

EXECUTIVE SUMMARY

HIV/AIDS Annual Report – February 2009
State of Arizona

General Comments:

In Arizona's HIV/AIDS reporting, estimates of incidence are based upon the sum of new HIV cases, and new AIDS cases not diagnosed as HIV infections in any prior calendar year. These cases are referred to as *emergent* cases and are used as an estimate of incidence. Cases of HIV/AIDS can only be counted as emergent in the year they were first diagnosed with HIV infection. Persons who were emergent as HIV and diagnosed as AIDS in the same calendar year are counted as emergent AIDS to avoid double counting. This method is the most straightforward method available for estimating incidence.

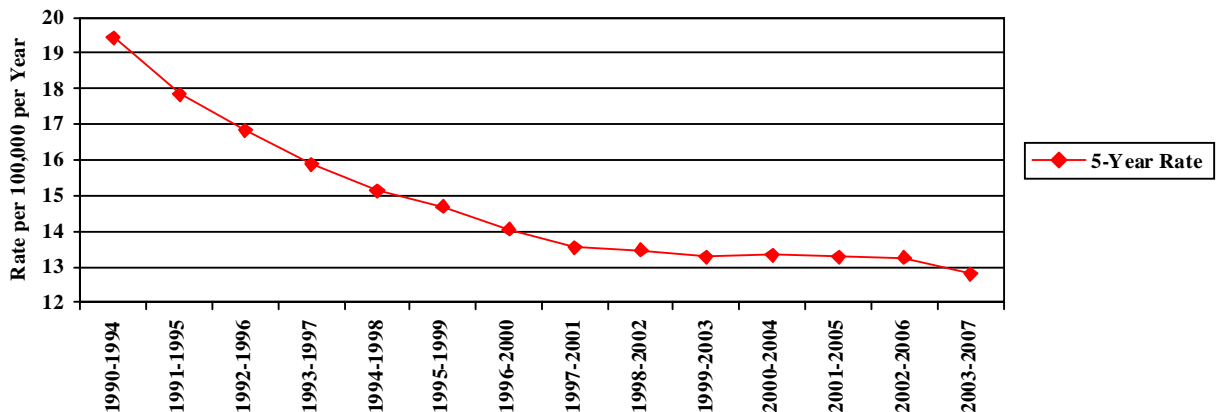
This report includes current (2/1/09) estimated prevalence, 2007 reported *emergent* case counts, and the 2007 population estimate for each county or region. For comparison to prior period prevalence or incidence, please refer to previous annual reports. Incidence estimates for the 5-year reporting timeframes (1998-2002 and 2003-2007) used in this report are expressed as annualized rates for purposes of valid comparison with the 5-year timeframes in prior annual reports, or single-year annual rates provided elsewhere. These annualized 5-year rates may be regarded as the average annual rate across the 5 years in the reporting timeframe.

The HIV/AIDS program is working to improve linkages between State or County disease prevention programs, and care delivery programs under the Ryan White Treatment Modernization Act. These efforts will improve delivery of care to persons living with HIV/AIDS in Arizona, and improve the quality of data reporting upon which these programs depend.

Current Data:

The State of Arizona is experiencing some of the most rapid population growth in the nation. Most of that growth is taking place in the Phoenix Metropolitan area. Recent trends show the 5-year HIV/AIDS emergence case rate has been declining. 5-year average case rate trends are shown in Figure 1 below. Five-year average rates are not as subject to year-on-year variance as annual rates.

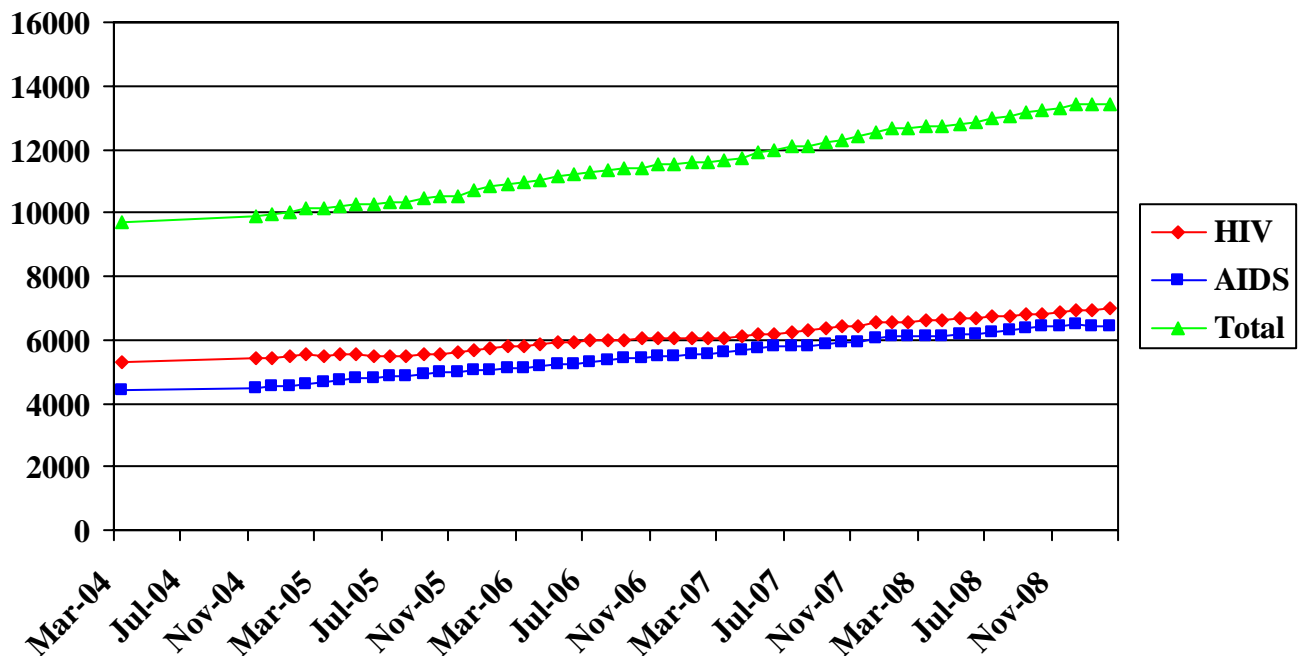
Figure 1: Arizona 5-Year Emergent HIV/AIDS Case Rate Trend



The five-year emergent HIV/AIDS case rate declined steadily throughout the 1990's, leveling off from the 1998-2002 time period. Emergent HIV infection in Arizona was 12.8 per 100,000 per year during 2003-2007. According to the most recent estimates of the Center for Disease Control and Prevention (CDC), the 2006 estimated HIV/AIDS diagnosis rate for Arizona was just under the national rate, and was higher than two-thirds of states with well-established confidential name-based HIV reporting (CDC slide set, 2006 data at <http://www.cdc.gov/hiv/topics/surveillance/resources/slides/general/index.htm>).

Arizona is currently considered to be a moderate morbidity state, with CDC-estimated prevalence in the middle rate category among states with well-established confidential name-based HIV reporting. But prevalence rates continue to rise in Arizona. Prevalence of reported HIV infection is 212 per 100,000. That is about 13,500 persons, a rise of nearly 40% in 5 years. The increase in prevalence rates appears to be due to the efficacy of multi-drug treatments for HIV infection, which have sharply reduced HIV-related death.

Figure 2: Arizona HIV/AIDS Prevalence Trend



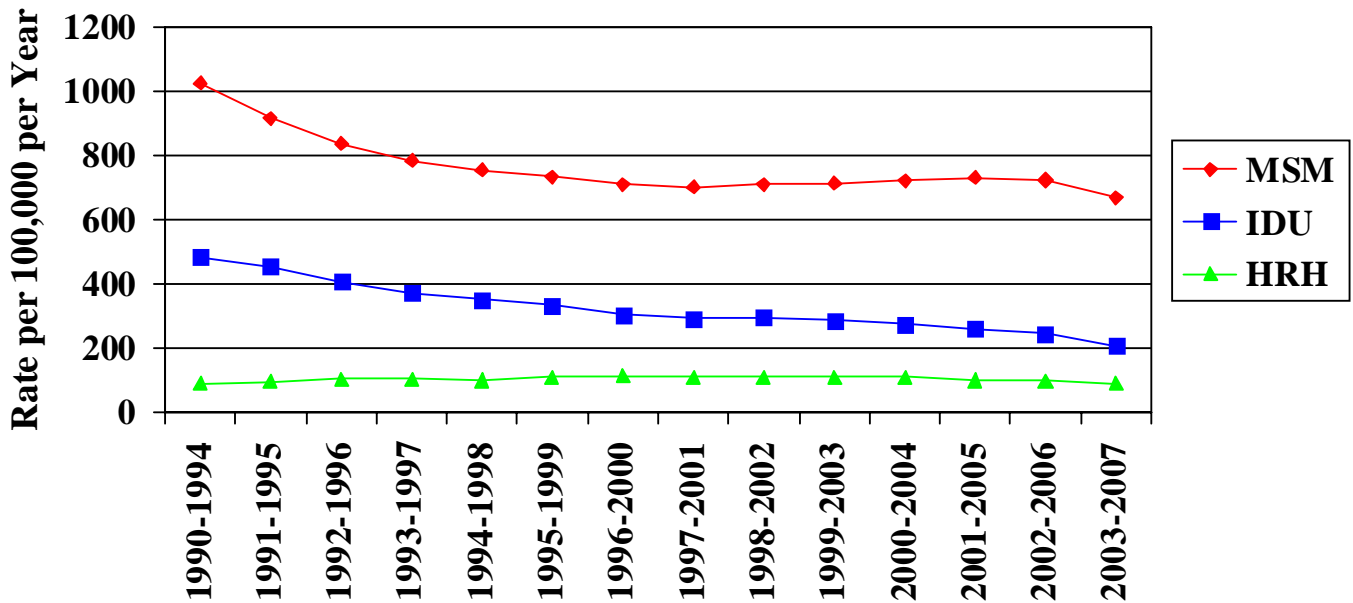
If current prevalence trends continue, within the next 2 to 4 years the number of persons living with AIDS in Arizona will surpass the number of persons with HIV infection who have not been diagnosed with AIDS. Because the burden of HIV-related disease is greater among persons with AIDS, treatment, utilization, and continuity of care will become increasingly critical issues.

While emergent rates have been declining, that trend has not been consistent across all risk categories. Rates of emergent HIV infection among persons reporting injection drug use (IDU) have declined consistently. Among persons reporting high-risk heterosexual activity (HRH) they have remained level since 1990. But among men who have sex with men (MSM) emergent HIV rates declined to a low in 1999, rose slightly until 2005, and appear to be declining once more. These trends are shown in Figure 3 below. Because of

different rate patterns between different risk groups, the proportion of the HIV epidemic among MSM has increased. The proportion of emergent cases that are MSM-related has risen from a low of 60% in 1995 to 71% in 2006.

CDC estimates suggest a similar trend across the country, with the proportion of new HIV/AIDS cases attributed to the MSM risk category increasing from 44% in 1999 to 56% in 2007. While the MSM risk category accounts for the greatest proportion of cases for both Arizona and the U.S., the second most prevalent risk category differs. In Arizona, in 2007 the second most commonly reported risk is Injection Drug Use (IDU) (12%) while nationally it is High Risk Heterosexual (31%).

Figure 3: Estimated Arizona 5-Year Emergent HIV/AIDS Rates by Reported Risk



Pediatric HIV Infection:

In 2007 there was one case of emergent HIV infection among children under age 13 in Arizona.

Urbanization of HIV:

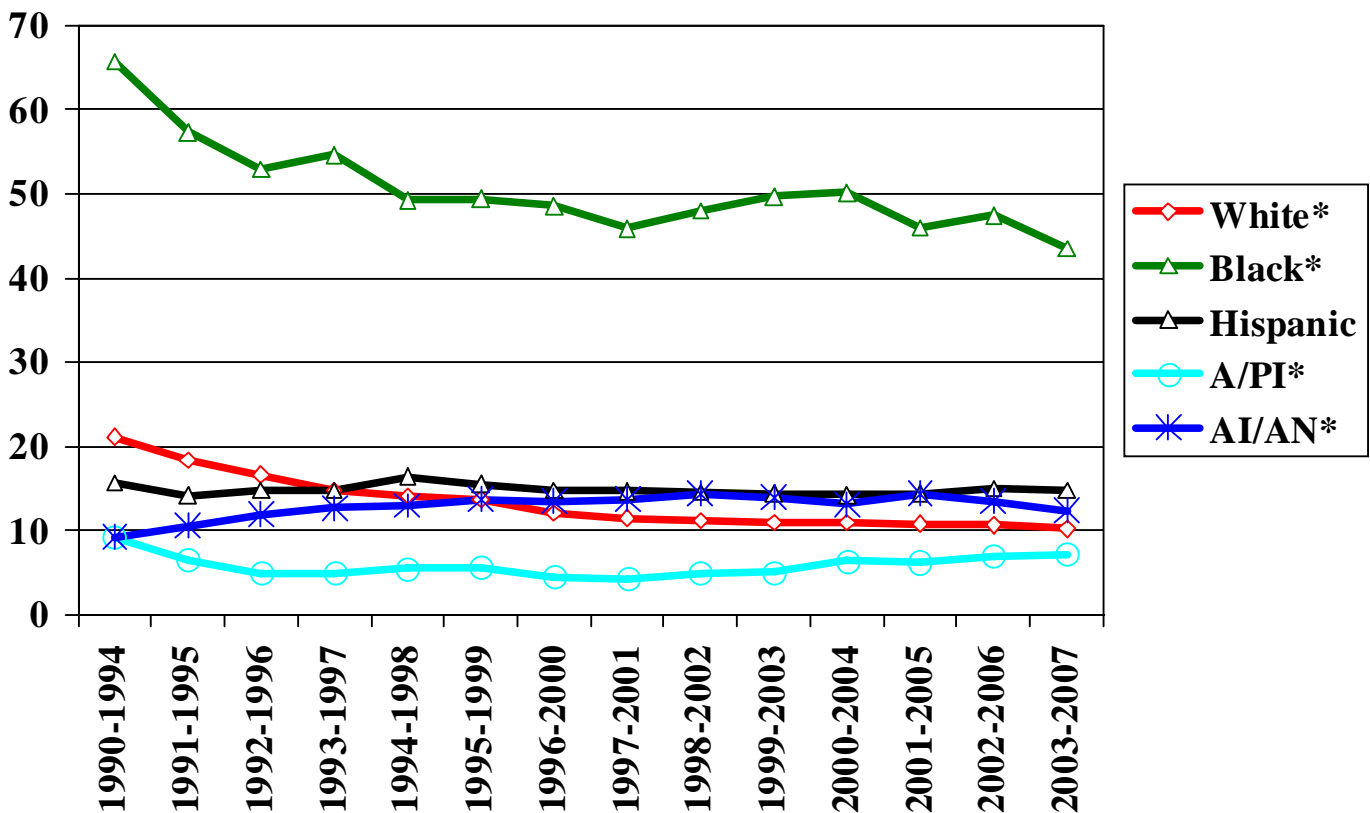
Rates of HIV/AIDS prevalence and emergence differ sharply between counties in Arizona that are primarily urban, and those that are primarily rural. At the time of this report, 85% of reported HIV/AIDS prevalence and 82% of emergent infections occur in urban counties that contain 76% of the state population. The average rate of HIV/AIDS emergent infection, and HIV/AIDS prevalence in urban counties in Arizona is between 2 and 2.5 times greater than the average in rural counties. Reported rates of HIV/AIDS are highest in Pinal County (18.7 per 100,000 per year, 2003-2007). Pinal County's HIV/AIDS incidence rate is rising sharply (41% increase from 1998-2002), while elsewhere in the state it is gradually declining. The majority of cases reported in Pinal are among prisoners, many of whom are not originally from Pinal County. A

concentration of emergent HIV/AIDS cases among prisoners in Pinal County correctional facilities may explain this recent sharp rise.

Race/Ethnicity Disparities:

Rates of HIV/AIDS prevalence and emergence differ sharply between African Americans and other race/ethnicity groups. African Americans are the only race/ethnicity group in Arizona that experiences such a severe disparity of HIV/AIDS impact. Currently the emergent HIV/AIDS rate among African Americans in Arizona is more than 4 times that of White Non-Hispanics. This disparity is presented in Figure 4 below.

Figure 4: Arizona 5-Year Emergent HIV/AIDS Rates by Race/Ethnicity



The disparity observed in Arizona among African Americans is also seen elsewhere in the country. The CDC estimates that in 2007, blacks were 13% of the total population in states with established confidential HIV reporting, and 48% of new HIV diagnoses. As observed in Arizona, CDC also reports a more pronounced racial disparity nationally among women than among men when blacks are compared with other race groups.

Groups of Special Concern:

Effective prevention policy focuses upon groups most adversely impacted by HIV/AIDS, or known to be at greater risk of transmitting HIV infection. In Arizona there is a clear and alarming impact of HIV/AIDS in the African American community. African Americans in Arizona experience an epidemic of HIV/AIDS that is at least 3 times more

severe than any other race/ethnic group. This disparity is more pronounced among African American women than among African American men. Among African American women, the rate of emergent HIV infection continues to rise. Although HIV has historically been a disease that predominantly affects males in Arizona, the 2003-2007 rate of emergent HIV among African American women is nearly 60% higher than the statewide rate among men.

Arizona is seeing a significant increase of early syphilis. The link between Sexually Transmitted Disease (STD) and increased likelihood of HIV transmission is well established. Since 2002, the number of men diagnosed with early Syphilis who report having sex with men (MSM) has risen by nearly 500%. Rates of HIV incidence among MSM are high (see figure 3 above), so the increase of Syphilis among MSM raises serious public health concerns. For this reason, ADHS office of HIV/STD/Hepatitis C services is working to expand prevention efforts in this area, including the delivery of priority Partner Services to HIV infected persons who experience an STD diagnosis.

Multi-Drug/Highly Active Anti-Retroviral Therapy (HAART) has been extremely successful in preventing HIV related death and disease. High viral loads increase the likelihood of HIV transmission. Linking persons with HIV infection to HIV primary care, including HAART therapy should be emphasized in ongoing prevention efforts. Persons who have an unmet need for HIV primary care, or who have dropped out of care should receive counseling and referral services with priority as part of ongoing HIV prevention efforts.