

# Canada: Study provides further evidence of risk of hepatitis C and HIV transmission in prisons

In 2002, as part of a larger injection drug use social network study undertaken in Winnipeg,<sup>1</sup> a study was undertaken at Stony Mountain Institution to obtain data on the social network interactions in the prison and the potential role these interactions have on facilitating or inhibiting the spread of bloodborne pathogens among injection drug users.<sup>2</sup> The study, although small in size and largely exploratory, provides further evidence of the risk of HCV and HIV transmission in prisons and its potential public health implications.

## The Winnipeg study

The study was undertaken as a sub-project within the Winnipeg Injection Drug Use Social Network Study, which was funded by Health Canada, carried out in Winnipeg in 2001/2002, and which aimed to provide pilot data on the social network interactions of Winnipeg injection drug users (IDU) and the potential role these interactions have on facilitating or inhibiting the spread of bloodborne pathogens among IDU.

During the course of the study, the investigators entered into discussions with staff at Stony Mountain Institution to discuss the possibility of doing a similar study within a correctional facility. Health Canada eventually gave approval to undertake this study. Because of the nature of the prison environment, where discussions of the behaviours of third parties can have serious safety implications, extensive modifications to the study questionnaire were required, and the types of questions about networks that were asked in prison were much more generic than those that could be asked in the community.

## The study at Stony Mountain

Forty of the 420 prisoners at Stony Mountain participated in the study. A mechanism was developed to allow individuals who had participated in

injection drug use to present for the study in as confidential a manner as possible. Because it was generally known that the study was focusing on drug use, most individuals presenting for study enrollment were current or former IDU. Therefore, as the authors point out, the sample is not representative of the general prison population, and should not be interpreted as such.

Participants provided background demographic data, as well as information on their knowledge with respect to risk factors for transmission of HCV and HIV and on their injection drug behaviours both within the prison and in the community immediately before their current prison term.

Ninety-seven percent of participants reported that they had ever injected drugs. Approximately half of them had injected during their present prison term, with seven reporting that they had stopped prior to entering prison, and 11 reporting that they had stopped as a result of being arrested or imprisoned. Smyth noted that the reasons for stopping injection drug use in prison have been insufficiently examined, and speculated that the lack of clean needles could be a component of this decision.<sup>3</sup> Therefore, the investigators asked individuals an open-ended question on why they had stopped injecting in prison. Reasons typically centered on a concern for their health and a desire to change their lives, or on problems associated with injecting in a

prison environment (eg, limited opportunities to inject, or drug availability and quality). Only one individual specifically reported he had stopped due to his inability to get clean injection equipment in prison and his resulting concern over HIV infection. Two participants reported that they had started injecting during a prison sentence, saying that they needed to be accepted or form a bond with others, or simply that "everyone else was using."

Frequency of injection in prison varied greatly. Slightly more than half of the 21 prison injectors reported relatively few injections (less than 30 times) during the previous six months, while others reported injecting more than 100 times. Drug injection frequency in the community was higher than in prison, but over half of participants said that outside they had never used someone else's needle. This is consistent with other studies in which many individuals who practised safer injection in the community started sharing needles in prison.

When asked about the number of individuals who were usually present when an individual injects drugs, respondents most commonly said three or more. Slightly less than half of individuals currently injecting in prison indicated they inject with more than one group or network of people in prison, with the numbers ranging from two to as many as six. This provides evidence of the numerous trans-

mission opportunities. The study investigators write:

With respect to drug use and transmission, the picture that emerges from the data is of a highly interconnected network of people. Many individuals frequently interact with different groups of inmates for injection purposes....

The movement of individuals (or needles) between different groups of people creates numerous “bridge” opportunities for pathogens to move between networks, resulting in a very high risk environment for transmission. In a community setting, it is known that pathogen transmission is most efficient within highly interconnected networks.”<sup>4</sup>

## Conclusions

Despite the small sample size of the study and its limitations, the study does provide yet more evidence of the potential for transmission of HIV and HCV in prisons. From a public health

perspective, it is particularly worrisome that the movement of individuals between different networks of people essentially creates either one or a few large, highly interconnected networks through which bloodborne viruses can be readily transmitted.

The study also explores the issue of whether making clean needles available in prisons could potentially lead to increased injection drug use. One of the prisoners interviewed reported that the lack of access to clean injection equipment was a factor in his decision to stop injecting. However, for the other prisoners who stopped injecting, their decision to stop was influenced by other factors. The authors conclude that “there is potential for some increase in the number of injectors as a result of the introduction of needle exchange,” but that “the reduction in the potential for transmission created by the availability of clean needles would likely out-

weigh any increased transmission potential created by increased injection drug use.”<sup>5</sup> It should be noted that the evaluations of existing prison needle exchange programs have found no evidence of increased drug use or increased drug injection.<sup>6</sup>

<sup>1</sup> JL Wylie et al. The Winnipeg social network injection drug use study: Project overview and analysis of gender- and ethnic-based differences in individual and social network drug use behaviours. Presented at CAHR 2002, abstract no 333P ([www.pulsus.com/cahr2002/abs/abs333P.htm](http://www.pulsus.com/cahr2002/abs/abs333P.htm)).

<sup>2</sup> JL Wylie. A pilot study assessing risk factors for hepatitis C and HIV transmission within a federal correctional institution. On file with author.

<sup>3</sup> BP Smyth. Many injectors stop injecting while imprisoned. *British Medical Journal* 2000; 321(7253): 1406.

<sup>4</sup> Wylie, supra, at 2 at 6, with reference to SR Friedman et al. Sociometric risk networks and risk for HIV infection. *American Journal of Public Health* 1997; 87(8): 1289-1296.

<sup>5</sup> Wylie, supra, note 2 at 10.

<sup>6</sup> See the reports by the Canadian HIV/AIDS Legal Network and the Ontario Medical Association, summarized above in the article entitled “Prison needle exchange programs work.”

# Canadian court orders remand centre to provide prescribed medication and permit consultation with outside physician

In two applications brought by Geary, a provincial prisoner, the Alberta Court of Queen’s Bench ordered the Edmonton Remand Centre to provide Geary with prescribed medication and to permit him to consult an outside physician.<sup>1</sup> In each application, Geary was asking the court on an urgent basis to order interim measures until such time as the court could hear his full application for release from custody. This decision has important implications for prisoners living with HIV/AIDS, some of whom report receiving medical treatment that does not meet professionally accepted standards. It is also significant that, in finding for the prisoner, the court refers to the Charter, the United Nations Standard Minimum Rules for the Treatment of Prisoners, and American constitutional case law.

## Application for access to pain medication

In 2000, Geary suffered serious burns to 60 to 70 per cent of his body. In 2002 his physician prescribed Dilaudid for pain, and a number of other medications. Geary was detained at the remand centre awaiting trial on a range of relatively minor charges. The institution’s physicians refused Geary’s requests for his pain