

population-based data on the prevalence of HIV infection among women bearing live children between April 1989 and March 1995. CDC suggests using these data to extrapolate estimates of HIV prevalence not only among all women but also among all adults/adolescents.

Estimates made using this approach rest on three basic assumptions:

1) The proportion of Tennessee women found to be HIV-infected in this study approximates the proportion of Tennessee women aged 15-44 years who are HIV-infected.

2) The ratio of current unstaged HIV infection among women aged 15-44 to the total population of women approximates the ratio of late-stage HIV infection (AIDS) among women aged 15-44 to the total population of women.

3) The number of HIV-infected men is 6 to 7 times the number of HIV-infected women (based on the ratio of men with AIDS to women with AIDS). Thus, the sex ratio in 1994 is 7 (563 males:85 females), while in 1995 the ratio is 6 (613 males:108 females).

This method involves the following steps described in detail here and illustrated in Tables 3.5.1, 3.5.2 and 3.5.3:

1. Estimate seroprevalence among women of childbearing age by multiplying the proportion of infected women in the study by the total population of women 15-44 years of age (based on census data). This step assumes that no significant differences in infection exist between women of childbearing age who bore children over the last six years and those who did not. In other words, it assumes that the proportion of Tennessee women found to be HIV-infected in this study approximates the proportion of Tennessee women 15-44 years of age who are HIV-infected.

2. Adjust for women older or younger than the childbearing age-range by dividing the seroprevalence estimate for women of childbearing age (see step 1) by the proportion of all Tennessee AIDS cases diagnosed among Tennessee women 15-44 years of age in a single recent year. This step assumes that the proportion of women who had been diagnosed with AIDS in 1995 is similar to the proportion of women who are infected with HIV who are 15-44 years of age.

3. Adjust for decreased fertility in women with AIDS-opportunistic illnesses (OIS). Recent studies show that fertility is much lower in women who have AIDS-opportunistic illnesses than in other HIV-infected women. To account for these women with AIDS-OIs