Facts about... HIV/AIDS in injection drug users

Summary: As in other cities in the western U.S., the number of HIV/AIDS cases among injection drug users (IDU) in the Seattle-King County area is far lower than among men who have sex with men (MSM). The percent of cases due to IDU decreased from 7% in 1999-2001 to 4% in 2005-07. Drug injection has a greater impact on HIV transmission for women compared with men and for People of Color compared to whites. This fact sheet focuses on heterosexuals whose primary HIV risk is injection drug use.

Population sizes:
- An estimated 15,000 King County residents inject drugs (excluding about 1,575 MSM/IDU).
- Based on estimates from reported cases, up to 440 HIV-infected heterosexual IDU reside in King County, or about 3% of all IDU.
- There are an estimated 680 HIV-infected men with a history of male-male sex and injection drug use, or 22% of MSM who ever injected. Most of these men are thought to have acquired HIV through sexual transmission rather than by sharing of injection equipment. More information on MSM/IDU can be found in the fact sheet for MSM.

HIV prevalence and incidence (Figure 2):
- Among the estimated 15,000 IDUs who reside in King County 440 (3%) are HIV-infected, and prevalence has remained low and stable over time. In unlinked surveys, 1.5% of over 7,000 IDU entering drug treatment from 1988-1999 tested positive for HIV with no change in HIV prevalence over time.¹ From 1994-2004 HIV prevalence measured in the RAVEN, Kiwi, and DUIT studies in 18-30 year old IDU was 2.6% and did not change over time.²
- Among 1,811 IDU recruited for the Kiwi Study in the two main King County jails from August 1998 to December 2002, HIV prevalence was 2.5% and HIV incidence was about 1% per year.³
- Among 589 IDU aged 15 to 30 recruited through outreach, advertising and referrals for the DUIT Study in King County from 2002-2004, HIV prevalence was 2.6% (no females were HIV-infected).⁴
- Evidence of the potential for explosive growth of HIV rates among IDU occurred in nearby Vancouver, BC (Canada) from 1994 to 1997 when HIV prevalence rose from 3% to 23%.
- Among King County IDU, the highest numbers of new HIV diagnoses are among residents of the downtown zip code 98104, followed by 98122.

Status and trends in HIV/AIDS cases (Figure 1):
- Among the 6,283 King County residents reported living with HIV/AIDS as of June 2008, 342 (6%) were IDU.
- The proportion of HIV/AIDS cases attributed to IDU who are not MSM has decreased from 7% of cases in 1999-2001 to 4% in 2005-07.
- IDU make up a smaller proportion of all AIDS cases in King County compared with other areas. In King County, 6% of AIDS cases are IDU, compared with 13% in Washington outside of King County, and 23% nationally.
- More IDU living with HIV in King County are male (225) than female (117). However IDU exposure makes up a higher proportion of total infections among females (19%) than males (4%).
- Non-whites with HIV are more likely to have IDU exposures than whites. People with histories of IDU make up 10% of HIV cases among blacks, 6% among Hispanics, and 23% among Native Americans, but only 4% among whites and 3% among Asians & Pacific Islanders.
HIV-related risk and preventive behaviors among IDU:
The Kiwi study surveyed 1,811 (77% men and 23% women) IDU from 1998-2002.3
- 26 (58%) of 45 IDU with HIV were aware of their HIV positive status.
- 89% reported a prior HIV test.
- The median age when study participants began injecting drugs was 19 years.
- In the past six months, 60% had injected with someone else’s used syringe, 71% had shared cookers, and 58% had backloaded (measuring and dividing drugs with a shared syringe).

The DUIT study surveyed 589 IDU (69% men and 31% women) aged 15-30 from 2002-2004.4
- 11 (73%) of 15 IDU with HIV knew their status.
- 82% reported a prior HIV test.
- The median age when study participants started injecting was 17 years.
- In the past three months, 49% had injected with someone else’s used syringe, 74% had shared cookers, and 68% had backloaded.

The National HIV Behavioral Surveillance (NHBS) system surveyed 371 IDU (77% males and 23% females) 18 years and older in the Seattle area in 2005 using respondent driven sampling (RDS).5
- 98% reported a prior HIV test (HIV testing was not included in the survey).
- In the past 12 months, 34% had injected with someone else’s used syringe, 62% had shared cookers, and 63% had backloaded.

Behavioral trends in 18–30 year old IDU in the RAVEN, KIWI and DUIT studies:2, 6
- The proportion of 18-30 year old IDU who primarily injected amphetamine rose from 7% in 1994 to 32% in 2003 while the proportion who primarily injected cocaine decreased from 19% in 1994 to 5% in 2003. The proportion who primarily injected heroin did not change.
- No significant changes were seen in injection with someone else’s used syringe from 1994-2004.
- The proportion of 18–30 year old IDU whose primary source of syringes was needle exchange rose from 48% in 1994 to 68% in 2004.
- The proportion of 18–30 year old IDU who reported at least one vaccination against hepatitis B increased from 20% in 1994 to 50% in 2004.
Figure 2: Number of new diagnoses of HIV among IDU in King County (2002-2008) by zip code

Newly diagnosed HIV/AIDS cases 2002 - 2008

IDU Exposure Category

- 0 - 2
- 3 - 7
- 8 - 19
- 20 - 24
Exposures to other blood-borne infections

Although HIV prevalence is quite low, King County IDUs acquire other blood-borne infections such as hepatitis B (HBV) and C (HCV). HBV and HCV incidence and prevalence indicate risk behaviors persist that can also spread HIV.

- In the RAVEN Study (1994–1997), antibody to HCV was present in more than 80% and antibody to HBV in about 60%. [Note that HBV and HCV are more easily transmitted than HIV.]
- In the RAVEN Study, 20% acquired HCV and 10% acquired HBV over a one-year period.
- HCV prevalence in 18 – 30 year old IDU decreased from 68% in 1994 to 32% in 2004 and HBV prevalence decreased from 42% in 1994 to 15% in 2004.

6. Recent Drug Abuse Trends in the Seattle-King Area, June 2005