

Companion Text for the Slide Set:

Minnesota HIV/AIDS Prevalence & Mortality Report, 2010

INTRODUCTION

The *Minnesota HIV/AIDS Prevalence & Mortality Report, 2010* contains estimates of HIV/AIDS prevalence (the number of persons living with HIV or AIDS) and mortality in Minnesota. These estimates can be used to help educate, plan for HIV/AIDS services and develop policy.

Data Source

In Minnesota, laboratory-confirmed infections of human immunodeficiency virus (HIV) are monitored by the Minnesota Department of Health (MDH) through an active and passive surveillance system. State rules (Minnesota Rule 4605.7040) require both physicians and laboratories to report all cases of HIV infection (HIV or AIDS) directly to the MDH (passive surveillance). Additionally, regular contact is maintained with several clinical sites to ensure completeness of reporting (active surveillance). All of the data presented in this report come from MDH HIV/AIDS Surveillance System.

Data Limitations

The prevalence estimate is calculated by totaling the number of HIV and AIDS cases diagnosed through December 31, 2010 who are not known to be deceased and whose most recently reported state of residence was Minnesota. It bears noting that persons who are HIV-infected but not yet tested are not included in this prevalence estimate. Migration (known HIV-infected persons moving in or out of the state) also affects the estimate. Refer to the *HIV/AIDS Prevalence & Mortality Technical Notes* for a more detailed description of data inclusions and exclusions.

Factors that impact the completeness and accuracy of the available surveillance data on HIV/AIDS include the level of screening and compliance with case reporting. Thus, any changes in numbers of infections may be due to one of these factors, or due to actual changes in HIV/AIDS occurrence.

PERSONS LIVING WITH HIV/AIDS IN THE UNITED STATES

According to the Centers for Disease Control & Prevention (CDC), at the end of 2006, between 1,056,400 and 1,156,400 persons in the United States were living with HIV/AIDS, with 21% undiagnosed and unaware of their HIV infection¹. The number of people specifically living with AIDS in the United States has been increasing in recent years: from approximately 290,400 in 1998 to approximately 455,636 in 2006.²

PERSONS LIVING WITH HIV/AIDS IN MINNESOTA

Overview of HIV/AIDS in Minnesota, 1990-2010

The number of persons assumed to be living with HIV/AIDS in Minnesota has been steadily increasing over time. As of December 31, 2010, 6,814 persons known to be living with HIV/AIDS resided in Minnesota, a 4.0% increase from 2009. The number of HIV (non-AIDS) diagnoses had remained steady since the mid-1990s at just under 200 cases per year; however that number has been increasing steadily since 2003. In contrast, both the number of newly diagnosed AIDS cases and the number of deaths among AIDS cases declined between 1996 and 2000. These decreases were primarily due to the success of new treatments introduced in 1995 (protease inhibitors) and 1996 (highly active antiretroviral therapy or HAART). These treatments do not cure, but can delay progression to AIDS among persons with HIV (non-AIDS) infection and improve survival among those with AIDS. Thus, the declines slowed during the late 1990s and between 2001 and 2004 the numbers of AIDS cases increased slowly, followed by a slight decrease between 2005 and 2007. The number of AIDS cases increased again slightly in 2008, however in 2010 the number decreased again to that seen in 2002.

Living HIV/AIDS Cases, 2010

Among the estimated 6,814 prevalent cases in Minnesota, 3,619 are diagnosed with HIV (non-AIDS) and 3,195 are diagnosed with AIDS. The majority (85%) of prevalent cases reside in the seven-county metropolitan area surrounding the Twin Cities

¹ Centers for Disease Control and Prevention. *HIV Prevalence Estimates – US 2006*, MMWR 2010; 57(39):1073-76

² Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2007*. Vol 19.

of Minneapolis and St. Paul (Hennepin, Ramsey, Anoka, Carver, Dakota, Scott, and Washington counties). Although HIV infection is more common in communities with higher population densities and greater poverty, there are people living with HIV or AIDS in over 88% of counties in Minnesota.

Gender & Race/Ethnicity

Seventy-seven percent (77%) of prevalent HIV/AIDS cases are males. Broken down by race/ethnicity, 60% of male cases are White, 19% African American, 9% Hispanic, 7% African-born, 1% American Indian, and 2% Asian/Pacific Islander. In total, 40% of males living with HIV/AIDS are non-White whereas only 11% of the general male population is Non-White. Among female cases, the distribution is even more skewed toward women of color: 27% White, 29% African American, 30% African-born, 6% Hispanic, 3% American Indian, and 2% Asian/Pacific Islander. Thus, 73% of prevalent female HIV/AIDS cases are non-White whereas only 11% of the general female population in Minnesota is non-White.

Please note that race is not considered a biological reason for disparities related to HIV/AIDS experienced by persons of color. Race, however, can be considered a marker for other personal and social characteristics that put a person at greater risk for HIV exposure. These characteristics may include, but are not limited to, lower socioeconomic status, less education, and less access to health care.

Age

Seventy-nine percent (79%) of persons living with HIV/AIDS in 2010 are currently 35 years of age or older. As with new cases, there are differences by gender in the age of living cases. While males 24 and younger account for just 4 % of male living cases, young females account for 7 % of female living cases.

With the advent of therapies that delay progression to AIDS and death for those living with HIV infection the population of living cases has aged over time. In 2010, persons 50 and older accounted for 31 % of living cases compared to 16 % in 2002.

Mode of Exposure

In 2010, MDH used a risk re-distribution method to estimate the mode of exposure among cases with unknown risk. For additional details on how this was done please read the *HIV Prevalence and Mortality Technical Notes*. All mode of exposure numbers referred to in the text are based on the risk re-distribution.

The proportions of living cases attributable to particular modes of exposure differ among gender and race groups. While male-to-male sex (MSM or MSM/IDU) accounts for an estimated 94% of White male cases, it accounts for an estimated 51% of non-White male cases. The estimated percent of male cases that identified IDU as a risk factor was particularly high for African Americans (16%), Hispanics (11%), and American Indians (10%). These percentages among Asian, White, and African-born males were estimated at 4%, 3%, and 1%, respectively. Similar to the MSM category, IDU may be underreported due to social stigma.

Across all race/ethnicity groups, females most frequently report heterosexual contact as their mode of HIV exposure. However, IDU also accounts for a large percentage of female cases among most race/ethnicity groups. The largest estimated percentage of IDU cases are among American Indians (22%) followed by African Americans and Whites with 17% each and Hispanics with 10%. Among Asian females, heterosexual contact accounted for an estimated 89% of cases, and IDU for an estimated 3%. However, the number of prevalent cases among Asian/Pacific Islander females is quite small (n=37), so the results need to be interpreted very carefully.

While risk re-distribution was used to make better sense of mode of exposure information there are differences by race and gender on how many cases have unspecified risk. Among males, only 7% of White prevalent cases have unspecified risk, compared to 83% of African-born, 35% of Asian, and 24% and 19% for Hispanic and African American cases, respectively. Among women, the disparity between White females (8% unspecified) and women of color is not as striking, except for African-born (26% unspecified) and Asian (18%) females. See the *HIV/AIDS Prevalence & Mortality Technical Notes* for a detailed discussion of mode of exposure categories.

Special Populations

Between 1990 and 2010, the number of foreign-born persons living with HIV/AIDS in Minnesota increased substantially, especially among the African-born population. In 1990, 50 foreign-born persons were reported to be living with HIV/AIDS in Minnesota, and by 2003 this number had increased twelve-fold to 692 persons. In 2010, the total number of foreign-born persons living with HIV/AIDS in Minnesota was 1,333, a 4% increase from 2009. This trend illustrates the growing diversity of the infected population in Minnesota and the need for culturally appropriate HIV care services and prevention efforts.

The characteristics of foreign-born persons living with HIV/AIDS in Minnesota differ from U.S.-born, especially in gender. While females account for 18% of cases among U.S.-born persons, they account for 43% of foreign-born cases. This is especially noticeable among African-born cases, where women account for 55% of those living with HIV/AIDS in Minnesota. Among Asian-born cases, women account for 34% of cases. The gender distribution among cases born in Latin America/the Caribbean and Other countries is similar to that of U.S.-born cases, where 16% and 29% of prevalent cases are among women, respectively.

Six countries (Cameroon, Ethiopia, Kenya, Liberia, Mexico, and Somalia) account for a majority (58%) of living foreign-born cases, however there are over 90 countries represented among the 1,333 foreign-born persons living with HIV infection in Minnesota.

HIV/AIDS MORTALITY IN MINNESOTA

The number of deaths³ among Minnesota AIDS cases decreased between 1995 and 1997 and has remained relatively constant between 1997 and 2010. The largest declines in mortality were observed among White males in the mid 1990s. In recent years, the number of deaths among Minnesota AIDS cases has been comparable between White and non-White males and between White and non-White females. In 2010, a total of 51 deaths were reported among AIDS cases diagnosed in Minnesota. Of these deaths,

³ Includes all deaths to cases diagnosed with AIDS in MN, regardless of location of death and cause of death.

11 were among women and 40 among men. The number of deaths⁴ reported in Minnesota for those living with HIV infection (HIV (non-AIDS) or AIDS) was slightly higher (70 deaths) than the number of deaths among MN AIDS cases.

⁴ Includes all deaths to people living with HIV infection in Minnesota, regardless of location of diagnosis and cause of death.