there are fewer cases among blacks in the low prevalence areas. This shows that this disease disproportionately affects blacks in both high and low prevalence areas of Michigan.



Hispanics comprise 4 percent of all persons living with HIV/AIDS. The map to the left shows the rate per 100,000 of Hispanics living with HIV/AIDS in counties across Michigan. The counties with 5 or more cases are included in the map. The areas with the highest case rates for Hispanics appear to follow the statewide pattern for all race/ethnicity groups, and seven of the 14 counties that meet this definition are either on the Lake Michigan shore line or just to the east of it. Although Wayne County has the largest number of cases, its rate (166 per 100,000) is actually lower than the statewide average of 176 per 100,000. The other county rates include Allegan (83), Berrien (266), Genesee (49), Ingham (130), Kalamazoo (143 per 100,000), Kent (199), Macomb (40), Muskegon (117), Oakland (128), Ottawa (108), Saginaw (36), Van Buren (178), and Washtenaw (158).

Trends and Conclusions:

MDCH estimates that the number of new HIV infections annually among blacks has remained level at 550 in 2000. During this same time period, the estimated annual number among whites has remained stable at 250 persons in 2000. New HIV infections diagnosed among Hispanics is also level and remains under 50 persons in 2000.



Trends in new HIV diagnoses among males and females do show similar patterns. The number of males newly diagnosed with HIV each year is stable at about 580 new infections in the year 2000. Among females the number appears to also be stable at 250 in the year 2000.

The proportion of new cases among men has decreased from 76 percent to 67 percent of new HIV diagnoses between 1998 and 2000.

The graph on the left shows that HIV related mortality dropped for all four race and sex groups. The number of deaths among Hispanics was too small to appear on this graph. The decline in

2002 Profile of HIV/AIDS in Michigan

Description of the Epidemic by Race and Sex (Continued)

deaths was marked in all groups, but was more rapid among whites (77 percent) compared with blacks (62 percent), and among men (68 percent) compared with women (51 percent).

When all the data are considered for the three behavioral groups discussed in this document, the consistent impact across transmission behaviors that this epidemic is having on blacks is apparent. The number of new HIV diagnoses among blacks is increasing and their HIV/AIDS rate is still seven times higher than the rate among whites. Every region in Michigan should look closely at its own data to discern whether this disproportionate impact on blacks holds true for its area as well.

Description of the Epidemic Among Children (0-12)

Number of Cases: **Data from HIV/AIDS Reporting System (HARS)**

MDCH estimates that there are 210 children living, who were ages 0-12 when they were diagnosed with HIV. They comprise 1.4 percent of the reported infected persons. Most of them (87 percent) were infected perinatally, i.e., before, during or shortly after birth. (Those infected after birth would be infected via breastfeeding. There have not been any documented cases of this kind of transmission in Michigan). Of the remaining children**,** 9 percent were infected via blood exposure before 1985.

Fewer than 2 percent of children 0-12 with known risk have been infected sexually and 2 percent were probably due to perinatal transmission or blood products in other countries.

Description of Cases in Children:

Children, ages 0-12, infected with HIV are 52 percent male and 48 percent female. Among the 147 young children reported with HIV/AIDS about three quarters are black, one quarter are white and 2 percent are Hispanic or of unknown race.

Of the 132 children infected perinatally, 64 percent were IDU related, and for 17 percent the mother was not known to be an IDU but one or more of her sex partners were IDUs. An additional 18 percent had mothers with HIV-infected sex partners but for whom additional risk information was unavailable. For 17 percent all that was known about the mother is that she was HIV-infected with no additional risk information.

Geographic Distribution of Infected Children:

Approximately 75% of HIV positive children in Michigan are residents of southeast Michigan.

Trends and Conclusions:

The best measurable success in reducing HIV transmission has been among the perinatally infected cases. Without Zidovudine (ZDV) prophylaxis, about 25 percent of children born to HIV-infected women could expect to become HIV-infected. In Michigan, the proportion of these children who become infected has dropped precipitously, from 25 percent in 1992 to 3 percent in 2000. As of January 1, 2002, two of the 69 children in 2000 and four of the 51 children in 2001 born to HIV infected women were diagnosed with HIV infection.

For further discussion please see: Mokotoff, ED, Malamud BH, Kent JB, Kowalczyk, RJ, Scott LJ, Hammett TA, Lindegren, ML. Progress Towards Elimination of Perinatal HIV Infection-Michigan, 1993-2000, MMWR, 2002:51:5: 93-97.

2002 Profile of HIV/AIDS in Michigan

Description of the Epidemic Among Teens and Young Adults (13-24)

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Data from HIV & STD Surveillance, & Job Corps

Number of Cases:

MDCH estimates that there are about 1,660 persons currently living in Michigan who were ages 13-24 years when they were diagnosed with HIV. They comprise 11 percent of all persons reported with HIV/AIDS in Michigan (2 percent age 13-19 years; 9 percent age 20-24 years). The rate of HIV/AIDS among these young people is lower than the rate among those aged 25-44 years. The level of incident and prevalent cases among persons age 13-24 years is not as high as the level among persons age 25-44 years. However, some young people are at particularly high risk. Specifically these are youth who live in areas with high HIV prevalence and who have sex partners who are age 20 or older.

STD rates are highest in these age groups. The STD data are shown on pages 28 and 29. In persons age 15-24 years, the rate of chlamydia is over two times higher and the rate of gonorrhea is almost two times higher than the rate among persons age 25-29 years (please refer to the Sexually Transmitted Diseases section on page 7 for a discussion of these high rates).

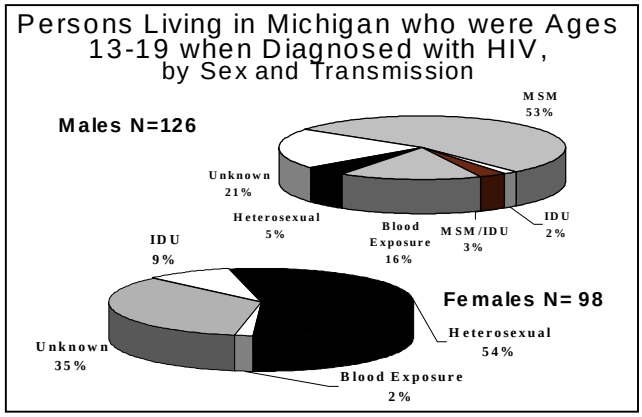
The Job Corps training program for disadvantaged youth performs HIV testing for all entrants (for the years 1988-1998). Since testing began in 1988 there have been 24 positives out of over 12,000 tests among Michigan residents (less than one quarter of one percent) and there is no increase over time. All but one of the positives were in black youth and, the geographic distribution is proportional to the epidemic in Michigan, 79 percent were from Region 1; most (17 or 71 percent) were among males.

Teen pregnancy rates have shown decreases over time and have now leveled off over the past 5 years. In Wayne County and the City of Detroit, the areas with the highest teen pregnancy rates in the state (89 per 1,000 in Wayne County outside of Detroit and 124 in the City of Detroit), the 2000 rates among teens in Detroit actually exceeded the rates among persons age 15-44 years. The statewide teen rate in 2000 was 66 pregnancies per 1,000 females aged 15-19 years. In Regions 2-7, the 2000 rates range from 60-80, in Region 8, about 40 and in Region 1, a rate of 68. In each region the rate among teens is lower than the rates among persons age 15-44 years.

MDCH conducted adolescent seroprevalence surveys in Detroit/Wayne County between 1990 and 1995. These surveys were conducted at two adolescent health care clinics and one youth detention facility where HIV seroprevalence was measured in homeless youth. These three surveys all showed extremely low numbers of HIV-infected youth; eight infected youth out of more than 3,000 tested (less than one quarter of one percent positive). These youth were among the highest risk youth in the region and the state. They lived in Wayne County, including Detroit, the county with the highest rate of HIV, most were sexually active and some were homeless. Therefore, fewer positives would be expected among youth that live in other areas of the state.

Mode of Transmission:

Teenagers: When discussing mode of transmission in other sections, those individuals with unknown risk were left out of percentage calculations. However, the unknown category for teenagers and young adults is too large to omit. Historically, most infected teenagers were recipients of HIV-infected blood or blood products. However, since screening of all blood products began in 1985 this proportion has steadily declined.



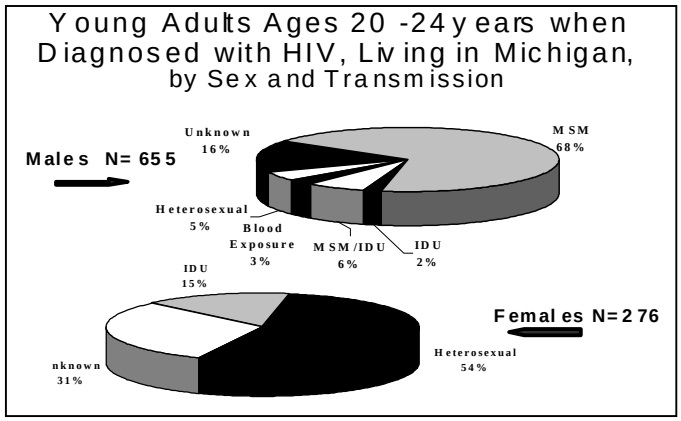
2002 Profile of HIV/AIDS in Michigan

Additional Discussions: Teens and Young Adults (Continued)

Among the 224 persons who were ages 13-19 at time of HIV diagnosis and currently living with HIV in Michigan, 126 (56 percent) are male. Among these male cases, over half had sex with other males (57 percent) which includes the MSM/IDU cases while 20 percent had been infected with HIV through blood products before 1985. Only 5 percent could be attributed to IDU (including MSM/IDU) and 5 percent to heterosexual transmission. Teenage males have the largest proportion of unidentified risk (21 percent) compared with any other age group of men under age 60. Experience with investigating such persons shows that it is likely that many of these males were infected through having sex with other males.

Among the 98 females who were ages 13-19 at time of HIV diagnosis and currently living with HIV in Michigan, over half (54 percent) were infected through heterosexual sex; 9 percent were IDUs. Similar to males of this age, there is a large number who did not report a mode of transmission (34 females or 35 percent). Experience with investigating such persons shows that it is likely that most of these females were infected heterosexually.

Young Adults: Among the 931 persons who were ages 20-24 at time of HIV diagnosis and currently living with HIV, almost three quarters (70 percent) are male. Three quarters of them reported sex with other males (including those MSM who also are IDU); 16 percent did not report a mode of transmission. Many of these were likely infected through sex with other men.



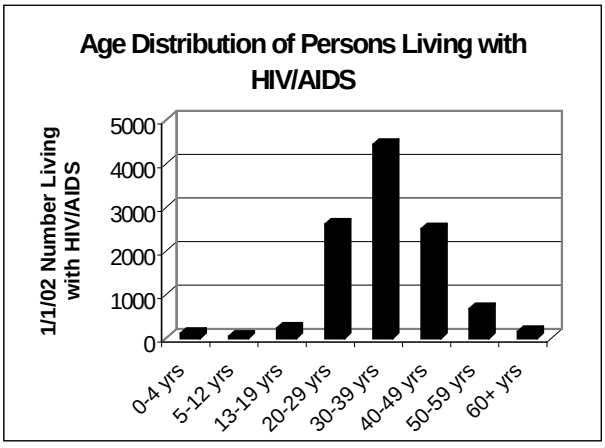
Among the 276 women who were ages 20-24 at time of HIV diagnosis and currently living with HIV, over half (54 percent) were infected heterosexually and 15 percent were IDUs; just under a third did not report a mode of transmission. Like the teenage females, many were likely infected heterosexually.

Geographic Distribution of Youth and Teen Cases:

The 1,155 persons diagnosed and reported with HIV/between the ages 13-24 are located proportionately throughout the state. In the high and low prevalence areas (see map on Page 2) they comprise 13 percent and 14 percent of reported cases respectively.

Trends and Conclusions:

The number of cases among person age 13-24 years has remained level. Although this group comprises 5 percent of persons living with AIDS and 16 percent of those living with HIV/not AIDS, this is likely a reflection that HIV is generally diagnosed before AIDS. This does not necessarily mean that age of initial HIV infection is decreasing over time. Consequently you would expect those with an HIV diagnosis to be younger than those with AIDS. Each region should consider both the behaviors of youth that increase the risk of HIV transmission and the likelihood that their partners for these behaviors are HIV-infected. Given the small number of infected persons in these age groups, it is likely most are infected by older partners (20+).

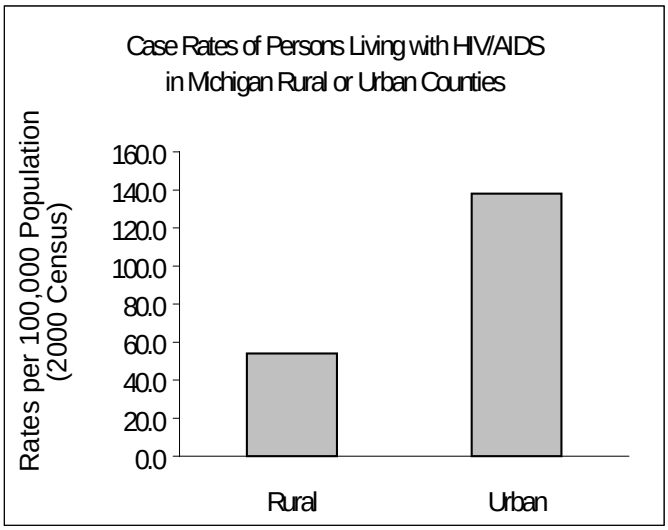


2002 Profile of HIV/AIDS in Michigan

Special Populations: Rural HIV

Data from HIV/AIDS Reporting System (HARS)

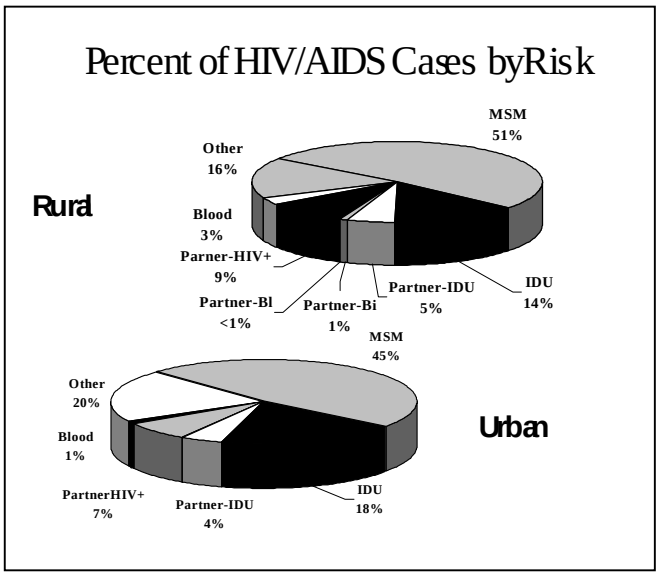
In an effort to help to identify needs within the HIV/AIDS epidemic specific to rural localities, the Michigan HIV/AIDS Council (MHAC) has formed a Rural HIV Prevention Work Group. This group defines rural as non-metropolitan counties that contain cities and towns with a population less than 50,000. In addition to these areas, the following counties are included because of their social, geographic and service availability issues: Bay, Berrien, Calhoun, Clinton, Eaton, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Monroe, Muskegon, Ottawa, St. Clair and Van Buren.

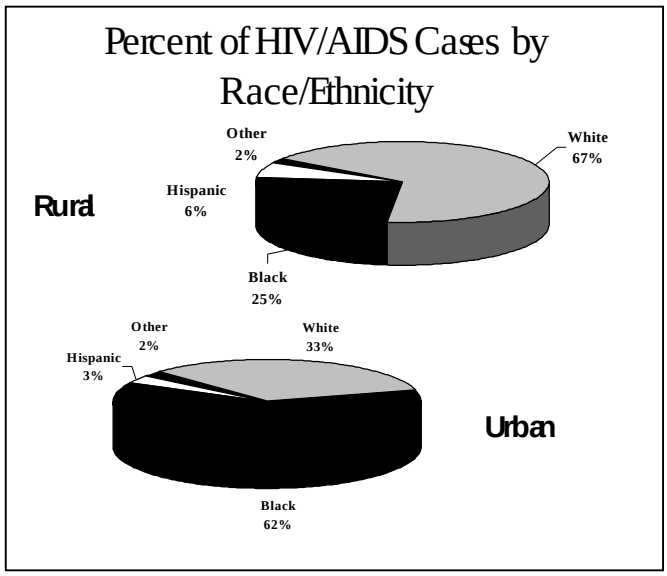


Using this definition, the reported cases were divided into rural or urban categories. Rural cases constitute 18 percent of reported cases (1,893). The estimated rate of infection in rural areas is 54 per 100,000. Urban areas account for 82 percent of cases and have a rate that is almost three times higher, 138 per 100,000.

In Michigan's rural communities, HIV is more likely to be attributable to men who have sex with men and less likely to be attributed to injecting drug use when compared with urban areas. There is little difference between rural and urban communities with respect to the relative proportion of MSM and Heterosexual cases.

In Michigan, the greatest proportion of HIV/AIDS cases occurs among blacks. In rural communities, however, the largest proportion of cases occurs among whites. In rural communities, racial/ethnic minorities are also disproportionately impacted relative to their presence in the general population. For further discussion see page 16.





2002 Profile of HIV/AIDS in Michigan

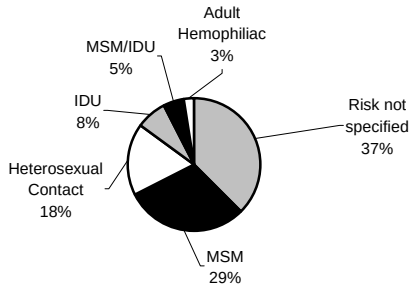
Special Populations: Arab-American Community

Data from HIV/AIDS Reporting System (HARS)

In response to requests from an Arab-American community based organization, we began reviewing the size of the epidemic in this community. Arabic is considered an ethnicity and not a racial category and has not been routinely collected by the surveillance system. Consequently, the numbers presented here may be undercounted. Beginning in the year 2001 a question was added about Arabic ethnicity on the HIV/AIDS Case Report Form.

In Michigan, the largest concentration of Arab-Americans is in Southeastern Michigan, where most of these HIV/AIDS cases were diagnosed. Of the 40 known cases, 38 percent were HIV not AIDS and 63 percent as AIDS. The counties where persons were diagnosed with HIV (including AIDS) included Wayne (43 percent), Oakland (25 percent), Macomb (10 percent), Kent (5 percent), Kalamazoo (3 percent), and 'Other' (15 percent). Eighty percent (32) of the cases are among males, 20 percent (8) among females, and the mode of transmission for the few female cases were heterosexual or unknown, none were IDU. The age of HIV diagnosis (including AIDS) is similar to the age distribution for all cases in Michigan, with 25 percent (10) ages 20-29, 38 percent (15) ages 30-39, and 23 percent (9) ages 40-49.

Persons of Arabic Descent Living with HIV/AIDS by Mode of Transmission, N=40



Males of Arabic Descent Living with HIV/AIDS by Mode of Transmission, N=32

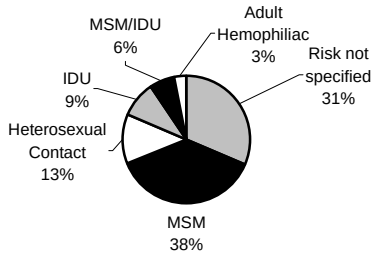


Table 1: Statewide Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Prisoners and persons with unknown residence are included
January 1, 2002

Statewide Patient Group	Estimated HIV Infection[1]	Total HIV + AIDS Reported[2] Cases	%	Rate per 100,000[3]	2000 Census	%
Male	**12,000**	**8,320**	**77.4%**	**246.3**	**4,873,095**	**49%**
White Males	*4,950*	*3,431*	*31.9%*	*129.0*	*3,836,091*	*39%*
Black Males	*6,400*	*4,441*	*41.3%*	*964.7*	*663,406*	*7%*
Hispanic Males	*440*	*302*	*2.8%*	*258.0*	*170,555*	*2%*
Asian Males	*30*	*21*	*0.2%*	*34.0*	*88,314*	*1%*
American Indian Males	*30*	*23*	*0.2%*	*113.0*	*26,537*	*0%*
Unknown Race Males	*N/A*	*102*	*0.9%*	*	*88192*	*N/A*
Female	**3,500**	**2,429**	**22.6%**	**69.1**	**5,065,349**	**51%**
White Females	*740*	*516*	*4.8%*	*18.6*	*3,970,600*	*40%*
Black Females	*2,540*	*1,764*	*16.4%*	*343.9*	*738,641*	*7%*
Hispanic Females	*140*	*96*	*0.9%*	*91.3*	*153,322*	*2%*
Asian Females	*10*	*10*	*0.1%*	*11.2*	*89,142*	*1%*
American Indian Females	*20*	*14*	*0.1%*	*74.4*	*26,884*	*0%*
Unknown Race Females	*N/A*	*29*	*0.3%*	*	*86760*	*N/A*
White	**5,690**	**3,947**	**36.7%**	**72.9**	**7,806,691**	**79%**
Black	**8,950**	**6,205**	**57.7%**	**638.4**	**1,402,047**	**14%**
Hispanic	**570**	**398**	**3.7%**	**176.0**	**323,877**	**3%**
Asian	**40**	**31**	**0.3%**	**22.5**	**177,456**	**2%**
American Indian	**50**	**37**	**0.3%**	**93.6**	**53,421**	**1%**
Unknown Race	**N/A**	**131**	**1.2%**	*	**174952**	**N/A**
Male-Male Sex	**6,830**	**4,738**	**53.5%** [a]	N/A		
Injecting Drug Use	**2,770**	**1,920**	**21.7%** [a]	N/A		
IDU with heterosexual risk[b]	*1,180*	*818*	*9.2%* [a]	N/A		
IDU without heterosexual risk[b]	*1,590*	*1,102*	*12.5%* [a]	N/A		
M-M Sex and Inject Drugs	**850**	**591**	**6.7%** [a]	N/A		
Blood Exposure[b]	**190**	**134**	**1.5%** [a]	N/A		
Heterosexual[b]	**1,920**	**1,333**	**15.1%** [a]	N/A		
Partner IDU	*640*	*446*	*5.0%* [a]	N/A		
Partner Bisexual[b]	*90*	*63*	*0.7%* [a]	N/A		
Partner Blood Exp	*50*	*32*	*0.4%* [a]	N/A		
Partner HIV+	*1,140*	*792*	*9.0%* [a]	N/A		
Perinatal	**190**	**132**	**1.5%** [a]	N/A		
Known Risk Total	**12,760**	**8,848**	**100.0%** [a]	N/A		
Unknown Risk	**N/A**	**1,901**	**17.7%**	N/A		
0 - 4 years	**150**	**106**	**1.0%**	**22.3**	**672,005**	**7%**
5 - 9 years	**40**	**30**	**0.3%**	**5.4**	**745,181**	**7%**
10-12 years	**20**	**11**	**0.1%**	**4.4**	**454,587**	**5%**
13 -19 years	**320**	**224**	**2.1%**	**31.6**	**1,012,292**	**10%**
20 -24 years	**1,340**	**931**	**8.7%**	**208.1**	**643,839**	**6%**
25 -29 years	**2,420**	**1,681**	**15.6%**	**369.7**	**654,629**	**7%**
30 -34 years	**3,320**	**2,303**	**21.4%**	**469.2**	**707,542**	**7%**
35 -39 years	**3,080**	**2,135**	**19.9%**	**391.2**	**787,367**	**8%**
40 -44 years	**2,290**	**1,588**	**14.8%**	**282.4**	**811,006**	**8%**
45 -49 years	**1,320**	**918**	**8.5%**	**179.6**	**734,905**	**7%**
50 -54 years	**690**	**480**	**4.5%**	**109.0**	**633,034**	**6%**
55 -59 years	**280**	**193**	**1.8%**	**57.6**	**485,895**	**5%**
60 -64 years	**120**	**84**	**0.8%**	**31.8**	**377,144**	**4%**
65 and over	**90**	**63**	**0.6%**	**7.4**	**1,219,018**	**12%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**
REG1	**10,630**	**6,984**	**68.6%**	**244.2**	**4,353,647**	**44%**
REG2	**730**	**481**	**4.7%**	**99.0**	**737,158**	**7%**
REG3	**1,010**	**666**	**6.5%**	**92.9**	**1,087,219**	**11%**
REG4	**520**	**344**	**3.4%**	**116.2**	**447,624**	**5%**
REG5	**1,200**	**786**	**7.7%**	**98.1**	**1,223,801**	**12%**
REG6	**1,030**	**677**	**6.6%**	**90.5**	**1,137,694**	**11%**
REG7	**250**	**165**	**1.6%**	**39.5**	**633,685**	**6%**
REG8	**120**	**81**	**0.8%**	**37.8**	**317,616**	**3%**
Total for Regions 1-8[4]	**14,890**	**10,184**	**96.1%**	**N/A**		
In Prison[5]	*610*	*417*	*3.9%*	N/A		
Total Known Residence	15,500	10,601	100.0%	156.0	9,938,444	100%
Unknown Residence	N/A	148	1.4%	N/A		
Statewide Total	**15,500**	**10,749**	**100.0%**	**156.0**	**9,938,444**	**100%**

* Indicates there are fewer than five reported cases

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minimum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

[4] Totals for counties/regions includes infected prisoners redistributed to their county/region of origin.

[5] Estimated HIV Infection *In Prison, included in the above total.*

Table 1a : Statewide Distribution of HIV/AIDS Prevalence Estimates by County
Reported Cases, and Population within Michigan
Prisoners and persons with unknown residence are included
January 1, 2002

Statewide Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2]		Rate per 100,000 [3]	2000 Census
		Cases	%		
ALCONA CO.	10	*	*	*	11,719
ALGER CO.	10	*	*	*	9,862
ALLEGAN CO.	100	63	0.6%	94.6	105,665
ALPENA CO.	10	6	0.1%	31.9	31,314
ANTRIM CO.	10	5	0.0%	43.3	23,110
ARENAC CO.	10	*	*	*	17,269
BARAGA CO.	10	7	0.1%	114.3	8,746
BARRY CO.	20	13	0.1%	35.2	56,755
BAY CO.	80	50	0.5%	72.6	110,157
BENZIE CO.	10	*	*	*	15,998
BERRIEN CO.	230	152	1.5%	141.6	162,453
BRANCH CO.	10	7	0.1%	21.8	45,787
CALHOUN CO.	150	98	1.0%	108.7	137,985
CASS CO.	30	19	0.2%	58.7	51,104
CHARLEVOIX CO.	10	8	0.1%	38.3	26,090
CHEBOYGAN CO.	10	*	*	*	26,448
CHIPPEWA CO.	20	15	0.1%	51.9	38,543
CLARE CO.	10	8	0.1%	32.0	31,252
CLINTON CO.	30	20	0.2%	46.3	64,753
CRAWFORD CO.	10	6	0.1%	70.1	14,273
DELTA CO.	20	13	0.1%	51.9	38,520
DETROIT	6,820	4483	44.0%	716.9	951,270
DICKINSON CO.	10	9	0.1%	36.4	27,472
EATON CO.	40	27	0.3%	38.6	103,655
EMMET CO.	10	6	0.1%	31.8	31,437
GENESEE CO.	610	403	4.0%	139.9	436,141
GLADWIN CO.	10	6	0.1%	38.4	26,023
GOGEBIC CO.	10	*	*	*	17,370
GRAND TRAVERSE CO.	60	39	0.4%	77.3	77,654
GRATIOT CO.	10	*	*	*	42,285
HILLSDALE CO.	20	10	0.1%	43.0	46,527
HOUGHTON CO.	10	6	0.1%	27.8	36,016
HURON CO.	10	*	*	*	36,079
INGHAM CO.	460	299	2.9%	164.7	279,320
IONIA CO.	20	15	0.1%	32.5	61,518
IOSCO CO.	10	6	0.1%	36.6	27,339
IRON CO.	10	*	*	*	13,138
ISABELLA CO.	10	8	0.1%	15.8	63,351
JACKSON CO.	140	92	0.9%	88.4	158,422
KALAMAZOO CO.	310	204	2.0%	129.9	238,603
KALKASKA CO.	10	*	*	*	16,571
KENT CO.	840	553	5.4%	146.3	574,335
KEWEENAW CO.	10	*	*	*	2,301
LAKE CO.	10	8	0.1%	88.2	11,333
LAPEER CO.	30	17	0.2%	34.1	87,904
LEELANAU CO.	10	9	0.1%	47.4	21,119
LENAWEE CO.	60	40	0.4%	60.7	98,890
LIVINGSTON CO.	40	25	0.2%	25.5	156,951
LUCE CO.	10	*	*	*	7,024
MACKINAC CO.	10	*	*	*	11,943
MACOMB CO.	560	367	3.6%	71.1	788,149
MANISTEE CO.	10	9	0.1%	40.8	24,527
MARQUETTE CO.	30	21	0.2%	46.4	64,634
MASON CO.	20	13	0.1%	70.7	28,274
MECOSTA CO.	20	12	0.1%	49.3	40,553
MENOMINEE CO.	10	*	*	*	25,326
MIDLAND CO.	40	23	0.2%	48.3	82,874
MISSAUKEE CO.	10	5	0.0%	69.1	14,478
MONROE CO.	60	39	0.4%	41.1	145,945
MONTCALM CO.	30	22	0.2%	49.0	61,266
MONTMORENCY CO.	10	*	*	*	10,315
MUSKEGON CO.	130	87	0.9%	76.4	170,200
NEWAYGO CO.	20	16	0.2%	41.8	47,874

*** Indicates there are fewer than five reported cases**

[1] The minimum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 1a: Statewide Distribution of HIV/AIDS Prevalence Estimates by County (Continued)
Reported Cases, and Population within Michigan
Prisoners and persons with unknown residence are included
January 1, 2002

Statewide Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	%	Rate per 100,000 [3]	2000 Census
OAKLAND CO.	1,570	1031	10.1%	131.5	1,194,156
OCEANA CO.	10	6	0.1%	37.2	26,873
OGEMAW CO.	10	*	*	*	21,645
ONTONAGON CO.	10	*	*	*	7,818
OSCEOLA CO.	10	*	*	*	23,197
OSCODA CO.	10	*	*	*	9,418
OTSEGO CO.	10	6	0.1%	42.9	23,301
OTTAWA CO.	100	67	0.7%	42.0	238,314
PRESQUE ISLE CO.	10	*	*	*	14,411
ROSCOMMON CO.	20	12	0.1%	78.5	25,469
SAGINAW CO.	220	144	1.4%	104.7	210,039
SANILAC CO.	10	9	0.1%	22.4	44,547
SCHOOLCRAFT CO.	10	*	*	*	8,903
SHIAWASSEE CO.	30	20	0.2%	41.8	71,687
ST CLAIR CO.	90	61	0.6%	54.8	164,235
ST JOSEPH CO.	30	20	0.2%	48.1	62,422
TUSCOLA CO.	10	9	0.1%	17.2	58,266
VAN BUREN CO.	80	53	0.5%	104.9	76,263
WASHTENAW CO.	490	324	3.2%	151.8	322,895
WAYNE CO.	1,530	1003	9.8%	137.9	1,109,892
WEXFORD CO.	10	9	0.1%	32.8	30,484
Total for Regions 1- 8 [4]	**15,500**	**10,184**	**96.1%**	**156.0**	**9,938,444**
In Prison [5]	*440*	*417*	*3.9%*	*N/A*	
Total Known Residence	15,500	10,601	100%	N/A	
Unknown Residence	N/A	148	1.4%	N/A	
Statewide Total	**15500**	**10,749**	**100%**	**156.0**	**9,938,444**

*** Indicates there are fewer than five reported cases**

[1] **The minimum estimate is 10 cases.**

[2] **Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02**

[3] **Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000**

[4] **Totals for counties/regions includes infected prisoners redistributed to their county/region of origin.**

[5] **Estimated HIV Infection *In Prison, included in the above total.***

Table 2: Statewide Living HIV/AIDS Cases in Michigan
Sex and Race by Risk

January 1, 2002

Male Only	White		Black		Hispanic		Other		All Races	
MI	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	**2,510**	**80%**	**2,045**	**57%**	**132**	**53%**	**51**	**71%**	**4,738**	**67%**
Injecting Drug Use	**197**	**6%**	**892**	**25%**	**63**	**25%**	**10**	**14%**	**1,162**	**16%**
IDU w/ hetero risk[b]	*68*	*2%*	*336*	*9%*	*28*	*11%*	*	*	*434*	*6%*
IDU w/o hetero risk[b]	*129*	*4%*	*556*	*15%*	*35*	*14%*	*8*	*11%*	*728*	*10%*
M-M Sex /IDU	**232**	**7%**	**335**	**9%**	**19**	**8%**	**5**	**7%**	**591**	**8%**
Blood Exposure	**88**	**3%**	**24**	**1%**	*	*	*	*	**116**	**2%**
Perinatal	**13**	**0%**	**50**	**1%**	*	*	*	*	**65**	**1%**
Heterosexual[b]	**84**	**3%**	**271**	**7%**	**31**	**12%**	*	*	**390**	**6%**
Partner IDU	*24*	*1%*	*105*	*3%*	*8*	*3%*	*	*	*139*	*2%*
Partner Blood Exposure	*5*	*0%*	*	*	*	*	*	*	*9*	*0%*
Partner HIV+	*55*	*2%*	*163*	*5%*	*22*	*9%*	*	*	*242*	*3%*
Total Known Risks	**3,124**	**100%**	**3,617**	**100%**	**249**	**100%**	**72**	**100%**	**7,062**	**100%**
Undetermined	**307**		**824**		**53**		**74**		**1,258**	
Total All Cases	**3,431**		**4,441**		**302**		**146**		**8,320**	

Female Only	White		Black		Hispanic		Other		All Races	
MI	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Injecting Drug Use	**131**	**32%**	**598**	**47%**	**22**	**28%**	**7**	**27%**	**758**	**42%**
IDU w/ hetero risk[b]	*73*	*18%*	*295*	*23%*	*13*	*17%*	*	*	*384*	*22%*
IDU w/o hetero risk[b]	*58*	*14%*	*303*	*24%*	*9*	*12%*	*	*	*374*	*21%*
Blood Exposure[b]	**12**	**3%**	**6**	**0%**	*	*	*	*	**18**	**1%**
Perinatal	**11**	**3%**	**48**	**4%**	**6**	**8%**	*	*	**67**	**4%**
Heterosexual[b]	**259**	**63%**	**617**	**49%**	**50**	**64%**	**17**	**65%**	**943**	**53%**
Partner IDU	*75*	*18%*	*209*	*16%*	*17*	*22%*	*6*	*23%*	*307*	*17%*
Partner Bisexual[b]	*28*	*7%*	*29*	*2%*	*	*	*	*	*63*	*4%*
Partner Blood Exposure	*16*	*4%*	*6*	*0%*	*	*	*	*	*23*	*1%*
Partner HIV+	*140*	*34%*	*373*	*29%*	*29*	*37%*	*8*	*31%*	*550*	*31%*
Total Known Risks	**413**	**100%**	**1,269**	**100%**	**78**	**100%**	**26**	**100%**	**1,786**	**100%**
Undetermined	**103**		**495**		**18**		**27**		**643**	
Total All Cases	**516**		**1,764**		**96**		**53**		**2,429**	

Male & Female	White		Black		Hispanic		Other		All Races	
MI	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	**2,510**	**71%**	**2,045**	**42%**	**132**	**40%**	**51**	**52%**	**4,738**	**54%**
Injecting Drug Use	**328**	**9%**	**1,490**	**30%**	**85**	**26%**	**17**	**17%**	**1,920**	**22%**
IDU w/ hetero risk[b]	*141*	*4%*	*631*	*13%*	*41*	*13%*	*5*	*5%*	*818*	*9%*
IDU w/o hetero risk[b]	*187*	*5%*	*859*	*18%*	*44*	*13%*	*12*	*12%*	*1,102*	*12%*
M-M Sex /IDU	**232**	**7%**	**335**	**7%**	**19**	**6%**	**5**	**5%**	**591**	**7%**
Blood Exposure[b]	**100**	**3%**	**30**	**1%**	*	*	*	*	**134**	**2%**
Perinatal	**24**	**1%**	**98**	**2%**	**8**	**2%**	*	*	**132**	**1%**
Heterosexual[b]	**343**	**10%**	**888**	**18%**	**81**	**25%**	**21**	**21%**	**1,333**	**15%**
Partner IDU	*99*	*3%*	*314*	*6%*	*25*	*8%*	*8*	*8%*	*446*	*5%*
Partner Bisexual[b]	*28*	*1%*	*29*	*1%*	*	*	*	*	*63*	*1%*
Partner Blood Exposure	*21*	*1%*	*9*	*0%*	*	*	*	*	*32*	*0%*
Partner HIV+	*195*	*6%*	*536*	*11%*	*51*	*16%*	*10*	*10%*	*792*	*9%*
Total Known Risks	**3,537**	**100%**	**4,886**	**100%**	**327**	**100%**	**98**	**100%**	**8,848**	**100%**
Undetermined	**410**		**1,319**		**71**		**101**		**1,901**	
Total All Cases	**3,947**		**6,205**		**398**		**199**		**10,749**	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 3: Statewide Living HIV/AIDS Cases in Michigan

Age by Risk

January 1, 2002

Male Only	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
MI	Cases	%[a]	11	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	*	*	68	68%	445	81%	893	79%	2,123	70%	919	54%	246	57%	44	59%	4,738	67%
Injecting Drug Use	*	*	*	*	13	2%	73	6%	420	14%	512	30%	127	30%	14	19%	1,162	16%
IDU w/ hetero risk[b]	*	*	*	*	*5*	*1%*	*27*	*2%*	*184*	*6%*	*185*	*11%*	*29*	*7%*	*	*	*434*	*6%*
IDU w/o hetero risk[b]	*	*	*	*	*8*	*1%*	*46*	*4%*	*236*	*8%*	*327*	*19%*	*98*	*23%*	*11*	*15%*	*728*	*10%*
M-M Sex /IDU	*	*	4	*	42	8%	79	7%	290	10%	150	9%	24	6%	*	*	591	8%
Blood Exposure	10	13%	20	20%	18	3%	21	2%	30	1%	12	1%	*	*	*	*	116	2%
Perinatal	65	87%	5	*	*	*	*	*	*	*	*	*	*	*	*	*	65	1%
Heterosexual[b]	*	*	6	6%	31	6%	58	5%	157	5%	96	6%	31	7%	11	15%	390	6%
Partner IDU	*	*	*32*	*	*5*	*1%*	*22*	*2%*	*52*	*2%*	*40*	*2%*	*15*	*3%*	*	*	*139*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*9*	*0%*
Partner HIV+	*	*	*5*	*5%*	*26*	*5%*	*34*	*3%*	*102*	*3%*	*54*	*3%*	*16*	*4%*	*5*	*7%*	*242*	*3%*
Total Known Risks	75	100%	100	100%	549	100%	1,124	100%	3,020	100%	1,689	100%	430	100%	74	100%	7,062	100%
Undetermined	*		26		106		174		522		282		113		32		1,257	
Total All Cases	77		126		655		1,298		3,542		1,971		543		106		8,320	

Female Only	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
MI	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Injecting Drug Use	*	*	9	14%	42	22%	70	28%	333	50%	261	59%	38	43%	5	24%	758	42%
IDU w/ hetero risk[b]	*	*	*	*	*22*	12%	*34*	14%	*176*	26%	*130*	29%	*17*	19%	*	*	*384*	22%
IDU w/o hetero risk[b]	*	*	*5*	8%	*20*	10%	*36*	15%	*157*	24%	*131*	30%	*21*	24%	*	*	*374*	21%
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18	1%
Perinatal	67	100%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	67	4%
Heterosexual[b]	*	*	53	83%	148	77%	176	71%	328	49%	177	40%	49	56%	12	57%	943	53%
Partner IDU	*	*	*8*	13%	*32*	17%	*45*	18%	*115*	17%	*84*	19%	*19*	22%	*	*	*307*	17%
Partner Bisexual[b]	*	*	*6*	9%	*6*	3%	*15*	6%	*24*	4%	*7*	2%	*5*	6%	*	*	*63*	4%
Partner Blood Exposure	*	*	*	*	*	*	*7*	3%	*8*	1%	*	*	*	*	*	*	*23*	1%
Partner HIV+	*	*	*39*	61%	*106*	55%	*109*	44%	*181*	27%	*83*	19%	*25*	28%	*7*	33%	*550*	31%
Total Known Risks	67	100%	64	100%	191	100%	248	100%	665	100%	442	100%	88	100%	21	100%	1,786	100%
Undetermined	*		34		85		135		231		93		42		20		643	
Total All Cases	70		98		276		383		896		535		130		41		2,429	

Male & Female	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
MI	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	*	*	68	41%	445	60%	893	65%	2,123	58%	919	43%	246	47%	44	46%	4,738	54%
Injecting Drug Use	*	*	11	7%	55	7%	143	10%	753	20%	773	36%	165	32%	19	20%	1,920	22%
IDU w/ hetero risk[b]	*	*	*5*	3%	*27*	4%	*61*	4%	*360*	10%	*315*	15%	*46*	9%	*	*	*818*	9%
IDU w/o hetero risk[b]	*	*	*6*	4%	*28*	4%	*82*	6%	*393*	11%	*458*	21%	*119*	23%	*15*	16%	*1,102*	12%
M-M Sex /IDU	*	*	*	*	42	6%	79	6%	290	8%	150	7%	24	5%	*	*	591	7%
Blood Exposure[b]	10	7%	22	13%	19	3%	23	2%	34	1%	16	1%	*	*	7	7%	134	2%
Perinatal	132	93%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	132	1%
Heterosexual[b]	*	*	59	36%	179	24%	234	17%	485	13%	273	13%	80	15%	23	24%	1,333	15%
Partner IDU	*	*	*9*	5%	*37*	5%	*67*	5%	*167*	5%	*124*	6%	*34*	7%	*8*	8%	*446*	5%
Partner Bisexual[b]	*	*	*6*	4%	*6*	1%	*15*	1%	*24*	1%	*7*	0%	*5*	1%	*	*	*63*	1%
Partner Blood Exposure	*	*	*	*	*	*	*9*	1%	*11*	0%	*5*	0%	*	*	*	*	*32*	0%
Partner HIV+	*	*	*44*	27%	*132*	18%	*143*	10%	*283*	8%	*137*	6%	*41*	8%	*12*	13%	*792*	9%
Total Known Risks	142	100%	164	100%	740	100%	1,372	100%	3,685	100%	2,131	100%	518	100%	95	100%	8,848	100%
Undetermined	5		60		191		309		753		375		155		52		1,901	
Total All Cases	147		224		931		1,681		4,438		2,506		673		147		10,749	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 4: Gonorrhea, Syphilis, and Chlamydia by Sex
Race, and Age Group in Michigan
January 1, 2001 to December 31, 2001

	2000	Gonorrhea			P&S Syphilis*			Chlamydia		
Patient Group	Population	Cases	Pct	Rate*	Cases	Pct	Rate*	Cases	Pct	Rate*
Male	4,873,095	8,064	47%	165	267	62%	5	6,540	21%	134
White Males	3,836,091	581	3%	15	28	7%	1	1,164	4%	30
Black Males	663,406	4,809	28%	725	236	55%	36	3,269	11%	493
Hispanic Males	170,555	15	0%	9	0	0%	0	24	0%	14
Other Males	203,043	2,659	16%	N/A	3	1%	N/A	2,083	7%	N/A
Female	5,065,349	9,057	53%	179	161	38%	3	24,550	79%	485
White Females	3,970,600	1,146	7%	29	8	2%	0	5,168	17%	130
Black Females	738,641	3,157	18%	427	149	35%	20	5,928	19%	803
Hispanic Females	153,322	19	0%	12	0	0%	0	76	0%	50
Other Females	202,786	4,735	28%	N/A	4	1%	N/A	13,378	43%	N/A
White	7,806,691	1,727	10%	22	36	8%	0	6,332	20%	81
Black	1,402,047	7,966	47%	568	385	90%	27	9,197	30%	656
Hispanic	323,877	34	0%	10	0	0%	0	100	0%	31
Asian	177,456	17	0%	10	1	0%	1	67	0%	38
AmIndian	53,421	10	0%	19	0	0%	0	43	0%	80
Unknown Race	174,952	7,367	43%	N/A	6	1%	N/A	15,351	49%	N/A
0 - 4 years	672,005	6	0%	1	0	0%	0	25	0%	4
5 - 9 years	745,181	13	0%	2	0	0%	0	13	0%	2
10-14 years	747,012	236	1%	32	0	0%	0	433	1%	58
15 -19 years	719,867	4,103	24%	570	17	4%	2	10,565	34%	1468
20 -24 years	643,839	5,695	33%	885	70	16%	11	11,840	38%	1839
25 -29 years	654,629	2,926	17%	447	73	17%	11	4,412	14%	674
30 -34 years	707,542	1,711	10%	242	66	15%	9	1,898	6%	268
35 -39 years	787,367	986	6%	125	64	15%	8	774	2%	98
40 -44 years	811,006	595	3%	73	62	14%	8	360	1%	44
45 -54 years	1,367,939	455	3%	33	60	14%	4	245	1%	18
55 -64 years	863,039	85	0%	10	12	3%	1	68	0%	8
65 and over	1,219,018	38	0%	3	4	1%	0	25	0%	2
Unknown Age	N/A	272	2%	N/A	0	0%	N/A	432	1%	N/A
Total	9,938,444	17,121	100%	172	428	100%	4	31,090	100%	313

***Primary and Secondary Syphilis**

*** Rate per 100,000**

Table 5: Gonorrhea, Syphlis, and Chlamydia by Region

and Local Health Department Jurisdicition

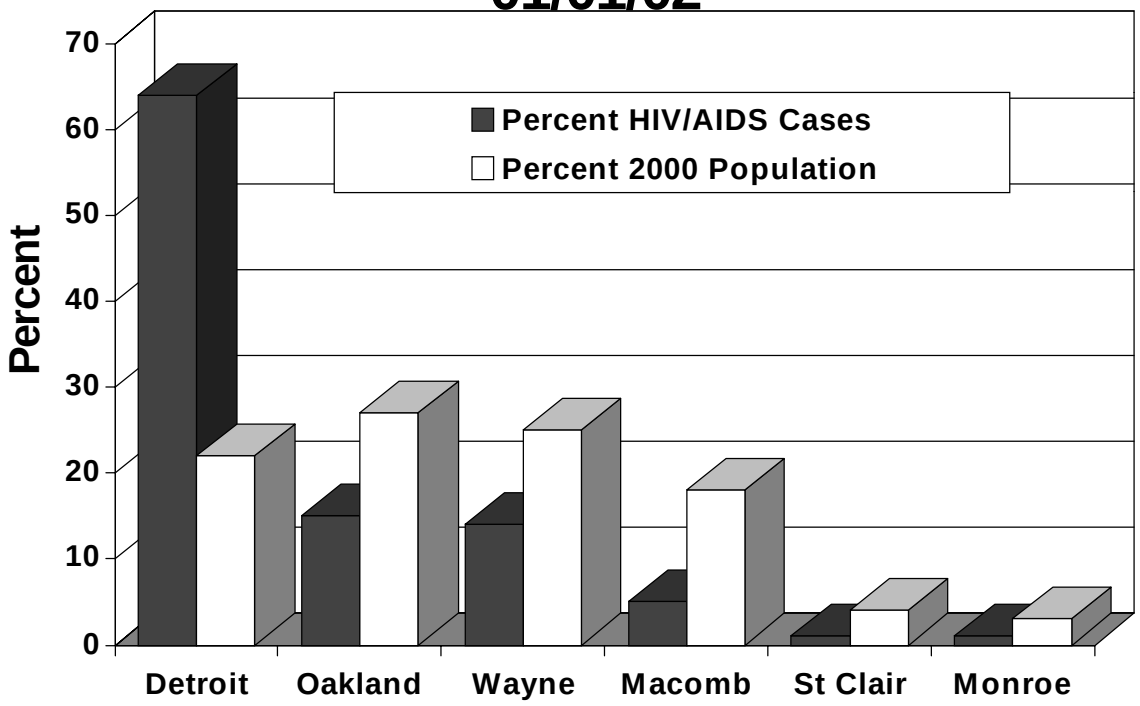
January 1, 2001 to December 31, 2001

	2000	Gonorrhea		P&S Syphilis*		Chlamydia	
Patient Group	Population	Cases	Rate*	Cases	Rate*	Cases	Rate*
REG1	4,353,647	10,070	231	409	9.4	15,784	363
REG2	737,158	732	99	5	0.7	1,956	265
REG3	1,087,219	1,516	139	2	0.2	3,244	298
REG4	447,624	632	141	8	1.8	1,322	295
REG5	1,223,801	1,976	161	3	0.2	4,191	342
REG6	1,137,694	2,116	186	1	0.1	3,658	322
REG7	633,685	62	10	0	0.0	710	112
REG8	317,616	17	5	0	0.0	225	71
Allegan	105,665	36	34	0	0.0	142	134
Bay	110,157	30	27	1	0.9	208	189
Berrien	162,453	472	291	0	0.0	791	487
Barry/Eaton	160,410	22	14	0	0.0	139	87
Benzie/Leelanau	37,117	1	3	0	0.0	35	94
Br/Hills/St Joseph	154,736	44	28	0	0.0	219	142
Calhoun	137,985	367	266	1	0.7	632	458
Cass	51,104	10	20	0	0.0	61	119
Chippewa	38,543	1	3	0	0.0	32	83
Central MI Dist	186,561	33	18	0	0.0	288	154
Detroit	951,270	8,220	864	351	36.9	11,552	1214
Delta/Menominee	63,846	1	2	0	0.0	57	89
Dickinson/Iron	39,969	0	0	0	0.0	16	40
District #2	70,121	0	0	0	0.0	19	27
District #3	103,938	1	1	0	0.0	114	110
District #4	82,488	1	1	0	0.0	18	22
District #10 Total	255,240	40	16	0	0.0	272	107
Dist #10 in Reg 5	179,434	31	17	0	0.0	195	109
Dist #10 in Reg 7	75,806	9	12	0	0.0	77	102
Genesee	436,141	1,545	354	0	0.0	2,024	464
Grand Traverse	77,654	17	22	0	0.0	159	205
Greater Thumb	138,892	19	14	0	0.0	110	79
Ingham	279,320	612	219	8	2.9	1,144	410
Ionia	61,518	14	23	0	0.0	98	159
Jackson	158,422	274	173	2	1.3	671	424
Kalamazoo	238,603	519	218	1	0.4	1,073	450
Kent	574,335	1,325	231	2	0.3	2,588	451
Lapeer	87,904	13	15	0	0.0	45	51
Lenawee	98,890	46	47	1	1.0	207	209
Livingston	156,951	9	6	0	0.0	120	76
LMAS District	37,732	8	21	0	0.0	21	56
Macomb	788,149	233	30	9	1.1	655	83
Marquette	64,634	4	6	0	0.0	60	93
Midland	82,874	8	10	0	0.0	85	103
Monroe	145,945	31	21	1	0.7	143	98
Muskegon	170,200	550	323	1	0.6	922	542
Mid-MI District	168,304	20	12	0	0.0	178	106
Oakland	1,194,156	892	75	18	1.5	2,144	180
Ottawa	238,314	56	23	0	0.0	388	163
Saginaw	210,039	491	234	0	0.0	1,112	529
Shiawassee	71,687	10	14	0	0.0	74	103
St Clair	164,235	62	38	2	1.2	211	128
Van Buren	76,263	46	60	0	0.0	187	245
Washtenaw	322,895	403	125	2	0.6	958	297
Wayne exc Detroit	1,109,892	632	57	28	2.5	1,079	97
WestUpDist	72,251	3	4	0	0.0	39	54
Total	9,938,444	17,121	184	428	4.6	31,090	334

*Primary and Secondary Syphilis

*Rate per 100,000

Region 1 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 1

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Tables:

2002 Profile of HIV/AIDS in Region 1

Summary of Epidemic for Region 1

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 10,630 people living with HIV/AIDS in Region 1, of which 6,984 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 500 new cases annually**.** The number of AIDS deaths dropped 65 percent between 1995 and 2000. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 1 has more cases (of the 10,749 cases reported in Michigan) when compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health department within Region 1. Sixty-four percent of the reported cases within this region were among residents of Detroit.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county, however most contain a single county. All LHDs have been labeled as either being in a high or low HIV prevalence area (please refer to page 2 of the Statewide profile for methodology used). Within Region 1, Detroit and Oakland Co. are considered to be LHDs in high prevalence areas, while Macomb Co., Monroe Co. and St. Clair Co. are considered to be LHDs in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 1. The guiding question used in this process has been, “In which populations can strategies prevent the most infections from occurring?” Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 59 percent of all HIV/AIDS cases with a known mode of transmission (3,374 out of 5,714). The MSM behavioral group continues to be the most affected behavioral group even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 30 percent are IDUs (1,695 out of 5,714). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** HRH cases constitute 14 percent of the total number of cases with a known mode of transmission (817 out of 5,714) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men and/or 3) HIV+ individuals. The trend for heterosexual transmission also appears to be level.

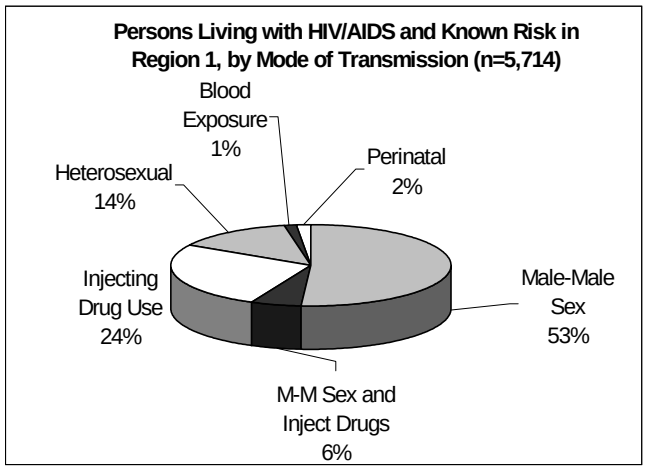
**These numbers include MSM/IDU in totals and percent calculations*

2002 Profile of HIV/AIDS in Region 1

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Current surveillance methods do not distinguish the specific transmission route for individuals who have engaged in more than one behavior. Surveillance is only able to determine the most likely mode. However, when multiple risk information on men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.

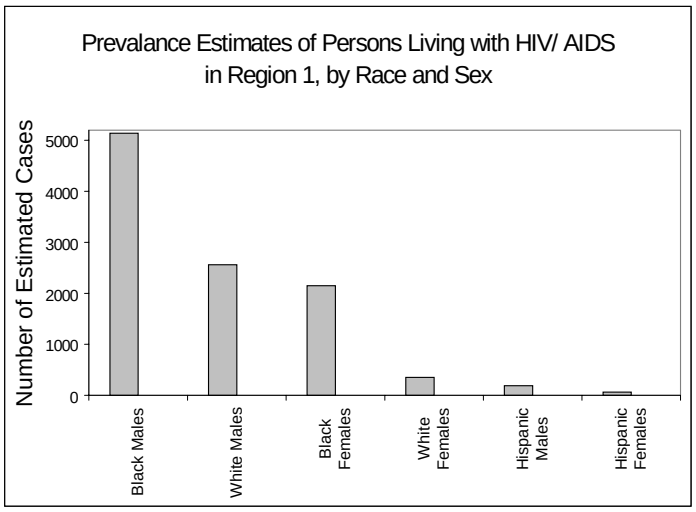


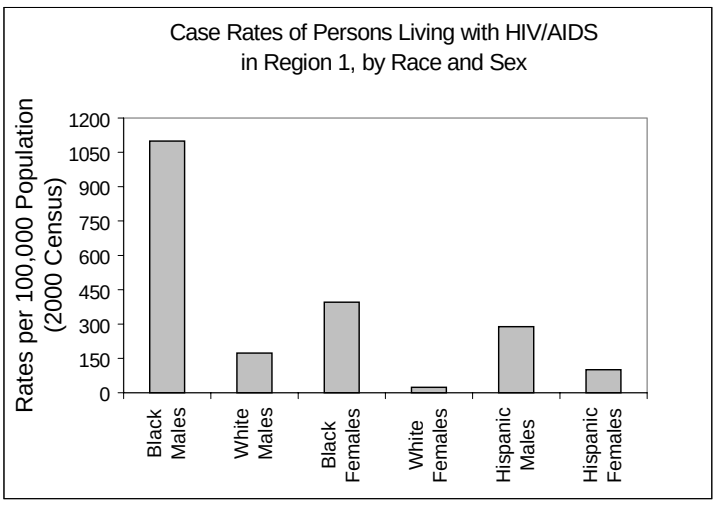
The pie chart indicates the number of people living with HIV/AIDS in Region 1 by mode of transmission among the 5,714 cases for which the risk was identifiable.

- This chart demonstrates that over half (59 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 6 percent who also injected drugs.
- Almost a third (30 percent) are injecting drug users, including 6 percent who are also MSM. Thirty-nine percent of non-MSM IDUs also have high risk heterosexual sex partners. (See Table 1, page 18.)
- Finally, 14 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System





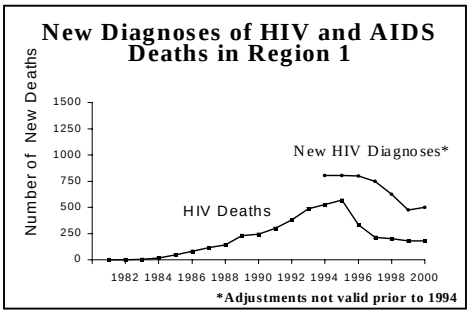
These bar graphs show the impact of this epidemic on six race and sex groups.

- Black males have both the highest rate per 100,000 population (1,099) and the highest estimated number (5,140) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Black females have the second highest rate (395) and the third highest estimated number (2,150) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (289) and the fifth highest estimated number (190) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- White males have the fourth highest rate (173) and the second highest estimated number (2,560) of cases.
- Hispanic females have the fifth highest rate (101) and the lowest estimated number (60) of HIV/AIDS.
- White females have the lowest rate (23) and the fourth highest estimated number (350) of HIV/AIDS cases.

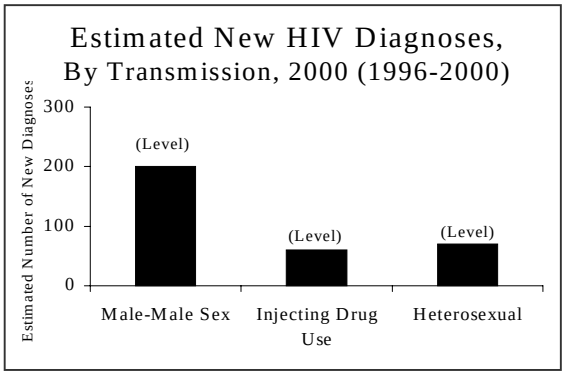
2002 Profile of HIV/AIDS in Region 1

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV Diagnoses (HIV incidence) and deaths are statistically level 1996-2000.* HIV incidence and the HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 500 persons were newly infected in the year 2000 in Region 1 (the slight increase from 1999 to 2000 has shown no significant trend).



- *Transmission of HIV 1996-2000*: The estimated number of new diagnoses among men who have sex with men are stable at 200 persons in 2000. The proportion of persons infected heterosexually is level at 70 and IDU is level 60 new infections in 2000. New infections are level among MSM who also inject drugs, however they are not shown in this graph. There were fewer than 10 persons diagnosed each year who acquired infection from blood products received before 1985, and fewer than 10 infants infected at birth each year.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	70%	75%
Females	30%	25%
Whites	18%	27%
Blacks	77%	69%
Hispanics	3%	2%
Other Minorities	1%	0%
Race Unknown	1%	1%
White males	15%	24%
Black males	52%	48%
Hispanic males	2%	2%
Other Minority males	1%	0%
Unknown Race males	1%	1%
White females	3%	3%
Black females	26%	20%
Hispanic females	1%	1%
Other minority females	0%	0%
Unknown Race females	0%	0%
0-12 years*	2%	1%
13-19 years*	1%	1%
20-24 years*	3%	4%
25-44 years*	57%	64%
45+ years*	36%	30%
Total HIV Infected	4,526	6,984

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act and related sources (RWCA).

In 2001, 4,526 HIV-infected persons were reported receiving Ryan White Services in Region 1. A comparison also shows that persons receiving Ryan White services were significantly more likely than the reported population to be female, black or Hispanic.

Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (6,984), it is apparent that not all reported persons are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 1

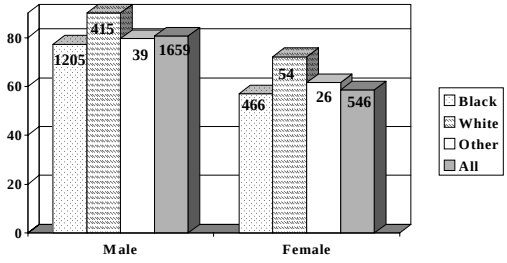
Information from Interviews with HIV-Infected Persons in SE Michigan

Data from Supplement to HIV/AIDS Surveillance Project (SHAS)

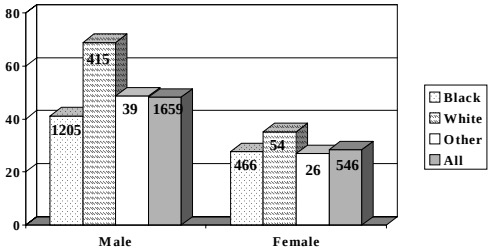
Data presented in this section are from the Supplement to HIV/AIDS Surveillance Project (SHAS) from 1990-2000. HIV-infected persons in Region 1 who present for care at one of three sites, two large tertiary medical centers and one neighborhood clinic system, are eligible for a one-time interview. Data are collected on demographic and socioeconomic factors, drug use (alcohol, ingested and/or injected drugs), needle sharing and cleaning, access to drug treatment, sexual behaviors, condom use, medical and social services, compliance with drug therapies, and, for women, reproductive history and child health. Prevention and care planning groups are encouraged to contact the MDCH HIV/AIDS Surveillance Section for additional data from this project. A summary of the 1990-2000 SHAS data is also available on-line at: www.michigan.gov/mdch.

- At the time of the interview 57 percent had AIDS and 43 percent had HIV/not AIDS; 75 percent are male and 75 percent are black.
- Among the 1,659 male interviewees, 81 percent had greater than or equal to 12 years of education, 36 percent were employed at the time of interview, and 49 percent had an income of $10,000 or more.
- Among the 546 female interviewees, 59 percent had greater than or equal to 12 years of education, 21 percent were employed at the time of interview and 29 percent had an income of $10,000 or more.

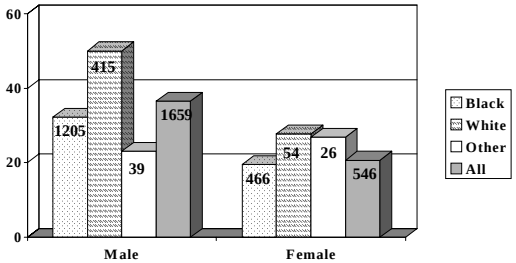
Percent of Interviewees with Greater than 12 Years of Education by Race and Sex in SE Michigan, 1990-2000



Percent of Interviewees with an Income of $10,000 or More by Race and Sex in SE Michigan, 1999-2000



Percent of Interviewees Employed at the Time of Interview by Race and Sex in SE Michigan, 1999-2000



Note: Numbers on the bars are the total number of interviewees in each sex and race group.

2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Supplement to HIV/AIDS Surveillance Project(SHAS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 1. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 5,130 MSM living with HIV disease in Region 1. This includes 500 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

The percent of MSM who are HIV infected and attended the Sexually Transmitted Diseases (STD) clinics at local health departments in southeast Michigan has been quite high. These rates are 10 percent in Wayne County outside of Detroit (average 1993 –1996), 24 percent in Oakland County (average 1991-1993) and 29 percent (average 1993-1999) in the City of Detroit. Although data from these seroprevalence surveys provide valuable information about clinic attendees, the results cannot be generalized to all MSM. The findings are based on a select group of men at the highest risk for contracting HIV — MSM who engage in unprotected sex and have contracted other STDs. In addition, this behavior is likely under-reported at STD clinics, complicating the implications of these rates. This under-reporting leads to a small number of known MSM being included in these surveys annually (an average of approximately 25 for Detroit and under 20 each for Wayne and Oakland County clinics). Even so, these results suggest that the percent of MSM who are HIV positive is higher than any other behavioral group discussed in these profiles.

Race/Ethnicity:

Having sex with other men infected most males in Region 1. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 3,374), black males (1,914) account for more than a half (57 percent) while white males (1,365) comprise approximately 40 percent of men in this combined category (Refer to Table 2)

Age: Among those reporting male-male sex, the highest percent of all living cases of HIV/AIDS is found among those aged 30-39 (45 percent). MSM is the predominant mode of transmission for males aged 13 and up (Refer to Table 3).

Geographic Distribution:

Just under two-thirds (63 percent) of HIV-infected MSM statewide reside in Region 1. Within high prevalence counties of Region 1, MSM are over half of the cases with a known risk (59 percent) while in the lower prevalence counties 70 percent of reported persons living with HIV/AIDS are MSM.

Trends and Conclusions:

MDCH estimates that there were about 200 new HIV infections in the year 2000 among men who have sex with men. These numbers were level from 1996-2000.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older, since older men are more likely to be HIV-infected than are younger males.

2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group: MSM (Discussion of Bisexuals)

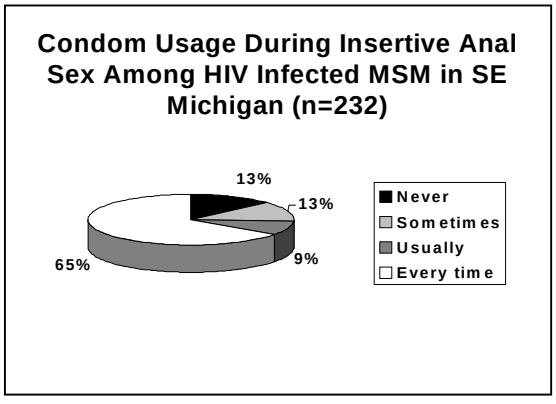
Data Supplement to HIV/AIDS Surveillance Project (SHAS)
& HIV/AIDS Reporting System (HARS)

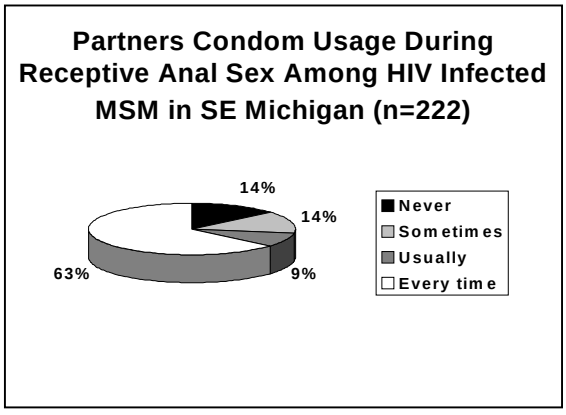
In an effort to help focus prevention activities, we present the data that are available on bisexual behavior among HIV-infected men in Michigan. Detailed behavioral data on MSM in southeast Michigan are available from the SHAS interview study (described on page 4). The SHAS interview asks HIV-infected persons directly about specific behaviors. Of all male SHAS respondents, 59 percent report having sex with other men in the five years prior to the interview. Twenty-nine percent of black MSM also report having sex with women, while 17 percent of white MSM report having sex with women.

Case reporting data are collected statewide but have only limited information on male bisexual behavior. Case reports are usually completed by health care providers reviewing medical records rather than through extensive interviews of the infected person. Only 59 percent of all case reports have complete answers to both questions, "has the patient had sex with men," and "has the patient had sex with women." Based on these complete forms, 35 percent of all MSM reported also having sex with women since 1977. These complete forms also show that 4 percent of women report having sex with bisexual men. There are no changes over time. These data from case reporting should be viewed as minimum estimates of these behaviors. Nonetheless, they suggest that more HIV infected women have sex with bisexual men than the surveillance system collects.

Ranked Behavioral Group: MSM: A Look at Condom Usage

The SHAS interview (described on page 4) also asks questions about condom usage. Among MSM interviewed, we asked questions regarding condom use with male partners. As shown in the graphs below, of 232 respondents only 65 percent reported using condoms “every time” in the past year when they participated in insertive anal sex with a male partner. Therefore, 35 percent of the HIV infected MSM reported condom use with a range from “usually” to “never”. Of the 222 respondents who participated in receptive anal sex with a male partner, 63 percent reported that their partner used a condom. This also indicates that 37 percent of respondents report that condom usage, while engaging in receptive anal sex is not consistent, and ranges from “usually” to “never”.





2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Supplement to HIV/AIDS Surveillance Project (SHAS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 1 and account for almost a third of reported infected persons with a known risk. MDCH estimates there are approximately 2,580 IDUs living with HIV disease in Region 1. This estimate includes 500 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals, infants, and MSM. Over one-third (39 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 817 cases with reported heterosexual risk, 277 individuals (34 percent) also reported having IDU as partners. Sixty-five percent of perinatally infected infants (infants infected at birth) have an IDU as a mother or have a mother whose partner is an IDU.

When these linked populations are considered, IDU-related transmission accounts for 35 percent **(**2,034 cases) of people reported with HIV disease and having a known risk in Region 1. This is similar to the nationwide picture.

Wayne County Jail HIV Seroprevalence Anonymous Unlinked Serosurvey, 1999

From March-August 1999, an anonymous, unlinked HIV seroprevalence study was conducted among 5,555 persons who were incoming prisoners to the Wayne County Jail. From these participants, 4,909 HIV test results were available and revealed an overall seroprevalence of 1.7 percent (85 persons). Most of the incoming prisoners were residents of Wayne County (94.1 percent), and most were male (87.8 percent), black (75.5 percent) and had previously been incarcerated (86 percent). Risk behavior was underreported.

This population of incoming prisoners has an HIV seroprevalence rate (1.7%) comparable to the rate of those who utilize voluntary HIV counseling and testing services in Wayne county (1.2%) and higher than the general Michigan population (0.14%). These findings demonstrate a need for readily available voluntary HIV counseling and testing services at county jail facilities. This would provide a good opportunity for high-risk individuals who will likely return to the community relatively quickly to know their HIV status and learn about prevention behaviors and intervention services.

Race/Ethnicity and Sex:

Of the 1,695 IDU HIV/AIDS cases, 878 are black men (52 percent), 513 are black women (30 percent), 172 are white men (10 percent), 76 are white women (5 percent), 37 are Hispanic men (2 percent) and 10 are Hispanic women (<1 percent). In total, 82 percent (1,391 cases) of the cases occur in black IDU.

Approximately two-thirds of the cases are men (64 percent) and one-third are women (36 percent). Among the 603 women whose HIV infection has been attributed to IDU, almost half (49 percent) report high-risk heterosexual sex partners.

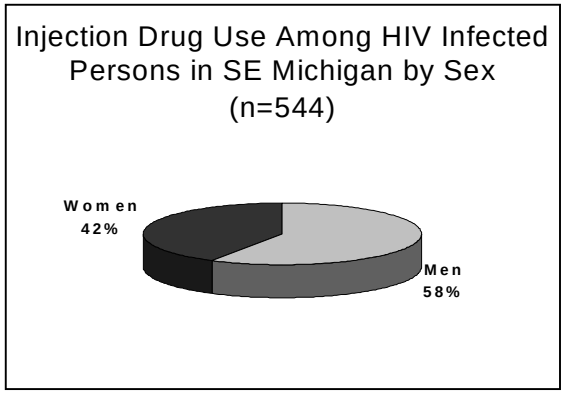
Additional behavioral data on IDUs and other drug users in southeast Michigan is known from the SHAS interview (See graphs on next page). Of the 2,205 persons interviewed in SHAS, 25 percent injected drugs at some time during their lives.

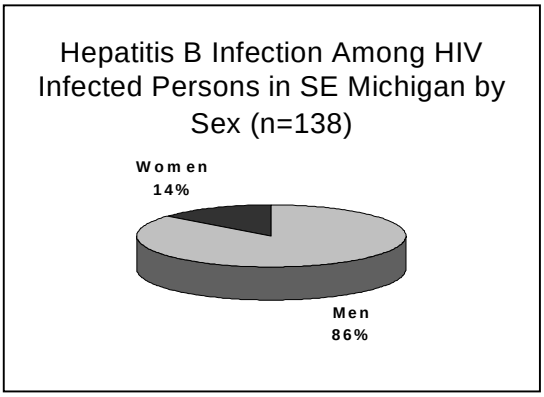
2002 Profile of HIV/AIDS in Region 1

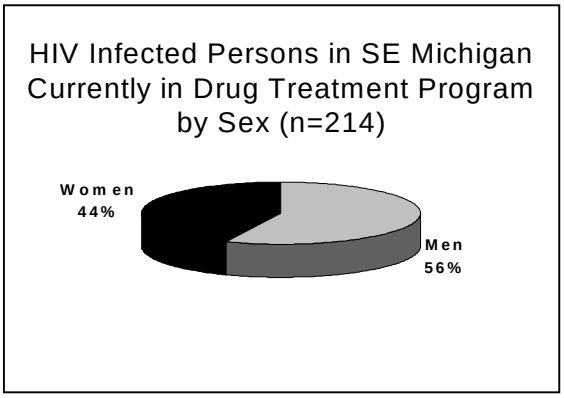
Ranked Behavioral Group: IDU (Continued)

This 25 percent was mostly comprised of males (58 percent). Of 138 respondents, 86 percent of men and 14 percent of women reported also being infected with Hepatitis B. When clients were asked about current participation in drug treatment programs, 214 persons (10 percent) responded in the affirmative. Questions used to screen interviewees for potential alcoholism reveal that 22 percent of female and 21 percent of male interviewees are potential alcoholics.

Other drug use information shows that 65 percent of females and 56 percent of males used some kind of illegal drug in the past. Among these respondents, the non-injected primary drug for women was crack cocaine and for men marijuana, followed by crack. Further SHAS data describing the drug use behaviors of participants in this study are available online at http://www.michigan.gov/mdch.







Age:

Among men with a known risk in each age group over 19 years, IDU is the second most common mode of transmission. Forty-one percent of male IDU cases are among men in their forties (34 percent of males in their forties were MSM/IDU).

IDU is the predominant mode of transmission for women aged 30-49 years (59 percent of female cases in this age group with known risk). Among the 482 female IDUs in this age group, 49 percent of them also reported high risk heterosexual partners.

There are very few cases of HIV/AIDS attributed to IDU among teenagers (7); the proportion of IDU among those in their twenties is small (12 percent of cases with a known risk).

2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group: IDU (Continued)

Geographic Distribution:

Ninety-nine percent of IDU cases were reported in the higher prevalence areas of Region 1. Within high prevalence counties, just under a third of cases with a known risk (30 percent*) are IDU, while in the lower prevalence counties 13 percent* of persons living with HIV/AIDS are IDU. (* These percentages include IDU males who are also MSM).

Trends and Conclusions:

In a range from 12.4 percent in 1990 to 3.1 percent in 1999, an average of 6.4 percent of IDUs referred through the Detroit Health Department drug treatment Central Intake Facility test positive for HIV (for the years 1988-1999). This has not changed statistically over time. The infection rate among IDUs who are not in treatment is unknown.

The number of new HIV diagnoses among IDUs (excluding MSM/IDU) remained level from 1996 and 2000, with approximately 60 new HIV infections in the year 2000. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs. In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group/Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 1. Heterosexual sex accounts for 14 percent of reported infected persons with a known risk. MDCH estimates that 1,240 persons living with HIV disease in Region 1 were infected through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 820 infected persons who are classified as IDUs but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. Among reported cases, the dual risk IDU/heterosexual cases comprise 9 percent of all reported HIV/AIDS cases with a known risk and are 45 percent men and 55 percent women within Region 1.

The rate of HIV positives measured among heterosexual attendees of the Detroit STD clinic, who are likely among the highest risk heterosexuals in the state, averaged under 1 percent (0.9 percent) positive in the annual seroprevalence surveys done 1993-1999.

Race/Ethnicity and Sex:

Most heterosexual cases of HIV/AIDS are black--80 percent of female and 78 percent of male heterosexually transmitted HIV/AIDS cases were among blacks. While women account for 25 percent of HIV/AIDS cases in Region 1, they have consistently accounted for over two-thirds of heterosexually acquired infections -- currently 73 percent.
The percent of men infected heterosexually is low--5 percent of cases among men of all races with a known risk.

Over one-third of black women were infected heterosexually (46 percent). Among Hispanic and white women, over half of each group were infected through heterosexual sex (Hispanic women 59 percent, white women 52 percent).

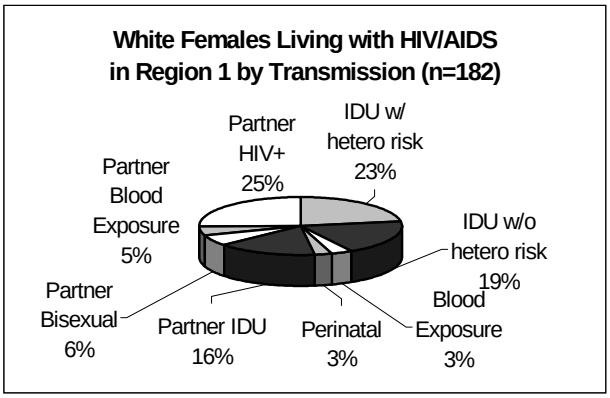
Among females of all races reported with HIV/AIDS and a known risk, just under half (47 percent) of cases are contracted heterosexually. Virtually the same proportion, 48 percent, were infected via IDU. Among women with a known risk, 24 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

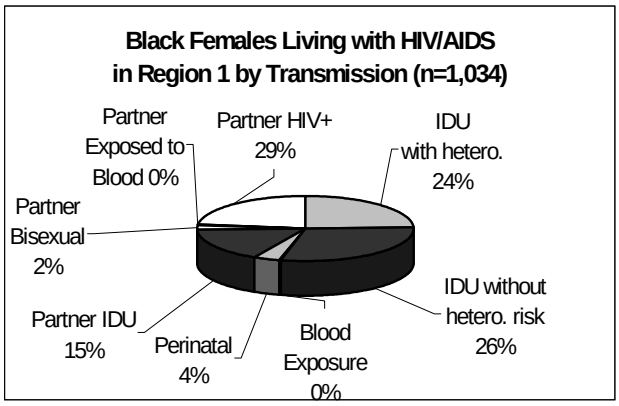
Among the 817 men and women living with HIV/AIDS and infected heterosexually, 34 percent reported their heterosexual partner as injecting drug users, 4 percent as bisexual men (this applies to women only) and 2 percent as persons infected through blood products. Over half (60 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

2002 Profile of HIV/AIDS in Region 1

Ranked Behavioral Group: Heterosexuals (Continued)

The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a partner who is HIV infected, bisexually active, or an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected black and white women with known risk are shown in the two pie charts below.





Age:

For women between the ages of 13 and 29, heterosexual transmission is the predominant mode. Among women 30-49, IDU supercedes heterosexual transmission.

Geographic Distribution:

Ninety-eight percent of the 817 cases attributed to heterosexual activity were reported in high prevalence counties. Of all the cases within high prevalence counties in Region 1, heterosexual transmission constitutes 14 percent. Within low prevalence counties, heterosexual transmission constitutes 17 percent of the cases.

Trends and Conclusions:

MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission has remained level from 1996 to 2000 with an estimated 70 new HIV cases in the year 2000. The proportion of cases attributable to heterosexual transmission is still a lower proportion of cases than among MSMs (53 percent) and IDUs (24 percent).

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSMs, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 1

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Black persons comprise the majority of those living with HIV/AIDS in Region 1. They comprise 22 percent of this region's population yet make up over two-thirds (69 percent) of the cases of HIV/AIDS. MDCH estimates 7,290 blacks live with HIV/AIDS in Region 1. The rate of HIV infection among blacks is 721 per 100,000 population, eight times higher than the rate among whites. MDCH estimates that as many as one out of 100 black males and one out of 250 black females may be HIV-infected.

White persons comprise over a quarter (27 percent) of reported HIV/AIDS cases and almost three-quarters of the region's population. MDCH estimates 2,920 whites live with HIV/AIDS in Region 1. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (97 per 100,000 population). MDCH estimates that as many as one out of 580 white males and one out of 4,350 white females may be HIV-infected.

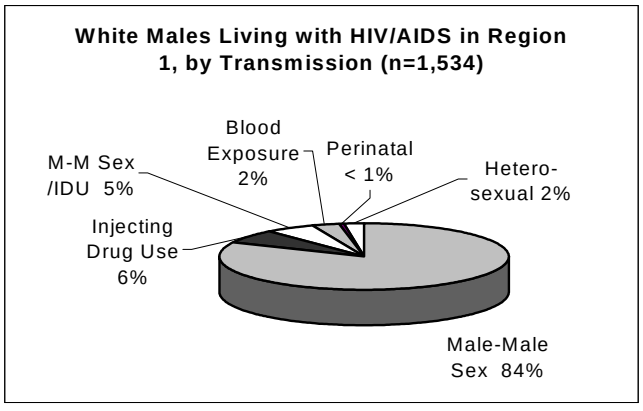
Hispanics comprise 2 percent of cases and 2 percent of the population. MDCH estimates 240 Hispanics live with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (192 per 100,000 population). MDCH estimates that as many as one out of 350 Hispanic males and one out of 990 Hispanic females may be HIV-infected.

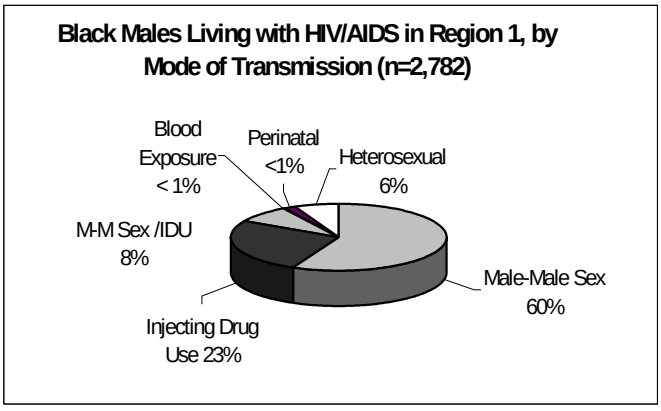
Most persons living with HIV/AIDS in Region 1 as of January 2002 are male (76 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 24 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (refer to page 11 for black and white female distributions).

- The majority of the 5,272 male HIV/AIDS cases are black (64 percent), 32 percent white, 2 percent Hispanic and <1 percent are other or unknown race with known risk.





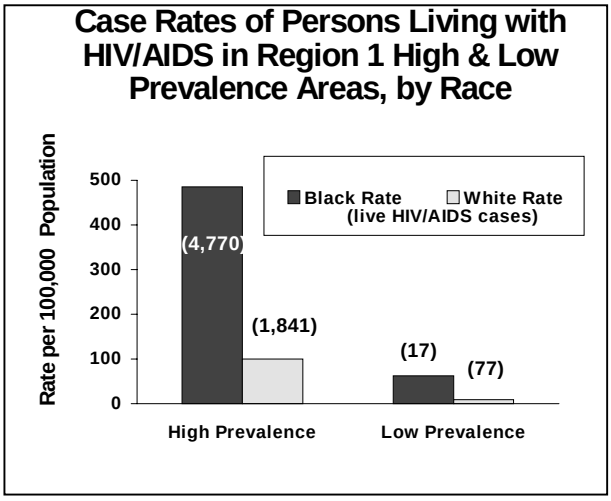
- The majority of the 1,712 female HIV/AIDS cases are black (82 percent), under one-quarter (14 percent) white, two percent Hispanic and one percent other or unknown race (refer to page 11 for graphs).

2002 Profile of HIV/AIDS in Region 1

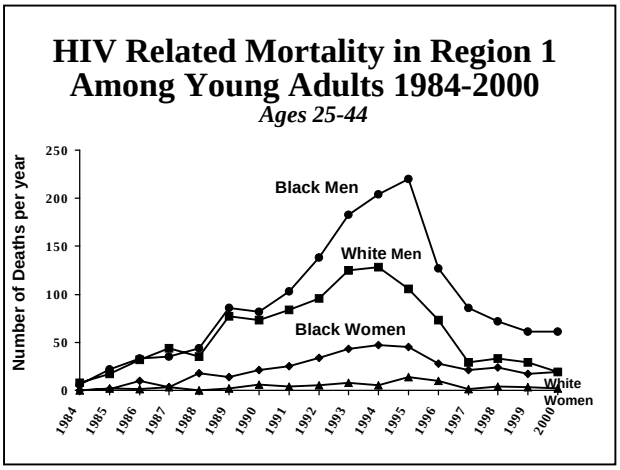
Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of cases by Race:

Looking at the proportions of cases by race in a particular area of the region (i.e., number of black cases/total number of cases) does not fully measure the impact of this disease. This is because the proportions of whites and blacks living in high and low prevalence areas are different. Therefore, instead of proportions, rates are used (number of black cases/total number of blacks living in that area). The bar graph shows these rates and establishes that the HIV/AIDS case rate among blacks is four to seven times higher than the rate among whites in both high and low prevalence areas of the region, even though there are many fewer cases among blacks in the low prevalence areas. This shows that this disease disproportionately affects blacks in both high and low prevalence areas of Region 1.



Conclusions:



The graph on the left shows that HIV related mortality dropped for all four race and sex groups. The number of deaths among Hispanics was too small to appear on this graph. The decline in deaths was marked in all groups, among whites (69 percent) compared with blacks (64 percent), and among men (68 percent) compared with women (53 percent).

When all the data are considered for the three behavioral groups discussed in this document, the consistent impact across transmission behaviors that this epidemic is having on blacks is apparent.

2002 Profile of HIV/AIDS in Region 1

Description of the Epidemic Among Children (0-12)

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

MDCH estimates that there are 150 people living in Region 1, who were ages 0-12 when they were diagnosed with HIV. They comprise 1.4 percent of reported infected persons. Most of them (93 percent) were infected perinatally, i.e., before, during or shortly after birth. (Those infected after birth would be infected via breastfeeding. There have not been any documented cases of this kind of transmission in Michigan). Of the remaining children**,**
4 percent were infected via blood exposure before 1985. Although blood products are relatively safe, prior to1985, this was not the case. Approximately 3 percent had a risk unknown.

A small number of children 0-12 with known risk have been infected sexually.

Description of Cases in Children:

Children, ages 0-12, infected with HIV are 50 percent male and 50 percent female. Among the 102 young children reported with HIV/AIDS 84 percent are black, 12 percent are white and 4 percent are Hispanic or of unknown race.

Of the 95 children infected perinatally, 47 percent had a mother who was an IDU, and 17 percent the mother was not known to be an IDU but one or more of her sex partners were IDUs. An additional 18 percent had mothers with HIV-infected sex partners but for whom additional risk information was unavailable. For 17 percent all that was known about the mother is that she was HIV-infected with no additional risk information.

Geographic Distribution of Infected Children:

All young children infected with HIV in Region 1 (perinatal cases) are residents within high prevalence counties.

Trends and Conclusions:

The best measurable success in reducing HIV transmission has been among the perinatally infected cases. Without Zidovudine (ZDV) prophylaxis, about 25 percent of children born to HIV-infected women could expect to become HIV-infected. As of January 1, 2002, 2 of the 69 children born to HIV-infected women in 2000 in Region 1 have been diagnosed with HIV infection.

For further discussion please see: Mokotoff, ED, Malamud BH, Kent JB, Kowalczyk, RJ, Scott LJ, Hammett TA, Lindegren, ML. Progress Towards Elimination of Perinatal HIV Infection-Michigan, 1993-2000, MMWR, 2002:51:5: 93-97.

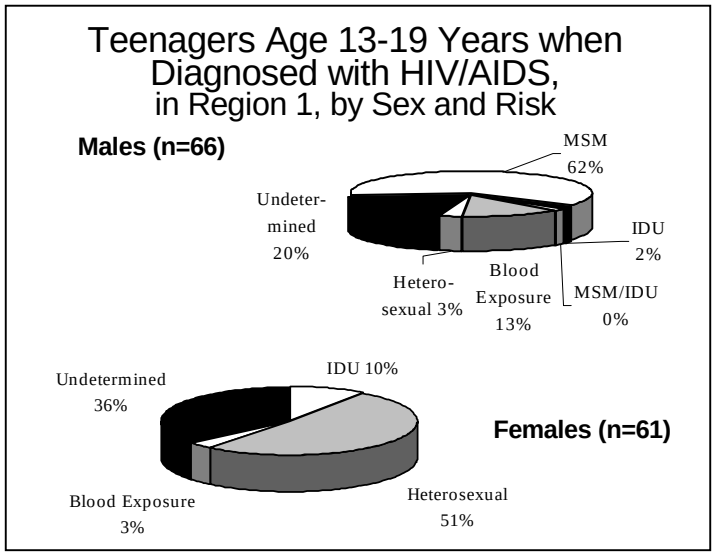
2002 Profile of HIV/AIDS in Region 1

Description of the Epidemic Among Teens and Young Adults (13-24)

Data from HIV/AIDS Reporting System (HARS), Family of HIV Seroprevalence Surveys & Data from HIV & STD Surveillance, & Job Corp

Number of Cases:

MDCH estimates that there are about 1020 persons currently living in Region 1 who were ages 13-24 years when they were diagnosed with HIV. Those ages 13-19 years comprise 2 percent; and age 20-24 years, 8 percent of the Region 1 total. The rate of HIV/AIDS among these young people is lower than the rate among those aged 25-44 years. The level of incident and prevalent cases among persons 13-24 years is not as high as the level among persons 25-44 years. However, some young people are at particularly high risk. Specifically these are youth who live in areas with high HIV prevalence and who have sex partners who are age 20 or older.



STD rates are highest in these age groups. The STD data are shown on pages 28 and 29 of the Michigan Profile. In persons age 15-24 years, the rate of chlamydia is over two times higher and the rate of gonorrhea is almost two times higher than the rate among persons age 25-29 years (please refer to the Sexually Transmitted Diseases Section of the Statewide Profile for a discussion of these high rates).

The Job Corps training program for disadvantaged youth performs HIV testing for all entrants (for the years 1988-1998). Since testing began in 1988 there have been 24 positives out of over 12,000 tests among Michigan residents (less than one quarter of one percent) and there is no increase over time. All but one of the positives were in black youth and, the geographic distribution is proportional to the epidemic in Michigan, 79 percent were from Region 1; most (17 or 71 percent) were among males.

Teen pregnancy rates have shown decreases over time and have leveled off over the past 5 years. In Wayne County and the City of Detroit, the areas with the highest teen pregnancy rates in the state (89 per 1,000 in Wayne County outside of Detroit and 124 in the City of Detroit), the 2000 rates among teens in Detroit actually exceeded the rates among women age 15-44 years.

MDCH conducted adolescent seroprevalence surveys in Detroit/Wayne County between 1990 and 1995. These surveys were conducted at two adolescent health care clinics and one youth detention facility where HIV seroprevalence was measured in homeless youth. These three surveys all showed extremely low numbers of HIV-infected youth; eight infected youth out of more than 3,000 tested (less than one quarter of one percent positive). These youth were among the highest risk youth in the region and the state. They lived in the county with the highest rate of HIV (Wayne County including Detroit), most were sexually active and some were homeless.

Mode of Transmission:

Teenagers: When discussing mode of transmission in other sections, those individuals with unknown risk were left out of percentage calculations. However, the unknown category for teenagers and young adults is too large to omit. Historically, most infected teenagers were recipients of HIV-infected blood or blood products. However, since screening of all blood products began in 1985 there have been no new HIV infections among persons age 13-24 years.

2002 Profile of HIV/AIDS in Region 1

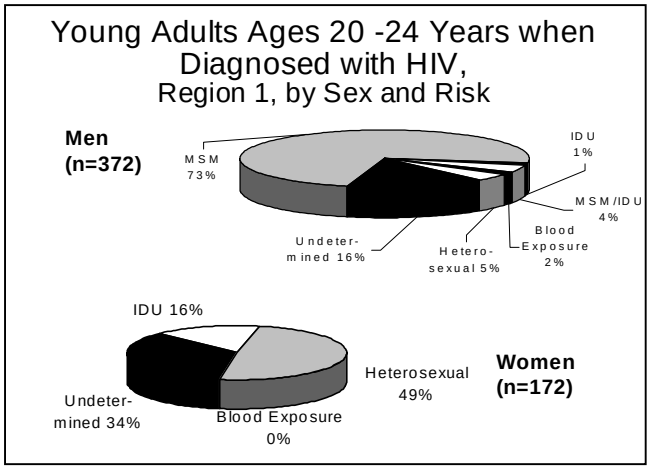
Description of the Epidemic Among Teens and Young Adults (Continued)

Among the 127 persons who were ages 13-19 at time of HIV diagnosis and currently living with HIV in Region 1, 66 (52 percent) are male. Among these male cases, over half had sex with other males (62 percent), which includes the MSM/IDU cases, while 13 percent had been infected with HIV through blood products before 1985. Only 2 percent could be attributed to IDU and 3 percent to heterosexual transmission for this age group within this region. Teenage males have the largest proportion of unidentified risk compared with any other age group of men under age 50. Experience with investigating such persons shows that it is likely that many of these males were infected through having sex with other males.

Among the 61 females who were ages 13-19 at time of HIV diagnosis and currently living with HIV in Region 1, about half (51 percent) were infected through heterosexual sex; 10 percent were IDU. Similar to males of this age, there is a relatively large number who did not report a mode of transmission (22 females or 36 percent). Most of these females were probably infected heterosexually.

Young Adults: Among the 544 persons who were ages 20-24 at time of HIV diagnosis, two-thirds (68 percent) are male. Over three quarters of them reported sex with other males (including those MSM who also are IDU); 16 percent did not report a mode of transmission. Many of these were likely infected through sex with other men.

Among the 172 females who were ages 20-24 at time of HIV diagnosis, just under half (49 percent) were infected heterosexually and 16 percent were IDUs; just over a third did not report a mode of transmission. Like the teenage females, many were likely infected heterosexually.



Geographic Distribution of Youth and Teen Cases:

Ninety-seven percent of the 671 persons diagnosed and reported with HIV/AIDS between the ages of 13-24 are located in high prevalence counties. The remaining 3 percent were reported in low prevalence counties.

Trends and Conclusions:

The number of new cases among person age 13-24 years has remained level.

Region 1 should consider both the behaviors of youth that increase the risk of HIV transmission and the likelihood that their partners for these behaviors are HIV-infected. Given the small number of infected persons in these age groups, it is likely most are infected by older partners (25+).

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan

Region 1

Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 1 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	% [a]	Rate per 100,000 [3]	2000 Census	%
Male	**8,020**	**5,272**	**75.5%**	**379.6**	**2,112,990**	**62%**
White Males	*2,560*	*1,685*	*24.1%*	*173.3*	*1,507,632*	*36%*
Black Males	*5,140*	*3,376*	*48.3%*	*1098.7*	*429,759*	*10%*
Hispanic Males	*190*	*122*	*1.7%*	*288.7*	*41,218*	*1%*
Asian Males	*20*	*12*	*0.2%*	*38.7*	*27,431*	*1%*
American Indian Males	*10*	*7*	*0.1%*	*161.1*	*7,126*	*0%*
Unknown Race Males	*N/A*	*70*	*1.0%*	*	*0*	*0%*
Female	**2,610**	**1,712**	**24.5%**	**116.5**	**2,178,720**	**52%**
White Females	*350*	*233*	*3.3%*	*22.8*	*1,592,246*	*38%*
Black Females	*2,150*	*1,411*	*20.2%*	*395.4*	*509,070*	*12%*
Hispanic Females	*60*	*38*	*0.5%*	*100.8*	*41,533*	*1%*
Asian Females	*10*	*6*	*0.1%*	*19.5*	*28,232*	*1%*
American Indian Females	*10*	*5*	*0.1%*	*152.1*	*7,639*	*0%*
Unknown Race Females	*N/A*	*19*	*0.3%*	*	*0*	*0%*
White	**2,920**	**1,918**	**27.5%**	**96.9**	**3,099,878**	**74%**
Black	**7,290**	**4,787**	**68.5%**	**720.7**	**938,829**	**22%**
Hispanic	**240**	**160**	**2.3%**	**191.5**	**82,751**	**2%**
Asian	**30**	**18**	**0.3%**	**29.1**	**55,663**	**1%**
American Indian	**20**	**12**	**0.2%**	**156.4**	**14,765**	**0%**
Unknown Race	**N/A**	**89**	**1.3%**	*	**0**	**0%**
Male-Male Sex	**4,630**	**3,044**	**53.3%** [a]	N/A		
Injecting Drug Use	**2,080**	**1,365**	**23.9%** [a]	N/A		
IDU with heterosexual risk [b]	*820*	*537*	*9.4%* [a]	N/A		
IDU without heterosexual risk [b]	*1,260*	*828*	*14.5%* [a]	N/A		
M-M Sex and Inject Drugs	**500**	**330**	**5.8%** [a]	N/A		
Blood Exposure [b]	**100**	**63**	**1.1%** [a]	N/A		
Heterosexual [b]	**1,240**	**817**	**14.3%** [a]	N/A		
Partner IDU	*420*	*277*	*4.8%* [a]	N/A		
Partner Bisexual [b]	*50*	*35*	*0.6%* [a]	N/A		
Partner Blood Exp	*20*	*15*	*0.3%* [a]	N/A		
Partner HIV+	*750*	*490*	*8.6%* [a]	N/A		
Perinatal	**140**	**95**	**1.7%** [a]	N/A		
Known Risk Total	**8,700**	**5,714**	**100.0%** [a]	N/A		
Unknown Risk	**N/A**	**1,270**	**18.2%**	N/A		
0 - 4 years	**120**	**81**	**1.2%**	**39.4**	**324,337**	**8%**
5 - 9 years	**20**	**16**	**0.2%**	**5.9**	**377,988**	**9%**
10-12 years	**10**	**5**	**0.1%**	**5.0**	**225,148**	**5%**
13 -19 years	**190**	**127**	**1.8%**	**46.4**	**531,035**	**13%**
20 -24 years	**830**	**544**	**7.8%**	**331.8**	**300,831**	**7%**
25 -29 years	**1,510**	**995**	**14.2%**	**494.5**	**356,136**	**8%**
30 -34 years	**2,170**	**1,426**	**20.4%**	**655.4**	**377,152**	**9%**
35 -39 years	**2,140**	**1,405**	**20.1%**	**603.5**	**338,951**	**8%**
40 -44 years	**1,720**	**1,133**	**16.2%**	**476.0**	**302,935**	**7%**
45 -49 years	**1,000**	**660**	**9.5%**	**310.1**	**239,322**	**6%**
50 -54 years	**520**	**341**	**4.9%**	**186.1**	**192,934**	**5%**
55 -59 years	**210**	**138**	**2.0%**	**100.4**	**179,763**	**4%**
60 -64 years	**90**	**59**	**0.8%**	**57.6**	**189,236**	**5%**
65 and over	**80**	**52**	**0.7%**	**15.2**	**500,214**	**12%**
Unknown Age	**N/A**	*****	*****	**N/A**	**0**	**0%**
DETROIT	6,820	4,483	64.2%	716.9	951,270	23%
MACOMB CO.	560	367	5.3%	71.1	788,149	19%
MONROE CO.	60	39	0.6%	41.1	145,945	3%
OAKLAND CO.	1,570	1031	14.8%	131.5	1,194,156	28%
ST CLAIR CO.	90	61	0.9%	54.8	164,235	4%
WAYNE CO.	1,530	1003	14.4%	137.9	1,109,892	26%
Total Region 1	**10,630**	**6,984**	**100.0%**	**244.2**	**4,353,647**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan

Region 1

Sex and Race by Risk

January 1, 2002

Male Only Region 1	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**1,281**	**84%**	**1,678**	**60%**	**53**	**52%**	**32**	**80%**	**3,044**	**68%**
Injecting Drug Use	**88**	**6%**	**642**	**23%**	**28**	**28%**	*****	*****	**762**	**17%**
IDU w/ hetero risk[b]	*20*	*1%*	*213*	*8%*	*8*	*8%*	*	*	*241*	*5%*
IDU w/o hetero risk[b]	*68*	*4%*	*429*	*15%*	*20*	*20%*	*	*	*521*	*12%*
M-M Sex /IDU	**84**	**5%**	**236**	**8%**	**9**	**9%**	*****	*****	**330**	**7%**
Blood Exposure[b]	**37**	**2%**	**12**	**0%**	*****	*****	*****	*****	**52**	**1%**
Perinatal	**6**	**0%**	**39**	**1%**	*****	*****	*****	*****	**46**	**1%**
Heterosexual[b]	**38**	**2%**	**175**	**6%**	**8**	**8%**	*****	*****	**223**	**5%**
Partner IDU	*10*	*1%*	*66*	*2%*	*	*	*	*	*80*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*27*	*2%*	*107*	*4%*	*5*	*5%*	*	*	*140*	*3%*
Total Known Risks	**1,534**	**100%**	**2,782**	**100%**	**101**	**100%**	**40**	**100%**	**4,457**	**100%**
Undetermined	**151**		**594**		**21**		**49**		**815**	
Total All Cases	**1,685**		**3,376**		**122**		**89**		**5,272**	

Female Only Region 1	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	**76**	**42%**	**513**	**50%**	**10**	**34%**	*****	*****	**603**	**48%**
IDU w/ hetero risk[b]	*41*	*23%*	*248*	*24%*	*6*	*21%*	*	*	*296*	*24%*
IDU w/o hetero risk[b]	*35*	*19%*	*265*	*26%*	*	*	*	*	*307*	*24%*
Blood Exposure[b]	**6**	**3%**	**5**	**0%**	*****	*****	*****	*****	**11**	**1%**
Perinatal	**5**	**3%**	**41**	**4%**	*****	*****	*****	*****	**49**	**4%**
Heterosexual[b]	**95**	**52%**	**475**	**46%**	**17**	**59%**	**7**	**58%**	**594**	**47%**
Partner IDU	*29*	*16%*	*156*	*15%*	*8*	*28%*	*	*	*197*	*16%*
Partner Bisexual[b]	*11*	*6%*	*21*	*2%*	*	*	*	*	*35*	*3%*
Partner Blood Exposure	*9*	*5%*	*	*	*	*	*	*	*12*	*1%*
Partner HIV+	*46*	*25%*	*295*	*29%*	*7*	*24%*	*	*	*350*	*28%*
Total Known Risks	**182**	**100%**	**1,034**	**100%**	**29**	**100%**	**12**	**100%**	**1,257**	**100%**
Undetermined	**51**		**377**		**9**		**18**		**455**	
Total All Cases	**233**		**1,411**		**38**		**30**		**1,712**	

Male & Female Region 1	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**1,281**	**75%**	**1,678**	**44%**	**53**	**41%**	**32**	**62%**	**3,044**	**53%**
Injecting Drug Use	**164**	**10%**	**1,155**	**30%**	**38**	**29%**	**8**	**15%**	**1,365**	**24%**
IDU w/ hetero risk[b]	*61*	*4%*	*461*	*12%*	*14*	*11%*	*	*	*537*	*9%*
IDU w/o hetero risk[b]	*103*	*6%*	*694*	*18%*	*24*	*18%*	*7*	*13%*	*828*	*14%*
M-M Sex /IDU	**84**	**5%**	**236**	**6%**	**9**	**7%**	*****	*****	**330**	**6%**
Blood Exposure[b]	**43**	**3%**	**17**	**0%**	*****	*****	*****	*****	**63**	**1%**
Perinatal	**11**	**1%**	**80**	**2%**	*****	*****	*****	*****	**95**	**2%**
Heterosexual[b]	**133**	**8%**	**650**	**17%**	**25**	**19%**	**9**	**17%**	**817**	**14%**
Partner IDU	*39*	*2%*	*222*	*6%*	*11*	*8%*	*5*	*10%*	*277*	*5%*
Partner Bisexual[b]	*11*	*1%*	*21*	*1%*	*	*	*	*	*35*	*1%*
Partner Blood Exposure	*10*	*1%*	*5*	*0%*	*	*	*	*	*15*	*0%*
Partner HIV+	*73*	*4%*	*402*	*11%*	*12*	*9%*	*	*	*490*	*9%*
Total Known Risks	**1,716**	**100%**	**3,816**	**100%**	**130**	**100%**	**52**	**100%**	**5,714**	**100%**
Undetermined	**202**		**971**		**30**		**67**		**1,270**	
Total All Cases	**1,918**		**4,787**		**160**		**119**		**6,984**	

*** Indicates there are fewer than five reported cases**

[a] **Indicates percentage calculated from cases with *known risk***

[b] **Indicates an explanatory definition exists in attached glossary at end of Profile**

Table 3: Living HIV/AIDS Cases in Michigan
Age by Risk
Region 1
January 1, 2002

Male Only	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
Region 1	Cases	%[a]	11	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	*	*	41	77%	273	87%	569	87%	1,356	73%	617	53%	153	52%	35	61%	3,044	68%
Injecting Drug Use	*	*	*	*	5	2%	27	4%	242	13%	379	32%	96	33%	11	19%	762	17%
IDU w/ hetero risk[b]	*	*	*	*	*	*	*8*	*1%*	*86*	*5%*	*124*	*11%*	*20*	*7%*	*	*	*241*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*	*	*19*	*3%*	*156*	*8%*	*255*	*22%*	*76*	*26%*	*9*	*16%*	*521*	*12%*
M-M Sex /IDU	*	*	*	*	14	4%	27	4%	162	9%	105	9%	20	7%	*	*	330	7%
Blood Exposure[b]	*	*	9	17%	7	2%	8	1%	15	1%	7	1%	*	*	*	*	52	1%
Perinatal	46	92%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	46	1%
Heterosexual[b]	*	*	*	*	15	5%	23	4%	85	5%	66	6%	24	8%	8	14%	223	5%
Partner IDU	*	*	*	*	*	*	*8*	*1%*	*27*	*1%*	*29*	*2%*	*11*	*4%*	*	*	*80*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*14*	*4%*	*14*	*2%*	*58*	*3%*	*37*	*3%*	*13*	*4%*	*	*	*140*	*3%*
Total Known Risks	50	100%	53	100%	314	100%	654	100%	1,860	100%	1,174	100%	294	100%	57	100%	4,457	100%
Undetermined	*		13		58		106		335		198		82		21		815	
Total All Cases	51		66		372		760		2,195		1,372		376		78		5,272	

Female Only	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
Region 1	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Injecting Drug Use	*	*	6	15%	27	24%	50	32%	252	54%	230	65%	33	49%	5	36%	603	48%
IDU w/ hetero risk[b]	*	*	*	*	*15*	*13%*	*27*	*17%*	*129*	*28%*	*108*	*30%*	*13*	*19%*	*	*	*296*	*24%*
IDU w/o hetero risk[b]	*	*	*	*	*12*	*11%*	*23*	*15%*	*123*	*26%*	*122*	*34%*	*20*	*29%*	*	*	*307*	*24%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11	1%
Perinatal	49	100%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	49	4%
Heterosexual[b]	*	*	31	79%	85	76%	103	66%	211	45%	122	34%	35	51%	7	50%	594	47%
Partner IDU	*	*	*5*	*13%*	*13*	*12%*	*22*	*14%*	*78*	*17%*	*59*	*17%*	*16*	*24%*	*	*	*197*	*16%*
Partner Bisexual[b]	*	*	*	*	*	*	*8*	*5%*	*15*	*3%*	*6*	*2%*	*	*	*	*	*35*	*3%*
Partner Blood Exposure	*	*	*	*	*	*	*5*	*3%*	*5*	*1%*	*	*	*	*	*	*	*12*	*1%*
Partner HIV+	*	*	*24*	*62%*	*70*	*63%*	*68*	*44%*	*113*	*24%*	*55*	*15%*	*17*	*25%*	*	*	*350*	*28%*
Total Known Risks	49	100%	39	100%	112	100%	155	100%	465	100%	355	100%	68	100%	14	100%	1,257	100%
Undetermined	*		22		60		80		171		66		35		19		455	
Total All Cases	51		61		172		235		636		421		103		33		1,712	

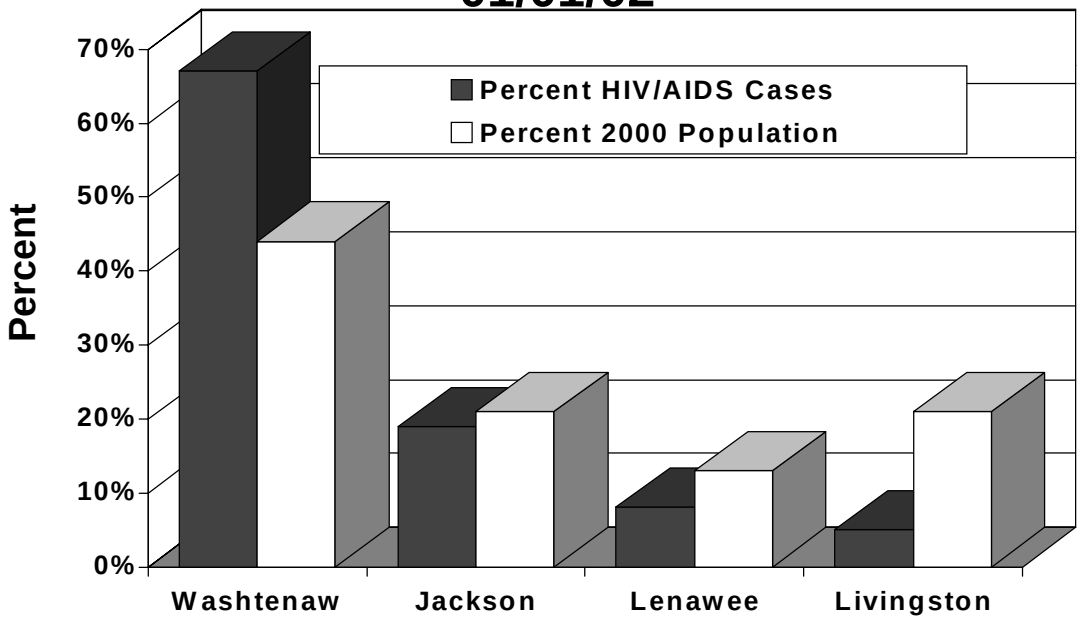
Male & Female	0-12 years		13-19 years		20-24 years		25-29 years		30-39 years		40-49 years		50-59 years		60+ years		All Ages	
Region 1	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	*	*	41	45%	273	64%	569	70%	1,356	58%	617	40%	153	42%	35	49%	3,044	53%
Injecting Drug Use	*	*	7	8%	32	8%	77	10%	494	21%	609	40%	129	36%	16	23%	1,364	24%
IDU w/ hetero risk[b]	*	*	*	*	*16*	*4%*	*35*	*4%*	*215*	*9%*	*232*	*15%*	*33*	*9%*	*	*	*537*	*9%*
IDU w/o hetero risk[b]	*	*	*	*	*16*	*4%*	*42*	*5%*	*279*	*12%*	*377*	*25%*	*96*	*27%*	*13*	*18%*	*827*	*14%*
M-M Sex /IDU	*	*	*	*	14	3%	27	3%	162	7%	105	7%	20	6%	*	*	330	6%
Blood Exposure[b]	*	*	11	12%	7	2%	10	1%	17	1%	10	1%	*	*	*	*	63	1%
Perinatal	95	96%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	95	2%
Heterosexual[b]	*	*	33	36%	100	23%	126	16%	296	13%	188	12%	59	16%	15	21%	817	14%
Partner IDU	*	*	*5*	*5%*	*14*	*3%*	*30*	*4%*	*105*	*5%*	*88*	*6%*	*27*	*7%*	*8*	*11%*	*277*	*5%*
Partner Bisexual[b]	*	*	*	*	*	*	*8*	*1%*	*15*	*1%*	*6*	*0%*	*	*	*	*	*35*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*6*	*1%*	*5*	*0%*	*	*	*	*	*	*	*15*	*0%*
Partner HIV+	*	*	*26*	*28%*	*84*	*20%*	*82*	*10%*	*171*	*7%*	*92*	*6%*	*30*	*8%*	*5*	*7%*	*490*	*9%*
Total Known Risks	99	100%	92	100%	426	100%	809	100%	2,325	100%	1,529	100%	362	100%	71	100%	5,713	100%
Undetermined	*		35		118		186		506		264		117		40		1,269	
Total All Cases	102		127		544		995		2,831		1,793		479		111		6,984	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Region 2 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 2

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2002 Profile of HIV/AIDS in Region 2

Summary of Epidemic for Region 2

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 730 people living with HIV/AIDS in Region 2, of which 481 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 30 new cases in the year 2000. The number of AIDS deaths dropped 68 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 2 has fewer cases (of the 10,749 cases reported statewide) than would be expected compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health departments within Region 2. Sixty-seven percent of the reported cases within this region were recorded in Washtenaw County.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county, however most contain a single county. All LHDs have been labeled as either being in a HI or and LOW HIV prevalence area (refer to page 2 of the Statewide profile for methodology used). Within Region 2, Jackson County, and Washtenaw County are considered to be LHDs in HI prevalence areas, while Lenawee County and Livingston County are considered to be LHDs in LOW prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 2. The guiding question used in this process has been, "In which populations can strategies prevent the most infections from occurring?" Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSMs make up 69 percent of all HIV/AIDS cases with a known mode of transmission (287 out of 420). The MSM behavioral group continues to be the most affected behavioral group even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 22 percent are IDUs (89 out of 420). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** HRH cases constitute 15 percent of the total number of cases with a known mode of transmission (65 out of 420) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men and/or 3) HIV+ individuals. The trend in heterosexual transmission is level in Region 2.

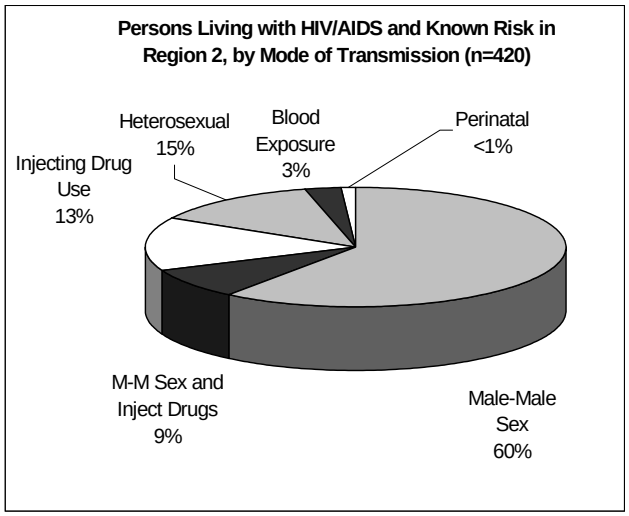
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 2

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.



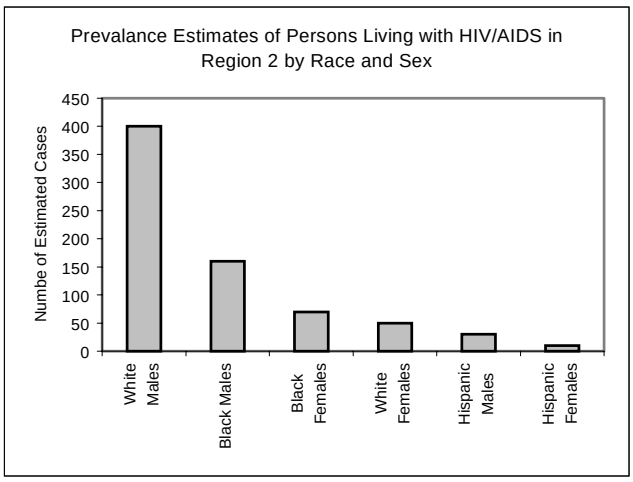
The pie chart indicates the number of people living with HIV/AIDS in Region 2 by mode of transmission for the 420 cases for which the risk was identifiable.

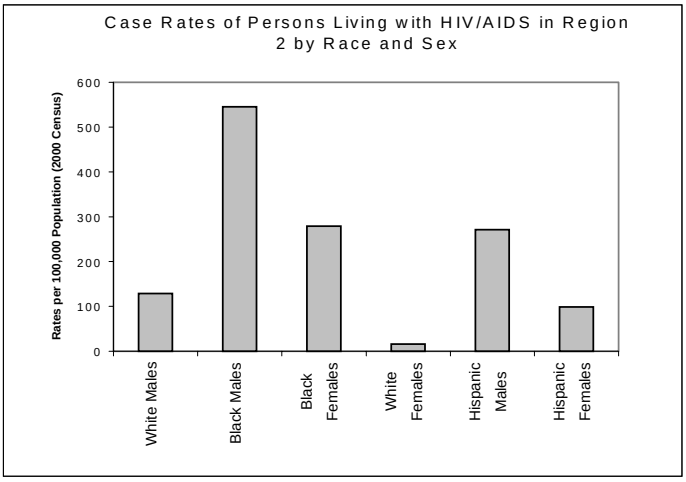
- This chart demonstrates that over two-thirds (69 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 9 percent who also injected drugs.
- Almost a quarter (22 percent) are injecting drug users, including 9 percent who are also MSM. Forty percent of non-MSM IDUs also have high risk heterosexual sex partners. (Table 1, page 11.)
- Finally, 15 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on six race and sex groups.



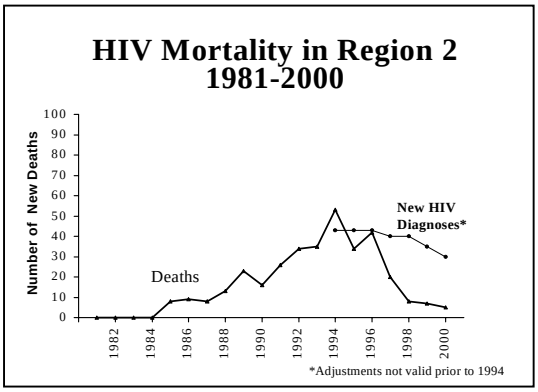


- Black males have the highest rate per 100,000 population (545) and the second highest estimated number (160) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Black females have the second highest rate (279) and the third highest estimated number (70) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (271) and the fifth highest estimated number (30) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- White males have the fourth highest rate (129) and the highest estimated number (400) of cases.
- Hispanic females have the fifth highest rate (99) and the lowest estimated number (10) of cases.
- White females have the lowest rate (16) and the fourth highest estimated number (50) of HIV/AIDS cases.

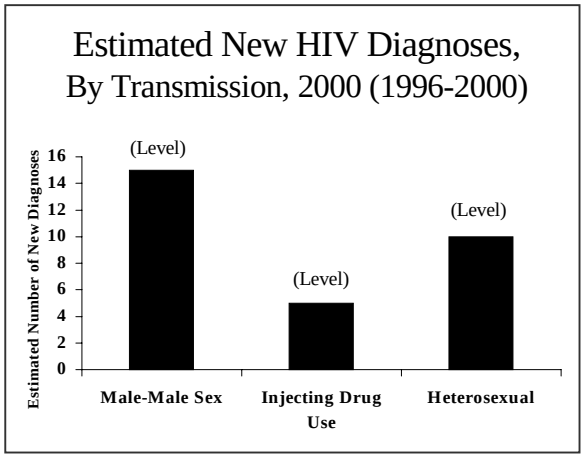
2002 Profile of HIV/AIDS in Region 2

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 30 persons were newly infected in the year 2000 in Region 2.



- *Transmission of HIV 1996-2000*: The estimated number of new diagnoses among men who have sex with men are stable at 15 persons in 2000. The proportion of persons infected heterosexually is level at 10 and IDU is level at 5 new infections in 2000. New infections among MSM who also inject drugs are not included in this graph. There were fewer than 10 persons diagnosed each year who acquired infection from blood products received before 1985, and fewer than 10 infants infected at birth each year.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	74%	81%
Females	26%	19%
Whites	56%	62%
Blacks	35%	32%
Hispanics	6%	5%
Other minorities	1%	0%
Unknown Race	1%	1%
White Males	48%	54%
Black Males	19%	22%
Hispanic Males	4%	4%
Other minority males	2%	0%
Unknown race males	1%	1%
White Females	7%	7%
Black Females	16%	10%
Hispanic Females	2%	2%
Other minorty females	0%	0%
Unknown race females	0%	0%
0-12 years*	2%	1%
13-19 years*	1%	1%
20-24 years*	2%	4%
25-44 years*	62%	68%
45+ years*	34%	26%
Total HIV Infected	190	481

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act and related sources (RWCA).

In 2001, 190 HIV-infected persons were reported receiving Ryan White Services in Region 2. Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (481), it is apparent that not all persons reported are receiving RWCA-funded services.

**Years within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 2

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 2. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 430 MSM living with HIV disease in Region 2. This includes 50 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 2. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 287), white males (217) account for three-quarters (76 percent) while black males (56) comprise approximately 20 percent of men in this combined category.

Age: Eighty-six percent of all living cases that reported male-male sex are between the ages of 25-49. MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

Just 5 percent of HIV-infected MSM statewide reside in Region 2. MSMs are over two-thirds (68 percent) of cases with a known risk within both hi and low prevalence areas.

Trends and Conclusions:

MDCH estimates that there were about 15 new HIV infections in the year 2000 among men who have sex with men. This number was level from 1996-2000 in Region 2.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older. Older men are more likely to be HIV-infected than are younger males.

Region 2 should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally, especially in high prevalence areas.

2002 Profile of HIV/AIDS in Region 2

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 2 and account for 22 percent of reported infected persons with a known risk. MDCH estimates there are approximately 130 IDUs living with HIV in Region 2. This estimate includes 50 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals, infants, and MSM. Over one-third (40 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 65 cases with reported heterosexual risk, 15 individuals (23 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 25 percent **(**104 cases) of people reported with HIV disease and having a known risk in Region 2. This is similar to the nationwide picture.

Race/Ethnicity and Sex:

Of the 89 IDU HIV/AIDS cases, 33 are black men (37 percent), 10 are black women (11 percent), 38 are white men (43 percent), 7 are white women (8 percent), and less than five are Hispanic males (<5 percent). In total, 48 percent (43 cases) of the cases occur in black IDU.

More than three-quarters of the cases are men (81 percent), while women constitute the remaining 19 percent. Among the 17 women whose HIV infection has been attributed to IDU, 35 percent report high-risk heterosexual sex partners.

Age:

Among men with a known risk in each age group over 20 years, IDU is the second most common mode of transmission. Thirty-nine percent of IDU cases are among males in their thirties (63 percent of these were MSM/IDU).

Geographic Distribution:

Eighty-eight percent of IDU cases were reported in the higher prevalence areas of the region. Within high prevalence counties, just under a quarter of cases with a known risk (21 percent*) are IDU, while in the lower prevalence counties 20 percent* of persons living with HIV/AIDS are IDU. However, there are fewer than 15 cases of IDU in lower prevalence counties. (* These percentages include IDU males who are also MSM).

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (including MSM/IDU) has remained level between 1996 and 2000, at approximately 5 new HIV infections in the year 2000. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs. In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 2

Ranked Behavioral Group/Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three-ranked behavioral group in Region 2. Heterosexual sex accounts for 15 percent of reported infected persons with a known risk. MDCH estimates that 100 persons living with HIV disease in Region 2 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

There are an estimated 30 infected persons who are classified as IDUs but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. These dual risk IDU/heterosexual cases comprise 5 percent of all reported HIV/AIDS cases with a known risk and are 71 percent men and 29 percent women within Region 2.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

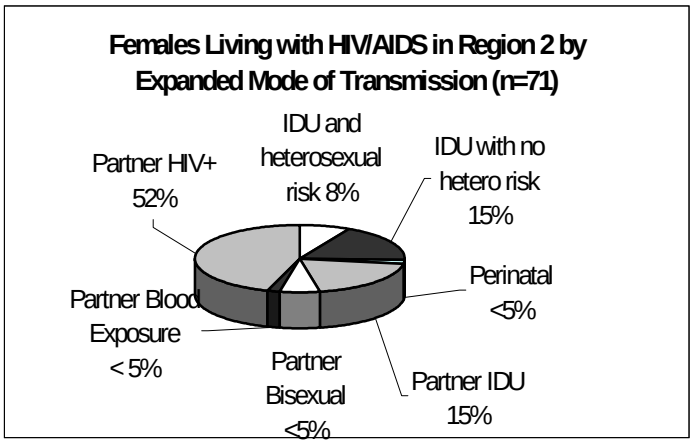
Race/Ethnicity and Sex:

Among females reported with a known risk for HIV/AIDS, almost three-quarters (72 percent) were infected heterosexually. Additionally, among women with a known risk, 8 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 65 men and women living with HIV/AIDS and infected heterosexually, 23 percent reported their heterosexual partner as injecting drug users, 5 percent as bisexual men (this applies to women only) and no persons infected through blood products. Almost three-quarters (72 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 19 percent of HIV/AIDS cases in Region 2 they have consistently accounted for over three-quarters of heterosexually acquired infections -- currently 78 percent.

Nearly three-quarters of black women were infected heterosexually (72 percent). Of white women, over two-thirds were infected through heterosexual sex (67 percent).



Over half of the heterosexual cases of HIV/AIDS are black. The percent of men infected heterosexually is low--4 percent of cases among men of all races with a known risk.

The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a male partner who is: 1) HIV+, 2) HIV+ due to blood exposure, 3) bisexual, and/or 4) an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected women with known risk are shown in the pie chart here.

2002 Profile of HIV/AIDS in Region 2

Ranked Behavioral Group: Heterosexuals (Continued)

Age:

For women between the ages of 25 and 49, heterosexual transmission is the predominant mode. (Most other age groups have <5 cases.)

Geographic Distribution:

Eighty-eight percent of the 65 cases in Region 2 attributed to heterosexual activity were reported in high prevalence counties. Of all the cases within high prevalence counties in Region 2, heterosexual transmission constitutes 16 percent. Within low prevalence counties, heterosexual transmission constitutes 15 percent of the cases, although this percent reflects <10 actual cases.

Trends and Conclusions:

Heterosexual transmission within Region 2 is level. MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission was approximately 10 in the year 2000.

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSM, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 2

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Although white persons comprise the majority of those living with HIV/AIDS in Region 2, there are a disproportionate number of black cases. Blacks comprise 7 percent of the Region 2 population yet make up a third (32 percent) of the cases of HIV/AIDS. MDCH estimates 240 blacks living with HIV/AIDS in Region 2. The rate of HIV infection among blacks is 441 per 100,000 population, almost six times higher than the rate among whites. MDCH estimates that as many as one out of 180 black males and one out of 360 black females may be HIV-infected.

White persons comprise over half (62 percent) of reported HIV/AIDS cases, and over three-quarters of the population. MDCH estimates 450 whites living with HIV/AIDS in Region 2. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (72 per 100,000 population). MDCH estimates that as many as one out of 775 white males and one out of 6,250 white females may be HIV-infected.

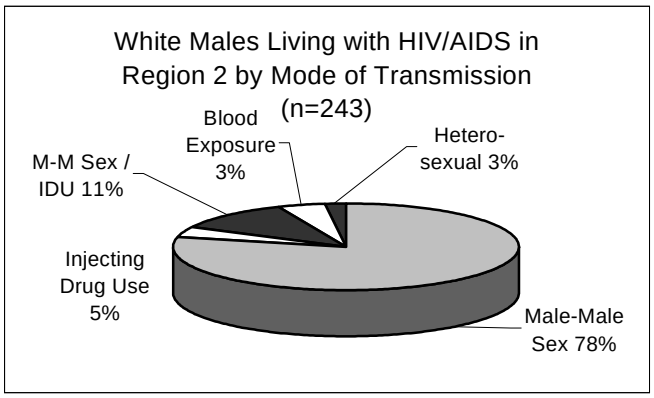
Hispanics comprise 5 percent of cases and 3 percent of the population. MDCH estimates 30 Hispanics living with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (142 per 100,000 population). MDCH estimates that as many as one out of 370 Hispanic males one out of 1,010 Hispanic females may be HIV-infected.

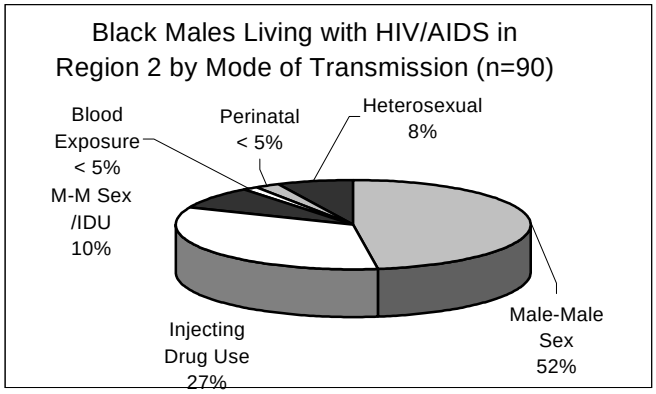
Most persons living with HIV/AIDS in Region 2 are male (81 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 19 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (refer to page 6 for female distributions).

- The majority of the 392 male HIV/AIDS cases are white (67 percent), 27 percent are black, 4 percent are Hispanic and 2 percent are other or unknown race.





- Over half of the 89 female HIV/AIDS cases are black (54 percent), 38 percent are white, 6 percent are Hispanic and 2 percent are other or unknown race. (Please refer back to page 6 for break down of female transmissions.)

2002 Profile of HIV/AIDS in Region 2

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases:

Ninety-eight percent of all the black cases occur in high prevalence counties. For whites, the distribution of cases is divided 82 percent and 18 percent between high and low prevalence counties respectively.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However similar to the state, the impact this epidemic is having on blacks is disproportionate.

The majority of female cases in this region are divided between blacks and whites 54 and 38 percent respectively.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 2

Prisoners and persons with unknown residence are included

January 1, 2002

Region 2 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	% [a]		Rate per 100,000 [3]	2000 Census	%
Male	**590**	**392**	**81%**		**159.4**	**370,158**	**50%**
White Males	*400*	*262*	*54%*		*128.9*	*310,249*	*42%*
Black Males	*160*	*107*	*22%*		*544.5*	*29,387*	*4%*
Hispanic Males	*30*	*17*	*4%*		*271.5*	*11,048*	*1%*
Asian Males	*10*	*	*		*	*11,422*	*2%*
American Indian Males	*10*	*	*		*	*1,342*	*0%*
Unknown Race Males	*N/A*	*	*		*	*6710*	*N/A*
Female	**140**	**89**	**19%**		**38.1**	**367,000**	**50%**
White Females	*50*	*34*	*7%*		*16.0*	*312,670*	*42%*
Black Females	*70*	*48*	*10%*		*279.1*	*25,084*	*3%*
Hispanic Females	*10*	*5*	*1%*		*98.8*	*10,121*	*1%*
Asian Females	*10*	*	*		*	*11,226*	*2%*
American Indian Females	*10*	*	*		*	*1,249*	*0%*
Unknown Race Females	*N/A*	*	*		*	*6650*	*N/A*
White	**450**	**296**	**62%**		**72.2**	**622,919**	**85%**
Black	**240**	**155**	**32%**		**440.6**	**54,471**	**7%**
Hispanic	**30**	**22**	**5%**		**141.7**	**21,169**	**3%**
Asian	**10**	*	*		*	**22,648**	**3%**
American Indian	**10**	*	*		*	**2,591**	**0%**
Unknown Race	**N/A**	**6**	**1%**		*	**13360**	**N/A**
Male-Male Sex	**380**	**251**	**60%**	a	N/A		
Injecting Drug Use	**80**	**53**	**13%**	a	N/A		
IDU with heterosexual risk [b]	*30*	*21*	*5%*	a	N/A		
IDU without heterosexual risk [b]	*50*	*32*	*8%*	a	N/A		
M-M Sex and Inject Drugs	**50**	**36**	**9%**	a	N/A		
Blood Exposure [b]	**20**	**11**	**3%**	a	N/A		
Heterosexual [b]	**100**	**65**	**15%**	a	N/A		
Partner IDU	*20*	*15*	*4%*	a	N/A		
Partner Bisexual [b]	*10*	*	*	a	N/A		
Partner Blood Exp	*10*	*	*	a	N/A		
Partner HIV+	*70*	*47*	*11%*	a	N/A		
Perinatal	**10**	*	*	a	N/A		
Known Risk Total	**640**	**420**	**100%**	a	N/A		
Unknown Risk	**N/A**	**61**	**13%**		N/A		
0 - 4 years	**10**	*	*		*	**48,084**	**7%**
5 - 9 years	**10**	*	*		*	**51,871**	**7%**
10-12 years	**10**	*	*		*	**31859**	**4%**
13 -19 years	**20**	**10**	**2%**		**25.5**	**78,317**	**11%**
20 -24 years	**70**	**44**	**9%**		**116.7**	**59,980**	**8%**
25 -29 years	**120**	**81**	**17%**		**231.6**	**51,809**	**7%**
30 -34 years	**160**	**108**	**22%**		**288.3**	**55,503**	**8%**
35 -39 years	**160**	**106**	**22%**		**261.8**	**61,118**	**8%**
40 -44 years	**90**	**57**	**12%**		**146.7**	**61,368**	**8%**
45 -49 years	**70**	**43**	**9%**		**123.5**	**56,668**	**8%**
50 -54 years	**30**	**17**	**4%**		**62.1**	**48,346**	**7%**
55 -59 years	**10**	*	*		*	**35,210**	**5%**
60 -64 years	**10**	**5**	**1%**		**40.3**	**24,814**	**3%**
65 and over	**10**	*	*		*	**72,211**	**10%**
Unknown Age	**N/A**	*	*		**N/A**	**0**	**N/A**
JACKSON CO.	140	92	19%		88.4	158,422	21%
LENAWEE CO.	60	40	8%		60.7	98,890	13%
LIVINGSTON CO.	40	25	5%		25.5	156,951	21%
WASHTENAW CO.	490	324	67%		151.8	322,895	44%
Total Region 2	**730**	**481**	**100%**		**99.0**	**737,158**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan

Region 2

Sex and Race by Risk

January 1, 2002

Male Only Region 2	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**190**	**78%**	**47**	**52%**	**10**	**83%**	*	*	**251**	**72%**
Injecting Drug Use	**11**	**5%**	**24**	**27%**	*	*	*	*	**36**	**10%**
IDU w/ hetero risk[b]	*	*	*12*	*13%*	*	*	*	*	*15*	*4%*
IDU w/o hetero risk[b]	*8*	*3%*	*12*	*13%*	*	*	*	*	*21*	*6%*
M-M Sex /IDU	**27**	**11%**	**9**	**10%**	*	*	*	*	**36**	**10%**
Blood Exposure[b]	**8**	**3%**	*	*	*	*	*	*	**9**	**3%**
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**7**	**3%**	**7**	**8%**	*	*	*	*	**14**	**4%**
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*5*	*2%*	*5*	*6%*	*	*	*	*	*10*	*3%*
Total Known Risks	**243**	**100%**	**90**	**100%**	**12**	**100%**	*	*	**349**	**100%**
Undetermined	**19**		**17**		**5**		*		**43**	
Total All Cases	**262**		**107**		**17**		**6**		**392**	

Female Only Region 2	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	**7**	**23%**	**10**	**28%**	*	*	*	*	**17**	**24%**
IDU w/ hetero risk[b]	*	*	*	*	*	*	*	*	*6*	*8%*
IDU w/o hetero risk[b]	*	*	*7*	*19%*	*	*	*	*	*11*	*15%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**20**	**67%**	**26**	**72%**	*	*	*	*	**51**	**72%**
Partner IDU	*	*	*7*	*19%*	*	*	*	*	*11*	*15%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*16*	*53%*	*18*	*50%*	*	*	*	*	*37*	*52%*
Total Known Risks	**30**	**100%**	**36**	**100%**	*	*	*	*	**71**	**100%**
Undetermined	*		**12**		*		*		**18**	
Total All Cases	**34**		**48**		**5**		*		**89**	

Male & Female Region 2	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**190**	**70%**	**47**	**37%**	**10**	**67%**	*	*	**251**	**60%**
Injecting Drug Use	**18**	**7%**	**34**	**27%**	*	*	*	*	**53**	**13%**
IDU w/ hetero risk[b]	*6*	*2%*	*15*	*12%*	*	*	*	*	*21*	*5%*
IDU w/o hetero risk[b]	*12*	*4%*	*19*	*15%*	*	*	*	*	*32*	*8%*
M-M Sex /IDU	**27**	**10%**	**9**	**7%**	*	*	*	*	**36**	**9%**
Blood Exposure[b]	**10**	**4%**	*	*	*	*	*	*	**11**	**3%**
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**27**	**10%**	**33**	**26%**	*	*	*	*	**65**	**15%**
Partner IDU	*5*	*2%*	*9*	*7%*	*	*	*	*	*15*	*4%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*21*	*8%*	*23*	*18%*	*	*	*	*	*47*	*11%*
Total Known Risks	**273**	**100%**	**126**	**100%**	**15**	**100%**	**6**	**100%**	**420**	**100%**
Undetermined	**23**		**29**		**7**		*		**61**	
Total All Cases	**296**		**155**		**22**		**8**		**481**	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Age by Risk
Region 2
January 1, 2002

Male Only Region 2	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	23	79%	216	73%	12	67%	251	72%
Injecting Drug Use	*	*	*	*	31	10%	5	28%	36	10%
IDU w/ hetero risk[b]	*	*	*	*	*13*	*4%*	*	*	*15*	*4%*
IDU w/o hetero risk[b]	*	*	*	*	*18*	*6%*	*	*	*21*	*6%*
M-M Sex /IDU	*	*	*	*	31	10%	*	*	36	10%
Blood Exposure[b]	*	*	*	*	5	2%	*	*	9	3%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	13	4%	*	*	14	4%
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*9*	*3%*	*	*	*10*	*3%*
Total Known Risks	6	100%	29	100%	296	100%	18	100%	349	100%
Undetermined	*		*		36		*		43	
Total All Cases	8		31		332		21		392	

Female Only Region 2	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	15	27%	*	*	17	24%
IDU w/ hetero risk[b]	*	*	*	*	*5*	*9%*	*	*	*6*	*8%*
IDU w/o hetero risk[b]	*	*	*	*	*10*	*18%*	*	*	*11*	*15%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	6	86%	6	67%	34	62%	5	100%	51	72%
Partner IDU	*	*	*	*	*10*	*18%*	*	*	*11*	*15%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*5*	*71%*	*6*	*67%*	*22*	*40%*	*	*	*37*	*52%*
Total Known Risks	7	100%	9	100%	55	100%	5	100%	71	100%
Undetermined	*		*		13		*		18	
Total All Cases	8		13		68		5		89	

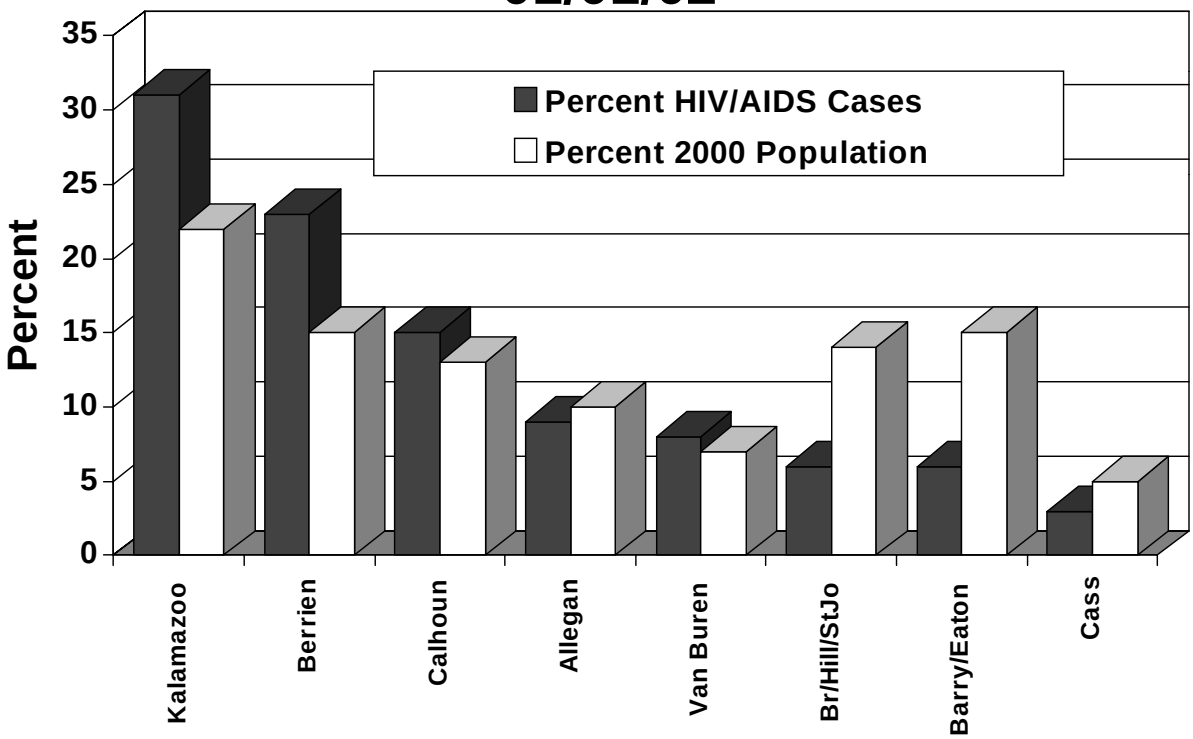
Male & Female Region 2	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	23	61%	216	59%	12	52%	251	60%
Injecting Drug Use	*	*	*	*	46	12%	5	22%	53	13%
IDU w/ hetero risk[b]	*	*	*	*	*18*	*5%*	*	*	*21*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*28*	*8%*	*	*	*32*	*8%*
M-M Sex /IDU	*	*	*	*	31	8%	*	*	36	9%
Blood Exposure[b]	*	*	*	*	6	2%	*	*	11	3%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	6	46%	7	18%	47	13%	5	22%	65	15%
Partner IDU	*	*	*	*	*14*	*4%*	*	*	*15*	*4%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*5*	*38%*	*7*	*18%*	*31*	*8%*	*	*	*47*	*11%*
Total Known Risks	13	100%	38	100%	369	100%	23	100%	420	100%
Undetermined	*		6		52		*		61	
Total All Cases	16		44		421		26		481	

*** Indicates there are fewer than five reported cases**

[a] **Indicates percentage calculated from cases with *known risk***

[b] **Indicates an explanatory definition exists in attached glossary at end of Profile**

Region 3 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 3

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Tables:

2002 Profile of HIV/AIDS in Region 3

Summary of Epidemic for Region 3

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 1,010 people living with HIV/AIDS in Region 3, of which 666 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at approximately 45 new cases in the year 2000. The number of AIDS deaths dropped 70 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 3 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there (although there are a few LHDs which have more than an expected number of cases). The graph on the previous page displays the distribution of reported cases by local health department within Region 3. The greatest percent of cases within this region, thirty-one percent, was recorded in Kalamazoo County.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county, however most contain a single county. All LHDs have been labeled as either being in a high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 3, Allegan, Berrien, Calhoun, Kalamazoo, and Van Buren counties are considered to be LHDs in high prevalence areas, while Barry, Branch, Cass, Eaton, and Hillsdale, and St. Joseph counties are considered to be LHDs in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 3. The guiding question used in this process has been, "In which populations can strategies prevent the most infections from occurring?" Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 62 percent of all HIV/AIDS cases with a known mode of transmission (341 out of 554). The MSM behavioral group continues to be the most affected behavioral group statewide even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 22 percent are IDUs (121 out of 554). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** HRH cases constitute 21 percent of the total number of cases with a known mode of transmission (118 out of 554) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men and/or 3) HIV+ individuals. The trend in heterosexual transmission is level in Region 3.

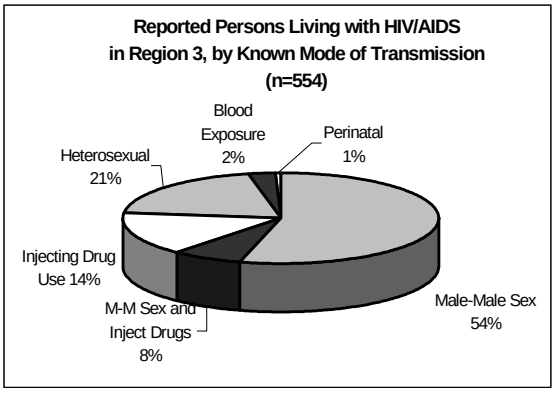
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 3

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.



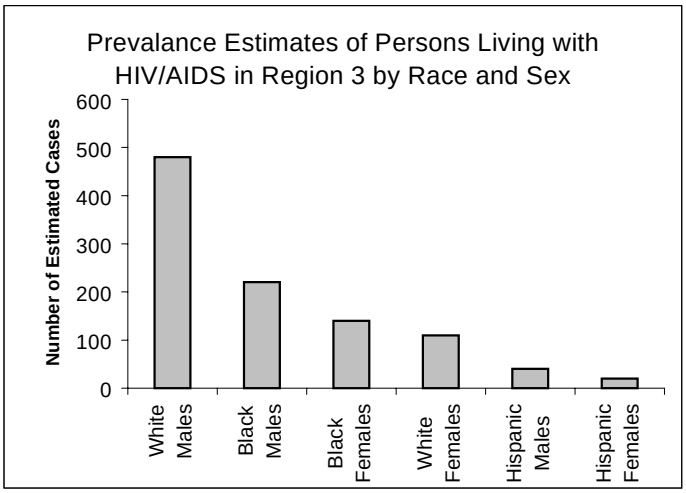
The pie chart indicates the number of people living with HIV/AIDS in Region 3 by mode of transmission for the 554 cases for which the risk was identifiable.

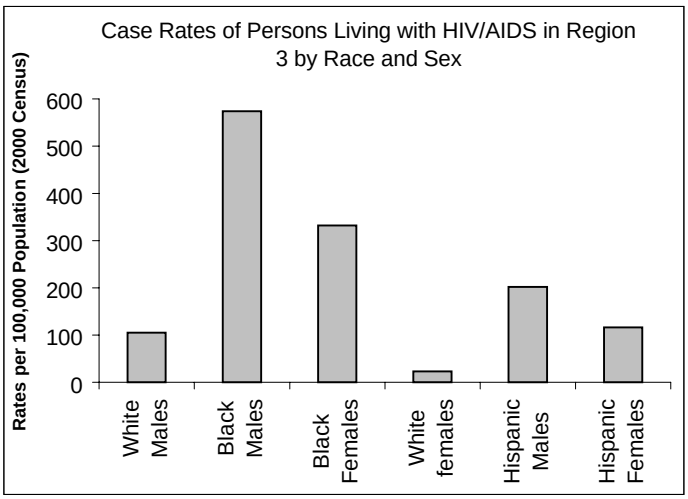
- This chart demonstrates that just under two-thirds (62 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 8 percent who also injected drugs.
- Almost one quarter (22 percent) are injecting drug users, including 8 percent who are also MSM. Forty-eight percent of non-MSM IDUs also have high risk heterosexual sex partners. (Table 1, page 11.)
- Finally, 21 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on six race and sex groups.



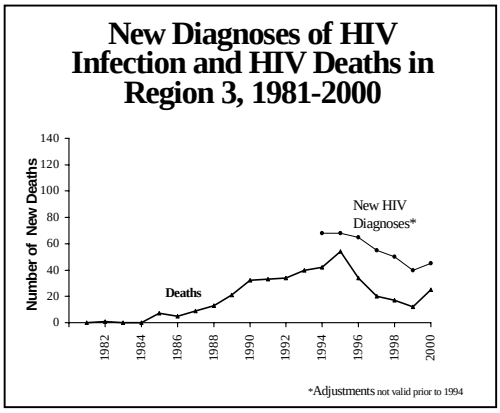


- Black males have the highest rate per 100,000 population (574) and the second highest estimated number (220) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Black females have the second highest rate (332) and the third highest estimated number (140) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (202) and the fifth highest estimated number (40) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- Hispanic females have the fourth highest rate (116) and the lowest estimated number (20) of HIV/AIDS cases. However, this rate is based upon very few cases.
- White males have the fifth highest rate (105) and the highest estimated number (480) of cases.
- White females have the lowest rate (23) and the fourth highest estimated number (110) of HIV/AIDS cases.

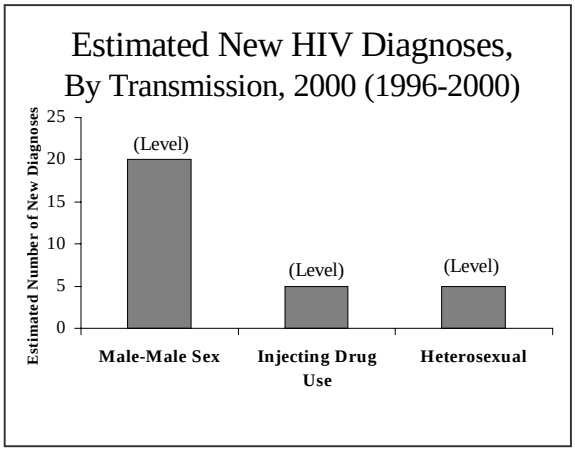
2002 Profile of HIV/AIDS in Region 3

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 45 persons were newly in the year 2000 in Region 3.



- *Transmission of HIV 1996-2000*: Among persons with a known risk for HIV transmission, new diagnoses among men who have sex with men are stable at 20 persons in the year 2000. The proportion of persons infected heterosexually and via IDU is level at around 5 cases each in the year 2000. There were fewer than 10 persons diagnosed each year who acquired infection from blood products received before 1985, and fewer than 10 infants infected at birth each year. New diagnoses are level among men who have sex with men and inject drugs, however they are not included in this graph.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	76%	74%
Females	24%	26%
Whites	58%	58%
Blacks	26%	35%
Hispanics	7%	5%
Other Minorities	7%	0%
Race Unknown	1%	0%
White Males	49%	47%
Black Males	17%	22%
Hispanic Males	6%	4%
Other Minority Male	3%	0%
Unknown Race Male	1%	0%
White Females	9%	11%
Black Females	9%	14%
Hispanic Females	1%	2%
Other Minority Fem.	4%	0%
Unknown Race Fem.	0%	0%
0-12 years*	0%	1%
13-19 years*	0%	0%
20-24 years*	2%	4%
25-44 years*	67%	71%
45+ years*	30%	24%
Total HIV Infected	401	666

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act and related sources (RWCA).

In 2001, 401 HIV-infected persons were reported receiving Ryan White Services in Region 3. A comparison also shows that persons receiving Ryan White services were significantly more likely than the reported population to be 45 years or older.

Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (666), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 3

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 3. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 510 MSM living with HIV disease in Region 3. This includes 60 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 3. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 341), white males (260) account for more than three-quarters (76 percent) while black males (66) comprise approximately 19 percent of men in this combined category.

Age: The largest percentage of living MSM cases are between the ages of 25-49 (83 percent). MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

Just six percent of all HIV-infected MSM statewide reside in Region 3. Within high prevalence counties, MSMs constitute 62 percent of the cases with a known risk while in the lower prevalence counties 58 percent of reported persons living with HIV/AIDS are MSM. (* These percentages include MSM who are also are IDU).

Trends and Conclusions:

MDCH estimates that there were about 15 new HIV infections in the year 2000 among men who have sex with men. These numbers were statistically level from 1996-2000 in Region 3.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older, since older men are more likely to be HIV-infected than are younger males.

Region 3 should recognize that there are an estimated 60 cases of MSM who additionally are IDUs. Prevention efforts targeting MSM should allow for an increased vision to encompass MSM/IDU who otherwise might be missed.

Region 3 should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally, especially in high prevalence areas.

2002 Profile of HIV/AIDS in Region 3

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 3 and account for 22 percent of reported infected persons with a known risk. MDCH estimates there are approximately 180 IDUs living with HIV disease in Region 3. This estimate includes 60 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals and MSM. Nearly one-half (48 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 118 cases with reported heterosexual risk, 41 individuals (35 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 29 percent (162 cases) of people reported with HIV disease and having a known risk in Region 3. This is similar to the nationwide picture.

Race/Ethnicity and Sex:

Of the 121 IDU HIV/AIDS cases, 43 are black men (36 percent), 17 are black women (14 percent), 46 are white men (38 percent), eleven are white women (9 percent), less than five are Hispanic cases (<1 percent). In total, 50 percent (60) of the cases occur in black IDU.

More than three-quarters of the cases are men (76 percent), while women constitute the remaining 24 percent. Among the 29 women whose HIV infection has been attributed to IDU, 62 percent report high-risk heterosexual sex partners.

Age:

Among men with a known risk in each age group over 25 years, IDU is the second most common mode of transmission. Thirty-two percent of IDU cases are among men in their thirties (49 percent of these were MSM/IDU).

Geographic Distribution:

Eighty-six percent of IDU cases were reported in the higher prevalence areas of the region. Within both high and low prevalence counties, 22 percent* of persons living with HIV/AIDS are IDU. (* These percentages include IDU males who are also MSM).

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (including MSM/IDU) has remained level between 1996 and 2000, at approximately 5 new HIV infections in the year 2000. IDU cases in Region 3 are similar among blacks than among whites. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs.

In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 3

Ranked Behavioral Group/Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 3. Heterosexual sex accounts for 21 percent of reported infected persons with a known risk. MDCH estimates that 180 persons living with HIV disease in Region 3 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 60 infected persons who are classified as IDUs but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. Among reported cases, the dual risk IDU/heterosexual cases comprise 7 percent of all reported HIV/AIDS cases with a known risk and are 53 percent men and 47 percent women within Region 3.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

Race/Ethnicity and Sex:

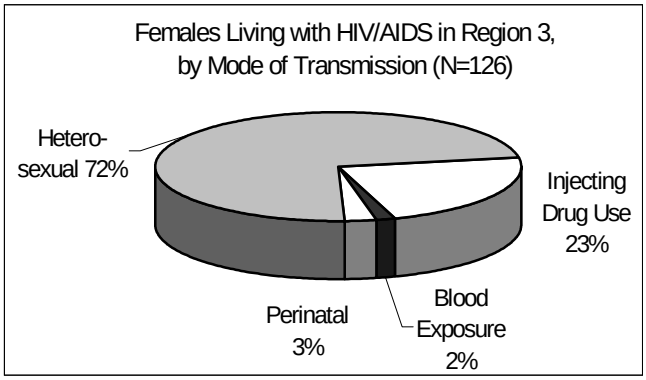
Among females reported with HIV/AIDS and a known risk, just under three-quarters (72 percent) of cases are contracted heterosexually. Additionally, among women with a known risk, 14 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 118 men and women living with HIV/AIDS and infected heterosexually, 35 percent reported their heterosexual partner as injecting drug users, 9 percent as bisexual men (this applies to women only) and 3 percent as persons infected through blood products. Over half (53 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 26 percent of HIV/AIDS cases in Region 3 they have consistently accounted for over three-quarters of heterosexually acquired infections -- currently 77 percent.

Over two-thirds of black women were infected heterosexually (69 percent). Among white women, over three-quarters were infected through heterosexual sex (75 percent).

Half of the heterosexual cases of HIV/AIDS are black. The percent of men infected heterosexually is low--6 percent of cases among men of all races with a known risk.



The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a partner who is: 1) HIV+, 2) HIV+ due to blood exposure, 3) a bisexually active man, and/or 4) an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected women with known risk are shown in the pie chart here.

2002 Profile of HIV/AIDS in Region 3

Ranked Behavioral Group: Heterosexuals (Continued)

Age:

For women between the ages of 13 and 49, heterosexual transmission is the predominant mode. (Most other age groups have <5 cases.)

Geographic Distribution:

Eighty-one percent of the 118 cases in Region 3 attributed to heterosexual activity were reported in high prevalence counties. Of all the cases with a known risk within high prevalence counties in Region 3, heterosexual transmission constitutes 20 percent. Within low prevalence counties, heterosexual transmission constitutes 29 percent of the cases.

Trends and Conclusions:

In Region 3, heterosexual transmission is statistically level from 1996 to 2000. MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission was stable at 5 in the year 2000.

In Region 3 the number of heterosexual transmission cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSMs, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 3

Description of the Epidemic by Race and Sex

Date from HIV/AIDS Reporting System (HARS)

Number of Cases:

Although white persons comprise the majority of those living with HIV/AIDS in Region 3, the number of black cases is still disproportionate. Blacks comprise 7 percent of this region's population yet make up a third (35 percent) of the cases of HIV/AIDS. MDCH estimates 360 blacks living with HIV/AIDS in Region 3. The rate of HIV infection among blacks is 448 per 100,000 population, seven times higher than the rate among whites. MDCH estimates that as many as one out of 175 black males and one out of 300 black females may be HIV-infected.

White persons comprise over half (58 percent) of reported HIV/AIDS cases and 86 percent of the region's population. MDCH estimates 590 whites living with HIV/AIDS in Region 3. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (63 per 100,000 population). MDCH estimates that as many as one out of 950 white males and one out of 4,350 white females may be HIV-infected.

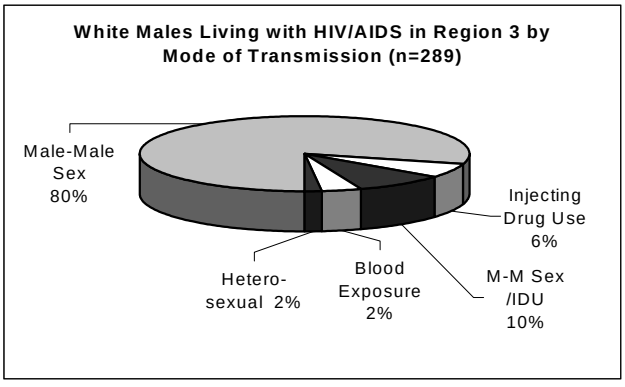
Hispanics comprise 5 percent of cases and 3 percent of the population. MDCH estimates 50 Hispanics living with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (135 per 100,000 population). MDCH estimates that as many as one out of 495 Hispanic males and one out of 860 Hispanic females may be infected.

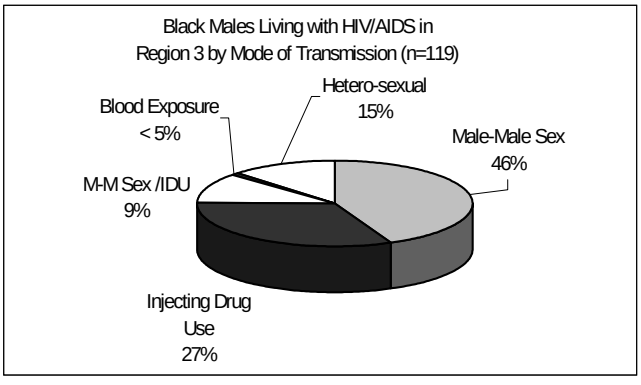
Most persons living with HIV/AIDS in Region 3 are male (74 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 26 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (Refer back to page 6 for female distributions).

- The majority of the 491 male HIV/AIDS cases are white (64 percent), 30 percent black, 5 percent Hispanic and 1 percent are other or unknown race.





- Just over half of the 175 female HIV/AIDS cases are black (51 percent), 41 percent are white, 6 percent are Hispanic and 2 percent are other or unknown race (refer to page 6 for female transmissions data).

2002 Profile of HIV/AIDS in Region 3

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases:

Ninety-two percent of all the black cases occur in high prevalence counties. For whites, the distribution of cases is divided 82 percent and 18 percent between high and low prevalence counties respectively.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However similar to the state, the impact this epidemic is having on blacks is disproportionate.

Female cases in this region are divided between blacks and whites 51 and 41 percent respectively.

Special Populations: Berrien County

Number of Cases:

Berrien County has the highest rate of HIV infection in Region 3 at 142 per 100,000 persons. For persons with a known mode of transmission (106), thirty-eight percent are classified as heterosexual, compared to 15 percent statewide and 21 percent in Region 3. Also, forty-one percent of persons who are HIV infected in Berrien County are classified as MSM (including MSM/IDU), compared with 61 percent statewide and 62 percent in Region 3.

Race/Ethnicity and Sex:

Based on race/ethnicity, sixty-one percent of HIV/AIDS cases are black and 33 percent are white. This is similar to the statewide distribution of cases (58 percent black and 37 percent white) but different from the distribution in Region 3 (35 percent black and 58 percent white).

Of the 152 HIV/AIDS cases in Berrien County, sixty-one percent are male and 39 percent are female. This again varies from the state (77 percent male and 23 percent female) as well as with Region 3 (74 percent male and 26 percent female).

Other Information:

Berrien County also has a total of 13 persons known to be co-infected with HIV and TB. Forty-two foreign nationals are living with HIV/AIDS in Berrien County. Thus, it is important that prevention, outreach and care services are targeted to the appropriate populations.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 3

Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 3 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	% [a]	Rate per 100,000 [3]	2000 Census	%
Male	**750**	**491**	**74%**	**140.7**	**533,214**	**49%**
White Males	*480*	*316*	*47%*	*104.7*	*458,478*	*42%*
Black Males	*220*	*146*	*22%*	*574.3*	*38,305*	*4%*
Hispanic Males	*40*	*25*	*4%*	*202.2*	*19,778*	*2%*
Asian Males	*10*	*	*	*	*5,432*	*0%*
American Indian Males	*10*	*	*	*	*2,515*	*0%*
Unknown Race Males	*N/A*	*	*	*	*8706*	*N/A*
Female	**270**	**175**	**26%**	**48.7**	**554,005**	**51%**
White Females	*110*	*71*	*11%*	*23.0*	*477,785*	*44%*
Black Females	*140*	*90*	*14%*	*332.2*	*42,144*	*4%*
Hispanic Females	*20*	*10*	*2%*	*116.0*	*17,244*	*2%*
Asian Females	*10*	*	*	*	*5,539*	*1%*
American Indian Females	*10*	*	*	*	*2,589*	*0%*
Unknown Race Females	*N/A*	*	*	*	*8704*	*N/A*
White	**590**	**387**	**58%**	**63.0**	**936,263**	**86%**
Black	**360**	**236**	**35%**	**447.5**	**80,449**	**7%**
Hispanic	**50**	**35**	**5%**	**135.1**	**37,022**	**3%**
Asian	**10**	*	*	*	**10,971**	**1%**
American Indian	**10**	*	*	*	**5,104**	**0%**
Unknown Race	**N/A**	*	*	*	**17410**	**N/A**
Male-Male Sex	**450**	**299**	**54%** [a]	N/A		
Injecting Drug Use	**120**	**79**	**14%** [a]	N/A		
IDU with heterosexual risk [b]	*60*	*38*	*7%* [a]	N/A		
IDU without heterosexual risk [b]	*60*	*41*	*7%* [a]	N/A		
M-M Sex and Inject Drugs	**60**	**42**	**8%** [a]	N/A		
Blood Exposure [b]	**20**	**11**	**2%** [a]	N/A		
Heterosexual [b]	**180**	**118**	**21%** [a]	N/A		
Partner IDU	*60*	*41*	*7%* [a]	N/A		
Partner Bisexual [b]	*20*	*11*	*2%* [a]	N/A		
Partner Blood Exp	*10*	*	* [a]	N/A		
Partner HIV+	*100*	*63*	*11%* [a]	N/A		
Perinatal	**10**	**5**	**1%** [a]	N/A		
Known Risk Total	**840**	**554**	**100%** [a]	N/A		
Unknown Risk	**N/A**	**112**	**17%**	N/A		
0 - 4 years	**10**	*	*	*	**71,706**	**7%**
5 - 9 years	**10**	*	*	*	**79,241**	**7%**
10-12 years	**10**	*	*	*	**50307**	**5%**
13 -19 years	**30**	**17**	**3%**	**25.5**	**117,634**	**11%**
20 -24 years	**100**	**65**	**10%**	**136.6**	**73,226**	**7%**
25 -29 years	**190**	**126**	**19%**	**285.7**	**66,512**	**6%**
30 -34 years	**210**	**136**	**20%**	**294.6**	**71,286**	**7%**
35 -39 years	**200**	**131**	**20%**	**240.0**	**83,346**	**8%**
40 -44 years	**120**	**81**	**12%**	**137.5**	**87,254**	**8%**
45 -49 years	**80**	**55**	**8%**	**98.4**	**81,271**	**7%**
50 -54 years	**40**	**25**	**4%**	**56.6**	**70,727**	**7%**
55 -59 years	**20**	**15**	**2%**	**36.4**	**54,965**	**5%**
60 -64 years	**10**	*	*	*	**43,527**	**4%**
65 and over	**10**	**5**	**1%**	**7.3**	**136,217**	**13%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**
ALLEGAN CO.	100	63	9%	94.6	105,665	10%
BERRIEN CO.	230	152	23%	141.6	162,453	15%
Barry/Eaton	60	40	6%	37.4	160,410	15%
BARRY CO.	20	13	2%	35.2	56,755	5%
EATON CO.	40	27	4%	38.6	103,655	10%
Branch/Hillsdale/St.Joseph	50	37	6%	32.3	154,736	14%
BRANCH CO.	10	7	1%	21.8	45,787	4%
HILLSDALE CO.	20	10	2%	43.0	46,527	4%
ST JOSEPH CO.	30	20	3%	48.1	62,422	6%
CALHOUN CO.	150	98	15%	108.7	137,985	13%
CASS CO.	30	19	3%	58.7	51,104	5%
KALAMAZOO CO.	310	204	31%	129.9	238,603	22%
VAN BUREN CO.	80	53	8%	104.9	76,263	7%
Total Region 3	**1,010**	**666**	**100%**	**92.9**	**1,087,219**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan

Region 3

Sex and Race by Risk

January 1, 2002

Male Only Region 3	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**230**	**80%**	**55**	**46%**	**13**	**68%**	*	*	**299**	**70%**
Injecting Drug Use	**16**	**6%**	**32**	**27%**	*	*	*	*	**50**	**12%**
IDU w/ hetero risk[b]	*6*	*2%*	*14*	*12%*	*	*	*	*	*20*	*5%*
IDU w/o hetero risk[b]	*10*	*3%*	*18*	*15%*	*	*	*	*	*30*	*7%*
M-M Sex /IDU	**30**	**10%**	**11**	**9%**	*	*	*	*	**42**	**10%**
Blood Exposure[b]	**7**	**2%**	*	*	*	*	*	*	**9**	**2%**
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**6**	**2%**	**18**	**15%**	*	*	*	*	**27**	**6%**
Partner IDU	*5*	*2%*	*	*	*	*	*	*	*9*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*14*	*12%*	*	*	*	*	*18*	*4%*
Total Known Risks	**289**	**100%**	**119**	**100%**	**19**	**100%**	*	*	**428**	**100%**
Undetermined	**27**		**27**		**6**		*		**63**	
Total All Cases	**316**		**146**		**25**		*		**491**	

Female Only Region 3	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	**11**	**20%**	**17**	**29%**	*	*	*	*	**29**	**23%**
IDU w/ hetero risk[b]	*7*	*13%*	*10*	*17%*	*	*	*	*	*18*	*14%*
IDU w/o hetero risk[b]	*	*	*7*	*12%*	*	*	*	*	*11*	*9%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**42**	**75%**	**41**	**69%**	**6**	**67%**	*	*	**91**	**72%**
Partner IDU	*16*	*29%*	*15*	*25%*	*	*	*	*	*32*	*25%*
Partner Bisexual[b]	*8*	*14%*	*	*	*	*	*	*	*11*	*9%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*16*	*29%*	*24*	*41%*	*	*	*	*	*45*	*36%*
Total Known Risks	**56**	**100%**	**59**	**100%**	**9**	**100%**	*	*	**126**	**100%**
Undetermined	**15**		**31**		*		*		**49**	
Total All Cases	**71**		**90**		**10**		*		**175**	

Male & Female Region 3	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**230**	**67%**	**55**	**31%**	**13**	**46%**	*	*	**299**	**54%**
Injecting Drug Use	**27**	**8%**	**49**	**28%**	*	*	*	*	**79**	**14%**
IDU w/ hetero risk[b]	*13*	*4%*	*24*	*13%*	*	*	*	*	*38*	*7%*
IDU w/o hetero risk[b]	*14*	*4%*	*25*	*14%*	*	*	*	*	*41*	*7%*
M-M Sex /IDU	**30**	**9%**	**11**	**6%**	*	*	*	*	**42**	**8%**
Blood Exposure[b]	**9**	**3%**	*	*	*	*	*	*	**11**	**2%**
Perinatal	*	*	*	*	*	*	*	*	**5**	**1%**
Heterosexual[b]	**48**	**14%**	**59**	**33%**	**9**	**32%**	*	*	**118**	**21%**
Partner IDU	*21*	*6%*	*19*	*11%*	*	*	*	*	*41*	*7%*
Partner Bisexual[b]	*8*	*2%*	*	*	*	*	*	*	*11*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*17*	*5%*	*38*	*21%*	*7*	*25%*	*	*	*63*	*11%*
Total Known Risks	**345**	**100%**	**178**	**100%**	**28**	**100%**	*	*	**554**	**100%**
Undetermined	**42**		**58**		**7**		**5**		**112**	
Total All Cases	**387**		**236**		**35**		**8**		**666**	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with known risk

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Age by Risk
Region 3

January 1, 2002

Male Only Region 3	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	6	55%	26	76%	245	69%	22	76%	299	70%
Injecting Drug Use	*	*	*	*	43	12%	6	21%	50	12%
IDU w/ hetero risk[b]	*	*	*	*	*18*	*5%*	*	*	*20*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*25*	*7%*	*	*	*30*	*7%*
M-M Sex /IDU	*	*	*	*	37	10%	*	*	42	10%
Blood Exposure[b]	*	*	*	*	5	1%	*	*	9	2%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	24	7%	*	*	27	6%
Partner IDU	*	*	*	*	*8*	*2%*	*	*	*9*	*2%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*16*	*5%*	*	*	*18*	*4%*
Total Known Risks	11	100%	34	100%	354	100%	29	100%	428	100%
Undetermined	*		*		49		10		63	
Total All Cases	12		37		403		39		491	

Female Only Region 3	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	24	26%	*	*	29	23%
IDU w/ hetero risk[b]	*	*	*	*	*16*	*18%*	*	*	*18*	*14%*
IDU w/o hetero risk[b]	*	*	*	*	*8*	*9%*	*	*	*11*	*9%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	19	90%	62	68%	6	75%	91	72%
Partner IDU	*	*	*8*	*38%*	*23*	*25%*	*	*	*32*	*25%*
Partner Bisexual[b]	*	*	*	*	*7*	*8%*	*	*	*11*	*9%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*8*	*38%*	*32*	*35%*	*	*	*45*	*36%*
Total Known Risks	10	100%	21	100%	91	100%	8	100%	126	100%
Undetermined	*		7		41		*		49	
Total All Cases	11		28		132		10		175	

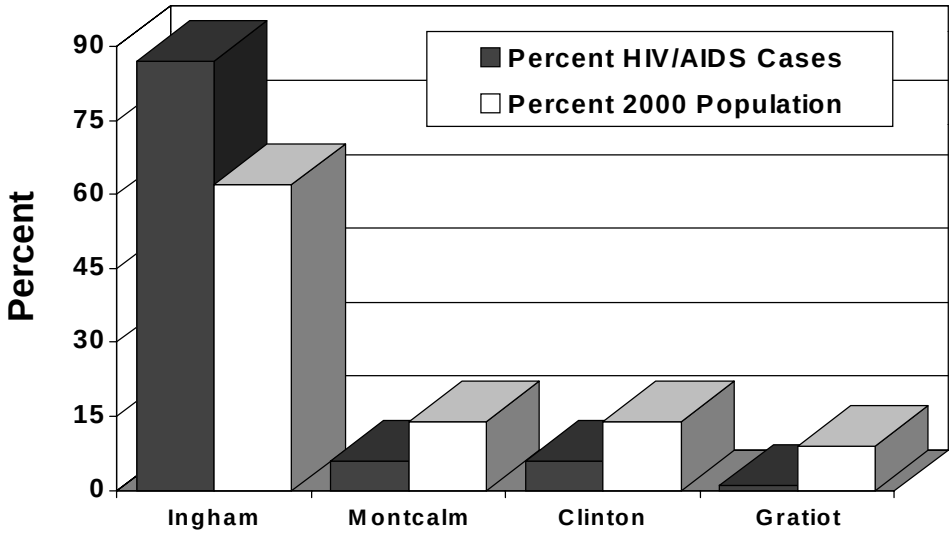
Male & Female Region 3	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	6	29%	26	47%	245	52%	22	59%	299	54%
Injecting Drug Use	*	*	*	*	67	14%	7	19%	79	14%
IDU w/ hetero risk[b]	*	*	*	*	*34*	7%	*	*	*38*	7%
IDU w/o hetero risk[b]	*	*	*	*	*33*	7%	*	*	*41*	7%
M-M Sex /IDU	*	*	*	*	37	8%	*	*	42	8%
Blood Exposure[b]	*	*	*	*	6	1%	*	*	11	2%
Perinatal	5	24%	*	*	*	*	*	*	5	1%
Heterosexual[b]	*	*	22	40%	86	18%	6	16%	118	21%
Partner IDU	*	*	*9*	16%	*31*	7%	*	*	*41*	7%
Partner Bisexual[b]	*	*	*	*	*7*	1%	*	*	*11*	2%
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*10*	18%	*48*	10%	*	*	*63*	11%
Total Known Risks	21	100%	55	100%	471	100%	37	100%	554	100%
Undetermined	*		10		98		12		112	
Total All Cases	23		65		569		49		666	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with known risk

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Region 4 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 4

Table of Contents/Region 4

Tables:

2002 Profile of HIV/AIDS in Region 4

Summary of Epidemic for Region 4

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 520 people living with HIV/AIDS in Region 4, of which 344 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 20 new cases in the year 2000. The number AIDS deaths dropped 65 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 4 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there. Individually, however, the Ingham County health department has more cases than would be expected. The graph on the previous page displays the distribution of reported cases by local health department within Region 4. The greatest percent of cases within this region, 87 percent, was recorded in the local health department of Ingham.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county however most contain a single county. All LHDs have been labeled as either being in a high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 4, Ingham Co. is considered to be a LHD in a high prevalence area, while Clinton, Gratiot, and Montcalm counties are considered to be LHDs in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 4. The guiding question used in this process has been, “In which populations can strategies prevent the most infections from occurring?” Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 67 percent of all HIV/AIDS cases with a known mode of transmission (201 out of 303). The MSM behavioral group continues to be the most affected behavioral group even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 20 percent are IDUs (60 out of 303). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** Heterosexual cases constitute 16 percent of the total number of cases with a known mode of transmission (49 out of 303) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men or 3) HIV+ individuals. The trend in heterosexual transmission is level in Region 4.

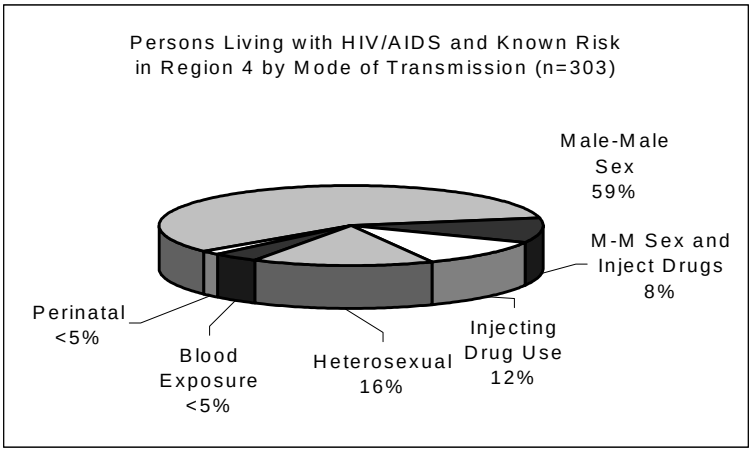
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 4

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.

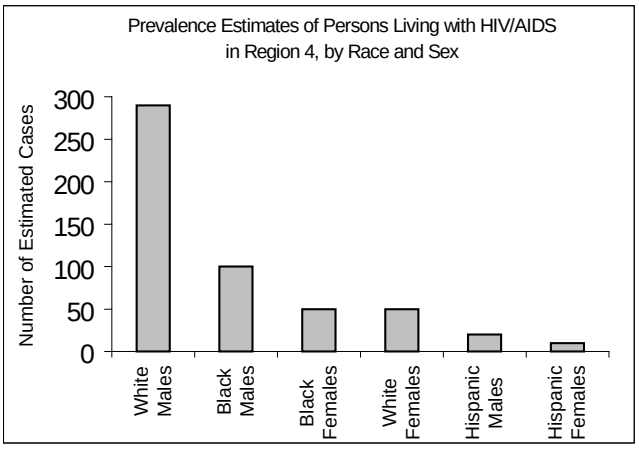


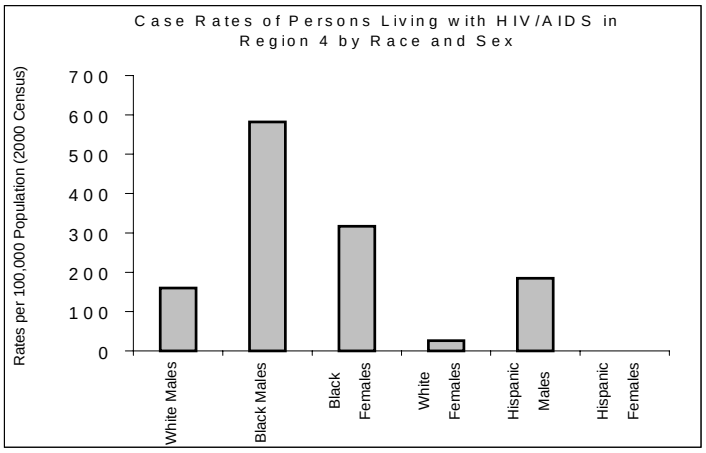
The pie chart indicates the number of people living with HIV/AIDS in Region 4 by mode of transmission for the 303 cases for which the risk was identifiable.

- This chart demonstrates that over two-thirds (67 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 8 percent who also injected drugs.
- Almost one quarter (20 percent) are injecting drug users, including 8 percent who are also MSM. Thirty-eight percent of non-MSM IDUs also have high risk heterosexual sex partners. (Table 1, page 11.)
- Finally, 16 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System





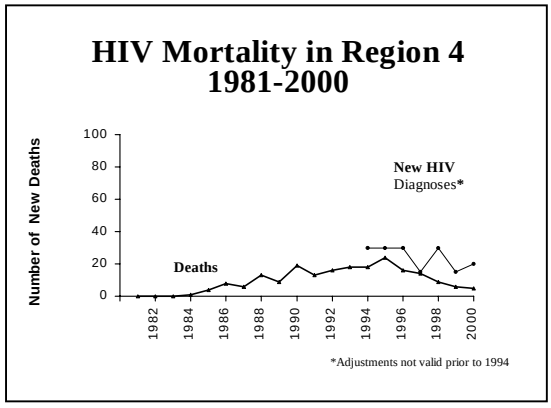
These bar graphs show the impact of this epidemic on six race and sex groups:

- Black males have the highest rate per 100,000 population (582) and the second highest estimated number (100) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Hispanic males have the third highest rate (185) and the lowest estimated number (20) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- Black females have the second highest rate (317) and the third highest estimated number (50) of cases (tied with white females).
- White males have the fourth highest rate (160) and the highest estimated number (290) of cases.
- White females have the lowest rate (26) and the third highest estimated number (50) of HIV/AIDS cases (tied with black females).
- An accurate rate for Hispanic females cannot be provided due to low number of cases. Hispanic females have an estimated number of 10 HIV/AIDS cases.

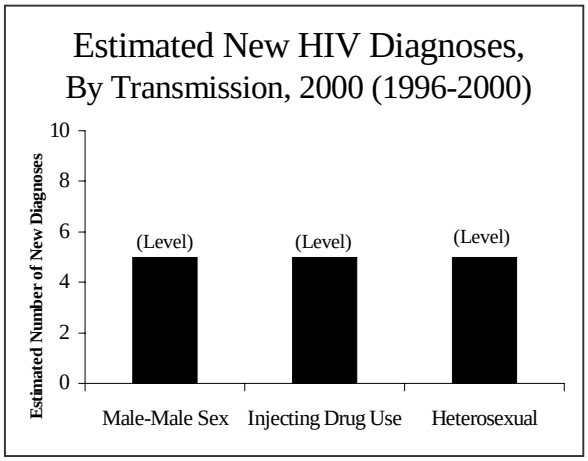
2002 Profile of HIV/AIDS in Region 4

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 20 persons were newly infected in the year 2000 in Region 4.



- *Transmission of HIV 1996-2000*: Among persons with a known risk for HIV transmission, new diagnoses among men who have sex with men are stable with 5 persons in 2000. The proportion infected heterosexually and via IDU are both level at 5 persons each in the year 2000. New diagnoses are level among men who both have sex with men and inject drugs, however they are not included in this graph. There were fewer than 5 persons diagnosed each year who acquired HIV from blood products received before 1985, and fewer than 5 infants infected at birth each year.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	75%	81%
Females	25%	19%
Whites	63%	65%
Blacks	27%	27%
Hispanics	6%	6%
Other Minorities	2%	1%
Race Unknown	2%	1%
White Males	51%	56%
Black Males	16%	16%
Hispanic Males	6%	5%
Other Minority Males	2%	1%
Unknown Race Males	1%	1%
White Females	12%	10%
Black Females	11%	9%
Hispanic Females	0%	1%
Other Minority Females	0%	0%
Other Females	1%	0%
0-12 years*	0%	1%
13-19 years*	2%	1%
20-24 years*	1%	2%
25-44 years*	69%	73%
45+ years*	28%	23%
Total HIV Infected	212	344

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2000, 212 HIV-infected persons were reported receiving Ryan White Services in Region 4. A comparison shows reported cases in Region 4 are not significantly different than those receiving services through RWCA.

Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (344), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 4

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 4. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 300 MSM living with HIV disease in Region 4. This includes 30 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 4. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 201), white males (156) account for more than three-quarters (78 percent) while black males (30) comprise approximately 15 percent of men in this combined category.

Age: The largest percentage of living MSM cases are between the ages of 25-49 (83 percent). MSM is the predominant mode of transmission for males ages 20 and up.

Geographic Distribution:

Just 4 percent of HIV-infected MSM statewide reside in Region 4. Within high prevalence counties, MSMs are 68 percent of the cases with a known risk while in the lower prevalence counties 56 percent of reported persons living with HIV/AIDS are MSM.

Trends and Conclusions:

MDCH estimates that there are about 5 new HIV infections in the year 2000 among men who have sex with men. This number was level from 1996-2000 in Region 4.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older. Older men are more likely to be HIV-infected than are younger males.

Region 4 should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally, especially in high prevalence areas.

2002 Profile of HIV/AIDS in Region 4

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 4 and account for 20 percent of reported infected persons with a known risk. MDCH estimates there are approximately 90 IDUs living with HIV disease in Region 4. This estimate includes 30 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals and MSM. Over one third (38 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 49 cases with reported heterosexual risk, 14 individuals (29 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 24 percent (74 cases) of people reported with HIV disease and having a known risk in Region 4. This is similar to the nationwide picture.

Race/Ethnicity and Sex:

Of the 60 IDU HIV/AIDS cases, 30 are white men (50 percent), 13 are black men (22 percent), 5 are black women (8 percent), 5 are white women (8 percent), and five are Hispanic (8 percent). In total, 58 percent (35) of the cases occur in white IDU.

More than three-quarters of the cases are men (80 percent), while women constitute the remaining 20 percent. Among the 12 women whose HIV infection has been attributed to IDU, 58 percent report high-risk heterosexual sex partners.

Age:

Among men with a known risk in each age group over 25 years, IDU is the second most common mode of transmission. Ninety-two percent of all the male IDU cases are recorded among men in the 25-49 age group (52 percent of these were MSM/IDU).

Geographic Distribution:

Ninety-two percent of IDU cases were reported in the higher prevalence areas of the region. Within high prevalence counties, just under a quarter of cases with a known risk (21 percent*) are IDU, while in the lower prevalence counties 12 percent* of persons living with HIV/AIDS are IDU. (* These percentages include IDU males who are also MSM).

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (including MSM/IDU) has remained level between 1996 and 2000, at approximately 5 new HIV infections in the year 2000. IDU cases in Region 4 are greater among whites than among blacks. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs.

In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 4

Ranked Behavioral Group Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 4. Heterosexual sex accounts for 16 percent of reported infected persons with a known risk. MDCH estimates that 70 persons living with HIV disease in Region 4 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 14 infected IDUs who had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. With regard to reported cases, the dual risk of IDU/heterosexual cases comprise 5 percent of all reported HIV/AIDS cases with a known risk and are 50 percent men and 50 percent women within Region 4.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

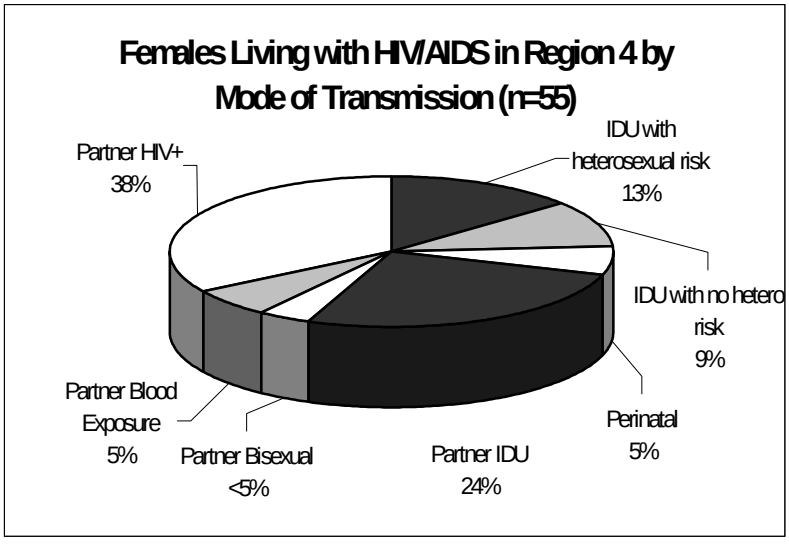
Race/Ethnicity and Sex:

Among females reported with HIV/AIDS and a known risk, just under three-quarters (71 percent) of cases are contracted heterosexually. Additionally, among women with a known risk, 13 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 49 men and women living with HIV/AIDS and infected heterosexually, 29 percent reported their heterosexual partner as injecting drug users, <5 percent as bisexual men (this applies to women only) and 10 percent as persons infected through blood products. Over half (57 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 19 percent of HIV/AIDS cases in Region 4 they have consistently accounted for over three-quarters of heterosexually acquired infections -- currently 80 percent.

Just under three-quarters of both black and white women with known risk were infected heterosexually (70 percent and 77 percent, respectively).



Over half of the heterosexual cases of HIV/AIDS are white (55 percent). The percent of men infected heterosexually is low--4 percent of cases among men of all races with a known risk.

The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a partner who is: 1) HIV+, 2) HIV+ due to blood exposure, 3) bisexually active man, or 4) an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected women with known risk are shown in the pie chart here.

2002 Profile of HIV/AIDS in Region 4

Ranked Behavioral Group: Heterosexuals (Continued)

Age:

For women between the ages of 25 and 49, heterosexual transmission is the predominant mode. (All other age groups have <5 cases.)

Geographic Distribution:

Seventy-six percent of the 49 cases in Region 4 attributed to heterosexual activity were reported in high prevalence counties. Of all the cases within high prevalence counties in Region 4, heterosexual transmission constitutes 14 percent. Within low prevalence counties, heterosexual transmission constitutes 28 percent of the cases.

Trends and Conclusions:

In Region 4, heterosexual transmission is level. MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission was stable from 1996 to 2000 with 5 new infections in 2000.

In Region 4 the number of heterosexual transmission cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSMs, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 4

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Although white persons comprise the majority of those living with HIV/AIDS in Region 4, the number of black cases is still disproportionate. Blacks comprise 7 percent of this region's population yet make up over a quarter (27 percent) of the cases of HIV/AIDS. MDCH estimates 140 blacks living with HIV/AIDS in Region 4. The rate of HIV infection among blacks is 425 per 100,000 population, four and one half times higher than the rate among whites. MDCH estimates that as many as one out of 170 black males and one out of 315 black females may be HIV-infected.

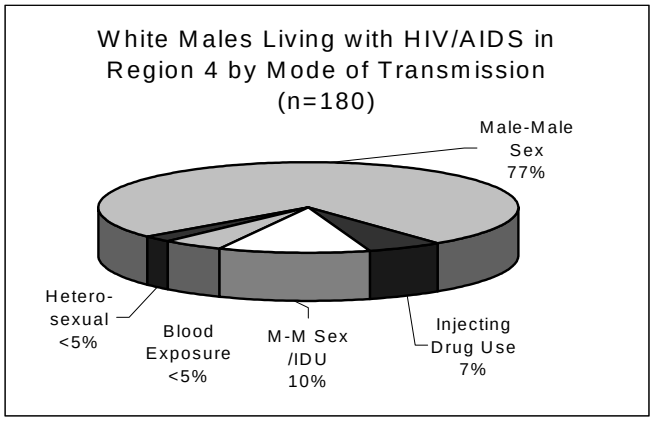
White persons comprise about two-thirds (65 percent) of reported HIV/AIDS cases and over three-quarters of the region's population (83 percent). MDCH estimates 340 whites living with HIV/AIDS in Region 4. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (92 per 100,000 population). MDCH estimates that as many as one out of 625 white males and one out of 3,800 white females may be HIV-infected.

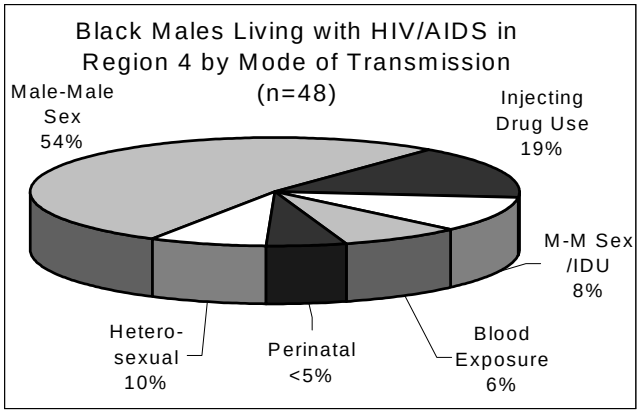
Hispanics comprise 6 percent of cases and 5 percent of the population. MDCH estimates 30 Hispanics living with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (142 per 100,000 population). MDCH estimates that as many as one out of 540 Hispanic males may be HIV-infected. Low case numbers do not permit an accurate rate for Hispanic females.

Most persons living with HIV/AIDS in Region 4 are male (81 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 19 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (Refer back to page 6 for female distributions).





- The majority of the 277 male HIV/AIDS cases are white (69 percent), 23 percent black, 6 percent Hispanic and <5 percent are other or unknown race.

- Just under half of the 67 female HIV/AIDS cases are white (49 percent), 45 percent are black, 6 percent are Hispanic and of other or unknown race (refer to page 6 for break down of female transmissions).

2002 Profile of HIV/AIDS in Region 4

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases:

Ninety-six percent of all the black cases occur in high prevalence counties. For whites, the distribution of cases is divided 82 percent and 18 percent between high and low prevalence counties respectively.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However similar to the state, the impact this epidemic is disproportionate on blacks.

Female cases in this region are divided between blacks and whites at 45 and 49 percent respectively.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 4
Prisoners and persons with unknown residence are included
January 1, 2002

Reigon 4 Patient Group	Estimated HIV Infection 1	Total HIV + AIDS Reported 2 Cases	%	Rate per 100,0003	2000 Census	%
Male	**420**	**277**	**81%**	**190.5**	**220,434**	**49%**
White Males	*290*	*191*	*56%*	*159.9*	*181,344*	*41%*
Black Males	*100*	*64*	*19%*	*582.1*	*17,178*	*4%*
Hispanic Males	*20*	*16*	*5%*	*184.6*	*10,834*	*2%*
Asian Males	*10*	*	*	*	*5,476*	*1%*
American Indian Males	*10*	*	*	*	*1,087*	*0%*
Unknown Race Males	*N/A*	*	*	*	*4515*	*N/A*
Female	**100**	**67**	**19%**	**44.0**	**227,190**	**51%**
White Females	*50*	*33*	*10%*	*26.3*	*190,094*	*42%*
Black Females	*50*	*30*	*9%*	*316.5*	*15,797*	*4%*
Hispanic Females	*10*	*	*	*	*10,313*	*2%*
Asian Females	*10*	*	*	*	*5,514*	*1%*
American Indian Females	*10*	*	*	*	*1,054*	*0%*
Unknown Race Females	*N/A*	*	*	*	*4418*	*N/A*
White	**340**	**224**	**65%**	**91.5**	**371,438**	**83%**
Black	**140**	**94**	**27%**	**424.6**	**32,975**	**7%**
Hispanic	**30**	**20**	**6%**	**141.9**	**21,147**	**5%**
Asian	**10**	*	*	*	**10,990**	**2%**
American Indian	**10**	*	*	*	**2,141**	**0%**
Unknown Race	**N/A**	*	*	**N/A**	**8933**	**N/A**
Male-Male Sex	**270**	**178**	**59%** [a]	N/A		
Injecting Drug Use	**60**	**37**	**12%** [a]	N/A		
IDU with heterosexual risk [b]	*20*	*14*	*5%* [a]	N/A		
IDU without heterosexual risk [b]	*30*	*23*	*8%* [a]	N/A		
M-M Sex and Inject Drugs	**30**	**23**	**8%** [a]	N/A		
Blood Exposure [b]	**20**	**12**	**4%** [a]	N/A		
Heterosexual [b]	**70**	**49**	**16%** [a]	N/A		
Partner IDU	*20*	*14*	*5%* [a]	N/A		
Partner Bisexual [b]	*10*	*	* [a]	N/A		
Partner Blood Exp	*10*	*5*	*2%* [a]	N/A		
Partner HIV+	*40*	*28*	*9%* [a]	N/A		
Perinatal	**10**	*	* [a]	N/A		
Known Risk Total	**460**	**303**	**100%** [a]	N/A		
Unknown Risk	**N/A**	**41**	**12%**	N/A		
0 - 4 years	**10**	*	*	*	**28,621**	**6%**
5 - 9 years	**10**	*	*	*	**31,064**	**7%**
10-12 years	**10**	*	*	*	**18949**	**4%**
13 -19 years	**10**	**7**	**2%**	**19.3**	**51,700**	**12%**
20 -24 years	**50**	**31**	**9%**	**108.1**	**46,245**	**10%**
25 -29 years	**100**	**64**	**19%**	**322.5**	**31,012**	**7%**
30 -34 years	**120**	**80**	**23%**	**386.1**	**31,077**	**7%**
35 -39 years	**110**	**71**	**21%**	**329.8**	**33,351**	**7%**
40 -44 years	**60**	**38**	**11%**	**174.2**	**34,453**	**8%**
45 -49 years	**30**	**20**	**6%**	**94.1**	**31,886**	**7%**
50 -54 years	**20**	**15**	**4%**	**73.2**	**27,304**	**6%**
55 -59 years	**10**	**9**	**3%**	**48.8**	**20,499**	**5%**
60 -64 years	**10**	*	*	*	**15,034**	**3%**
65 and over	**10**	*	*	*	**46,429**	**10%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**
INGHAM CO.	450	299	87%	161.1	279,320	62%
Mid-MI District	60	45	13%	35.6	168,304	38%
CLINTON CO.	30	20	6%	46.3	64,753	14%
GRATIOT CO.	10	*	*	*	42,285	9%
MONTCALM CO.	30	22	6%	49.0	61,266	14%
Total Region 4	**520**	**344**	**100%**	**116.2**	**447,624**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with known risk

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (Estimated HIV Infection/2000 Census) * 100,000

Table 2: Living HIV/AIDS Cases in Michigan
Region 4
Sex and Race by Risk
January 1, 2002

Male Only Region 4	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**138**	**77%**	**26**	**54%**	**10**	**71%**	*	*	**178**	**72%**
Injecting Drug Use	**12**	**7%**	**9**	**19%**	*	*	*	*	**25**	**10%**
IDU w/ hetero risk[b]	*	*	*	*	*	*	*	*	*7*	*3%*
IDU w/o hetero risk[b]	*8*	*4%*	*7*	*15%*	*	*	*	*	*18*	*7%*
M-M Sex /IDU	**18**	**10%**	*	*	*	*	*	*	**23**	**9%**
Blood Exposure[b]	**8**	**4%**	*	*	*	*	*	*	**11**	**4%**
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	**5**	**10%**	*	*	*	*	**10**	**4%**
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*7*	*3%*
Total Known Risks	**180**	**100%**	**48**	**100%**	**14**	**100%**	**6**	**100%**	**248**	**100%**
Undetermined	**11**		**16**		*		*		**29**	
Total All Cases	**191**		**64**		**16**		**6**		**277**	

Female Only Region 4	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	**5**	**17%**	**5**	**22%**	*	*	*	*	**12**	**22%**
IDU w/ hetero risk[b]	*	*	*	*	*	*	*	*	*7*	*13%*
IDU w/o hetero risk[b]	*	*	*	*	*	*	*	*	*5*	*9%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**23**	**77%**	**16**	**70%**	*	*	*	*	**39**	**71%**
Partner IDU	*7*	*23%*	*6*	**26%**	*	*	*	*	*13*	*24%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*13*	*43%*	*8*	**35%**	*	*	*	*	*21*	*38%*
Total Known Risks	**30**	**100%**	**23**	**100%**	*	*	*	*	**55**	**100%**
Undetermined	*		**7**		*		*		**12**	
Total All Cases	**33**		**30**		*		*		**67**	

Male & Female Region 4	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**138**	**66%**	**26**	**37%**	**10**	**63%**	*	*	**178**	**59%**
Injecting Drug Use	**17**	**8%**	**14**	**20%**	**5**	**31%**	*	*	**37**	**12%**
IDU w/ hetero risk[b]	*8*	*4%*	*	*	*	*	*	*	*14*	*5%*
IDU w/o hetero risk[b]	*9*	*4%*	*10*	*14%*	*	*	*	*	*23*	*8%*
M-M Sex /IDU	**18**	**9%**	*	*	*	*	*	*	**23**	**8%**
Blood Exposure[b]	**8**	**4%**	*	*	*	*	*	*	**12**	**4%**
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	**27**	**13%**	**21**	**30%**	*	*	*	*	**49**	**16%**
Partner IDU	*7*	*3%*	*7*	*10%*	*	*	*	*	*14*	*5%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*5*	*2%*
Partner HIV+	*15*	*7%*	*12*	*17%*	*	*	*	*	*28*	*9%*
Total Known Risks	**210**	**100%**	**71**	**100%**	**16**	**100%**	**6**	**100%**	**303**	**100%**
Undetermined	**14**		**23**		*		*		**41**	
Total All Cases	**224**		**94**		**20**		**6**		**344**	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Region 4
Age by Risk
January 1, 2002

Male Only Region 4	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	17	89%	143	70%	17	77%	178	72%
Injecting Drug Use	*	*	*	*	21	10%	*	*	25	10%
IDU w/ hetero risk[b]	*	*	*	*	*6*	*3%*	*	*	*7*	*3%*
IDU w/o hetero risk[b]	*	*	*	*	*15*	*7%*	*	*	*18*	*7%*
M-M Sex /IDU	*	*	*	*	23	11%	*	*	23	9%
Blood Exposure[b]	*	*	*	*	8	4%	*	*	11	4%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	8	4%	*	*	10	4%
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*6*	*3%*	*	*	*7*	*3%*
Total Known Risks	*	*	19	100%	203	100%	22	100%	248	100%
Undetermined	*		*		20		*		29	
Total All Cases	6		23		223		25		277	

Female Only Region 4	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	8	19%	*	*	12	22%
IDU w/ hetero risk[b]	*	*	*	*	*6*	*14%*	*	*	*7*	*13%*
IDU w/o hetero risk[b]	*	*	*	*	*	*	*	*	*5*	*9%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	33	77%	*	*	39	71%
Partner IDU	*	*	*	*	*12*	*28%*	*	*	*13*	*24%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*16*	*37%*	*	*	*21*	*38%*
Total Known Risks	5	100%	7	100%	43	100%	*	*	55	100%
Undetermined	*		*		10		*		12	
Total All Cases	6		8		53		*		67	

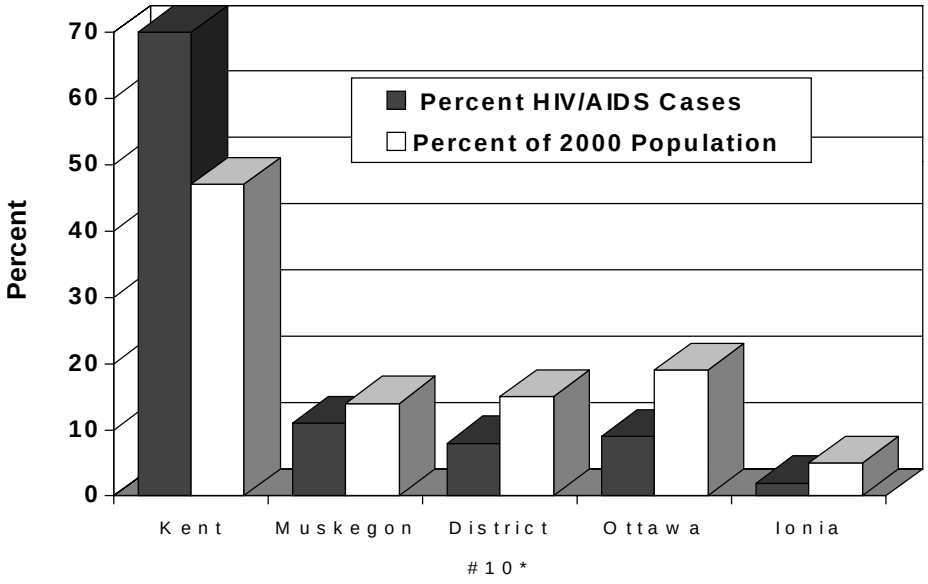
Nale & Female Region 4	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	17	65%	143	54%	17	71%	178	59%
Injecting Drug Use	*	*	*	*	29	11%	5	21%	37	12%
IDU w/ hetero risk[b]	*	*	*	*	*12*	*5%*	*	*	*14*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*17*	*6%*	*	*	*23*	*8%*
M-M Sex /IDU	*	*	*	*	23	9%	*	*	23	8%
Blood Exposure[b]	*	*	*	*	8	3%	*	*	12	4%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	5	19%	41	15%	*	*	49	16%
Partner IDU	*	*	*	*	*12*	*5%*	*	*	*14*	*5%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*5*	*2%*	*	*	*5*	*2%*
Partner HIV+	*	*	*5*	*19%*	*22*	*8%*	*	*	*28*	*9%*
Total Known Risks	9	100%	26	100%	265	100%	24	100%	303	100%
Undetermined	*		5		32		*		41	
Total All Cases	12		31		297		28		344	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Region 5 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



*District #10 in Region 5

Lake
Manistee
Mason
Mecosta
Newaygo
Oceana

2002 Profile of HIV/AIDS in Region 5

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2002 Profile of HIV/AIDS in Region 5

Summary of Epidemic for Region 5

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 1,200 people living with HIV/AIDS in Region 5, of which 786 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 60 new cases in 2000. The number AIDS deaths dropped 67 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 5 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health departments within Region 5. The greatest percent of cases within this region, 70 percent, was recorded in the local health department of Kent.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county however most contain a single county. All LHDs have been labeled as either being in high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 5, Kent county is considered to be a LHD in a high prevalence area, while Muskegon, Ionia, Lake, Manistee, Mason, Mecosta, Newaygo, Oceana, and Ottawa counties are considered to be LHDs in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 5. The guiding question used in this process has been, “In which populations can strategies prevent the most infections from occurring?” Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSMs make up 63 percent of all HIV/AIDS cases with a known mode of transmission (425 out of 678). The MSM behavioral group continues to be the most affected behavioral group even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 22 percent are IDUs (149 out of 678). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** HRH cases constitute 18 percent of the total number of cases with a known mode of transmission (124 out of 678) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men or 3) HIV+ individuals. The trend in heterosexual transmission is level in Region 5.

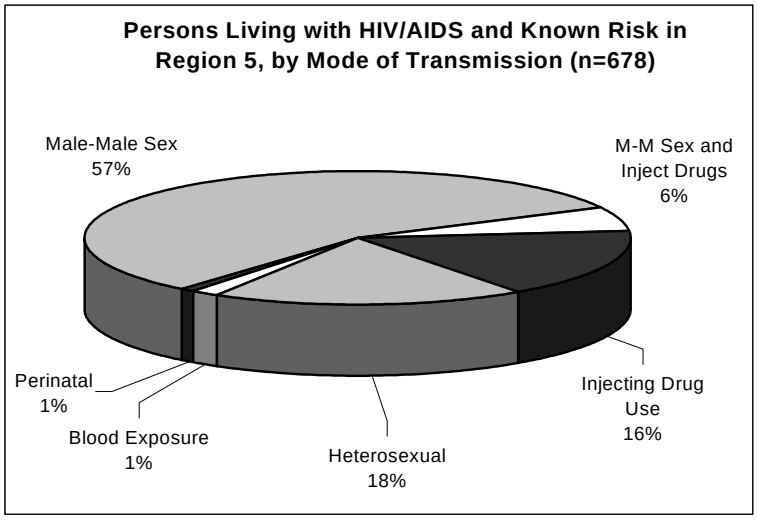
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 5

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.



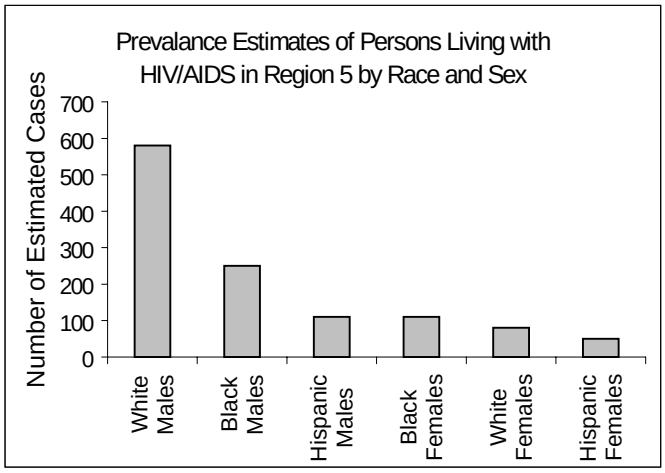
The pie chart indicates the number of people living with HIV/AIDS in Region 5 by mode of transmission for the 678 cases for which the risk was identifiable.

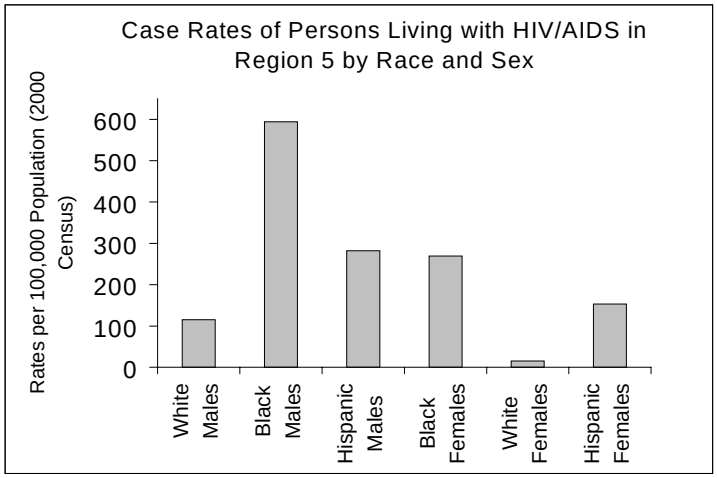
- This chart demonstrates that just under two-thirds (63 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 6 percent who also injected drugs.
- Just under a quarter (22 percent) are injecting drug users, including 6 percent who are also MSM. Fifty percent of non-MSM IDU also have high risk heterosexual sex partners. (Table 1, page 12.)
- Finally, 18 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on six race and sex groups.



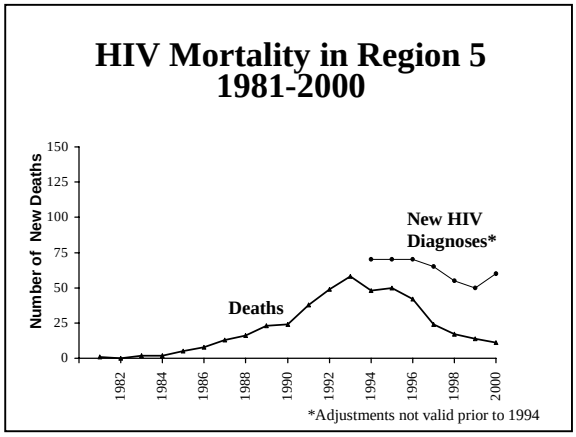


- Black males have the highest rate per 100,000 population (594) and the second highest estimated number (250) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Hispanic males have the second highest rate (282) and the third highest estimated number (110) of cases (tied with black females). This means that the impact of this epidemic is high on a relatively small demographic group.
- Black females have the third highest rate (269) and the third highest estimated number (110) of cases of HIV/AIDS (tied with Hispanic males).
- Hispanic females have the fourth highest rate (152) and the lowest estimated number (50) of HIV/AIDS cases.
- White males have the fifth highest rate (115) and the highest estimated number (580) of cases.
- White females have the lowest rate (15) and the forth highest estimated number (80) of HIV/AIDS cases.

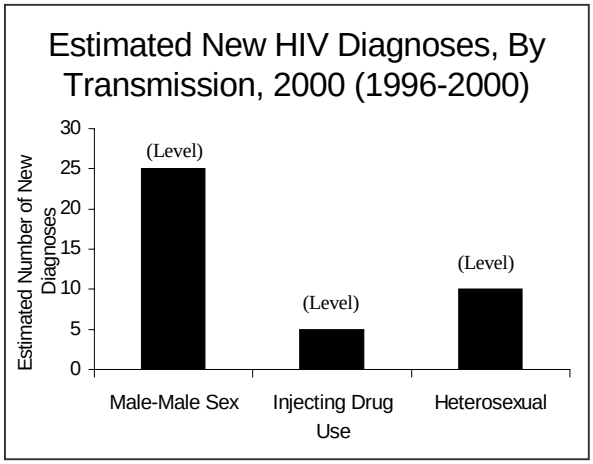
2002 Profile of HIV/AIDS in Region 5

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 60 persons were newly infected in the year 2000 in Region 5.



- *Transmission of HIV 1996-2000*: New diagnoses among men who have sex with men are stable at 25 persons in 2000. The proportion infected heterosexually and via IDU has remained level at around 10 cases and 5 cases, respectively, in 2000. New diagnoses are level among men who have sex with men and inject drugs, however they are not included in this graph. There were fewer than 10 persons diagnosed each year who acquired infection from blood products received before 1985, and fewer than 10 infants infected at birth each year.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	76%	79%
Females	24%	21%
Whites	56%	55%
Blacks	25%	30%
Hispanics	13%	13%
Other Minorities	2%	2%
Race Unknown	4%	0%
White Males	47%	48%
Black Males	17%	20%
Hispanic Males	9%	9%
Other Minority Males	1%	1%
Uknown Race Males	2%	0%
White Females	9%	7%
Black Females	8%	9%
Hispanic Females	4%	4%
Other Minority Fem.	1%	1%
Unknown Race Fem.	2%	0%
0-12 years*	1%	1%
13-19 years*	0%	2%
20-24 years*	4%	4%
25-44 years*	68%	73%
45+ years*	25%	20%
Total HIV Infected	679	786

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2001, 679 HIV-infected persons were reported receiving Ryan White Services in Region 5. A comparison also shows that persons reported as cases in Region 5 are not significantly different than those receiving services through RWCA.

Since it is likely that most of these individuals receiving care are reported cases, when comparing their number to that of the total number of reported cases (786), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 5

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 5. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 650 MSM living with HIV disease in Region 5. This includes 60 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 5. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 425), white males (314) account for more than three-quarters (74 percent) while black males (76) comprise approximately 18 percent of men in this combined category.

Age: The largest percentage of living MSM cases are between the ages of 25-49 (82 percent). MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

Just 8 percent of all HIV-infected MSM statewide reside in Region 5. Within high prevalence counties, MSMs constitute 62 percent of the cases with a known risk.

Trends and Conclusions:

MDCH estimates that there are about 25 new HIV infections in the year 2000 among men who have sex with men. This number was level from 1996-2000 in Region 5.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older. Older men are more likely to be HIV-infected than are younger males.

Region 5 should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally, especially in high prevalence areas.

2002 Profile of HIV/AIDS in Region 5

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 5 and account for 22 percent of reported infected persons with a known risk. MDCH estimates there are approximately 230 IDUs living with HIV disease in Region 5. This estimate includes 60 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals and MSM. Half (50 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 124 cases with reported heterosexual risk, 31 individuals (25 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 27 percent (180 cases) of people reported with HIV disease and having a known risk in Region 5. This is similar to the nationwide picture.

Western Michigan Drug Treatment HIV Seroprevalence Study:

From June 1998 to March 1999 an anonymous, unlinked HIV seroprevalence study was conducted among 1,120 persons receiving drug treatment through a drug and alcohol treatment center in Kent County. From these participants 1,115 HIV test results were available and revealed an overall seroprevalence of 1.3 percent (15 persons).

One-fifth of all clients had ever injected drugs, and 61 percent of IDUs had injected in the last 12 months, with heroin being the primary drug injected. Six HIV-infected persons (40 percent) had ever injected drugs, and three of these had injected in the last 12 months. One-third of IDU, including three HIV-infected IDU, had shared works since 1978.

HIV seroprevalence was higher among IDU than non-IDU (2.6 percent versus 1 percent), but the majority of the HIV-infected (60 percent) did not report injecting drugs and their risk factors were not known. Although HIV seroprevalence among white males was low in this population, they accounted for the largest proportion of IDU and the largest proportion of IDU who share needles.

Of the 1,120 persons in the study, 825 persons were tested for HCV, and 202 (25%) were positive. Of the 14 HIV-infected persons who were tested, 8 (57%) were co-infected with HCV. HCV seroprevalence was much higher among persons who had injected drugs (61%) than among persons using non-injected drugs (14%).

Race/Ethnicity and Sex:

Of the 149 IDU HIV/AIDS cases, 51 are black men (34 percent), 13 are black women (9 percent), 45 are white men (30 percent), 15 are white women (10 percent), and 16 are Hispanic males (11 percent). In total, 43 percent (64) of the cases occur in black IDU.

More than three-quarters of the cases are men (76 percent), while women constitute the remaining 24 percent. Among the 36 women whose HIV infection has been attributed to IDU, 56 percent report high-risk heterosexual sex partners.

2002 Profile of HIV/AIDS in Region 5

Ranked Behavioral Group: IDU (continued)

Age:

Among men with a known risk in each age group over 25 years, IDU is the second most common mode of transmission. Nearly half, (45 percent) of IDU cases are among men in their thirties (35 percent of these were MSM/IDU).

Geographic Distribution:

Eighty-four percent of IDU cases were reported in the higher prevalence areas of the region. Within high prevalence counties, just under a quarter of cases with a known risk (23 percent) are IDU, while in the lower prevalence counties 19 percent of persons living with HIV/AIDS are IDU (these percentages include IDU males who are also MSM).

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (including MSM/IDU) has remained level between 1996 and 2000, at approximately 5 new HIV infections in the year 2000. IDU cases in Region 5 are higher among blacks than among whites. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs.

In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 5

Ranked Behavioral Group Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 5. Heterosexual sex accounts for 18 percent of reported infected persons with a known risk. MDCH estimates that 190 persons living with HIV disease in Region 5 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 80 infected persons who are classified as IDUs but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. With regard to reported cases, the dual risk of IDU with heterosexual risk comprise 8 percent of all reported HIV/AIDS cases with a known risk and are 64 percent men and 36 percent women within Region 5.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

Race/Ethnicity and Sex:

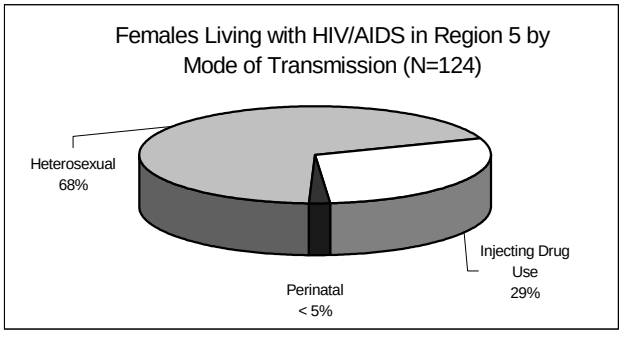
Among females reported with HIV/AIDS and a known risk, over two-thirds (68 percent) of cases are contracted heterosexually. Additionally, among women with a known risk, 16 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 124 men and women living with HIV/AIDS and infected heterosexually, 25 percent reported their heterosexual partner as injecting drug users, 4 percent as bisexual men (this applies to women only) and 3 percent as persons infected through blood products. Two-thirds (68 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 21 percent of HIV/AIDS cases in Region 5 they have consistently accounted for over two-thirds of heterosexually acquired infections -- currently 68 percent.

Over two-thirds of both black and white women were infected heterosexually (66 percent and 67 percent, respectively).

In Region 5, 36 percent of the female heterosexual cases are white, 35 percent are black, and 25 percent are Hispanic. Blacks and whites each make up about one third of the heterosexual cases (34 percent and 35 percent, respectively). Hispanics constitute over one quarter (28 percent). The percent of men infected heterosexually is low–7 percent of cases among men of all races with a known risk.



The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a partner who is: 1) HIV+, 2) HIV+ due to blood exposure, 3) bisexually active man, or 4) an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected women with known risk are shown in the pie chart here.

2002 Profile of HIV/AIDS in Region 5

Ranked Behavioral Group: Heterosexuals (Continued)

Age:

For women between the ages of 20 and 49, heterosexual transmission is the predominant mode. (All other age groups have <5 cases.)

Geographic Distribution:

Eighty-three percent of the 124 cases in Region 5 attributed to heterosexual activity were reported in high prevalence counties. Of all the cases within high prevalence counties in Region 5, heterosexual transmission constitutes 19 percent. Within low prevalence counties, heterosexual transmission constitutes 16 percent of the cases.

Trends and Conclusions:

In Region 5, heterosexual transmission is level. MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission was stable at 10 persons in the year 2000.

In Region 5 the number of heterosexual transmission cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSMs, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 5

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Although white persons comprise the majority of those living with HIV/AIDS in Region 5, the number of black cases is still disproportionate. Blacks comprise 7 percent of this region's population yet make up more than a quarter (30 percent) of the cases of HIV/AIDS. MDCH estimates 350 blacks living with HIV/AIDS in Region 5. The rate of HIV infection among blacks is 422 per 100,000 population, over six times higher than the rate among whites. MDCH estimates that as many as one out of 170 black males and one out of 370 black females may be HIV-infected.

White persons, comprise over half (55 percent) of reported HIV/AIDS cases and over three-quarters (84 percent) of the region's population. MDCH estimates 670 whites living with HIV/AIDS in Region 5. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (65 per 100,000 population). MDCH estimates that as many as one out of 870 white males and one out of 6,535 white females may be HIV-infected.

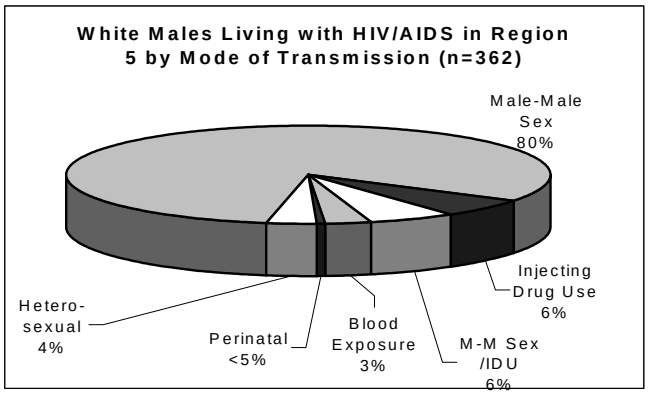
Hispanics comprise 13 percent of cases and 6 percent of the population. MDCH estimates 160 Hispanics living with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (223 per 100,000 population). MDCH estimates that as many as one out of 355 Hispanic males and one out of 655 Hispanic females may be infected.

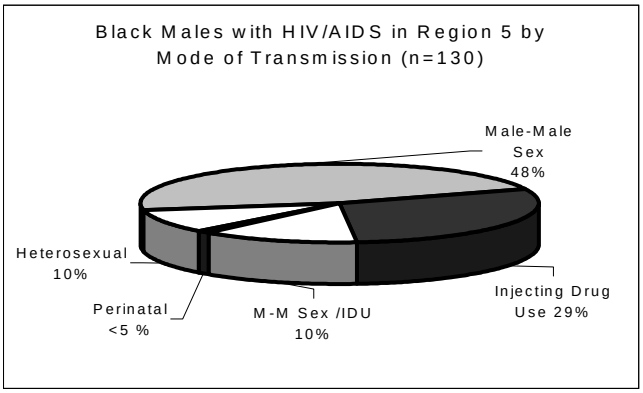
Most persons living with HIV/AIDS in Region 5 are male (79 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 21 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (Refer back to page 7 for female distributions).

- The majority of the 554 male HIV/AIDS cases are white (65 percent), 23 percent black, 10 percent Hispanic and 1 percent are other or unknown race.





- Just over one-third of the 124 female HIV/AIDS cases are white (36 percent), 35 percent are black, 24 percent are Hispanic and 4 percent are other or unknown race. (Please refer back to page 7 for break down of female transmissions.)

2002 Profile of HIV/AIDS in Region 5

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases:

Ninety-three percent of all the black cases occur in high prevalence counties. For whites, the distribution of cases is divided 77 percent and 23 percent between high and low prevalence counties respectively.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However similar to the state, the impact of this epidemic is disproportionate on blacks.

Female cases in this region are higher among blacks than whites, 43 and 34 percent respectively. Hispanic females make up 24 percent of the female cases with known risk in this region.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 5
Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 5 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	% [a]	Rate per 100,000 [3]	2000 Census	%
Male	**950**	**622**	**79%**	**156.4**	**607,597**	50%
White Males	*580*	*381*	*48%*	*114.7*	*505,738*	*41%*
Black Males	*250*	*161*	*20%*	*593.5*	*42,120*	*3%*
Hispanic Males	*110*	*70*	*9%*	*282.4*	*38,956*	*3%*
Asian Males	*10*	*	*	*	*8,416*	*1%*
American Indian Males	*10*	*	*	*	*3,097*	*0%*
Unknown Race Males	*N/A*	*	*	*	*9270*	*N/A*
Female	**250**	**164**	**21%**	**40.6**	**616,204**	**50%**
White Females	*80*	*55*	*7%*	*15.3*	*521,311*	*43%*
Black Females	*110*	*71*	*9%*	*269.1*	*40,870*	*3%*
Hispanic Females	*50*	*33*	*4%*	*152.5*	*32,797*	*3%*
Asian Females	*10*	*	*	*	*9,041*	*1%*
American Indian Females	*10*	*	*	*	*3,035*	*0%*
Unknown Race Females	*N/A*	*	*	*	*9150*	*N/A*
White	**670**	**436**	**55%**	**65.2**	**1,027,049**	**84%**
Black	**350**	**232**	**30%**	**421.7**	**82,990**	**7%**
Hispanic	**160**	**103**	**13%**	**223.0**	**71,753**	**6%**
Asian	**10**	**7**	**1%**	**57.3**	**17,457**	**1%**
American Indian	**10**	*	*	**163.1**	**6,132**	**1%**
Unknown Race	**N/A**	*	*	**N/A**	**18420**	**N/A**
Male-Male Sex	**590**	**385**	**57%** [a]	N/A		
Injecting Drug Use	**170**	**109**	**16%** [a]	N/A		
IDU with heterosexual risk [b]	*80*	*55*	*8%* [a]	N/A		
IDU without heterosexual risk [b]	*80*	*54*	*8%* [a]	N/A		
M-M Sex and Inject Drugs	**60**	**40**	**6%** [a]	N/A		
Blood Exposure [b]	**20**	**10**	**1%** [a]	N/A		
Heterosexual [b]	**190**	**124**	**18%** [a]	N/A		
Partner IDU	*50*	*31*	*5%* [a]	N/A		
Partner Bisexual [b]	*10*	*	* [a]	N/A		
Partner Blood Exp	*10*	*	* [a]	N/A		
Partner HIV+	*130*	*84*	*12%* [a]	N/A		
Perinatal	**20**	**10**	**1%** [a]	N/A		
Known Risk Total	**1040**	**678**	**100%** [a]	N/A		
Unknown Risk	**N/A**	**108**	**14%**	N/A		
0 - 4 years	**10**	**7**	**1%**	**11.2**	**89,552**	**7%**
5 - 9 years	**10**	*	*	*	**95,240**	**8%**
10-12 years	**10**	*	*	*	**58663**	**5%**
13 -19 years	**30**	**18**	**2%**	**22.0**	**136,249**	**11%**
20 -24 years	**140**	**89**	**11%**	**158.1**	**88,565**	**7%**
25 -29 years	**230**	**152**	**19%**	**280.5**	**81,994**	**7%**
30 -34 years	**330**	**213**	**27%**	**381.7**	**86,466**	**7%**
35 -39 years	**170**	**112**	**14%**	**174.2**	**97,586**	**8%**
40 -44 years	**130**	**88**	**11%**	**133.7**	**97,256**	**8%**
45 -49 years	**90**	**58**	**7%**	**104.0**	**86,524**	**7%**
50 -54 years	**40**	**23**	**3%**	**56.5**	**70,848**	**6%**
55 -59 years	**30**	**17**	**2%**	**55.6**	**53,972**	**4%**
60 -64 years	**10**	*	*	*	**42,466**	**3%**
65 and over	**10**	*	*	*	**138,420**	**11%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**
Dist#10 in Region 5	100	64	8%	55.7	179,434	15%
LAKE CO.	10	8	1%	88.2	11,333	1%
MANISTEE CO.	10	9	1%	40.8	24,527	2%
MASON CO.	20	13	2%	70.7	28,274	2%
MECOSTA CO.	20	12	2%	49.3	40,553	3%
NEWAYGO CO.	20	16	2%	41.8	47,874	4%
OCEANA CO.	10	6	1%	37.2	26,873	2%
MUSKEGON CO.	130	87	11%	76.4	170,200	14%
IONIA CO.	20	15	2%	32.5	61,518	5%
KENT CO.	840	553	70%	146.3	574,335	47%
OTTAWA CO.	100	67	9%	42.0	238,314	19%
Total Region 5	**1200**	**786**	**100%**	**98.1**	**1,223,801**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan
Region 5
Sex and Race by Risk
January 1, 2002

Male Only Region 5	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**291**	**80%**	**63**	**48%**	**26**	**46%**	**5**	**83%**	**385**	**69%**
Injecting Drug Use	**22**	**6%**	**38**	**29%**	**12**	**21%**	*****	*****	**73**	**13%**
IDU w/ hetero risk[b]	*9*	*2%*	*18*	*14%*	*7*	*13%*	*	*	*35*	*6%*
IDU w/o hetero risk[b]	*13*	*4%*	*20*	*15%*	*5*	*9%*	*	*	*38*	*7%*
M-M Sex /IDU	**23**	**6%**	**13**	**10%**	*****	*****	*****	*****	**40**	**7%**
Blood Exposure[b]	**10**	**3%**	*****	*****	*****	*****	*****	*****	**10**	**2%**
Perinatal	*****	*****	*****	*****	*****	*****	*****	*****	**6**	**1%**
Heterosexual[b]	**13**	**4%**	**13**	**10%**	**14**	**25%**	*****	*****	**40**	**7%**
Partner IDU	*	*	*	*	*	*	*	*	*7*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*11*	*3%*	*9*	*7%*	*10*	*18%*	*	*	*30*	*5%*
Total Known Risks	**362**	**100%**	**130**	**100%**	**56**	**100%**	**6**	**100%**	**554**	**100%**
Undetermined	**19**		**31**		**14**		*****		**68**	
Total All Cases	**381**		**161**		**70**		**10**		**622**	

Female Only Region 5	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	**15**	**33%**	**13**	**30%**	**7**	**23%**	*****	*****	**36**	**29%**
IDU w/ hetero risk[b]	*7*	*16%*	*9*	*20%*	*	*	*	*	*20*	*16%*
IDU w/o hetero risk[b]	*8*	*18%*	*	*	*	*	*	*	*16*	*13%*
Blood Exposure[b]	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Perinatal	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Heterosexual[b]	**30**	**67%**	**29**	**66%**	**21**	**70%**	*****	*****	**84**	**68%**
Partner IDU	*7*	*16%*	*9*	*20%*	*7*	*23%*	*	*	*24*	*19%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*5*	*4%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*20*	*44%*	*18*	*41%*	*13*	*43%*	*	*	*54*	*44%*
Total Known Risks	**45**	**100%**	**44**	**100%**	**30**	**100%**	**5**	**100%**	**124**	**100%**
Undetermined	**10**		**27**		*****		*****		**40**	
Total All Cases	**55**		**71**		**33**		**5**		**164**	

Male & Female Region 5	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**291**	**71%**	**63**	**36%**	**26**	**30%**	**5**	**45%**	**385**	**57%**
Injecting Drug Use	**37**	**9%**	**51**	**29%**	**19**	**22%**	*****	*****	**109**	**16%**
IDU w/ hetero risk[b]	*16*	*4%*	*27*	*16%*	*10*	*12%*	*	*	*55*	*8%*
IDU w/o hetero risk[b]	*21*	*5%*	*24*	*14%*	*9*	*10%*	*	*	*54*	*8%*
M-M Sex /IDU	**23**	**6%**	**13**	**7%**	*****	*****	*****	*****	**40**	**6%**
Blood Exposure[b]	**10**	**2%**	*****	*****	*****	*****	*****	*****	**10**	**1%**
Perinatal	*****	*****	**5**	**3%**	*****	*****	*****	*****	**10**	**1%**
Heterosexual[b]	**43**	**11%**	**42**	**24%**	**35**	**41%**	*****	*****	**124**	**18%**
Partner IDU	*8*	*2%*	*12*	*7%*	*10*	*12%*	*	*	*31*	*5%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*5*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*31*	*8%*	*27*	*16%*	*23*	*27%*	*	*	*84*	*12%*
Total Known Risks	**407**	**100%**	**174**	**100%**	**86**	**100%**	**11**	**100%**	**678**	**100%**
Undetermined	**29**		**58**		**17**		*****		**108**	
Total All Cases	**436**		**232**		**103**		**15**		**786**	

*** Indicates there are fewer than five reported cases**
[a] Indicates percentage calculated from cases with *known risk*
[b] Indicates an explanatory definition exits in attached glossary at end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Region 5
Age by Risk
January 1, 2002

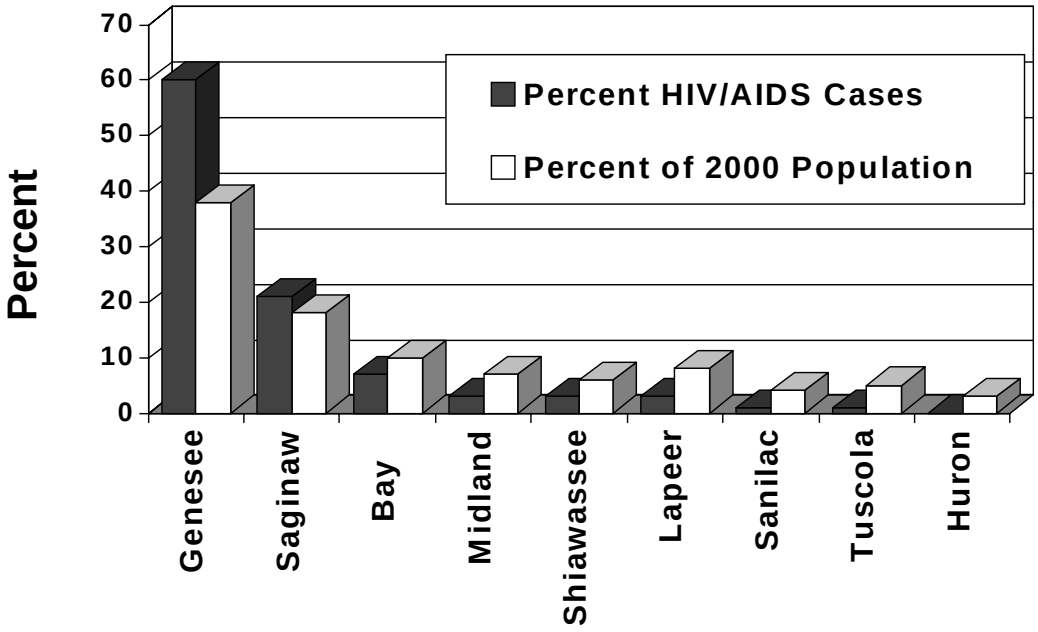
Male Only Region 5	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	43	83%	314	70%	24	69%	385	69%
Injecting Drug Use	*	*	*	*	69	15%	*	*	73	13%
IDU w/ hetero risk[b]	*	*	*	*	*35*	*8%*	*	*	*35*	*6%*
IDU w/o hetero risk[b]	*	*	*	*	*34*	*8%*	*	*	*38*	*7%*
M-M Sex /IDU	*	*	5	10%	34	8%	*	*	40	7%
Blood Exposure[b]	*	*	*	*	*	*	*	*	10	2%
Perinatal	6	38%	*	*	*	*	*	*	6	1%
Heterosexual[b]	*	*	*	*	30	7%	5	14%	40	7%
Partner IDU	*	*	*	*	*	*	*	*	*7*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*24*	*5%*	*	*	*30*	*5%*
Total Known Risks	16	100%	52	100%	451	100%	35	100%	554	100%
Undetermined	*		7		57		*		68	
Total All Cases	17		59		508		38		622	

Female Only Region 5	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	33	35%	*	*	36	29%
IDU w/ hetero risk[b]	*	*	*	*	*19*	*20%*	*	*	*20*	*16%*
IDU w/o hetero risk[b]	*	*	*	*	*14*	*15%*	*	*	*16*	*13%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	20	87%	56	60%	*	*	84	68%
Partner IDU	*	*	*7*	*30%*	*16*	*17%*	*	*	*24*	*19%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*5*	*4%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*10*	*43%*	*37*	*40%*	*	*	*54*	*44%*
Total Known Risks	8	100%	23	100%	93	100%	*	*	124	100%
Undetermined	5		7		28		*		40	
Total All Cases	13		30		121		6		164	

Male & Female Region 5	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	43	57%	314	55%	24	62%	385	57%
Injecting Drug Use	*	*	*	*	102	18%	*	*	109	16%
IDU w/ hetero risk[b]	*	*	*	*	*54*	*9%*	*	*	*55*	*8%*
IDU w/o hetero risk[b]	*	*	*	*	*48*	*8%*	*	*	*54*	*8%*
M-M Sex /IDU	*	*	5	7%	34	6%	*	*	40	6%
Blood Exposure[b]	*	*	*	*	*	*	*	*	10	1%
Perinatal	10	42%	*	*	*	*	*	*	10	1%
Heterosexual[b]	6	25%	23	31%	86	15%	9	23%	124	18%
Partner IDU	*	*	*8*	*11%*	*19*	*3%*	*	*	*31*	*5%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*5*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*5*	*21%*	*12*	*16%*	*61*	*11%*	*6*	*15%*	*84*	*12%*
Total Known Risks	24	100%	75	100%	575	100%	39	100%	678	100%
Undetermined	6		14		88		5		108	
Total All Cases	30		89		663		44		786	

*** Indicates there are fewer than five reported cases**
[a] Indicates percentage calculated from cases with *known risk*
[b] Indicates an explanatory definition exits in attached glossary at end of Profile

Region 6 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 6

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2002 Profile of HIV/AIDS in Region 6

Summary of Epidemic for Region 6

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 1,030 people living with HIV/AIDS in Region 6, of which 677 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 50 new cases in the year 2000. The number of AIDS deaths dropped 73 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 6 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health department within Region 6. The greatest percent of cases within this region, 60 percent, was recorded in the local health department of Genesee.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county however most contain a single county. All LHDs have been labeled as either being in a high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 6, Genesee and Saginaw counties are considered to be LHDs in high prevalence areas, while Bay, Huron, Lapeer, Midland, Sanilac, Shiawassee, and Tuscola counties are LHDs in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 6. The guiding question used in this process has been, "In which populations can strategies prevent the most infections from occurring?" Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSMs make up 68 percent of all HIV/AIDS cases with a known mode of transmission (341 out of 504). The MSM behavioral group continues to be the most affected behavioral group even though the number of new cases indicates a level (non-increasing, non-decreasing) trend.

- **Injecting Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 19 percent are IDUs (96 out of 504). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. The trend in IDU transmission also appears to be level.

- **High Risk Heterosexuals (HRH):** HRH constitute 14 percent of the total number of cases with a known mode of transmission (73 out of 504) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men or 3) HIV+ individuals. The trend in heterosexual transmission is level in Region 6.

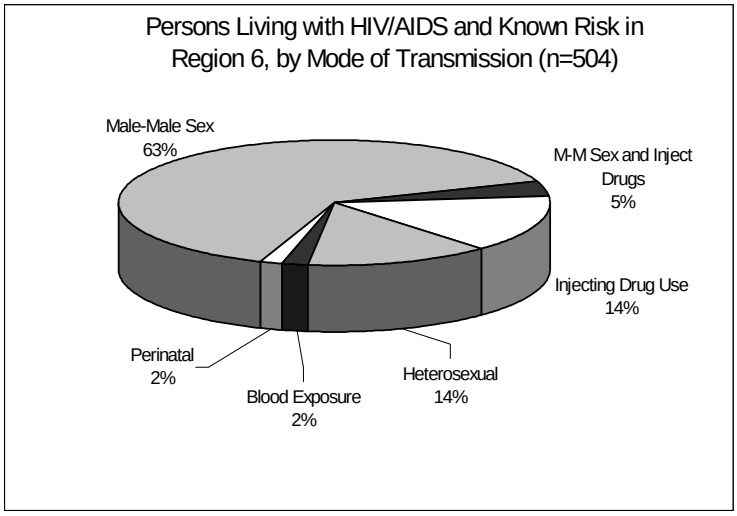
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 6

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report, both risks are reported together.



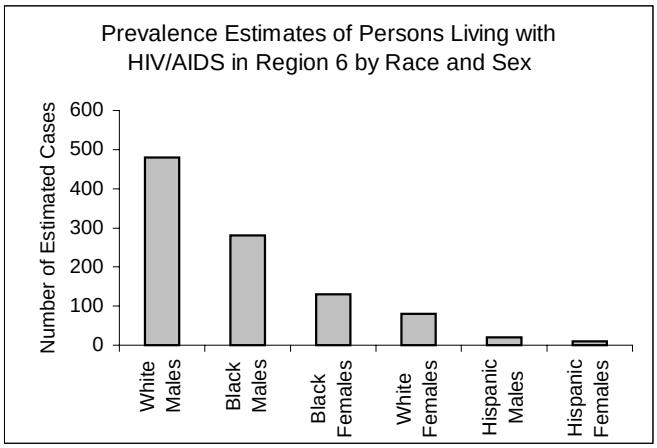
The pie chart indicates the number of people living with HIV/AIDS in Region 6 by mode of transmission for the 504 cases for which the risk was identifiable.

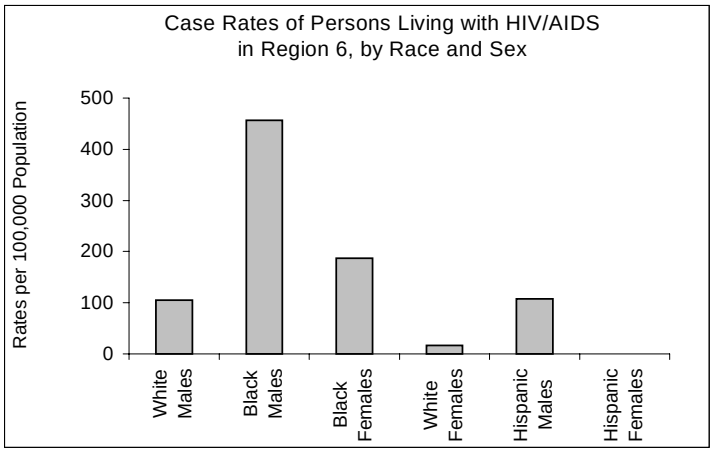
- This chart demonstrates that just over two-thirds (68 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 5 percent who also injected drugs.
- Nineteen percent are injecting drug users, including 5 percent who are also MSM. Forty-six percent of non-MSM IDUs also have high risk heterosexual partners (refer to Table 1, page 11).
- Finally, 14 percent had high risk heterosexual partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on six race and sex groups.



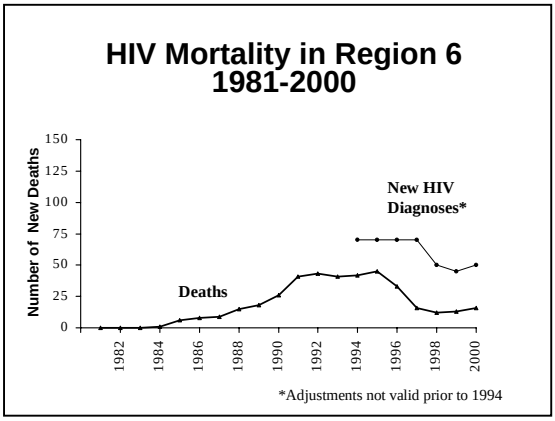


- Black males have the highest rate per 100,000 population (457) and the second highest estimated number (280) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Hispanic males have the third highest rate (108) and the fifth highest estimated number (20) of cases. This means that the impact of this epidemic is high on a relatively small demographic group.
- Black females have the second highest rate (187) and the third highest estimated number (130) of cases of HIV/AIDS.
- White males have the fourth highest rate (105) and the highest estimated number (480) of cases.
- White females have the lowest rate (17) and the fourth highest estimated number (80) of HIV/AIDS cases.
- An accurate rate for Hispanic females cannot be calculated. The estimated number of HIV/AIDS cases is 10.

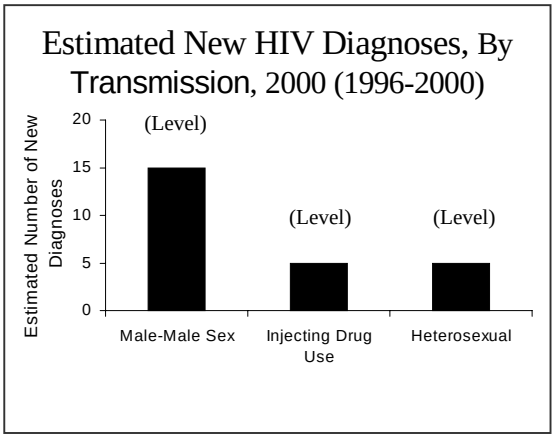
2002 Profile of HIV/AIDS in Region 6

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 50 persons were newly infected in the year 2000 in Region 6.



- *Transmission of HIV 1996-2000:* New diagnoses among men who have sex with men are stable at 15 persons in the year 2000. The proportions infected heterosexually and via IDU are both level at 5 new infections in 2000. New diagnoses are level among men who both have sex with men and inject drugs, however they are not included in this graph. There were fewer than 10 persons diagnosed each year who acquired infection from blood products received before 1985, and fewer than 10 infants infected at birth each year.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	82%	79%
Females	18%	21%
Whites	56%	55%
Blacks	37%	40%
Hispanics	3%	3%
Other Minorities	1%	0%
Race Unknown	2%	3%
White Males	49%	47%
Black Males	27%	27%
Hispanic Males	2%	2%
Other Minority Male	2%	0%
Unknown Race Male	2%	2%
White Females	8%	8%
Black Females	10%	12%
Hispanic Females	0%	0%
Other Minority Fem.	0%	0%
Unknown Race Fem.	0%	1%
0-12 years*	1%	1%
13-19 years*	1%	2%
20-24 years*	3%	5%
25-44 years*	67%	68%
45+ years*	28%	25%
Total HIV Infected	**323**	677

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2001, 323 HIV-infected persons were reported receiving Ryan White Services in Region 6.

Since it is likely that most of these individuals receiving care are reported cases, when comparing their number to that of the total number of reported cases (677), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 6

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 6. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 520 MSM living with HIV disease in Region 6. This includes 40 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 6. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 341), white males (237) account for more than two-thirds (70percent) while black males (90) comprise approximately 26 percent of men in this combined category.

Age: The largest percentage of living MSM cases are between the ages of 25-49 (85 percent). MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

Just 6 percent of all HIV-infected MSM statewide reside in Region 6. Within high prevalence counties, MSMs constitute 66 percent of the cases with a known risk.

Trends and Conclusions:

MDCH estimates that there were about 15 new HIV infections in the year 2000 among men who have sex with men. This number was level from 1996-2000 in Region 6.

Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic.

The data also suggest that prevention activities among teenagers and young adults should be geared towards males having sex with other males. These activities should recognize that adolescents at highest risk are those males whose sex partners are older. Older men are more likely to be HIV-infected than are younger males.

Region 6 should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally, especially in high prevalence areas.

2002 Profile of HIV/AIDS in Region 6

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 6 and account for 19 percent of reported infected persons with a known risk. MDCH estimates there are approximately 150 IDUs living with HIV in Region 6. This estimate includes 40 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals and MSM. Almost half (46 percent) of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners. Additionally, of the 73 cases with reported heterosexual risk, 15 individuals (21 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 22 percent (111 cases) of people reported with HIV disease and having a known risk in Region 6. This is similar to the nationwide picture.

Race/Ethnicity and Sex:

Of the 96 IDU HIV/AIDS cases, 36 are black men (38 percent), 22 are black women (23 percent), 30 are white men (31 percent), six are white women (6 percent), and less than five are Hispanic males. In total, 60 percent (58) of the cases occur in black IDU.

More than two-thirds of the cases are men (71 percent), while women constitute the remaining 29 percent. Among the 28 women whose HIV infection has been attributed to IDU, over half (54 percent) report high-risk heterosexual sex partners.

Age:

Among men with a known risk in each age group over 25 years, IDU is the second most common mode of transmission. The highest proportion of IDU cases (68 percent), are among men in their thirties and forties (35 percent of these were MSM/IDU).

Geographic Distribution:

Ninety-two percent of IDU cases were reported in the higher prevalence areas of the region. Within high prevalence counties, just under a quarter of cases with a known risk (20 percent) are IDU, while in the lower prevalence counties 11 percent of persons living with HIV/AIDS are IDU. These percentages include IDU males who are also MSM).

Trends and Conclusions:

The number of new HIV diagnoses among IDUs (including MSM/IDU) has remained level between 1996 and 2000, at approximately 5 new HIV infections in the year 2000. IDU cases in Region 6 are higher among blacks than among whites. Some of these persons also have heterosexual exposures, since IDUs are more likely to have IDU sex partners than are persons who do not inject drugs.

In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 6

Ranked Behavioral Group Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 6. Heterosexual sex accounts for 14 percent of reported infected persons with a known risk. MDCH estimates that 110 persons living with HIV disease in Region 6 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 50 infected persons who are classified as IDU but who also had one or more heterosexual sex partner(s) who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. With regard to reported cases, the dual risk of IDU/heterosexual cases comprise 7 percent of all reported HIV/AIDS cases with a known risk and are 55 percent men and 45 percent women within Region 6.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

Race/Ethnicity and Sex:

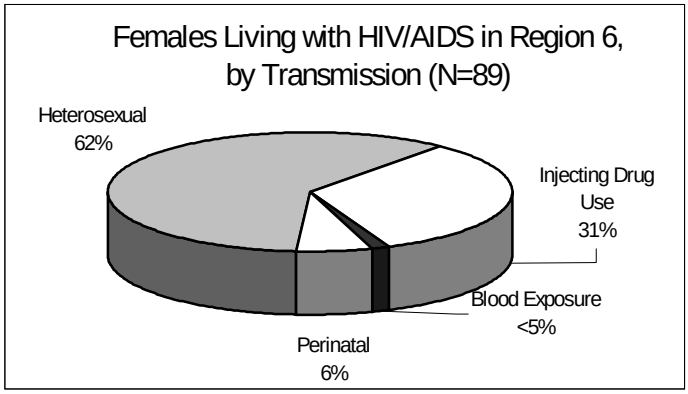
Among females reported with HIV/AIDS and a known risk, over two-thirds (62 percent) of cases are contracted heterosexually. Additionally, among women with a known risk, 17 percent are IDUs who also had high risk heterosexual sex partners. These data underscore the point that these two modes of transmission are closely intertwined for women.

Among the 73 men and women living with HIV/AIDS and infected heterosexually, 21 percent reported their heterosexual partner as injecting drug users. Over two-thirds (68 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 21 percent of HIV/AIDS cases in Region 6, they have consistently accounted for almost three-quarters of heterosexually acquired infections -- currently 75 percent.

Just under one-half (47 percent) of black women and just over three-quarters (78 percent) of white women were infected heterosexually.

In Region 6, fifty-eight percent of the female heterosexual cases are white and 40 percent are black. Forty-two percent of all the heterosexual cases of HIV/AIDS are black. The percent of men infected heterosexually is low--4 percent of cases among men of all races with a known risk.



The definition for heterosexual transmission for females includes sub-categories to help better describe risk to women. To be reported as a heterosexual transmission case, a female must have a partner who is: 1) HIV+, 2) HIV+ due to blood exposure, 3) a bisexually active man, or 4) an IDU. Heterosexual and IDU modes of transmission and associated sub-categories for infected women with known risk are shown in the pie chart here.

2002 Profile of HIV/AIDS in Region 6

Ranked Behavioral Group: Heterosexuals (Continued)

Age:

For women between the ages of 20 and 49, heterosexual transmission is the predominant mode. (All other age groups have <5 cases.)

Geographic Distribution:

Ninety-five percent of the 73 cases in Region 6 attributed to heterosexually activity were reported in high prevalence counties. Of all the cases within high prevalence counties in Region 6, heterosexual transmission constitutes 16 percent. Within low prevalence counties, heterosexual transmission constitutes 6 percent of the cases.

Trends and Conclusions:

In Region 6, heterosexual transmission is level. MDCH estimates that the annual number of new HIV diagnoses attributable to heterosexual transmission was stable at 5 persons in the year 2000.

In Region 6 the number of heterosexual transmission cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

The data show that although there is heterosexual transmission from women to men, it is a much smaller problem in Michigan (and the U.S.) than transmission from men to women. In light of the much lower seroprevalence rates among high risk heterosexuals compared with MSMs, this mode of transmission is unlikely to surpass that of MSM. However, the overlapping risk of high risk heterosexuals with IDU makes it difficult to predict whether heterosexually acquired cases will equal or surpass, in the future, those classified as IDU.

2002 Profile of HIV/AIDS in Region 6

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Although white persons comprise the majority of those living with HIV/AIDS in Region 6, the number of black cases is still disproportionate. Blacks comprise 12 percent of this region's population yet make up more than a third (40 percent) of the cases of HIV/AIDS. MDCH estimates 410 blacks living with HIV/AIDS in Region 6. The rate of HIV infection among blacks is 313 per 100,000 population, five times higher than the rate among whites. MDCH estimates that as many as one out of 220 black males and one out of 535 black females may be HIV-infected.

White persons comprise over half (55 percent) of reported HIV/AIDS cases and more than three-quarters of the region's population (83 percent). MDCH estimates 560 whites living with HIV/AIDS in Region 6. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than blacks or Hispanics (60 per 100,000 population). MDCH estimates that as many as one out of 960 white males and one out of 6,025 white females may be HIV-infected.

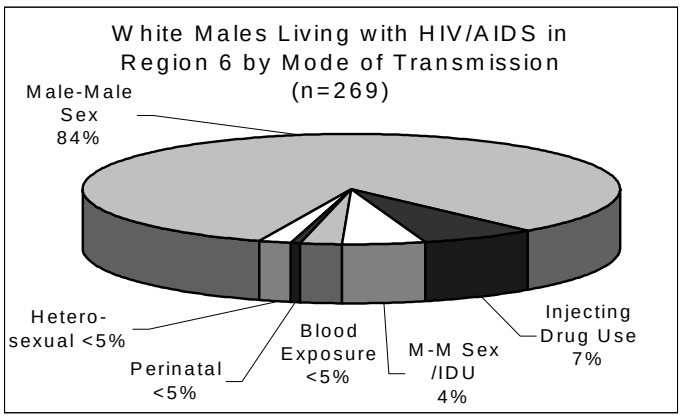
Hispanics comprise both 3 percent of cases and 3 percent of the population. MDCH estimates 30 Hispanics living with HIV/AIDS in this region. However, the relatively few cases are spread out among a small population and therefore they have a rate higher than that among whites (81 per 100,000 population). MDCH estimates that as many as one out of 930 Hispanic males may be HIV-infected. A rate cannot be estimated for Hispanic females due to a low number of cases.

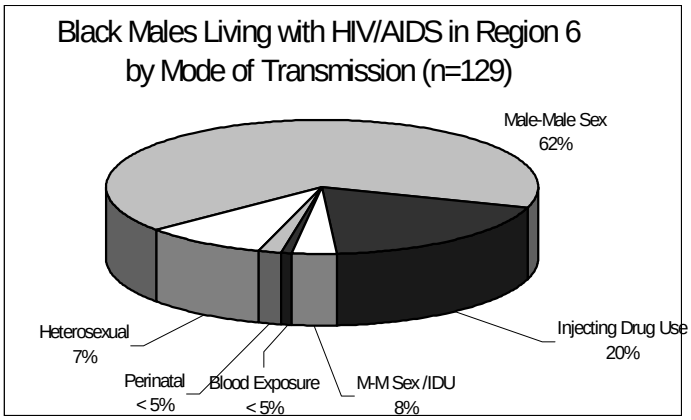
Most persons living with HIV/AIDS in Region 6 are male (79 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 21 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of black and white male cases by mode of transmission, among those with known transmission (refer to page 6 for female distributions).

- The majority of the 536 male HIV/AIDS cases are white (59 percent), 35 percent black, 3 percent Hispanic and 3 percent are other or unknown race.





- Over half of the 89 female HIV/AIDS cases are black (53 percent), 46 percent are white, and 1 percent are Hispanic (refer to page 6 for breakdown of female transmissions).

2002 Profile of HIV/AIDS in Region 6

Description of the Epidemic by Race and Sex (Continued)

Geographic Distribution of Cases:

All the black cases occur in high prevalence counties. For whites, the distribution of cases is divided 80 percent and 20 percent between high and low prevalence counties respectively.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However similar to the state, the impact this epidemic is disproportionate on blacks.

Female cases in this region are divided between blacks and whites 60 and 36 percent respectively.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 6

Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 6 Patient Group	Estimated HIV Infection[1]	Total HIV + AIDS Reported[2] Cases	%	Rate per 100,000[3]	2000 Census	%
Male	**820**	**536**	**79%**	**148.1**	**553,526**	**49%**
White Males	*480*	*318*	*47%*	*104.5*	*459,259*	*40%*
Black Males	*280*	*186*	*27%*	*456.8*	*61,297*	*5%*
Hispanic Males	*20*	*16*	*2%*	*107.5*	*18,603*	*2%*
Asian Males	*10*	*	*	*	*3,770*	*0%*
American Indian Males	*10*	*	*	*	*2,374*	*0%*
Unknown Race Males	*N/A*	*14*	*2%*	*	*8223*	*N/A*
Female	**210**	**141**	**21%**	**35.9**	**584,168**	**51%**
White Females	*80*	*51*	*8%*	*16.6*	*480,961*	*42%*
Black Females	*130*	*84*	*12%*	*186.8*	*69,580*	*6%*
Hispanic Females	*10*	*	*	*	*18,417*	*2%*
Asian Females	*10*	*	*	*	*4,215*	*0%*
American Indian Females	*10*	*	*	*	*2,477*	*0%*
Unknown Race Females	*N/A*	*	*	*	*8518*	*N/A*
White	**560**	**369**	**55%**	**59.6**	**940,220**	**83%**
Black	**410**	**270**	**40%**	**313.3**	**130,877**	**12%**
Hispanic	**30**	**18**	**3%**	**81.0**	**37,020**	**3%**
Asian	**10**	*	*	*	**7,985**	**1%**
American Indian	**10**	*	*	*	**4,851**	**0%**
Unknown Race	**N/A**	**18**	**3%**	*	**16741**	**N/A**
Male-Male Sex	**480**	**317**	**63%** [a]	N/A		
Injecting Drug Use	**110**	**72**	**14%** [a]	N/A		
IDU with heterosexual risk[b]	*50*	*33*	*7%* [a]	N/A		
IDU without heterosexual risk[b]	*60*	*39*	*8%* [a]	N/A		
M-M Sex and Inject Drugs	**40**	**24**	**5%** [a]	N/A		
Blood Exposure[b]	**10**	**9**	**2%** [a]	N/A		
Heterosexual[b]	**110**	**73**	**14%** [a]	N/A		
Partner IDU	*20*	*15*	*3%* [a]	N/A		
Partner Bisexual[b]	*10*	*6*	*1%* [a]	N/A		
Partner Blood Exp	*10*	*	* [a]	N/A		
Partner HIV+	*80*	*50*	*10%* [a]	N/A		
Perinatal	**10**	**9**	**2%** [a]	N/A		
Known Risk Total	**770**	**504**	**100%** [a]	N/A		
Unknown Risk	**N/A**	**173**	**(26%)**	N/A		
0 - 4 years	**10**	**6**	**1%**	**13.0**	**77,072**	**7%**
5 - 9 years	**10**	*	*	*	**87,800**	**8%**
10-12 years	**10**	*	*	*	**53250**	**5%**
13 -19 years	**30**	**23**	**3%**	**25.4**	**118,171**	**10%**
20 -24 years	**100**	**68**	**10%**	**151.9**	**65,850**	**6%**
25 -29 years	**170**	**112**	**17%**	**246.1**	**69,088**	**6%**
30 -34 years	**210**	**137**	**20%**	**273.9**	**76,665**	**7%**
35 -39 years	**220**	**146**	**22%**	**248.3**	**88,615**	**8%**
40 -44 years	**130**	**84**	**12%**	**138.3**	**93,973**	**8%**
45 -49 years	**70**	**48**	**7%**	**82.4**	**84,983**	**7%**
50 -54 years	**50**	**30**	**4%**	**67.3**	**74,273**	**7%**
55 -59 years	**10**	**9**	**1%**	**17.1**	**58,321**	**5%**
60 -64 years	**10**	**7**	**1%**	**21.6**	**46,249**	**4%**
65 and over	**10**	*	*	*	**143,384**	**13%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**
BAY CO.	80	50	7%	72.6	110,157	10%
GENESEE CO.	610	403	60%	139.9	436,141	38%
HURON CO.	10	*	*	*	36,079	3%
LAPEER CO.	30	17	3%	34.1	87,904	8%
MIDLAND CO.	40	23	3%	48.3	82,874	7%
SAGINAW CO.	220	144	21%	104.7	210,039	18%
SANILAC CO.	10	9	1%	22.4	44,547	4%
SHIAWASSEE CO.	30	20	3%	41.8	71,687	6%
TUSCOLA CO.	10	9	1%	17.2	58,266	5%
Total Region 6	**1,030**	**677**	**100%**	**90.5**	**1,137,694**	**100%**

***** Indicates there are fewer than five reported cases

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan
Region 6
Sex and Race by Risk
January 1, 2002

Male Only Region 6	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	225	84%	80	62%	9	69%	*	*	317	76%
Injecting Drug Use	18	7%	26	20%	*	*	*	*	44	11%
IDU w/ hetero risk[b]	*9*	*3%*	*9*	*7%*	*	*	*	*	*18*	*4%*
IDU w/o hetero risk[b]	*9*	*3%*	*17*	*13%*	*	*	*	*	*26*	*6%*
M-M Sex /IDU	12	4%	10	8%	*	*	*	*	24	6%
Blood Exposure[b]	7	3%	*	*	*	*	*	*	8	2%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	6	2%	9	7%	*	*	*	*	18	4%
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*5*	*2%*	*9*	*7%*	*	*	*	*	*16*	*4%*
Total Known Risks	269	100%	129	100%	13	100%	*	*	415	100%
Undetermined	49		57		*		12		121	
Total All Cases	318		186		16		16		536	

Female Only Region 6	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	6	15%	22	47%	*	*	*	*	28	31%
IDU w/ hetero risk[b]	*	*	*11*	*23%*	*	*	*	*	*15*	*17%*
IDU w/o hetero risk[b]	*	*	*11*	*23%*	*	*	*	*	*13*	*15%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	5	6%
Heterosexual[b]	32	78%	22	47%	*	*	*	*	55	62%
Partner IDU	*	*	*9*	*19%*	*	*	*	*	*13*	*15%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*6*	*7%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*23*	*56%*	*10*	*21%*	*	*	*	*	*34*	*38%*
Total Known Risks	41	100%	47	100%	*	*	*	*	89	100%
Undetermined	10		37		*		*		52	0%
Total All Cases	51		84		*		*		141	

Male & Female Region 6	White Cases	%[a]	Black Cases	%[a]	Hispanic Cases	%[a]	Other Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	225	73%	80	45%	9	64%	*	*	317	63%
Injecting Drug Use	24	8%	48	27%	*	*	*	*	72	14%
IDU w/ hetero risk[b]	*13*	*4%*	*20*	*11%*	*	*	*	*	*33*	*7%*
IDU w/o hetero risk[b]	*11*	*4%*	*28*	*16%*	*	*	*	*	*39*	*8%*
M-M Sex /IDU	12	4%	10	6%	*	*	*	*	24	5%
Blood Exposure[b]	8	3%	*	*	*	*	*	*	9	2%
Perinatal	*	*	6	3%	*	*	*	*	9	2%
Heterosexual[b]	38	12%	31	18%	*	*	*	*	73	14%
Partner IDU	*5*	*2%*	*9*	*5%*	*	*	*	*	*15*	*3%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*6*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*28*	*9%*	*19*	*11%*	*	*	*	*	*50*	*10%*
Total Known Risks	310	100%	176	100%	14	100%	*	*	504	100%
Undetermined	59		94		*		16		173	
Total All Cases	369		270		18		20		677	

*** Indicates there are fewer than five reported cases**

[a] **Indicates percentage calculated from cases with *known risk***

[b] **Indicates an explanatory definition exists in attached glossary at end of Profile**

Table 3: Living HIV/AIDS Cases in Michigan
Region 6
Age by Risk
January 1, 2002

Male Only Region 6	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	8	53%	27	71%	267	80%	15	56%	317	76%
Injecting Drug Use	*	*	*	*	34	10%	7	26%	*44*	11%
IDU w/ hetero risk[b]	*	*	*	*	*14*	*4%*	*	*	*18*	*4%*
IDU w/o hetero risk[b]	*	*	*	*	*20*	*6%*	*5*	*19%*	*26*	*6%*
M-M Sex /IDU	*	*	*	*	22	7%	*	*	24	6%
Blood Exposure[b]	*	*	5	13%	*	*	*	*	8	2%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	12	4%	*	*	18	4%
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*11*	*3%*	*	*	*16*	*4%*
Total Known Risks	15	100%	38	100%	335	100%	27	100%	415	100%
Undetermined	*		13		89		15		121	
Total All Cases	19		51		424		42		536	

Female Only Region 6	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	23	36%	*	*	28	31%
IDU w/ hetero risk[b]	*	*	*	*	*11*	*17%*	*	*	*15*	*17%*
IDU w/o hetero risk[b]	*	*	*	*	*12*	*19%*	*	*	*13*	*15%*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	5	50%	*	*	*	*	*	*	5	6%
Heterosexual[b]	*	*	9	82%	40	63%	*	*	55	62%
Partner IDU	*	*	*	*	12	19%	*	*	13	15%
Partner Bisexual[b]	*	*	*	*	*	*	*	*	6	7%
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	7	64%	23	36%	*	*	34	38%
Total Known Risks	10	100%	11	100%	64	100%	*	*	89	100%
Undetermined	5		6		40		*		52	
Total All Cases	15		17		104		6		141	

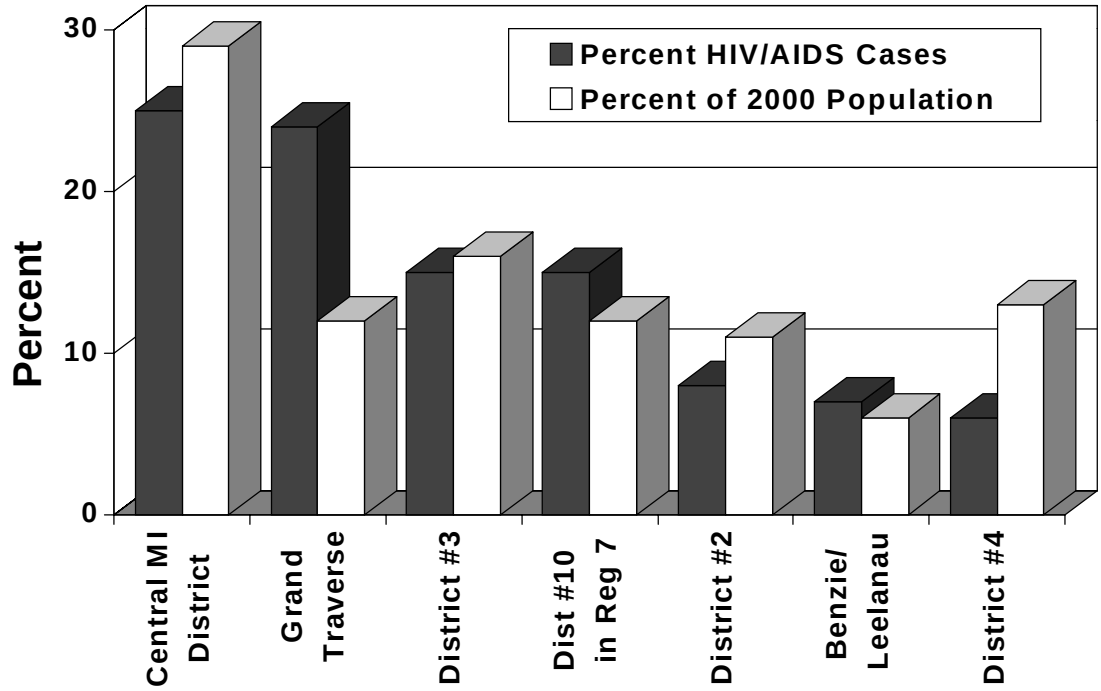
Male & Female Region 6	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	8	32%	27	55%	267	66%	15	48%	317	63%
Injecting Drug Use	*	*	5	10%	57	14%	9	29%	72	14%
IDU w/ hetero risk[b]	*	*	*	*	*25*	*6%*	*	*	*33*	*7%*
IDU w/o hetero risk[b]	*	*	*	*	*32*	*8%*	*5*	*16%*	*39*	*8%*
M-M Sex /IDU	*	*	*	*	22	5%	*	*	24	5%
Blood Exposure[b]	*	*	5	10%	*	*	*	*	9	2%
Perinatal	9	36%	*	*	*	*	*	*	9	2%
Heterosexual[b]	5	20%	10	20%	52	13%	6	19%	73	14%
Partner IDU	*	*	*	*	*13*	*3%*	*	*	*15*	*3%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*6*	*1%*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*8*	*16%*	*34*	*8%*	*	*	*50*	*10%*
Total Known Risks	25	100%	49	100%	402	100%	31	100%	504	100%
Undetermined	9		19		134		17		173	
Total All Cases	34		68		536		48		677	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Region 7 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



Central Michigan District:	**Arenac, Clare, Gladwin, Isabella, Osceola, Roscommon**
District #2:	**Alcona, Iosco, Ogemaw, Oscoda**
District #3:	**Antrim, Charlevoix, Emmet, Otsego**
District #4:	**Alpena, Cheboygan, Montmorency, Presque Isle**
District #10 in Region 7:	**Crawford, Kalkaska, Missaukee, Wexford**

2002 Profile of HIV/AIDS in Region 7

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2002 Profile of HIV/AIDS in Region 7

Summary of Epidemic for Region 7

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 250 people living with HIV/AIDS in Region 7, of which 165 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 10 new cases in the year 2000. The number AIDS deaths dropped 29 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 7 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health department (LHD) within Region 7. The greatest percent of cases within this region, 25 percent, was recorded in the Central Michigan District health department.

  The 83 counties of Michigan are divided into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county however most contain a single county. All LHDs have been grouped as either being a high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 7, all LHDs are considered to be low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 7. The guiding question used in this process has been, "In which populations can strategies prevent the most infections from occurring?" Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 73 percent of all HIV/AIDS cases with a known mode of transmission (108 out of 148). Numbers of cases are too small for this behavioral group within this region to present trend information.

- **Intravenous Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, 22 percent are IDUs (32 out of 148). Numbers of cases are too small for this behavioral group within this region to present trend information.

- **High Risk Heterosexuals (HRH):** Heterosexual cases constitute 14 percent of the total number of cases with a known mode of transmission (20 out of 148) and are defined as HIV-infected persons whose heterosexual sex partners are known to be 1) IDUs, 2) bisexual men or 3) HIV+ individuals. Numbers of cases are too small for this behavioral group within this region to present trend information.

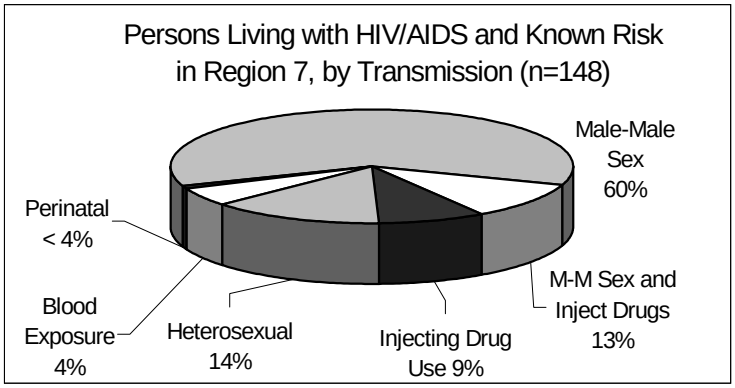
**These numbers include MSM/IDU in totals and percent calculations.*

2002 Profile of HIV/AIDS in Region 7

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.



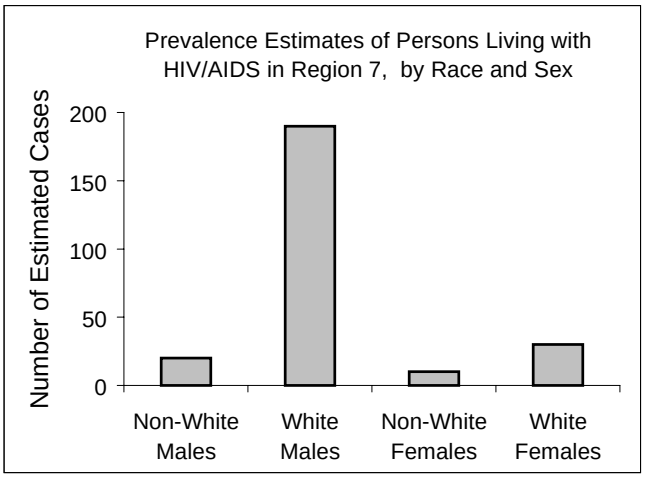
The pie chart indicates the number of people living with HIV/AIDS in Region 7 by mode of transmission for the 148 cases for which the risk was identifiable.

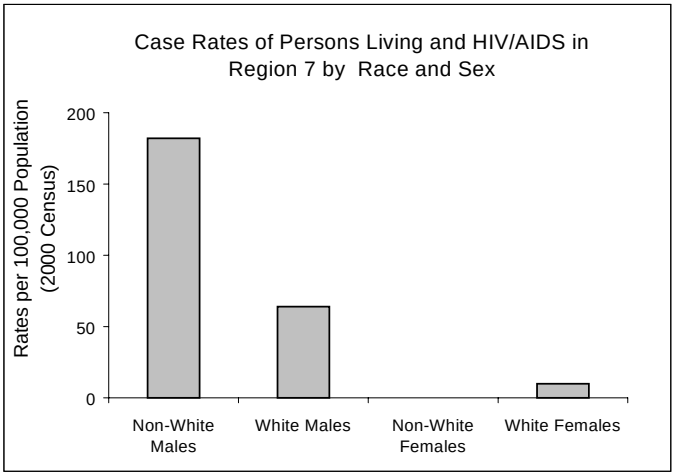
- This chart demonstrates that just under three-quarter (73 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including 13 percent who also injected drugs.
- Twenty-two percent are injecting drug users, including 13 percent who are also MSM.
- Finally, 14 percent of the total had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on whites and non-whites and sex groups.



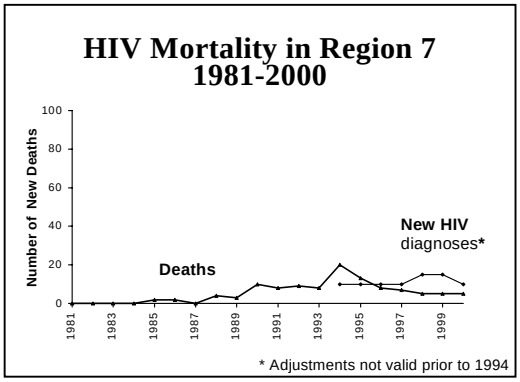


- Non-white males have the highest rate per 100,000 population (182) and the third highest estimated number (20) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- White males have the second highest rate (64) and the highest estimated number (190) of cases of HIV/AIDS.
- White females have the third highest rate (10) and the second estimated number (30) of HIV/AIDS cases.
- Non-white females have too few cases to provide a rate, however they are estimated to have 10 cases.

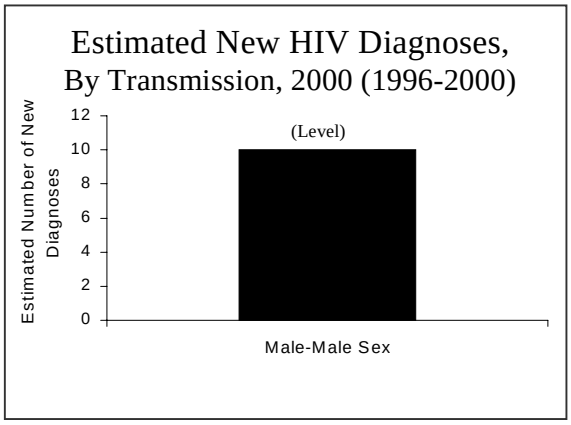
2002 Profile of HIV/AIDS in Region 7

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 10 persons were newly infected in the year 2000 in Region 7.



- *Transmission of HIV 1996-2000*: New diagnoses among men who have sex with men are stable at 10 persons in the year 2000. Trend information on new diagnoses among heterosexuals and injection drug users is difficult to determine due to low number of cases.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	80%	84%
Females	20%	16%
Whites	86%	88%
Non-Whites	11%	11%
Other	3%	1%
White Males	71%	75%
Non-White Males	7%	8%
Other Males	2%	1%
White Females	15%	13%
Non-White Females	4%	3%
Other Females	1%	1%
0-12 years*	1%	1%
13-19 years*	1%	0%
20-24 years*	1%	3%
25-44 years*	67%	73%
45+ years*	31%	23%
Total HIV Infected	**158**	**165**

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2001, 158 HIV-infected persons were reported receiving Ryan White Services in Region 7. A comparison also shows that persons reported as cases in Region 7 are not significantly different than those receiving services through RWCA.

Since it is likely that most of these individuals receiving services are reported cases, when comparing their number to that of the total number of reported cases (165), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 7

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 7. MSM remain the single largest behavioral group affected by this epidemic and account for over two-thirds of all reported infected persons with a known risk. MDCH estimates that there are approximately 160 MSM living with HIV disease in Region 7. This includes 30 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race/Ethnicity:

Having sex with other men infected most males in Region 7. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 108), white males (99) account for more than three-quarters (92 percent).

Age:

The largest percentage of living MSM cases are between the ages of 25-49 (83 percent). MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

All health department jurisdictions in Region 7 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 7 are considered to be low prevalence areas.

Trends and Conclusions:

MDCH estimates that there are about 10 new HIV infections annually among men who have sex with men. This number was level 1996-2000 in Region 7. Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic. Region 7 should observe carefully to determine if the statewide trend of level number of cases among white and non-white MSM is occurring locally.

2002 Profile of HIV/AIDS in Region 7

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 7. IDU are the second largest behavioral group affected by this epidemic and account for 22 percent of reported infected persons with a known risk. MDCH estimates there are approximately 50 IDUs living with HIV disease in Region 7. This estimate includes 30 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

When considering the effect of IDU on the HIV/AIDS epidemic, it is important to note that this group is additionally linked to heterosexuals and MSM. Half of the reported cases among non-MSM IDUs also had high risk heterosexual sex partners (excluding MSM/IDUs). Additionally, of the 20 cases with reported heterosexual risk, nine individuals (45 percent) also reported having IDU as partners.

When these linked populations are considered, IDU-related transmission accounts for 28 percent (41 cases) of people reported with HIV disease and having a known risk in Region 7. This is similar to the nationwide picture.

Race/Ethnicity and Sex:

Of the 32 IDU HIV/AIDS cases, 26 are white (81 percent). Also, 91 percent of the IDU cases are male.

Females and non-whites make up 19 percent of the cases.

Age:

Among men with a known risk in the age group 25-49 years, IDU is the second most common mode of transmission; 24 percent of the cases in this age group.

Geographic Distribution:

All health department jurisdictions in Region 7 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 7 are considered to be low prevalence areas.

Trends and Conclusions:

Estimating trends among IDUs (including MSM/IDU) in Region 7 is difficult due to low number of cases.

Although most cases are among whites, all IDUs would benefit from learning that the risk of HIV transmission increases through sex and sharing needles. In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 7

Ranked Behavioral Group Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 7. Heterosexual sex accounts for 14 percent of reported infected persons with a known risk. MDCH estimates that 30 persons living with HIV disease in Region 7 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

Currently there are an estimated 10 infected persons who are classified as IDU but who also had one or more heterosexual sex partner who engaged in high risk behaviors (i.e., IDU, bisexual). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment.

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

Race or Ethnicity and Sex:

Among females reported with HIV/AIDS and a known risk, over two-thirds (80 percent) of cases are contracted heterosexually. While women account for 16 percent of HIV/AIDS cases in Region 7, they have consistently accounted for over two-thirds of heterosexually acquired infections -- currently 80 percent. Of those cases among women, 81 percent are white females cases.

Among the 20 men and women living with HIV/AIDS and infected heterosexually, 45 percent reported their heterosexual partner as injecting drug users.

Age:

For women between the ages of 25 and 49, heterosexual transmission is the predominant mode. (All other age groups have <5 cases.)

Geographic Distribution:

All health department jurisdictions in Region 7 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 7 are considered to be low prevalence areas.

Trends and Conclusions:

Heterosexual transmission is the only mode of transmission which is increasing statewide among infected persons. However, there are not enough cases annually in Region 7 to determine a statistical trend. Heterosexual contact will remain a less common source of HIV transmission statewide than MSM or IDU behavior for the foreseeable future. In Region 7, heterosexual cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

2002 Profile of HIV/AIDS in Region 7

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

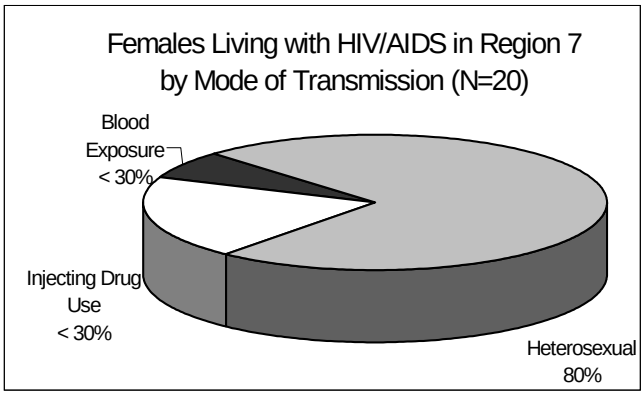
Although white persons comprise the majority of those living with HIV/AIDS in Region 7, the number of non-white cases is still disproportionate. Non-whites comprise 3 percent of this region's population yet make up 11 percent of the cases of HIV/AIDS. MDCH estimates 30 non-whites living with HIV/AIDS in Region 7. The rate of HIV infection among non-whites is 141 per 100,000 population, almost four times higher than the rate among whites. *MDCH estimates that as many as one out of 550 non-white males may be HIV-infected. A valid rate is not available for non-white females.*

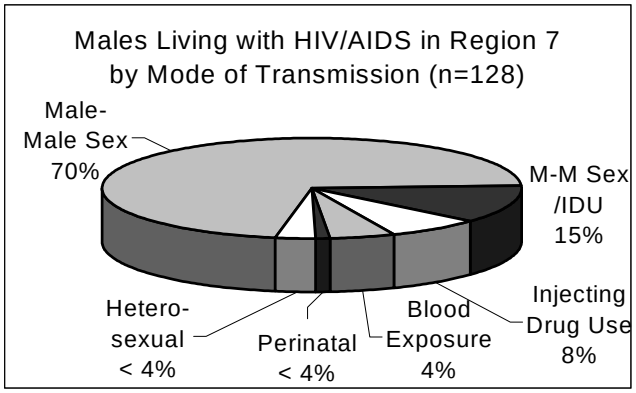
White persons comprise over three-quarters (88 percent) of reported HIV/AIDS cases and 96 percent of the population. MDCH estimates 220 whites living with HIV/AIDS in Region 7. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than non-whites (36 per 100,000 population). *MDCH estimates that as many as one out of 1,570 white males and one out of 10,200 white females may be HIV-infected.*

Most persons living with HIV/AIDS in Region 7 are male (84 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 16 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of male and female male cases by mode of transmission, among those with known transmission. Percents showing a < amount indicates areas where fewer than five cases were reported. Male and female cases are not subdivided by race because the numbers in these categories are too small.





Geographic Distribution of Cases:

All health department jurisdictions in Region 7 have reported cases of HIV among their residents; however, the numbers are too small to provide detailed analysis.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However, similar to the state, the disproportionate impact this epidemic is having on non-whites should be taken into account when designing prevention messages.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 7

Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 7 Patient Group	Estimated HIV Infection[1]	Total HIV + AIDS Reported[2] Cases	%		Rate per 100,000[3]	2000 Census	%
Male	**210**	**138**	**84%**		**67.2**	**312,424**	**49%**
White Males	*190*	*124*	*75%*		*63.8*	*297,993*	*47%*
Non-White Males	*20*	*13*	*8%*		*181.6*	*11,015*	*2%*
Unknown Race Males	*N/A*	*	*		*	*3416*	*N/A*
Female	**40**	**27**	**16%**		**12.5**	**321,261**	**51%**
White Females	*30*	*21*	*13%*		*9.8*	*307,366*	*49%*
Non-WhiteFemales	*10*	*	*		*97.7*	*10,232*	*2%*
Unknown Race Females	*N/A*	*	*		*	*3663*	*N/A*
White	**220**	**145**	**88%**		**36.3**	**605,359**	**96%**
Non-White	**30**	**18**	**11%**		**141.2**	**21,247**	**3%**
Unknown Race	**N/A**	*	*		*	**7079**	**N/A**
Male-Male Sex	**130**	**89**	**60%**	[a]	N/A		
Injecting Drug Use	**20**	**13**	**9%**	[a]	N/A		
IDU with heterosexual risk[b]	*10*	*7*	*5%*	[a]	N/A		
IDU without heterosexual risk[b]	*10*	*6*	*4%*	[a]	N/A		
M-M Sex and Inject Drugs	**30**	**19**	**13%**	[a]	N/A		
Blood Exposure[b]	**10**	**6**	**4%**	[a]	N/A		
Heterosexual[b]	**30**	**20**	**14%**	[a]	N/A		
Partner IDU	*10*	*9*	*6%*	[a]	N/A		
Partner Bisexual[b]	*10*	*	*	[a]	N/A		
Partner Blood Exp	*10*	*	*	[a]	N/A		
Partner HIV+	*10*	*9*	*6%*	[a]	N/A		
Perinatal	**10**	*	*	[a]	N/A		
Known Risk Total	**220**	**148**	**100%**	[a]	N/A		
Unknown Risk	**N/A**	**17**	**(10%)**		N/A		
0 - 4 years	**10**	*	*		*	**35,675**	**6%**
5 - 9 years	**10**	*	*		*	**41,592**	**7%**
10-12 years	**10**	*	*		*	**27186**	**4%**
13 -19 years	**10**	*	*		*	**67,018**	**11%**
20 -24 years	**20**	**16**	**10%**		**53.2**	**37,563**	**6%**
25 -29 years	**40**	**29**	**18%**		**125.5**	**31,881**	**5%**
30 -34 years	**60**	**41**	**25%**		**163.6**	**36,665**	**6%**
35 -39 years	**50**	**33**	**20%**		**109.5**	**45,655**	**7%**
40 -44 years	**30**	**19**	**12%**		**60.1**	**49,921**	**8%**
45 -49 years	**10**	**9**	**5%**		**21.6**	**46,363**	**7%**
50 -54 years	**10**	**8**	**5%**		**24.2**	**41,246**	**7%**
55 -59 years	**10**	*	*		*	**36,999**	**6%**
60 -64 years	**10**	*	*		*	**34,008**	**5%**
65 and over	**10**	*	*		*	**101,913**	**16%**
Unknown Age	**N/A**	*	*		**N/A**	**0**	**N/A**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minimum estimate is 10 cases

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 1: Distribution of HIV/AIDS Prevalence Estimates (Con't)
Reported Cases, and Population within Michigan
Region 7
Prisoners and persons with unknown residence are included
January 1, 2002

Reigon 7 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	%^	Rate per 100,000 [3]	2000 Census	%
Benzie/Leelanau	**20**	**12**	**7%**	**53.9**	**37,117**	**6%**
BENZIE CO.	**10**	*	*	*	**15,998**	**3%**
LEELANAU CO.	**10**	**9**	**5%**	**47.4**	**21,119**	**3%**
Central MI District	**60**	**41**	**25%**	**32.2**	**186,561**	**29%**
ARENAC CO.	**10**	*	*	*	**17,269**	**3%**
CLARE CO.	**10**	**8**	**5%**	**32.0**	**31,252**	**5%**
GLADWIN CO.	**10**	**6**	**4%**	**38.4**	**26,023**	**4%**
ISABELLA CO.	**10**	**8**	**5%**	**15.8**	**63,351**	**10%**
OSCEOLA CO.	**10**	*	*	*	**23,197**	**4%**
ROSCOMMON CO.	**20**	**12**	**7%**	**78.5**	**25,469**	**4%**
District #10 Region 7	**40**	**24**	**15%**	**52.8**	**75,806**	**12%**
CRAWFORD CO.	**10**	**6**	**4%**	**70.1**	**14,273**	**2%**
KALKASKA CO.	**10**	*	*	*	**16,571**	**3%**
MISSAUKEE CO.	**10**	*	*	**69.1**	**14,478**	**2%**
WEXFORD CO.	**10**	**9**	**5%**	**32.8**	**30,484**	**5%**
District #2	**20**	**14**	**8%**	**28.5**	**70,121**	**11%**
ALCONA CO.	**10**	*	*	*	**11,719**	**2%**
IOSCO CO.	**10**	**6**	**4%**	**36.6**	**27,339**	**4%**
OGEMAW CO.	**10**	*	*	*	**21,645**	**3%**
OSCODA CO.	**10**	*	*	*	**9,418**	**1%**
District #3	**40**	**25**	**15%**	**38.5**	**103,938**	**16%**
ANTRIM CO.	10	*	*	43.3	23,110	4%
CHARLEVOIX CO.	10	8	5%	38.3	26,090	4%
EMMET CO.	10	6	4%	31.8	31,437	5%
OTSEGO CO.	10	6	4%	42.9	23,301	4%
District #4	**20**	**10**	**6%**	**24.2**	**82,488**	**13%**
ALPENA CO.	10	6	4%	31.9	31,314	5%
CHEBOYGAN CO.	10	*	*	*	26,448	4%
MONTMORENCY CO.	10	*	*	*	10,315	2%
PRESQUE ISLE CO.	10	*	*	*	14,411	2%
GRAND TRAVERSE CO.	**60**	**39**	**24%**	**77.3**	**77,654**	**12%**
Total Region 7	**250**	**165**	**100%**	**39.5**	**633,685**	**100%**

*** Indicates there are fewer than five reported cases**

^ Indicates percentage calculated from cases with *known risk*

 # Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan
Region 7
Sex and Race by Risk
January 1, 2002

Male Only Region 7	White Cases	%[a]	Non-White Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**82**	**71%**	**7**	**58%**	**89**	**70%**
Injecting Drug Use	**8**	**7%**	*****	*****	**10**	**8%**
IDU w/ hetero risk[b]	*	*	*	*	*6*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*	*
M-M Sex /IDU	**17**	**15%**	*****	*****	**19**	**15%**
Blood Exposure[b]	**5**	**4%**	*****	*****	**5**	**4%**
Perinatal	*****	*****	*****	*****	*****	*****
Heterosexual[b]	*****	*****	*****	*****	*****	*****
Partner IDU	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*
Total Known Risks	**116**	**100%**	**12**	**100%**	**128**	**100%**
Undetermined	**8**		*****		**10**	
Total All Cases	**124**		**14**		**138**	

Female Only Region 7	White Cases	%[a]	Non-White Cases	%[a]	All Races Cases	%[a]
Injecting Drug Use	*****	*****	*****	*****	*****	*****
IDU w/ hetero risk[b]	*	*	*	*	*	*
IDU w/o hetero risk[b]	*	*	*	*	*	*
Blood Exposure[b]	*****	*****	*****	*****	*****	*****
Perinatal	*****	*****	*****	*****	*****	*****
Heterosexual[b]	**13**	**87%**	*****	*****	**16**	**80%**
Partner IDU	*8*	*53%*	*	*	*9*	*45%*
Partner Bisexual[b]	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*6*	*30%*
Total Known Risks	**15**	**100%**	**5**	**100%**	**20**	**100%**
Undetermined	**6**		*****		**7**	
Total All Cases	**21**		**6**		**27**	

Male & Female Region 7	White Cases	%[a]	Non-White Cases	%[a]	All Races Cases	%[a]
Male-Male Sex	**82**	**63%**	**7**	**41%**	**89**	**60%**
Injecting Drug Use	**9**	**7%**	*****	*****	**13**	**9%**
IDU w/ hetero risk[b]	*5*	*4%*	*	*	*7*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*6*	*4%*
M-M Sex /IDU	**17**	**13%**	*****	*****	**19**	**13%**
Blood Exposure[b]	**6**	**5%**	*****	*****	**6**	**4%**
Perinatal	*****	*****	*****	*****	*****	*****
Heterosexual[b]	**16**	**12%**	*****	*****	**20**	**14%**
Partner IDU	*8*	*6%*	*	*	*9*	*6%*
Partner Bisexual[b]	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*6*	*5%*	*	*	*9*	*6%*
Total Known Risks	**131**	**100%**	**17**	**100%**	**148**	**100%**
Undetermined	**14**		*****		**17**	
Total All Cases	**145**		**20**		**165**	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Region 7
Age by Risk
January 1, 2002

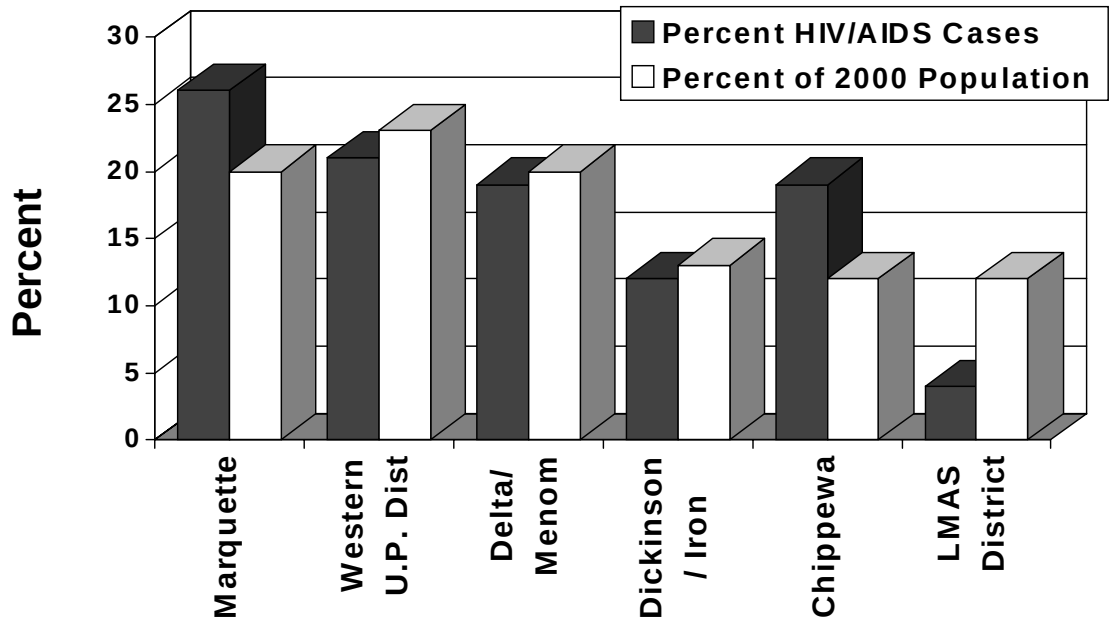
Male Only Region 7	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	6	55%	75	71%	8	100%	89	70%
Injecting Drug Use	*	*	*	*	10	10%	*	*	10	8%
IDU w/ hetero risk[b]	*	*	*	*	*6*	*6%*	*	*	*6*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*	*	*	*	*	*
M-M Sex /IDU	*	*	*	*	15	14%	*	*	19	15%
Blood Exposure[b]	*	*	*	*	*	*	*	*	5	4%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	*	*	*	*	*	*
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*	*
Total Known Risks	*	*	11	100%	105	100%	8	100%	128	100%
Undetermined	*		*		7		*		10	
Total All Cases	*		12		112		10		138	

Female Only Region 7	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Injecting Drug Use	*	*	*	*	*	*	*	*	*	*
IDU w/ hetero risk[b]	*	*	*	*	*	*	*	*	*	*
IDU w/o hetero risk[b]	*	*	*	*	*	*	*	*	*	*
Blood Exposure[b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	11	33%	*	*	16	80%
Partner IDU	*	*	*	*	*6*	*18%*	*	*	*9*	*45%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*6*	*30%*
Total Known Risks	*	*	*	*	33	100%	*	*	20	100%
Undetermined	*		*		13		*		7	
Total All Cases	*		*		46		*		27	

Male & Female Region 7	0-19 Cases	years %[a]	20-24 Cases	years %[a]	25-49 Cases	years %[a]	50+ Cases	years %[a]	All Ages Cases	%[a]
Male-Male Sex	*	*	6	40%	75	28%	8	80%	89	60%
Injecting Drug Use	*	*	*	*	12	5%	*	*	13	9%
IDU w/ hetero risk[b]	*	*	*	*	*7*	*3%*	*	*	*7*	*5%*
IDU w/o hetero risk[b]	*	*	*	*	*5*	*2%*	*	*	*6*	*4%*
M-M Sex /IDU	*	*	*	*	15	6%	*	*	19	13%
Blood Exposure[b]	*	*	*	*	*	*	*	*	6	4%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	14	5%	*	*	20	14%
Partner IDU	*	*	*	*	*6*	*2%*	*	*	*9*	*6%*
Partner Bisexual[b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*6*	*2%*	*	*	*9*	*6%*
Total Known Risks	5	100%	15	100%	266	100%	10	100%	148	100%
Undetermined	*		*		30		*		17	
Total All Cases	5		16		296		13		165	

***Indicates there are fewer than five reported cases**
[a] Indicates percentage calculated from cases with *known risk*
[b] Indicates an explanitory definition exits in attached glossary at end of Profile

Region 8 Live HIV/AIDS Cases and Population by Local Health Department Jurisdiction, 01/01/02



2002 Profile of HIV/AIDS in Region 8

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Tables:

2002 Profile of HIV/AIDS in Region 8

Summary of Epidemic for Region 8

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 120 people living with HIV/AIDS in Region 8, of which 81 were reported as of January 1, 2002. Incidence of HIV (the number of new HIV infections) is level at around 5 new cases in the year 2000. The number AIDS deaths dropped 70 percent between 1995 and 2000 in this region. The prevalence of HIV disease (all persons living with HIV infection or AIDS, whether diagnosed recently or years ago) is increasing because new cases are still being diagnosed and infected persons are living longer.

- **How are the cases geographically distributed?** HIV disease is distributed disproportionately in Michigan. Region 8 has fewer cases (of the 10,749 cases reported statewide) when compared with the general population that lives there. The graph on the previous page displays the distribution of reported cases by local health department within Region 8. The greatest percent of cases within this region, 26 percent, was recorded in the local health department of Marquette.

  The 83 counties of Michigan are organized into 48 local health departments (LHDs). In the less populated areas of the state LHDs may contain more than one county however most contain a single county. All LHDs have been labeled as either being in a high or low HIV prevalence area (refer to page 2 of the statewide profile for methodology used). Within Region 8, all LHDs are in low prevalence areas.

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities at both the statewide and the regional levels, the MDCH HIV/AIDS Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in Region 8. The guiding question used in this process has been, "In which populations can strategies prevent the most infections from occurring?" Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group was used in determining the ranked order of the following three behavioral groups: MSM, IDUs, and heterosexuals.

- **Men Who Have Sex With Men (MSM)*:** MSMs make up 61 percent of all HIV/AIDS cases with a known mode of transmission (41 out of 67). Numbers of cases are too small for this behavioral group within this region to present trend information.

- **Intravenous Drug Users (IDUs)*:** Of all HIV/AIDS cases with a known mode of transmission, twenty-two percent are IDUs (15 out of 67). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. Numbers of cases are too small for this behavioral group within this region to present trend information.

- **High Risk Heterosexuals (HRH):** HRH cases constitute 7 percent of the total number of cases with a known mode of transmission (5 out of 67) and are defined as HIV-infected persons whose heterosexual sex partners are 1) IDUs, 2) bisexual men or 3) HIV+ individuals. Numbers of cases are too small for this behavioral group within this region to present trend information.

**These numbers include MSM/IDU in totals and percent calculations.*

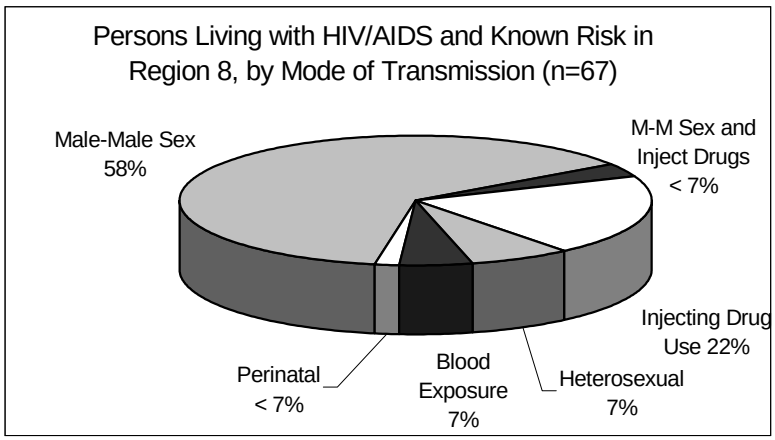
2002 Profile of HIV/AIDS in Region 8

Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

Data from HIV/AIDS Reporting System

Surveillance methods cannot distinguish the specific transmission route in individuals who have engaged in more than one transmission behavior. Surveillance is only able to determine the most likely mode. However, if information on the multiple risk of men who have sex with men (MSM) and injecting drug use (IDU) is available from a case report form, both risks are reported together.

The pie chart indicates the number of people living with HIV/AIDS in Region 8 by mode of transmission for the 67 cases for which the risk was identifiable.

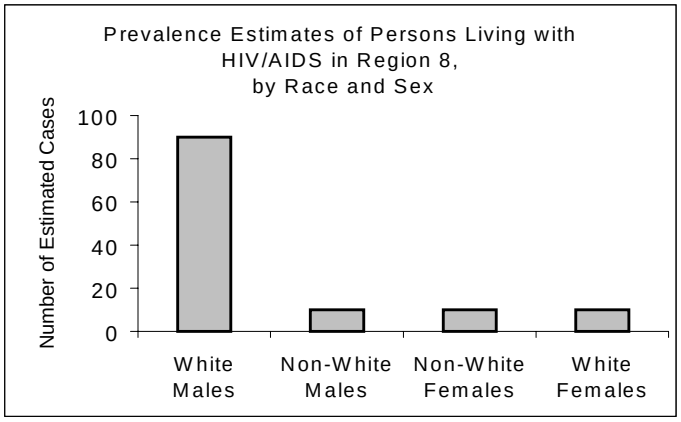


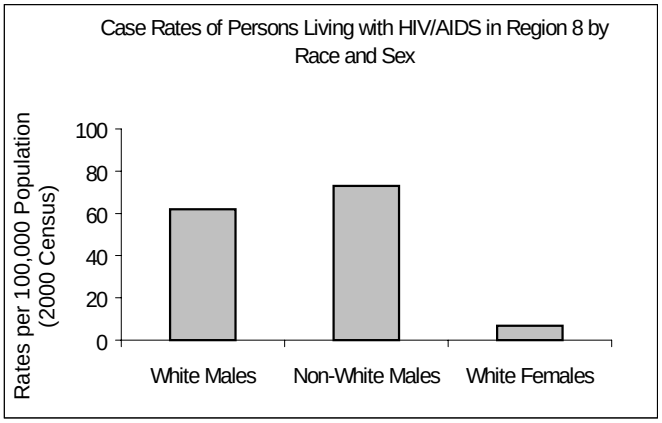
- This chart demonstrates that 61 percent of the people living with HIV/AIDS with a known mode of transmission are MSM, including < 7 percent who also injected drugs.
- Twenty-two percent are injecting drug users, including < 7 percent who are also MSM.
- Finally, 7 percent of the total cases had high risk heterosexual sex partners as their only mode of transmission.

Distribution of Estimated HIV/AIDS Cases by Race

Data from HIV/AIDS Reporting System

These bar graphs show the impact of this epidemic on whites and non-whites and sex groups.



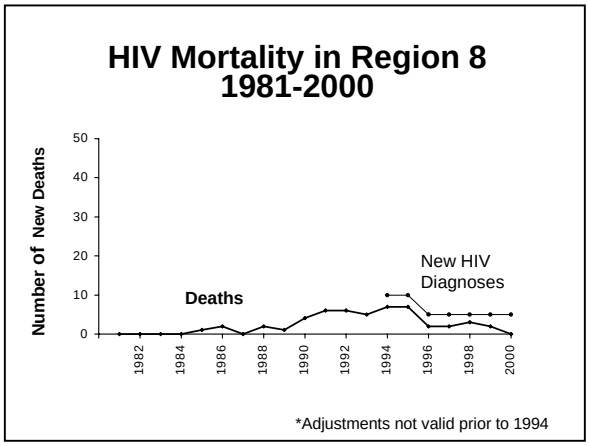


- Non-white males have the highest rate per 100,000 population (73) and they have an estimated 10 persons living with HIV/AIDS. This high rate means the impact of the epidemic is greatest on this demographic group.
- White males have the second highest rate (62) and the highest estimated number (90) of cases of HIV/AIDS.
- White females have the third highest rate (7) and an estimated 10 persons living with HIV/AIDS.
- Non-white females have too few cases to provide a rate, however they are estimated to have 10 cases.

2002 Profile of HIV/AIDS in Region 8

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (HARS)



- *New HIV diagnoses (HIV incidence) and deaths are statistically level.* HIV incidence and the decrease in HIV related deaths are shown in the graph to the left. The overall decrease in deaths is likely due to the more effective treatments introduced in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. MDCH estimates that about 5 persons were newly infected in the year 2000 in Region 8.

- *Transmission of HIV 1996-2000*: Trend information on new diagnoses among MSM, heterosexuals, and injection drug users is difficult to determine due to low number of cases.

Number of People Accessing Services vs. Reported Cases

Data from Uniform Reporting System (URS) & HIV/AIDS Reporting System (HARS)

Comparing Services with Cases		
Group	**Services**	**Cases**
Males	85%	83%
Females	15%	17%
Whites	87%	85%
Non-Whites	11%	11%
Race Unknown	2%	4%
White Males	77%	73%
Non-White Males	6%	7%
Unknown Race Male	2%	4%
White Females	11%	12%
Non-White Females	4%	4%
Unknown Race Fem	0%	1%
0-12 years*	4%	4%
13-19 years*	2%	0%
20-24 years*	4%	1%
25-44 years*	55%	74%
45+ years*	40%	21%
Total HIV Infected	**47**	**81**

The Uniform Reporting System collects data on services that are provided to clients, including case-management, physician referrals, and assistance with housing and transportation needs. These services are funded through the Ryan White CARE Act (RWCA) and related sources.

In 2001, 47 HIV-infected persons were reported receiving Ryan White Services in Region 8. Since it is likely that most of these individuals receiving care are reported cases, when comparing their number to that of the total number of reported cases (81), it is apparent that not all persons reported are receiving RWCA-funded services.

** "Years" within this table refer to current age, not age at diagnosis.*

2002 Profile of HIV/AIDS in Region 8

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Men who have sex with men (MSM) are the number one ranked behavioral group in Region 8. MSM remain the single largest behavioral group affected by this epidemic and account for over half of all reported infected persons with a known risk. MDCH estimates that there are approximately 70 MSM living with HIV disease in Region 8. This includes 10 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

Race or Ethnicity:

Having sex with other men infected most males in Region 8. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 41), white males (39) account for approximately 95 percent of the cases.

Age:

The largest percentage of living MSM cases are between the ages of 25-49 (78 percent). MSM is the predominant mode of transmission for males aged 20 and up.

Geographic Distribution:

All health department jurisdictions in Region 8 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 8 are considered to be low prevalence areas.

Trends and Conclusions:

MDCH estimated that there were about 5 new HIV infections in the year 2000 among men who have sex with men. Men who have sex with men will continue to be the largest behavioral group affected by the HIV epidemic. Because low case numbers make trend determination difficult in Region 8, this region should observe carefully to determine if the statewide trend of level number of cases among white and black MSM is occurring locally.

2002 Profile of HIV/AIDS in Region 8

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Injecting drug users (IDUs) are the number two ranked behavioral group in Region 8 and account for 22 percent of reported infected persons with a known risk. MDCH estimates there are approximately 30 IDUs living with HIV disease in Region 8. This estimate includes 10 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

The low number of cases makes it difficult to make determinations regarding the link between heterosexual transmission and IDU transmission. This region should look at the statewide profile to determine if similar issues exist.

Race or Ethnicity and Gender:

Of the 15 IDU HIV/AIDS cases, ten are white (67 percent) with non-whites making up the remaining 33 percent.

Sixty-seven percent of the IDU cases are male and 33 percent are female.

Age:

Among all IDU, the majority of the cases are recorded among the 25-49 age group.

Geographic Distribution:

All health department jurisdictions in Region 8 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 8 are considered to be low prevalence areas.

Trends and Conclusions:

Estimating trends among IDUs (including MSM/IDU) in Region 8 is difficult due to low number of cases.

Although most cases are among whites, all IDUs would benefit from learning that the risk of HIV transmission increases through sex and sharing needles. In addition, the impact of this transmission group on non-IDUs is important to recognize. Decreasing HIV among IDUs will decrease the number of cases attributed to heterosexual transmission as well as to their infants via perinatal transmission.

2002 Profile of HIV/AIDS in Region 8

Ranked Behavioral Group Discussion: Heterosexuals

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

Heterosexual transmission is the number three ranked behavioral group in Region 8. Heterosexual sex accounts for 7 percent of reported infected persons with a known risk. MDCH estimates that 10 persons living with HIV disease in Region 8 were infected with HIV through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDU, bisexual men or known to be HIV-infected (these are referred to as high risk heterosexual partners).

There are no seroprevalence surveys in this region to measure the HIV positive rate of higher risk heterosexuals attending STD clinics. However rates here are likely lower than those at the Detroit STD clinics.

Race or Ethnicity and Gender:

There are five cases of heterosexual transmission in Region 8. Of these cases, the majority are female.

Age:

There are too few cases of heterosexual transmission to make an analysis by age. However, there were no cases recorded for individuals less than 13 years old or greater than 40.

Geographic Distribution:

All health department jurisdictions in Region 8 have reported cases of HIV among their residents, however, the numbers of cases are too small to provide a detailed analysis. Additionally, all counties within Region 8 are considered to be low prevalence areas.

Trends and Conclusions:

There are not enough cases annually in Region 8 to determine a statistical trend. Heterosexual contact will remain a less common source of HIV transmission statewide than MSM or IDU behavior for the foreseeable future. In Region 8, cases may approach IDU cases over time, but it is important to remember that the seroprevalence rates are much lower. Therefore, interventions among a few IDUs may prevent more infections than among a large number of heterosexuals.

2002 Profile of HIV/AIDS in Region 8

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (HARS)

Number of Cases:

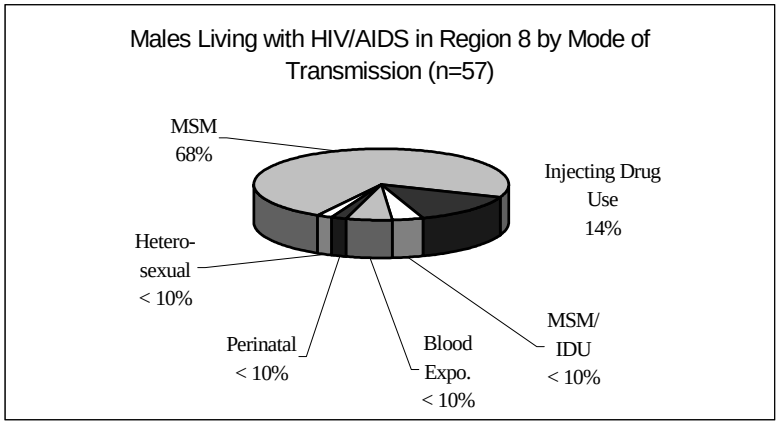
Although white persons comprise the majority of those living with HIV/AIDS in Region 8, the number of non-white cases is still disproportionate. Non-whites comprise 7 percent of this region's population yet make up 11 percent of the cases of HIV/AIDS. MDCH estimates 10 non-whites living with HIV/AIDS in Region 8. The rate of HIV infection among non-whites is 45 per 100,000 population, higher than the rate among whites. *MDCH estimates that as many as one out of 1,375 non-white males may be HIV-infected. A valid rate is not available for non-white females.*

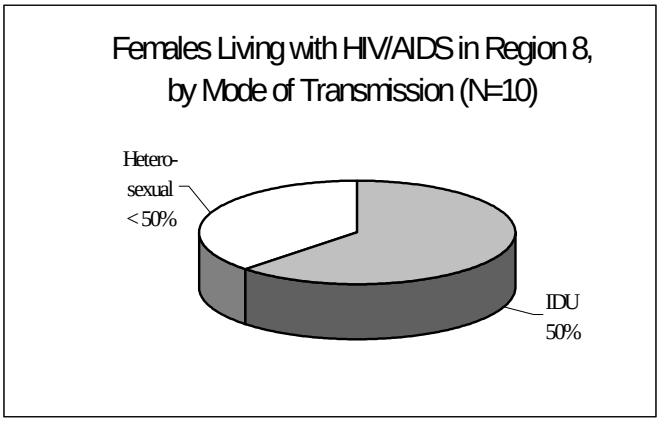
White persons comprise over three-quarters (85 percent) of reported HIV/AIDS cases and 91 percent of the region's population. MDCH estimates 100 whites living with HIV/AIDS in Region 8. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection than non-whites (35 per 100,000 population). *MDCH estimates that as many as one out of 1,620 white males and one out of 14,285 white females may be HIV-infected.*

Most persons living with HIV/AIDS in Region 8 are male (83 percent). Although women continue to be a smaller proportion of persons living with HIV/AIDS, their proportion has increased and they currently comprise 17 percent of the infected population in this region.

Mode of Transmission:

The following pie charts display the proportion of male and female male cases by mode of transmission, among those with known transmission. Percents showing a < amount indicates areas where fewer than five cases were reported. Male and female cases are not subdivided by race because there are two few cases.





Geographic Distribution of Cases:

All health department jurisdictions in Region 8 have reported cases of HIV among their residents; however, the numbers are too small to provide detailed analysis.

Trends and Conclusions:

Trends over time among the various race or sex groups in this region are difficult to discern due to sparse data. However, similar to the state, the disproportionate impact this epidemic is having on non-whites should be taken into account when designing prevention messages.

Table 1: Distribution of HIV/AIDS Prevalence Estimates
Reported Cases, and Population within Michigan
Region 8
Prisoners and persons with unknown residence are included
January 1, 2002

Reigon 8 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2] Cases	% [a]	Rate per 100,000 [3]	2000 Census	%
Male	**100**	**67**	**83%**	**61.4**	**162,752**	**51%**
White Males	*90*	*59*	*73%*	*61.7*	*145,883*	*46%*
Non-White Males	*10*	*6*	*7%*	*72.7*	*13,763*	*4%*
Unknown Race Males	*N/A*	*	*	*	*3106*	*N/A*
Female	**20**	**14**	**17%**	**12.9**	**154,864**	**49%**
White Females	*10*	*10*	*12%*	*7.0*	*143,658*	*45%*
Non-White Females	*10*	*	*	*	*8,414*	*3%*
Unknown Race Females	*N/A*	*	*	*	*2792*	*N/A*
White	**100**	**69**	**85%**	**34.5**	**289,541**	**91%**
Non-White	**10**	**9**	**11%**	**45.1**	**22,177**	**7%**
Unknown Race	**N/A**	*	*	*	**5898**	**N/A**
Male-Male Sex	**60**	**39**	**58%** [a]	N/A		
Injecting Drug Use	**20**	**13**	**19%** [a]	N/A		
IDU with heterosexual risk [b]	*10*	*	* [a]	N/A		
IDU without heterosexual risk [b]	*10*	*9*	*13%* [a]	N/A		
M-M Sex and Inject Drugs	**10**	*	* [a]	N/A		
Blood Exposure [b]	**10**	**5**	**7%** [a]	N/A		
Heterosexual [b]	**10**	**5**	**7%** [a]	N/A		
Partner IDU	*10*	*	* [a]	N/A		
Partner Bisexual [b]	*10*	*	* [a]	N/A		
Partner Blood Exp	*10*	*	* [a]	N/A		
Partner HIV+	*10*	*	* [a]	N/A		
Perinatal	**10**	*	* [a]	N/A		
Known Risk Total	**100**	**67**	**100%** [a]	N/A		
Unknown Risk	**N/A**	**14**	**(17%)**	N/A		
0 - 4 years	**10**	*	*	*	**16,553**	**5%**
5 - 9 years	**10**	*	*	*	**18,779**	**6%**
10-12 years	**10**	*	*	*	**12530**	**4%**
13 -19 years	**10**	*	*	*	**33,426**	**11%**
20 -24 years	**10**	**8**	**10%**	**44.9**	**22,291**	**7%**
25 -29 years	**20**	**13**	**16%**	**117.9**	**16,966**	**5%**
30 -34 years	**20**	**13**	**16%**	**106.4**	**18,791**	**6%**
35 -39 years	**30**	**22**	**27%**	**129.8**	**23,108**	**7%**
40 -44 years	**20**	**12**	**15%**	**78.7**	**25,401**	**8%**
45 -49 years	**10**	*	*	*	**24,784**	**8%**
50 -54 years	**10**	**6**	**7%**	**48.0**	**20,817**	**7%**
55 -59 years	**10**	*	*	*	**16,700**	**5%**
60 -64 years	**10**	*	*	*	**14,928**	**5%**
65 and over	**10**	*	*	*	**52,542**	**17%**
Unknown Age	**N/A**	*	*	**N/A**	**0**	**N/A**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minumum estimate is 10 cases.

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 1: Distribution of HIV/AIDS Prevalence Estimates (Continued)
Reported Cases, and Population Within Michigan
Region 8

Prisoners and persons with unknown residence are included

January 1, 2002

Reigon 8 Patient Group	Estimated HIV Infection [1]	Total HIV + AIDS Reported [2]		Rate per 100,000 [3]	2000 Census	
		Cases	% [a]			%
CHIPPEWA CO.	**20**	**15**	**19%**	**51.9**	**38,543**	**12%**
Delta-Menomominee	**20**	**15**	**19%**	**31.3**	**63,846**	**20%**
DELTA CO.	20	13	16%	51.9	38,520	12%
MENOMINEE CO.	10	*	*	*	25,326	8%
Dickinson-Iron District	**10**	**10**	**12%**	**25.0**	**39,969**	**13%**
DICKINSON CO.	10	9	11%	36.4	26,831	8%
IRON CO.	10	*	*	*	13,138	4%
LMAS District	**10**	*****	*****	*****	**37,732**	**12%**
LUCE	10	*	*	*	7,024	2%
MACKINAC CO.	10	*	*	*	11,943	4%
ALGER	10	*	*	*	9,862	3%
SCHOOLCRAFT CO.	10	*	*	*	8,903	3%
MARQUETTE CO.	**30**	**21**	**26%**	**46.4**	**64,634**	**20%**
Western U.P. District	**30**	**17**	**21%**	**41.5**	**72,251**	**23%**
BARAGA CO.	10	7	9%	114.3	8,746	3%
GOGEBIC CO.	10	*	*	*	17,370	5%
HOUGHTON CO.	10	6	7%	27.8	36,016	11%
KEWEENAW	10	*	*	*	2,301	1%
ONTONAGON	10	*	*	*	7,818	2%
Total Region 8	**120**	**81**	**100%**	**37.8**	**317,616**	**100%**

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

[1] The minimum estimate is 10 cases

[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/02

[3] Rate calculated (*Estimated HIV Infection/2000 Census)* * 100,000

Table 2: Living HIV/AIDS Cases in Michigan
Region 8
Sex and Race by Risk
January 1, 2002

Male Only	White		Non-White		All Races	
Region 8	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	37	76%	*	*	39	68%
Injecting Drug Use	*	*	*	*	8	14%
IDU w/ hetero risk[b]	*	*	*	*	*	*
IDU w/o hetero risk[b]	*	*	*	*	*7*	*12%*
M-M Sex /IDU	*	*	*	*	*	*
Blood Exposure[b]	*	*	*	*	5	9%
Perinatal	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	*	*
Partner IDU	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*
Total Known Risks	49	100%	8	100%	57	100%
Undetermined	10		*		10	
Total All Cases	59		8		67	

Female Only	White		Non-White		All Races	
Region 8	Cases	%[a]	Cases	%[a]	Cases	%[a]
Injecting Drug Use	*	*	*	*	5	50%
IDU w/ hetero risk[b]	*	*	*	*	*	*
IDU w/o hetero risk[b]	*	*	*	*	*	*
Blood Exposure[b]	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	*	*
Partner IDU	*	*	*	*	*	*
Partner Bisexual[b]	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*
Total Known Risks	7	2%	*	*	10	100%
Undetermined	*		*		*	
Total All Cases	10		*		14	

Male & Female	White		Non-White		All Races	
Region 8	Cases	%[a]	Cases	%[a]	Cases	%[a]
Male-Male Sex	37	66%	*	*	39	58%
Injecting Drug Use	8	14%	5	45%	13	19%
IDU w/ hetero risk[b]	*	*	*	*	*	*
IDU w/o hetero risk[b]	*6*	*11%*	*	*	*9*	*13%*
M-M Sex /IDU	*	*	*	*	*	*
Blood Exposure[b]	*	*	*	*	5	7%
Perinatal	*	*	*	*	*	*
Heterosexual[b]	*	*	*	*	5	7%
Partner IDU	*	*	*	*	*	*
Partner Bisexual[b]	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*
Total Known Risks	56	100%	11	100%	67	100%
Undetermined	13		*		14	
Total All Cases	69		12		81	

*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in the glossary at the end of Profile

Table 3: Living HIV/AIDS Cases in Michigan
Region 8
Age by Risk

January 1, 2002

Male Only Region 8	0-19 years Cases	% [a]	20-24 years Cases	% [a]	25-49 years Cases	% [a]	50+ years Cases	% [a]	All Ages Cases	% [a]
Male-Male Sex	*	*	*	*	31	72%	*	*	39	68%
Injecting Drug Use	*	*	*	*	7	16%	*	*	8	14%
IDU w/ hetero risk [b]	*	*	*	*	*	*	*	*	*	*
IDU w/o hetero risk [b]	*	*	*	*	*6*	*14%*	*	*	*7*	*12%*
M-M Sex /IDU	*	*	*	*	*	*	*	*	*	*
Blood Exposure [b]	*	*	*	*	*	*	*	*	5	9%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual [b]	*	*	*	*	*	*	*	*	*	*
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*	*
Total Known Risks	*	*	6	100%	43	100%	5	100%	57	100%
Undetermined	*		*		9		*		10	
Total All Cases	*		6		52		6		67	

Female Only Region 8	0-19 years Cases	% [a]	20-24 years Cases	% [a]	25-49 years Cases	% [a]	50+ years Cases	% [a]	All Ages Cases	% [a]
Injecting Drug Use	*	*	*	*	*	*	*	*	5	50%
IDU w/ hetero risk [b]	*	*	*	*	*	*	*	*	*	*
IDU w/o hetero risk [b]	*	*	*	*	*	*	*	*	*	*
Blood Exposure [b]	*	*	*	*	*	*	*	*	*	*
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual [b]	*	*	*	*	*	*	*	*	*	*
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Bisexual [#]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*	*
Total Known Risks	*	*	*	*	6	100%	*	*	10	100%
Undetermined	*		*		*		*		*	
Total All Cases	*		*		10		*		14	

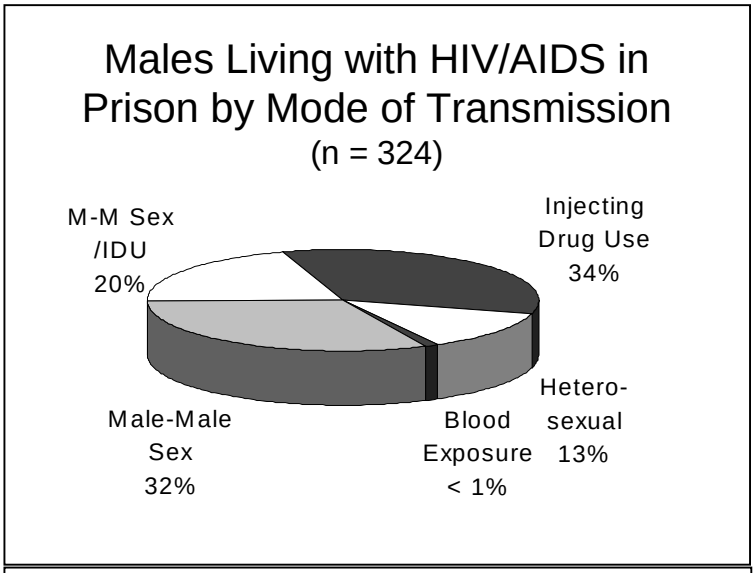
Male & Female Region 8	0-19 years Cases	% [a]	20-24 years Cases	% [a]	25-49 years Cases	% [a]	50+ years Cases	% [a]	All Ages Cases	% [a]
Male-Male Sex	*	*	*	*	31	63%	*	*	39	58%
Injecting Drug Use	*	*	*	*	11	22%	*	*	13	19%
IDU w/ hetero risk [b]	*	*	*	*	*	*	*	*	*	*
IDU w/o hetero risk [b]	*	*	*	*	*8*	*16%*	*	*	*9*	*13%*
M-M Sex /IDU	*	*	*	*	*	*	*	*	*	*
Blood Exposure [b]	*	*	*	*	*	*	*	*	5	7%
Perinatal	*	*	*	*	*	*	*	*	*	*
Heterosexual [b]	*	*	*	*	*	*	*	*	5	7%
Partner IDU	*	*	*	*	*	*	*	*	*	*
Partner Bisexual [b]	*	*	*	*	*	*	*	*	*	*
Partner Blood Exposure	*	*	*	*	*	*	*	*	*	*
Partner HIV+	*	*	*	*	*	*	*	*	*	*
Total Known Risks	5	100%	8	100%	49	100%	5	100%	67	100%
Undetermined	*		*		13		*		14	
Total All Cases	5		8		62		6		81	

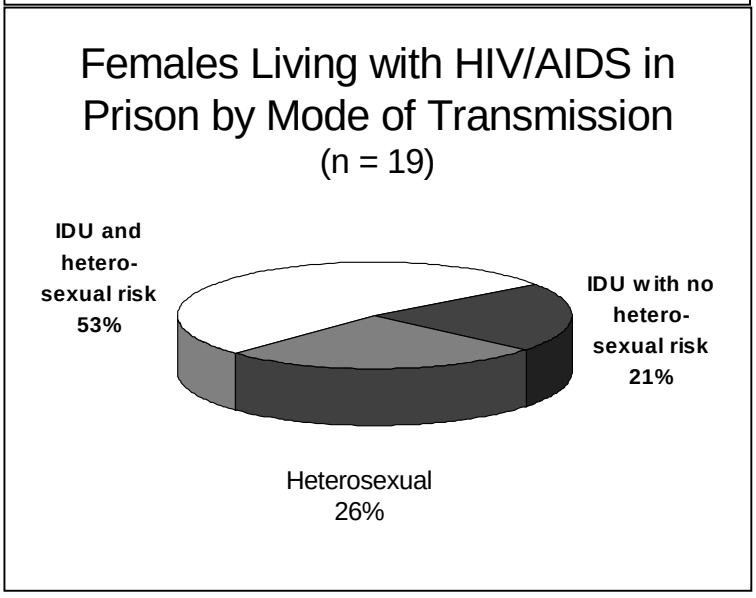
*** Indicates there are fewer than five reported cases**

[a] Indicates percentage calculated from cases with *known risk*

[b] Indicates an explanatory definition exists in attached glossary at end of Profile

Michigan Department of Corrections
HIV Infection within Michigan's Prison Population





2002 Profile of HIV/AIDS for Michigan Department of Corrections

Table of Contents Michigan Department of Corrections

Tables:

2002 Profile of HIV/AIDS for Michigan Department of Corrections

Statewide Summary of Epidemic Among Michigan's Prison Population

Data from HIV/AIDS Reporting System (HARS)

- **How many cases?** From 1983 to present, a cumulative total of 1,531 prisoners have been confirmed with HIV infection. Many were first diagnosed upon intake to prison, some were diagnosed while in prison, and some diagnosed prior to incarceration. A total of 476 are known to have died inside or outside of prison.

  The regional profiles include ex-prisoners but not persons still in prison. This profile on the Michigan Department of Corrections includes the 417 inmates known to be incarcerated at state facilities, as of January 2002.

- **What are the demographics of these cases?** The remainder of this profile describes these inmates. Ninety-five percent of HIV-infected prisoners are male and 5 percent are female. Most (78 percent) are black, 15 percent are white, and 6 percent are Hispanic.

  Among the 21 females, just over three-quarters are black and less than 15 percent are white. Among those with known behavior histories, 74 percent give a history of injecting drug use.

  Among black males with known risk, 31 percent are men who have sex with men, 36 percent have injected drugs, and 19 percent have had both behaviors. Another 14 percent indicate they had a heterosexual sex partner who was HIV-infected or who was an injecting drug user. The acknowledged behaviors among white males are similar: 42 percent are men who have sex with men, 20 percent have injected drugs, and 28 percent have had both behaviors. Less than 9 percent of white men acknowledge a heterosexual sex partner who was HIV-infected or who was an injecting drug user.

- **How was this data collected?** Since 1989, all prisoners are tested for HIV infection and other infectious diseases upon intake to state correctional facilities. This testing shows that among both men and women, approximately 1 percent of all prisoners are HIV-infected. Among young men under age 21, the rate is much lower. These rates have not changed significantly over time.

  The most current available surveillance data was reviewed to determine the progression of HIV disease among these prisoners. This data is often collected at the time of incarceration, although there are occasional updates.

Table 1: Living HIV/AIDS Cases in Michigan

Michigan Department of Corrections

Sex and Race by Risk

January 2002

Male Only In Prisons	White Cases	%^	Black Cases	%^	Hispanic Cases	%^	Other Cases	%^	All Races Cases	%^
Male-Male Sex	**21**	**42%**	**77**	**31%**	**5**	**23%**	**0**	**0%**	**103**	**32%**
Injecting Drug Use	**10**	**20%**	**89**	**36%**	**12**	**55%**	**0**	**0%**	**111**	**34%**
IDU w/ hetero risk#	*8*	*16%*	*54*	*22%*	*8*	*36%*	*0*	*0%*	*70*	*22%*
IDU w/o hetero risk#	*	*	*35*	*14%*	*	*	*0*	*0%*	*41*	*13%*
M-M Sex /IDU	**14**	**28%**	**47**	**19%**	*	*	*	*	**65**	**20%**
Blood Exposure	*	*	*	*	**0**	**0%**	**0**	**0%**	*	*
Perinatal	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Heterosexual	*	*	**34**	**14%**	*	*	*	*	**41**	**13%**
Partner IDU	*	*	*22*	*9%*	*	*	*0*	*0%*	*26*	*8%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*	*	*12*	*5%*	*0*	*0%*	*	*	*15*	*5%*
Total Known Risks	**50**	**100%**	**250**	**100%**	**22**	**100%**	*	*	**324**	**100%**
Undetermined	**10**		**60**		*	*	**0**		**72**	
Total All Cases	**60**		**310**		**24**		*	*	**396**	

Female Only In Prisons	White Cases	%^	Black Cases	%^	Hispanic Cases	%^	Other Cases	%^	All Races Cases	%^
Injecting Drug Use	*	*	**10**	**67%**	*	*	0	0%	**14**	**74%**
IDU w/ hetero risk#	*	*	*8*	*53%*	*	*	*0*	*0%*	*10*	*53%*
IDU w/o hetero risk#	*	*	*	*	*0*	*0%*	*0*	*0%*	*	*
Blood Exposure#	*0*	*0%*	*0*	*0%*	**0**	**0%**	**0**	**0%**	*0*	*0%*
Perinatal	*0*	*0%*	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Heterosexual	*0*	*0%*	**5**	**33%**	**0**	**0%**	**0**	**0%**	**5**	**26%**
Partner IDU	*0*	*0%*	*5*	*33%*	*0*	*0%*	*0*	*0%*	*5*	*26%*
Partner Bisexual#	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Total Known Risks	*	*	**15**	**100%**	*	*	**0**	**0%**	**19**	**100%**
Undetermined	**0**		*		**0**		*		*	
Total All Cases	*		**16**		*		*		**21**	

Male & Female In Prisons	White Cases	%^	Black Cases	%^	Hispanic Cases	%^	Other Cases	%^	All Races Cases	%^
Male-Male Sex	**21**	**40%**	**77**	**29%**	**5**	**22%**	**0**	**0%**	**103**	**30%**
Injecting Drug Use	**13**	**25%**	**99**	**37%**	**13**	**57%**	**0**	**0%**	**125**	**36%**
IDU w/ hetero risk#	*9*	*17%*	*62*	*23%*	*9*	*39%*	*0*	*0%*	*80*	*23%*
IDU w/o hetero risk#	*	*	*37*	*14%*	*	*	*0*	*0%*	*45*	*13%*
M-M Sex /IDU	**14**	**26%**	**47**	**18%**	*	*	*	*	**65**	**19%**
Blood Exposure#	*	*	*	*	**0**	**0%**	**0**	**0%**	*	*
Perinatal	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Heterosexual	*	*	**39**	**15%**	*	*	*	*	**46**	**13%**
Partner IDU	*	*	*27*	*10%*	*	*	*	*	*31*	*9%*
Partner Bisexual#	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*	*	*12*	*5%*	*0*	*0%*	*	*	*15*	*4%*
Total Known Risks	**53**	**100%**	**265**	**100%**	**23**	**100%**	*	*	**343**	**100%**
Undetermined	**10**		**61**		*		*		**74**	
Total All Cases	**63**		**326**		**25**		*		**417**	

*** Indicates there are fewer than five reported cases**

^ Indicates percentage calculated from cases with *known risk*

 # Indicates an explanatory definition exists in attached glossary at end of Profile

Table 2: Living HIV/AIDS Cases in Michigan

Michigan Department of Corrections

Sex and Age by Risk

January 2002

Male Only	13-19	years	20-24	years	25-49	years	50 +	years	All Ages	years
In Prisons	Cases	%^	Cases	%^	Cases	%^	Cases	%^	Cases	%^
Male-Male Sex	6	55%	20	57%	77	28%	0	0%	103	32%
Injecting Drug Use	*	*	*	*	102	37%	*	*	111	34%
IDU w/ hetero risk#	*	*	*	*	*64*	*23%*	*	*	*70*	*22%*
IDU w/o hetero risk#	0	0%	*	*	*38*	*14%*	*	*	*41*	*13%*
M-M Sex /IDU	*	*	6	17%	55	20%	*	*	65	20%
Blood Exposure	0	0%	*	*	*	*	0	0%	*	*
Perinatal	0	0%	0	0%	0	0%	0	0%	0	0%
Heterosexual	*	*	*	*	36	13%	0	0%	41	13%
Partner IDU	*0*	*0%*	*	*	*25*	*9%*	*0*	*0%*	*26*	*8%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*	*	*	*	*11*	*4%*	*0*	*0%*	*15*	*5%*
Total Known Risks	11	100%	35	100%	273	100%	5	100%	324	100%
Undetermined	*		14		52		*		72	
Total All Cases	15		49		325		7		396	

Female Only	13-19	years	20-24	years	25-49	years	50 +	years	All Ages	years
In Prisons	Cases	%^	Cases	%^	Cases	%^	Cases	%^	Cases	%^
Injecting Drug Use	0	0%	*	*	12	75%	*	*	14	74%
IDU w/ hetero risk#	*0*	*0%*	*	*	*8*	*50%*	*	*	*10*	*53%*
IDU w/o hetero risk#	*0*	*0%*	*0*	*0%*	*	*	*0*	*0%*	*	*
Blood Exposure#	0	0%	0	0%	0	0%	0	0%	0	0%
Perinatal	0	0%	0	0%	0	0%	0	0%	0	0%
Heterosexual	0	0%	0	0%	*	*	*	*	5	26%
Partner IDU	*0*	*0%*	*0*	*0%*	*	*	*	*	*5*	*26%*
Partner Bisexual#	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Total Known Risks	0	0%	*	*	16	100%	*	*	19	100%
Undetermined	0		0		*		0		*	
Total All Cases	0		*		18		*		21	

Male & Female	13-19	years	20-24	years	25-49	years	50 +	years	All Ages	years
In Prisons	Cases	%^	Cases	%^	Cases	%^	Cases	%^	Cases	%^
Male-Male Sex	6	67%	20	67%	77	29%	0	0%	103	30%
Injecting Drug Use	*	*	5	17%	110	42%	5	71%	125	36%
IDU w/ hetero risk#	*	*	*	*	*72*	*27%*	*	*	*80*	*23%*
IDU w/o hetero risk#	*0*	*0%*	*	*	*42*	*16%*	*	*	*45*	*13%*
M-M Sex /IDU	*	*	6	20%	55	21%	*	*	65	19%
Blood Exposure#	0	0%	*	*	*	*	0	0%	*	*
Perinatal	0	0%	0	0%	0	0%	0	0%	0	0%
Heterosexual	*	*	*	*	40	15%	*	*	46	13%
Partner IDU	*0*	*0%*	*	*	*29*	*11%*	*	*	*31*	*9%*
Partner Bisexual#	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner Blood Exposure	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*	*0*	*0%*
Partner HIV+	*	*	*	*	*11*	*4%*	*0*	*0%*	*15*	*4%*
Total Known Risks	9	100%	36	100%	289	100%	7	100%	343	100%
Undetermined	*		14		54		*		74	
Total All Cases	15		50		343		9		417	

*** Indicates there are fewer than five reported cases**

^ Indicates percentage calculated from cases with known risk

 # Indicates an explanatory definition exists in attached glossary at end of Profile

2002 Profile of HIV/AIDS for Michigan
Definition of some terms

HIV Infection and AIDS Case Definitions: These are standard national definitions and are used by all states. A minimum amount of 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, surveillance always counts that case as AIDS even if his/her health status improves.

HIV infection: The surveillance definition for HIV infection was last updated in December 1999 and includes laboratory tests which detect antibody to HIV infection, or which directly detect the virus HIV.

AIDS: The surveillance definition for AIDS includes a diagnosis of any of 25 different opportunistic disease which are indicative of a severe immune deficiency, or a laboratory test demonstrating severe immune deficiency.

The above definitions are more fully described in the following references:

Guidelines for National HIV Case Surveillance, Including Monitoring for HIV Infection and AIDS, Morbidity and Mortality Weekly Report, December 10, 1999, vol 48, number RR-13.

1993 Revised Classification System for HIV Infection and Expanded Surveillance Case Definition for AIDS Among Adolescents and Adults, Morbidity and Mortality Weekly Report, December 18, 1992, volume 41, number RR-17.

Both of these references can be obtained through the CDC website www.cdc.gov/mmwr/mmwr_rr.html .

Heterosexual risk: A heterosexual partner is known to be HIV-infected, or is a man who has had sex with men, or is an injection drug user, or is a hemophiliac.

IDU with Heterosexual risk: A person who injects drugs AND has a heterosexual risk (see above).

IDU without Heterosexual risk: A person who injects drugs and does NOT have a heterosexual risk (see above).

Blood Exposure: All hemophiliacs who received blood products prior to 1986 and recipients of transfused blood known to receive blood products prior to 1986 are included in this category.

Partner Bisexual: Applies to women who have one or more male partners who also have sex with other men.

Prevalence: The total number of persons with HIV disease at one point in time is called the **prevalence**. This number for all of Michigan as of January 1, 2000, was 13,000 persons. This estimate includes persons who have AIDS, persons diagnosed with HIV infection without AIDS, and persons with HIV infection who have not yet been diagnosed.

Incidence: This is the number of persons who develop a disease or infection in a certain period of time, usually a year. The number of persons diagnosed with HIV infection in Michigan is about 1,100 persons per year.

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