Appendix D--Epidemiology of AIDS in Women, Injection Drug Users, African Americans, and Hispanics

The epidemic of acquired immunodeficiency syndrome (AIDS) in the United States has now entered its second decade, and the fastest growing populations of people in the United States with AIDS are women, injection drug users, African Americans, and Hispanics. Although the rate of increase in the number of AIDS cases among homosexual and bisexual men (excluding those who are also injection drug users) began declining by 1987 (215), the rate of increase in the number of AIDS cases associated with injection drug use and heterosexual transmission has continued to rise (212).

Through February 1992, 29 percent of all AIDS cases reported to the Centers for Disease Control (CDC) in the U.S. Department of Health and Human Services (DHHS) were among injection drug users (including male injection drug 'users who reported having had sex with men)(223), as compared with 25.5 percent in 1982. The increased incidence of AIDS among injection drug users in this country is associated with an increased incidence of AIDS among minorities and women. A disproportionate number of HIV-infected injection drug users are African American or Hispanic. As of February 1992, African American men and women accounted for 50 percent of U.S. AIDS cases reported among heterosexual injection drug users, and Hispanic men and women accounted for 29 percent of AIDS cases among heterosexual injection drug users (223).

Similarly, a large number of AIDS cases among women in the United States are associated with injection drug use. Approximately 50 percent of women who were reported as AIDS cases to the CDC through February 1992 had used injection drugs. An additional 21 percent of female AIDS cases occurred among women who reported sexual contact with an injection drug user (223).

The Epidemiology of AIDS in U.S. Women

By the end of February 1992, there were more than 22,000 reported cases of AIDS among women in the United States (223). The incidence of AIDS among U.S. women is climbing faster than the AIDS incidence among U.S. men. From 1988 to 1989, the annual number of AIDS diagnoses increased by 29 percent in women and 18 percent in men (35). Between 1985 and 1990, the percentage of adult AIDS cases occurring in women increased from 6.6 percent to 11.5 percent (48).

In 1988, AIDS/HIV accounted for 3 percent of all deaths among U.S. women of reproductive age(35).¹ The number of deaths per year due to HIV/AIDS in women of reproductive age increased from 18 in 1980 (35) to 5,730 in 1991 (222).

AIDS is now the eighth leading cause of death in U.S. women of reproductive age. In New York and New Jersey, it is the leading cause of death in women of reproductive age. If current mortality trends continue, AIDS will become one of the five leading causes of death for U.S. women of reproductive age (35).

African American and Hispanic women represent 72 percent of all U.S. women diagnosed with AIDS as of 1989 (213). African American women, who constituted 13.3 percent of U.S. women in 1988, represented 57.6 percent of all women of reproductive age with AIDS between 1981 and 1989. Hispanic women, who constituted 7.9 percent of U.S. women in 1988, accounted for 16.8 percent of all AIDS cases reported in women of reproductive age between 1981

¹ Reproductive age for women is defined as 15 to 44 years of age. Approximately 85 percent of women with AIDS are of reproductive age at the time of their diagnosis (221).

and 1989. Non-Hispanic white women, who constituted 75.1 percent of the U.S. women in 1988, accounted for 24.9 percent of the AIDS cases in women between 1981 and 1989 (216).

Death rates associated with HIV infection/AIDS are much higher for African American women than for white women. In 1988, the death rate from HIV infection was nine times higher for African American women of reproductive age than for white women (213). For African American women, the age-adjusted death rate for HIV/AIDS increased from 4.4 deaths per 100,000 population in 1986 to 10.3 deaths per 100,000 in 1988. For white women, the age-adjusted death rate for HIV/AIDS increased from 0.6 deaths per 100,000 in 1985 to 1.2 deaths per 100,000 in 1988 (35).

The median survival time from AIDS diagnosis to death for women does not differ significantly from that for heterosexual men. A recent study by Ellerbrock and colleagues found that the median survival time from AIDS diagnosis to death to be 9.8 months for U.S. women and 9.3 months for heterosexual U.S. men (48). This study-found the 3-year survival rate after a diagnosis of AIDS to be 20 percent for women and 19 percent for heterosexual These findings differ from the findings of a previous study by men. Rothenberg and colleagues, which found that the median survival time from AIDS diagnosis to death to be shorter for women (263 days) than for men (357 days) (145). One reason for the differences in the two studies' findings may be that the earlier study by Rothenberg and colleagues compared women with all men, including men who have sex with men; survival time in men who have sex with men is higher than in other risk groups (in part because a higher percentage of men who have sex with men have Kaposi's sarcoma, which is associated with a longer survival time than other opportunistic diseases)

(48). Heterosexual men with AIDS may be amore appropriate comparison group for women with AIDS because they are more similar demographically and have risk factors similar to those of women with AIDS.

The Epidemiology of AIDS in U.S. Injection Drug Users

From the beginning of the AIDS epidemic through December 1991, there have been 58,888 cumulative AIDS cases among injection drug users in the United States (including male injection drug users who had sex with men)(222). These cases represent 29 percent of all adult and adolescent AIDS cases reported to the CDC in that period. In 78 percent (45,753) of the reported AIDS cases among injection drug users, the only risk factor for HIV infection reported was injection drug use (222). The high incidence of AIDS among injection drug users is associated with an increased incidence of AIDS among sexual partners of injection drug users and an increased incidence of AIDS among children whose mothers are injection drug users or are sex partners of injection drug users.

Higher HIV antibody seroprevalence rates are observed among African American and Hispanic injection drug users than among non-Hispanic white injection drug users. A review of 92 studies of the prevalence of HIV infection among injection drug users by Hahn and colleagues found that the risk of HIV infection was associated not only with male homosexual contact and particular injection drug use practices, but also with African American or Hispanic ethnicity (71). This racial/ethnic disparity may be explained, in part, by differences in drug use behavior. In particular, the practice of sharing needles or syringes among strangers and acquaintances appears to be more common among African American and Hispanic injection drug users than among non-Hispanic white injection drug users (154).

Of the 45,753 AIDS cases reported among heterosexual injection drug users through December 1991, 50 percent occurred among African American men and women and 29 percent occurred among Hispanic men and women (222). Of the AIDS cases reported among heterosexual sex partners of injection drug users, 52 percent were African American men and women and 26 percent were Hispanic men and women (222). Of the AIDS cases reported among female injection drug users in the same time period, 58 percent were among African Americans and 20 percent were among Hispanics (222).

Regional variations in the distribution of AIDS cases in the United States are evident. The injection-drug-using population most severely affected by the AIDS virus is concentrated in northeastern cities, primarily New York City and surrounding metropolitan areas (241), and in Puerto Rico (71).

The Epidemiology of AIDS in African Americans and Hispanics

In 1991, the annual rate per 100,000 population of AIDS cases was 95.3 (11,059) among African American men and 69.9 (6,850) among Hispanic men. The annual rate per 100,000 population among non-Hispanic white men was 27.8 (20,716)(222). Cases of AIDS in African Americans and Hispanics represented 28 percent and 17 percent, respectively, of the 39,093 male AIDS cases, and 52 percent and 22 percent, respectively, of the 4,890 female AIDS cases reported in 1991 (222). HIV transmission among African American and Hispanic persons with AIDS occurred predominantly through injection drug use (222).

As measured in terms of cumulative incidence rate, the relative risk of AIDS in African Americans and Hispanics was approximately three times the risk in non-Hispanic whites. The risks of AIDS in African American and Hispanic men were 2.8 and 2.7 times, respectively, that of non-Hispanic white men (157).

Racial disparities in the distribution of AIDS cases are even more striking among women than among men. Between 1985 and 1990, 52 percent of the women with AIDS were African American and 21 percent were Hispanic (221).² During this period, African American women had a cumulative incidence rate 13 times that of non-Hispanic whites, and Hispanic women had a cumulative incidence rate that was 8 times that of non-Hispanic whites (48).

In 1991, a total of 45,506 new AIDS cases were reported to the CDC. The annual rate of new AIDS cases for the U.S, population as a whole was 17.8 cases per 100,000 population for 1991. Annual rates for African Americans and Hispanics were much higher--49.2 cases per 100,000 in the case of African Americans and 31.4 cases per 100,000 for Hispanics (222).

 $^{2\ {\}rm Thirteen}$ percent of all U.S. women are African American and $8\ {\rm percent}$ are Hispanic.