

Facts about... HIV/AIDS in incarcerated people

Summary: Incarcerated populations tend to have a higher prevalence of HIV infection than the general population, in part because they are more likely to have engaged in high-risk behavior, such as injection drug use. Hepatitis C (HCV) infection, which is also spread by sharing injection equipment, is also common. Incarcerated people with HIV infection or HCV may have substantial health and medical care needs, and may put others at risk for becoming infected. Locally and nationally, jail prison populations continue to increase each year. An estimated 3-4% of inmates in King County jails have HIV infection. Because the average jail stay is short (there are no prisons in King County), close collaboration between jail and community services are particularly important to address prevention and health care needs, including substance use and mental health treatment in this high-risk population.

Jail and prison populations:

- The number and rate of people incarcerated in U.S. local jails and state and federal prisons has risen dramatically in recent years from 1,585,586 (601/100,000 population) in 1995 to 2,293,157 (756/100,000) in 2007.¹ Overall, 1 in 132 persons in the U.S. is incarcerated.
- The incarceration rate in state and federal prisons in 2007 was 69/100,000 for women and 955/100,000 for men. Incarceration rates were 6.5 times higher among black men and 2.6 times higher among Hispanic men compared to white men. Similar discrepancies exist among women.¹
- There were 17,772 persons under jurisdiction (not all were incarcerated) of state and federal prisons in Washington state by the end of 2007.¹
- The average daily King County adult detention population (includes inmates in the jails and inmates who are partially confined in Work Education Release or Electronic Home Detention) increased from 2,393 in 2003 to 2,726 in 2007. The average length of stay was 18.5 days in 2007.²

Prevalence and trends in HIV infection (Table 1):

- By year end 2006, 1.6% of male and 2.4% of female inmates in U.S. state and federal prisons were known to be HIV-infected.³ AIDS-related deaths comprised 34.2% of all deaths in 1995 and 4.6% of deaths in 2006 in these facilities.
- A total of 84 inmates or 0.5% of the corrections population in state and federal prisons in Washington were known to be HIV-infected by the end of 2006.³
- HIV prevalence was <1% in inmates entering Washington state prisons in the mid-1990s.
- King County jail staff estimate that on any given day about 3-4% of inmates are HIV positive.
- From 2005–2007, 52 of the 3,927 (1.3%) persons who tested while incarcerated in the King County jails were HIV positive. Newly diagnosed HIV infection was more common among males than females, and among those with dual male-male sex and injection drug use exposures.

Table 1: Results of HIV testing among persons incarcerated in King County (2005–2007)

Males: Risk Category	# Tested	# HIV positive	% HIV positive
Male-male sex (MSM) and IDU	327	13	4.0%
MSM	212	8	3.4%
Injection drug use (IDU)	929	9	0.9%
HIV+ or high-risk female partner(s) ¹	730	9	1.2%
Other risk or risk not identified ²	809	5	0.6%
Total, Males	3,007	44	1.5%
Females: Risk Category	# Tested	# HIV positive	% HIV positive
Injection drug use (IDU)	393	2	0.5%
HIV+ or high-risk male partner(s) ¹	234	3	1.2%
Other risk or risk not identified ²	293	3	1.0%
Total, Females	920	8	0.9%

¹Includes presumed heterosexual transmission.

²Transfusion recipients, and needle sticks or other blood exposure.

HIV and behavioral risks among IDU arrested in King County:

- Public Health – Seattle & King County conducted an interview and seroprevalence survey of IDUs who were recently arrested and booked into the King County adult correctional facilities in Seattle and Kent (the Kiwi Study).⁴ From 1998-2002, 1,811 persons (77% men, 23% women) participated in the study.
 - Forty-five (2.5%) of the 1,811 persons tested were HIV positive. HIV prevalence in male IDU with a history of sex with other men (MSM/IDU) was 9% compared to 2% in non-MSM male IDU, and 20% among MSM/IDU whose primary injection drug was amphetamine.
 - Of the 45 participants who tested positive, 26 (58%) were aware of their HIV infection.
 - 89% of participants reported a prior HIV test.
- The Kiwi Study showed injection risk behaviors prior to incarceration were common.
 - The median age when study participants began drug injection was 19 years.
 - In the past six months, 60% had injected with a needle that had been used by somebody else before them, 71% had shared cookers, and 58% had backloaded (using a common syringe to measure and divide drugs).
- The Kiwi Study also showed that sexual risks were common among the study participants.
 - Thirty-eight percent reported history of a sexually transmitted disease.
 - Twelve percent of male participants reported male-male sex, including six percent in the past year.
 - Fifty-five percent of female and twelve percent of male participants reported a history of sex work.

Other measures of risk:

- **Prevalence of drug injection behavior:** Information from various national studies and the local Kiwi Study estimate the prevalence of drug injection in jail populations between 12-20%.^{5,6}
- **Hepatitis C infection:** Hepatitis C infection is transmitted by sharing drug injection equipment and is very common among the IDU population in King County. In the Kiwi Study, 65% of participating IDUs had antibodies to hepatitis C.
- **Sexually transmitted infections (STIs):** Several studies have documented a high prevalence of STIs in incarcerated populations.^{7,8} In 2006, 4.5% of adult Chlamydia cases and 7.2% of adult gonorrhea cases diagnosed in King County residents were reported from correctional facilities in King County.
- **Tuberculosis (TB):** Studies have shown that rates of TB are higher in prison inmates than in the general population and that prison inmates are less likely to complete TB treatment,⁹ a disparate

number of people who are incarcerated are also at high risk of TB, including IDU, persons of lower socioeconomic status, and persons with HIV.

Additional information:

CDC recommendations for HIV testing in correctional facilities:

www.cdc.gov/hiv/topics/prev_prog/AHP/resources/guidelines/Interim_RoutineTest.htm

CDC recommendations for prevention and control of TB in correctional facilities:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5509a1.htm>

¹ Prisoners in 2007. US Department of Justice, Bureau of Justice Statistics Bulletin. See www.ojp.usdoj.gov/bjs/pub/pdf/p07.pdf

² King County Department of Adult and Juvenile Detention, See http://www.kingcounty.gov/courts/detention/administration/jail_stats.aspx#bookings

³ HIV in Prisons 2006. US Department of Justice, Bureau of Justice Statistics Bulletin. See www.ojp.usdoj.gov/bjs/pub/pdf/hivp06.pdf

⁴ HIV/AIDS Epidemiology Report, 1st Half, 2003, p. 25-35. See www.kingcounty.gov/healthservices/health/communicable/hiv/epi/reports.aspx

⁵ National Institute of Justice. Arrestee Drug Abuse Monitoring Program, Annual Report 2000 www.ncjrs.org/pdffiles1/nij/193013.pdf

⁶ National Institute of Justice. ADAM Preliminary 2000 Findings on drug Use and Drug Markets, Adult Male Arrestees. www.ncjrs.gov/pdffiles1/nij/189101.pdf

⁷ Kahn. Sex Transm Dis. 2004;31:360- 364.

⁸ Pathela P. Sex Transm Dis. 2007 Nov 5. [Epub ahead of print]

⁹ MacNeil JR. Am J Public Health. 2005;95:1800-1805.