January 2008

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INMATES AND OFFENDERS

Background

The responsibility for corrections in Canada is shared by the federal, provincial and territorial governments. In 2001, the average count of adult offenders incarcerated in federal, provincial and territorial facilities was 32,073 (133/100,000). A further 122,870 adult offenders were under community supervision, including probation, conditional sentence and conditional release. Statistics on juvenile corrections are not routinely collected at the national level, but in 1994-95, 1,095 female young offenders were sentenced to secure custody, 1,795 were placed in open custody and another 6,952 were placed on probation; in 1996-97, 10,396 male young offenders were sentenced to secure custody, 11,541 were placed in open custody and 28,395 were placed on probation.

Although Aboriginal people constitute about 3% of the general population in Canada, they represent approximately 15% of the federal offender population. Women made up approximately 3% of the total incarcerated population in Correctional Service Canada (CSC) facilities in 2000–2001. Canada's incarceration rate is higher than that of many Western European countries, but is much lower than that of the United States.

Epidemiology

Inmates in correctional facilities around the world bear a disproportionate burden of illness related to infectious disease compared to the general population. As a result, rates of sexually transmitted infections (STIs), hepatitis B virus (HBV), hepatitis C virus (HCV) and HIV/AIDS are significantly higher among prison inmates. Often inmates belong to vulnerable populations in which high-risk behaviours for STI infection are present, such as injection drug use (IDU) and unprotected sexual intercourse.⁵ Although many inmates enter correctional facilities already infected, any inmate who engages in risky behaviours in prison is at risk of becoming infected with or re-infected with an STI.⁵ As of 2002, CSC estimated that 70% of the inmates who entered prison had self-identified drug- or alcohol-abuse problems.⁶ Although penetrative sexual activity is known to occur in correctional settings,⁷ it is likely underreported because it is often prohibited and may carry stigma.⁶ Non-consensual sexual activity may also be an issue.⁸ Other practices within the prison setting, such as IDU, tattooing and/or piercing, may contribute to the transmission of infectious diseases as well.⁶

In January 2000, CSC, in collaboration with Health Canada (now the Public Health Agency of Canada), introduced a comprehensive surveillance system to provide more accurate and extensive information about infectious diseases within federal correctional settings — the CSC Infectious Diseases Surveillance System (CSC-IDSS).⁵ The CSC-IDSS is based on aggregate data on testing and test results for blood-borne and sexually transmitted pathogens, and it allows CSC to monitor trends in prevalence among newly admitted and general-population inmates. According to CSC, a revised system, which includes line-listed risk behaviour and test-outcome data, is currently being implemented to better target harm-reduction programs.

Reported rates of infection in Canadian penitentiaries to 2002 are as follows:5,9,10

- HIV: *The prevalence of HIV among offenders in federal facilities increased steadily between 2000 and 2002, from 1.7% to 2.0%. In 2002, the rate was higher in women (3.7%) than in men (1.9%).
- HCV: *The prevalence of HCV among offenders in federal facilities increased from 2,542 cases (19.7%) in 2000 to 3,173 (25.4%) in 2002. In 2002, the rate was higher in women (33.7%) than in men (25.2%), but between 2000 and 2002, rates decreased for women and increased for men.
- HBV: †HBV prevalence among federal inmates in 2002 was 0.2%. There was a sharp increase from 2000 (0.1%) to 2001 (0.3%), but rates fell in 2002. Most cases identified were in men.
- Chlamydia: †There were 53 cases reported in 2002 (0.32% prevalence). The rate is increasing compared to 2000–2001. Over 90% of cases have been diagnosed in men.
- Gonorrhea: †There were 20 cases reported in 2002 (0.12% prevalence). The rate has increased compared to 2000–2001. About 85% of cases have been diagnosed in men.
- Syphilis: †There were three cases reported in 2002. The rate has increased compared to 2000–2001.

Notes:

*Testing uptake levels for HIV and HCV indicate that up to 70% of inmates may remain unscreened for these infections. As a result, reported rates may severely underestimate the true burden of disease within federal correctional facilities.

†Lack of reporting and underdiagnosis of HBV and STIs (including lack of routine screening for STIs) are likely to result in an underestimate of the actual rates of these infections in inmates.

Prevention

Correctional facilities in Canada are recognized as an important focus for public health measures to control STIs, HBV, HCV, HIV/AIDS and other infectious diseases. By its very nature, incarceration may offer one of the best opportunities to access high-risk individuals and provide them with the preventive services, treatment and skills necessary to stay healthy.⁵ Interventions are limited by the length of incarceration, but even brief counselling encounters can have a significant impact on risky behaviours. Since most inmates eventually return to the community, harm-reduction efforts within the correctional system can have favourable implications, not only for the inmate population but also for the wider community. For this reason, it is important to coordinate prevention activities with local public health officials and other community-based care groups. Discharge planning for infected inmates is also an important step in order to optimize the continuation of care for offenders outside the correctional setting.^{5,11}

Components to be considered for STI prevention programs within correctional facilities are similar to those in the community¹²: education; voluntary testing and counselling; distribution of clean needles or bleach; distribution of condoms; and drug-dependence treatment (including substitution treatment) have all have been proven effective in reducing HIV/STI risk in prisons and have been shown to have no unintended negative consequences.¹² The appropriate care, treatment and support of inmates with STIs helps prevent transmission of these infections. This includes partner notification, as well as testing and treatment of recent sexual contacts.

It is important to include the issues of alcohol and drug use in educational efforts, acknowledging their contribution to heightened risk for STIs and other infections. Harm-reduction education to minimize the negative consequences of risky behaviours and provide alternatives can impact favourably on the transmission of STIs and other infections. CSC currently has a number of health-education and peer-counselling support programs to disseminate information and encourage behaviour modification.

As part of the Canadian Strategy on HIV/AIDS and in partnership with the Public Health Agency of Canada, CSC has implemented several initiatives aimed at preventing and controlling the transmission of infectious diseases (including STIs, HIV, HBV and HCV) within federal correctional facilities. ¹⁴ These include confidential, voluntary testing for inmates on admission and throughout their incarceration, as well as pre- and post-test counselling. ¹⁴ Serological testing and immunization for hepatitis A (HAV) and HBV are offered. Educational programs and materials are provided for offenders and staff. ¹⁴

In 1992, condoms, dental dams and water-based lubricants were introduced into federal penitentiaries.⁵ CSC has also initiated a national drug strategy aimed at controlling the supply of drugs in federal institutions. Its goal is to reduce the demand for drugs among federal offenders by implementing prevention and treatment programs,⁶ such as methadone maintenance treatment and substance-use programs.¹⁴ CSC currently provides bleach kits to inmates for cleaning needles and most recently has instituted a pilot project of tattoo parlours in six federal prisons. Currently, CSC does not provide needle-exchange services to inmates, citing its zero-tolerance policy toward drug use and trafficking in prison, as well as concerns about the health of inmates and the security of the institution. Discussions between CSC and the Public Health Agency of Canada about possible collaborative projects in federal correctional facilities are underway.

Evaluation

Health care professionals may be reluctant to ask and offenders may be reluctant to disclose information about their health, especially when issues such as sexual activity, substance use and possible illegal activities are involved. It is essential that the confidential nature of the interaction be stressed so that a true understanding of a patient's risk for STIs and other infections can be gained.

History

A complete sexual history should be taken (see *Primary Care* and *Sexually Transmitted Infections* chapter).

It is important to be aware that self-identified sexual identity is not an accurate predictor of sexual behaviour.⁸ Although some inmates may consider themselves heterosexual, they may have been involved in sexual activity with members of the same sex (either prior to and/or during incarceration). Therefore, it is essential that a basic sexual history include questions about opposite-sex and same-sex activity. This can be achieved by asking open-ended questions such as: "Do you have sex with men, women or both?" For a more complete discussion of this topic, see *Men Who Have Sex with Men/ Women Who Have Sex with Women* chapter.

Patients engaging in practices (both sexual and non-sexual) that are associated with an increased risk for STIs need to be identified. Such practices include the following:

- Receptive and insertive anogenital intercourse.
- · Oral-anal intercourse (anilingus/rimming).
- Unprotected sexual activity (oral, anal, or genital)
- Sharing of sex toys
- Receptive manual-anal intercourse (insertion of finger or fist in anus of partner).
- Substance use accompanying sex.
- Tattooing.
- IDU and other substance use.

Because of the high prevalence of substance use in correctional settings, a substance-use history should also be taken (see *Substance Use* chapter).

Screening

Voluntary testing offered to new admissions to the correctional system may be one of the best opportunities for screening and identifying prevalent infections among offenders.⁵ Non-invasive tests such as urine nucleic acid amplification testing (NAAT) has made STI screening in correctional facilities more available and acceptable,⁵ but anecdotal reports suggest that this has not translated into higher rates of uptake.⁵ One possible explanation may be inmates' reluctance to submit urine, as urine testing is typically associated with testing for drug use, something inmates may be anxious to hide. A detailed explanation of the testing procedure may help to overcome this hurdle.

Whether for a new admission or not, greater use of routine testing for inmates at risk is needed,⁵ especially given the often asymptomatic nature of STIs. This highlights the importance of the sexual history for identifying those at risk (see *Primary Care* and *Sexually Transmitted Infections* chapter). Collaborations involving corrections, public health officials and evaluators have been shown to facilitate increased STI screening in inmates.¹⁵

Pre- and post-test counselling for positive and negative results is essential and should reflect the primary public health purposes of counselling and testing: to help non-infected individuals initiate and sustain behaviour changes to reduce their risk of infection and to help infected individuals seek health care and avoid infecting others.⁸

Based on the results of the history/risk assessment, the following screening should be considered for inmates and offenders:

- Routine STI screening at all potential sites of infection: chlamydia, gonorrhea, syphilis, HIV and HBV (if not already immunized or known to be immune).
- Testing for herpes simplex virus, if symptoms are present (see *Genital Herpes Simplex Virus Infections* chapter).
- HCV serology: IDU, tattooing and high-risk sexual practices are known risk behaviours associated with the transmission of HCV in the prison/inmate population.⁶
- For those with identified risk, screen for HAV immunity prior to vaccination.

For specific screening considerations in men who have sex with men and women who have sex with women, see *Men Who Have Sex with Men/Women Who Have Sex with Women* chapter.

Cervical screening for dysplasia and/or human papillomavirus (HPV) infection in female inmates should be considered if there is no evidence of screening with a normal result within the previous year (see *Genital Human Papillomavirus Infections* chapter).

Specimen Collection and Lab Diagnosis

In the correctional setting, the rapid turnover and transfer of offenders within institutions, especially at reception and among temporary detainees (those returning from parole), may limit the time available to diagnose and treat an STI. For this reason, rapid point-of-care testing may be especially relevant.

Urine-based testing is generally more acceptable than more invasive urethral or cervical swabs, but its association with drug testing may make inmates reluctant to provide a sample. A discussion of exactly what the urine is being tested for may facilitate acceptance by inmates.

Management and Treatment

In the correctional setting, the rapid turnover and transfer of offenders within institutions, especially at reception and among temporary detainees (those returning from parole), may limit the use of longer-term treatment regimens. In these cases, single-dose therapies for the treatment of STIs may be more appropriate.

Reporting and Partner Notification

According to a CSC infection control directive, CSC physicians or the Chief of Health Services on behalf of a physician must ensure that all diagnosed provincially reportable communicable diseases are reported to the local public health unit or the appropriate public health office.

Partner notification is a major component of STI follow-up. However, inmates who test positive for an STI may be reluctant to disclose information about contacts or behaviours that may be deemed inappropriate, illegal or stigmatized. It is critical to ensure that the partner-notification process is voluntary and non-coercive, preserving confidentiality and trust and respecting the dignity and human rights of the individual.⁸

Follow-up

Inmates who continue to engage in risky behaviour should be encouraged to be screened regularly for STIs. Safer sex and harm-reduction education and counselling should continue to be emphasized.

If HAV and HBV vaccination have been initiated, the vaccination schedule should be completed as recommended.

As for all women, female inmates should have regular cervical screening for dysplasia and/or HPV infection as appropriate.

It is important that correctional services work in concert with local public health officials to follow up when appropriate with offenders who have been released to the community (i.e., referral/reporting to public health of unmanaged cases and contacts released to or residing in the community).