

**Status of the HIV/AIDS Epidemic in the
Detroit Metropolitan Statistical Area (MSA), 2004**
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Methods: The Detroit MSA consists of Wayne, Oakland, Macomb, Monroe, and St. Clair counties. To evaluate trends over time, we estimated the number of persons newly diagnosed with HIV infection each year and determined if there was a statistically significant change from 1999 through 2003. Numbers are estimated by adjusting the number of reported cases for people diagnosed in 1999-2003 for those who may not have been reported to the health department by January 1, 2005. This year's report is the second time this adjustment was based on only Michigan reporting patterns. Previously, adjustments were made using multi-state regional data. The date of new HIV *diagnosis* does not tell us when persons were first *infected*, because their HIV diagnosis may take place months or years after infection. However, this is the best current measure of how fast the epidemic is spreading among different populations. Over this time period No Identifiable Risk (NIR) cases were also redistributed to other risk categories based on past patterns of NIR reclassification.

Overall: The number of persons newly diagnosed with HIV each year increased significantly from 1999 to 2003 (490 to 626 cases). However, the trend is entirely due to a low number in 1999, which MDCH believes is related to reporting patterns and not reflective of true changes in the epidemic. For this reason we have decided to exclude 1999 from the analysis and we ran the trends from 2000 to 2003. We believe this is a better reflection of the current trends in HIV diagnoses. The number of HIV infections from 2000 to 2003 is stable at around 585 cases per year. These new diagnoses include persons who learn of their HIV infection status after developing symptoms of AIDS. Each year, there are more new diagnoses of HIV infection than deaths. Therefore, the reported number of persons living with HIV/AIDS in the Detroit MSA is increasing. MDCH estimates that 11,200 residents are living with HIV infection in the Detroit MSA (including those with AIDS). This estimate represents two thirds of the cases in the State of Michigan and this proportion has not changed over time.

Risk Behaviors for HIV Infection, 2000-

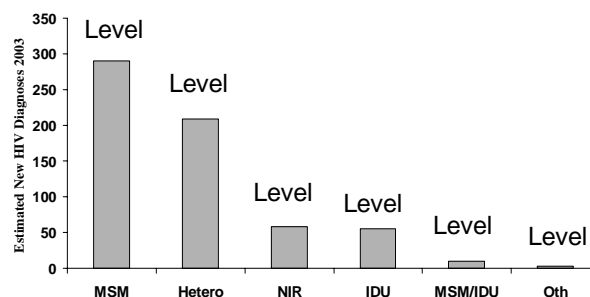
2003: The proportion of persons diagnosed each year with HIV infection between 2000 and 2003 decreased significantly in High Risk Heterosexuals (HRHs) from 16% to 8% (94 to 47 cases) and increased significantly in Presumed Heterosexuals (PHs) from 19% to 26% (117 to 162 cases). However, as shown in the figure, when these two heterosexual groups are combined the trend is level.

'High risk' heterosexuals are persons who knew they had one or more partners that were an IDU, bisexual (for females), a

recipient of HIV infected blood, or a person who they knew was infected with HIV. 'Presumed' heterosexuals are persons who had heterosexual sex as their only risk but their partner's risk and HIV status are unknown. The proportion of new diagnoses remained level in all the other risk groups.

Of the 626 new HIV infections diagnosed in 2003, there were 290 (46%) diagnoses among MSM, 162 (26%) among PH's, 58 (9%) among NIR's, 55 (9%) among IDU's, 47 (8%) among HRH's, 10 (2%)

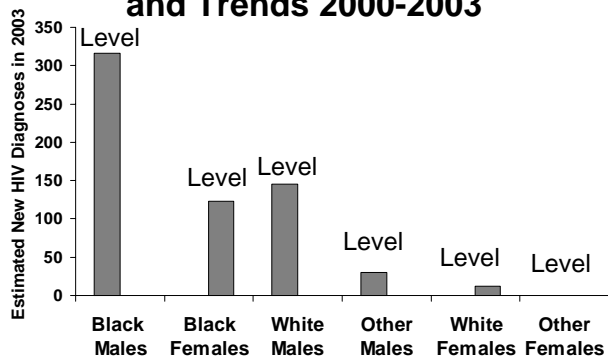
**Number of New HIV Diagnoses in 2003,
and Trends 2000-2003**



among MSM/IDU's, and <5 (<1%) among persons with other risks. Other risks include transmission from blood products and perinatal exposures. Less than 1 percent of diagnoses were among persons who first acquired infection from blood products received either before 1985 in the U.S. or in other countries. Less than 1 percent of diagnoses were among infants born to HIV-infected mothers.

Race and Sex 2000-2003: The proportion of new HIV diagnoses did not change significantly between 2000 and 2003 in any of the race/sex groups. In 2003, there were 316 (50%) new diagnoses in black

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males, 145 (23%) in white males, 123 (20%) in black females, 30 (5%) in non-white/non-black males, 12 (2%) in white females, and 0 (0%) in non-white/non-black females. Although the trends in new HIV diagnoses among black males and females are level, they are still impacted disproportionate to their numbers in the population. Black males and females make up 23 percent of the population of the Detroit MSA but 87 percent of persons living with HIV infection.

Age at HIV Diagnosis 2000-2003: The proportion of persons diagnosed each year with HIV infection only changed significantly among those diagnosed at 13-19

years of age, from 2% to 4% (10 to 25 cases). We believe that this increase may reflect increased testing of this age group and not necessarily a true increase in new HIV infections among teenagers. We are examining this and will continue to evaluate this trend over the coming year. In 2003, there were 2 (<1%) persons infected at 0-12 years of age, 25 (4%) 13-19 years, 66 (11%) 20-24 years, 165 (26%) 25-34 years, 206 (33%) 35-44 years, and 136 (22%) 45+ years. In addition, 26 (4%) cases were missing an age at HIV diagnosis.

Concurrent HIV and AIDS Diagnosis, 2000-2003: The overall proportion of persons newly diagnosed with HIV infection, who were diagnosed with AIDS at the same time, did not change significantly from 2000 to 2003 with 28% of new HIV/AIDS infections being concurrent in 2003. There were also no changes in the proportion of concurrent diagnoses in any of the race-sex groups from 2000 to 2003. In 2003, there were 87 (28%) concurrent diagnoses in black males, 41 (28%) in white males, 39 (32%) in black females, 10 (33%) in non-white/non-black males, 1 (8%) in white females, and 0 in non-white/non-black females. Every concurrent diagnosis represents a failure to start treatment early. Persons who are unaware of their HIV infection cannot benefit from antiretroviral therapy and have a poorer prognosis than those diagnosed early in the disease course. They are also not accessible for secondary prevention.

Trends in New Diagnoses of AIDS in Southeast Michigan, 2000-2003

New AIDS cases were statistically level at about 400 persons annually between 2000 and 2003. In order to decrease the number of new AIDS cases, we need to continue efforts to get infected persons tested and into early care. In addition, treatments will need to become more effective and work for longer periods of time.

Conclusions

Detroit Metropolitan Area residents with HIV infection continue to be two thirds of the cases in the state, predominantly men who have sex with men, black, and ages 25-44 years old at time of diagnosis. When 'presumed heterosexuals' are included in the heterosexual category, the proportion with heterosexually acquired infection is almost equal to the number infected through MSM. The proportions of new

diagnoses of HIV infection among PHs and those 13-19 years old at diagnosis have increased significantly over the past few years while the proportions in HRHs have decreased significantly.

From 2000-2003, approximately 28 percent of persons newly diagnosed with HIV infection were also diagnosed with AIDS at the same time and did not change significantly in any of the race/sex groups.