



# Research at a glance

## Relationships between Lifetime Health Risk-Behaviours and Self-Reported Human Immunodeficiency Virus and Hepatitis C Virus Infection Status among Canadian Federal Inmates

**KEY WORDS:** *self-report, illicit drug use, risky sexual behaviour, HIV, HCV, inmates*

### Why we did this study

Previous research suggests that people may misreport undesirable, illegal, and/or stigmatizing characteristics, but that the accuracy of self-report can be improved by increasing the anonymity and confidentiality of the self-report process. This study was conducted to examine the accuracy of data collected in the National Inmate Infectious Diseases and Risk-Behaviours Survey (NIIDRBS).

### What we did

In collaboration with inmates and the Public Health Agency of Canada, Correctional Service Canada (CSC) developed a self-administered questionnaire that focussed on issues relevant to blood-borne and sexually transmitted infections, particularly human immunodeficiency virus (HIV) and hepatitis C virus (HCV). A random sample of men and all women were invited to complete the questionnaire. In total, 3,370 inmates across Canada voluntarily participated in 2007. To maximize the accuracy of the survey data, CSC emphasized confidentiality and anonymity by having an external private company administer, retain, and eventually destroy the anonymous paper questionnaires. Although an external criterion with which to assess inmate veracity is not available, information captured by the NIIDRBS allows for an examination of associations between self-reported lifetime health risk-behaviours (i.e., injection drug use and sex-trade involvement) and self-reported HIV and HCV infection status. Concordance with associations established in past research would increase confidence in the accuracy of NIIDRBS data.

### What we found

Among men, ever injecting drugs and ever being a sex-trade worker were associated with increased odds of self-reported HIV; and, ever injecting drugs was associated with increased odds of self-reported HCV.

Among women, insufficient HIV cases existed for analysis, but ever injecting drugs and ever being a sex-trade worker were associated with increased odds of self-reported HCV.

For both men and women, those reporting both ever injecting drugs and ever having sex with an injection drug user had an odds of self-reported HCV that was at least 35 times greater than those reporting neither risk-behaviour; an increase more than three times greater than that observed among inmates reporting injection drug use only.

After adjusting for both injection drug use and sex-trade risk-behaviours, Aboriginal women had an odds of self-reported HCV that was 1.80 times greater (95% CI: 1.15, 2.81) than that of non-Aboriginal women.

### What it means

Confidence in the accuracy of NIIDRBS data was strengthened when previously established relationships between health risk-behaviours and infection status were observed. The substantially elevated risk of self-reported HCV infection among inmates reporting both ever injecting drugs and ever having sex with an injection drug user may be related to the riskier injecting practices of couples who inject drugs, such as sharing injecting equipment not only within the relationship but also within a larger network of injection drug users. The elevated odds of self-reported HCV among Aboriginal women relative to non-Aboriginal women after adjusting for injection drug use and sex-trade risk-behaviours suggests there may be additional important factors associated with HCV infection that were not captured in these analyses and that differ between Aboriginal and non-Aboriginal women. In fact, previous findings from the NIIDRBS indicate that Aboriginal women may engage in riskier drug injecting and sexual behaviours compared to non-Aboriginal women. Efforts should continue to educate Aboriginal women about the risks associated with injecting drugs and risky sexual behaviour, and the harm-reduction options available.

### For more information

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