Status of the HIV/AIDS Epidemic in the
Detroit Metropolitan Statistical Area (MSA), 2005

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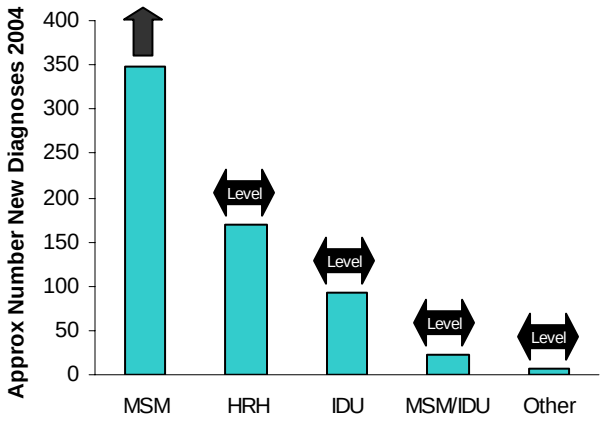
Methods: The Detroit MSA consists of Wayne, Oakland, Macomb, Monroe, Lapeer, and St. Clair counties. To evaluate trends over time, we approximated the number of persons newly diagnosed with HIV infection each year and determined if there was a statistically significant change from 2000 through 2004. Numbers are approximated by adjusting the number of reported cases diagnosed in 2000-2004 to account for those who may not have been reported to the health department by January 1, 2006. 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 HIV diagnoses from 2000 to 2004 is stable at around 600 cases per year. These new diagnoses include persons who learned 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 Michigan is increasing. MDCH estimates that 11,210 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, 2000-2004: The proportion of persons diagnosed each year with HIV infection between 2000 and 2004 increased significantly in males who have sex with males (MSM) from 51% to 55% (314 to 349 cases). There was a decline in the proportion of new diagnoses seen in IDUs, from 18% to 15% (111 to 93 cases); however, the numbers did not reach statistical significance. The proportion of new diagnoses remained level in all the other risk groups, including High Risk Heterosexuals (HRH). HRH 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 infected with HIV.

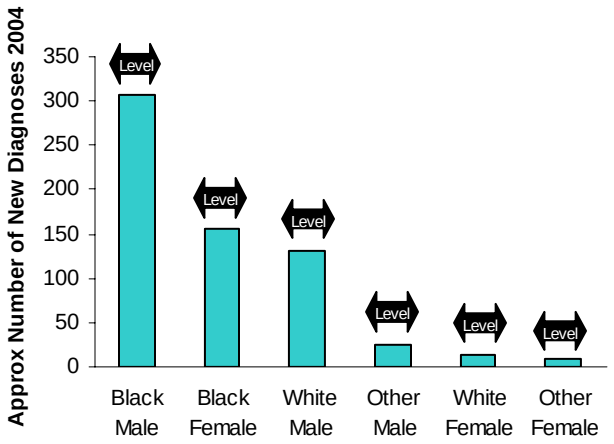
Number of New Diagnoses in 2004 and Trends 2000-2004 According to Risk



Of the 640 new HIV diagnoses in 2004, there were 349 (55%) diagnoses among MSM, 168 (26%) among HRHs, 93 (15%) among IDUs, 22 (4%) among MSM/IDUs, and 8 (1%) among persons with other risks. Other risks include transmission from blood product exposure, perinatal exposure, and those with no identified risk. One 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.

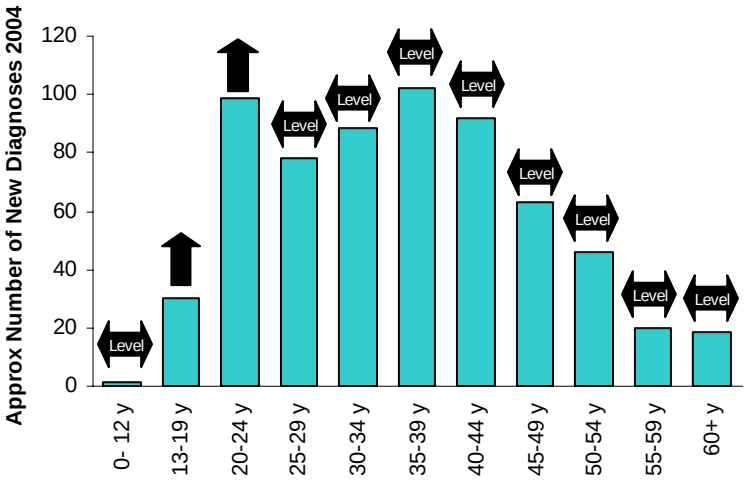
Race and Sex 2000-2004: The proportion of new HIV diagnoses did not change significantly between 2000 and 2004 in any of the race/sex groups. In 2004, there were 307 (48%) new diagnoses in black males, 155 (24%) in black females, 131 (20%) in white males, 25 (4%) in non-white/non-black males, 14 (2%) in white females, and 8 (1%) 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 persons make up 23 percent of the population of the Detroit MSA, but account for 72 percent of new HIV infections in 2004 and 67 percent of persons living with HIV/AIDS.

Number of New Diagnoses in 2004 and Trends 2000-2004 According to Race/Sex



Age at HIV Diagnosis 2000-2004: The proportion of persons diagnosed each year with HIV infection increased significantly among those diagnosed at 13-19 years of age, from 1% to 5% (9 to 30 cases) and among those diagnosed at 20-24 years of age, from 7% to 15% (46 to 99 cases). In 2004, there was 1 (<1%) person infected at 0-12 years of age, 30 (5%) 13-19 years, 99 (15%) 20-24 years, 78 (12%) 25-29 years, 88 (14%) 30-34 years, 102 (16%) 35-39 years, 92 (14%) 40-44 years, 63 (10%) 45-49 years, 46 (7%) 50-54 years, 20 (3%) 55-59 years, and 18 (3%) 60 years and over.[§]

Number of New Diagnoses in 2004 and Trends 2000-2004 According to Age at HIV Diagnosis



Concurrent HIV and AIDS Diagnosis, 2000-2004: Among persons who were diagnosed with HIV between 2000 and 2004, the percentage diagnosed concurrently (within the same month) with AIDS remained stable at 25% (150 cases) overall. There are no significant changes in concurrent diagnoses according to race/sex group.

Twenty-four percent (151 cases) of the new diagnoses in 2004 were concurrent. The following are proportions of concurrent diagnoses within each race/sex group: 27% of black male diagnoses (83 of 307), 25% of white male diagnoses (33 of 131), 17% of black female diagnoses (26 of 155), 19% of non-white/non-black male diagnoses (5 of 25), 18% of white female diagnoses (2 of 14), and 15% of non-white/non-black female diagnoses (1 of 8). In general, males are significantly more likely to be diagnosed concurrently than females. In 2004, 26 percent of males (121 cases) were diagnosed concurrently compared to 17 percent of females (30 cases). There were no significant differences in concurrent diagnoses among race groups.

Every concurrent diagnosis represents a failure to diagnose HIV early in the course of the person's infection as well as to start treatment early. Persons who are unaware of their HIV infection cannot

[§] In order to adjust the number of new diagnoses to account for reporting delays, weights are applied to the data. The number of new diagnoses in each of the age groups do not sum to 640 (the total number of new diagnoses in 2004) due to rounding error.

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, 2000-2004
New AIDS cases were statistically level at about 420 persons annually between 2000 and 2004. 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

From 2000-2004, approximately 25 percent of persons newly diagnosed with HIV infection were also diagnosed with AIDS at the same time. There were no significant changes in proportion of concurrent diagnoses in any of the race/sex groups.

When evaluating the relative impact of the epidemic among different groups it is important to balance both where the largest numbers are as well as trends over time. Approximately two-thirds of new HIV diagnoses in Michigan continue to be among residents of the Detroit Metropolitan Area. New HIV cases in the Detroit MSA are predominantly males who have sex with males (MSM), persons who are black, and persons who are age 20-49 years at the time of HIV diagnosis. The proportions of new diagnoses of HIV infection have increased significantly over the past few years in the MSM risk group as well as among 13-19 and 20-24 year olds. These trends support the need for routine HIV testing of persons of any age who are sexually active. If testing is increased, we will identify more HIV-infected people who will need assistance getting into and staying in care.