

2010 Profile of HIV/AIDS in The Detroit Metro Area

Trends in HIV/AIDS Data

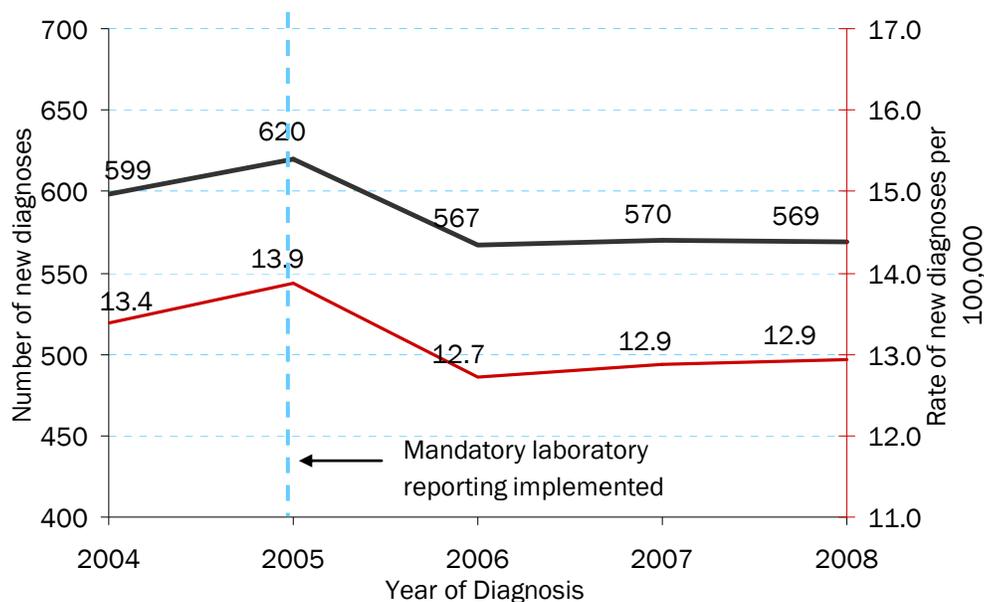
Data from HIV/AIDS Reporting System (eHARS)

To evaluate recent trends in 2010, we estimated the number of persons newly diagnosed with HIV infection each year by adjusting the number of reported cases diagnosed from 2004 through 2008. This adjustment was applied to account for those who may not have been reported to the health department by January 1, 2010. The adjustments were calculated by weighting the data. Please see Forward (Page 1-5) for further description on methods used to evaluate the trends and page 4-46 for further analyses on trends over time.

New Diagnoses of HIV:

The rate of new HIV diagnoses remained stable averaging 13.2 per 100,000, while the number of new HIV diagnoses decreased significantly from 599 in 2004 to 569 in 2008. The Detroit Metro Area experienced a population decline during this period, which may explain the decreases in the number of new diagnoses. A stable rate where population is decreasing suggests that the impact of the disease on the population is level or increasing. The rate peaked at 13.9 per 100,000 in 2005, and is 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. (Figure 5)

Figure 5: Number and Rate of New HIV Diagnoses in the Detroit Metro Area, 2004-2008



Transmission of HIV 2004-2008:

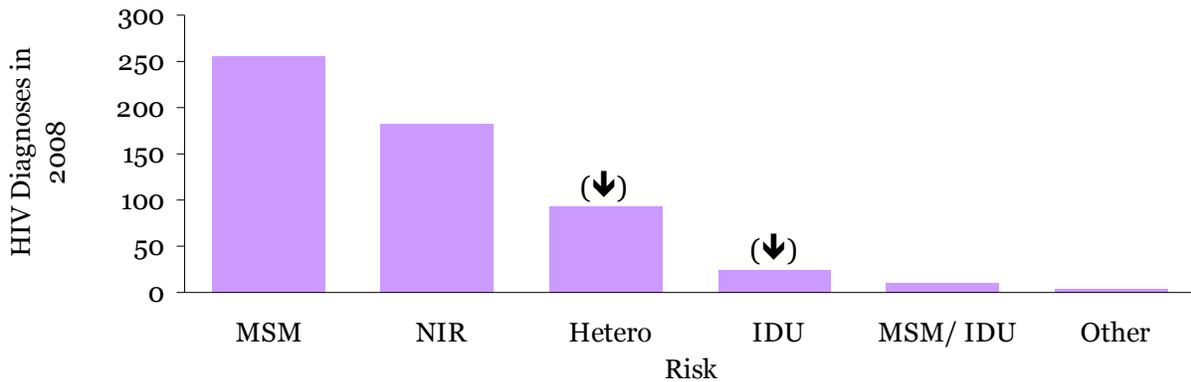
Between 2004 and 2008, the number of newly diagnosed persons who were injection drug users (IDU) decreased by an average of 16 percent per year. The number also decreased among persons who were infected through heterosexual sex by an average of three percent per year (Figure 6, next page). Data from Michigan's HIV Behavioral Surveillance (collected in 2005), which focused on IDU living in Detroit, suggest the trend among IDU can be partly attributed to the success of harm reduction programs like needle exchange.

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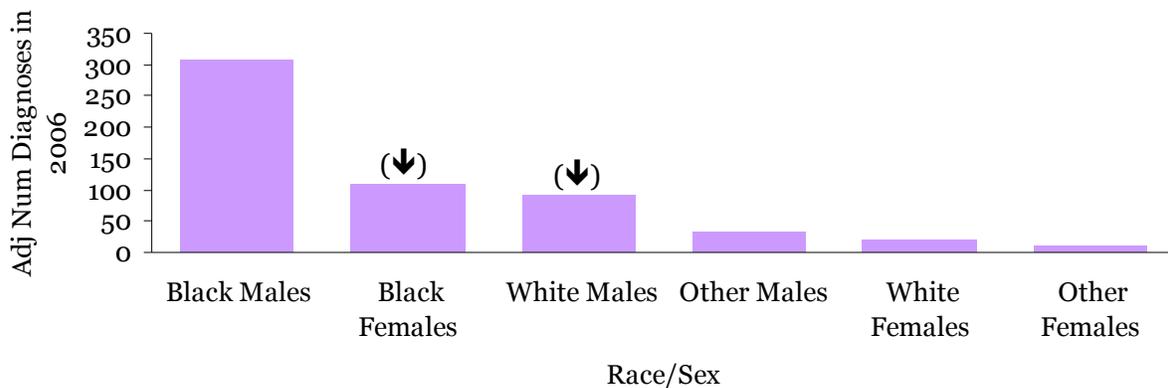
Figure 6: Number of New HIV Diagnoses in 2008 and Trend Between 2004 and 2008, by Risk, DMA



Race and Sex 2004-2008 :

The rate of new diagnoses decreased among white males, black females, and whites overall. The decrease among whites overall is likely to be a result of the decrease among white males who make up 86 percent of all diagnoses among whites. The rate of new HIV diagnoses is consistently highest among black males (average 63.2 per 100,000) and black females (average 22.0 per 100,000), with an overall average rate for blacks of 41.0 per 100,000. In 2008, the rate of new diagnoses among blacks was 11.1 times higher than that of whites. (Figure 7)

Figure 7: Number of New HIV Diagnoses in 2008 and Trends 2004 -2008, by Race and Sex, the DMA



Age at HIV Diagnosis 2004-2008:

The rate of new diagnoses increased significantly among persons 13-19 years of age (average increase in rate of 26 percent per year) for the fifth consecutive analysis. Sixty-eight percent of new cases among 13-19 year olds are Detroit residents. The rate decreased significantly among persons aged 40-44. Rates in all other ages groups were stable.

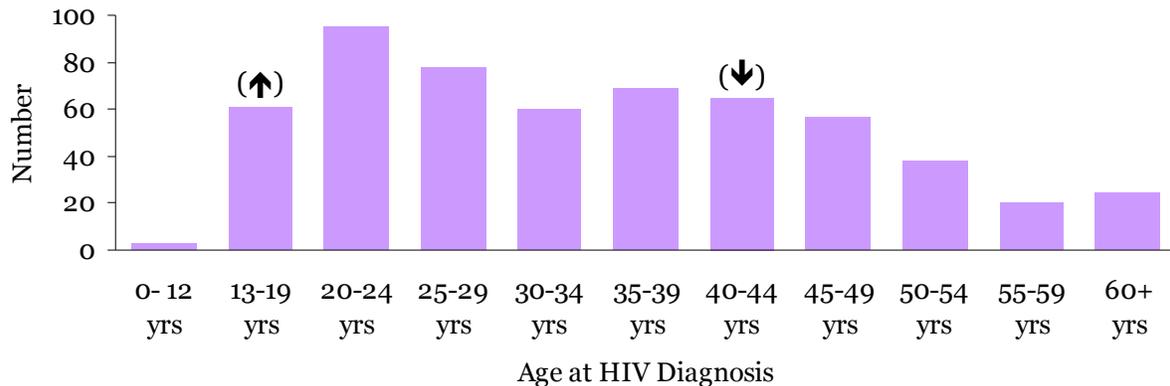
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Although these trends are alarming and demand action, it is important to remember that the largest numbers and highest rates of new diagnoses continue to be among 20-44 year olds, followed closely by 45-54 year olds. (Figure 8)

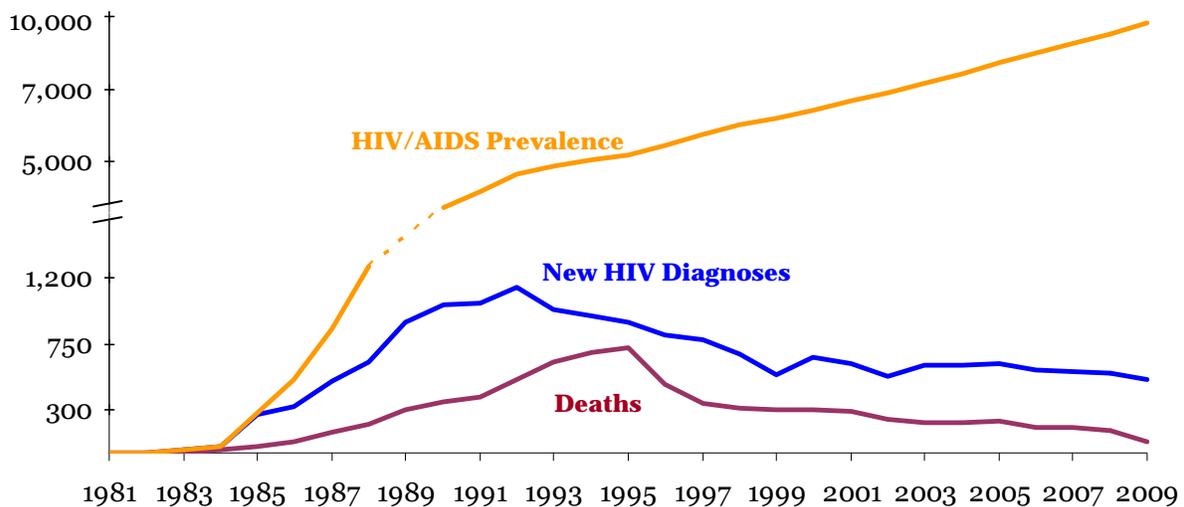
Figure 8: Number of New HIV Diagnoses in 2008 and Trends 2004 -2008, by Age at HIV Diagnosis, the DMA



New Diagnoses, Deaths and Prevalence of HIV by Year:

The unadjusted number of new HIV diagnoses, number of HIV related deaths and HIV prevalence are presented in Figure 9. The trend among new HIV diagnoses reflects reported cases. These data were not adjusted for reporting delay, as they were in Figures 5 through 8. Consequently, the decreases in new diagnoses seen in the most recent years will likely level out as more cases diagnosed during those years are reported.

Figure 9: New HIV Diagnoses, Deaths and Prevalence by Year

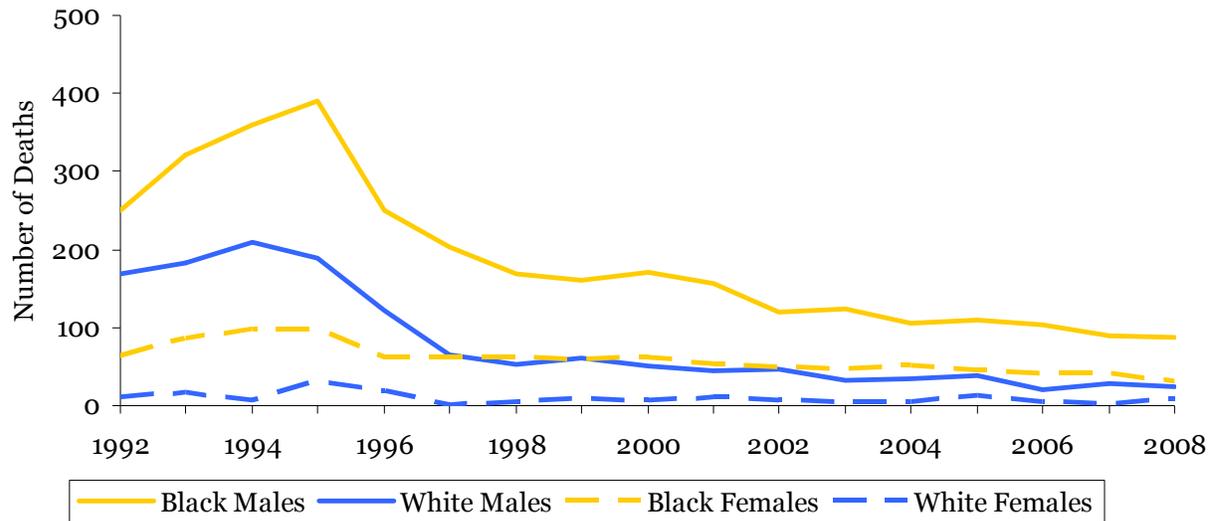


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Figure 10: HIV/AIDS Deaths by Race/Sex



Deaths:

Figure 10 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 were relatively stable until 2001. This large decrease can be attributed to the success of highly active anti-retroviral therapies (HAART). 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 deaths among black males continued to fall substantially between 2001 and 2005 (39 percent), and with greater magnitude when compared to white males (25 percent), black females (21 percent), and white females (<1 percent). However, but the number of deaths remains highest among black males compared to any other race/sex group.