Facts about... **HIV/AIDS in heterosexuals**

**Summary:** Nationally and locally, heterosexually-contracted HIV is the leading route of infection among women, and accounts for a higher proportion of cases among People of Color and foreign-born blacks compared with whites. The proportion of HIV infections of known risk attributable to heterosexual transmission is unchanged at 14% of King County HIV cases between 1999 and 2007.

**Definition:** According to standard national case definitions for HIV surveillance, HIV transmission is considered heterosexually-acquired when the infected person is a) not a male who has sex with males, b) does not inject drugs, and c) has a heterosexual partner who is an injection drug user, a bisexual male, or known to be HIV-infected. In addition, women who do not inject drugs and have been sexually active are ‘presumed heterosexual’ cases and are included in our King County totals. A heterosexual male without a documented HIV-infected or injection drug using partner is considered to have ‘no reported risk’ and is not counted as heterosexually-acquired. Because of this definition, surveillance data provide a low estimate of heterosexual-acquired infection.

**Population:** The estimated King County population of 15-69 year-old heterosexuals is about 1.3 million (derived from the 2006 population estimate for ages 15-69, minus an estimated 40,000 men who have sex with men [MSM]). This number is likely an overestimate, as it includes women with female partners and people who are not sexually active.

**Status and trends in HIV/AIDS cases (Figure 1):** The proportion of HIV diagnoses attributed to heterosexual transmission in King County increased during the early part of the epidemic, but is currently stable (Figure 1). Over the period 1999-2007, 14% of new diagnoses of HIV infection with known risk were attributed to heterosexual contact (Figure 1).

**Figure 1: Number and percent of new HIV diagnoses among heterosexuals (1982-2007)**

**HIV incidence (Figures 2 and 3):** The number of people diagnosed with HIV infection attributed to heterosexual transmission is level at about 40 diagnoses annually from 2000-2007.
Cases attributed to heterosexual transmission are more common among women, blacks, persons age 15-24, foreign-born persons, and residents of King County outside Seattle.

While 31% of cases among foreign-born residents are heterosexually-acquired, only six percent of cases among U.S.-born residents are heterosexually-acquired.

Heterosexual transmission accounts for 30% of cases among blacks, 13% among Native Americans, 11% among Asian & Pacific Islanders, 9% among Hispanics, and 4% among whites.

Thirteen percent of persons age 15-24 at time of diagnosis likely acquired infection heterosexually, versus nine percent of those aged 25-69.

Among people with a known risk for HIV, heterosexual transmission accounts for 67% of HIV diagnoses among women, but just three percent of diagnoses among men (see Figure 2).

The majority of women with known HIV risk were infected heterosexually (67%): women with male partners who injected drugs (9%), who were bisexual (4%), who were infected through receipt of blood products (2%), or who were infected with HIV but whose risk was unspecified (31%). An additional 21% of females were presumed heterosexual because they denied injection drug use and were sexually active, although no specific risk or HIV infection was known for their partners (Figure 2).

New diagnoses of HIV infection 2002 through 2008 were distributed among residents living throughout King County. Residents of the 98118 zip code accounted for the highest number of new diagnoses from any single zip code.

**Figure 2: King County residents living with HIV or AIDS by gender and exposure category (as of 6/30/2008)**

**Males, N=5,312 with known risk**

- MSM 82%
- MSM/IDU 10%
- IDU 4%
- heterosexual 3%
- blood < 1%
- perinatal <1%

**Females, N=563 with known risk**

- heterosexual partner HIV+ 34%
- heterosexual partner presumed HIV+ 23%
- blood exposure 3%
- perinatal 2%
- IDU 21%
- heterosexual partner IDU 10%
- heterosexual partner is bi-sexual 5%
- heterosexual partner blood exposed 2%
- heterosexual partner is HIV+ 3%

**HIV prevalence:**

- An estimated 770 King County residents are living with heterosexually-acquired HIV infection. In addition, among heterosexuals an estimated 440 HIV infections acquired infection through use of injection drugs and an estimated 50 infections are among heterosexuals who acquired HIV through receipt of blood products.

- The 770 estimated HIV infections among heterosexuals comprise roughly 0.1% of the King County heterosexual population in the age range of 15-69 years. Most HIV infections among the heterosexual population were acquired through injection drug use or blood exposure.

- Among both female and male non-drug-injecting heterosexual clients seen at the Harborview Sexually Transmitted Diseases (STD) Clinic from 1998-1999, the HIV prevalence was 0.3%. People attending an STD Clinic are at higher risk for HIV infection than the general population.
Figure 3: Number of new diagnoses of HIV among heterosexuals in King County (2002-2008) by zip code.
**Other measures of risk:**

- Sexually transmitted infections (STIs) are an indirect indicator of unprotected sexual activity that could result in transmission of HIV. Due to more acute onset of symptoms for most other STIs compared to HIV, these data may provide more timely information on behavioral trends in the community. The vast majority of gonorrhea and chlamydia infections in King County are heterosexually transmitted.

- In 2002, the reported rate of sexually transmitted gonorrhea in King County was 256 per 100,000 in 15-24 year-olds. The rate among 15-24 year-old blacks (1,329/100,000) was twelve times greater than that among whites (105/100,000) of the same age.

- In 2002, King County chlamydia rates were 1,347 per 100,000 persons aged 15-19 compared to 618 per 100,000 in 25-29 year-olds.

- In the HIV Testing Survey conducted at a local STD clinic in 2000, half of both men and women surveyed said they never used condoms during sexual intercourse with their heterosexual partner(s).