

2008 Profile of HIV/AIDS in The Detroit Metro Area

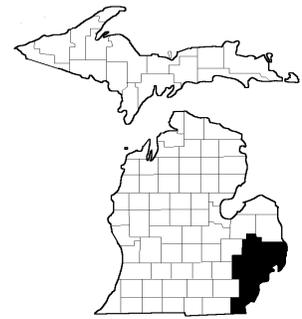
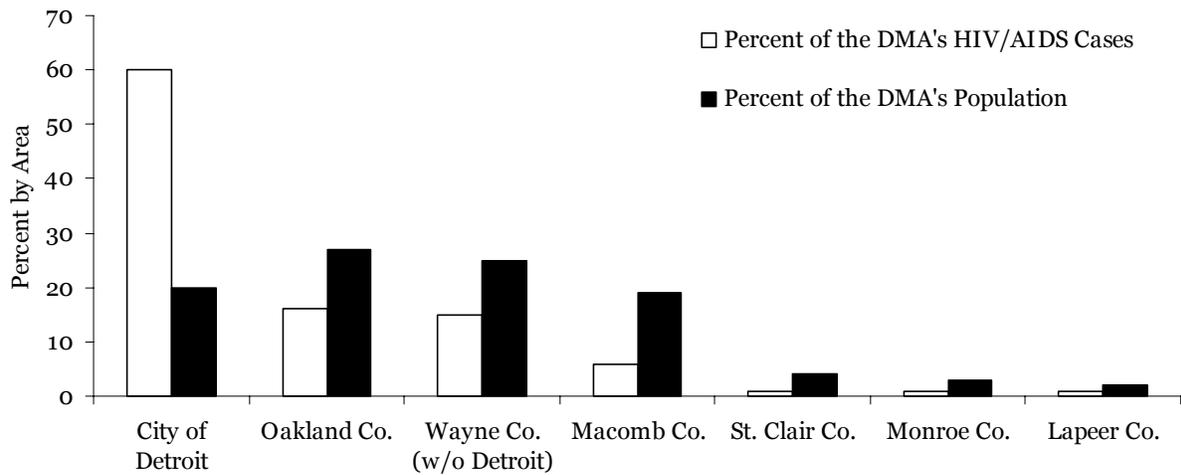


Figure 1: Detroit Metro Area: Living HIV/AIDS Cases and Population by Local Health Jurisdiction, January 2008



2008 Profile of HIV/AIDS in The Detroit Metro Area

Table of Contents/The Detroit Metropolitan Area

List of Tables and Figures	4-3—4
----------------------------	-------

OVERALL DESCRIPTION OF THE EPIDEMIC

Summary of Epidemic for the Detroit Metro Area	4-7
Recommendations: Ranking of Behavioral Groups	4-8
Distribution of Living HIV/AIDS Cases by Risk	4-7
Distribution of Reported Rate and Estimated Prevalence of HIV/AIDS Cases by Race and Sex	4-9
Trends in HIV/AIDS Data	4-11—14
New Diagnoses of HIV	4-11
Transmission of HIV 2002-2006	4-11—12
New Diagnoses, Deaths, and Prevalence of HIV by Year	4-12
HIV related Deaths by Race/Sex	4-12—13
Race and Sex 2002-2006	4-13—14
Age at HIV Diagnosis 2002-2006	4-14
Patterns of Service Utilization of HIV-infected persons	4-15—17
Comparing Services with Cases	4-15
Exploring Core Services	4-16
Receipt of ART	4-17
Sexually Transmitted Diseases	4-18
Gonorrhea and Chlamydia	4-18
Syphilis	4-18
Hepatitis and HIV	4-19

2008 Profile of HIV/AIDS in The Detroit Metro Area

Table of Contents/The Detroit Metropolitan Area

RANKED BEHAVIORAL GROUPS

MSM	4-20—21
Overview	4-20
Race/Ethnicity	4-20
Age at HIV Diagnosis	4-20
Concurrent Diagnoses	4-20
Geographic Distribution	4-20
Trends and Conclusions	4-20
Discussion of Behaviorally Bisexual Men	4-20—21
A Look at Condom Usage	4-21
Heterosexuals	4-22—25
Overview	4-22
Race/Ethnicity and Sex	4-22—23
Age at HIV Diagnosis	4-24
Concurrent Diagnoses	4-24
Geographic Distribution	4-24
Trends and Conclusions	4-24
A Look at Condom Usage	4-25
Injecting Drug Users (IDU)	4-26—27
Overview	4-26
Race/Ethnicity and Sex	4-26
Age at HIV Diagnosis	4-27
Concurrent Diagnoses	4-27
Geographic Distribution	4-27
Trends and Conclusions	4-27

2008 Profile of HIV/AIDS in The Detroit Metro Area

Table of Contents/The Detroit Metropolitan Area

DESCRIPTION OF THE EPIDEMIC BY DEMOGRAPHICS

Race and Sex	4-28—30
Overview	4-28
Concurrent Diagnoses	4-28
Mode of Transmission	4-29
Geographic Distribution	4-30
Trends and Conclusions	4-30
Age	4-31—39
Age at Diagnosis vs. Current Age	4-31—32
Children (0-12)	4-33
Overview	4-33
Demographic Description	4-33
Geographic Distribution	4-33
Trends and Conclusions	4-33
Teens and Young Adults (13-24)	4-34—36
Overview	4-34
STDs	4-34
Teen Pregnancy	4-34
Race/Ethnicity	4-34
Geographic Distribution	4-34
Mode of Transmission	4-35—36
Trends and Conclusions	4-36
Persons 50 years and older at HIV Diagnosis	4-37—39
Overview	4-37
Mode of Transmission	4-37—39
Focus on persons 50-59 years	4-38
Focus on persons 60 years and older	4-39
Persons Currently 50 Years and Older	4-37
Trends and Conclusions	4-37

2008 Profile of HIV/AIDS in The Detroit Metro Area

List of Tables and Figures\The Detroit Metropolitan Area

TABLES

Table 1: Comparing HIV Services with Reported Cases throughout the Detroit Metro Area, January 2008	4-15
Table 2: Core Services per Ryan White client, Detroit Metro Area Residents, 2007	4-16
Table 3: Barrier/Condom use with Steady Partner, Among Heterosexuals	4-25
Table 4: Barrier/Condom use with Non-Steady Partner, Among Heterosexuals	4-25
Table 5: Demographic Information on HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008	4-40
Table 6: Sex, Race, and Risk Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008	4-41
Table 7: Sex, Race, and Age at HIV Diagnosis Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008	4-42
Table 8: Sex, Risk, and Age at HIV Diagnosis Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008	4-43
Table 9: Demographics for Detroit Metro Area Gonorrhea, Syphilis, and Chlamydia Cases	4-44
Table 10: Characteristics of HIV/Hepatitis Co-Infected Persons in Care in Southeast Michigan ASD, 2001-2003	4-45

FIGURES

Figure 1: Detroit Metro Area: Living HIV/AIDS Cases and Population by Local Health Jurisdiction, January 2008	4-1
Figure 2: Reported Persons Living with HIV/AIDS in the Detroit Metro Area, by Risk, January 2008	4-9
Figure 3: Estimated Prevalence of Persons Living with HIV/AIDS in the Detroit Metro Area, by Race and Sex	4-10
Figure 4: Reported Prevalence Rate of Persons Living with HIV/AIDS in the Detroit Metro Area, by Race and Sex	4-10
Figure 5: Number and Rate of New HIV Diagnoses in the Detroit Metro Area	4-11
Figure 6: Number of New HIV Diagnoses in 2006 and Trend Between 2002-2006, by Risk, DMA	4-12
Figure 7: New Diagnoses, Deaths and Prevalence of HIV/AIDS by Year, DMA	4-12
Figure 8: HIV/AIDS Deaths by Race/Sex	4-13
Figure 9: Number of New HIV Diagnoses in 2006 and Trends 2002-2006, by Race/Sex, the DMA	4-14

2008 Profile of HIV/AIDS in The Detroit Metro Area

List of Tables and Figures\The Detroit Metropolitan Area

Figure 10: Number of New HIV Diagnoses in 2006 and Trends 2002-2006, by Age at HIV Diagnosis, the DMA	4-14
Figure 11: Proportion of Patients Who Received Antiretroviral Treatment Late, at the Recommended Time, or Early, ASD Study-Michigan, 1999-2003	4-17
Figure 12: Partners' Condom Usage During Insertive Anal Sex, Among HIV Infected MSM (SHAS)	4-21
Figure 13: Partners' Condom Usage During Receptive Anal Sex, among HIV Infected MSM (SHAS)	4-21
Figure 14: Black Females Living with HIV/AIDS in the Detroit Metro Area, by Risk	4-23
Figure 15: White Females Living with HIV/AIDS in the Detroit Metro Area by Risk	4-23
Figure 16: Black Males Living with HIV/AIDS in the Detroit Metro Area by Risk	4-29
Figure 17: White Males Living with HIV/AIDS in the Detroit Metro Area by Risk	4-29
Figure 18: Case Rates of Persons with HIV/AIDS Living in High and Low Prevalence Areas of the Detroit Metro Area, by Race, 2008	4-30
Figure 19: Age at Initial HIV Diagnosis for those Living with HIV/AIDS in the Detroit Metro Area, January 2008	4-31
Figure 20: Age of AIDS Diagnosis for those Living with AIDS in the Detroit Metro Area, January 2008	4-31
Figure 21: Current Age of those Living with HIV/AIDS in the Detroit Metro Area, January 2008	4-32
Figure 22: Persons Living in the Detroit Metro Area who were 13-19 Years Old at HIV Diagnosis, by Sex and Risk	4-35
Figure 23: Persons Living in the Detroit Metro Area who were 20-24 Years Old at HIV Diagnosis, by Sex and Risk	4-36
Figure 24: Males 50-59 Years Old at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk	4-38
Figure 25: Females 50-59 Years Old at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk	4-38
Figure 26: Males 60 Years and Older at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk	4-39
Figure 27: Females 60 Years and Older at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk	4-39

2008 Profile of HIV/AIDS in The Detroit Metro Area

Summary of HIV/AIDS Epidemic for the Detroit Metro Area

- **How many cases?** The Michigan Department of Community Health (MDCH) estimates that there are 11,560 people living with HIV/AIDS in the Detroit Metro Area, of which 9,171 were reported as of January 1, 2008. 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 rate of new HIV diagnoses increased by an average of four percent per year, from 11/6 per 100,000 in 2002 to 13.8 per 100,000 in 2006, after peaking at 14.5 per 100,000 in 2005. 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 than expected (9,171 of the 14,341 cases reported in Michigan) when compared with the percent 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 percent of the reported cases within this area were among residents of the City of Detroit, while 40 percent were residents of the remaining Detroit Metro Area.

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. All LHDs have been labeled as either being in a high or low HIV prevalence area (please refer to Figure 2, page 3-9 of the State-wide profile for methodology used). Within the Detroit Metro Area, the City of Detroit and Oakland and Wayne counties are considered to be LHDs in statistically high prevalence areas (92 percent of cases in the Detroit Metro Area), while Lapeer, Macomb, Monroe and St. Clair counties are considered to be LHDs in statistically low prevalence areas. For purposes of categorical HIV funding, Macomb county is considered to have high prevalence.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Recommendations: Ranking of Behavioral Groups

To assist in prioritizing prevention activities, the MDCH HIV/STD/VH/TB Epidemiology 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 is, “In which populations can strategies prevent the most infections from occurring?” Effectively reducing transmission in populations where most of the HIV transmission is taking place will have the greatest impact upon the overall epidemic. The percentage of cases for each behavioral group, as well as trends over time were used in determining the ranked order of the following three behavioral groups: MSM, heterosexual, and IDU.

- **Men Who Have Sex With Men (MSM)*:** MSM make up 51 percent of all HIV/AIDS reported (4,665 out of 9,171 cases). The MSM behavioral group continues to be the most affected behavioral group statewide. The trend in persons reporting MSM behavior appears to be level from 2002 through 2006, with 315 cases diagnosed in 2006.
- **Heterosexuals:** Heterosexual cases constitute 17 percent of the total number of reported cases (1,525 out of 9,171 cases) and are comprised of High-Risk Heterosexuals (HRH) and females who are presumed to have heterosexual risk (PH-Fem). HRH 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, and PH-Fem are defined as females whose only reported risk is heterosexual contact, and their male partner’s risk and HIV status are unknown. The trend in persons reporting heterosexual transmission appears to be level from 2002 through 2006, with 85 cases diagnosed in 2006.
- **Injecting Drug Users (IDU)*:** Of all HIV/AIDS reported cases, 18 percent are IDU (1,647 out of 9,171 cases). The trend in persons reporting IDU behavior appears to be level from 2002 through 2006, with 46 cases diagnosed in 2006.

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

2008 Profile of HIV/AIDS in The Detroit Metro Area

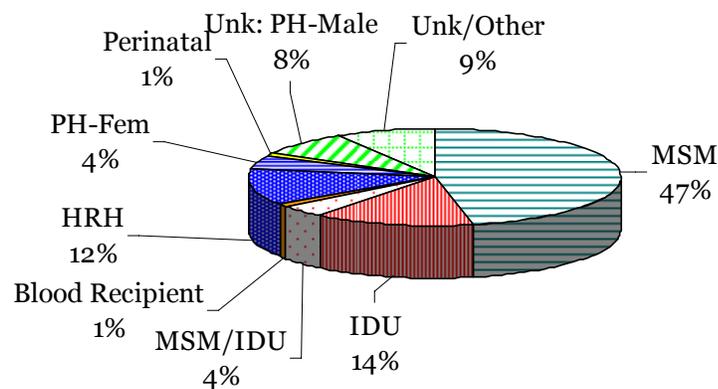
Distribution of Living HIV/AIDS Cases by Risk

Data from HIV/AIDS Reporting System (eHARS)

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 (HRH) (see glossary for more in-depth description), (6) receipt of HIV-infected blood or blood components, and (7) no identified risk (NIR). Michigan has further separated the NIR category, in an attempt to capture those persons whose only reported risk is heterosexual risk. Often times, partners are unaware of their partners' risky behaviors. For this reason, Michigan uses two additional categories to help define the transmission pattern: Presumed Heterosexual (PH)-Female and PH-Male (please see the glossary for further explanation).

Figure 2 indicates persons living with HIV/AIDS in the Detroit Metro Area by mode of transmission.

Figure 2: Reported Persons Living with HIV/AIDS in the Detroit Metro Area by Risk, January 2008 (N = 9,171)



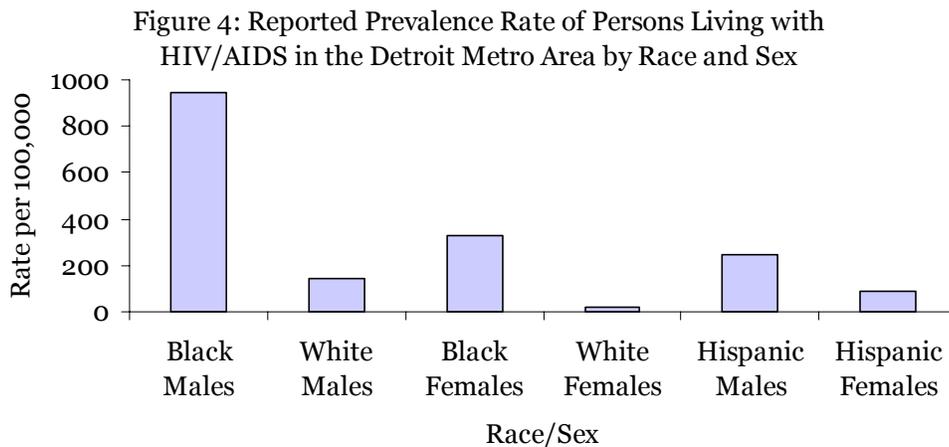
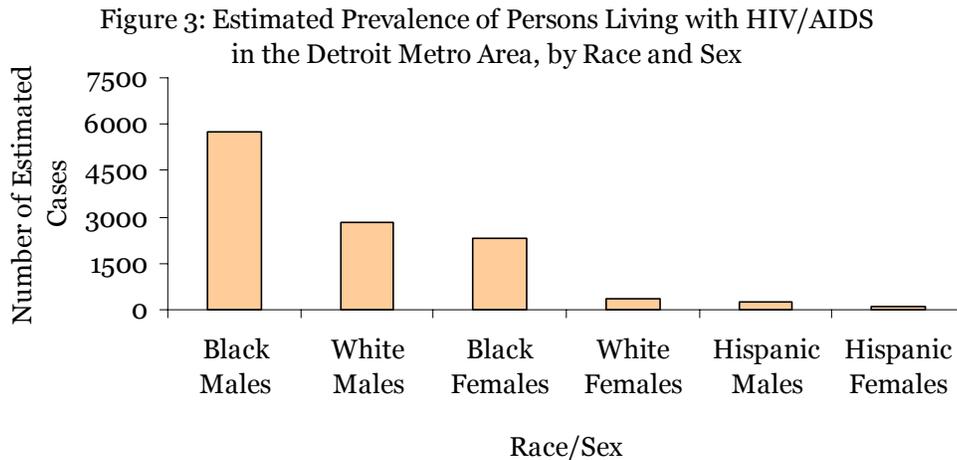
- Half (51 percent) of the people living with HIV/AIDS are MSM, including four percent who also injected drugs (MSM/IDU).
- Sixteen percent have a risk of heterosexual sex, including 12 percent HRH and four percent PH-Female.
- Eighteen percent are injecting drug users, including four percent who are also MSM (MSM/IDU).
- Seventeen percent have a categorical 'unknown' risk, including eight percent PH-Male and nine percent other or unknown.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Distribution of Reported Rate and Estimated Prevalence of HIV/AIDS Cases by Race and Sex

Data from HIV/AIDS Reporting System (eHARS)

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



- Black males have both the highest rate per 100,000 population (948) and the highest estimated number (5,640) 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 (327) and the third highest estimated number (2,270) of cases of HIV/AIDS.
- Hispanic males have the third highest rate (248) and the fifth highest estimated number (260) 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 (146) and the second highest estimated number (2,770) of cases.
- Hispanic females have the fifth highest rate (86) and the lowest estimated number (80) of HIV/AIDS.
- White females have the lowest rate (19) and the fourth highest estimated number (370) of HIV/AIDS cases.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Trends in HIV/AIDS Data

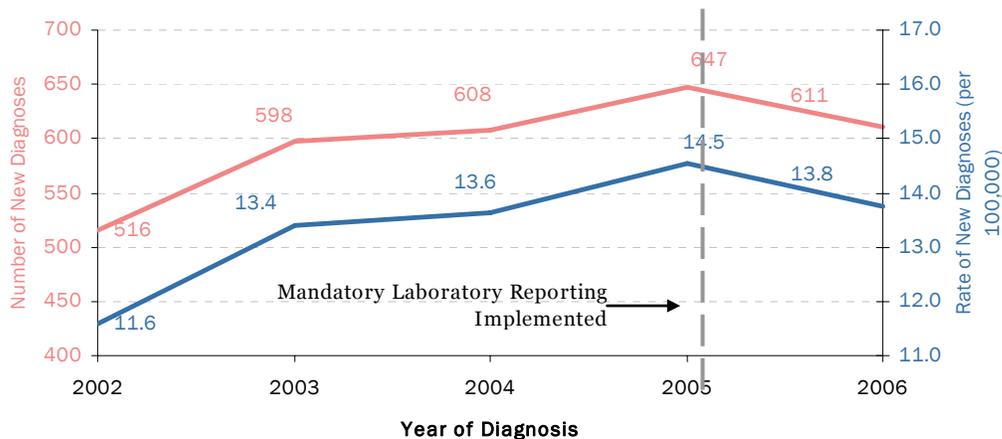
Data from HIV/AIDS Reporting System (eHARS)

To evaluate trends in 2008, we estimated the number of persons newly diagnosed with HIV infection each year by adjusting the number of reported cases diagnosed in 2002 through 2006. This adjustment was applied to account for those who may not have been reported to the health department by January 1, 2008. The adjustments are calculated by weighting the data. Please see Forward (Page 1-4) for further description on methods used to evaluate the trends.

New Diagnoses of HIV:

The rate of new HIV diagnoses increased by an average of four percent per year, from 11.6 per 100,000 in 2002 to 13.8 per 100,000 in 2006 (516 cases to 611 cases, average of 600 cases), after peaking at 14.5 per 100,000 in 2005 (Figure 5). The increasing trend and peak in 2005 are most likely due to the implementation of mandatory laboratory reporting in 2005. Prior to this, surveillance for HIV in Michigan relied on a few laboratories who voluntarily reported positive HIV-related test results and health care providers, who are required by law to report positive cases. The addition of mandatory laboratory reporting has increased the case reports received, and appear to be driving the upward trend described here.

Figure 5: Number and Rate of New HIV Diagnoses in the Detroit Metro Area, 2002-2006



Transmission of HIV 2002-2006:

Figure 6 (next page) shows that between 2002 and 2006, there were no significant changes in number of new diagnoses according to risk for known risk groups. The number of new diagnoses with no identified risk, on the other hand, is an average of 14 percent higher each year than the year before. This is to be expected because there has been less time to investigate cases diagnosed more recently for risk information. The “Other” category includes perinatal and blood product transmission.

The unadjusted number of new HIV diagnoses, number of HIV related deaths and HIV prevalence are presented in Figure 7 (next page). The trend among new HIV diagnoses reflects reported cases. These data were not adjusted for reporting delay, as in Figure 5 (this page).

2008 Profile of HIV/AIDS in The Detroit Metro Area

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (eHARS)

Figure 6: Number of New HIV Diagnoses in 2006 and Trend Between 2002 and 2006, by Risk, DMA

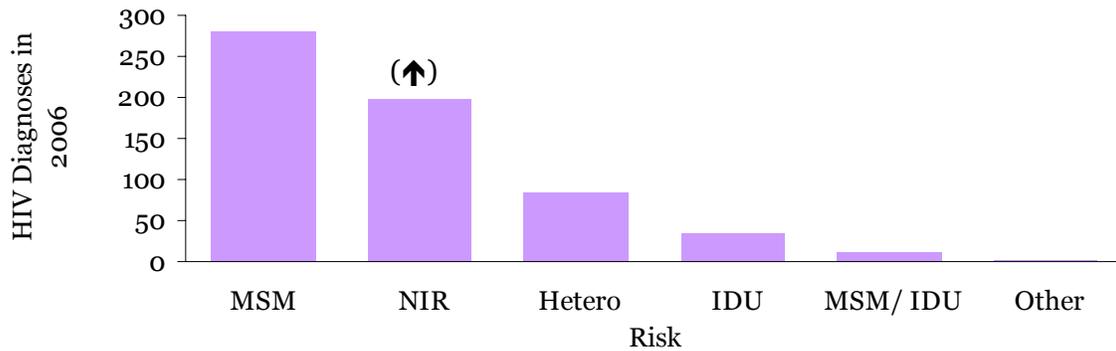
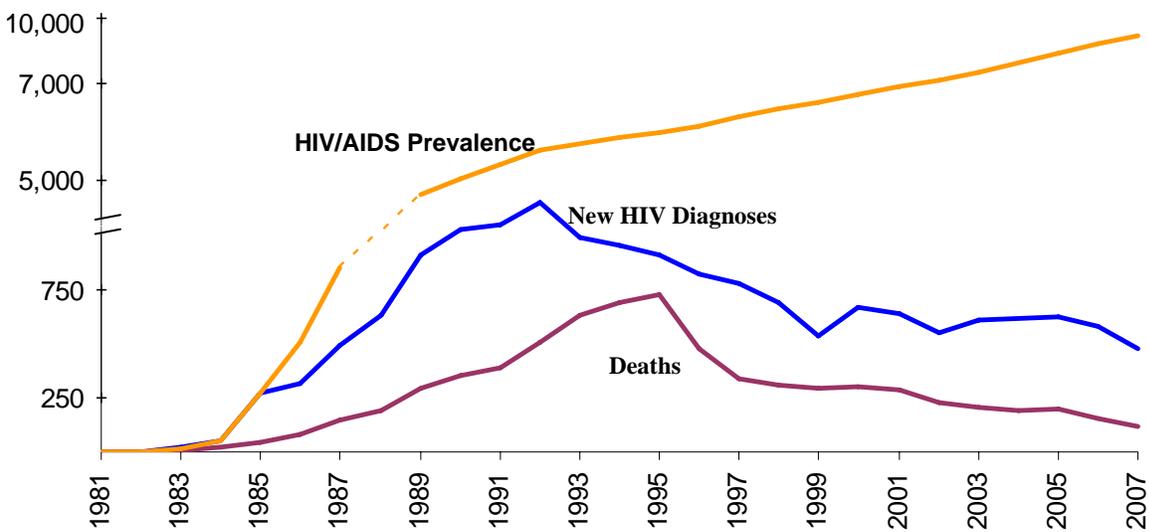


Figure 7: New Diagnoses, Deaths, and Prevalence of HIV/AIDS by Year, DMA



Deaths:

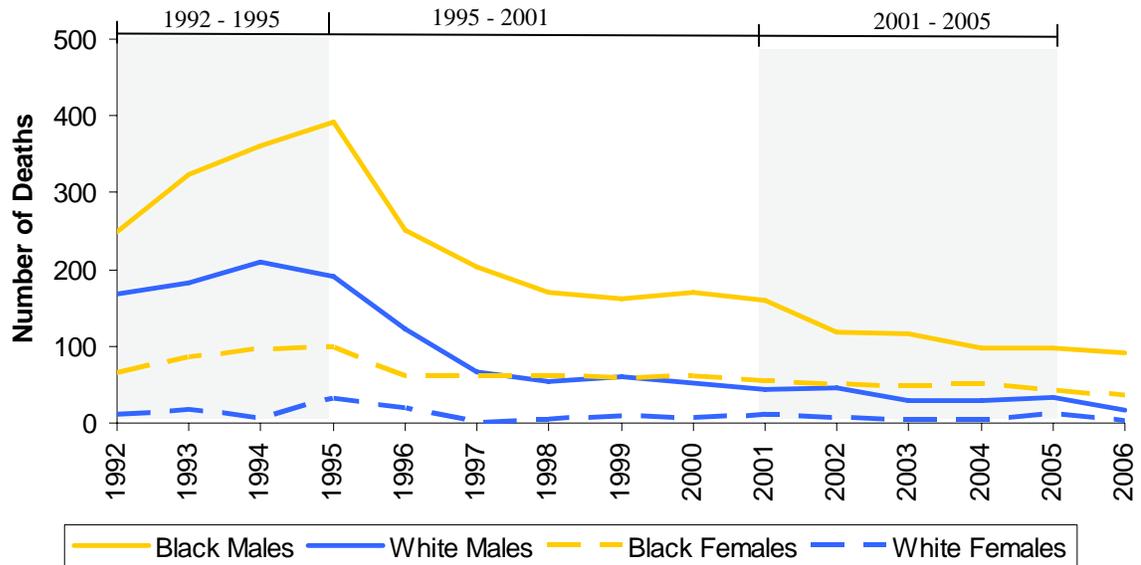
Figure 8 (next page) shows the number of HIV-infected Detroit Metro Area residents who have been reported as deceased by a local health department, the Division of Vital Records via a data match or death certificate, or an alternate source. The number of deaths increased in all race/sex groups from the beginning of the epidemic through approximately 1994-1995. The number of deaths decreased markedly between 1995 and 1998 and then were relatively stable until 2001. The percent decrease in deaths among white males (77 percent) between 1995 and 2001 was more pronounced than the percent decrease among black males (59 percent), and the percent decrease among white females (65 percent) was larger than the percent decrease among black females (45 percent). Encouragingly, the number of

2008 Profile of HIV/AIDS in The Detroit Metro Area

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (eHARS)

Figure 8: HIV/AIDS Deaths by Race/Sex



deaths in black males has fallen substantially from 2001 to 2005 (39 percent), even in comparison to white males (25 percent), black females (21 percent), and white females (0 percent), but the number of deaths among black males still exceeds that of any other race/sex group.

Race and Sex 2002-2006 :

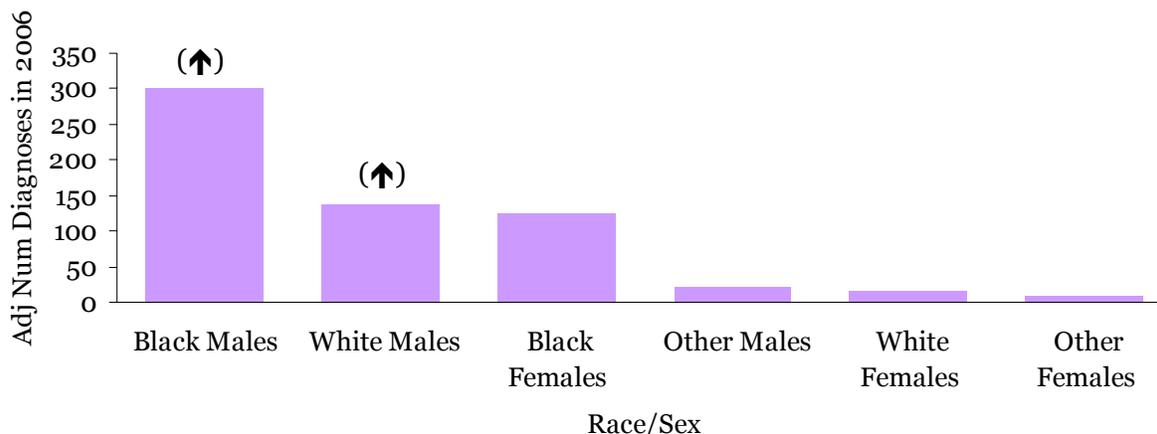
The rate of new diagnoses increased significantly among white and black males between 2002 and 2006 (average increases of seven percent and three percent per year, respectively). As a result, the overall rate among males increased an average of four percent per year. In addition, the increases seen among white and black males contributed in large part to the significant three percent and eight percent increases among all white and black persons, respectively. (Figure 9, next page)

2008 Profile of HIV/AIDS in The Detroit Metro Area

Trends in HIV/AIDS Data

Data from HIV/AIDS Reporting System (eHARS)

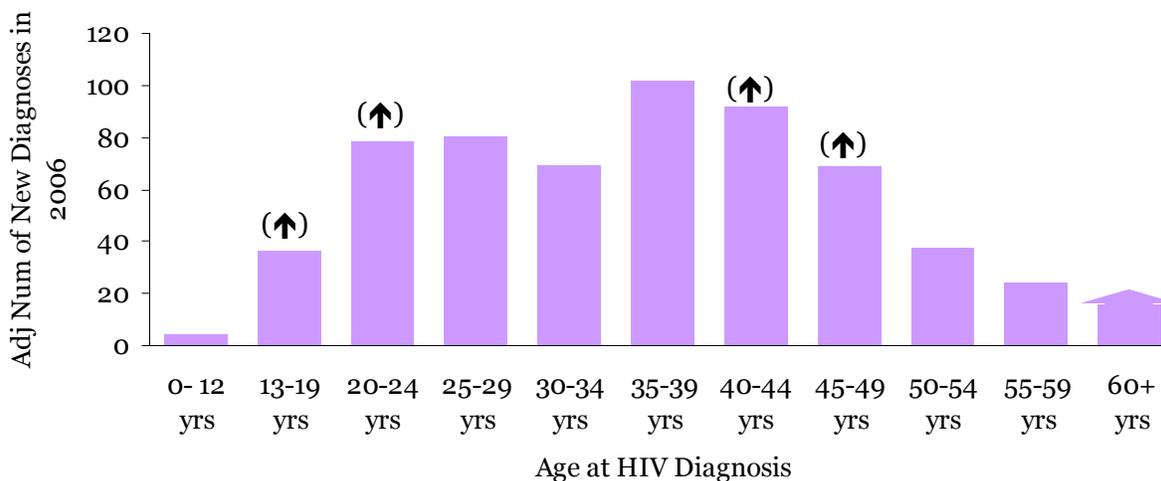
Figure 9: Number of New HIV Diagnoses in 2006 and Trends 2002 -2006, by Race/Sex, the DMA



Age at HIV Diagnosis 2002-2006:

Between 2002 and 2006 the rate of new HIV diagnoses increased among teens and young adults, those who were 13-24 years of age at HIV diagnosis, among persons in their forties, and among persons 60 years and older at HIV diagnosis (Figure 10). Rates in all other age groups were stable. This is the third year in a row that Michigan trend analyses have shown a significant increase among teens and young adults. While the trends we are seeing may partially be attributed to heightened HIV testing efforts aimed at young persons, public testing data suggest that additional testing is not the sole explanation for the increases seen among teens and young adults. In fact, there seems to be a true increase in this group.

Figure 10: Number of New HIV Diagnoses in 2006 and Trends 2002 -2006, by Age at HIV Diagnosis, the DMA



2008 Profile of HIV/AIDS in The Detroit Metro Area

Patterns of Service Utilization of HIV-infected Persons

Data from HIV/AIDS Reporting System (eHARS), Uniform Reporting System (URS) & Adult and Adolescent Spectrum of disease (ASD)

The Uniform Reporting System (URS) is a statewide client-level data standard designed to uniformly document the quantity and types of services provided by agencies receiving Ryan White funds, and to describe the populations receiving the services. A wide range of clinical and supportive services are reported in the URS including outpatient medical care, dental care, mental health services, case management, and the AIDS Drug Assistance Program. URS data may include HIV/AIDS services that are not directly funded by Ryan White, as long as the reported service is eligible to be funded. However, most

services reported in the URS are at least partially funded by Ryan White resources.

Table 1: Comparing HIV Services with Reported Cases throughout the DMA January 2008

Group	Services	Cases
White	20%	27%
Black	71%	68%
Hispanic	3%	3%
Other	1%	1%
Unknown	5%	<1%
Males	73%	76%
White Males	17%	24%
Black Males	49%	49%
Hispanic Males	2%	2%
Other Males	1%	1%
Unknown Males	4%	<1%
Females	27%	24%
White Females	3%	3%
Black Females	22%	20%
Hispanic Females	1%	1%
Other Females	<1%	<1%
Unknown Females	2%	<1%
0-12 Years^	<1%	<1%
13-19 Years^	2%	1%
20-24 Years^	5%	3%
25-44 Years^	46%	45%
45+ Years^	47%	50%
Infants: 0-1 Years^	<1%	<1%
Children: 2-12 Years^	1%	<1%
Youth: 13-24 Years^	7%	5%
Women 25+ Years^	25%	23%
Total	100% (N = 4,588)	100% (N = 9,171)

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

There are several client-level data systems in Michigan that collect URS data. Demographic and service data from all these systems were extracted into a standard format, and these data were then combined and unduplicated to produce a URS dataset for analysis. The Detroit EMA dataset is a subset of the unduplicated statewide dataset from all Ryan White funded programs, including the AIDS Drug Assistance Program. Clients are included in this dataset if they reside in the Detroit EMA and received at least one service from a Ryan White funded provider between January 1, 2007 and December 31, 2007. Detroit EMA clients may receive services from providers that are not located in the Detroit EMA.

Table 1 compares the demographic distribution of the 4,588 HIV-infected residents of the Detroit Metro Area who were served by Ryan White funded programs in 2007, to that of the 9,171 persons known to be living with HIV in the same area at the end of 2007. The comparison shows that persons receiving Ryan White services were more likely than the reported population to be female or black, and less likely to be 45 years and older.

The Ryan White HIV/AIDS Treatment Modernization 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 13 to 24, and women age 25 or older receiving care is somewhat higher than in reported cases.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Patterns of Service Utilization of HIV-infected Persons

Table 2 gives additional detail about the core services of outpatient medical care, oral health care, mental health care, medical case management and medication assistance delivered to Detroit EMA residents by Ryan White programs in 2007. Except for the Drug Assistance Program (DAP), which counts the number of prescriptions filled, the service counts in the table are visits, not units of time. Only one “visit” per day is counted for any service category in this URS summary data.

Table 2: Core Services per Ryan White Client, Detroit Metro Area Residents, 2007

	Outpatient Medical Care	Oral Health Care	Mental Health Care	Medical Case Management	DAP (Medication Assistance)
No. of providers supplying valid data*	11	2	5	9	1
No. of unduplicated clients served**	3,119	573	412	1,278	1,296
Percent receiving the service.	68%	13%	9%	28%	28%
Total Days of Service***	13,433	2,498	2,184	30,170	39,083
Average no. of visits per client	4.3	4.4	5.3	23.6	30.2
Median no. of visits per client	3	3	3	13	23
Range of visits per client	1-47	1-45	1-51	1-286	1-195

Data based on number of Ryan White providers that submitted URS data and delivered services to residents of the Detroit Metro Area. Some providers served residents of both the DMA and the Out-State area.

* A provider may be included in more than one service category and may not be located in the DMA

** Clients are unduplicated for the service across all providers and may be counted in more than one service category.

*** The Drug Assistance service unit is a prescription filled rather than a visit or day of service.

URS medical care services are for outpatient medical care visits ranging from a complete physical with a physician to a brief check-up with a nurse, drug review with a pharmacist, or a visit for a blood draw or lab test. The annual average of 4.3 visits per client, with a median of three, is consistent with HIV care standards that recommend monitoring of health status on a quarterly basis. (Table 2)

Oral health care services reported in the URS are primarily provided through the statewide Michigan Dental Program, administered by the Division of Health, Wellness and Disease Control of MDCH, and the University of Detroit/Mercy Dental School. Dental services for clients may be extensive, and require multiple visits, but may also simply be for bi-annual or more frequent prophylaxis. The annual average of 4.4 visits per client is consistent with an initial exam to plan the care needed and two or more treatment visits following approval of the care plan. (Table 2)

Mental health care services encompass mental health assessments, individual counseling, and group sessions for HIV+ clients with a mental health diagnosis, and must be conducted by a licensed mental health professional. Mental health services do not include substance abuse treatment.

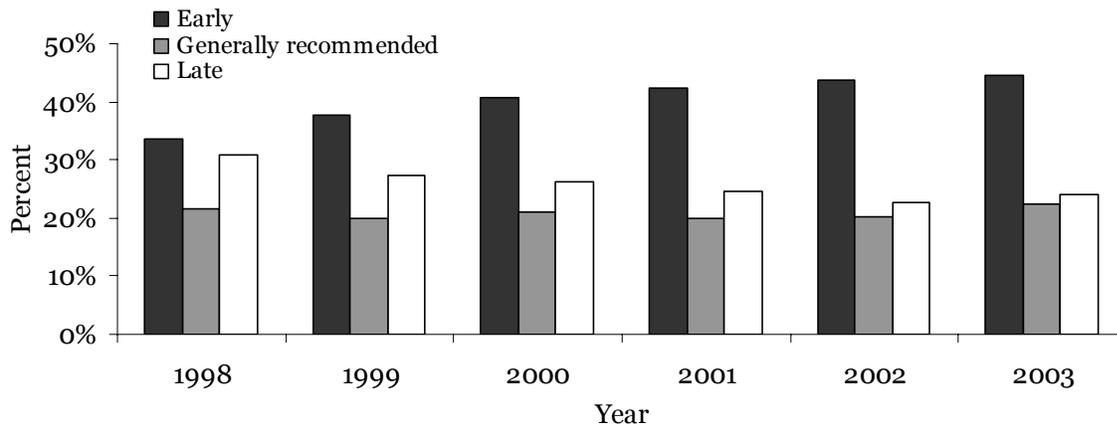
Medical case management visits include intake, assessments, care planning, medication adherence counseling, and monitoring of medical status, and may be conducted in person, by phone or by mail, with the goal of linking HIV+ clients to health care services, and assisting them to remain in care.

The Drug Assistance Program (DAP), administered by the Division of Health, Wellness and Disease Control of MDCH pays for medications dispensed to eligible HIV+ clients throughout Michigan. The DAP covers all HIV medications and many other medications as well. The unit of service reported in

2008 Profile of HIV/AIDS in The Detroit Metro Area

Patterns of Service Utilization of HIV-infected Persons

Figure 11: Proportion of Patients who Received Antiretroviral Treatment Late, at the Recommended Time, or Early, ASD Study-Michigan, 1999-2003



Note. Late (CD4 count of less than 200 cells/ μ L), generally recommended time (CD4 count of greater than or equal to 200 μ L, but less than 350 cells/ μ L), or early (CD4 count greater than or equal to 350 cells/ μ L).

Figure 11 shows the timing of the initiation of antiretroviral treatment and the proportions of patients whose treatments began at each three times (each time corresponds to a category of CD4 count). This analysis included only intervals during which the person had either an outpatient clinic visit or a hospitalization, and did not include intervals in which the person had only visited the ER or had telephone contact with the clinic staff. Of patients receiving care at the two Detroit health care systems included in ASD, the proportion whose antiretroviral treatment was begun late decreased from 31 percent in 1999 to 24 percent in 2003. Inversely, the proportion whose antiretroviral treatment was begun early has increased from 34 percent in 1999 to 44 percent in 2003.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Sexually Transmitted Diseases

Data from STD Reporting System & HIV/AIDS Reporting System (eHARS)

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.

Gonorrhea and Chlamydia:

During 2007, there were over 21,000 cases of chlamydia and over 10,000 cases of gonorrhea reported in the Detroit Metro Area. See Table 9, page 4-44. For both diseases, the highest number of infections was among 15–19 year olds; 15 to 19 year olds comprise six percent of the Detroit Metro Area population but accounted for 28 percent of gonorrhea and 30 percent of chlamydia cases. Race is missing on 50 percent of gonorrhea cases and 58 percent of chlamydia cases. For those cases in which we know the race, the rate of chlamydia among black persons was 10 times the rate among white persons; and the rate of gonorrhea in black persons was 34 times that of white persons. In the Detroit Metro Area, the proportion of females with gonorrhea and chlamydia are higher than males.

Syphilis:

Over seventy percent (71.5) of 2007 primary or secondary (P&S) infectious syphilis cases were reported in the Detroit Metro Area (88 of 123 cases). These cases were more likely to be male (75 percent) and older (33 percent over the age of 40) than persons with gonorrhea or chlamydia. Sixty-seven percent of these cases were black and 23 percent were white. Nine percent of primary or secondary syphilis cases were Hispanic.

Since 2002, the number of P&S infectious syphilis cases reported in the city of Detroit has declined from 443 to just 68 in 2007.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Hepatitis and HIV

Data from Adult and Adolescent Spectrum of Disease (ASD)

Data for this analysis were provided by a supplemental surveillance project, Adult and Adolescent Spectrum of Disease (ASD). ASD collected data from the medical records of HIV patients at two major medical centers in Detroit, between 1990 and 2004, from the time the persons first contacted either site, until they died or were lost to follow-up. The proportion of males in ASD was lower than in the HIV-infected population overall, because ASD included all the women, but only 40 percent of the men who presented for HIV care at ASD sites.

Hepatitis C (HCV) was the most common hepatitis co-infection among HIV-infected persons. Of the 1,790 persons in care and in ASD in 2001-2003, 353 (20 percent) had a diagnosis of HCV at some time during ASD follow-up, while 207 (12 percent) had a diagnosis of hepatitis B (HBV), and 64 (4 percent) of hepatitis A (HAV). The true rates of co-infection with HBV, and particularly with HCV, may be higher than these estimates because HBV and HCV infections are frequently asymptomatic, and only some of the persons in ASD were tested for HBV and HCV.

Table 10 (page 4-45) shows the demographic and HIV transmission risk profiles for all the persons in care and for the populations co-infected with HAV, HBV and HCV. Of persons co-infected with HCV, higher proportions were female and black, compared to the proportions among all persons in care, and a higher proportion were over 40 years of age. The predominance of blood transfer as the transmission mode for HCV was reflected in the higher proportions of HCV-co-infected persons who had a history of drug injection or other blood contact recorded as their HIV transmission risk. In contrast, the demographic and HIV transmission risk profiles of persons co-infected with HAV (predominantly oral-fecal transmission) did not differ significantly from the profiles of all the persons in care. Among persons co-infected with HBV, the only significant differences were that higher proportions were male and had MSM or drug injection recorded as their HIV transmission risk, reflecting the transmission modes for HBV (sexual contact and blood transfer).

The proportions of persons in care who were vaccinated against HAV and HBV were lower among persons co-infected with the respective viruses. These differences were expected because of the lack of need for immunization as a result of the long-term immunity (HAV and HBV) and chronic infection (HBV) that are associated with these viruses.

The impact of HCV co-infection on the health of HIV-infected persons is increasing. The numbers of new HCV cases in the U.S. increased in the 1970s and 1980s, and dropped precipitously in the early 1990s.¹ These changes created a cohort of HCV-infected persons in the population, and the aging of this cohort is expected to lead to an increase in the number of persons with HCV-related late stage liver disease through at least 2015.² HIV-infected persons will be impacted even more than the general population, because HIV/HCV co-infected persons have a higher risk of liver disease than persons infected with HCV alone.³ Planning for the care of HIV-infected persons will need to consider the increasing numbers of HIV-HCV co-infected persons who are expected to develop late stage liver disease over the next decade or more.

¹Centers for Disease Control and Prevention. Hepatitis Surveillance Report No. 58. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003.

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

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

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: MSM

Data from HIV/AIDS Reporting System (eHARS) & Supplement to HIV/AIDS Surveillance Project II (SHAS)

Overview:

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 half (51 percent) of all reported infected persons. MDCH estimates that there are 5,880 MSM living with HIV disease in the Detroit Metro Area. This includes 470 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs. See Table 5, page 4-40.

Race/Ethnicity:

MSM accounts for most HIV infection among men in Michigan. This is true for all races. In reviewing reported cases for MSM and MSM/IDU (total cases equaling 4,665), black males account for more than half (58 percent), while white males comprise 38 percent of men in this combined category (Refer to Table 6, page 4-41).

Age at HIV Diagnosis:

Among those reporting male-male sex, the highest percent of all living cases of HIV/AIDS is found among those aged 30-39 at the time of diagnosis (38 percent). MSM is the predominant mode of transmission for males aged 13 and up. (Refer to Table 8, page 4-43).

Concurrent Diagnoses:

Of the 9,171 persons living with HIV/AIDS in the Detroit Metro Area, 54 percent (4,985 cases) have progressed to AIDS. Of these, 2,283 (46 percent) had concurrent HIV and AIDS diagnoses. Fifty-three percent of these persons (1,208 cases) have reported MSM behavior, including MSM who were also IDU. MSMs make up the majority of those getting tested for HIV late in the course of the disease.

Geographic Distribution:

Nearly two-thirds (63 percent) of HIV-infected MSM statewide reside in the Detroit Metro Area. Within high prevalence counties (see map on page 3-15) of the Detroit Metro Area, half of the reported cases are MSM, while 61 percent of reported cases in the low prevalence areas are MSM (including MSM/IDU).

Trends and Conclusions:

MDCH estimates that HIV infections among men who have sex with men in the Detroit Metro Area has remained relatively stable from 2002-2006, with 280 diagnoses in 2006.

Ranked Behavioral Group: MSM: Discussion of Behaviorally Bisexual Men

Data from HIV/AIDS Reporting System (eHARS) & Supplement to HIV/AIDS Surveillance Project II (SHAS)

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 51 percent of all case reports for the Detroit Metro Area have complete "yes or no" answers to both questions, "has the patient had sex with men," and "has the patient had sex with women." Based on these complete forms, 64

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: MSM: Discussion of Behaviorally Bisexual Men

percent of all MSM reported also having sex with women. These more complete forms also show that four 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.

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), which was conducted in MI 1990-2004. The SHAS interview asked HIV-infected persons directly about specific behaviors. It was conducted only in SE Michigan; therefore, is not representative of all HIV-infected persons in the state. Please see the Data Sources Section (page 1-7) 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 persons), 63 percent (332 persons) reported having sex with other men in the 12 months prior to the interview; 77 percent (254 persons) were black and 22 percent (72 persons) were white. Of these 332 men, 10 percent (33 persons) also reported having sex with women in the 12 months prior to the interview. This represents 12 percent (30 persons) of the 254 black men and three percent (2 persons) of the 72 white men who reported same-sex behavior.

Ranked Behavioral Group: MSM: A Look at Condom Usage

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

This section discusses questions from interviews with infected MSM regarding condom use with male partners from the SHAS project. Among the 333 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 (187) reported having sex with a non-steady man during the 12 months prior to the interview. As shown in Figures 11 and 12, 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 119 male respondents who reported having receptive anal sex with a steady male partner, 30 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 12: Partners Condom Usage During Insertive Anal Sex Among HIV Infected MSM in SHAS (N = 111)

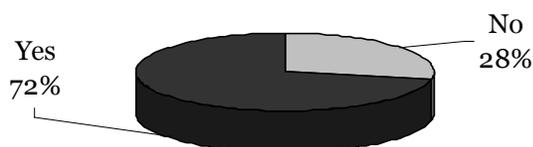
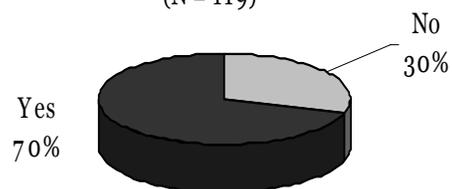


Figure 13: Partners Condom Usage During Receptive Anal Sex Among HIV Infected MSM in SHAS (N = 119)



2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: Heterosexuals

Data from HIV/AIDS Reporting System (eHARS)

Overview:

Heterosexual transmission is the number-two ranked behavioral group in the Detroit Metro Area. Heterosexual sex accounts for 17 percent of reported infected persons. MDCH estimates that 1,920 persons living with HIV disease in the Detroit Metro Area were infected with HIV through heterosexual sex. Heterosexual transmission is comprised of High-Risk Heterosexuals (HRH) and females who are presumed to have heterosexual risk (PH-Fem). HRH 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, and PH-Fem are defined as females whose only reported risk is heterosexual contact, and their male partner's risk and HIV status are unknown. Currently there are an estimated 1,400 infected persons who are classified as HRH and 520 who are PH-Fem.

Race/Ethnicity and Sex:

Among the 1,525 men and women living with HIV/AIDS and infected heterosexually in the Detroit Metro Area, under three-quarters (73 percent) are HRH and 27 percent are PH-Fem. Of the 1,114 HRH, 29 percent reported their heterosexual partner as injecting drug users (73 percent women, 27 percent men), five percent as behaviorally bisexual men (this applies to women only) and two percent as persons infected through blood products (74 percent women, 26 percent men). Two thirds (63 percent; 68 percent women, 32 percent men) reported their partner(s) as HIV-infected without reporting the partner's risk for contracting HIV.

While women account for 24 percent of all reported HIV/AIDS cases in the Detroit Metro Area, they have consistently accounted for over three-quarters of heterosexually acquired infections -- currently 79 percent. Over half of all black women were infected heterosexually (55 percent). Fifty-seven percent of white women, 59 percent of Hispanic women, and 53 percent of women of other or unknown race were infected through heterosexual sex. Black women and women of other or unknown race have higher proportions of PH-Fem than white or Hispanic women (black-19 percent, other/unk-31 percent, white-16 percent, Hispanic-13 percent).

Most heterosexual cases of HIV/AIDS are black--81 percent. It should be noted that the overall proportion of men infected heterosexually is low--five percent of cases among men of all races. See Table 6, page 4-41.

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 (79 percent) of the heterosexually transmitted cases. Risk breakdowns for prevalent black and white women are shown in Figures 14 and 15.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: Heterosexuals

Figure 14: Black Females Living with HIV/AIDS in the Detroit Metro Area, by Risk (N = 1,802)

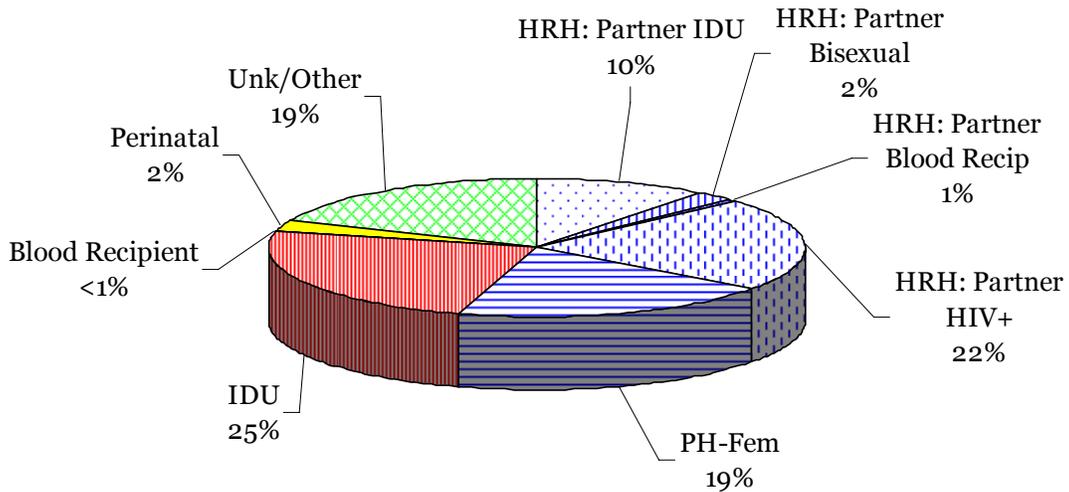
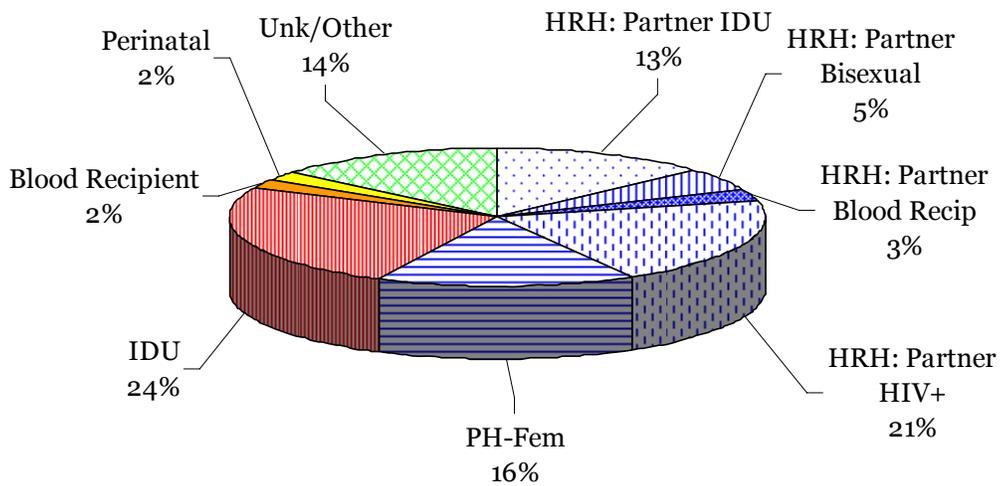


Figure 15: White Females Living with HIV/AIDS in the Detroit Metro Area, by Risk (N = 290)



2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: Heterosexuals

Age at HIV Diagnosis:

In the Detroit Metro Area, heterosexual transmission is the predominant mode of HIV transmission for females who were 13 years of age and older at the time of their HIV diagnosis. Just less than three-quarters (72 percent) of those 13-19 at the time of HIV diagnosis report heterosexual sex (68 percent HRH, 32 percent PH-Fem). As age increases, the proportion made up by heterosexual sex decreases, but still remains higher than IDU for all age groups 13 years and older.

Among men, the percentage with heterosexual sex as the mode of HIV transmission remains low (one percent). However as the age at diagnosis gets older, HRH makes up a larger proportion, but never surpasses 10 percent. See Table 8, page 4-43.

Concurrent Diagnoses:

Of the 9,171 persons living with HIV/AIDS in the Detroit Metro Area, 54 percent (4,985 cases) have progressed to AIDS. Of these, 2,283 (46 percent) had concurrent HIV and AIDS diagnoses. Fifteen percent of these persons (340 cases) have reported heterosexual behavior; 10 percent reporting HRH and five percent reporting presumed heterosexual (among females). Overall, heterosexuals are about as likely as IDUs and less likely than MSMs to get tested late in the progression of HIV disease. See Table 5, page 4-40.

Geographic Distribution:

In the high and low prevalence areas of the Detroit Metro Area (Figure 2 on page 3-15), persons living with HIV/AIDS who acquired HIV heterosexually comprise 17 percent and 13 percent, respectively, of reported cases in these areas.

Trends and Conclusions:

MDCH estimates that HIV infections among persons having heterosexual sex in the Detroit Metro Area has remained relatively stable from 2002-2006, with 85 diagnoses in 2006. 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 heterosexuals compared with men who have sex with men, this mode of transmission is unlikely to surpass that of MSM. However, recent trends show that heterosexually acquired cases have surpassed the proportion of cases attributed to IDU.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: Heterosexuals: Condom Usage

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

In SHAS, 64 percent (213) of female respondents reported having vaginal, oral, and/or anal sex in the 12 months prior to the interview. Of these, most (208 or 98 percent) reported having sex with a man in the 12 months prior to the interview. We asked these 208 women questions about use of a barrier with their steady partners (someone they feel committed to above anyone else and have sex with). Eighty-five percent (176) of the (208) women reported 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 4.

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 at that sexual contact with these partners is displayed in Table 4.

Table 3: Barrier/Condom Use with Steady Partner, Among Heterosexuals

	Females (n=176) Percent (barrier use/sexual activity)	Males (n=148) 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) reported 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) reported having sex with a woman other than a steady female partner in the 12 months prior to interview. Barrier/condom use at last sexual contact with these partners is displayed in Table 5.

Table 4: Barrier/Condom Use with Most Recent Non-Steady Partner, Among Heterosexuals

	Females (n=68) Percent (barrier use/sexual activity)	Males (n=115) 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*

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: IDU

Data from HIV/AIDS Reporting System (eHARS) & Supplement to HIV/AIDS Surveillance Project II (SHAS)

Overview:

Injecting drug users (IDUs) are the number three ranked behavioral group in the Detroit Metro Area and account for 18 percent (1,647 cases) of reported infected persons (including MSM/IDU). MDCH estimates there are 2,070 IDUs living with HIV in the Detroit Metro Area. This estimate includes 470 HIV-infected men whose risk is a combination of having sex with other men and injecting drugs (MSM/IDU).

Race/Ethnicity and Sex:

Of the 1,647 IDU and MSM/IDU persons living with HIV, 851 are black men (52 percent), 435 are black women (26 percent), 213 are white men (13 percent), 72 are white women (four percent), 42 are Hispanic men (three percent) and 16 are Hispanic women (one percent). In total, over three-quarters (1,286 cases, 78 percent) of the IDU cases occur in black persons. Over two-thirds of the cases are among men (68 percent) and 32 percent are among women. See Table 6, page 4-41.

Additional behavioral data on HIV-infected IDUs and other drug users in southeast Michigan is known from the SHAS interview project. Of the 1,174 persons interviewed in SHAS between 2000 and 2004, 15 percent (178) injected drugs at some time during their lives. This 15 percent (178) 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 59 percent of males (53) and 71 percent of females (37).

Non-injection drug use:

One hundred and seventy-four (98 percent) 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). A 'potential alcoholic' is defined as a person who answered 'Yes' to two or more of the following questions on the SHAS II questionnaire: 1) Have you ever felt you ought to cut down on your drinking?, 2) Have people ever annoyed you by criticizing your drinking?, 3) Have you ever felt bad or guilty about your drinking?, and 4) Have you ever had a drink first thing in the morning to steady your nerves or rid yourself of a hangover?

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 32 percent of females (108). Other drug use information shows 772 (66 percent) of all respondents (1,174) 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 cocaine for both men and women. Further SHAS data describing the drug use behaviors of participants in this project are available online at www.michigan.gov/hivstd.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Ranked Behavioral Group: IDU (continued)

Age at HIV Diagnosis:

Among men in their forties and fifties at the time of HIV diagnosis, IDU (when combined with MSM/IDU) behavior is the second most common mode of transmission. For men in their thirties, IDU makes up the same proportion as those with an unknown risk. Seventy-three percent of male IDU cases are among men who were in their thirties and forties at the time of HIV diagnosis (36 and 37 percent, respectively).

IDU is the second most common mode of transmission for women who were in their thirties, forties or fifties at the time of HIV diagnosis. This pattern is similar to what is seen among males. Eighty-one percent of female IDU cases are among women in these age groups.

There are very few cases of HIV/AIDS attributed to IDU among teenagers (five percent); however the proportion of IDU among female teenagers (eight percent) is twice the proportion of IDU (including MSM/IDU) among male teenagers (four percent).

Concurrent Diagnoses:

Of the 9,171 persons living with HIV in the Detroit Metro Area, 54 percent (4,985 cases) have progressed to AIDS. Of these, 2,283 (46 percent) had concurrent HIV and AIDS diagnoses. Sixteen percent of these persons (363 cases) have reported IDU behavior. Overall, persons reporting IDU behavior are about as likely as heterosexuals and less likely than MSMs to get tested late in the progression of HIV disease. See Table 5, page 4-40.

Geographic Distribution:

In the high and low prevalence areas of the Detroit Metro Area (Figure 2 on page 3-15), persons living with HIV/AIDS who acquired HIV through IDU behavior comprise 18 percent and 12 percent, respectively, of reported cases in these areas.

Trends and Conclusions:

MDCH estimates that HIV infections among injecting drug users in the Detroit Metro Area has remained relatively stable from 2002-2006, with 35 diagnoses in 2006.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Race and Sex

Data from HIV/AIDS Reporting System (eHARS)

Overview:

Black persons comprise the majority of those living with HIV/AIDS in the Detroit Metro Area. This group represents 23 percent of this area's population yet make up over two-thirds (68 percent) of the cases of HIV/AIDS. MDCH estimates 7,920 black persons live with HIV/AIDS in the Detroit Metro Area. The rate of HIV infection among black persons is 614 per 100,000, almost seven-and-a-half times higher than the rate among white persons. As many as one out of 110 black males and one out of 310 black females may be HIV-infected.

White persons comprise over two-thirds of the area's population (69 percent) but just over a quarter (27 percent) of reported HIV/AIDS cases. MDCH estimates 3,130 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 (82 per 100,000) than black or Hispanic persons. As many as one out of 690 white males and one out of 5,320 white females may be HIV-infected.

Hispanic persons comprise four percent of the population and three percent of the cases in the Detroit Metro Area. MDCH estimates 340 Hispanic persons 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 (172 per 100,000) than that among white persons. As many as one out of 400 Hispanic males and one out of 1,160 Hispanic females may be HIV-infected.

Most persons living with HIV/AIDS in the Detroit Metro Area as of January 2008 are male (76 percent). The majority of the 6,979 male HIV/AIDS cases are black (64 percent), 31 percent white, three percent Hispanic and one percent are other or unknown race. The majority of the 2,192 female HIV/AIDS cases are black (82 percent), 13 percent are white, three percent are Hispanic and two percent are other or unknown race.

Concurrent Diagnoses:

Of the 9,171 persons living with HIV in the Detroit Metro Area, 54 percent (4,985 cases) have progressed to AIDS. Of these, 2,283 (46 percent) had concurrent HIV and AIDS diagnoses. Of these, 80 percent are male and 20 percent are female, showing that a higher proportion of males are getting diagnosed later in the progression of their disease.

Two-thirds (66 percent) are black, 30 percent are white, and three percent are Hispanic. Black males make up the majority at 49 percent, followed by white males (27 percent) and black females (17 percent). The remainder of the race-sex groups are all below three percent. See Table 6, page 4-41 for more detail.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Race and Sex

Mode of Transmission:

Figures 16 and 17 display the proportion of black and white male cases by risk.

Figure 16: Black Males Living with HIV/AIDS in the Detroit Metro Area, by Risk (N = 4,478)

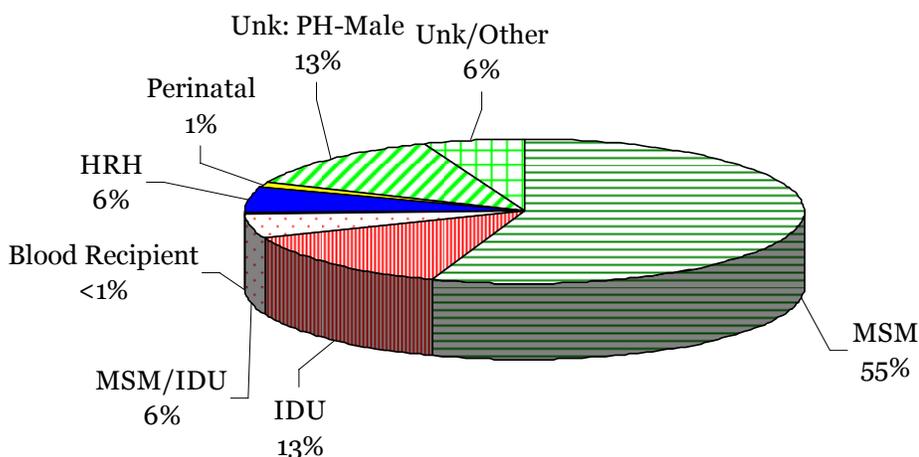
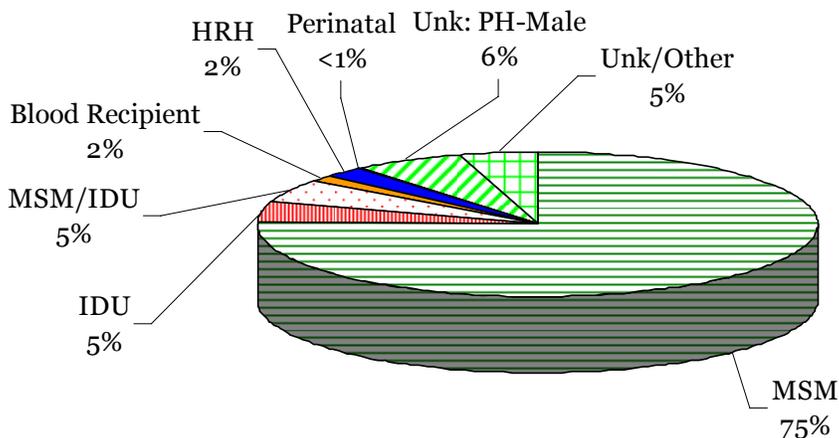


Figure 17: White Males Living with HIV/AIDS in the Detroit Metro Area, by Risk (N = 2,197)



Please refer to Figures 14 and 15 on page 4-23 for black and white female distributions.

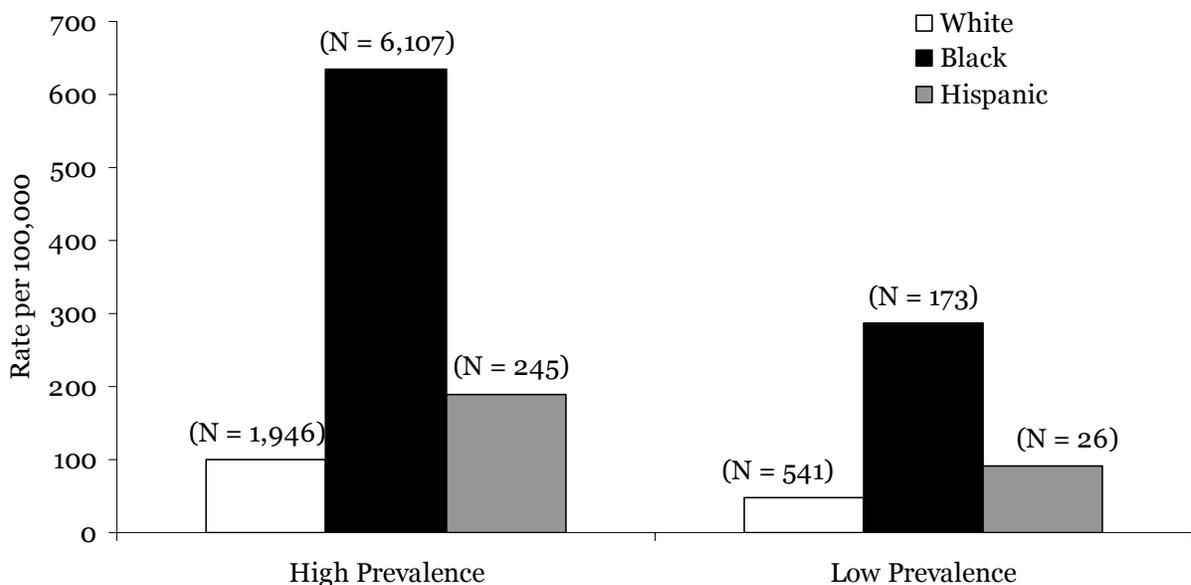
2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Race and Sex

Geographic Distribution of Cases:

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 (see page 3-15). Therefore, instead of proportions, rates are used (e.g., number of black cases/total number of black persons living in that area). Figure 18 shows that among black persons, the rate is six times higher than the rate among white persons in both high and low prevalence areas of the Detroit Metro Area, even though there are many fewer cases among the black population in the low prevalence areas. This shows that this disease disproportionately affects the black population in both high and low prevalence areas of the Detroit Metro Area. The HIV/AIDS case rate among Hispanic persons is also disproportionately high: one-and-a-half to two times higher than the rate among white persons in both high and low prevalence areas.

Figure 18: Case Rates of Persons with HIV/AIDS Living in High & Low Prevalence Areas of the Detroit Metro Area, by Race, 2008



Trends and Conclusions:

The rate of new diagnoses increased significantly among white and black males between 2002 and 2006 (average increase seven percent and three percent per year, respectively). As a result, the overall rate among males increased an average of four percent per year. In addition, the increases seen among white and black males contributed in large part to the significant three percent and eight percent increases among all white and black persons, respectively.

On the whole, the high rates of new HIV diagnoses among black males and black females are quite troubling even though the trend among black females is stable. In 2006, the rate among black females (22.6 per 100,000) was 2.5 times higher than the rate among white males (9.2 per 100,000). The rate among black males (an astounding 63.9 per 100,000) was nearly 7.0 times higher than the rate among white males.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age

Data from HIV/AIDS Reporting System (eHARS)

Age at Diagnosis:

Between 2002 and 2006, the rate of new diagnoses increased among 13-24 year olds, among those in their forties, and among those 60 years and older at the time of HIV diagnosis (Figure 10, page 4-14). Figure 19 shows that persons who were in their thirties at their initial diagnosis of HIV make up the majority of those living with HIV/AIDS (36 percent). Those who were in their forties comprise the second largest group of age at initial HIV diagnosis (23 percent). Similar proportions are seen when looking at age at AIDS diagnosis (39 percent in their thirties and 30 percent in their forties), Figure 20. Although persons in their thirties and forties make up the largest group at initial AIDS diagnosis, the proportion of persons diagnosed with AIDS in their twenties is much higher than the proportion diagnosed with HIV in their twenties. This discrepancy is seen because of the time lag for progression of HIV to AIDS.

Figure 19: Age at Initial HIV Diagnosis for Those Living with HIV/AIDS in the Detroit Metro Area, January 2008

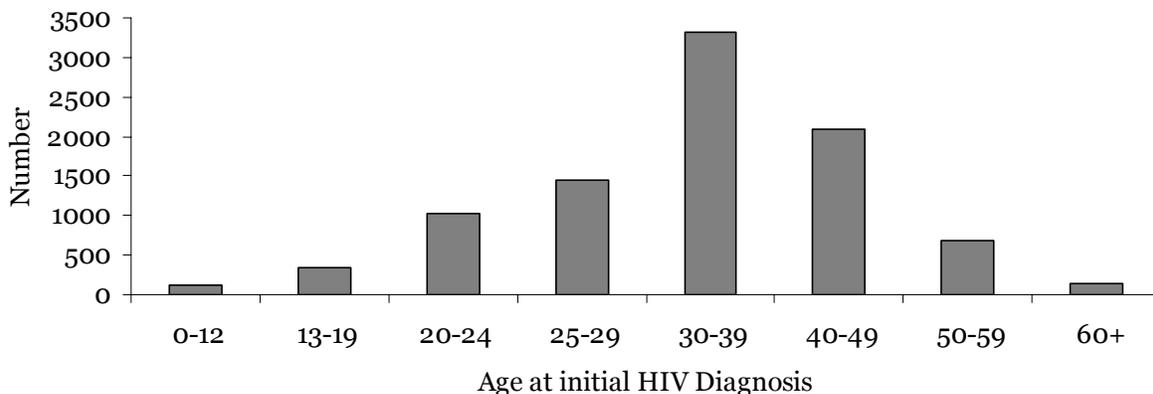
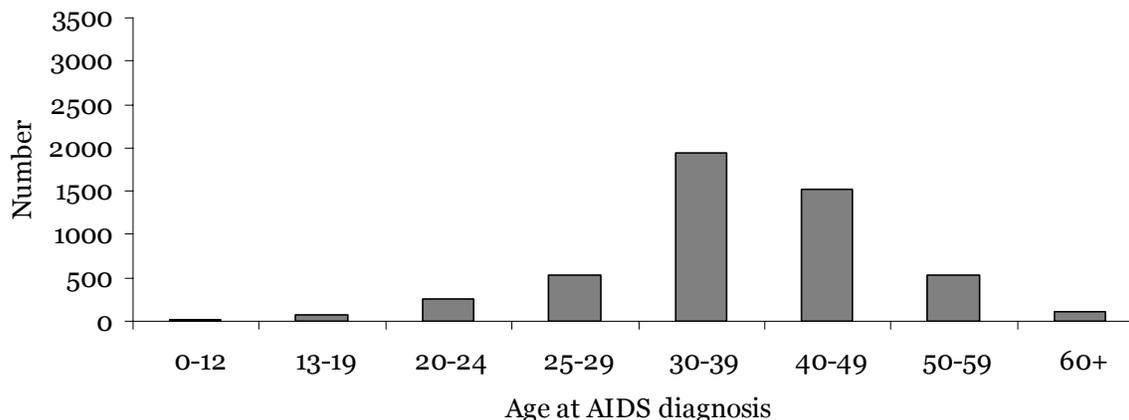


Figure 20: Age of AIDS Diagnosis for Those Living with AIDS in the Detroit Metro Area, January 2008



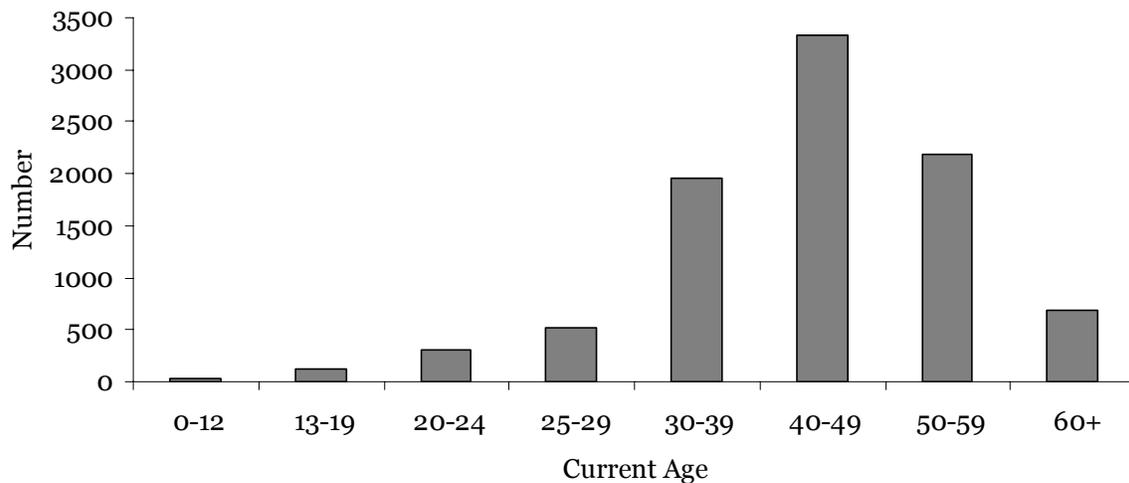
2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age

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 21, which shows the current ages of those living with HIV in Michigan. Those persons currently in their forties make up the largest group of those living with HIV (36 percent), while those currently in their fifties make up the second largest group (24 percent). While persons who were 50 years and older at the time of HIV diagnosis made up only nine percent of those diagnosed with HIV (Figure 19), persons currently in this age group make up 31 percent of persons living with HIV/AIDS in the Detroit Metro Area.

Figure 21: Current Age of Those Living with HIV/AIDS in the Detroit Metro Area, January 2008



2008 Profile of HIV/AIDS in The Detroit Metro Area

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

Data from HIV/AIDS Reporting System (eHARS)

Overview:

MDCH estimates that there are 150 individuals living with HIV in the Detroit Metro Area who were ages 0-12 when they were diagnosed. They comprise one percent of reported 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 individuals, seven percent were infected via blood exposure before 1985 and four percent have an unknown risk. No individuals currently living with HIV and aged 0-12 at the time of HIV diagnosis have been infected through sexual behavior or injection drug use.

Demographic Description:

Of the 117 individuals who were ages 0-12 when diagnosed with HIV living in Michigan, 56 percent are male and 44 percent are female; three-quarters are black (75 percent), 20 percent are white and five percent are Hispanic or of unknown race. See Table 8, page 4-43.

Of the 104 individuals who were ages 0-12 when diagnosed with HIV and infected and perinatally, 52 percent are male and 48 percent are female; 82 percent are black, 13 percent are white, and five percent are Hispanic or other races. Less than one percent of the HIV infections in these children are known to be IDU-related (i.e., mothers who were IDUs). However, for the majority (99 percent) all that was known about the mother is that she was HIV-infected with no additional maternal risk information.

Geographic Distribution:

Eighty-five percent of the 117 children diagnosed and reported with HIV between the ages of 0 and 12 years are residents of high prevalence counties of the Detroit Metro Area (See page 3-15). The remaining 15 percent live in low prevalence counties.

Trends and Conclusions:

The best measurable success in reducing HIV transmission has been among those infected perinatally. Without Zidovudine (ZDV) prophylaxis, about 25 percent of children born to HIV-infected women could expect to become HIV-infected. In Michigan, the proportion of these children who become infected has dropped precipitously, from 12 percent in 1996 to one percent in 2007. As of January 1, 2008, none of the 42 children born in 2005, one of the 29 children born in 2006, and one of the seven children born in 2007 to HIV-infected women were diagnosed with HIV infection.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age: Teens and Young Adults, 13-24

Data from HIV/AIDS Reporting System (eHARS), STD Reporting System, MDCH Vital Records Youth Risk Behavior Survey, & Bureau of Juvenile Justice Youth Risk Behavior Survey

Overview:

MDCH estimates that there are 1,730 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 four percent; and age 20-24 years comprise 11 percent. The number of persons who were 13-24 years at HIV diagnosis is not as high as the number among persons 25-44 years. However, some young people are at particularly high risk. Specifically, those who live in areas with high HIV prevalence and have male sex partners who are age 20 or older.

STDs:

STD rates are highest in these age groups. The STD data are shown on Table 9, page 4-44. In the Detroit Metro Area, the rate of chlamydia in persons age 15-19 is 5.9 times higher than the overall rate (among all persons in this area). The rate of gonorrhea in this same age group is 4.7 times that of overall rate. (Please refer to the Sexually Transmitted Diseases Section of the Statewide Profile (page 3-28) 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. Also, since the rates of HIV among teens are very low, and because most teens have sex with other teens, the gonorrhea and chlamydia epidemic is perpetuated and HIV is introduced into the population less often.

Teen Pregnancy:

Teen (ages 15-19) pregnancy rates have shown decreases over time and decreased significantly from 2002 to 2006. The statewide teen pregnancy rate in 2006 was 54 pregnancies per 1,000 females aged 15-19 years. In the Detroit Metro Area, the 2006 rates ranged from 33-123 pregnancies per 1,000 females aged 15-19. The city of Detroit had the highest rate of teen pregnancy statewide (123 per 1,000). The 2006 rates among teens (15-19) in Detroit exceed the rates among women age 15-44 years in that same area (123 vs. 99).

Race/Ethnicity:

Eighty-five percent of persons aged 13-19 at the time of HIV diagnosis are black, 11 percent are white, and four percent are Hispanic or other race. Seventy-seven percent of persons aged 20-24 at the time of HIV diagnosis are black, 19 percent are white, and four percent are Hispanic or other race.

Geographic Distribution:

Ninety-two percent of the 1,371 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 eight percent are located in low prevalence counties.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Additional Discussion: Teens and Young Adults

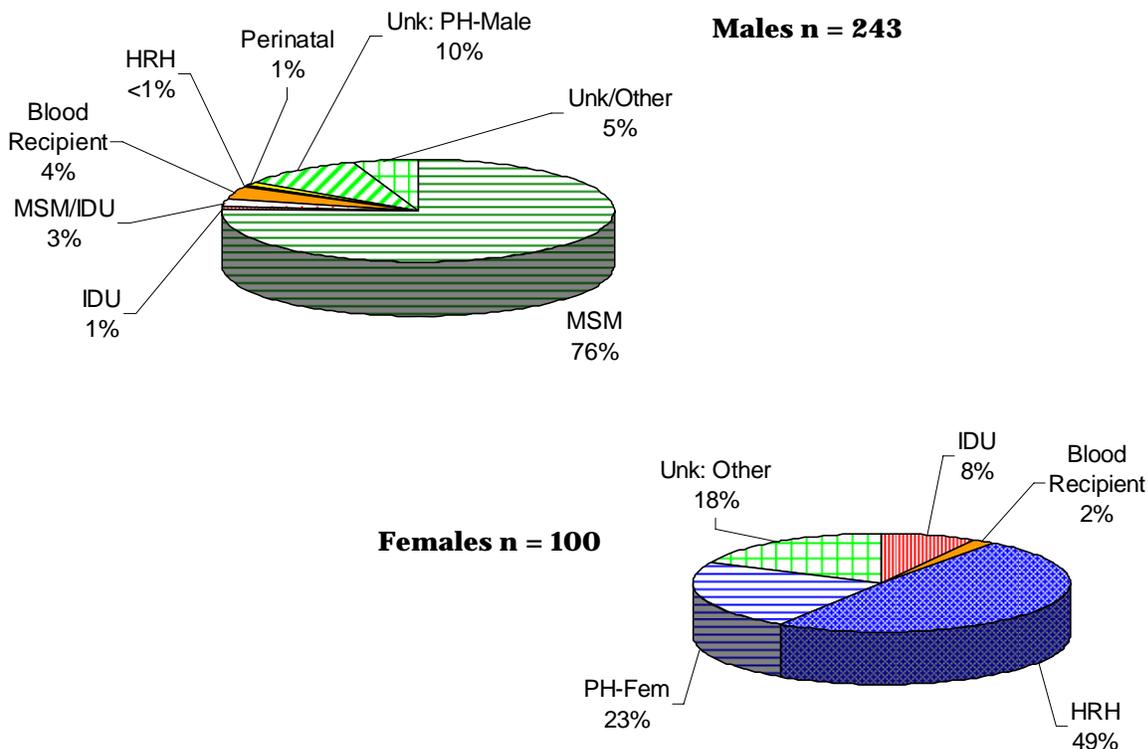
Mode of Transmission:

Teenagers: In the 1980s, 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.

Figure 22 shows that among the 343 persons living with HIV in the Detroit Metro Area who were ages 13-19 at time of diagnosis, 243 (71 percent) are male. Among these male cases, the majority had sex with other males (79 percent), including MSM/IDU, while four percent were infected with HIV through blood products before 1985. Four percent could be attributed to IDU, including MSM/IDU and less than one percent to heterosexual transmission for this age group within this area. Fifteen percent of teenage males have an unidentified risk. Experience with investigating teen males shows that it is likely that many of them were infected through having sex with other males.

Figure 22 also shows that among the 100 females living with HIV in the Detroit Metro Area who were ages 13-19 at time of diagnosis, almost three-quarters (72 percent) were infected through heterosexual sex (overall, 49 percent HRH and 23 percent PH-Fem); eight percent were IDU. Similar to males of this age, there is a considerable proportion that did not report a mode of transmission (18 percent). It is likely that most females above age 13 with an unknown risk were infected through heterosexual contact.

Figure 22: Persons Living in the Detroit Metro Area Who Were 13-19 Years Old at HIV Diagnosis (Teenagers), by Sex and Risk (N = 343)



2008 Profile of HIV/AIDS in The Detroit Metro Area

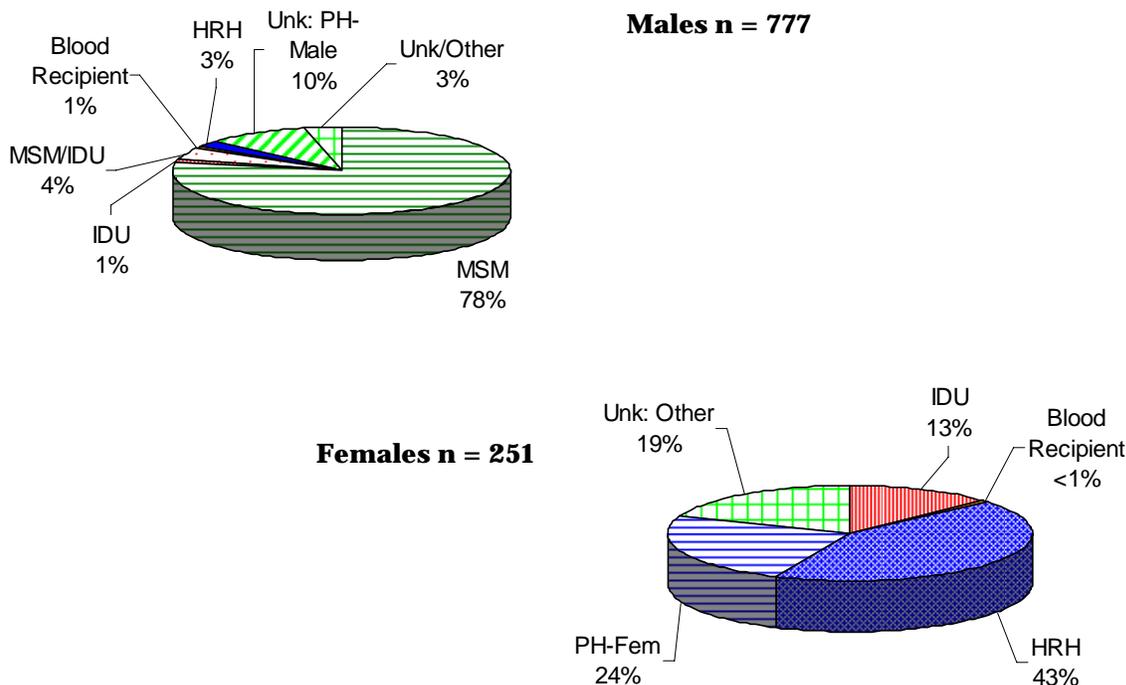
Additional Discussion: Teens and Young Adults

Young Adults:

Figure 23 shows that among the 1,028 persons living with HIV in the Detroit Metro Area who were ages 20-24 at time of diagnosis, three quarters (76 percent) are male. Of these, 82 percent have 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 23 also shows that among the 251 females living with HIV in the Detroit Metro Area who were ages 20-24 at time of diagnosis, 67 percent were infected heterosexually (overall; 43 percent HRH, 24 percent PH-Fem) and 13 percent were IDU. Nineteen percent did not report a mode of transmission. Like the teenage females, many were likely infected heterosexually.

Figure 23: Persons Living in the Detroit Metro Area Who Were 20-24 Years Old at HIV diagnosis (Young Adults), by Sex and Risk (N = 1,028)



Trends and Conclusions:

Between 2002 and 2006 the rate of new HIV diagnoses increased among teens and young adults, those who were 13-24 years of age at HIV diagnosis. This is the third consecutive year we have seen this increase. While the trends we are seeing may partially be attributed to heightened HIV testing efforts aimed at young persons, public testing data suggest that additional testing is not the sole explanation for the increases seen among teens and young adults. In fact, there seems to be a true increase in this group.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age: 50 years and older

Data from HIV/AIDS Reporting System (eHARS)

Overview:

MDCH estimates there are 1,040 persons living in the Detroit Metro Area who were 50 years and older when they were diagnosed with HIV. They comprise nine percent of all reported infected persons and three quarters are male. This population was mainly infected through sexual contact (either men having sex with men or heterosexually), however, those who were in their fifties when diagnosed with HIV have a substantial proportion infected through injection drug use.

Mode of Transmission:

When discussing mode of transmission, those who were in their fifties at the time of HIV diagnosis have different transmission mode proportions than those who were aged 60 or older. Therefore, these two populations are discussed separately on the following two pages.

Persons Currently aged 50 and older:

As of January 1, 2008 there are 3,578 persons who are **currently** 50 years and older and living with HIV/AIDS in Michigan. This represents 39 percent of the 9,171 persons living with HIV/AIDS in Michigan.

These persons are comparable to the population of persons of all ages living with HIV/AIDS in the Detroit Metro Area with regards to sex and race. However, persons who were 50 years and older at the time of diagnosis are more likely to have been infected by injecting drugs (24 vs. 18 percent) and have an unknown risk (24 vs. 17 percent) than the total population of HIV-infected persons. Seventy-one percent of persons currently 50 years and older less than 50 years old at the time of HIV diagnosis.

Trends and Conclusions:

Between 2002 and 2006 the rate of new HIV diagnoses increased among persons 60 years and older at HIV diagnosis. Rates in persons in their fifties at HIV diagnosis remained stable. As the persons living with HIV continue to age, it is important to be aware of specific challenges faced by older Americans and to ensure they get information and services to help protect them from infection.

Men who were 60 years and older at HIV diagnosis have the highest proportion of heterosexual cases of men in any age group. This is an important distinction when developing targeted prevention and intervention messages.

2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age: Mode of Transmission for those 50 –59 at time of HIV Diagnosis

Persons who were in their fifties when first diagnosed with HIV are 75 percent male and 25 percent female. Among these 679 persons reported with HIV/AIDS less than three-quarters are black (71 percent), one-quarter are white (25 percent) and five percent are Hispanic or of unknown race.

Figure 24 shows that less than half (48 percent) of the 510 males in their fifties at time of HIV diagnosis and currently living with HIV reported having sex with other males (including those MSM who also are IDU). Over one-quarter (27 percent) reported injection drug use (including those IDU who were also MSM). Six percent were infected heterosexually and 23 percent did not report a mode of transmission; many of these were likely infected through sex with other men.

Figure 24: Males 50-59 Years Old at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk (N = 510)

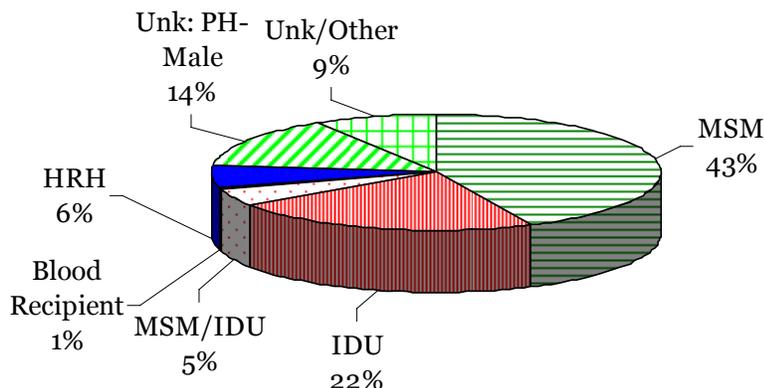
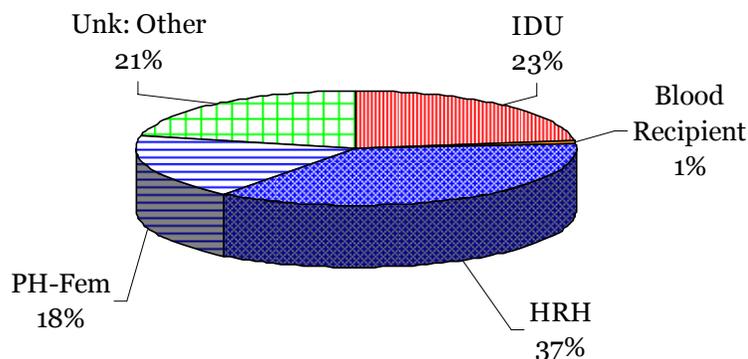


Figure 25 shows that among the 169 females who were in their fifties at time of HIV diagnosis and currently living with HIV, over half (55 percent) were infected heterosexually (overall; 37 percent HRH, 18 percent PH-Fem) and 23 percent were IDU. Twenty-one percent did not report a mode of transmission; many of these were likely infected through heterosexual contact.

Figure 25: Females 50-59 Years Old at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk (N = 169)



2008 Profile of HIV/AIDS in The Detroit Metro Area

Description of the Epidemic by Age: Mode of Transmission for those 60 and older at time of HIV Diagnosis

Persons who were 60 years and older when first diagnosed with HIV are 76 percent male and 24 percent female. Among these 146 persons, 59 percent are black, just less than one-third are white (32 percent) and 10 percent are Hispanic or of unknown race.

Figure 26 shows that less than half (48 percent) of the 111 males who were 60 years and older at time of HIV diagnosis and currently living with HIV reported sex with other males (including those MSM who also are IDU). Twelve percent reported injection drug use (including those IDU who were also MSM). Eight percent were infected heterosexually and 33 percent did not report a mode of transmission. This group has the largest portion of unknown risk for HIV; many of these were likely infected through sex with other men.

Figure 26: Males 60 Years and older at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk (N = 111)

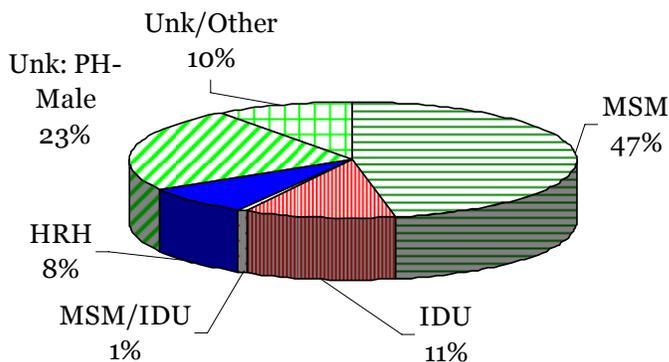


Figure 27 shows that among the 35 females who were 60 and older at the time of HIV diagnosis and currently living with HIV, less than two-thirds (62 percent) were infected heterosexually (overall; 31 percent HRH, 31 percent PH-Fem) and 14 percent were IDU. Seventeen percent did not report a mode of transmission; many of these were likely infected through heterosexual contact.

Figure 27: Females 60 Years and Older at HIV Diagnosis, Living with HIV/AIDS in the Detroit Metro Area by Risk (N = 35)

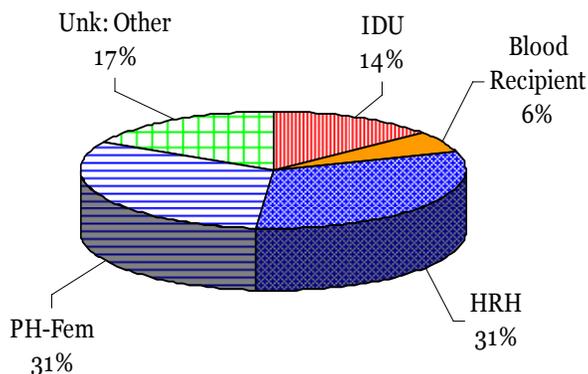


Table 5: Demographic Information on HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008

	EST PREV*	REPORTED PREVALENCE							CENSUS 2006 ESTIMATES			
		HIV, not AIDS		AIDS		TOTAL		CONCURRENT AIDS		Num	%	
		Num	%	Num	%	Num	%	Rate per 100,000	Num			%
RACE/ ETHNICITY[§]												
White	3,130	1,117	27%	1,370	27%	2,487	27%	82	677	30%	3,049,393	69%
Black	7,920	2,884	69%	3,396	68%	6,280	68%	614	1,504	66%	1,022,897	23%
Hispanic	340	120	3%	151	3%	271	3%	172	75	3%	157,731	4%
Asian/PI	50	18	0%	25	1%	43	0%	31	17	1%	140,681	3%
Am Indian/AN	30	13	0%	7	0%	20	0%	158	2	0%	12,681	0%
Multi/Unk/Other	90	34	1%	36	1%	70	1%	N/A	8	0%	56,107	1%
SEX & RACE												
Males	8,800	3,102	74%	3,877	78%	6,979	76%	322	1,816	80%	2,166,834	49%
White Males	2,770	965	23%	1,232	25%	2,197	24%	146	621	27%	1,506,559	34%
Black Males	5,640	2,001	48%	2,477	50%	4,478	49%	948	1,113	49%	472,488	11%
Hispanic Males	260	91	2%	116	2%	207	2%	248	60	3%	83,394	2%
Other Males	120	45	1%	52	1%	97	1%	93	22	1%	104,393	2%
Females	2,760	1,084	26%	1,108	22%	2,192	24%	96	467	20%	2,272,656	51%
White Females	370	152	4%	138	3%	290	3%	19	56	2%	1,542,834	35%
Black Females	2,270	883	21%	919	18%	1,802	20%	327	391	17%	550,409	12%
Hispanic Fmls	80	29	1%	35	1%	64	1%	86	15	1%	74,337	2%
Other Females	50	20	0%	16	0%	36	0%	34	5	0%	105,076	2%
RISK*												
Male-Male Sex	5,410	1,838	44%	2,453	49%	4,291	47%	N/A	1,130	49%	N/A	N/A
Injection Drug Use	1,600	505	12%	768	15%	1,273	14%	N/A	285	12%	N/A	N/A
MSM/IDU	470	142	3%	232	5%	374	4%	N/A	78	3%	N/A	N/A
Blood Products	90	21	1%	47	1%	68	1%	N/A	18	1%	N/A	N/A
Heterosexual	1,920	733	18%	792	16%	1,525	17%	N/A	340	15%	N/A	N/A
HRH	1,400	501	12%	613	12%	1,114	12%	N/A	234	10%	N/A	N/A
PH-Female	520	232	6%	179	4%	411	4%	N/A	106	5%	N/A	N/A
Perinatal	130	78	2%	29	1%	107	1%	N/A	15	1%	N/A	N/A
Undetermined	1,930	869	21%	664	13%	1,533	17%	N/A	417	18%	N/A	N/A
PH-Male	950	384	9%	369	7%	753	8%	N/A	227	10%	N/A	N/A
Unknown	980	485	12%	295	6%	780	9%	N/A	190	8%	N/A	N/A
AGE AT HIV DIAGNOSIS												
0 - 12 years	150	81	2%	36	1%	117	1%	N/A	13	1%	N/A	N/A
13 - 19 years	430	209	5%	134	3%	343	4%	N/A	32	1%	N/A	N/A
20 - 24 years	1,300	591	14%	437	9%	1,028	11%	N/A	109	5%	N/A	N/A
25 - 29 years	1,830	690	16%	763	15%	1,453	16%	N/A	248	11%	N/A	N/A
30 - 39 years	4,180	1,414	34%	1,906	38%	3,320	36%	N/A	857	38%	N/A	N/A
40 - 49 years	2,620	849	20%	1,233	25%	2,082	23%	N/A	717	31%	N/A	N/A
50 - 59 years	860	284	7%	395	8%	679	7%	N/A	250	11%	N/A	N/A
60 years and over	180	65	2%	81	2%	146	2%	N/A	57	2%	N/A	N/A
Unspecified	10	3	0%	0	0%	3	0%	N/A	0	0%	N/A	N/A
AREA OF RESIDENCE AT DIAGNOSIS												
Lapeer Co.	40	15	0%	20	(0%)	35	0%	37	9	0%	93,761	(2%)
Macomb Co.	730	272	6%	304	(6%)	576	6%	69	158	7%	832,861	(19%)
Monroe Co.	70	24	1%	35	(1%)	59	1%	38	19	1%	155,035	(3%)
Oakland Co.	1,910	710	17%	803	(16%)	1,513	16%	125	366	16%	1,214,255	(27%)
St Clair Co.	110	48	1%	41	(1%)	89	1%	52	25	1%	171,725	(4%)
Wayne Co. Total	8,700	3,117	74%	3,782	(76%)	6,899	75%	350	1,706	75%	1,971,853	(44%)
Wayne Co. (excl. Detroit)	1,740	611	15%	769	(15%)	1,380	15%	125	357	16%	1,100,732	(25%)
City of Detroit	6,960	2,506	60%	3,013	(60%)	5,519	60%	634	1,349	59%	871,121	(20%)
Detroit Metro Area Total	11,560	4,186	100%	4,985	100%	9,171	100%	207	2,283	100%	4,439,490	100%

*See page 1-3 for descriptions of prevalence estimate calculations and pages 6-7,8 for risk category groupings. Risk categories used in Michigan re newly defined as of July 2007.

§ In this report, persons described as white, black, Asian/Pacific Islander (PI) or American Indian/Alaskan Native (AN) are all non-Hispanic. Persons described as Hispanic could be of any race.

Table 6: Sex, Race, and Risk Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008

MALES	White		Black		Hispanic		Other or Unknown		Male Subtotal	
Male-Male sex	1,658	75%	2,479	55%	105	51%	49	51%	4,291	61%
Injecting Drug Use	100	5%	601	13%	34	16%	9	9%	744	11%
Male-Male Sex/IDU	113	5%	250	6%	8	4%	3	3%	374	5%
Blood Products	35	2%	14	0%	4	2%	2	2%	55	1%
Heterosexual*	45	2%	254	6%	15	7%	4	4%	318	5%
Perinatal	9	0%	46	1%	2	1%	0	0%	57	1%
Undetermined	237	11%	834	19%	39	19%	30	31%	1,140	16%
<i>PH-Male</i>	137	6%	575	13%	27	13%	14	14%	753	11%
<i>Unknown</i>	100	5%	259	6%	12	6%	16	16%	387	6%
Male Subtotal	2,197	31%	4,478	64%	207	3%	97	1%	6,979	100%
FEMALES	White		Black		Hispanic		Other or Unknown		Female Subtotal	
Injecting Drug Use	72	25%	435	24%	16	25%	6	17%	529	24%
Blood Products	6	2%	5	0%	1	2%	1	3%	13	1%
Heterosexual	166	57%	984	55%	38	59%	19	53%	1,207	55%
<i>HRH</i>	121	42%	637	35%	30	47%	8	22%	796	36%
<i>PH-Female</i>	45	16%	347	19%	8	13%	11	31%	411	19%
Perinatal	6	2%	41	2%	2	3%	1	3%	50	2%
Undetermined*	40	14%	337	19%	7	11%	9	25%	393	18%
Female Subtotal	290	13%	1,802	82%	64	3%	36	2%	2,192	100%
TOTAL	White		Black		Hispanic		Other or Unknown		Risk Total	
Male-Male sex	1,658	67%	2,479	39%	105	39%	49	37%	4,291	47%
Injecting Drug Use	172	7%	1,036	16%	50	18%	15	11%	1,273	14%
Male-Male Sex/IDU	113	5%	250	4%	8	3%	3	2%	374	4%
Blood Products	41	2%	19	0%	5	2%	3	2%	68	1%
Heterosexual	211	8%	1,238	20%	53	20%	23	17%	1,525	17%
<i>HRH</i>	166	7%	891	14%	45	17%	12	9%	1,114	12%
<i>PH-Female</i>	45	2%	347	6%	8	3%	11	8%	411	4%
Perinatal	15	1%	87	1%	4	1%	1	1%	107	1%
Undetermined	277	11%	1,171	19%	46	17%	39	29%	1,533	17%
<i>PH-Male</i>	137	6%	575	9%	27	10%	14	11%	753	8%
<i>Unknown</i>	140	6%	596	9%	19	7%	25	19%	780	9%
RACE TOTAL	2,487	27%	6,280	68%	271	3%	133	1%	9,171	100%

*In the male subset all cases in the heterosexual category are HRH because the PH-Female category is not applicable to males. Likewise, in the female subset, all cases in the undetermined category are of unknown risk because the PH-Male category is not applicable to females.

Table 7: Sex, Race, and Age at HIV Diagnosis Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008

MALES	White		Black		Hispanic		Other or Unknown		Male Subtotal	
0 - 12 years	17	1%	46	1%	2	1%	1	1%	66	1%
13 - 19 years	23	1%	212	5%	7	3%	1	1%	243	3%
20 - 24 years	159	7%	587	13%	24	12%	7	7%	777	11%
25 - 29 years	369	17%	695	16%	35	17%	20	21%	1,119	16%
30 - 39 years	896	41%	1,542	34%	74	36%	38	39%	2,550	37%
40 - 49 years	544	25%	995	22%	39	19%	23	24%	1,601	23%
50 - 59 years	150	7%	338	8%	17	8%	5	5%	510	7%
60 years and over	39	2%	61	1%	9	4%	2	2%	111	2%
Unknown	0	0%	2	0%	0	0%	0	0%	2	0%
Male Subtotal	2,197	31%	4,478	64%	207	3%	97	1%	6,979	100%
FEMALES	White		Black		Hispanic		Other or Unknown		Female Subtotal	
0 - 12 years	6	2%	42	2%	2	3%	1	3%	51	2%
13 - 19 years	14	5%	79	4%	6	9%	1	3%	100	5%
20 - 24 years	36	12%	205	11%	8	13%	2	6%	251	11%
25 - 29 years	57	20%	262	15%	7	11%	8	22%	334	15%
30 - 39 years	97	33%	635	35%	25	39%	13	36%	770	35%
40 - 49 years	54	19%	412	23%	10	16%	5	14%	481	22%
50 - 59 years	18	6%	142	8%	4	6%	5	14%	169	8%
60 years and over	7	2%	25	1%	2	3%	1	3%	35	2%
Unknown	1	0%	0	0%	0	0%	0	0%	1	0%
Female Subtotal	290	13%	1,802	82%	64	3%	36	2%	2,192	100%
TOTAL	White		Black		Hispanic		Other or Unknown		Age Total	
0 - 12 years	23	1%	88	1%	4	1%	2	2%	117	1%
13 - 19 years	37	1%	291	5%	13	5%	2	2%	343	4%
20 - 24 years	195	8%	792	13%	32	12%	9	7%	1,028	11%
25 - 29 years	426	17%	957	15%	42	15%	28	21%	1,453	16%
30 - 39 years	993	40%	2,177	35%	99	37%	51	38%	3,320	36%
40 - 49 years	598	24%	1,407	22%	49	18%	28	21%	2,082	23%
50 - 59 years	168	7%	480	8%	21	8%	10	8%	679	7%
60 years and over	46	2%	86	1%	11	4%	3	2%	146	2%
Unknown	1	0%	2	0%	0	0%	0	0%	3	0%
RACE TOTAL	2,487	27%	6,280	68%	271	3%	133	1%	9,171	100%

Table 8: Sex, Risk and Age at HIV Diagnosis Among HIV/AIDS Cases Currently Living in the Detroit Metro Area, 2008

MALES	0 - 12 years		13 - 19 years		20 - 24 years		25 - 29 years		30 - 39 years		40 - 49 years		50 - 59 years		60 years and over		Male Subtotal	
Male-Male sex	0	0%	183	75%	605	78%	832	74%	1,608	63%	791	49%	220	43%	52	47%	4,291	62%
Injecting Drug Use	0	0%	2	1%	11	1%	43	4%	242	9%	319	20%	114	22%	12	11%	743	11%
Male-Male Sex/IDU	0	0%	7	3%	32	4%	52	5%	160	6%	98	6%	24	5%	1	1%	374	5%
Blood Products	8	12%	9	4%	5	1%	9	1%	14	1%	7	0%	3	1%	0	0%	55	1%
Heterosexual*	0	0%	1	0%	20	3%	40	4%	136	5%	80	5%	32	6%	9	8%	318	5%
Perinatal	54	82%	3	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	57	1%
Undetermined	4	6%	38	16%	104	13%	143	13%	390	15%	306	19%	117	23%	37	33%	1,139	16%
<i>PH-Male</i>	0	0%	25	10%	77	10%	88	8%	271	11%	194	12%	72	14%	26	23%	753	11%
<i>Unknown</i>	4	6%	13	5%	27	3%	55	5%	119	5%	112	7%	45	9%	11	10%	386	6%
Male Subtotal[^]	66	1%	243	3%	777	11%	1,119	16%	2,550	37%	1,601	23%	510	7%	111	2%	6,977	100%
FEMALES	0 - 12 years		13 - 19 years		20 - 24 years		25 - 29 years		30 - 39 years		40 - 49 years		50 - 59 years		60 years and over		Female Subtotal	
Injecting Drug Use	0	0%	8	8%	33	13%	56	17%	225	29%	163	34%	39	23%	5	14%	529	24%
Blood Products	0	0%	2	2%	1	0%	0	0%	5	1%	2	0%	1	1%	2	6%	13	1%
Heterosexual	0	0%	72	72%	169	67%	208	62%	414	54%	229	48%	93	55%	22	63%	1,207	55%
<i>HRH</i>	0	0%	49	49%	108	43%	144	43%	268	35%	154	32%	62	37%	11	31%	796	36%
<i>PH-Female</i>	0	0%	23	23%	61	24%	64	19%	146	19%	75	16%	31	18%	11	31%	411	19%
Perinatal	50	98%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	50	2%
Undetermined*	1	2%	18	18%	48	19%	70	21%	126	16%	87	18%	36	21%	6	17%	392	18%
Female Subtotal[^]	51	2%	100	5%	251	11%	334	15%	770	35%	481	22%	169	8%	35	2%	2,191	100%
TOTAL	0 - 12 years		13 - 19 years		20 - 24 years		25 - 29 years		30 - 39 years		40 - 49 years		50 - 59 years		60 years and over		Age Total	
Male-Male sex	0	0%	183	53%	605	59%	832	57%	1,608	48%	791	38%	220	32%	52	36%	4,291	47%
Injecting Drug Use	0	0%	10	3%	44	4%	99	7%	467	14%	482	23%	153	23%	17	12%	1,272	14%
Male-Male Sex/IDU	0	0%	7	2%	32	3%	52	4%	160	5%	98	5%	24	4%	1	1%	374	4%
Blood Products	8	7%	11	3%	6	1%	9	1%	19	1%	9	0%	4	1%	2	1%	68	1%
Heterosexual	0	0%	73	21%	189	18%	248	17%	550	17%	309	15%	125	18%	31	21%	1,525	17%
<i>HRH</i>	0	0%	50	15%	128	12%	184	13%	404	12%	234	11%	94	14%	20	14%	1,114	12%
<i>PH-Female</i>	0	0%	23	7%	61	6%	64	4%	146	4%	75	4%	31	5%	11	8%	411	4%
Perinatal	104	89%	3	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	107	1%
Undetermined	5	4%	56	16%	152	15%	213	15%	516	16%	393	19%	153	23%	43	29%	1,531	17%
<i>PH-Male</i>	0	0%	25	7%	77	7%	88	6%	271	8%	194	9%	72	11%	26	18%	753	8%
<i>Unknown</i>	5	4%	31	9%	75	7%	125	9%	245	7%	199	10%	81	12%	17	12%	778	8%
AGE TOTAL[^]	117	1%	343	4%	1,028	11%	1,453	16%	3,320	36%	2,082	23%	679	7%	146	2%	9,168	100%

*In the male subset all cases in the heterosexual category are HRH because the PH-Female category is not applicable to males. Likewise, in the female subset, all cases in the undetermined category are of unknown risk because the PH-Male category is not applicable to females.

[^] Not included in this table are the following cases with unknown age at diagnosis: one male IDU, one male with unknown risk, and one female with unknown risk.

Table 9: Gonorrhea, Syphilis, and Chlamydia Case by Sex, Race and Age Group, the Detroit Metro Area, 2007

	<i>Gonorrhea</i>			<i>P&S Syphilis*</i>			<i>Chlamydia</i>			<i>Census 2006 Estimate</i>
	Num	%	Rate [^]	Num	%	Rate [^]	Num	%	Rate [^]	
<i>RACE/ ETHNICITY</i>										
White	409	4%	13.4	20	23%	0.7	1,870	9%	61.3	3,049,393
Black	4,643	45%	453.9	59	67%	5.8	6,829	31%	667.6	1,022,897
Hispanic	38	0%	24.1	8	9%	5.1	134	1%	85.0	157,731
Other/Multi	79	1%	37.7	0	0%	0.0	209	1%	99.8	209,469
Unknown Race	5,092	50%	N/A	1	1%	N/A	12,645	58%	N/A	N/A
<i>SEX & RACE</i>										
Male	4,437	43%	204.8	66	75%	3.0	4,857	22%	224.2	2,166,834
<i>White Males</i>	131	1%	8.7	16	18%	1.1	528	2%	35.0	1,506,559
<i>Black Males</i>	2,359	23%	499.3	46	52%	9.7	1,926	9%	407.6	472,488
<i>Hispanic Males</i>	12	0%	14.4	4	5%	4.8	45	0%	54.0	83,394
<i>Other Males</i>	28	0%	N/A	0	0%	N/A	55	0%	N/A	104,393
<i>Unk Males</i>	1,907	19%	N/A	0	0%	N/A	2,303	11%	N/A	N/A
Female	5,771	56%	253.9	22	25%	1.0	16,688	77%	734.3	2,272,656
<i>White Females</i>	278	3%	18.0	4	5%	0.3	1,342	6%	87.0	1,542,834
<i>Black Females</i>	2,281	22%	414.4	13	15%	2.4	4,891	23%	888.6	550,409
<i>Hispanic Females</i>	26	0%	35.0	4	5%	5.4	89	0%	119.7	74,337
<i>Other Females</i>	51	0%	N/A	0	0%	N/A	154	1%	N/A	105,076
<i>Unk Females</i>	3,135	31%	N/A	1	1%	N/A	10,212	47%	N/A	N/A
Unknown Sex - All Races	53	1%	N/A	0	0%	N/A	142	1%	N/A	N/A
<i>Age</i>										
0-4 years	6	0%	2.1	0	0%	0.0	12	0%	4.2	288,238
5-9 years	12	0%	3.9	0	0%	0.0	18	0%	5.9	303,975
10-14 years	148	1%	44.8	0	0%	0.0	439	2%	132.8	330,568
15-19 years	3,473	34%	1095.0	4	5%	1.3	9,206	42%	2902.5	317,178
20-24 years	2,848	28%	1099.3	12	14%	4.6	6,584	30%	2541.3	259,083
25-29 years	1,549	15%	600.1	11	13%	4.3	2,915	13%	1129.3	258,133
30-34 years	819	8%	285.8	14	16%	4.9	1,166	5%	406.8	286,596
35-39 years	574	6%	173.5	18	20%	5.4	632	3%	191.0	330,873
40-44 years	360	4%	103.1	9	10%	2.6	291	1%	83.3	349,294
45-54 years	337	3%	48.9	16	18%	2.3	269	1%	39.0	689,341
55-64 years	81	1%	16.4	3	3%	0.6	55	0%	11.2	493,086
65 and over	28	0%	5.3	1	1%	0.2	11	0%	2.1	533,125
Unknown Age	26	0%	N/A	0	0%	N/A	89	0%	N/A	N/A
<i>Total</i>	10,261	100%	231.1	88	100%	2.0	21,687	100%	488.5	4,439,490

* P&S: Primary and Secondary Syphilis

[^] Rate per 100,000

Table 10: Characteristics of HIV/Hepatitis Co-Infected Persons in Care, in Southeast Michigan, Adult/Adolescent Spectrum of Disease (ASD), 2001-2003

	ALL (N = 1,790)	HAV/HIV Co-infected (N = 64)	HBV/HIV Co-infected (N = 207)	HCV/HIV Co-infected (N = 353)
SEX			*	
Male	58%	66%	68%	50%
Female	42%	34%	32%	50%
RACE/ETHNICITY				*
White	20%	30%	17%	13%
Black	75%	67%	80%	83%
Other/Multi	5%	3%	2%	4%
AGE				*
<20	1%	0%	0%	0%
20-29	10%	11%	5%	3%
30-39	27%	14%	29%	9%
40-49	38%	39%	38%	43%
50 and older	24%	36%	28%	44%
RISK FOR HIV			*	*
MSM	38%	45%	45%	10%
IDU	30%	34%	41%	78%
Blood Exposure	2%	5%	1%	5%
High-Risk Heterosexual	21%	8%	8%	6%
Presumed Heterosexual	8%	8%	3%	1%
Unknown/Other	1%	0%	<1%	0%
HAV Vaccination	14%	5%*	13%	23%*
HBV Vaccination	21%	24%	4%*	14%*

*Proportions significantly different from the proportions among all the persons in care, $p < 0.05$ in Chi square test comparing the distribution of co-infected patients among the categories of the demographic, vaccination or transmission risk factor to the distribution of all the persons in care.

NOTE: Hepatitis A (HAV), Hepatitis B (HBV), or Hepatitis C (HCV) co-infection is defined as diagnosis of HAV, HBV (acute or chronic) or HCV, recorded in ASD at any time in the past. Age is the age as of the last care recorded in 2001-2003. HAV and HBV Vaccination include vaccinations recorded in ASD at any time in the past.