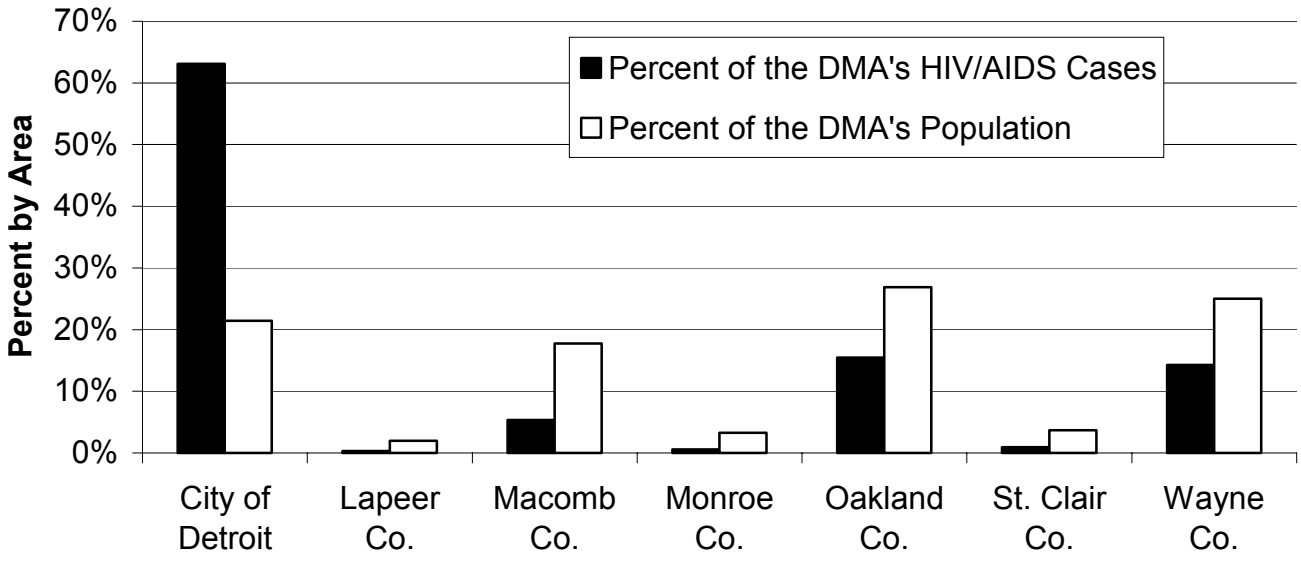
# 2004 Profile of HIV/AIDS: The Detroit Metro Area

**Figure 1: Detroit Metro Area: Living HIV/AIDS Cases and Population by Local Health Jurisdiction, 1/1/04**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

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# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Summary of Epidemic for The Detroit Metro Area

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 10,500 people living with HIV/AIDS in the Detroit Metro Area, of which 7,337 were reported as of January 1, 2004. For this profile, the Detroit Metro Area is the Detroit Metropolitan Statistical Area as defined by the US Census. It contains the counties of Lapeer, Oakland, Macomb, Monroe, St. Clair, and Wayne, including the city of Detroit. The incidence of HIV (the number of new HIV infections) was roughly level at around 500 new cases each year between 1998 and 2002**.** The number of AIDS deaths annually in the Detroit Metro Area has remained roughly level at about 210 deaths each year between 1998 and 2002. However, 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. The Detroit Metro Area has more cases (7,337 of the 11,527 cases reported in Michigan) when compared with the number of people who live there. Within the Detroit Metro Area, the City of Detroit has a higher proportion of cases than expected based on the percent of the population that lives there. Figure 1 displays the distribution of reported cases by local health jurisdictions within the Detroit Metro Area. Sixty-three percent of the reported cases within this area were among residents of Detroit.

  The 83 counties of Michigan are divided into 45 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 Figure 2, page 3-6 of the Statewide profile for methodology used). Within the Detroit Metro Area, the City of Detroit and Oakland and Wayne counties are considered to be LHDs in high prevalence areas (93 percent of cases in the Detroit Metro Area), while Lapeer, Macomb, Monroe and St. Clair 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 local levels, the MDCH HIV/STD & Bloodborne Infections Surveillance Section is charged with ranking the top three primary behavioral groups at risk for HIV disease in the Detroit Metro Area. 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. Notice: The trends and rates reported in the Detroit Metro Area Profiles must be viewed with caution because they are based on 'statistically small' numbers.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 61 percent of all HIV/AIDS cases with a known mode of transmission (3,741 out of 6,094). 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, 25 percent are IDUs (1,535 out of 6,094). Cases among IDUs are closely linked to HIV among women and their infants and the heterosexual groups. IDU transmission decreased significantly between 1998 and 2002 from 16 percent to nine percent (143 to 79 cases).

- **High Risk Heterosexuals (HRH):** HRH cases constitute 16 percent of the total number of cases with a known mode of transmission (987 out of 6,094) and are defined as HIV-infected persons whose heterosexual sex partners are known to be IDUs, behaviorally bisexual men, blood recipients known to be HIV +, and/or HIV+ individuals. The trend for heterosexual transmission also appears to be level.

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

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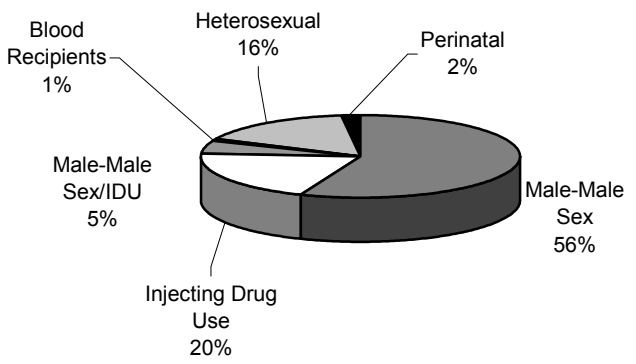
## Distribution of HIV/AIDS (Living) Cases by Mode of Transmission

**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. Although case reporting includes ascertainment of many behaviors associated with HIV transmission, for the purposes of analysis and interpretation, cases are assigned to a risk hierarchy designated by the Centers for Disease Control and Prevention. This hierarchy takes into account the efficiency of HIV transmission associated with each behavior as well as the probability of exposure to an infected person within the population. The adult/adolescent categories, in order, are as follows: (1) men who have sex with men (MSM), (2) injecting drug users (IDU), (3) men who have sex with men and inject drugs (MSM/IDU), (4) hemophilia/coagulation disorders, (5) heterosexual (see glossary for more in-depth description), (6) receipt of HIV-infected blood or blood components, and (7) no identified risk (NIR). The hierarchy is currently being re-examined by a national work group.

Figure 2 indicates persons living with HIV/AIDS in the Detroit Metro Area by mode of transmission among the 6,094 cases for which the risk was identifiable.

**Figure 2: Reported Persons Living with HIV/AIDS and Known Risk in The Detroit Metro Area, by Mode of Transmission (n=6,094)**




- This chart demonstrates that over half (61 percent) of the people living with HIV/AIDS with a known mode of transmission are MSM, including five percent who also injected drugs.
- A quarter (25 percent) are injecting drug users, including five percent who are also MSM. Forty-eight percent of non-MSM IDUs also have high-risk heterosexual sex partners (IDU w/ hetero). See Table 4, page 3-31.
- Finally, 16 percent of the total had high-risk heterosexual sex partners as their only mode of transmission.

**Discussion of Persons with 'No Identified Risk':**

The 'No Identified Risk' (NIR) category is the only transmission category with a significant trend increase from 1998 to 2002. NIRs make up 17 percent of the HIV-infection population in the Detroit Metro Area and are 63 percent male and 37 percent female. Those persons in the NIR category are 77 percent black, 15 percent white, and eight percent other races. Almost three-quarters of the NIRs fall under the 'presumed heterosexual' subcategory. Presumed Heterosexual accounts for nine percent of men living with HIV and 21 percent of women living with HIV. See Table 5, page 3-32.

There are many reasons why risk is not reported to the Michigan Department of Community Health on the initial case report. Lack of provider elicitation and patient denial, as well as, patients truly not knowing their risks and the risks of their partner(s'), are reasons why there is a growing proportion of NIRS.

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## Distribution of Estimated HIV/AIDS Cases by Race

**Data from HIV/AIDS Reporting System**

Figures 3 and 4 show the impact of this epidemic on six race and sex groups.

**Figure 3: Estimated Prevalence of Persons Living with HIV/AIDS in The Detroit Metro Area, by Race and Sex**

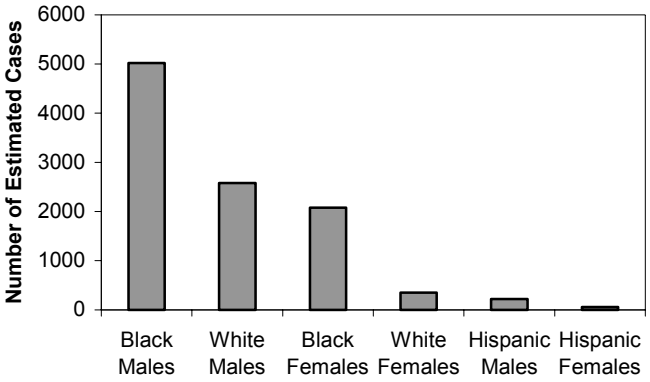
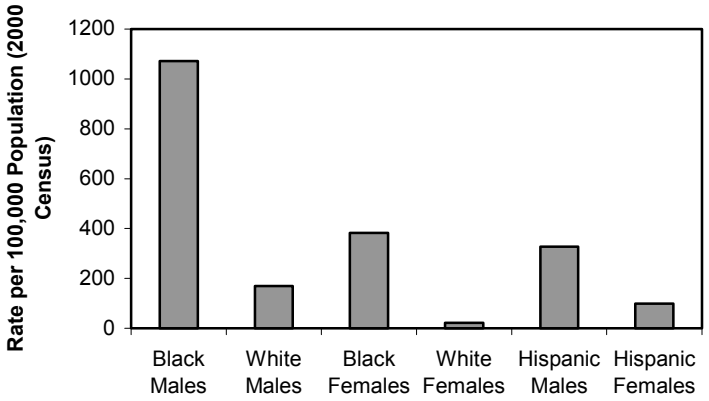



**Figure 4: Estimated Case Rates of Persons Living with HIV/AIDS in The Detroit Metro Area, by Race and Sex**



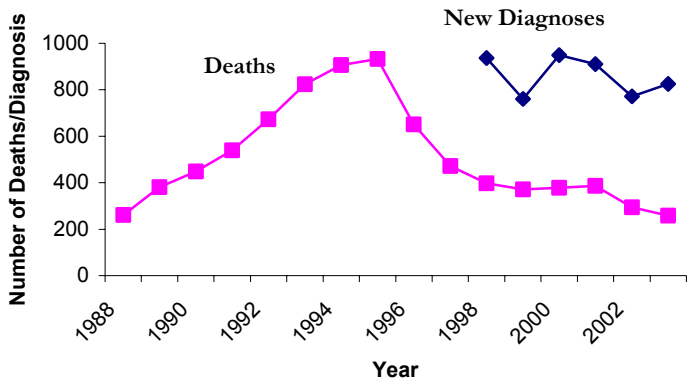

- Black males have both the highest rate per 100,000 population (1,069) and the highest estimated number (5,010) of HIV/AIDS cases. This high rate means the impact of the epidemic is greatest on this demographic group.
- Black females have the second highest rate (383) and the third highest estimated number (2,080) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (327) and the fifth highest estimated number (220) 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 (170) and the second highest estimated number (2,580) of cases.
- Hispanic females have the fifth highest rate (99) and the lowest estimated number (60) of HIV/AIDS.
- White females have the lowest rate (22) and the fourth highest estimated number (350) of HIV/AIDS cases.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Trends in HIV/AIDS Data

**Data from HIV/AIDS Reporting System (HARS)**

**Figure 5: New Diagnoses of HIV and HIV Deaths in the Detroit Metro Area**




- *New HIV Diagnoses (HIV incidence) and deaths are statistically level 1996-2000.* HIV incidence and the HIV related deaths are shown in Figure 5. The overall decrease in deaths is likely due to the more effective treatments available in 1996 that delay or prevent the onset of AIDS in HIV-infected persons. The number of persons newly diagnosed with HIV each year was roughly level at about 500 cases between 1998 and 2002. (the slight increase from 1999 to 2000 has shown no significant trend).

- *Risk Behaviors for HIV Infection, 1998-2002:* The proportion of persons diagnosed each year with HIV infection between 1998 and 2002 decreased significantly in IDUs from 17 percent to 10 percent (109 to 54 cases) and MSM/IDUs from four percent to two percent (23 to 9 cases) and increased significantly in the No Identifiable Risks (NIRs) from six percent to 10 percent (39 to 58 cases).

**Figure 6: The Detroit Metro Area: Number of New HIV Diagnoses in 2002 and Trends 1998-2002, by Mode of Transmission**

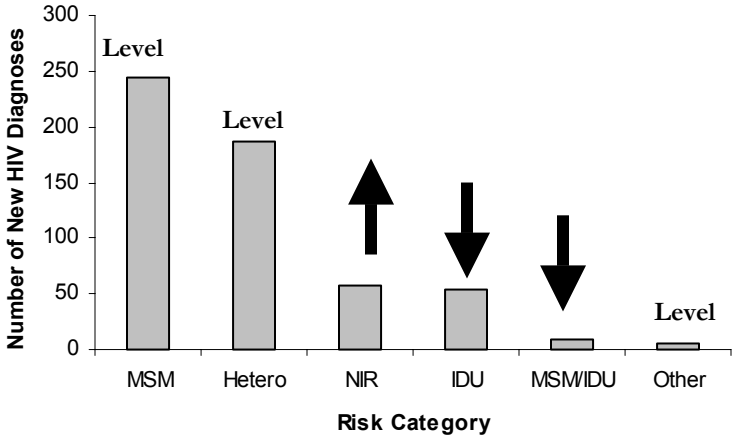



Figure 6 shows that of the 558 new HIV infections diagnosed in 2002, there were 245 (44 percent) diagnoses among MSM, 186 (33 percent) among heterosexuals, 58 (10 percent) among NIRs, 54 (10 percent) among IDUs, 9 (2 percent) among MSM/IDUs, and 6 (1 percent) among other risk infections. This year the heterosexual category is made up of two subgroups: 'high risk' heterosexuals and 'presumed' heterosexuals. A 'high risk' heterosexual is categorized as an HIV-infected person whose heterosexual sex partners are known to be IDUs, behaviorally bisexual men, blood recipients known to be HIV +, and/or HIV+ individuals. A 'presumed' heterosexual is someone who had heterosexual sex as their only risk but their partner's risk is unknown. This is the first year we included "presumed" heterosexuals with the "high risk" heterosexuals in one category for the purpose of measuring trend over time. The trend for heterosexual transmission also appears to be level. Other risks include transmission from blood products and perinatal exposures.

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## Number of People Accessing Services vs. Reported Cases

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

| Table 1: Comparing Services with Cases Detroit Metro Area | | |
|---|---|---|
| **Group** | **Services** | **Cases** |
| Males | 71% | 76% |
| Females | 29% | 24% |
| White | 19% | 28% |
| Black | 75% | 68% |
| Hispanic | 3% | 3% |
| Other Minorities | 1% | 1% |
| Unknown Race | 2% | 1% |
| White Males | 17% | 25% |
| Black Males | 50% | 48% |
| Hispanic Males | 2% | 2% |
| Other Minority Males | 1% | <1% |
| Unknown Race Males | 1% | 1% |
| White Females | 2% | 3% |
| Black Females | 25% | 20% |
| Hispanic Females | 1% | 1% |
| Other Minority Females | 1% | <1% |
| Unknown Race Females | <1% | <1% |
| 0-12 Years* | 1% | 1% |
| 13-19 Years* | 1% | 1% |
| 20-24 Years* | 3% | 3% |
| 25-44 Years* | 56% | 54% |
| 45+ Years* | 38% | 42% |
| Infants: 0-1 Years* | <1% | <1% |
| Children: 2-12 Years* | 1% | 1% |
| Youth: 12-24 Years* | 5% | 3% |
| Women: 25 Years*+ | 26% | 23% |
| Total HIV Infected | 100% (N=4,670) | 100% (N=7,337) |

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

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 2003, 4,670 HIV-infected persons were reported receiving Ryan White Services in the Detroit Metro Area. A comparison also shows that persons receiving these services were more likely than the reported population to be female and/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 (7,337), it is apparent that not all reported persons are receiving RWCA-funded services.

The Ryan White CARE Act puts a priority on providing services to women, infants, children and youth (WICY) with HIV infection. As a result, the proportion of youth age 12 to 24, and women age 25 or older receiving care is somewhat higher than in reported cases.

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## Sexually Transmitted Diseases

**Data from STD Reporting System & HIV/AIDS Reporting System (HARS)**

Several sexually transmitted diseases (STDs) are more common than HIV infection, have a short incubation period, and are curable. 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 2003, there were over 16,000 cases of chlamydia and over 7,000 cases of gonorrhea reported the Detroit Metro Area. See Table 7, page 3-34. For both diseases, the highest rates of infection were among persons age 20-24. This age group comprises six percent of the Detroit Metro Area population but accounted for 31 percent of gonorrhea and 35 percent of chlamydia cases. The rate of chlamydia among blacks was 10 times the rates among whites; and the rate of gonorrhea in blacks was 33 times that of whites. Similar to statewide data, 47 percent of gonorrhea cases are male and 53 percent are female, however, the majority of chlamydia cases are female (81 percent).

The majority of 2003 primary or secondary syphilis cases were reported in the Detroit Metro Area (222 of 249 cases). These cases were more likely to be male (62 percent) and older (42 percent over the age of 40). Eighty-four percent of these cases were black and 14 percent were white. Only one percent of primary or secondary syphilis cases were Hispanic.

## Hepatitis and HIV

**Data from Adult and Adolescent Spectrum of Disease (ASD)**

The Adult and Adolescent Spectrum of Disease project (ASD) is a supplemental surveillance project that collects data from the medical records of HIV-infected patients at two major medical centers in the Detroit Metropolitan Area. Medical records are reviewed every six months, from the time the patients first contact either site, until they die or are lost to follow-up. The proportion of males in ASD is lower than in the HIV-infected population overall, because ASD includes all the females, but only 40 percent of the males who present for HIV care at ASD sites. Thus, females are purposely over-sampled.

Hepatitis C (HCV) is the most common type of hepatitis among HIV-infected persons. Of the 1,902 persons included in ASD who were in care in 2000-2002, 384 (19 percent) had a diagnosis of HCV, while 184 (10 percent) had a diagnosis of hepatitis B (HBV), and 62 (3 percent) had a diagnosis of hepatitis A (HAV) (Table 8). The proportion of HIV-infected persons who were co-infected with HCV was higher among injecting drug users (IDU) and blood recipients than among persons in other HIV transmission risk groups. It was also higher among persons 40 or more years of age than among persons under 40. The rate of HCV co-infection was slightly higher among females than among males, and higher among persons of black or other race than among whites. The proportion co-infected with HBV or HAV varied less than HCV among the demographic and HIV transmission risk groups.

The impact of HCV co-infection on the health of HIV-infected persons is increasing, especially among those with a history of injecting drug use and persons over the age of 40. The total numbers of new HCV cases in the U.S. increased in the 1970's and 1980's, and dropped precipitously in the early 1990's.[1] These changes created a cohort of HCV-infected persons in the population, and as this cohort ages, the number of persons with HCV-related late stage liver disease is expected to increase through 2015.[2] Because HIV/HCV co-infected persons have a higher risk of liver disease than persons infected with HCV alone,[3] they will be impacted even more. Planning for the care of HIV-infected persons needs to take into account the increasing numbers of HIV-HCV co-infected persons who are expected to develop late stage liver disease over the next decade or more.

**References:**

[1]Centers for Disease Control and Prevention. Hepatitis Surveillance Report No. 58. Atlanta, GA: HHS, CDC, 2003.

[2]Armstrong GL, et al. 2000. Hepatology 31:777-782.

[3]Graham CS, et al. 2001. Clin Infect Disease 33:562-569.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## 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 the Detroit Metro Area. 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 5,360 MSM living with HIV disease in the Detroit Metro Area. This includes 480 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs.

**Prevalence:**

From 1993 to 1999, the percent of MSM who were HIV infected and attended the sexually transmitted diseases (STD) clinics at local health departments in southeast Michigan was 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 in the City of Detroit (average 1993-1999). Although data from 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 proportions. 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. HIV seroprevalence ranged from 13 to 54 percent during these years, declining in the early years, and peaking in 1995 and then falling again to its lowest level in 1999. These clinic-based surveys were discontinued in 1999.

Statewide Counseling and Testing data showed that HIV seroprevalence was the highest among black MSM and, in 2002, was 6 times higher than that of white MSM and 4 times that of Hispanic MSM. Seroprevalence also increased among black MSM, from 8 percent in 1999 to 11 percent in 2002, but was more stable among white and Hispanic MSM.

**Incidence:**

Archived serum from HIV-infected clients tested at HIV Counseling, Testing & Referral (CTR) sites throughout Michigan from 1993-2002 was tested using the less sensitive assay (STARHS) to determine whether HIV infection was recently acquired (in the 4-6 months prior to the blood draw). During this time period, approximately 58,000 and 68,000 HIV tests were performed annually. The number of incident infections ranged from 22-54 (13 to 24 percent of HIV-positive persons tested). Overall HIV incidence was stable throughout most of the study period, reaching a low of 0.17 percent in 2000 and then rising to the highest level during this study period at 0.41 percent in 2002. MSM accounted for almost half of incident HIV infections. Incidence among MSM was stable through the 1990s then dipped and rose, settling at 3 percent in 2002. MSM/IDU had many high peaks, but did drop below that of MSM.

The racial distribution of MSM with newly acquired HIV shifted over time. Whites accounted for the majority of newly acquired infections among MSM (61 percent) in the first 5 study years, but 46 percent in the last 5 years, while the proportion of blacks increased from 34 percent to 47 percent during that same time period. Black MSM had higher incidence compared with the other MSM and had greater increases in incidence in recent years. Incidence increased from two percent in 1999 to seven percent in 2002 among black MSM whereas incidence among white MSM increased from 1.1 percent to 1.6 percent over this same time period. HIV incidence among Hispanic MSM was more erratic due to smaller numbers in this population.

Increases in recent years were most apparent among MSM in the 30-39 year and 40-49 year age groups . Among MSM in their 30s, incidence increased from 1.1 percent in 1998 to 2.6 percent in 2002. The increase was greater still among MSM in their 40s, from 0.8 percent in 1999 to 5.3 percent in 2002.

## Ranked Behavioral Group: MSM (Continued)

**Race/Ethnicity:**

Having sex with other men infected most males in the Detroit Metro Area. This is true for black, white and Hispanic men. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 3,741), black males (2,110) account for more than a half (56 percent) while white males (1,504) comprise approximately 40 percent of men in this combined category (Refer to Table 5)

**Age:**

Among those reporting male-male sex, the highest percent of all living cases of HIV/AIDS is found among those aged 30-39 (42 percent). MSM is the predominant mode of transmission for males aged 13 and up (Refer to Table 6).

**Geographic Distribution:**

Just under two-thirds (63 percent) of HIV-infected MSM statewide reside in the Detroit Metro Area. Within high prevalence counties of the Detroit Metro Area, MSM are just under two-thirds of the cases with a known risk (60 percent) while in the lower prevalence counties almost three-quarters (73 percent) of reported persons living with HIV/AIDS are MSM.

**Trends and Conclusions:**

MDCH estimates that there were about 245 new HIV infections in the year 2002 among men who have sex with men. These numbers were level from 1998-2002. Men who have sex with men will likely continue to be the largest behavioral group affected by the HIV epidemic.

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

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: MSM: Discussion of Behaviorally Bisexual Men

**Data from Supplement to HIV/AIDS Surveillance Project (SHAS), HIV Testing Survey (HITS), & HIV/AIDS Reporting System (HARS)**

Case reporting data are collected statewide but have only limited information on male bisexual behavior. Case reports are usually completed by health care providers and surveillance staff reviewing medical records rather than through extensive interviews of the infected person. Only 53 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, 44 percent of all MSM reported also having sex with women since 1977. These more complete forms also show that three percent of women report having sex with behaviorally bisexual men. These data from case reporting should be viewed as minimum estimates of these behaviors. Nonetheless, they suggest that more women have sex with behaviorally bisexual men than the surveillance system collects. There have been no changes over time.

In an effort to help focus prevention activities, we present the data that are available on bisexual behavior among HIV-infected men in southeast (SE) Michigan from the Supplement to HIV/AIDS Surveillance Project (SHAS). The SHAS interview asks HIV-infected persons directly about specific behaviors. It is conducted only in SE Michigan; therefore, is not representative of all HIV-infected persons in the state. Please see the Data Sources Section (page 1-5) to learn more about SHAS. Of all male SHAS respondents who reported having vaginal, oral, and/or anal sex in the 12 months prior to the interview (530), 63 percent (332) reported having sex with other men* in the 12 months prior to the interview; 254 (77 percent) were black and 72 (22 percent) were white. Of these 332 men, 10 percent (33) also reported having sex with women in the 12 months prior to the interview; 12 percent (30) were black, and three percent (2) were white. *(*MSM/IDU are also included in these totals)*

During the HIV Testing Survey (HITS) HIV-negative MSM were interviewed in Detroit (55 MSM), Oakland County (5 MSM) and Grand Rapids (23 MSM). Data from these areas are left combined to maintain statistical power. The mean age of the respondents sampled at these bars was 30 years. Please see the Data Sources Section (page 1-5) to learn more about HITS. This section describes bisexual activity among this group. Among the 81 respondents interviewed in gay bars, the question "Have you had sex with a woman in the past 12 months?" was asked. As can be seen in Figures 7 and 8, men older than 24 years (28 percent) and black men (27 years) were more likely to report bisexual behavior.

**Figure 7: MSM by Age: Have you had sex with a woman in the past 12 months? (n=81)**

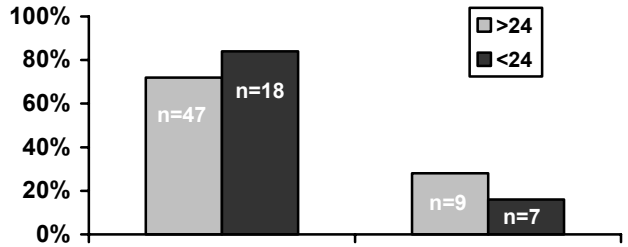
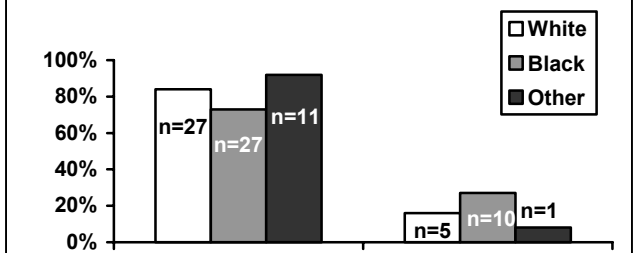



**Figure 8: MSM by Race: Have you had sex with a woman in the past 12 months? (n=81)**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: MSM: A Look at Condom Usage

**Data from Community Intervention Trial for Youth (CITY), Data Supplement to HIV/AIDS Surveillance Project (SHAS), & HIV Testing Survey (HITS)**

A survey of sexual risk and preventive behavior among young men who have sex with men was conducted in the summer of 1999 in Milwaukee, Wisconsin and Detroit called the Community Intervention Trial for Youth (CITY). Men were randomly recruited outside of venues frequented by young men who have sex with men in the two cities. A total of 547 men were surveyed, 48 percent were from Detroit. The mean age from the two cities was 21.2 years. Data specific to Detroit was not yet available, so provisional data from Detroit and Milwaukee combined are presented. The survey shows that 1 in 5 men (20 percent) reported not using a condom during insertive and/or receptive anal sex. Non-white participants were more likely to report insertive anal sex with a condom than white participants. More than half of the total sample (55 percent) had non-main partners in addition to main partners. Almost one-third (32 percent) reported that drugs or alcohol was a factor for having sex with their last non-main partner, while less than a quarter (22 percent) reporting being high on drugs or alcohol during sex with their main partner

This section discusses questions from interviews with infected MSM regarding condom use with male partners from the SHAS project. Among the 332 men who report having sex with a man in the 12 months prior to the interview, 65 percent (216) reported being in a steady relationship with a man. Fifty-six percent (184) reported having sex with a non-steady man during the 12 months prior to the interview. As shown in Figures 9 and 10, of the 111 male respondents who reported having insertive anal sex with a steady male partner, 28 percent reported not using condoms the last time they had sex. Of the 103 male respondents who reported having receptive anal sex with a steady male partner, 22 percent reported that their partner did not use a condom. The percentages of condom use are similar for most recent non-steady partners the last time they had sex.

**Figure 9: Condom Usage During Insertive Anal Sex Among HIV Infected MSM SHAS (n=111)**

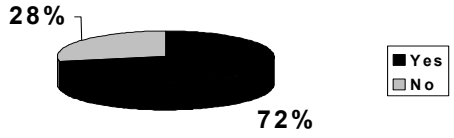
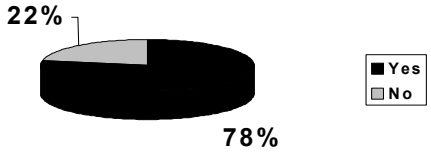



**Figure 10: Partners Condom Usage During Receptive Anal Sex Among HIV Infected MSM in SHAS (n=103)**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: MSM: HIV Negative, At-Risk Persons

**Data from HIV Testing Survey (HITS)**

During the HIV Testing Survey (HITS) HIV-negative MSM were interviewed in Detroit (55 MSM), Oakland County (5 MSM) and Grand Rapids (23 MSM). Data from these areas are left combined to maintain statistical power. Use of condoms with male partners was assessed and indicated inconsistent condom usage. Condom use was more frequent among those who reported being the insertive partner. Figure 11 shows that of 40 respondents reporting a "primary" partner who participated in receptive anal sex, 13 (32 percent) reported that their partner used condoms "Always" in the past year. Figure 12 shows that of the 47 respondents reporting a "primary" male partner who participated in insertive anal sex, 22 (47 percent) reported using a condom "Always".

**Figure 11: In the past 12 months, when you had receptive anal sex with a primary male partner, how often did he use a condom? (n=40)**

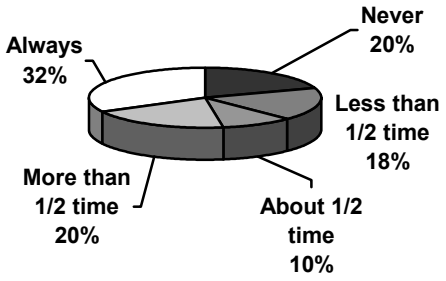



**Figure 12: In the past 12 months, when you had insertive anal sex with a primary male partner, how often did you use a condom? (n=47)**

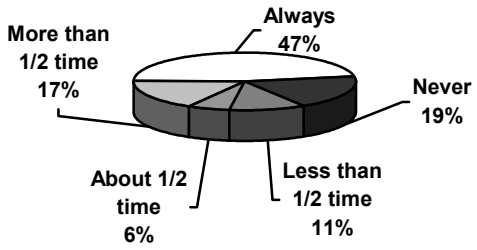



Figure 13 shows that among the 19 respondents with a "non-primary" male partner, 7 (37 percent) reported that their partner used condoms "Always" in the past year when they participated in receptive anal sex. Figure 14 shows that of the 32 respondents who participated in insertive anal sex with a non-primary male partner, 19 (60 percent) reported that they used a condom "Always".

**Figure 13: In the past 12 months, when you had receptive anal sex with a non-primary male partner, how often did he use a condom? (n=19)**

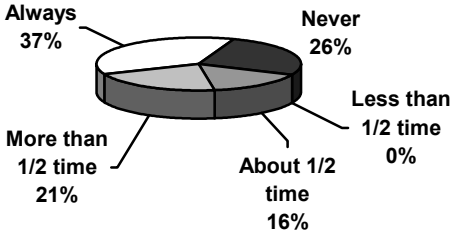
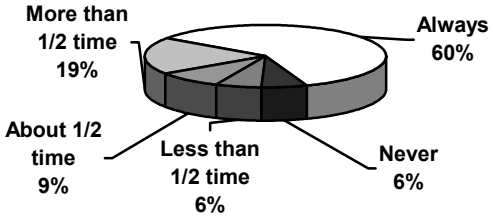



**Figure 14: In the past 12 months, when you had insertive anal sex with a non-primary male partner, how often did you use a condom? (n=32)**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## 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 the Detroit Metro Area and account for almost a third of reported infected persons with a known risk. MDCH estimates there are approximately 2,200 IDUs living with HIV disease in the Detroit Metro Area. This estimate includes 480 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. Almost half (45 percent) of the reported cases among non-MSM IDUs also had high-risk heterosexual sex partners. Additionally, of the 987 cases with reported heterosexual risk, 306 individuals (31 percent) also reported having IDU as partners. Sixty-three percent of perinatally infected infants (infants infected at birth) have mothers who are IDU or have a mother whose partner is an IDU.

When these linked populations are considered, IDU-related transmission accounts for 21 percent **(**1,253 cases) of people reported with HIV disease and having a known risk in the Detroit Metro Area. This is similar to the nationwide picture of 24 percent IDU.

**Prevalence:**

The Family of Seroprevalence Surveys measured HIV seroprevalence among non-injecting drug users (NIDU) and IDUs in treatment. From 1988 to 1999, the percent of IDU who were HIV infected and attended the Detroit Central Diagnostics and Referral Services (CDRS) declined over time, peaking at 10 percent in 1991 and falling to three percent in 1999. In addition, the proportion of heroin injectors with HIV decreased over time (11 percent in 1988 to 3 percent in 1999), while the proportion of cocaine injectors increased (11 percent in 1993 to 40 percent in 1998).

HIV seroprevalence from the Detroit CDRS varied by race, sex, and age. Prevalence among black males declined over time from 15 percent in 1998 to two percent in 1995. HIV prevalence in black females also declined over time after peaking at 14 percent in 1990. Whites comprised a smaller proportion of clients at the treatment center and no consistent trends were observed. Seroprevalence decreased in every age group. The only age group for which seroprevalence increased during the last years of the survey was 25-29 year olds, two percent in 1997 to six percent in 1999. Although data from seroprevalence surveys provide valuable information about treatment center attendees, the results cannot be generalized to all IDU. Please refer to the Data Sources section of this profile for more information on the Family of Seroprevalence Surveys.

**Incidence:**

In the early 2000s, a less sensitive EIA assay was used to measure incidence (recently acquired infections) by testing stored specimens from the Family of Seroprevalence Surveys that were collected between 1988 and 1999 at the Detroit Central Diagnostic and Referral Services (CDRS). A total of 20 persons were identified during the period as having recently acquired HIV infection, with the annual number of incident infections ranging from zero-seven (0 to 9 percent of HIV-positive) persons tested. The small number of recently infected persons tested limits the generalizability of the trends. Overall HIV incidence ranged from zero percent in 1988, 1989, and 1993 to two percent in 1992. In the most recent survey years, incidence increased from a low of 0.15 percent in 1997 to 0.62 percent in 1999. Because the number of recent infections identified each year was small, data were pooled in 3-year intervals to get more stable estimates of incidence over time. The pooled estimates show a peak in incidence between 1990-1992 at 0.82 percent and then a decline over the years. Again, in the later years, incidence began to increase, but it did not reach the levels seen from 1990-92.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: IDU (Continued)

**Incidence (continued):**

Black males and black females were the only groups with recently acquired infections. Incidence was highest in these two groups in the early 1990s, peaking for black males in 1992 at 2.82 percent and for black females in 1999 at 2.68 percent. Incident infections occurred more often among older age groups in the early years and occurred in the latter part of the decade in younger persons. For instance, incidence peaked in 1999 for persons 25-29 years (3.34 percent) and 30-34 years (1.58 percent), but the highest incidence occurred in 1992 among persons 40-44 years (6 percent).

IDU and NIDU were the only risk groups with recently acquired infections. HIV incidence was higher among IDU than NIDU in the early years of the survey, peaking at three percent in 1992, but there were no recently acquired infections among IDU after 1996. New infections were identified in NIDU from 1994 onward, with incidence ranging from 0.1 percent in 1996 to 0.88 percent in 1998-99. Among IDU, recently acquired infections were only identified among persons whose primary drug was heroin. Among NIDU, new infections were found primarily among crack cocaine users, and incidence increased among crack users from1997 (0.4 percent) to 1999 (1.4 percent). None of the newly infected clients chose to be HIV tested at intake. Please refer to the Data Sources section of this profile for more information on the Family of Seroprevalence Surveys.

**Race/Ethnicity and Sex:**

Of the 1,203 IDU HIV/AIDS cases, 541 are black men (45 percent), 460 are black women (38 percent), 84 are white men (7 percent), 71 are white women (6 percent), 30 are Hispanic men (2 percent) and 9 are Hispanic women (<1 percent). In total, 83 percent (1,001 cases) of the IDU cases occur in black men and women.

The HIV/AIDS cases attributed to IDU (excluding MSM/IDU) are relatively equally distributed between men (55 percent) and women (45 percent). Among the 542 women whose HIV infection has been attributed to IDU, over half (56 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 project. Of the 1,174 persons interviewed in SHAS, 15 percent (177) injected drugs at some time during their lives. This 15 percent (177) was mostly comprised of males (63 percent). Of all injection drug users, 51 percent (90) reported ever being told by a doctor or health care provider that they had hepatitis C; this was 58 percent of males (53) and 71 percent of females (37). One hundred and seventy-four (98 percent) of injection drug users have ever used some kind of non-injection drugs in the past. When injection drug users were asked about ever being in a drug or alcohol treatment program, 135 persons (76 percent) responded in the affirmative. Forty-two percent (74) of injection drug users are potential alcoholics-17 percent of males (44) and 28 percent of females (30).

Other drug use information shows 770 (66 percent) of all respondents (1171) have ever used some kind of non-injection drugs in the past. Among non-injection drug users, the primary non-injected drug for men and women was marijuana, followed by crack for both men and women.

Questions used to screen respondents for potential alcoholism reveal that 32 percent (371) of all respondents are potential alcoholics-31 percent of males (263) and 33 percent of females (108). Further SHAS data describing the drug use behaviors of participants in this project are available online at www.michigan.gov/mdch.

## Ranked Behavioral Group: IDU (Continued)

**Age:**

Among men with a known risk in each age group over 19 years, IDU (when combined with MSM/IDU) is the second most common mode of transmission. Seventy-eight percent of IDU cases are among men who were in their thirties, and forties at the time of HIV diagnosis (40 and 38 percent, respectively).

IDU is the predominant mode of transmission for women who were in their forties at the time of HIV diagnosis. Almost a third (31 percent) of all female, HIV infected IDUs were in this age group. IDU and HRH were extremely close for women in their thirties at the time of HIV diagnosis (49 and 50 percent, respectively). Among the 405 female IDUs who were in their thirties or forties at the time of HIV diagnosis, 56 percent of them also reported high risk heterosexual partners.

There are very few cases of HIV/AIDS attributed to IDU among teenagers (11); the proportion of IDU (including MSM/IDU) among those in their twenties is small (13 percent of cases).

**Geographic Distribution:**

Ninety-five percent of IDU cases were reported in the high prevalence areas of the Detroit Metro Area. Within high prevalence counties, just under a third of cases with a known risk (26 percent) are IDU, while in the low prevalence counties 16 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 (excluding MSM/IDU) decreased significantly between 1998 and 2002 (109 to 54 cases). Some of these persons were also likely exposed to HIV through heterosexual sex because 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.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: IDU: HIV Negative, At-Risk Persons

**Data from HIV Testing Survey (HITS)**

The HITS survey assessed behaviors in HIV-negative IDUs. This section includes data from Detroit (66 IDUs), Oakland County (7 IDUs), and Grand Rapids (21 IDUs). Data from these areas were left combined to maintain statistical power. Figure 15 shows approximately three in ten respondents reporting use of non-sterile needles at least some of the time during the 12 months prior to the survey. Figure 16 shows that 62 percent reported injecting only heroin on a "Daily" basis.

**Figure 15: In the last 12 months, how often have you used a dirty needle? (n=94)**

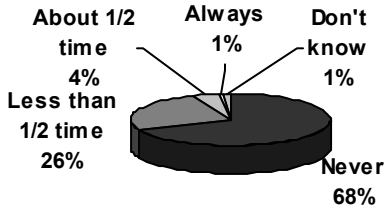
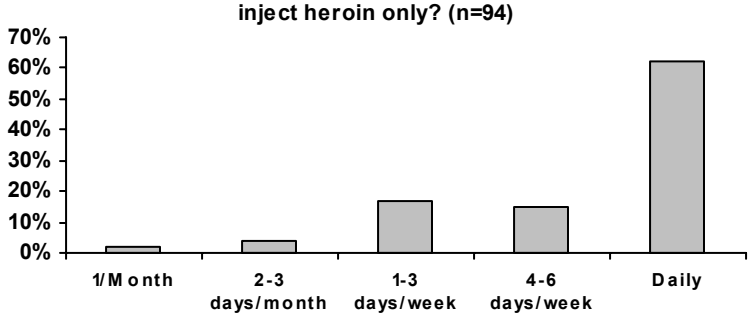



**Figure 16: In the past 12 months, how often did you inject heroin only? (n=94)**




Inconsistent condom use among female injection drug users is higher with primary male sex partners. Among female IDUs reporting "primary" male sex partners, 57 percent reported "Never" using a condom (Figure 17). Among female IDUS reporting "non-primary" male sex partners, 18 percent reported "Never" using a condom (Figure 18).

**Figure 17: Women: In the past 12 months, when you had vaginal sex with a primary male partner, how often did he use a condom? (n=23)**

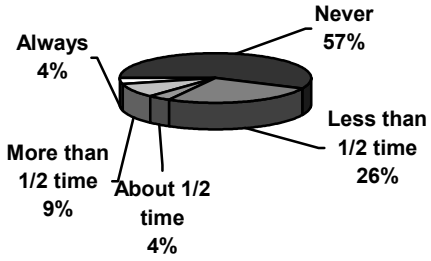
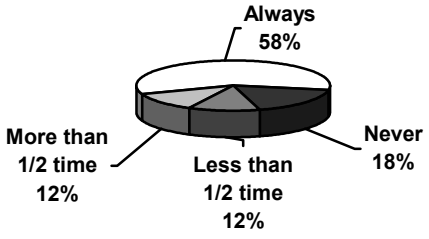



**Figure 18: Women: In the past 12 months, when you had vaginal sex with a non-primary male partner, how often did he use a condom? (n=17)**




Male injection drug users reported comparable condom usage rates with their female partners. Among those reporting a "primary" female sex partner, 57 percent reported "Never" using a condom with the primary female partner (Figure 19). Fifteen percent of male respondents reported "Never" using a condom with their female non-primary partner (Figure 20).

**Figure 19: Men: In the past 12 months, when you had vaginal sex with a primary female partner, how often did you use a condom? (n=37)**

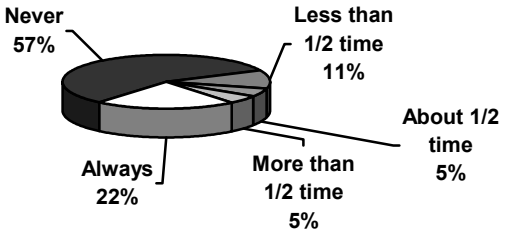
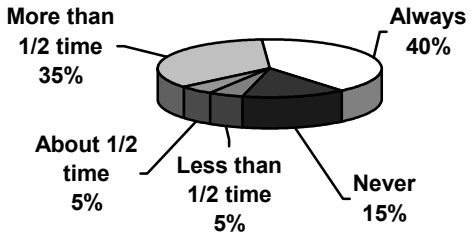



**Figure 20: Men: In the past 12 months, when you had vaginal sex with a non-primary female partner, how often did you use a condom? (n=20)**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: High-Risk Heterosexuals

**Data from HIV/AIDS Reporting System (HARS)**

**Number of Cases:**

Heterosexual transmission is the number-three ranked behavioral group in the Detroit Metro Area. High-risk heterosexual sex accounts for 16 percent of reported infected persons with a known risk. MDCH estimates that 1,410 persons living with HIV disease in the Detroit Metro Area were infected through heterosexual sex. Transmission is classified as heterosexual when one or more heterosexual sex partners are known to be IDUs, behaviorally bisexual men, blood recipients known to be HIV +, and/or HIV+ individuals (these are referred to as high-risk heterosexual partners).

Currently there are an estimated 790 infected persons who are classified as IDUs but who also had one or more high-risk heterosexual sex partner(s). These persons may have been exposed to HIV heterosexually or through sharing injecting equipment. Among reported cases, the dual risk IDU/heterosexual cases comprise nine percent of all reported HIV/AIDS cases with a known risk and are 45 percent men and 55 percent women within the Detroit Metro Area.

**Prevalence:**

The rate of HIV positives measured among heterosexual attendees of the Detroit Health Department's STD clinic, who were likely among the highest risk heterosexuals in the state, averaged less than one percent in the annual seroprevalence surveys done from 1993 to1999.

**Incidence:**

In the 2000s, a less sensitive EIA assay was used to measure incidence (recently acquired infections) by testing stored specimens from HIV Counseling, Testing, & Referral (CTR) sites throughout Michigan from 1993 to 2002. Incidence ranged from 22-54 cases (13 to 24 percent) annually. Overall HIV incidence was stable throughout most of the study period, reaching a low of 0.17 percent in 2000 and then rising to the highest level during this study period at 0.41 percent in 2002,. Specifically, heterosexuals were represented by two groups: a person engaging in only heterosexual sex, with no other risk and a person whose sex partner was at risk for HIV. Each of these groups accounted for 14 percent of recently acquired HIV infection during this period. The majority of recently acquired infections in the heterosexual group were black, and the proportion of blacks increased in the later study years, with the greatest increase seen among black females (from 29 to 44 percent).

**Race/Ethnicity and Sex:**

Among females of all races reported with HIV/AIDS and a known risk, just over half (54 percent) of cases are contracted heterosexually. Forty-one percent were infected via IDU. Among women with a known risk, 23 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 987 men and women living with HIV/AIDS and infected heterosexually, 31 percent reported their heterosexual partner as injecting drug users, four percent as behaviorally bisexual men (this applies to women only) and two percent as persons infected through blood products. Just under two-thirds (63 percent) reported their partner(s) as HIV-infected without reporting the partner(s) mode of transmission.

While women account for 24 percent of HIV/AIDS cases in the Detroit Metro Area, they have consistently accounted for almost three-fourths of heterosexually acquired infections -- currently 72 percent. Over half of black and white women were infected heterosexually (53 and 55 percent, respectively). Over two-thirds of Hispanic women were infected through heterosexual sex (69).

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: High-Risk Heterosexuals (Continued)

**Race/Ethnicity and Sex (continued):**

Most heterosexual cases of HIV/AIDS are black--81 percent of female and 80 percent of male heterosexually transmitted HIV/AIDS cases were among blacks. The percent of men infected heterosexually is low--six percent of cases among men of all races with a known risk.

The heterosexual transmission category includes sub-categories to describe mode of transmission in more detail. This is especially helpful for women since they make up most (72 percent) of the heterosexually transmitted cases. To be reported as a heterosexual transmission case, a female must have a male partner who is an IDU, behaviorally bisexual man, blood recipient known to be HIV +, and/or HIV positive. Heterosexual and IDU modes of transmission and associated sub-categories for infected black and white women with known risk are shown in Figures 21 and 22.

**Figure 21: Black Females Living with HIV/AIDS in The Detroit Metro Area by Known Expanded Mode of Transmission (N=1,083)**

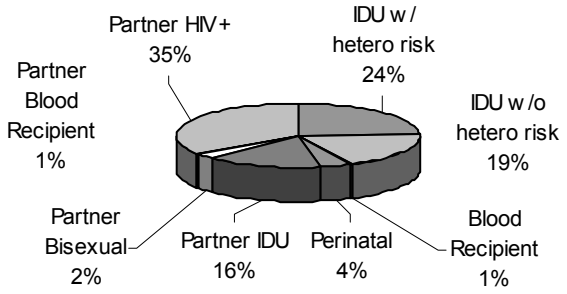
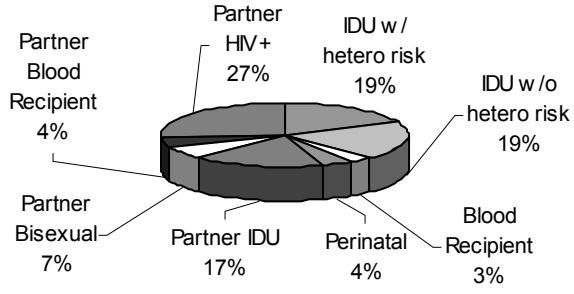



**Figure 22: White Females Living with HIV/AIDS in The Detroit Metro Area by Known Expanded Mode of Transmission (N=187)**




**Age:**

For every age group of women who were over 12 at the time of their HIV diagnosis, heterosexual transmission is the predominant mode, except for women who were in their forties. The proportion of high-risk heterosexual transmission increases with age at HIV diagnosis, peaking at 24 percent for those 60 and older, but never surpasses that of MSM or IDU.

**Geographic Distribution:**

Ninety-four percent of the 987 cases attributed to heterosexual activity in the Detroit Metro Area were reported in high prevalence counties. Of all the cases within high prevalence counties in the Detroit Metro Area, heterosexual transmission constitutes 16 percent. Within low prevalence counties, heterosexual transmission constitutes 12 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 1998 to 2002 with an estimated 63 new HIV cases in the year 2002. At the same time, the proportion of cases attributable to presumed heterosexuals, someone who had heterosexual sex as their only risk but their partner's risk is unknown, increased significantly from 15 percent to 22 percent (96 to 123 cases). When 'presumed heterosexuals' are included in the heterosexual category, the proportion with heterosexually acquired infection exceeds the number of cases attributed to IDU.

(Continued)

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: High-Risk Heterosexuals (Continued)

**Trends and Conclusions (Continued):**

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 those classified as IDU in the future.

## Ranked Behavioral Group: High-Risk Heterosexuals: Condom Usage

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

In SHAS, 64 percent (212) of female respondents reported having vaginal, oral, and/or anal sex in the 12 months prior to the interview. Of these, most (207 or 98 percent) reported having sex with a man in the 12 months prior to the interview. We asked these 207 women questions about use of a barrier with their steady (someone they feel committed to above anyone else and have sex with) partners. Eighty-five percent (175) of the (207) women report being in a steady relationship with a man during the 12 months prior to interview. Use of a barrier with these partners is displayed in Table 2.

Sixty-three percent (529) of male SHAS respondents reported having vaginal, oral, and/or anal sex during the 12 months prior to the interview. Of these 529, 228 men (43 percent) report having had sex with a woman in the 12 months prior to the interview. Sixty-five percent (148) of these men reported being in a steady relationship with a woman in the 12 months prior to interview. Condom use during the last sexual contact with these partners is displayed in Table 2.

**Table 2: Barrier/Condom Use with Steady Partner, Among Heterosexuals**

| | **Females** (n=175)<br>Percent (barrier use/sexual activity) | **Males** (n=148)<br>Percent (condom use/sexual activity) |
|---|---|---|
| **Sexual Activity*** | | |
| Vaginal sex | 69% (118/172) | 78% (113/145) |
| #*Oral sex | 22% (7/32) | 40% (16/40) |

**Categories are not mutually exclusive*
*#*Oral sex: mouth-vagina and penis-mouth*

In addition, we asked women and men questions regarding barrier/condom use with their most recent other male and female partners. Among the female SHAS respondents, 68 (33 percent) report having sex with a man other than a steady male partner in the 12 months prior to interview. While among the male SHAS respondents, 115 (50 percent) report having sex with a woman other than a steady female partner in the 12 months prior to interview. Barrier/condom use during the last sexual contact with these partners is displayed in Table 3.

**Table 3: Barrier/Condom Use with Most Recent Non-Steady Partner, Among Heterosexuals**

| | **Females** (n=68)<br>Percent (barrier use/sexual activity) | **Males** (n=115)<br>Percent (condom use/sexual activity) |
|---|---|---|
| **Sexual Activity*** | | |
| Vaginal sex | 70% (46/66) | 78% (84/108) |
| #*Oral sex | 35% (7/20) | 29% (14/48) |

**Categories are not mutually exclusive*
*#*Oral sex: mouth-vagina and penis-mouth*

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Ranked Behavioral Group: High-Risk Heterosexuals: HIV Negative, At-Risk Persons

**Data from HIV Testing Survey (HITS)**

High-risk HIV-negative heterosexuals were interviewed as a part of HITS at the sexually transmitted disease clinics of the Detroit City (62), Oakland County (27), and Kent County (28) Health Departments. Data from these three areas are left combined to maintain statistical power. Men interviewed reported "Never" using a condom 45 percent of the time with their primary female partner and "Never" using a condom 19 percent of the time with a non-primary female partner (Figures 23 and 24). Women interviewed in the STD clinics reported "Never" using a condom 38 percent of the time with their primary male partners, and "Never" using a condom 42 percent with the non-primary male partners (Figures 25 and 26).

**Figure 23: Men: In the past 12 months, when you had vaginal sex with a primary female partner, how often did you use a condom? (n=48)**

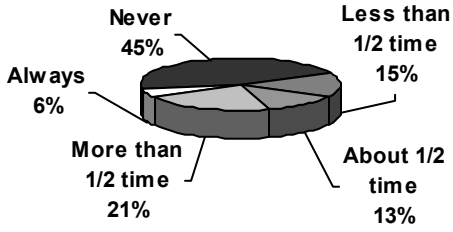



**Figure 24: Men: In the past 12 months, when you had vaginal sex with a non-primary female partner, how often did you use a condom? (n=37)**

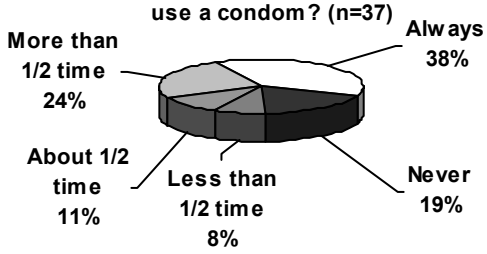



**Figure 25: Women: In the past 12 months, when you had vaginal sex with a primary male partner, how often did he use a condom? (n=50)**

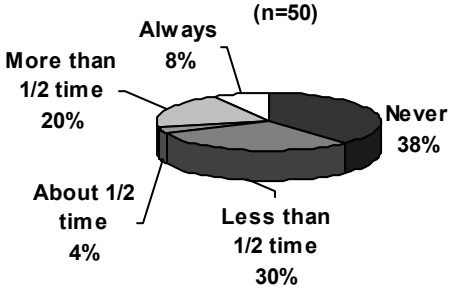
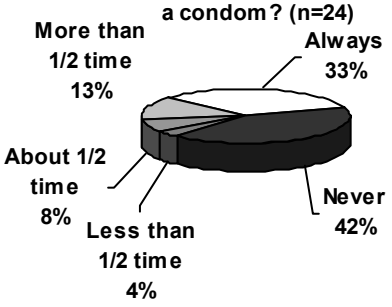



**Figure 26: Women: In the past 12 months, when you had vaginal sex with a non-primary male partner, how often did he use a condom? (n=24)**



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## 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 the Detroit Metro Area. This group comprises 23 percent of this area's population yet make up over two-thirds (68 percent) of the cases of HIV/AIDS. MDCH estimates 7,100 black persons live with HIV/AIDS in the Detroit Metro Area. The rate of HIV infection among blacks is 701 per 100,000 population, seven times higher than the rate among whites. MDCH estimates that as many as one out of 90 black males and one out of 260 black females may be HIV-infected.

White persons comprise almost three-quarters of the area's population (70 percent) but just over a quarter (28 percent) of reported HIV/AIDS cases. MDCH estimates 2,930 white persons live with HIV/AIDS in the Detroit Metro Area. However, since these cases are spread out among a much larger population they have a lower rate of HIV infection (95 per 100,000 population) than blacks or Hispanics. MDCH estimates that as many as one out of 590 white males and one out of 4,550 white females may be HIV-infected.

Hispanics comprise three percent of the population and three percent of the cases. MDCH estimates 280 Hispanics live with HIV/AIDS in the Detroit Metro Area. However, the relatively few cases are spread out among a small population and therefore they have a rate higher (219 per 100,000 population) than that among whites. MDCH estimates that as many as one out of 310 Hispanic males and one out of 1,010 Hispanic females may be HIV-infected.

Most persons living with HIV/AIDS in the Detroit Metro Area as of January 2004 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 area.

The majority of the 5,561 male HIV/AIDS cases are black (63 percent), 32 percent white, three percent Hispanic and two percent are other or unknown race. The majority of the 1,776 female HIV/AIDS cases are black (82 percent), under one-quarter (14 percent) white, three percent Hispanic and two percent other or unknown race.

**Mode of Transmission:**

Figures 30 and 31 display the proportion of black and white male cases by mode of transmission, among those with known transmission.

**Figure 27: Black Males Living with HIV/AIDS in The Detroit Metro Area by Known Mode of Transmission (N=2,928)**

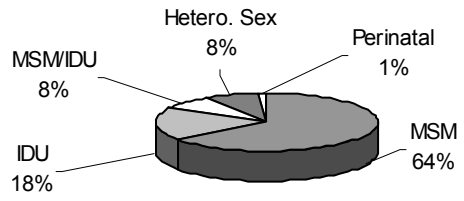
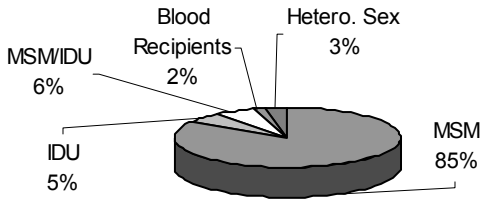



**Figure 28: White Males Living with HIV/AIDS in The Detroit Metro Area by Known Mode of Transmission (N=1,669)**




Please refer to Figures 21 and 22 on page 3-21 for black and white female distributions.

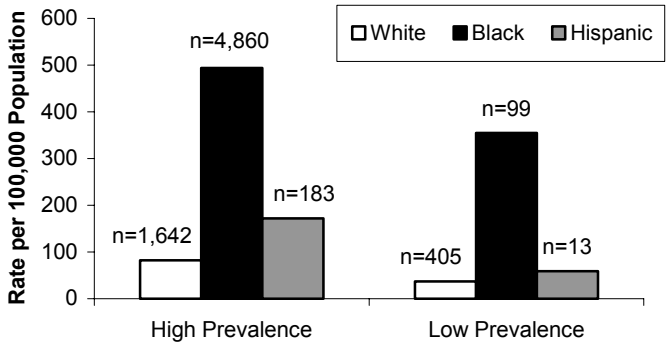
# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Race and Sex (Continued)

**Geographic Distribution:**

Looking at the proportions of cases by race (e.g., number of black cases/total number of cases) in a particular area of the Detroit Metro Area 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 (e.g., number of black cases/total number of blacks living in that area). Figure 29 shows that among blacks, the rate is six to ten times higher than the rate among whites in both high and low prevalence areas of the Detroit Metro Area, 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 the Detroit Metro Area. Also, the HIV/AIDS case rate among Hispanics is one and a half to two times higher than the rate among whites in both high and low prevalence areas.

**Figure 29: Case Rates of Persons with HIV/AIDS Living in High & Low Prevalence Areas of the Detroit Metro Area, by Race**

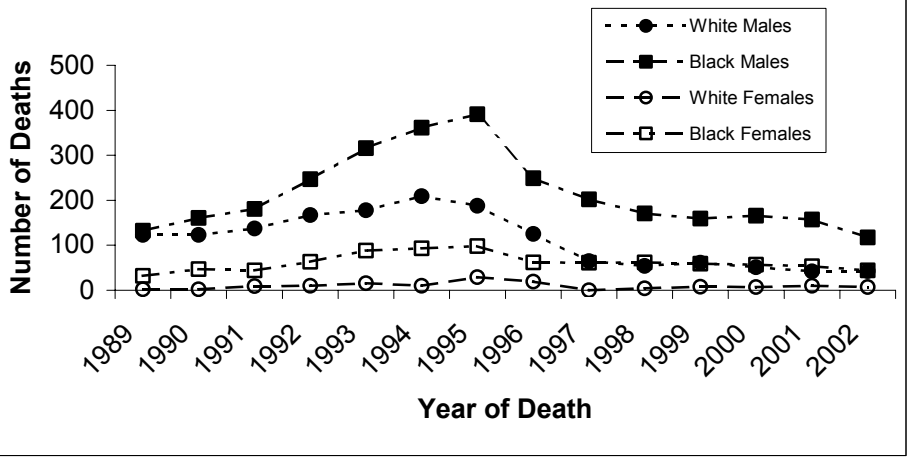



**Conclusions:**

Figure 30 shows that HIV related mortality dropped for all four race and sex groups from 1995 to 2001. The number of deaths among Hispanics was too small to appear on this graph. The decline in deaths from 1995 to 2001 was marked among whites (60 percent) and among men (37 percent). Blacks saw a slight decline (2 percent), and women experienced a marked increase (50 percent).

When all the data are considered, the consistent impact across transmission behaviors and geographic areas that this epidemic is having on blacks is apparent.

**Figure 30: HIV Related Mortality in the Detroit Metro Area 1989-2002**

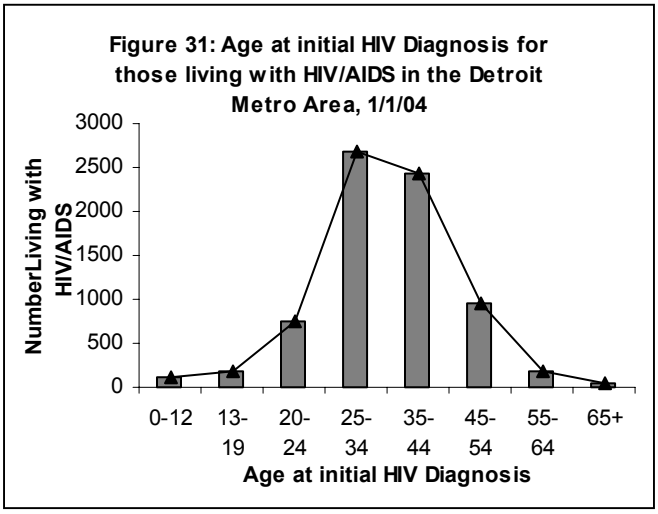


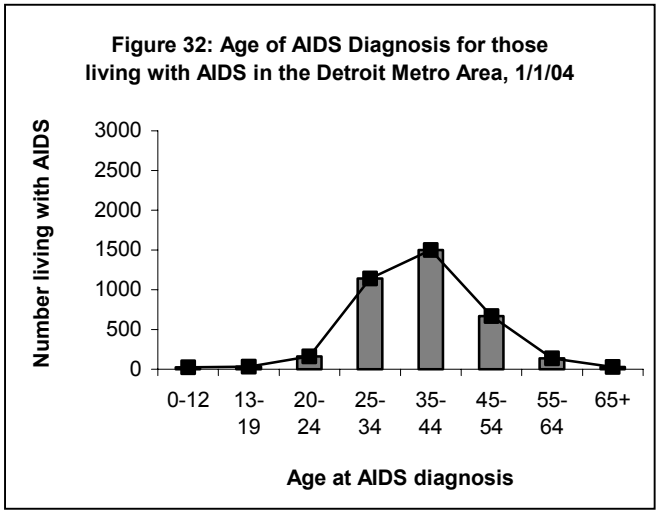
# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Age

**Age at Diagnosis:**

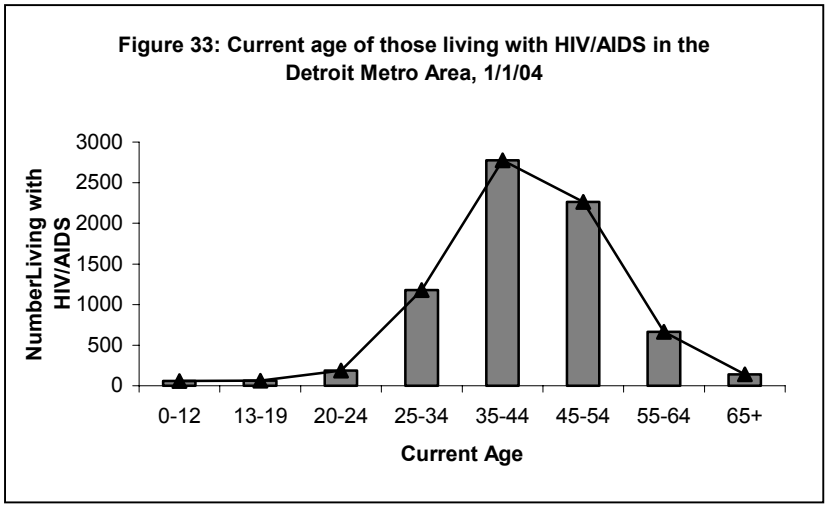
The proportion of persons diagnosed with HIV infection each year between 1998 and 2002 only changed significantly among those diagnosed at 20-24 years of age from 8 percent to 10 percent (53 to 56 cases). Figure 31 shows that persons who were between the ages of 25 and 34 at their initial diagnosis of HIV make up the majority of those living with HIV/AIDS (36 percent). Those who were 35-44 years old make up the second largest group of age at initial HIV diagnosis, but are the larget age group at AIDS diagnosis (41 percent), shown in Figure 32.




**Current Age:**

Since the start of widespread use of Highly Active Anti-Retroviral Therapy (HAART) in 1996, persons infected with HIV have been living longer. Evidence of this is shown in Figure 33, which shows the current ages of those living with HIV in Michigan. Those currently ages 35 to 44 years make up the largest group of those living with HIV (38 percent). While persons who were ages 55 and older at the time of AIDS diagnosis made up only four percent of those diagnosed with AIDS (Figure 32), persons in this age group make up 11 percent of persons living with HIV/AIDS in the Detroit Metro Area.



# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Age: Children (0-12)

**Data from HIV/AIDS Reporting System (HARS)**

**Number of Cases:**

MDCH estimates that there are 160 people living in the Detroit Metro Area, who were ages 0-12 when they were diagnosed with HIV. They comprise 1.6 percent of reported infected persons. Most of them (89 percent) were infected perinatally, i.e., before, during or shortly after birth. (Those infected after birth would be infected via breastfeeding.). Of the remaining children**,** seven percent were infected via blood exposure before 1985 and four percent had unknown risks.

**Description of Cases in Children:**

Of the 114 children who were ages 0-12 years when diagnosed with HIV/AIDS, living in the Detroit Metro Area, 53 percent male and 47 percent female; 75 percent are black, 20 percent are white and four percent are Hispanic or of unknown race. See Table 6, page 33.

Of the 102 children infected perinatally, 49 percent had a mother who was an IDU, 14 percent of these had a mother who was not known to be an IDU but one or more of her sex partners were IDUs). Two percent had mothers with behaviorally bisexual sex partners. An additional 17 percent had mothers with HIV-infected sex partners but for whom additional risk information was unavailable. For 19 percent all that was known about the mother is that she was HIV-infected with no additional risk information.

**Geographic Distribution of Infected Children:**

Ninety-one percent of the 114 persons diagnosed and reported with HIV/AIDS between the ages of 0-12 are located in high prevalence counties. The remaining nine percent are located in low 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, 2004, two of the 39 children born in 2001, two of the 34 children born in 2002, and one of the 32 children born in 2003 to HIV-infected women living in the Detroit Metro Area were diagnosed with HIV infection. Also, one of the 39 children born in 2001 to an HIV-infected woman was diagnosed with AIDS.

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.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Age: Teens and Young Adults (13-24)

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

**Number of Cases:**

MDCH estimates that there are about 1,320 persons currently living in the Detroit Metro Area 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, 10 percent of the Detroit Metro Area total. The rate of HIV/AIDS among these young people is lower than the rate among those aged 25-44 years. The level of newly diagnosed 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 male youth who live in areas with high HIV prevalence and have male sex partners who are age 20 or older.

STD rates are highest in these age groups. The STD data are shown on Table 7, page 3-34. In the Detroit Metro Area, the rate of chlamydia in persons age 15-19 is over six times higher than the overall rate (among all persons in this area). The rate of gonorrhea in this same age group is just nearly three times that of overall rate. (Please refer to the Sexually Transmitted Diseases Section of the Statewide Profile (page 2-14) for a discussion of these high rates). While rates of STDs among 15-19 year olds are quite high, the rates of HIV in this demographic group are comparably low. This is due to the fact that risk factors for STD acquisition are very broad, specifically multiple sex partners and unprotected sexual intercourse, in comparison to the more specific risk factors of injection drug use or homosexual sex for HIV.

Teen pregnancy rates have shown decreases over time and decreased significantly from 1998 to 2002. Wayne County and the City of Detroit have the highest teen pregnancy rates in the state (83 per 1,000 in Wayne County outside of Detroit and 115 in the City of Detroit). The 2002 pregnancy rates among teens in Detroit were almost equal to the rates among women age 15-44 years in that same area (115 vs. 114). However, in 2000, the pregnancy rates among teens in Detroit had exceeded the rates among women aged 15-44.

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 area and the state. They lived in Wayne County, including Detroit (the county with the highest rate of HIV), and most were sexually active and some were homeless. Therefore, fewer positives would be expected among youth that live in other areas of the state.

**Race/Ethnicity:**

Eighty-one percent of persons aged 13-19 at the time of HIV diagnosis are black, 14 percent are white, and five percent are Hispanic or other race. Seventy-four percent of persons aged 20-24 at the time of HIV diagnosis are black, 22 percent are white, and four percent are Hispanic or other race.

**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. Therefore, the percents discussed in this section will not match those found on Table 6. 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.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Age: Teens and Young Adults (Continued)

**Mode of Transmission (continued):**

Teenagers (continued):
Figure 34 shows that among the 183 persons living with HIV in the Detroit Metro Area who were ages 13-19 at time of diagnosis, 112 (61 percent) are male. Among these male cases, over two-thirds had sex with other males (67 percent) (there were no MSM/IDU), while 10 percent had been infected with HIV through blood products before 1985. Three percent could be attributed to IDU (there were no MSM/IDU) and three percent to heterosexual transmission for this age group within this area. Teenage males have the largest proportion of unidentified risk (18 percent) 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.

Figure 34 also shows that among the 71 females living with HIV in the Detroit Metro Area who were ages 13-19 at time of diagnosis, almost two-thirds (62 percent) were infected through heterosexual sex, while 11 percent were IDU. Similar to males of this age, there is a relatively large number who did not report a mode of transmission (25 percent). Most of these females were probably infected heterosexually.

**Figure 34: Persons Living in the Detroit Metro Area who were ages 13-19 when Diagnosed with HIV, by Sex and Risk**

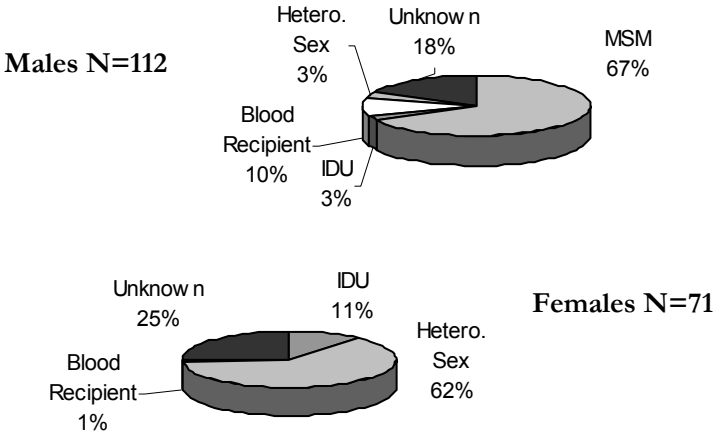
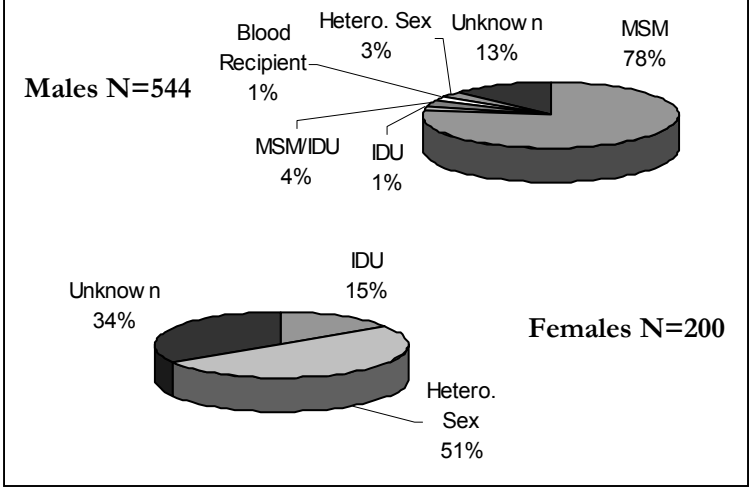



**Figure 35: Persons Living in the Detroit Metro Area who were ages 20-24 when Diagnosed with HIV, by Sex and Risk**




Young Adults:
Figure 35 shows that among the 544 persons living with HIV in the Detroit Metro Area who were ages 20-24 at time of diagnosis, almost three quarters (73 percent) are male. Over 80 percent of them reported sex with other males (including those MSM who also are IDU); 13 percent did not report a mode of transmission. Many of these were likely infected through sex with other men.

Figure 35 also shows that among the 200 females living with HIV in the Detroit Metro Area who were ages 20-24 at time of diagnosis, just over half (51 percent) were infected heterosexually and 15 percent were IDUs; just over a third (34 percent) did not report a mode of transmission. Like the teenage females, many were likely infected heterosexually.

# 2004 Profile of HIV/AIDS: The Detroit Metro Area

## Description of the Epidemic by Age: Teens and Young Adults (Continued)

**Geographic Distribution of Youth and Teen Cases:**

Ninety-three percent of the 927 persons diagnosed and reported with HIV/AIDS between the ages of 13-24 are located in high prevalence counties of the Detroit Metro Area. The remaining three percent are located in low prevalence counties.

**Trends and Conclusions:**

The number of new cases among persons aged 13-24 years has remained level. The Detroit Metro Area should consider both sexual 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+).

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

**Table 4: Distribution of HIV/AIDS: Prevalence Estimates, Reported Cases, and Population within the Detroit Metropolitan Area[4]**

**Prisoners and persons with unknown residence are not included**

**January 1, 2004**

| Detroit Metro. Area Patient Group | Estimated HIV Infection [1] | Total HIV + AIDS Reported [2] Reported Cases | % | | Rate per 100,000[3] | 2000 Census | % |
|---|---|---|---|---|---|---|---|
| **Male** | **7,960** | **5,561** | **76%** | | **369.0** | **2,157,470** | **49%** |
| *White, Non-Hispanic Males* | *2,580* | *1,804* | *25%* | | *169.9* | *1,518,812* | *34%* |
| *Black, Non-Hispanic Males* | *5,010* | *3,504* | *48%* | | *1,069.4* | *468,477* | *11%* |
| *Hispanic Males* | *220* | *151* | *2%* | | *327.0* | *67,279* | *2%* |
| *Asian, Hawaiian, Pacific Islander Males* | *30* | *22* | *0%* | | *57.8* | *51,874* | *1%* |
| *American Indian Males* | *10* | *7* | *0%* | | *157.6* | *6,344* | *0%* |
| *Other/Multi Race Males* | *N/A* | *73* | *1%* | | * | *44,684* | *N/A* |
| **Female** | **2,540** | **1,776** | **24%** | | **111.2** | **2,284,081** | **51%** |
| *White, Non-Hispanic Females* | *350* | *243* | *3%* | | *22.2* | *1,578,088* | *36%* |
| *Black, Non-Hispanic Females* | *2,080* | *1,455* | *20%* | | *382.5* | *543,785* | *12%* |
| *Hispanic Females* | *60* | *45* | *1%* | | *98.7* | *60,796* | *1%* |
| *Asian, Hawaiian, Pacific Islander Females* | *10* | *7* | *0%* | | *19.4* | *51,416* | *1%* |
| *American Indian Females* | *10* | * | * | | * | *6,736* | *0%* |
| *Other/Multi Race Females* | *N/A* | *22* | *0%* | | * | *43,260* | *N/A* |
| **White, Non-Hispanic** | **2,930** | **2,047** | **28%** | | **94.6** | **3,096,900** | **70%** |
| **Black, Non-Hispanic** | **7,100** | **4,959** | **68%** | | **701.4** | **1,012,262** | **23%** |
| **Hispanic** | **280** | **196** | **3%** | | **218.6** | **128,075** | **3%** |
| **Asian, Hawaiian, Pacific Islander** | **40** | **29** | **0%** | | **38.7** | **103,290** | **2%** |
| **American Indian** | **20** | **11** | **0%** | | **152.9** | **13,080** | **0%** |
| **Other/Multi Race** | **N/A** | **95** | **1%** | | * | **87,944** | **N/A** |
| **Male-Male Sex[#]** | **4,880** | **3,409** | **56%** | ^ | N/A | | |
| **Injecting Drug Use[#]** | **1,720** | **1,203** | **20%** | ^ | N/A | | |
| *IDU w/ heterosexual* | *790* | *551* | *9%* | ^ | N/A | | |
| *IDU w/o heterosexual* | *930* | *652* | *11%* | ^ | N/A | | |
| **Male-Male Sex/IDU[#]** | **480** | **332** | **5%** | ^ | N/A | | |
| **Blood Recipient[#]** | **90** | **61** | **1%** | ^ | N/A | | |
| **Perinatal** | **150** | **102** | **2%** | ^ | N/A | | |
| **Heterosexual[#]** | **1,410** | **987** | **16%** | ^ | N/A | | |
| *Partner IDU* | *440* | *306* | *5%* | ^ | N/A | | |
| *Partner Bisexual* | *60* | *40* | *1%* | ^ | N/A | | |
| *Partner Rec'd Bld* | *30* | *20* | *0%* | ^ | N/A | | |
| *Partner HIV +* | *890* | *621* | *10%* | ^ | N/A | | |
| **Known Risk Total** | **8,720** | **6,094** | **100%** | ^ | N/A | | |
| **Unknown Risk[#]** | **N/A** | **1,243** | **17%** | | N/A | | |
| *Presumed Heterosexual* | *N/A* | *891* | *12%* | | N/A | | |
| *Other* | *N/A* | *352* | *5%* | | N/A | | |
| **0 - 4 years[X]** | **140** | **98** | **1%** | | **45.1** | **310,638** | **7%** |
| **5 - 9 years[X]** | **20** | **17** | **0%** | | **5.8** | **346,656** | **8%** |
| **10-12 years[X]** | **10** | **7** | **0%** | | **4.8** | **206,214** | **5%** |
| **13-19 years[X]** | **260** | **183** | **2%** | | **62.0** | **419,442** | **9%** |
| **20-24 years[X]** | **1,060** | **744** | **10%** | | **416.6** | **254,469** | **6%** |
| **25-29 years[X]** | **1,720** | **1,202** | **16%** | | **554.4** | **310,242** | **7%** |
| **30-34 years[X]** | **2,110** | **1,475** | **20%** | | **625.3** | **337,435** | **8%** |
| **35-39 years[X]** | **2,020** | **1,413** | **19%** | | **557.4** | **362,411** | **8%** |
| **40-44 years[X]** | **1,460** | **1,017** | **14%** | | **395.1** | **369,557** | **8%** |
| **45-49 years[X]** | **870** | **610** | **8%** | | **264.0** | **329,490** | **7%** |
| **50-54 years[X]** | **490** | **343** | **5%** | | **171.8** | **285,289** | **6%** |
| **55-59 years[X]** | **190** | **132** | **2%** | | **88.8** | **213,932** | **5%** |
| **60-64 years[X]** | **80** | **57** | **1%** | | **50.2** | **159,475** | **4%** |
| **65 and older[X]** | **60** | **39** | **1%** | | **11.2** | **536,301** | **12%** |
| **Unknown Age** | **N/A** | **0** | **0%** | | **N/A** | **0** | **N/A** |
| **DETROIT** | **6,850** | **4,629** | **63%** | | **720.1** | **951,270** | **21%** |
| **LAPEER CO.** | **30** | **22** | **0%** | | **34.1** | **87,904** | **2%** |
| **MACOMB CO.** | **580** | **392** | **5%** | | **73.6** | **788,149** | **18%** |
| **MONROE CO.** | **60** | **43** | **1%** | | **41.1** | **145,945** | **3%** |
| **OAKLAND CO.** | **1,680** | **1,134** | **15%** | | **140.7** | **1,194,156** | **27%** |
| **ST CLAIR CO.** | **100** | **70** | **1%** | | **60.9** | **164,235** | **4%** |
| **WAYNE CO. (not including Detroit)** | **1,550** | **1,047** | **14%** | | **139.7** | **1,109,892** | **25%** |
| **Total Detroit Metropolitan Area** | **10,500** | **7,337** | **100%** | | **236.4** | **4,441,551** | **100%** |

*** Indicates there are fewer than five (n=1,2,3, or 4) reported cases**

**^ Indicates percentage calculated from cases with *known risk***

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

**[X] Indicates age is at time of HIV diagnosis**

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

**[2] Total HIV+AIDS refers to the number of reported cases alive as of 1/1/04**

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

**[4] Totals for counties/areas include infected prisoners who were discharged/paroled with no current residence available**

**Table 5: Living HIV/AIDS Cases Currently Living in the Detroit Metro Area**
**Sex and Race by Risk**
**January 1, 2004**

| Male Only | White | | Black | | Hispanic | | Other | | All Races | |
|---|---|---|---|---|---|---|---|---|---|---|
| MI | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ |
| **Male-Male Sex#** | **1,412** | **85%** | **1,883** | **64%** | **75** | **59%** | **39** | **74%** | **3,409** | **71%** |
| **Injecting Drug Use#** | **84** | **5%** | **541** | **18%** | **30** | **23%** | **6** | **11%** | **661** | **14%** |
| *IDU w/ heterosexual* | *24* | *1%* | *213* | *7%* | *12* | *9%* | *1* | *2%* | *250* | *5%* |
| *IDU w/o heterosexual* | *60* | *4%* | *328* | *11%* | *18* | *14%* | *5* | *9%* | *411* | *9%* |
| **Male-Male Sex/IDU#** | **92** | **6%** | **227** | **8%** | **10** | **8%** | **3** | **6%** | **332** | **7%** |
| **Blood Recipient#** | **32** | **2%** | **12** | **0%** | **2** | **2%** | **1** | **2%** | **47** | **1%** |
| **Perinatal** | **7** | **0%** | **42** | **1%** | **1** | **1%** | **0** | **0%** | **50** | **1%** |
| **Heterosexual#** | **42** | **3%** | **223** | **8%** | **10** | **8%** | **4** | **8%** | **279** | **6%** |
| *Partner IDU* | *15* | *1%* | *73* | *2%* | *4* | *3%* | *1* | *2%* | *93* | *2%* |
| *Partner Blood Recipient* | *1* | *0%* | *5* | *0%* | *0* | *0%* | *0* | *0%* | *6* | *0%* |
| *Partner HIV+* | *26* | *2%* | *145* | *5%* | *6* | *5%* | *3* | *6%* | *180* | *4%* |
| **Total Known Risks** | **1,669** | **93%** | **2,928** | **84%** | **128** | **85%** | **53** | **52%** | **4,778** | **86%** |
| **Unknown Risk#** | **135** | **7%** | **576** | **16%** | **23** | **15%** | **49** | **48%** | **783** | **14%** |
| *Presumed Heterosexual* | *91* | *5%* | *397* | *11%* | *19* | *13%* | *16* | *16%* | *523* | *9%* |
| *Other* | *44* | *2%* | *179* | *5%* | *4* | *3%* | *33* | *32%* | *260* | *5%* |
| **Total All Cases** | **1,804** | **32%** | **3,504** | **63%** | **151** | **3%** | **102** | **2%** | **5,561** | **100%** |

| Female Only | White | | Black | | Hispanic | | Other | | All Races | |
|---|---|---|---|---|---|---|---|---|---|---|
| MI | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ |
| **Injecting Drug Use#** | **71** | **38%** | **460** | **42%** | **9** | **25%** | **2** | **20%** | **542** | **41%** |
| *IDU w/ hetero risk* | *35* | *19%* | *259* | *24%* | *6* | *17%* | *1* | *10%* | *301* | *23%* |
| *IDU w/o hetero risk* | *36* | *19%* | *201* | *19%* | *3* | *8%* | *1* | *10%* | *241* | *18%* |
| **Blood Recipient#** | **6** | **3%** | **8** | **1%** | **0** | **0%** | **0** | **0%** | **14** | **1%** |
| **Perinatal** | **7** | **4%** | **42** | **4%** | **2** | **6%** | **1** | **10%** | **52** | **4%** |
| **Heterosexual#** | **103** | **55%** | **573** | **53%** | **25** | **69%** | **7** | **70%** | **708** | **54%** |
| *Partner IDU* | *32* | *17%* | *168* | *16%* | *10* | *28%* | *3* | *30%* | *213* | *16%* |
| *Partner Bisexual* | *13* | *7%* | *25* | *2%* | *2* | *6%* | *0* | *0%* | *40* | *3%* |
| *Partner Blood Recipient* | *8* | *4%* | *6* | *1%* | *0* | *0%* | *0* | *0%* | *14* | *1%* |
| *Partner HIV+* | *50* | *27%* | *374* | *35%* | *13* | *36%* | *4* | *40%* | *441* | *34%* |
| **Total Known Risks** | **187** | **77%** | **1,083** | **74%** | **36** | **80%** | **10** | **30%** | **1,316** | **74%** |
| **Unknown Risk#** | **56** | **23%** | **372** | **26%** | **9** | **20%** | **23** | **70%** | **460** | **26%** |
| *Presumed Heterosexual* | *48* | *20%* | *303* | *21%* | *7* | *16%* | *10* | *30%* | *368* | *21%* |
| *Other* | *8* | *3%* | *69* | *5%* | *2* | *4%* | *13* | *39%* | *92* | *5%* |
| **Total All Cases** | **243** | **14%** | **1,455** | **82%** | **45** | **3%** | **33** | **2%** | **1,776** | **100%** |

| Male and Female | White | | Black | | Hispanic | | Other | | All Races | |
|---|---|---|---|---|---|---|---|---|---|---|
| MI | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ | Cases | %^ |
| **Male-Male Sex#** | **1,412** | **76%** | **1,883** | **47%** | **75** | **46%** | **39** | **62%** | **3,409** | **56%** |
| **Injecting Drug Use#** | **155** | **8%** | **1,001** | **25%** | **39** | **24%** | **8** | **13%** | **1,203** | **20%** |
| *IDU w/ heterosexual* | *59* | *3%* | *472* | *12%* | *18* | *11%* | *2* | *3%* | *551* | *9%* |
| *IDU w/o heterosexual* | *96* | *5%* | *529* | *13%* | *21* | *13%* | *6* | *10%* | *652* | *11%* |
| **Male-Male Sex/IDU#** | **92** | **5%** | **227** | **6%** | **10** | **6%** | **3** | **5%** | **332** | **5%** |
| **Blood Recipient#** | **38** | **2%** | **20** | **0%** | **2** | **1%** | **1** | **2%** | **61** | **1%** |
| **Perinatal** | **14** | **1%** | **84** | **2%** | **3** | **2%** | **1** | **2%** | **102** | **2%** |
| **Heterosexual#** | **145** | **8%** | **796** | **20%** | **35** | **21%** | **11** | **17%** | **987** | **16%** |
| *Partner IDU* | *47* | *3%* | *241* | *6%* | *14* | *9%* | *4* | *6%* | *306* | *5%* |
| *Partner Bisexual* | *13* | *1%* | *25* | *1%* | *2* | *1%* | *0* | *0%* | *40* | *1%* |
| *Partner Blood Recipient* | *9* | *0%* | *11* | *0%* | *0* | *0%* | *0* | *0%* | *20* | *0%* |
| *Partner HIV+* | *76* | *4%* | *519* | *13%* | *19* | *12%* | *7* | *11%* | *621* | *10%* |
| **Total Known Risks** | **1,856** | **91%** | **4,011** | **81%** | **164** | **84%** | **63** | **47%** | **6,094** | **83%** |
| **Unknown Risk#** | **191** | **9%** | **948** | **19%** | **32** | **16%** | **72** | **53%** | **1,243** | **17%** |
| *Presumed Heterosexual* | *139* | *7%* | *700* | *14%* | *26* | *13%* | *26* | *19%* | *891* | *12%* |
| *Other* | *52* | *3%* | *248* | *5%* | *6* | *3%* | *46* | *34%* | *352* | *5%* |
| **Total All Cases** | **2,047** | **28%** | **4,959** | **68%** | **196** | **3%** | **135** | **2%** | **7,337** | **100%** |

*** Indicates there are fewer than five (n=1,2,3, or 4) reported cases**

**^ Indicates percentage calculated from cases with *known risk***

**-Percents for 'Total Known Risk', Unknown Risk', 'Presumed Heterosexual', 'Other', and 'Total All Cases' are calculated from all cases**

**# Indicates an explanatory definition exists in Appendix B**

**Table 6: Living HIV/AIDS Cases Currently Living in the Detroit Metro Area**
**Age[x] at HIV Diagnosis by Risk**
**January 1, 2004**

| 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 | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % |
| Male-Male Sex[#] | 0 | 0% | 75 | 82% | 422 | 89% | 693 | 85% | 1,417 | 73% | 609 | 57% | 160 | 55% | 33 | 65% | 3,409 | 71% |
| Injecting Drug Use[#] | 0 | 0% | 3 | 3% | 8 | 2% | 39 | 5% | 241 | 12% | 289 | 27% | 76 | 26% | 4 | 8% | 660 | 14% |
| *IDU w/ heterosexual* | *0* | *0%* | *0* | *0%* | *3* | *1%* | *17* | *2%* | *107* | *6%* | *102* | *10%* | *20* | *7%* | *1* | *2%* | *250* | *5%* |
| *IDU w/o heterosexual* | *0* | *0%* | *3* | *3%* | *5* | *1%* | *22* | *3%* | *134* | *7%* | *187* | *18%* | *56* | *19%* | *3* | *6%* | *410* | *9%* |
| Male-Male Sex/IDU[#] | 0 | 0% | 0 | 0% | 20 | 4% | 41 | 5% | 157 | 8% | 92 | 9% | 20 | 7% | 2 | 4% | 332 | 7% |
| Blood Recipient[#] | 8 | 14% | 11 | 12% | 8 | 2% | 5 | 1% | 10 | 1% | 4 | 0% | 1 | 0% | 0 | 0% | 47 | 1% |
| Perinatal | 50 | 86% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 50 | 1% |
| Heterosexual[#] | 0 | 0% | 3 | 3% | 17 | 4% | 37 | 5% | 111 | 6% | 66 | 6% | 33 | 11% | 12 | 24% | 279 | 6% |
| *Partner IDU* | *0* | *0%* | *0* | *0%* | *3* | *1%* | *13* | *2%* | *30* | *2%* | *28* | *3%* | *12* | *4%* | *7* | *14%* | *93* | *2%* |
| *Partner Blood Recipient* | *0* | *0%* | *0* | *0%* | *0* | *0%* | *1* | *0%* | *2* | *0%* | *1* | *0%* | *1* | *0%* | *1* | *2%* | *6* | *0%* |
| *Partner HIV+* | *0* | *0%* | *3* | *3%* | *14* | *3%* | *23* | *3%* | *79* | *4%* | *37* | *3%* | *20* | *7%* | *4* | *8%* | *180* | *4%* |
| Total Known Risks | 58 | 97% | 92 | 82% | 475 | 87% | 815 | 88% | 1,936 | 86% | 1,060 | 85% | 290 | 82% | 51 | 74% | 4,777 | 86% |
| Unknown Risk[#] | 2 | 3% | 20 | 18% | 69 | 13% | 112 | 12% | 303 | 14% | 193 | 15% | 65 | 18% | 18 | 26% | 782 | 14% |
| *Presumed Heterosexual* | *0* | *0%* | *15* | *13%* | *55* | *10%* | *73* | *8%* | *208* | *9%* | *113* | *9%* | *46* | *13%* | *13* | *19%* | *523* | *9%* |
| *Other* | *2* | *3%* | *5* | *4%* | *14* | *3%* | *39* | *4%* | *95* | *4%* | *80* | *6%* | *19* | *5%* | *5* | *7%* | *259* | *5%* |
| Total All Cases | 60 | 1% | 112 | 2% | 544 | 10% | 927 | 17% | 2,239 | 40% | 1,253 | 23% | 355 | 6% | 69 | 1% | 5,559 | 100% |

| 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 | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % |
| Injecting Drug Use[#] | 0 | 0% | 8 | 15% | 30 | 23% | 61 | 31% | 236 | 49% | 169 | 56% | 34 | 40% | 4 | 27% | 542 | 41% |
| *IDU w/ hetero risk* | *0* | *0%* | *5* | *9%* | *19* | *14%* | *33* | *17%* | *137* | *29%* | *91* | *30%* | *14* | *16%* | *2* | *13%* | *301* | *23%* |
| *IDU w/o hetero risk* | *0* | *0%* | *3* | *6%* | *11* | *8%* | *28* | *14%* | *99* | *21%* | *78* | *26%* | *20* | *23%* | *2* | *13%* | *241* | *18%* |
| Blood Recipient[#] | 0 | 0% | 1 | 2% | 0 | 0% | 3 | 2% | 3 | 1% | 3 | 1% | 2 | 2% | 2 | 13% | 14 | 1% |
| Perinatal | 52 | 100% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 52 | 4% |
| Heterosexual[#] | 0 | 0% | 44 | 83% | 102 | 77% | 134 | 68% | 238 | 50% | 131 | 43% | 50 | 58% | 9 | 60% | 708 | 54% |
| *Partner IDU* | *0* | *0%* | *6* | *11%* | *17* | *13%* | *28* | *14%* | *81* | *17%* | *56* | *18%* | *20* | *23%* | *5* | *33%* | *213* | *16%* |
| *Partner Bisexual* | *0* | *0%* | *4* | *8%* | *1* | *1%* | *10* | *5%* | *18* | *4%* | *6* | *2%* | *1* | *1%* | *0* | *0%* | *40* | *3%* |
| *Partner Blood Recipient* | *0* | *0%* | *0* | *0%* | *2* | *2%* | *6* | *3%* | *6* | *1%* | *0* | *0%* | *0* | *0%* | *0* | *0%* | *14* | *1%* |
| *Partner HIV+* | *0* | *0%* | *34* | *64%* | *82* | *62%* | *90* | *45%* | *133* | *28%* | *69* | *23%* | *29* | *34%* | *4* | *27%* | *441* | *34%* |
| ***Total Known Risks*** | 52 | 96% | 53 | 75% | 132 | 66% | 198 | 72% | 477 | 73% | 303 | 81% | 86 | 71% | 15 | 54% | 1,316 | 74% |
| Unknown Risk[#] | 2 | 4% | 18 | 25% | 68 | 34% | 77 | 28% | 173 | 27% | 73 | 19% | 35 | 29% | 13 | 46% | 459 | 26% |
| *Presumed Heterosexual* | *0* | *0%* | *17* | *24%* | *59* | *30%* | *55* | *20%* | *148* | *23%* | *52* | *14%* | *27* | *22%* | *10* | *36%* | *368* | *21%* |
| *Other* | *2* | *4%* | *1* | *1%* | *9* | *5%* | *22* | *8%* | *25* | *4%* | *21* | *6%* | *8* | *7%* | *3* | *11%* | *91* | *5%* |
| Total All Cases | 54 | 3% | 71 | 4% | 200 | 11% | 275 | 15% | 650 | 37% | 376 | 21% | 121 | 7% | 28 | 2% | 1,775 | 100% |

| Male and 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 | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % |
| Male-Male Sex[#] | 0 | 0% | 75 | 52% | 422 | 70% | 693 | 68% | 1,417 | 59% | 609 | 45% | 160 | 43% | 33 | 50% | 3,409 | 56% |
| Injecting Drug Use[#] | 0 | 0% | 11 | 8% | 38 | 6% | 100 | 10% | 477 | 20% | 458 | 34% | 110 | 29% | 8 | 12% | 1,202 | 20% |
| *IDU w/ heterosexual* | *0* | *0%* | *5* | *3%* | *22* | *4%* | *50* | *5%* | *244* | *10%* | *193* | *14%* | *34* | *9%* | *3* | *5%* | *551* | *9%* |
| *IDU w/o heterosexual* | *0* | *0%* | *6* | *4%* | *16* | *3%* | *50* | *5%* | *233* | *10%* | *265* | *19%* | *76* | *20%* | *5* | *8%* | *651* | *11%* |
| Male-Male Sex/IDU[#] | 0 | 0% | 0 | 0% | 20 | 3% | 41 | 4% | 157 | 7% | 92 | 7% | 20 | 5% | 2 | 3% | 332 | 5% |
| Blood Recipient[#] | 8 | 7% | 12 | 8% | 8 | 1% | 8 | 1% | 13 | 1% | 7 | 1% | 3 | 1% | 2 | 3% | 61 | 1% |
| Perinatal | 102 | 93% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 102 | 2% |
| Heterosexual[#] | 0 | 0% | 47 | 32% | 119 | 20% | 171 | 17% | 349 | 14% | 197 | 14% | 83 | 22% | 21 | 32% | 987 | 16% |
| *Partner IDU* | *0* | *0%* | *6* | *4%* | *20* | *3%* | *41* | *4%* | *111* | *5%* | *84* | *6%* | *32* | *9%* | *12* | *18%* | *306* | *5%* |
| *Partner Bisexual* | *0* | *0%* | *4* | *3%* | *1* | *0%* | *10* | *1%* | *18* | *1%* | *6* | *0%* | *1* | *0%* | *0* | *0%* | *40* | *1%* |
| *Partner Blood Recipient* | *0* | *0%* | *0* | *0%* | *2* | *0%* | *7* | *1%* | *8* | *0%* | *1* | *0%* | *1* | *0%* | *1* | *2%* | *20* | *0%* |
| *Partner HIV+* | *0* | *0%* | *37* | *26%* | *96* | *16%* | *113* | *11%* | *212* | *9%* | *106* | *8%* | *49* | *13%* | *8* | *12%* | *621* | *10%* |
| Total Known Risks | 110 | 96% | 145 | 79% | 607 | 82% | 1,013 | 84% | 2,413 | 84% | 1,363 | 84% | 376 | 79% | 66 | 68% | 6,093 | 83% |
| Unknown Risk[#] | 4 | 4% | 38 | 21% | 137 | 18% | 189 | 16% | 476 | 16% | 266 | 16% | 100 | 21% | 31 | 32% | 1,241 | 17% |
| *Presumed Heterosexual* | *0* | *0%* | *32* | *17%* | *114* | *15%* | *128* | *11%* | *356* | *12%* | *165* | *10%* | *73* | *15%* | *23* | *24%* | *891* | *12%* |
| *Other* | *4* | *4%* | *6* | *3%* | *23* | *3%* | *61* | *5%* | *120* | *4%* | *101* | *6%* | *27* | *6%* | *8* | *8%* | *350* | *5%* |
| Total All Cases | 114 | 2% | 183 | 2% | 744 | 10% | 1,202 | 16% | 2,889 | 39% | 1,629 | 22% | 476 | 6% | 97 | 1% | 7,334 | 100% |

*** Indicates there are fewer than five (n=1,2,3, or 4) reported cases**

**^ Indicates percentage calculated from cases with *known risk for categorical break down*.**

**-Percents for 'Total Known Risk', Unknown Risk', 'Presumed Heterosexual', 'Other', and 'Total All Cases' are calculated from all cases**

**[#] Indicates an explanatory definition exists in Appendix B**

**[x] Indicates age at time of HIV diagnosis (Unknown age: Males=2, Females=1)**

**Table 7: Gonorrhea, Syphilis, and Chlamydia by Sex**
**Race, and Age Group in The Detroit Metro Area**
**Reported January 1, 2003 to December 31, 2003**

| | 2000 Det EMA | Gonorrhea | | | P&S Syphilis* | | | Chlamydia | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Patient Group | Population | Cases | Pct | Rate^ | Cases | Pct | Rate^ | Cases | Pct | Rate^ |
| Male | 2,157,470 | 3,382 | 47% | 157 | 138 | 62% | 6 | 3,031 | 19% | 140 |
| *White Males* | 1,518,812 | 125 | 2% | 8 | 22 | 10% | 1 | 417 | 3% | 27 |
| *Black Males* | 468,477 | 2,172 | 30% | 464 | 114 | 51% | 24 | 1,393 | 9% | 297 |
| *Hispanic Males* | 67,279 | 5 | 0% | 7 | 2 | 1% | 3 | 20 | 0% | 30 |
| *Other Males* | 102,902 | 49 | 1% | N/A | 0 | 0% | N/A | 111 | 1% | N/A |
| *Unk Males* | N/A | 1,031 | 14% | N/A | 0 | 0% | N/A | 1,090 | 7% | N/A |
| Female | 2,284,081 | 3,843 | 53% | 168 | 84 | 38% | 4 | 13,065 | 81% | 572 |
| *White Females* | 1,578,088 | 219 | 3% | 14 | 9 | 4% | 1 | 1,447 | 9% | 92 |
| *Black Females* | 543,785 | 1,502 | 21% | 276 | 73 | 33% | 13 | 4,810 | 30% | 885 |
| *Hispanic Females* | 60,796 | 4 | 0% | 7 | 1 | 0% | 2 | 38 | 0% | 63 |
| *Other Females* | 101,412 | 215 | 3% | N/A | 1 | 0% | N/A | 481 | 3% | N/A |
| *Unk Females* | N/A | 1,903 | 26% | N/A | 0 | 0% | N/A | 6,289 | 39% | N/A |
| White | 3,096,900 | 344 | 5% | 11 | 31 | 14% | 1 | 1,864 | 12% | 60 |
| Black | 1,012,262 | 3,674 | 51% | 363 | 187 | 84% | 18 | 6,203 | 39% | 613 |
| Hispanic | 128,075 | 9 | 0% | 7 | 3 | 1% | 2 | 58 | 0% | 45 |
| Other | 204,314 | 264 | 4% | 129 | 1 | 0% | 0 | 592 | 4% | 290 |
| Unknown Race | N/A | 2,934 | 41% | N/A | 0 | 0% | N/A | 7,379 | 46% | N/A |
| 0-4 years | 310,638 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 |
| 5-9 years | 346,656 | 7 | 0% | 2 | 0 | 0% | 0 | 8 | 0% | 2 |
| 10-14 years | 206,214 | 69 | 1% | 33 | 0 | 0% | 0 | 175 | 1% | 85 |
| 15-19 years | 419,442 | 1,858 | 26% | 443 | 9 | 4% | 2 | 5,513 | 34% | 1314 |
| 20-24 years | 254,469 | 2,229 | 31% | 876 | 20 | 9% | 8 | 5,581 | 35% | 2193 |
| 25-29 years | 310,242 | 1,274 | 18% | 411 | 37 | 17% | 12 | 2,432 | 15% | 784 |
| 30-34 years | 337,435 | 729 | 10% | 216 | 30 | 14% | 9 | 1,220 | 8% | 362 |
| 35-39 years | 362,411 | 430 | 6% | 119 | 33 | 15% | 9 | 499 | 3% | 138 |
| 40-44 years | 369,557 | 247 | 3% | 67 | 24 | 11% | 6 | 233 | 1% | 63 |
| 45-54 years | 614,779 | 207 | 3% | 34 | 54 | 24% | 9 | 171 | 1% | 28 |
| 55-64 years | 373,407 | 36 | 0% | 10 | 13 | 6% | 3 | 58 | 0% | 16 |
| 65 and over | 536,301 | 128 | 2% | 24 | 2 | 1% | 0 | 172 | 1% | 32 |
| Unknown Age | N/A | 11 | 0% | N/A | 0 | 0% | N/A | 34 | 0% | N/A |
| Total | 4,441,551 | 7,225 | 100% | 163 | 222 | 100% | 5 | 16,096 | 100% | 362 |

*** P&S: Primary and Secondary Syphilis**

**^ Rate per 100,000**

Table 8: Characteristics of HIV/Hepatitis Co-Infected Persons in Care, in Southeast Michigan Adult Spectrum of Disease, 2000-2002

| | N | Proportion of Persons in the Sex, Race, Age, or HIV Transmission Risk Group Who Are Co-Infected with HAV, HBV, or HCV | | |
|---|---|---|---|---|
| | | HAV* | HBV* | HCV* |
| **Overall** | 1,902 | 3% | 10% | 19% |
| **Sex** | | | | |
| Male | 1,103 | 4% | 11% | 17% |
| Female | 799 | 3% | 8% | 21% |
| **Race** | | | | |
| White | 380 | 5% | 8% | 13% |
| Black | 1,427 | 3% | 11% | 20% |
| Others | 95 | 1% | 2% | 19% |
| **Age**** | | | | |
| <20 | 19 | *** | *** | *** |
| 20-29 | 209 | 4% | 7% | 5% |
| 30-39 | 533 | 2% | 11% | 8% |
| 40-49 | 742 | 4% | 9% | 23% |
| >=50 | 399 | 4% | 11% | 32% |
| **HIV Transmission Risk****** | | | | |
| MSM | 723 | 4% | 12% | 5% |
| IDU | 552 | 3% | 13% | 49% |
| Blood Recipient | 38 | *** | *** | 47% |
| High-Risk Heterosexual | 399 | 2% | 5% | 5% |
| Presumed Heterosexual | 171 | 3% | 3% | 4% |
| Unknown/Others | 19 | 0% | 0% | 0% |

*HAV = Hepatitis A Virus
HBV = Hepatitis B Virus
HCV = Hepatitis C Virus

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