



Prison Needle Exchange: Lessons from a Comprehensive Review of International Evidence and Experience

Second Edition, 2006



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Prison Needle Exchange:

**Lessons from a Comprehensive Review of
International Evidence and Experience**

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Prison Needle Exchange: Lessons from A Comprehensive Review of International Evidence and Experience

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Prison Needle Exchange: 2006 update to first edition

This section updates developments since April 2004, when the first edition of *Prison needle exchange: lessons from a comprehensive review of international experience and evidence* was completed. There have been a number of significant developments, both in Canada and internationally, which support the evidence, analysis and findings presented in the first edition of the report. Internationally, we present and review evidence from existing prison needle exchange programs (PNEPs) and report on additional countries that have implemented or are planning to implement such programs. Regarding Canada, we review research concerning the association between injection drug use, incarceration and the transmission of blood-borne pathogens. We report on recent recommendations from the medical community and a prison ombudsperson calling for pilot PNEPs, and on initiatives within the Canadian government to study the feasibility of piloting PNEPs.

International developments

The six countries featured in the previous edition of the report

The first edition of the report examined PNEPs in Switzerland, Germany, Spain, Moldova, the Kyrgyz Republic and Belarus. There is new information or documentation relating to the experiences in five of those countries.

- In *Switzerland*, as of 2006, distribution of sterile needles was being undertaken in seven prisons in different parts of the country.¹
- An article published in December 2005 reports findings from one of the most systematic studies undertaken to date on the effectiveness of needle exchange programs.²

The study was carried out in two prisons in *Germany* from October 1998 to June 2001 — a men’s prison and a women’s prison in Berlin. Any prisoner who had ever used illegal drugs was eligible to participate in the study. Study participants were tested for HIV, the Hepatitis B virus (HBV) and the hepatitis C virus (HCV) when they enrolled and at four-month intervals thereafter, making this one of the only studies to rigorously examine the relationship between prison needle exchange and seroconversion.

Needles were distributed by automatic dispensing machines in the women’s prison and by a non-governmental organization using hand-to-hand exchange in the men’s prison.

- Of the 213 people who were incarcerated in the two prisons during the study period, 174 participated in the study. Of the participants, 91 percent reported injecting in the six months prior to their enrolment. Seventy-one percent of prisoners who had previously injected in prison reported syringe sharing in prison prior to their enrolment in the study. Significantly, injection drug use during a term of imprisonment prior to the study period was found to be an independent predictor of HIV and HCV infection.
- During the course of the study, 67 percent of women and 90 percent of men continued to inject, with reported injection of both heroin and cocaine. However, the authors report “an impressive reduction of syringe sharing”: syringe sharing decreased to 11 percent at month four of the study, two percent at month eight, and zero percent in subsequent follow-ups. During the course of the study, no HIV or HBV seroconversions were observed. However, four out of 22 people who were HCV negative at the outset of the study seroconverted. Three of these prisoners reported sharing paraphernalia in the preparation of drugs.
- There were no adverse events (e.g. overall increase in injection drug use, violence involving needles against staff or other prisoners) observed during the study period. The limitation of the study was the relatively short time during which follow-up was conducted (a median of 12 months), which did not allow the authors to assess long-term preventative effects of the needle exchange program.
- In *Spain*, as of late 2005, needle exchange programs were operating in 38 prisons.³
- In the *Republic of Moldova*, it has recently been reported that the total number of syringes exchanged has grown from 3650 in 2000–2001 to 37 813 in 2003–2004 and 61 433 in 2004–2005.⁴ Moreover, prisons with needle exchange programs report few incidents of needle sharing.⁵
- Further documentation of the *Kyrgyz Republic*’s experience with prison needle exchange was published in 2005⁶

A number of evaluations of prison needle exchange programs in different countries have now been reported. The results are summarized in the table below.

Sample Evaluations of Prison Needle Exchange Programs⁷

Prison, Country	Incidence of HIV/HCV	Needle Sharing	Drug Use	Injecting
Am Hasenberge (Germany)	no data	strongly reduced	no increase	no increase
Basauri (Spain)	no seroconversion	strongly reduced	no increase	no increase
Hannöversand (Germany)	no data	strongly reduced	no increase	no increase
Hindelbank (Switzerland)	no seroconversion	strongly reduced	decrease	no increase
Berlin (Lehrter Strasse and Lichtenberg, Germany)	no HIV but HCV	strongly reduced	no increase	no increase*
Lingen I (Germany)	no seroconversion	strongly reduced	no increase	no increase
Realta (Switzerland)	no seroconversion	single cases	decrease	no increase
Vechta (Germany)	no seroconversion	strongly reduced	no increase	no increase
Vierlande (Germany)	no seroconversion	little change or reduction	no increase	no increase

* 2 people who had previously only inhaled heroin reported injection drug use on single occasions.

Additional countries

Since the publication of the first edition of the report, five jurisdictions have introduced prison needle exchange programs or taken steps towards doing so.

- In 2006, *Armenia* began needle exchange in prison with funds from the Global Fund to Fight AIDS, Tuberculosis, and Malaria, with three of nine harm reduction programs in penal institutions exchanging needles.⁸
- In *Iran*, two limited needle exchange programs are being prepared, with plans to expand these programs to all prisons.⁹
- In 2005, the State Department for Enforcement of Sentences in *Ukraine* decided that it would start prison needle and syringe pilot programs in two prisons and selected two colonies — colony #48 in Lviv and colony #53 in Mykolaiv — as the sites of the pilot projects. In preparation for the start of the projects in 2006, a conference and three training sessions on needle and syringe programs were organized in November and December 2005. Two of the training sessions took place with staff from the two colonies where the pilot projects will take place.¹⁰ A comprehensive monitoring and evaluation framework was developed and, in early 2006, NGOs were selected to assist with the implementation of the pilot projects. However, for political reasons, the start of the pilot projects may be delayed.

Canadian developments

Further evidence of injection-related risk behaviours during incarceration

In the past three years, researchers with the Vancouver Injection Drug Users Study (VIDUS) have published a number of peer-reviewed articles that further illustrate the relationship among injection drug use, imprisonment and HIV status.¹² Since its inception in 1996, the VIDUS study has enrolled over 1500 people who inject drugs, over 1000 of whom report that they have been incarcerated at least once since they first began injecting drugs. Of those who had spent time in prison, 351 people reported that they had injected drugs while incarcerated.¹³ A 2003 article reported that VIDUS study participants who had recently been incarcerated were 2.7 times more likely to become HIV-positive than those who had not been to jail or prison.¹⁴ An external evaluation of the attributable risks reported in that study concluded that 21 percent of the HIV infections among injection drug users in Vancouver were likely acquired in prison.¹⁵ The VIDUS researchers subsequently analyzed syringe sharing in prison.¹⁶ They found that incarceration in the six months prior to being interviewed was associated with syringe lending by HIV-positive VIDUS study participants during that period. Similarly, among HIV-negative participants, incarceration in the six months prior to being interviewed was associated with syringe borrowing during that period.

VIDUS researchers have also published qualitative evidence regarding injection drug use by VIDUS study participants during periods of incarceration.¹⁷ The small-scale study of recently released prisoners confirmed the previous reports that injecting within the prison environment is characterized by a pattern of syringe sharing among large networks composed of numerous individuals. The study also found that due to the scarcity of syringes, and out of fear of not being able to obtain syringes from other prisoners, HIV-positive prisoners conceal their status from injection partners. Study participants also indicated that bleach distribution is an incomplete solution. Given the illegality of drug use and the possibility of being caught by prison officials, drug injection is often hurried and prisoners generally do not decontaminate needles with bleach because this would take too long to complete. The authors conclude:

Considering the increasing prevalence of blood-borne viruses, the high levels of syringe sharing documented and the fact that prison-based syringe exchange programs have demonstrated positive impact in other contexts, the potential of a program to provide sterile syringe access for Canadian inmates merits exploration.¹⁸

Another peer-reviewed article, published in 2005, reports on a study of female prisoners in a British Columbia institution in which both provincial and federal prisoners were incarcerated.¹⁹ Of the 104 prisoners who participated in the study, 74 percent reported that their current prison sentence was related to drug use, 94 percent reported illegal drug use prior to incarceration, and 65 percent reported injection drug use prior to incarceration. Twenty-one percent (22/104) of prisoners reported injection drug use inside prison; of this number, 91 percent (20/22) reported being HCV seropositive. Two prisoners reported being both HCV and HIV seropositive. Nineteen of twenty-two prisoners who reported injecting while in prison reported sharing a syringe with other prisoners, and three reported not cleaning used syringes with bleach. Self-reported HIV and HCV infection rates among the prisoners were 8 percent and 25 percent, respectively. The authors conclude:

In British Columbia, as in the rest of Canada, imprisoned injection drug users are not able to access sterile injection equipment, which undermines harm reduction

initiatives occurring in local communities. The data from our study suggest that needle exchange programs, modeled on the European experience, could be piloted and evaluated in Canadian prisons, in an attempt to reduce the prison transmission of bloodborne pathogens.²⁰

Evidence concerning institutional safety

Shortly after the release of the first edition of the report, one of the report's authors filed with the Correctional Service of Canada (CSC) an access to information request regarding needle-stick injuries and the use of needles in assaults in federal prisons. The response to the request covered the period from 1 April 2000 to approximately the end of November 2004. During that time, correctional officers in CSC institutions reported 95 accidental needle stick injuries, evidencing the workplace health and safety threat posed by illicit needles already present in CSC institutions. There were *no reports* of a needle being used as a weapon in an assault on a correctional officer or another CSC staff member, out of a total of 1999 assaults reported during the aforementioned time period.²¹

Support for prison needle exchange programs

Two Canadian medical associations have now stated their support for prison needle exchange programs. In October 2004, the Ontario Medical Association (OMA) published *Improving Our Health: Why is Canada Lagging Behind in Establishing Needle Exchange Programs in Prisons?*²² Overall, the report analyzes the same evidence set out in the first edition of this report and arrives at the same conclusions. The OMA makes 11 recommendations, directed at CSC and the Ontario Ministry of Community Safety and Correctional Services, or both. Foremost among the recommendations is the call for CSC to “implement in as timely a manner as possible” at least one pilot needle exchange program in each CSC administrative region, and the call for Ontario to implement a program in “as timely a manner as possible.”

In August 2005, the Canadian Medical Association passed the following resolution at its annual meeting:

The Canadian Medical Association recommends that Correctional Service of Canada develop, implement and evaluate at least one pilot needle exchange program in prison(s) under its jurisdiction.²³

In December 2005, the Canadian Centre on Substance Abuse released a new paper in which, although it does not expressly endorse prison needle exchange programs, it concludes that

the prevalence of injection drug use, needle sharing and infectious diseases in Canadian prisons, the demonstrated effectiveness of needle exchange programs for reducing the spread of diseases among people who use drugs by injection, the positive experiences with prison-based needle exchange programs in other countries, the compelling legal/constitutional and moral/ethical arguments in regard to the responsibility of governments to provide equivalent preventative health care to prisoners, and the danger from the spread of infectious diseases to both prisoners and the community all provide ample justification for the government to *consider* implementing pilot studies to assess the effectiveness and feasibility of prison-based needle exchange programs in the near future.²⁴

In his 2003/2004 Annual Report, the Correctional Investigator of Canada, who is the legislatively mandated ombudsperson for federal prisons, called for the introduction of a PNEP.

The Correctional Investigator commented on the health advantages of needle exchange programs and found that, “the prohibition of drug injection, and the resulting clandestine use of scare injection tools, have resulted in great harm” to federal prisoners.²⁵ Accordingly, he made the following recommendations:

CSC introduce, before March 31, 2005, a safe needle exchange program based on thorough consultation with medical and security experts, offenders, CSC staff and concerned community organizations. Failing a positive response from CSC, the Minister direct the introduction of such a program.²⁶

Recognition that prisoner health is public health

Since the release of the original report, CSC has embraced the view that prisoner health is public health, and has taken the position that the Public Health Agency of Canada (PHAC) is primarily responsible for addressing the public health needs of all Canadians, including prisoners.²⁷ In April 2005, PHAC and CSC entered into a memorandum of understanding regarding the potential introduction of needle exchange programs in federal correctional institutions.²⁸ Under the memorandum, PHAC undertook to:

- provide scientific, medical and technical advice on the effectiveness of needle exchange programs in prisons, from a public health perspective;
- analyze published and unpublished evaluations concerning the effectiveness of prison needle exchange programs; and
- analyze the potential risks and benefits of introducing needle exchange programs in Canadian prisons.

PHAC was expected to have delivered its report, including advice and recommendations, to CSC by August 2005. As of 1 April 2006, it had not done so.

A renewed call for pilot projects

The relatively little experience available appears to show that, where risks are great, such as in countries with high prevalence rates of HIV and hepatitis, carefully introducing a syringe- and needle-exchange programme would be justifiable based on the experience already available . . . When prison authorities have any evidence that injecting is occurring, they should consider an exchange scheme, regardless of the current prevalence of HIV infection.²⁹

The evidence and experience of PNEPs presented in this update is consistent with the evidence and analysis in the first edition of the report. Prison needle exchange programs:

- are safe;
- do not lead to increased drug use;
- do not condone illegal drug use or undermine abstinence-based drug treatment programs;
- have been successfully introduced in a range of prison environments;
- reduce risk behaviours, prevent disease transmission, and otherwise improve the health of prisoners who inject drugs;
- are most effective when prison administration, staff and prisoners support them; and
- are best introduced as pilot projects. Despite the overall robustness regarding the find-

ings on the feasibility and efficacy of PNEPs, there are also several limitations of existing studies, and gaps in knowledge. Accordingly, evaluations of future pilot PNEPs should seek to gather reliable information on a range of relevant indicators before, during and after implementation of the program. The purpose of such information collection would be to document and analyse changes associated with the needle exchange program, compare the 'positive' and 'negative' effects, and make a determination as to whether the positive effects (e.g. a reduction in the amount of needle sharing and disease transmission, etc.) outweigh the negative effects (e.g. prisoners being introduced to, returning to, or increasing injecting because of the availability of needles, etc.). Yet, it must be remarked that there are legal, ethical and logistical obstacles to undertaking such scientifically rigorous research in the prison setting.

At the same time, it is important to recognize that the limited implementation of PNEPs is not attributable to a lack of adequate research data. In many countries, including Canada, there has been a lack of political leadership and political will to provide prisoners with the means to protect their health. Increasing the quantity of the same type of existing research is unlikely to lead to an increase in the likelihood of PNEP implementation. Yet, rejecting PNEPs because of the limitations of studies undertaken thus far would ignore the preponderance of evidence and be "both poor scientific judgment and bad public health policy."³⁰

The best available evidence strongly suggests that in countries where prison needle exchanges exist, many cases of HIV transmission have been prevented. In countries where injection drug use contributes to HIV prevalence and in which prisoners do not have access to sterile injection equipment, the evidence strongly suggests that countless people have become infected with HIV as a result of sharing injection equipment in prison, even though the means to prevent many of those infections are available and have been proven to be feasible and effective. This represents not only a human tragedy, but also a gross infringement by governments of prisoners' rights to the highest attainable standard of physical and mental health.

- Ralf Jürgens & Glenn Betteridge, April 2006.

¹ Canadian HIV/AIDS Legal Network. "Needle and syringe programs." *HIV/AIDS in prisons in Central and Eastern Europe and the former Soviet Union* Info Sheet No. 6. 2006.

² K Stark et al. A syringe exchange programme in prison as prevention strategy against HIV infection and hepatitis B and C in Berlin, Germany. *Epidemiology and Infection* 22 December 2005: 1 - 6. Electronic publication ahead of print.

³ Canadian HIV/AIDS Legal Network.

⁴ L Pintilei. Harm reduction in prisons of Republic of Moldova. Presentation at HIV/AIDS in Prisons in Ukraine – From Evidence to Action: Prevention and Care, Treatment, and Support, 1-2 November 2005, Kiev, Ukraine.

⁵ Ibid.

⁶ D Wolfe. *Pointing the Way: Harm Reduction in Kyrgyz Republic*. Harm Reduction Association of Kyrgyzstan. 2005.

⁷ H Stöver, J Nelles. 10 years of experience with needle and syringe exchange programmes in European prisons: A review of different evaluation studies. *International Journal of Drug Policy* 2003; 14: 437-444; S Rutter et al. *Prison-Based Syringe Exchange Programs. A Review of International Research and Program Development* (NDARC Technical Report No. 112). National Drug and Alcohol Research Centre, University of New South Wales. 2001; K Stark; G Thomas. *Assessing the need for prison-based needle exchange programs in Canada: a situational analysis*. Ottawa: Canadian Centre on Substance Abuse, 2005, available at www.ccsa.ca/NR/rdonlyres/62CB53B4-F416-455E-8069-9561275C1931/0/ccsa0113242005.pdf.

⁸ Personal communication with Daniel Wolfe, International Harm Reduction Development Program, Open Society Institute, 1 February 2006.

⁹ P Afshar. From the assessment to the implementation of services available for drug abuse and HIV/AIDS prevention and care in the prison setting: the experience of Iran. Presentation. 2005.

¹⁰ Canadian HIV/AIDS Legal Network.

¹² For a review of relevant research by VIDUS researchers, see W Small et al. Injection drug use, HIV/AIDS and incarceration: evidence from the Vancouver Injection Drug Users Study. *HIV/AIDS Policy & Law Review* 2005; 10(3): 1, 5-10.

¹³ E Wood et al. Recent incarceration independently predicts syringe sharing among injection drug users. *Public Health Reports* 2005; 120(2): 150-156.

¹⁴ MW Tyndall et al. Intensive injection cocaine use as the primary risk factor in the Vancouver HIV-1 epidemic. *AIDS* 2003; 17(6): 887-93.

¹⁵ H Hagan. The relevance of attributable risk measures to HIV prevention planning. *AIDS* 2003; 17(6): 911-3.

¹⁶ E Wood et al. Recent incarceration independently predicts syringe sharing among injection drug users. *Public Health Reports* 2005; 120(2): 150-156.

¹⁷ W Small et al. Incarceration, addiction and harm reduction: inmates' experiences injecting drugs in prison. *Substance Use and Misuse* 2005; 40(6): 831-843.

¹⁸ *Ibid.* at 841.

¹⁹ RE Martin. Drug use and risk of bloodborne infections. *Canadian Journal of Public Health* 2005; 96(2):97- 101.

²⁰ *Ibid.* at 100.

²¹ Correctional Service of Canada, Access to Information and Privacy Division file No A-2004-00428. The access to information request and response are on file with the authors of this section, Ralf Jürgens and Glenn Betteridge.

²² Ontario Medical Association. *Improving Our Health: Why is Canada Lagging Behind in Establishing Needle Exchange Programs in Prisons?* October 2004. Available at www.oma.org/phealth/omanep.pdf.

²³ Resolution 26 of 15 August 2005, available at www.cma.ca/index.cfm/ci_id/45252/1.htm.

²⁴ G Thomas at 19.

²⁵ Correctional Investigator Canada. *Annual Report of the Correctional Investigator 2003-2004*. June 2004. Available at www.oci-bec.gc.ca/reports/pdf/AR200304_e.pdf.

²⁶ *Ibid.*

²⁷ Various correspondence between Canadian HIV/AIDS Legal Network and Correctional Service of Canada, on file with the authors.

²⁸ A copy of the Memorandum of Understanding was obtained under access to information legislation, and is on file with the authors.

²⁹ World Health Organization (Europe). *Status paper on prisons, drugs and harm reduction*. May 2005, at 12. Available at www.euro.who.int/document/e85877.pdf.

³⁰ World Health Organization. *Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users*. 2004, at 6, quoting J Normand, D Vlahov, LE Moses (eds). *Preventing HIV transmission: the role of sterile needles and bleach*. Washington DC: National Academy Press, 1995.



Executive Summary

This report examines the issue of prison needle exchange based upon the international experience and evidence current to 31 March 2004. Evidence was gathered over an 18-month period beginning in October 2002. The authors undertook a literature review, visited prisons in four countries, and corresponded with people responsible for administering prison needle exchange programs. The report provides a comprehensive review of the evidentiary and legal basis for prison needle exchange programs. The goal of this report is to encourage prison systems with HIV and HCV epidemics driven by injection drug use to implement needle exchange programs.

The goal of this report is to encourage prison systems with HIV and HCV epidemics driven by injection drug use to implement needle exchange programs.

Injection drug use, HIV, and HCV are prison epidemics

The need for an effective response to the issues of HIV, hepatitis C virus (HCV), and injection drug use in prisons is a significant international concern. In many countries of the world, including Canada, rates of HIV and HCV infection in prison populations are much higher than those found in the general population. In many countries, the epidemics of HIV and HCV in prison are integrally related to injection drug use and to unsafe injection practices, both in the community and in prisons. In many countries, legal prohibitions against drug use and increased law enforcement have resulted in the systematic incarceration of people who inject drugs, thereby increasing the number of injectors in prisons, where there is a great likelihood of needle sharing due to a lack of access to sterile needles.

The failure to provide access to essential HIV and HCV prevention measures to prisoners is a violation of prisoners' right to health in international law.

Prisoners' right to health

The failure to provide access to essential HIV and HCV prevention measures to prisoners is a violation of prisoners' right to health in international law. Moreover, it is inconsistent with international instruments that deal with rights of prisoners, prison health services, and HIV/AIDS in prisons, including the United Nations' Basic Principles for the Treatment of Prisoners, the World Health Organization's (WHO) Guidelines on HIV Infection and AIDS in Prisons, and UNAIDS documents.

In Canada, it has been argued that both the Charter of Rights and Freedoms and the Corrections and Conditional Release Act guarantee prisoners a standard of health services equivalent to that in the general community, which includes access to adequate HIV prevention measures such as sterile needles. The call for implementation of prison needle exchange programs within Canada has been made by numerous community-based organizations, policy and research reports, and working groups of the Correctional Service of Canada.

Needle exchange programs are an effective harm-reduction measure

Needle exchange programs have proven to be an effective harm-reduction measure that reduces needle sharing, and therefore the risk of HIV and HCV transmission, among people who inject drugs and their sexual partners. As a result, many countries have implemented

Switzerland, Germany, Spain, Moldova, Kyrgyzstan, and Belarus have extended needle exchange programs into prisons.

these programs within community settings to enable people who inject drugs to minimize their risk of contracting or transmitting HIV and HCV through needle sharing. Despite the success of these programs in the community, only six countries (Switzerland, Germany, Spain, Moldova, Kyrgyzstan, and Belarus) have extended needle exchange programs into prisons. Other countries, including Kazakhstan, Tajikistan, and Ukraine may follow soon.

Since 1992, needle exchange programs have been implemented in prisons in these countries, and in each case needle exchange programs were introduced in response to significant evidence of the risk of HIV transmission within the institutions through the sharing of syringes.

Prison needle exchange programs have been implemented in both men's and women's prisons, in institutions of varying sizes, in both civilian and military systems, in institutions that house prisoners in individual cells and those that house prisoners in barracks, in institutions with different security ratings, and in different forms of custody (remand and sentenced, open and closed). Needle exchanges were typically implemented on a pilot basis, and later expanded based on the information learned during the pilot phase. Several different methods of syringe distribution are employed, based on the specific needs and the environment of the given institution. These methods include automatic dispensing machines; hand-to-hand distribution by prison physicians/health-care staff or by external community health workers; and programs using prisoners trained as peer outreach workers.

Lessons learned from prison needle exchange programs

The experience and evidence from the six countries where prison needle exchange programs exist demonstrate that such programs:

- do not endanger staff or prisoner safety, and in fact, make prisons safer places to live and work;
- do not increase drug consumption or injecting;
- reduce risk behaviour and disease (including HIV and HCV) transmission;
- have other positive outcomes for the health of prisoners;
- have been effective in a wide range of prisons; and
- have successfully employed different methods of needle distribution to meet the needs of staff and prisoners in a range of prisons.

Recommendation

This report makes one recommendation, directed at government and prison officials in Canada: Both federal and provincial/territorial correctional services in Canada should immediately take steps to implement multi-site pilot needle exchange programs. Although the last chapter (“Needle Exchange Programs Should Be Implemented in Prisons in Canada”) focuses on Canada, this recommendation also applies to other countries in which prison systems face HIV and HCV epidemics driven by injection drug use.

What does this report contain?

The first chapter (Prisoner Health Is a Public Health Issue) provides an introduction to the issue of prisoner health and needle exchange in prisons in the context of injection drug use, HIV, and HCV in prison. The second chapter (Methodology) reviews the methods used to gather evidence for the report. The third chapter (HIV and HCV Epidemics in Prison) summarizes evidence of HIV and HCV prevalence, injection drug use, and needle sharing in prisons worldwide. The Canadian evidence is reviewed in greater detail. The fourth chapter (Human Rights and Legal Standards) sets out the human rights, legal standards, and guidelines relevant to injection drug use, HIV, and HCV in prisons. The legal obligation of governments to respect, protect, and fulfill prisoners’ right to health, including the right to preventive health measures, is examined. The specific legal context in Canada is also examined. The fifth chapter (Review of International Evidence of Prison Needle Exchange) reviews the experience and evidence from the six above-mentioned countries with prison needle exchange programs that were studied for this report – Switzerland, Germany, Spain, Moldova, Kyrgyzstan, and Belarus. For each country the review includes, where available, epidemiological information about HIV and HCV, both in the general population and in prison; a history of the prison system’s response to HIV and HCV; a review of prison needle exchange programs, including historical information, evaluations, and lessons learned; the current situation; and future directions.

The sixth chapter (Analysis of the Evidence) draws on the evidence from the literature review and prison visits to present the findings concerning prison needle exchange programs. The seventh chapter (Needle Exchange Programs Should Be Implemented in Prisons in Canada) draws on the findings from the previous chapter to present the case for the implementation of needle exchange programs in federal and provincial/territorial prisons in Canada. The eighth and final chapter (Conclusion: A call for leadership on prison needle exchange programs) calls for leadership on the issue from elected officials, prison authorities, individual prison staff (both correctional staff and health service staff), and outside physicians who work in prisons.

Next steps

This report will be sent to a broad range of individuals and organizations working in areas of prisons, injection drug use, and harm reduction and/or HIV/AIDS and hepatitis C, both in Canada and internationally. It will also be sent to appropriate government policymakers in Canada, such as ministers responsible for corrections and justice, and unions and organizations of health-care workers involved in prison issues.

The Canadian HIV/AIDS Legal Network is a member of two Canadian prison, HIV, and hepatitis C groups: the **Prisons HIV/AIDS and Hepatitis C Networking Group** and the **Prison HIV/AIDS & Hepatitis C Research & Advocacy Consortium**. We will work with the other members of these groups to advocate for the implementation of prison needle exchange programs in federal and provincial/territorial prisons in Canada.

For further information...

Contact Glenn Betteridge at the Canadian HIV/AIDS Legal Network through the Network's office in Toronto at tel +1 416 595-1666, fax +1 416 595-0094, email: info@aidslaw.ca. Or contact him directly by email at gbetteridge@aidslaw.ca.

Further copies of this report can be retrieved from the website of the Canadian HIV/AIDS Legal Network via www.aidslaw.ca/Maincontent/issues/prisons.htm, or ordered through the Canadian HIV/AIDS Information Centre at tel + 1 613 725-3434 (toll free: + 1 877 999-7740), fax +1 613 725-1205, email: aidssida@cpha.ca.



Prisoner Health Is a Public Health Issue

In 1992, Dr Franz Probst was faced with a dilemma. A part-time physician at the Oberschöngrün prison for men in the Swiss canton of Solothurn, Dr Probst knew that more than 20 percent of the prisoners in the institution injected drugs. He also knew that these men had no access to sterile syringes and, as a result, were sharing syringes by necessity. As described by Nelles and Harding,

Unlike most of his fellow prison doctors, all of whom fe[It] obliged to compromise their ethical and public health principles daily, Probst began distributing sterile injection material without informing the prison director. When this courageous but apparently foolhardy gesture was discovered, the director, instead of firing Probst on the spot, listened to his arguments about prevention of HIV and hepatitis, as well as injection-site abscesses, and sought approval from the Cantonal authorities to sanction the distribution of needles and syringes. Thus, the world's first distribution of injection material inside prison began as an act of medical disobedience.¹

More than 10 years later, this act of medical disobedience remains an innovative and effective prison health-care initiative, and one that continues to highlight the failure of most prison systems worldwide to effectively address HIV and hepatitis C virus (HCV) transmission via injection drug use occurring within their walls. It is also a development that has inspired imitation, not only in other Swiss prisons but in prisons in Spain, Moldova, Germany, Kyrgyzstan, and Belarus. Although each of these countries deals with different social, political, correctional, and health-care circumstances, each arrived at the conclusion that providing sterile syringes to prisoners, while controversial, was necessary to prevent the transmission of HIV and HCV.

The world's first distribution of injection material inside prison began as an act of medical disobedience.

Injection drug use and high rates of HIV and HCV infection among prisoners are not unique to these six countries. Many countries, including Canada, are faced with HIV and HCV prevalence rates within prisons that are many times higher than those in the general population. In many countries the high rates of these bloodborne infections in prisons are attributable to a large extent to injection drug use both in the community and inside the prison itself. Throughout most of the world, the primary response to problems associated with illicit drug use has been to intensify law enforcement efforts. The result has been an unprecedented growth in prison populations and the incarceration of increasing numbers of people who use illicit drugs. Despite the fact that drug use and possession is illegal in prisons, and despite prison systems' efforts to prevent drugs from entering the prisons, drugs remain widely available. Many people enter prison with drug habits, while others begin consuming drugs while in prison as a means of coping with the prison environment. This report focuses on prison needle exchange programs, which represent a reasoned public health response to harms associated with injection drug use and the sharing of syringes (and even home-made injecting equipment) within prisons.

The health of prisoners is an issue of public health concern.

Due to the closed nature of prisons, the health of prisoners is an issue that rarely comes to the attention of the public at large. However, the health of prisoners is an issue of public health concern. Everyone in the prison environment – prisoners, prison staff, or their family members – benefits from enhancing the health of prisoners and reducing the incidence of communicable disease. Measures to decrease the risk of HIV and HCV transmission, including measures to minimize accidental exposure to these bloodborne infections, make prisons a safer place to live and work. The high degree of mobility between prison and community means that communicable diseases and related illnesses transmitted or exacerbated in prison do not remain there. When people living with HIV and HCV are released from incarceration, prison health issues necessarily become community health issues.

Prison presents a prime opportunity to respond to behaviours that pose a high risk of HIV and HCV transmission, such as needle sharing, using proven public health measures such as needle exchange programs. Prison authorities and elected officials responsible for prisons also have a legal responsibility to respect, protect, and fulfill prisoners' right to the highest attainable standard of health. In the context of the HIV epidemic and the transmission of HCV in prisons, prisoners' right to health includes access to measures to protect themselves from infection (or re-infection) with HIV and HCV, including needle exchange programs. Where authorities and officials fail in this duty they put the health not only of prisoners but of the entire community at risk.

A note on the use of terms

The term “needle exchange” is used to refer to the one-for-one exchange of a used needle for a sterile needle, as well as to the distribution of sterile needles without exchange. Unless otherwise indicated explicitly or by context, the terms “needle” and “syringe” mean a device used to inject fluids into the body, and are used interchangeably throughout the report.



Methodology

The evidence for this report was gathered over an 18-month period beginning in October 2002.

A review of the existing international literature was undertaken. This included extensive research on prisons and

- HIV
- HCV
- injection drug use
- harm-reduction measures
- needle exchange programs

Sources referenced include Canadian and international published reports, journal articles, conference presentations, government publications, and prison-service reports. These materials include previous work and research on these topics published by the authors of this report.

In addition, original research was conducted during site visits to prison needle exchange programs in the four countries operating such initiatives in October 2002. Site visits were made to the following prisons:

- Moldova: Prison Colony 18 (Branesti), 11-18 November 2002
- Switzerland: Hindelbank (Berne), Saxerriet (Salez), Obershöngrün (Berne), 1-5 June 2003
- Germany: Lichtenberg (Berlin), Vechta (Lower Saxony), 11-14 June 2003
- Spain: Soto de Real (Madrid), 25-28 May 2003

During these site visits, the needle exchange programs were observed and unstructured interviews were held with prison medical staff, prison management, external professionals working in drug policy and/or harm reduction, and prisoners. In some cases government officials and/or representatives of non-governmental organizations were also interviewed.

During the course of the research, prison needle exchange programs were initiated in two

other countries – Kyrgyzstan and Belarus. Since these programs were not in operation at the time the research plan was developed in October 2002, site visits to prisons in these countries were not possible. Therefore, research was conducted via

- personal communications with the staff involved in coordinating the needle exchange programs
- personal communications with the organizations funding the programs
- written documentation provided to the authors by the above sources, including funding proposals, project reports, conference presentations, and other documents

Because site visits were not possible in these cases, the information provided in the Kyrgyzstan and Belarus sections of the report is less detailed than that for the other countries.

Finally, in March 2004, while the report was being drafted, the authors followed up with contacts in a number of the countries to verify and clarify information previously obtained and/or to obtain updates on the situation in a particular country's prison system.



HIV and HCV Epidemics in Prison

Prevalence of HIV and HCV in prisons

Worldwide, rates of HIV-infection in prison populations tend to be much higher than those found in the general population. Canada is no exception. Much of the data regarding HIV/AIDS in prisons come from developed, high-income countries; relatively little information is available for developing countries and countries in transition. Even within high-income countries, the precise number of HIV-positive prisoners is difficult to estimate. This difficulty is attributable to different testing protocols (voluntary testing, testing of all new prisoners, testing where there are outbreaks of infection). The general applicability of infection rates determined by studying populations in a particular prison or region may also be a poor reflection of national prison prevalence, given that the burden of HIV infection may vary from region to region within a country.

Apart from those countries where prevalence is largely attributable to heterosexual risk behaviour, HIV prevalence in prisons is closely related to two factors: (1) the proportion of prisoners who injected drugs prior to their incarceration, and (2) the rate of HIV infection among people who inject drugs in the wider community. The jurisdictions with the highest HIV infection rates in prisons (apart from countries with large heterosexual HIV epidemics) are those where HIV infection in the general community is “pervasive among IV drug users, who are dramatically over-represented in correctional institutions.”⁷² Commenting in 1991 on the situation in the United States, the US National Commission on AIDS stated that “by choosing mass imprisonment as the federal and state governments’ response to the use of drugs, we have created a de facto policy of incarcerating more and more individuals with HIV infection.”⁷³ A prohibitionist approach toward drug use and drug users is not unique

Worldwide, rates of HIV-infection in prison populations tend to be much higher than those found in the general population.

to the United States. Thus, the situation described by the National Commission on AIDS is evident in numerous countries.

Western Europe, Australia, and the United States

High rates of HIV infection among incarcerated populations have been reported in numerous countries. In Spain, it is estimated that the overall rate of HIV infection among prisoners is 16.6%, with a figure as high as 38% among some prison populations.⁴ In Italy, a rate of 17% has been reported.⁵ High HIV infection rates among prisoners have also been reported in France (13%; testing of 500 consecutive entries), Switzerland (11%; cross-sectional study in five prisons in the Canton of Berne), and the Netherlands (11%; screening of a sample of prisoners in Amsterdam).⁶ In contrast, some European countries, including Belgium, Finland, Iceland, Ireland, and some Länder in Germany, report lower levels of HIV prevalence.⁷ Relatively low rates of HIV prevalence have also been reported from Australia.⁸

A recent US study found that an estimated 25% of all HIV-infected citizens pass through a correctional facility in the US each year.⁹ In the US, the geographic distribution of cases of HIV infection and AIDS is uneven. Many systems have reported HIV prevalence rates under 1%, while others have rates that approach or exceed 8%.¹⁰

Central and Eastern Europe and the former Soviet Union

In the countries of Central and Eastern Europe and the former Soviet Union, high rates of HIV infection among people who inject drugs and among prisoners is a growing concern. In the Russian Federation, by late 2002 the registered number of people living with HIV/AIDS in the penal system exceeded 36,000, representing approximately 20% of known HIV cases.¹¹ In Ukraine, where 69% of HIV infection is linked to injection drug use,¹² it is estimated that 7% of the prison population is HIV-positive.¹³ In Latvia it is estimated that prisoners comprise a third of the country's HIV-positive population, and that a fourth of all HIV-positive persons in Latvia were infected while in prison.¹⁴ In Lithuania, in May 2002 the number of new HIV-positive test results among prisoners found in a two-week period equalled all the cases of HIV identified in the entire country during all of the previous years combined.¹⁵ In total, 284 prisoners (15% of the total Lithuanian prison population) were diagnosed HIV-positive between May and August 2002.¹⁶

In the Russian Federation, the registered number of people living with HIV/AIDS in the penal system exceeds 36,000.

Canada

Estimates of HIV prevalence in Canadian federal and provincial prisons range from 2% to 8%¹⁷, while studies of HIV prevalence in individual prisons report rates of between 1% and 11.94% .¹⁸ Even adopting a conservative approach, these estimates place the HIV prevalence rate in prisons at 10 times the prevalence rate in the general Canadian population.¹⁹ According to preliminary data, 2.01% of all prisoners in Canadian federal prisons were known to be HIV-positive, with higher rates among women (3.71%).²⁰ Among the five Correctional Service Canada regions, the rate of reported HIV cases was highest in the Québec region (2.7%) and lowest in the Ontario region (0.7%).²¹ A number of HIV prevalence studies have been conducted in federal and provincial prisons, including:

- The first HIV prevalence and risk behaviour study in a Canadian prison was undertaken in a medium-security prison for women in Montréal.²² Of the 321 participants, 23 (7.2%) were HIV-positive and 160 (49.8%) reported injection drug use. Non-sterile

injection drug practices and unprotected sexual activity with a drug user were found to be the strongest risk factors for HIV infection.

- Between 1 October and 31 December 1992 a study of all provincial adult prisons in British Columbia examined associations between HIV infection and specific demographic and behavioural characteristics. A total of 2482 (91.3%) of 2719 eligible prisoners volunteered for testing. Prisoners who reported a history of injection drug use were more likely than the others to refuse HIV antibody testing (12.9% versus 6.8%). The 2482 prisoners who were tested for HIV were similar to the general prison population with regard to sex, native status, and age group. A total of 28 prisoners were confirmed to be HIV-positive, for an overall prevalence rate in the study population of 1.1%. The prevalence rates were higher among the women than among the men (3.3% versus 1.0%) and among the prisoners who reported a history of injection drug use than among those who did not report such a history (2.4% versus 0.6%). There was no association between HIV status and native status or age group. The higher prevalence rate among the women is to be explained by more of the women than of the men reporting a history of injection drug use. The authors of the study concluded that the overall prevalence rate of 1.1% and the rate among female prisoners of 3.3% confirm that HIV infection is a reality in prisons and that the virus has established a clear foothold in prison populations. Further, the authors suggest that from a public health perspective, the data suggested an urgent need for access to sterile injection equipment in addition to other preventive measures.²³
- A study reported in 1995 determined the seroprevalence of HIV infection and hepatitis C among prisoners of a federal penitentiary for women.²⁴ Of the 130 prisoners available for study, 113 (86.9%) agreed to donate a blood sample. One woman (0.9%) was HIV-positive; 45 (39.8%) were positive for HCV antibody. The HIV seroprevalence rate of 0.9% is lower than that found in studies in provincial prisons. However, the high rate of antibodies to HCV suggests a significant level of risk behaviour, most likely injection drug use, and suggests the potential for a rapid increase in the rate of HIV infection should the number of newly admitted HIV-positive prisoners who use injection drugs rise.
- In 1998 a Queen's University team conducted a voluntary, anonymous HIV and HCV serology screen in a Canadian male medium-security federal penitentiary;²⁵ 68% of 520 prisoners volunteered a blood sample and 99% of those giving a blood sample completed a risk-behaviour questionnaire that was linked numerically to the blood sample. Compared to previous screenings for HIV (four years earlier) and HCV (three years earlier²⁶) in the same institution, HIV seroprevalence had risen from 1% to 2% and HCV seroprevalence from 28% to 33%. The overwhelming risk association for HCV was with drug use outside prison, although there was a small group of men who had only ever injected drugs inside prison, over half of whom had been infected with HCV. The proportion of prisoners who had injected drugs in prison rose from 12% in 1995 to 24% in 1998. The proportion of surveyed individuals sharing injection equipment at some time in prison was 19%.
- An HIV prevalence study among 394 women incarcerated in Québec, reported in

In Canada, the HIV prevalence rate in prisons is at least 10 times higher than in the general population.

1994, found that 6.9% of all participants, and 13% of women with a history of injection drug use, were HIV-positive.²⁷

- A study released in 2004 of 1617 prisoners in seven provincial institutions in Québec found an HIV prevalence rate of 2.3 percent among men and 8.8 percent among women.²⁸

Other countries

High rates of HIV infection among prisoners are not limited to European and North American jurisdictions. Countries in all parts of the world are also struggling to address this health crisis. In Africa, reports have cited that as many as 41% of the 175,000 people in South African prisons are living with HIV or AIDS.²⁹ Zambia³⁰ and Nigeria³¹ have also reported high rates of HIV in their prisons. In Latin America, studies have shown HIV prevalence rates of almost 7% in three urban prisons in Honduras (with almost 5% of males aged 16 to 20 testing positive)³² and between 10.9 to 21.5% in a selection of Brazilian prisons.³³ In Asia, numerous studies in Thailand have shown a history of imprisonment to be significantly associated with HIV infection.³⁴ A study of 377 prisoners in three prisons in India found that 6.9% were living with HIV, all of these individuals being originally from Thailand and Myanmar.³⁵

HCV infection

HCV infection is endemic among prison populations worldwide. In many countries, the high rates of HIV infection among the prison population are eclipsed by even higher rates of HCV infection, another bloodborne viral infection that can be transmitted via needle sharing. Published studies of HCV in the prison setting include those from Australia, Taiwan, India, Ireland, Denmark, Scotland, Greece, Spain, England, Brazil, the United States, and Canada. The vast majority of peer-reviewed published studies have found that between 20% and 40% of prisoners are living with HCV and, within study samples, rates of HCV prevalence among prisoners who inject drugs are routinely two to three times higher than among prisoners who have no history of injection drug use.³⁶ It has been suggested that the concentration of HCV-infected individuals in prisons may be related to a number of factors, including high rates of incarceration among people who inject drugs and among those with previous or multiple imprisonments; and that imprisonment may be an independent risk factor for contracting HCV infection.³⁷

Between 20% and 40% of prisoners are living with HCV.

In Canada, 23.6% of federal prisoners who underwent voluntary HCV testing in 2001 tested positive.³⁸ As with HIV, HCV rates were higher among women prisoners (42.4%) than among men (23.2%).³⁹ However, the Correctional Service of Canada report that presented the 2001 data cautions that HCV may be under-reported because “[p]ersons at highest risk of infection may be less likely to be tested, leading to biased testing patterns and possible continued transmission of infection.”⁴⁰ This caution is borne out by a 1996 study of 192 prisoners at a federal men’s institution that revealed that 28% of prisoners were HCV-positive, with rates significantly higher among people who injected drugs (52%) than those who did not (3%).⁴¹

Drug use in prison

Despite their illegality, the penalties for their use, and the significant amounts of money and person-hours spent by prison systems to stop their entry, the fact remains that illicit drugs get into prisons and prisoners consume them. Just as in the community, drugs are present in prisons because there is a market for them and because there is money to be made selling them.

Many prisoners, whether in pretrial custody, awaiting sentencing, or serving a sentence of incarceration, have a history of drug use or actively use drugs at the time of imprisonment. Conflict with the law and incarceration are often a result of offences related to the criminalization of certain drugs, offences related to financing drug use (sometimes referred to as acquisitive crime), or offences related to behaviours brought about by drug use. In many countries, significant increases in prison populations and consequent prison overcrowding can be traced in large part to policies of actively pursuing and imprisoning those producing, trafficking, or consuming illegal substances. In addition to those people who enter prison with a history of, or active, drug use, a minority of prisoners start using drugs while in prison as a means to release tensions and to cope with living in an overcrowded and often violent environment.⁴²

Studies conducted in various countries illustrate the degree to which drug use occurs in prison. In the countries of the European Union, for example, the number of prisoners who report ever having used illegal drugs is between 29% and 86%, with most studies reporting figures of 50% or greater.⁴³ The number of prisoners actively using drugs during incarceration is between 16% and 54%.⁴⁴ These EU studies indicate that figures for drug use are even higher among incarcerated women.⁴⁵ In Canada, a 1995 survey by the Correctional Service of Canada found that 38% of prisoners reported having used drugs since arriving at their current institution.⁴⁶

Another factor influencing drug-use patterns in prisons is drug testing. Many prison systems, particularly those in the developed world, routinely and/or randomly test prisoners for illicit drugs, most often by urinalysis. Prisoners who are found to have consumed illicit drugs can face penalties under criminal laws or administrative/institutional penalties, which can result in loss of privileges or an increase in the amount of time a prisoner will be incarcerated. Therefore, there is a great incentive for prisoners who use illicit drugs to avoid detection. Urinalysis can detect the presence of drugs in urine. Some drugs clear the human body in relatively short order, while other drugs remain detectable, including in urine, for much longer periods of time. Particularly significant in the context of HIV and HCV transmission in prisons, smoked cannabis is traceable in urine for much longer (up to one month) than drugs administered by injection, such as heroin and cocaine.⁴⁷ Therefore, it is logical that some prisoners choose to inject drugs (with serious public health impacts) rather than risk the penalties associated with smoking cannabis (which has a negligible public health risk). Given the scarcity of sterile needles and the frequency of needle sharing in prison, the switch to injecting drugs may have devastating health consequences for individual prisoners. A number of studies have determined that urinalysis testing for illicit drugs increases the harms associated with injection drug use, including the potential for transmission of HIV and HCV.⁴⁸

Just as in the community, drugs are present in prisons because there is a market for them and because there is money to be made selling them.

Some prisoners start using drugs while in prison as a means to release tensions and to cope with living in an overcrowded and often violent environment.

Injection drug use, shared needles and risk of HIV and HCV transmission

Sharing needles among intravenous drug users is a high-risk activity for the transmission of HIV and HCV, due to the presence of blood in needles after injection.⁴⁹ For people who inject drugs, imprisonment increases the risk of contracting HIV and HCV infection via needle sharing. Because it is more difficult to smuggle needles into prisons than it is to smuggle in

Study after study has documented the prevalence of injection drug use in prisons throughout the world.

drugs, needles are typically scarce. As a result, prisoners who inject drugs share and reuse syringes out of necessity. A needle may circulate among (often large) numbers of people who inject drugs, or be hidden in a commonly accessible location where prisoners can use it as necessary. A needle may be owned by one prisoner and rented to others for a fee, or it may be used exclusively by one prisoner, reused again and again over a period of months until it disintegrates.⁵⁰ Sometimes the equipment used to inject drugs is home-

made, with needle substitutes fashioned out of available everyday materials, often resulting in vein damage, scarring, and injection-site and other infections.

International evidence

Given the legal prohibitions against drug use in most countries, people who inject drugs regularly find themselves coming into conflict with the law. In many cases, this results in periods of incarceration. For example, a national study in the US of 25,000 people who inject drugs found that approximately 80% had been in prison at some time.⁵¹ A 1995 World Health Organization (WHO) study of HIV risk behaviour among people who inject drugs in 12 cities found that 60% to 90% of respondents had been in prison since commencing injection drug use, most them experiencing incarceration on multiple occasions.⁵²

One study found that 6 of the 36 people who reported injecting and sharing syringes when last in prison also reported that this was the first time they had ever shared syringes.

Drug users do not necessarily cease using drugs simply because they are incarcerated. In many cases, they continue to use on a regular or occasional basis throughout the course of their sentences. As stated by UNAIDS in 1997, “long experience has shown that drugs, needles and syringes will find their way through the thickest and most secure of prison walls,” and study after study has documented the prevalence of injection drug use in prisons throughout the world.⁵³ In fact, studies have shown that people not only continue to inject drugs while in prisons but that prisoners actually *begin* using injection drugs while incarcerated.

- A 2002 report prepared for the European Union showed that 0.3% to 34% of the prison population in the European Union and Norway injected while incarcerated. The report also found that 0.4% to 21% of people who inject drugs started injecting in prison, and that a high proportion of people who inject drugs in prison share injection equipment. Studies in France and Germany found the incidence of sharing injection equipment among incarcerated women to be even higher than that among incarcerated men.⁵⁴
- In Australia, studies have found that 31% to 74% of people who inject drugs reported injecting in prison, and that 60% to 91% reported sharing injection equipment in prison.⁵⁵ One study found that 6 of the 36 people who reported injecting and sharing syringes when last in prison also reported that this was the first time they had ever shared syringes.⁵⁶
- In Thailand, the first wave of HIV infections occurred in 1988 among drug injectors. From a negligible percentage at the beginning of the year, the prevalence rate among people who inject drugs rose to over 40% by September, fuelled in part by transmission of the virus as people who inject drugs moved in and out of penal institutions.⁵⁷ More recently, a study concluded that “injecting drug users in Bangkok are at significantly increased risk of HIV infection through sharing needles with multiple partners

while in holding cells before incarceration.”⁵⁸

- In Russia, a study of 1087 prisoners found that 43% had injected a drug in their lives, and that 20% had injected while incarcerated. Of this second group, 64% used injection equipment that had already been used by somebody else, and 13.5% started injecting in prison.⁵⁹ In the oblast of Nizhni-Novgorod, which has a prisoner population of 28,000, the authorities found that all of the 220 HIV-positive prisoners had contracted HIV through intravenous drug use.⁶⁰
- In Mexico, a study in two jails found rates of injection drug use of 37% and 24% respectively.⁶¹

A Scottish study in Glenochil Prison provided definitive evidence that outbreaks of HIV infection can occur among incarcerated populations.

The presence of drugs in prisons, the number of prisoners who enter prison as active drug users or with histories of drug use, prisoners who start using drugs while incarcerated, and the scarcity of needles make prisons a high-risk environment for the rapid spread of HIV and HCV infection. Evidence of HIV transmission within prisons has been documented since the late 1980s:

- Between 1987 and 1989, Bangkok experienced a major rise in HIV infection among people who inject drugs in the general population. HIV prevalence rates jumped from 2% to 27% during 1987, and then to 43% by the end of 1988. This significant increase in HIV infection rates among people who inject drugs in the community paralleled the amnesty and release of a large number of Thai prisoners. Six studies of HIV infection among people who inject drugs in Thailand found that a history of imprisonment was significantly associated with HIV infection.⁶²
- A Scottish study in Glenochil Prison provided definitive evidence that outbreaks of HIV infection can occur among incarcerated populations. The study investigated an outbreak of HIV in the prison in 1993. Before the investigation began, 263 of the prisoners who had been in the institution at the time of the outbreak had been released or transferred to other prisons. Of the remaining 378 prisoners, 227 were recruited into the study. Seventy-six people in this group reported a history of injection, and 33 reported injecting in Glenochil. Twenty-nine of the latter were tested for HIV, with 14 testing positive. Thirteen had a common strain of HIV, proving that they became infected in the prison. All the prisoners infected in Glenochil reported extensive periods of syringe sharing.⁶³
- In an Australian prison, epidemiological and genetic evidence was used to connect a network of people who injected drugs. Twenty-five of the 31 prisoners were identified. Of these, two tested HIV-negative, seven were deceased, two declined to participate, and 14 were enrolled in the study. It could be proven that eight of those 14 people were infected with HIV while in the prison.⁶⁴
- In Lithuania, during random checks undertaken in 2002 by the state-run AIDS Center, 263 prisoners at Alytus Prison tested positive for HIV. Tests at Lithuania’s other 14 prisons found only 18 cases. Before the tests at Alytus prison, Lithuanian officials had listed just 300 cases of HIV in the whole country, or less than 0.01% of the population, the lowest rate in Europe. It has been stated that the outbreak at Alytus is due to sharing of drug injection equipment.⁶⁵
- Transmission of HCV in prison populations has also been documented in a number of studies.⁶⁶ The finding that hepatitis infections occur much more frequently in detention is supported by a German study conducted in 1996 in the women’s prison in Vechta, Lower Saxony. The research found that 78% of drug-using women were infected with

HBV and 74.8% were infected with HCV. Furthermore, the authors found that the number of seroconversions during detention was considerable. Nearly half the women who seroconverted (20 of 41) had been infected with hepatitis during incarceration.⁶⁷

Canadian evidence

Numerous Canadian studies have documented injection drug use and needle sharing in Canadian prisons:

- In an Ontario study reported in 2003, 11% of all participants (439 adult males, 158 females) in six provincial correctional centres who had a history of injecting reported injecting in the past year while incarcerated. 32% of those who reported injecting while incarcerated reported injecting with used needles.⁶⁸
- A 2003 study of federally incarcerated women found that 19% reported engaging in injection drug use while in prison.⁶⁹
- A 1998 study at Joyceville Penitentiary in Kingston, Ontario, found that 24.3% of prisoners reported using injection drugs in prison. This was an increase from the 12% found in a similar study at the same prison in 1995.⁷⁰
- A 1996 survey of prisoners in a federal prison in British Columbia found that 67% reported injection drug use either in prison or outside, with 17% reporting injection drug use only in prison.⁷¹
- In 1995, the Correctional Service of Canada's National Inmate Survey found that 11% of 4285 federal prisoners self-reported having injected since arriving in their current institution. Injection drug use was particularly high in the Pacific Region, with 23% of prisoners reporting injection drug use.⁷²
- A 1995 study among provincial prisoners in Montréal found that 73.3% of men and 15% of women reported drug use while incarcerated. Of these, 6.2% of men and 1.5% of women reported injecting drugs.⁷³
- A 1995 study of provincial prisoners in Québec City found that 12 of 499 prisoners admitted injecting drugs during imprisonment, 11 of whom had shared needles. Three were HIV-positive.⁷⁴

Harm reduction

Traditionally, concerns about disease transmission via injection drug use have been met with calls to further entrench the philosophy and practice of “zero tolerance” of drug use.

Numerous Canadian studies have documented injection drug use and needle sharing in Canadian prisons.

Increased penalties for drug use, tightened security measures to reduce the supply of drugs, and heightened surveillance of individual drug users are often put forward as “law and order” solutions to public health problems. However, the health risks posed by HIV and HCV infection through the sharing of needles have prompted many countries, including Canada, to recognize the limitations of a strict zero-tolerance approach. This has led to the development and implementation of community health programs that enable people

who inject drugs to reduce their risk of contracting HIV and HCV while continuing to use illegal drugs. These harm reduction initiatives, including needle exchange programs and safe injection facilities, have been enacted as pragmatic responses to injection drug use and the attendant risks that HIV and HCV infection pose, to the individual and to society as a whole.

While harm-reduction policies do not condone illegal drug use, they do recognize that reducing the transmission of bloodborne diseases and overdose deaths in society is a more urgent and achievable goal than is ending illegal drug use. As drug users are often isolated from health services, harm-reduction initiatives such as needle exchange and methadone maintenance programs also create important links between health professionals and these marginalized communities, thus enabling drug users to maintain and improve their overall health status. Already in 2001, there were over 200 needle exchange sites operating in communities across Canada.⁷⁵

While many governments have recognized the value of needle exchange programs and supported their implementation in the community, few have made efforts to extend the availability of these programs to prisoners. Some jurisdictions, including most Canadian jurisdictions, have recognized the risks associated with injection drug use and have implemented limited harm-reduction measures in prisons, such as bleach distribution and/or methadone maintenance treatment.⁷⁶

Unfortunately, most countries continue to fail to act in a pragmatic and decisive manner to protect the health of prisoners who engage in behaviours that put them at risk of HIV and HCV infection. According to UNAIDS: “Whether the authorities admit it or not – and however much they try to repress it – drugs are introduced and consumed by inmates in many countries.... Denying or ignoring these facts will not help solve the problem of the continuing spread of HIV.”⁷⁷ The experience of health services in many countries, as well as in many prison systems internationally, demonstrates that harm reduction provides the framework for effective action to prevent the transmission of HIV and HCV in prisons.

Harm-reduction policies do not condone illegal drug use. They recognize that reducing the transmission of bloodborne diseases and overdose deaths is a more urgent and achievable goal than is ending illegal drug use.



Human Rights and Legal Standards

Numerous international instruments address the rights of prisoners and prisoners' access to health services. These international instruments are relevant in the context of injection drug use and HIV/AIDS and HCV transmission in prisons. Taken together, these laws, rules, guidelines, and standards are an expression of the norms that should guide decision-makers, both legislators and prison authorities. It is important to distinguish between two general categories of instruments that protect rights, as each has different implications for governments. International human rights law is binding on governments; international rules, standards, and guidelines are not law, and are therefore not binding on governments.

International human rights law

Human rights are legally guaranteed under existing human rights laws adopted by international bodies. They protect all humans, both groups and individuals, against actions that interfere with their fundamental freedoms and human dignity. Human rights are primarily concerned with the relationship between a person or groups of people and the state, and impose obligations on states to respect, protect, and fulfil certain fundamental rights. The community of nations has recognized that all human rights are universal, interdependent, and interrelated.⁷⁸ States have a duty, regardless of their political, economic, and cultural systems, to protect and promote human rights.

Numerous international laws, while general in nature, are relevant to the rights of prisoners in the context of HIV/AIDS epidemic:

- International Covenant on Civil and Political Rights⁷⁹
- International Covenant on Economic, Social and Cultural Rights⁸⁰
- African Charter on Human and Peoples' Rights⁸¹
- American Convention on Human Rights⁸²

- Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights⁸³
- [European] Convention for the Protection of Human Rights and Fundamental Freedoms⁸⁴
- European Social Charter⁸⁵

Since most of these covenants, charters, and conventions are based on the United Nations Universal Declaration of Human Rights,⁸⁶ there is a great deal of overlap in the human rights they guarantee. The Universal Declaration has the status of customary international law⁸⁷ and as such is binding on all states. Moreover, states that have ratified or acceded to any one of the covenants, declarations, or charters set out above have recognized that they are legally bound to respect, protect, and fulfill the following human rights, among others:

- right to equality and non-discrimination
- right to life
- right to security of the person
- right not to be subjected to torture or to cruel, inhuman, or degrading treatment or punishment
- right to enjoyment of the highest attainable standard of physical and mental health

Prisoners retain all civil rights that are not taken away expressly or by necessary implication as a result of the loss of liberty flowing from imprisonment.

The international community has generally accepted that prisoners retain all civil rights that are not taken away expressly or by necessary implication as a result of the loss of liberty flowing from imprisonment.⁸⁸ Yet few international laws address explicitly and in detail conditions of imprisonment or the rights of prisoners. International rules, guidelines, principles, and standards are extremely useful in this regard.

International rules, guidelines, principles, and standards

International rules, guidelines, principles, and standards do not have the force of law and accordingly are not legally binding on states. Rules, guidelines, principles, and standards are consensual policy documents that are most often formulated by United Nations bodies, or other regional governing bodies, with the participation of member states. Although they are not law, these types of instruments are important for two reasons. First, they provide guidance to states concerning the types of domestic laws and policies that are understood to respect, protect, and fulfil their human rights obligations. Rules, guidelines, principles, and standards set out, often in detail, acceptable conditions of imprisonment and treatment of prisoners. Second, they are “the manifestation of ... moral and philosophical standards.”⁸⁹ Accordingly, it can be argued that states have at the very least an ethical obligation to observe international rules, guidelines, principles, and standards.

The specific instruments that apply to the situation of prisoners impose both negative and positive obligations on states regarding prison conditions and the treatment of prisoners:

- Basic Principles for the Treatment of Prisoners⁹⁰
- Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment⁹¹
- Standard Minimum Rules for the Treatment of Prisoners⁹²
- Recommendation No R (98)7 of the Committee of Ministers to Member States Concerning the Ethical and Organisational Aspects of Health Care in Prison⁹³

Three additional international instruments – one declaration and two sets of guidelines – are relevant to the situation of prisoners in the context of HIV/AIDS:

- WHO Guidelines on HIV Infection and AIDS in Prisons⁹⁴
- Declaration of Commitment – United Nations General Assembly Special Session on HIV/AIDS⁹⁵
- International Guidelines on HIV/AIDS and Human Rights⁹⁶

None of these documents have the force of law. All are the result of a consultation or special session of a United Nations body or bodies. The WHO Guidelines “provide standards – from a public health perspective – which prison authorities should strive to achieve in their efforts to prevent HIV transmission in prisons and to provide care to those affected by HIV/AIDS. It is expected that the guidelines will be adapted by prison authorities to meet their local needs.”⁹⁷ The WHO Guidelines outline general principles and cover issues such as HIV testing; prevention measures; management of HIV-infected prisoners; confidentiality; care and support of HIV-infected prisoners; tuberculosis; women prisoners; juvenile detention; semi-liberty, release and early release; community contacts; resources, and evaluation and research.

The state parties who participated in the UNGASS Declaration did not make any specific commitments in relation to prisoners or prisons, but did commit to taking action on human rights⁹⁸ and to reducing vulnerability to HIV infection.⁹⁹ These sections are generally applicable to the situation of prisoners as a group vulnerable to HIV/AIDS.

The specific relevance of the WHO Guidelines and the International Guidelines on HIV/AIDS and Human Rights for prison needle exchange programs is reviewed in the next section.

Prisoners’ right to health and access to sterile needles

Access to sterile needles implicates the right to health, given the great risk of HIV and HCV transmission associated with needle sharing. Numerous international laws provide that “Every person has a right to the highest attainable level of physical and mental health.”¹⁰⁰ The right to health imposes a duty on states to promote and protect the health of individuals and the community, including a duty to ensure quality health care. The right to health in international law should be understood in the context of the broad concept of health set forth in the WHO constitution, which defines health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹⁰¹

Key international instruments reveal a general consensus that the standard of health care provided to prisoners must be equivalent to that available in the general community.

Like all persons, prisoners are entitled to enjoy the highest attainable standard of health, as guaranteed under international law. Key international instruments reveal a general consensus that the standard of health care provided to prisoners must be equivalent to that available in the general community. Principle 9 of the Basic Principles for the Treatment of Prisoners states: “Prisoners shall have access to the health services available in the country without discrimination on the grounds of their legal situation.”¹⁰² In the context of HIV/AIDS, equivalence of “health services” would include providing prisoners the means to protect themselves from exposure to HIV and HCV. Support for this proposition is contained in documents emanating from the European Union, the Council of

Europe, and the WHO. Article 35 of the Charter of Fundamental Rights of the European Union states: “Everyone has the right to access preventive health care and the right to bene-

fit from medical treatment under the conditions established by national laws and practices.”¹⁰³ This may be considered to apply to people in prison. Further, Recommendation 10 of Council of Europe Recommendation No R 98(7) states: “Health policy in custody should be integrated into, and compatible with, national health policy. A prison health care service should be able to ... implement programmes of hygiene and preventive medicine in conditions comparable to those enjoyed by the general public.”¹⁰⁴ The WHO Guidelines recommend the equivalence of health care, including preventive measures, and that general policies adopted under national AIDS programs should apply equally to prisoners and the community.¹⁰⁵

This principle of equivalence of prison health care has been applied to the issue of HIV/AIDS by the WHO. In 1991, the WHO Regional Office for Europe recommended the provision of sterile syringes in prisons as part of a comprehensive HIV prevention strategy.¹⁰⁶ Two years later, the WHO Guidelines were published. Principle 1 of the WHO Guidelines emphasizes that “All prisoners have the right to receive health care, including preventive measures, equivalent to that available in the community without discrimination ... with respect to their legal status.”¹⁰⁷ Principle 2 further states that “general principles adopted by national AIDS programmes should apply equally to prisons and to the general community.”¹⁰⁸ The WHO Guidelines are clear that “In countries where clean syringes and needles are made available to injecting drug users in the community, consideration should be given to providing clean injection equipment during detention and on release.”¹⁰⁹

The right of people in prison to access adequate standards of HIV/AIDS prevention and care is also supported by UNAIDS. At the United Nations Commission on Human Rights, UNAIDS stated that “With regard to effective HIV/AIDS prevention and care programmes, prisoners have a right to be provided the basic standard of medical care available in the community.”¹¹⁰ This would again support the contention that where sterile syringes are provided to people who inject drugs in the community, these same programs must be implemented in prisons. Furthermore, Guideline 4 of the International Guidelines on HIV/AIDS and Human Rights specifically states that prison authorities should provide prisoners with means of HIV prevention, including “clean injection equipment.” These Guidelines are intended to promote and protect respect for human rights in the context of HIV/AIDS, to benefit governments by “outlin[ing] clearly how human rights standards apply in the area of HIV/AIDS and indicate concrete, specific measures, both in terms of legislation and practice, that should be undertaken” to fulfill state obligations in relation to public health within their specific contexts.¹¹¹

International codes of practice governing physicians and other health professionals working in prisons also support the contention that comprehensive HIV and HCV prevention measures, including needle exchange, must be made available to incarcerated populations. The Oath of Athens for Prison Health Professionals, adopted in 1979 by the International Council of Prison Medical Services, “recognize[s] the right of the incarcerated individuals to receive the best possible health care” and undertakes that “medical judgements be based on the needs of our patients and take priority over any non-medical matters.”¹¹²

International opinion supporting the right of prisoners to health care is not limited to the

In 1991, the WHO Regional Office for Europe recommended the provision of sterile syringes in prisons as part of a comprehensive HIV prevention strategy.

The International Guidelines on HIV/AIDS and Human Rights state that prison authorities should provide prisoners with means of HIV prevention, including clean injection equipment.

documents above. Reports from the European Committee for the Prevention of Torture and from the Eighth United Nations Congress have expressed similar positions, as have legal scholars and medical experts within national contexts, for example in the United States and Australia.¹¹³ As has been explored in detail by Jürgens, recommendations on HIV/AIDS in prisons developed by the international community consistently support “equivalence of treatment of prisoners,” stress the importance of prevention of transmission of HIV in prisons, and suggest that prevention measures, including sterile syringes, be provided to prisoners.¹¹⁴

Obligations in Canadian law

Among other international human rights laws, Canada has ratified the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. Canada is therefore legally bound to respect, protect, and fulfill the rights guaranteed in these instruments, including the right to the highest attainable standard of health. Concerning domestic human rights protections, Richard Elliott has argued that sections 7, 12, and 15 of the Canadian Charter of Rights and Freedoms may provide prisoners with a legal basis on which to seek the implementation of needle exchange programs.¹¹⁵ Section 7 protects the right not be deprived of the right to life, liberty, and security of the person except in accordance with the principles of fundamental justice; section 12 protects against cruel and unusual punishment; and section 15 guarantees the right to equality before and under the law and the right to equal protection and benefit of the law without discrimination on the basis of certain personal characteristics.

Governments and prison authorities in Canada may be vulnerable to legal challenges for denying prisoners access to sterile syringes.

In addition to the Charter, laws governing prison systems impose obligations on governments to safeguard the health and well-being of prisoners. The federal prison system is governed under the Corrections and Conditional Release Act and the accompanying regulations.¹¹⁶ Under sections 85 to 88 of the CCRA, the Correctional Service of Canada is mandated to provide every prisoner with essential health care, and reasonable access to non-essential mental health care that will contribute to his or her rehabilitation

and reintegration into the community. The CCRA states that this medical care “shall conform to professionally accepted standards.”¹¹⁷ It can be argued that since needle exchange is the accepted standard in the community for preventing the transmission of HIV and HCV via injection drug use, under the terms of the CCRA these programs must be made available to prisoners in the federal system.

Professor Ian Malkin has analyzed the application of Canadian tort law within the context of HIV transmission/prevention in prisons.¹¹⁸ He concludes that governments and prison authorities in Canada may be vulnerable to legal challenges for denying prisoners access to sterile syringes if a prisoner can demonstrate that he or she has contracted HIV while incarcerated as a result of sharing needles to inject drugs.



Review of International Evidence of Prison Needle Exchange

In many countries, needle exchange programs in the community have become an integral part of a pragmatic public health response to the risk of HIV transmission among people who inject drugs and, ultimately, to the general public. Extensive studies on the effectiveness of these programs have been carried out, providing scientific evidence that syringe exchange is an appropriate and important preventive health measure. For example, a worldwide survey found that in cities with needle exchange or distribution programs the HIV prevalence rate decreased by 5.8% per year; in cities without such programs, it increased by 5.9% per year.¹¹⁹ A 1998 US study analyzed the projected cost to the government of providing access to syringe exchange, pharmacy sales, and proper syringe disposal for all people who inject drugs in the country. The study found that “this policy would cost an estimated \$34,278 US per HIV infection averted, a figure well under the estimated lifetime costs of medical care for a person with HIV infection.”¹²⁰ A 2002 Australian report concluded that needle exchange programs in that country had prevented 25,000 cases of HIV over a 10-year period and that the \$150 million spent on the programs had resulted in a savings of AUD \$2.4 to 7.7 billion.¹²¹

Because of the success of needle exchange programs in the community, calls to make sterile needles available to prisoners have been made in many countries. However, only a handful of countries – Switzerland, Germany, Spain, Moldova, Kyrgyzstan, and Belarus – have established prison needle exchange programs. Some other countries, including Kazakhstan, Tajikistan, and Ukraine are reportedly ready to establish such programs in the near future. This chapter provides a chronological review of the experience of the countries that have implemented prison needle exchange programs. For each country the review includes, where available, epidemiological information about HIV and HCV, both in the general population

and in prisons; a history of the prison system's response to HIV and HCV; a review of prison needle exchange programs, including historical information, evaluations, and lessons learned; the current situation; and future directions.

Switzerland

Summary

In 1992 Switzerland became the first country to introduce a prison needle exchange program.

Switzerland has approximately 150 prisons spread across the 26 cantons that comprise the Swiss federation. Although the penal code is federal, the administration of the prisons is the responsibility of the government of the canton in whose territory the institution is located. There are approximately 6000 prisoners in Switzerland. The largest prison has a population of 350, although the majority of prisoners are incarcerated in small institutions with fewer than 100 prisoners. In 1992 Switzerland became the first country to introduce a prison needle exchange program. The initial program was started on an informal basis by a physician at the Oberschöngrün men's prison who, ignoring prison regulations, began distributing sterile syringes to patients who were known to inject drugs. In 1994 a formal needle exchange pilot project was established in the Hindelbank women's prison. After a successful trial and evaluation at Hindelbank, needle exchange programs have been expanded to a total of seven Swiss prisons.

HIV/AIDS, HCV, and IDU in Switzerland

According to figures released by UNAIDS and the WHO in 2002, there are approximately 19,000 adults (aged 15 to 49) in Switzerland living with HIV or AIDS. This represents an HIV prevalence rate in the general population of approximately 0.5%. The number of newly diagnosed HIV infections declined in Switzerland between 1992 and 2000. People who inject drugs comprised approximately 15% of positive HIV tests in 2000-2001.¹²²

Swiss drug policy began moving toward harm reduction during the late 1980s. During this time, open injection drug scenes were a significant feature in cities such as Zurich and Berne. In Needle Park, as it was known, in the Letten district of Zurich, thousands of people who inject drugs congregated daily to openly purchase and inject heroin. Needle Park received international media attention and led the Swiss government to adopt significant harm-reduction programs, such as expanded needle exchange access, methadone and heroin maintenance, safe injection facilities, and community health services for drug users. These interventions successfully ended the open drug scenes and resulted in increased health benefits for users.¹²³

HIV/AIDS, HCV, and IDU in Swiss prisons

Switzerland has not undertaken extensive HIV/AIDS or HCV prevalence research in prisons. However, HIV infection rates have been estimated to be between 2% and 10%.¹²⁴ As early as 1985, blood testing among Swiss prisoners detected the presence of HTLV-III antibodies in some prisoners.¹²⁵ More recently, a 1999 report based on interviews with 234 prisoners at Realta prison found an HIV infection rate of 5.1%, a result acknowledged as being comparable to rates in other institutions. The same study found that approximately 9% of the prisoners injected drugs at the time of the study.¹²⁶

History of the response to HIV/AIDS, HCV, and IDU in Swiss prisons

Harm-reduction initiatives within the Swiss prison system date back to the mid-1980s. Swiss prison officials approved the distribution of condoms as early as 1985, a program that over time expanded to more and more institutions. In 1989, “hygiene kits” containing condoms, disinfectant, and instructions for cleaning syringes were distributed to prisoners on entry to Regensdorf penitentiary. Methadone maintenance was begun in a special section of Regensdorf that same year, and in 1991 was expanded to several other remand prisons in Basel, Berne, Geneva, and Zurich. In 1990 disinfectants were made available in the remand prison in Geneva.¹²⁷ Discussions on prison needle exchange programs began with the first such program, in 1992. As of September 2000, condoms were provided in one-third of Swiss prisons, and disinfectants in 8%.¹²⁸ In addition to syringe exchange, two Swiss prisons (Oberschöngrün and Realta) have implemented heroin maintenance programs.

Staff have realized that distribution of sterile injection equipment is in their own interest.

Introduction of needle exchange/distribution programs

The first program

In 1992 the first prison needle exchange program in the world was started in the Oberschöngrün prison for men, located in the Swiss canton of Solothurn. The program was initiated by Dr Franz Probst, a part-time physician in the institution. Dr Probst found that approximately 15 of the 70 prisoners in the institution actively injected drugs. Moreover, he recognized that the lack of availability of sterile syringes meant that the prisoners were sharing syringes out of necessity. As a physician, Probst felt it was his ethical responsibility to act to prevent the risk of transmission of bloodborne disease, as well as to minimize the risk of abscesses and other vein problems resulting from the reuse of old syringes. He therefore began providing sterile syringes from the prison medical unit to prisoners who injected drugs.

When the prison warden learned of the syringe distribution program, rather than stop it, he was instead convinced by Dr Probst’s arguments about the necessity of the program as a public health intervention. As a result, the warden sought official approval from prison authorities to continue the program.¹²⁹

The physician distributed approximately 700 syringes annually to approximately 15 people who injected drugs within the institution.¹³⁰ While prison staff were initially sceptical of the program, over time there came to be broad support for it. As explained in 1996 by Peter Fäh, Warden of Oberschöngrün,

Staff have realized that distribution of sterile injection equipment is in their own interest. They feel safer now than before the distribution started. Three years ago, they were always afraid of sticking themselves with a hidden needle during cell searches. Now, inmates are allowed to keep needles, but only in a glass in their medical cabinet over their sink. No staff has suffered needle-stick injuries since 1993.¹³¹



Automatic syringe dispensing unit, Saxerriet Prison, Switzerland

Expansion to other prisons

At the same time as these developments were occurring at Oberschöngrün, plans were being developed for a pilot needle exchange program in the Hindelbank Institutions for Women.¹³²

The Hindelbank project has its foundations in a 1991 survey of prisoners conducted by the prison physician. This survey of injection drug use in the institution found that almost all the people who injected drugs in Hindelbank had shared syringes while incarcerated. Armed with these findings, the doctor proposed developing a pilot needle exchange program within the prison. This proposal was supported by the Swiss Federal Office of Public Health.

The Hindelbank needle exchange pilot project was launched in 1994 as one component of a broader health-promotion and harm-reduction initiative that included prevention education, counselling, and condom distribution. In the short term, the program sought to reduce the harms from drug use and to prevent infection or reinfection by bloodborne pathogens such as HIV and hepatitis B and C. In the medium term, the program aimed to reduce the number of new drug users and of former users who relapse. While

in the Oberschöngrün program syringes were distributed from the medical unit, the Hindelbank pilot project adopted a new approach. At Hindelbank, syringes could be obtained via automatic dispensing units that were placed in six discreet locations around the institution. These units operated on a one-for-one basis; inserting a used syringe into the machine would cause a new one to be released. New prisoners entering Hindelbank were given a “dummy” syringe that would operate the machine but were not themselves functional. During the first year of the pilot, 5335 syringes were distributed.

In 1996 and 1997, needle exchange programs were established in Champ Dollon prison (Geneva) and Realta prison (Graubünden) respectively. The Champ Dollon project follows the Oberschöngrün model of distribution of syringes through the medical unit, while Realta uses a single dispensing machine. In 1998, prison needle exchange programs were started at the Witzwil and Thorberg prisons in Berne. Both programs distribute syringes through prison medical staff. In 2000, the Saxerriet prison in Salez became the seventh Swiss prison to provide sterile needles.¹³³

Evaluation and lessons learned

The Hindelbank pilot project was the subject of an extensive scientific evaluation during its first year.¹³⁴ A series of structured interviews were conducted with the prisoners prior to the

launch of the pilot, then again at three-, six-, and 12-month intervals. Eighty-five percent of the prisoners participated in at least one stage of the evaluation process. The interviews were supplemented with voluntary blood testing and information from other correctional sources.

The evaluation found that syringe sharing virtually disappeared with the introduction of the pilot project. At the start of the pilot, eight of 19 women who injected drugs admitted sharing syringes within the past month in the institution, two of these sharing with more than one person. At the end of the 12-month pilot, only one woman (who had been imprisoned just before the interview) admitted sharing a syringe. There was no evidence of an increase



Insertion of used syringe in dispensing unit causes a new one to be released. Saxerriet Prison, Switzerland

The evaluation found that syringe sharing virtually disappeared with the introduction of the pilot project.

in drug consumption, and there were no new cases of HIV, HBV, or HCV infection in the prison population. In addition, there were no reports of syringes being used as weapons against staff or other prisoners. The prison also experienced a significant decrease in overdoses and in abscesses.¹³⁵ In terms of drug consumption in prison, there were two interesting results. First, the evaluation showed that the longer prisoners who had injected heroin and cocaine before imprisonment stayed in prison, the higher the likelihood they would consume drugs in prison. Second, the evaluation showed that the longer the harm-reduction project had been in existence at the time the prisoner entered the institution, the less likely it was that prisoners who had taken heroin and cocaine before imprisonment would use drugs in prison.¹³⁶

The Realta project was also subjected to an evaluation similar in structure to that done in Hindelbank.¹³⁷ The Realta project distributed 1389 syringes in its first 19 months of operation, using dispensing machines. The findings of the evaluation supported those in Hindelbank. Syringe sharing fell drastically, and was evident in only a few cases. There was no evidence of new HIV, HBV, or HCV infections in the institution, and there were no instances of syringes being used improperly (although there was one report of a prisoner receiving a needle-stick injury from a discarded syringe).

Surveys of staff attitudes at both institutions found that there was a high level of acceptance of the programs.

The original program at Oberschöngrün has not been evaluated scientifically. However, the physician in charge made a number of observations after the project's first three years. Among these were the disappearance of syringe sharing and abscesses, no increases in deaths or overdoses among people who inject drugs, and no instances of syringes being used as weapons.¹³⁸

While urinalysis is practised in the three prisons visited in the course of preparation of this report (Oberschöngrün, Hindelbank, Saxerriet), none of these institutions penalized people for traces of THC in their urine. In some cases the prisons tested for THC but did not penalize for it, while in others they chose not to test for THC at all. This practice was followed because the prisons agreed that penalizing people for smoking marijuana or hashish, which is detectable in urine for much longer than are injection drugs, would result in many prisoners switching from cannabis use to injection drug use. The prison authorities wanted to avoid this outcome, due to the significantly increased health risks associated with injecting drugs.

It is also significant that prisoners in institutions with a needle exchange program are permitted to access both methadone maintenance therapy and the needle exchange program.

Current situation

Prison needle exchanges continue to operate without incident in the seven prisons identified above. Some of these have adapted their programs based upon experience gained over several years. Hindelbank, for example, will now provide prisoners participating in the program with up to five additional "points" (needles) to attach to the main body of the syringe. This is to accommodate people who inject drugs and who may have trouble injecting due to difficulty finding veins. In such cases, the user may need to make several attempts to inject. With additional "points," the prisoner need not reuse a needle that gets duller with each attempted injection. This practice has not resulted in any security prob-



Any syringe found outside its plastic safety box is considered illegal. Hindelbank Prison, Switzerland. (photo: Peter Dimakos)

All syringes must be stored in the plastic safety boxes provided by the health unit.

lems. Oberschöngrün also follows a flexible approach to its syringe exchange program, and does not adhere to a strict one-for-one policy. Again, this has not resulted in any security or safety problems.

Hindelbank no longer requires program participants to store their syringes in a visible place. However, the prison maintains a strict policy that all syringes and extra “points” must be stored in the plastic safety boxes provided by the health unit. Any syringe found outside its box is considered illegal, and sanctions are imposed on the prisoner in question. In recent years, Hindelbank has seen the number of exchanges drop, from a high of over 5000 during the first year of the program to approximately 350 annually in 2003. Staff attribute this drop to a combination of factors, including the new practice of providing extra “points” and a general drop in intravenous drug use among younger prisoners, many of whom choose to smoke or snort rather than inject.

The canton of Berne recently mandated that all prisons under its administrative control must provide sterile syringes to prisoners. Despite this legislative directive, it was noted by several people interviewed for this report that this is not happening in an effective manner in many cantonal prisons. In these cases, prisons that object to syringe exchange have implemented programs in a manner that makes them virtually inaccessible to the vast majority of people who inject drugs (primarily by using non-confidential methods of distribution). In doing so, these prisons are able to fulfill the legal requirement of “providing” syringe exchange programs, yet have created a situation where prisoners will not use the program. This results in needle exchange programs that exist in name only. This resistance demonstrates the challenge posed by the imposition of needle exchange programs where prison staff were not involved in the planning and implementation. Such resistance has also been evident in the experience of Saxerriet prison in the Salez canton, where needle exchange programs were required by order of the cantonal legislature.

Germany

Summary

There are 220 prisons in Germany. Institutions are managed and administered by the state (Land) in which the institution is located.

In 1996, pilot needle exchange programs were established in three German prisons.

In 1996, pilot needle exchange programs were established in three German prisons. In the women’s prison in Vechta, exchanges were done using one-for-one syringe dispensing machines. In the men’s prison in Lingen 1 Dept Groß-Hesepe, exchanges were made by staff from the medical unit and the drug counselling service. In the open prison Vierlande in Hamburg, syringes were distributed by an external organization, which also provided counselling as well as vocational training for prison personnel. Following a successful two-year pilot phase and evaluation, the programs were continued in these three institutions and were expanded to four others. Over the last two years these programs have come under increasing attack from political leaders and, despite their effectiveness, six programs have been cancelled.

HIV/AIDS, HCV, and IDU in Germany

According to figures released by UNAIDS and the WHO in 2002, there are approximately 41,000 adults in Germany living with HIV or AIDS. This represents an HIV/AIDS preva-

lence rate of approximately 0.1% in the general population.¹³⁹

There are two sources for AIDS and HIV-related data in Germany. According to the National Case Report Register for AIDS, the total number of AIDS cases diagnosed up to the end of 2001 was 21,189, approximately 75% of whom have died. Nearly 16% of AIDS cases have been diagnosed among people who inject drugs. At the end of 2001 there were 2152 males living with AIDS who reported injecting drugs, 11.6% of all AIDS diagnoses among men. Among the 2620 women living with AIDS, 43.7% inject or used to inject drugs. Epidemiological data based on HIV testing is also available. Of the 18,000 laboratory tests for HIV conducted since 1993, 10.4% of the 1900 positive test results were among people who currently inject drugs or had a history of injection drug use. Women accounted for 28% of HIV-infected drug users.¹⁴⁰

HIV/AIDS, HCV, and IDU in German prisons

Several studies have estimated the HIV prevalence rate among German prisoners, with results ranging from 1.1% to 1.9%. These studies found that between 2.1% and 6.3% of prisoners who injected drugs were HIV-positive.¹⁴¹

Another study has indicated a link between incarceration, injection drug use, and the transmission of bloodborne diseases such as HIV and HCV. A 1993 study of over 612 people in Berlin who injected drugs concluded that the most significant factor for HIV infection among the group was sharing of needles during incarceration. Imprisonment was also found to be the second most common reason cited by the participants for needle sharing. The study concluded that a lack of access to sterile needles was counterproductive to HIV prevention measures implemented in the general community.¹⁴²

A 1993 study of over 612 people in Berlin who injected drugs concluded that the most significant factor for HIV infection among the group was sharing of needles during incarceration.

Rates of HCV infection among German prisoners are higher. A 1998 study in a Hamburg high-security prison for men found an HCV prevalence of 25% among all prisoners, and a 96% infection rate among people who inject drugs. A study at a women's prison in Lower Saxony found an HCV prevalence rate of 75%, and identified 20 women who had seroconverted while incarcerated.¹⁴³ Other studies have found HCV prevalence rates of 77% among prisoners who inject drugs, and 18% for prisoners who did not inject drugs. A 2001 study of prisoners who had injected drugs only in prison found a 100% rate of HCV infection.¹⁴⁴

History of the response to HIV/AIDS, HBV/HCV, and IDU in German prisons

The development of the response to HIV/AIDS and hepatitis in German prisons can be described as a long process toward normalization. In the mid-1980s, when HIV/AIDS was first identified in the prison setting, there was a debate about separation, isolation of HIV-positive prisoners, and mandatory HIV testing. At this time there was also a lack of knowledge among the prison staff about transmission routes. Voluntary HIV testing is provided, although the term "voluntary" has been differently interpreted and practised from state to state. In the early years, some prisons treated all those who refused testing as HIV infected. Due to different test practices in the 16 Länder, the test rate varied from 10% to more than 90%.

More than 90% of HIV- and/or HBV/HCV-positive prisoners inject drugs or have a history of injection drug use. Injecting is therefore the primary risk factor for HIV and hepatitis transmission in prisons. Despite this fact, the main response to the risks posed by injec-

tion drug use in Germany's criminal justice system continues to be abstinence-based, and includes counselling and drug-free wings in prisons, and diversion to drug treatment in place of custodial sentences for minor offences. Condoms are available in all German prisons. Substitution treatment is provided in most German prisons, although access depends to a great extent on the state in which the prison is located. While in the northern states substitution treatment is common, it is rare to find it provided in the southern states such as Bavaria and Baden-Württemberg.¹⁴⁵ Methadone is the most frequently used substitution treatment for detoxification.¹⁴⁶ Other harm-reduction measures have only been implemented in a few prisons. The provision of bleach was implemented in a Hamburg prison in the early 1990s, only to be withdrawn due to lack of access by prisoners. Bleach is currently not available in German prisons.¹⁴⁷ Prison needle exchange programs were piloted in 1996.

Introduction of needle exchange/distribution programs

The first programs

In 1995, the Minister of Justice in the northern German state of Lower Saxony approved a two-year prison needle exchange pilot project in the women's prison in Vechta and the men's prison in Lingen 1 Dept Groß-Hesepe.¹⁴⁸ The success of prison needle exchange programs in Switzerland, as well as support from various German experts, helped form the basis for this decision. The pilot projects were initiated in the women's and men's prisons in April and July 1996 respectively.

The Vechta prison houses a population of approximately 200 women (both adults and youth). Lingen 1 Dept Groß-Hesepe houses approximately 230 adult men. It was estimated that at least 50% of the prisoners in each institution had a current or past history of drug use. Each prison opted to explore different methods of needle distribution. In the case of Vechta, five syringe-dispensing machines were placed in various parts of the institution to allow anonymous access. The men's prison chose to distribute needles through staff of the medical and drug counselling service. An external scientific evaluation of both pilot projects was arranged with researchers at the university in Oldenburg.

In Vechta, the needle exchange program was one component of a comprehensive HIV prevention program that also included education and counselling, harm reduction and safer-sex information, access to methadone, and involvement of external organizations. Each woman entering the institution was given information from health-care staff that included details on participation in the needle exchange program. Before being approved for the needle exchange program, a prisoner underwent a medical examination and had her history of drug use documented in her medical file. Young offenders housed in Vechta were also eligible to participate in the program if parental consent was provided. Women participating in the methadone program were not eligible to be part of the needle exchange project.

As in Switzerland, prisoners participating in the program were given a "dummy" needle that could be inserted into a dispensing machine to release a sterile needle. Following this, a new needle could be obtained on a one-for-one basis by inserting a used syringe into the machine. In addition to providing sterile syringes, the machines also dispensed other harm-reduction materials necessary to practise safe injection. These included alcohol swabs, ascor-



Syringe dispensing machine, Lichtenberg Prison, Berlin.

bic acid, filters, plaster, and sodium chloride. Each of the dispensing machines was emptied and refilled daily by health-care staff.

Each prisoner involved in the program was allowed to have only one needle in her possession, and could only carry it on her person when it was being exchanged. Prisoners were not allowed to lend or sell their needle, and they could not leave the prison with the needle when transferred to another institution. Possession or distribution of drugs was illegal. One hundred and sixty-nine women participated in the needle exchange program during the two-year pilot phase, and 16,390 syringes were exchanged, with 98.9% of them being returned.

In the second pilot project at the men's prison in Lingen 1 Dept Groß-Hesepe, needles were distributed by staff rather than machine. Workers from the health unit or drug counselling service provided needle exchange every day in the tea room, a discreet area near the drug counselling centre that could be accessed from the prison's recreational area. Exchanges were available during established hours for any prisoner producing a used needle. Prisoners participating in the methadone program were not eligible for the needle exchange project. As in Vechta, the needle exchange program in Lingen 1 Dept Groß-Hesepe was one part of a larger comprehensive HIV prevention program including educational interventions, access to methadone, and involvement of outside organizations. In all, 83 men participated in the program over the pilot phase, 4517 needles were exchanged, and 98.3% of the syringes distributed were returned.

In both prisons, consultations and educational programs were provided for staff to make them aware of the rationale for and objectives of the programs, and to receive their input and suggestions.

Expansion to other prisons

Based upon the success of the Vechta and Lingen projects, needle exchange programs were implemented in several other German prisons.

In 1996 a program was started at the Vierlande prison in Hamburg, which houses over 300 men and approximately 20 women. This prison used both dispensing machines and staff to distribute sterile syringes. In 1998 needle exchange using dispensing machines was implemented in Lichtenberg prison for women and Lehrter Str. prison for men in Berlin.

In Lichtenberg, which has a population of approximately 75 women, every prisoner entering the institution is provided with a harm-reduction kit as part of the contents of her cell. This kit consists of a plastic eyeglasses case containing ascorbic acid, alcohol wipes, vein cream, and a "dummy" needle to be used in the sterile needle dispensing machine. As in other prisons with needle exchange, syringes stored properly in their plastic cases are legal. In Lichtenberg, a prisoner found with an improperly stored or hidden needle, in possession of more than one needle, or with a needle containing a dose of heroin, is subject to penalties.

In early 2000 needle exchange was made available through staff at the Hannöversand women's prison and the Am Hasenberge men's prison in Hamburg (see Current situation, below).

Based upon the success of the first projects, needle exchange programs were implemented in several other German prisons.



Harm reduction kit, Lichtenberg Prison, Berlin. (photo: Peter Dimakos)

Evaluation and lessons learned

An evaluation was conducted of the pilot programs in Vechta and Lingen 1 Dept Groß-Hesepe after two years.¹⁴⁹ The evaluation yielded results very similar to those found in Switzerland.

The provision of sterile needles did not lead to an increase in drug use, and the amount of drugs seized within the prison did not change with the availability of needle exchange. In fact, the number of drug users entering treatment programs actually increased after the implementation of the pilot, indicating that, as is the case in the outside community, prison needle exchange programs are effective outreach and referral points for people who inject drugs.

There were no instances of syringes being used as weapons against staff or other prisoners, despite the fact that over 20,000 syringes were distributed in the two institutions during the two-year pilot phase. Observance of the program rules by participants was found to be

high, with only occasional minor infractions occurring in the proper storage of syringes by some prisoners, or the possession of syringes by some prisoners in the methadone program (who were not allowed to also be part of the needle exchange project).

Staff and prisoners both found the existence of the program non-threatening. Staff adapted quickly to the new programs, which came to be seen as a normal part of the institutional routine. There were differences found in the level of acceptance of the programs by pris-

oners in the two different institutions. The evaluator reported that the women in Vechta had much more confidence and trust in the program than did the men in Lingen. This was the result of the differing methods of needle distribution in the two prisons (anonymous dispensing machines in Vechta; hand-to-hand distribution by prison health staff in Lingen). It was found that many prisoners in Lingen were hesitant to participate in the program, as doing so would be to identify themselves to staff as injection drug users.

Finally, the evaluator found that there were no new cases of HIV among the participants who were permanent members of the exchange program. A significant decrease in abscesses was also identified.

Lichtenberg, which was visited in the preparation of this report, has experienced no incidents of syringes being used as weapons, although one staff member suffered an accidental needle-stick injury. In this incident, a staff member found a syringe in the prison and stored it in an envelope. A second staff member was accidentally pricked when picking up the envelope. At the start of the program in Lichtenberg, there were a significant number of exchanges, although the rate has since declined. Staff attribute this to the fact that many

women participated in the program initially, as they believed that a high level of participation would ensure the continuation of the intervention.

Current situation

Since 2001, prison syringe exchange programs in Germany have come under political attack. In 2002 needle exchange programs operating in the Hannöversand women's prison, Am Hasenberge men's prison, and the Vierlande open prison (men and women) in

Hamburg were terminated. The decision to terminate the programs was taken by a centre-right coalition government formed in September 2001, in the absence of any reports or other evidence of problems with the programs. It is clear that the termination of the programs was politically and ideologically motivated. Ignoring six years of evidence of the success of prison syringe exchange programs in Germany, the governing coalition acted to abolish

Since 2001, prison syringe exchange programs in Germany have come under political attack.

Since the termination of the prison needle exchange program, many prisoners have started to share syringes.

harm-reduction measures and declared drug-free prisons as their main target.¹⁵⁰ On 1 June 2003 the needle exchanges in Vechta and in Lingen 1 Dept Groß-Hesepe were also terminated in similar circumstances by a new centre-liberal government in Lower Saxony.

In Berlin, the social-democratic and socialist coalition terminated one of its two needle exchange programs in early 2004. The stated reason for this action was an alleged lack of acceptance of the program among staff. The government also claimed that the prison did not exhibit a lower HIV infection rate than another prison without a needle exchange program. However, there is no epidemiological research to support this claim.

In each of these cases, the decision to terminate the needle exchange programs was made without consulting prison staff, and without an opportunity to prepare prisoners for the loss of access to the programs. In the case of Lower Saxony, the government's announcement to end needle exchange as of 1 June 2003 was made three days before it was to take effect and only one day before the start of a holiday week-end. This meant that there was no opportunity to discuss the policy change with the prisoners who accessed the needle exchange, and it essentially created a situation in which, overnight, prisoners lost access to a program that had provided them with sterile needles for seven years.

Discussions with prisoners in the Vechta prison in early June 2003 revealed that since the termination of the program many had started to share syringes and were reverting to the previously unknown practices of borrowing or renting needles from others. In Lingen it was also reported that syringes now cost € 10 or two packages of cigarettes on the underground market. Before the announcement, syringes were stored safely in plastic boxes in plain sight of prison staff. They are now being hidden, thus increasing the likelihood of accidental needle-stick injuries to staff.

Interestingly, apart from public protests by public health professionals, staff at these prisons are among the most vocal critics of the governments' decisions. In Vechta prison, for example, the prison staff have started a petition to lobby the government to reinstate the program. The official staff representative for the prison has written to the government to refute allegations by the Justice Minister of Lower Saxony that the withdrawal of the program came as the result of a lack of staff support. In Lichtenberg prison in Berlin, prison staff (85% of whom opposed the initial introduction of the needle exchange program in 1998) are now the main actors lobbying the government to keep the program operating. These examples provide compelling evidence of the benefits of prison needle exchange to staff, and show that strong staff support can develop for such programs.

Overall, the decision on the part of several state governments in Germany to terminate prison needle exchange programs clearly illustrates the continuing controversial nature of such programs, even within jurisdictions where they have a history of successful implementation. The decision to terminate effective needle exchange programs, without any evidence to justify such decisions, makes no sense from a public health perspective and represents the triumph of ideology and irrelevant political considerations over sound public health policy.

Spain

Summary

There are 69 prisons in Spain falling under the jurisdiction of the Spanish Ministry of the Interior. There are also a further 11 prisons that are administered by the government in the autonomous region of Cataluña.

Staff at these prisons are among the most vocal critics of the governments' decision to close the needle exchange program.

By the end of 2003 the number of Spanish prisons providing needle exchange had grown to 30.

The first prison needle exchange program was introduced in July 1997 in Basauri prison, Bilbao, in the Basque region. This was followed by pilot programs in Pamplona prison (1998) and the Orense and Tenerife prisons (1999). In June 2001 the Directorate General for Prisons ordered that needle exchange programs be implemented in all prisons. By the end of 2001, syringe exchange was provided in 11 Spanish prisons. By the end of 2002 the number of prisons providing needle exchange had grown to 27; and by the end of 2003, to 30.¹⁵¹

At present, the mandate to institute needle exchange programs exists for all 69 prisons under the jurisdiction of Spain's Ministry of the Interior, with the exception of psychiatric prisons and one high-security-level prison. There is also a pilot needle exchange program established in one of the prisons under the jurisdiction of the government of Cataluña.

HIV/AIDS, HCV, and IDU in Spain

According to figures from UNAIDS and the WHO, there were approximately 130,000 adults (aged 15 to 49) living with HIV/AIDS in Spain at the end of 2001, and a prevalence rate of 0.5%.¹⁵² The HCV prevalence rate in the general community is approximately 3%.¹⁵³

Although declining in recent years due to the wide implementation of harm-reduction programs such as methadone and needle exchange, the HIV prevalence rate among people who inject drugs continues to be high at 33.5% in 2000, down from 37.1% in 1996. As of June 2001, the National AIDS Register had identified 39,681 cumulative cases of AIDS in Spain that were related to injection drug use, 65% of all AIDS cases identified up to that time.¹⁵⁴

HIV/AIDS, HCV, and IDU in Spanish prisons

Approximately half of Spanish prisoners have a history of illicit drug use, or are actively using drugs at the time of incarceration. The vast majority of prisoners seeking drug treatment during incarceration do so for heroin dependence (85%). However, there has been an increase in injection cocaine use in recent years.¹⁵⁵

Rates of both HIV and HCV infection among Spanish prisoners are high. While prisoners represent only 0.01% of the total Spanish population, they account for 7% of AIDS diagnoses.¹⁵⁶ Rates of infection are particularly high among those with a history of injection drug use. In 1989, the first cross-sectional HIV prevalence study found an HIV infection rate among prisoners of 32%.¹⁵⁷ Since that time, rigorous HIV prevention and harm-reduction initiatives in the community and in prisons have achieved significant results. In the early 1990s the HIV prevalence rate in prisons was approximately 23%.¹⁵⁸ In 2000 the HIV prevalence rate was reported to be 16.6%.¹⁵⁹ A 2002 joint report by the Ministry of the Interior and the Ministry of Health and Consumer Affairs estimated an HIV prevalence rate of 15% and an HCV prevalence rate of 40%.¹⁶⁰ Among incarcerated women, rates of HIV infection are particularly high: in 2001 the HIV prevalence rate among women prisoners was 38%.¹⁶¹

People who inject drugs comprise the majority of AIDS cases among Spanish prisoners.¹⁶² Approximately 90% of prisoners living with AIDS in Spain cite injection drug use as a risk factor.¹⁶³ Rates of HIV infection among prisoners with a history of injection drug use have been cited as high as 46.1%.¹⁶⁴

Rates of HCV infection are even higher, particularly among people who inject drugs. According to a 1998 Penitentiary Health Study, 46.1% of prisoners were HCV infected.¹⁶⁵ In 2002 the HCV infection rate was cited as being 40%.¹⁶⁶ Among prisoners with a history of

injection drug use, HCV infection rates are as high as 90%. Even among prisoners who have no IDU history the rate of HCV infection is high, with 20% testing positive.¹⁶⁷ Dual infection is also a significant issue. It has been estimated that up to 83.5% of Spanish prisoners living with HIV/AIDS are also infected with HCV¹⁶⁸ and that 31% of all female prisoners are infected with both HIV and hepatitis.¹⁶⁹

History of the response to HIV/AIDS, HCV, and IDU in Spanish prisons

While the Spanish prison system has developed extensive drug treatment and abstinence programs, including drug-free units in many institutions, there is an official recognition that “[not] all drug users are candidates for an abstinence based program.”¹⁷⁰ Therefore, a multi-faceted approach, including significant harm-reduction initiatives, has been implemented.

This approach has been bolstered by various legal and policy instruments that support the extension of harm-reduction programs to prisoners in Spain. The Spanish Constitution, for example, establishes that prison sentences and security measures must aim at the re-education and social reintegration of individuals, as well as the protection of their health.¹⁷¹ Article 3.3 of the General Prisons Act also mandates that “the Prison System shall endeavour to preserve the life, health and integrity of inmates.” More recently, the National Plan on Drugs 2000-2008 includes specific references to prison health, including a call to “diversify the available range of harm-reduction programs in prisons through various initiatives, such as the extension of needle exchange programs.”¹⁷²

During the course of 2000, over 23,000 Spanish prisoners received methadone treatment.

Methadone maintenance was first introduced into Spanish prisons in 1992 as a strategy to reduce HIV and HCV transmission in prisons via injection drug use. By 1998, methadone was available in all but one prison (a very small institution on the island of Tenerife). During the course of 2000, over 23,000 prisoners received methadone.¹⁷³

Needle exchange was first piloted in 1997. In November 1998 the Directorate General for Prisons issued a recommendation that all prisons implement harm-reduction measures, and recommended that needle exchange programs should be considered.¹⁷⁴ In June 2001 the Directorate General for Prisons issued a directive requiring the implementation of needle exchange programs in all prisons.

Introduction of needle exchange/distribution programs

The first program

In December 1995 a Basque Parliament green paper recommended that the State Secretariat for Prison Affairs implement three pilot needle exchange programs in the Basque Autonomous Community. It was suggested that these pilots could be used to evaluate the feasibility of introducing syringe exchange programs more broadly within the prison system.¹⁷⁵

In January 1996 a planning committee was struck to examine the issue of prison needle exchange programs and make recommendations. The committee’s primary finding was that needle exchange programs should be implemented in cooperation with the staff of an external, non-governmental organization that was already providing prison services. Based upon these findings, and following consultation and education with prison staff, the first pilot needle exchange

Following the positive experience with the first prison needle exchange projects, the Spanish government made a commitment to expand their availability.

was established in July 1997 in the Centro Penitenciario de Basauri in Bilbao, a men's institution with a population of 250.¹⁷⁶ Of the 180 prisoners admitted in 1995, one-third regularly injected drugs, of whom nearly half were HIV-positive.

In Basauri, exchanges were made by workers from non-governmental organizations for five hours each day in two discreet areas of the prison. In addition to a sterile needle, the prisoners also received a harm-reduction kit that contained an alcohol swab, distilled water, a hard container for carrying the needle, and a condom. The program emphasized the safe storage of needles in plastic cases so as to minimize the risk of accidental needle-stick injuries. The needles provided were marked so that they could be distinguished from contraband needles.¹⁷⁷

During the first two-and-a-half years of the pilot, over 16,500 syringes were exchanged by over 600 prisoners using the program. During that time there were no violent incidents reported involving the use of the syringes.

Expansion to other prisons

In October 1996 the Provincial Criminal Court of Navarra ordered officials at Pamplona prison to provide sterile needles to prisoners. In 1997, as a result of numerous complaints, the

Office of the Ombudsman also recommended the implementation of prison needle exchange programs.¹⁷⁸ In November 1998 a second prison needle exchange program was started in Pamplona. This was followed in 1999 by projects in Tenerife, San Sebastián, and Orense. Based upon the experience gained through these programs, the National Plan on AIDS and the Directorate General for Prisons jointly created the Working Group on Syringe Exchange Programs in Prisons. The group's objectives were to "elaborate recommendations that seek to standardize as much as possible the conditions for introduction, criteria for action, and indicators for evaluation of syringe exchange programs in prisons."¹⁷⁹ The Working Group's

report, *Key Elements for the Implementation of Syringe Exchange Programs in Prison*, was published in April 2000. At that time, needle exchange programs were operating in nine prisons in the Basque region, Galicia, Canary Islands, and Navarra. In October 2001 it was reported that these programs had exchanged 5488 syringes.¹⁸⁰ By the end of 2001, syringe exchange programs had been established in 11 Spanish prisons.¹⁸¹

Following the positive experience of these projects, the Spanish government made a commitment to expand their availability and in March 2001 the parliament approved a green paper recommending the implementation of needle exchange programs in all prisons.¹⁸²

From this point, events moved quite rapidly. In June 2001 the Directorate General for Prisons

issued a directive requiring the implementation of needle exchange programs in all prisons. This was followed in October by a directive from the Subdirector General for Prison Health specifying that needle exchange programs should be introduced in all prisons by January 2002. In March 2002 the Ministry of the Interior and the Ministry of Health and Consumer Affairs jointly published the document *Needle Exchange in Prison: Framework Program*, which provides the prisons with guidelines, policies, and procedures, and training and evaluation materials for implementing needle exchange

programs.¹⁸³ By the end of 2002, 12,970 syringes had been distributed in 27 Spanish prisons.¹⁸⁴ There is also a pilot needle exchange program established in one of the prisons under

In Spain, needle exchange services are provided by health-care staff or by health-care staff in collaboration with external non-governmental organizations.

Harm-reduction kits must by policy include a syringe in a hard plastic transparent case, distilled water, and an alcohol swab.

the jurisdiction of the government of Cataluña. In all prisons, needle exchange is done exclusively through hand-to-hand methods (not dispensing machines) in discreet locations within the prisons. In many cases, particularly in large facilities, sterile needles are available at multiple sites.

Depending upon the institution, needle exchange services are provided by health-care staff (nurses, physicians), or health-care staff in collaboration with external non-governmental organizations. As is the case in other jurisdictions, syringe exchange is provided as one component of a broader comprehensive approach to drug use, harm reduction, and health promotion that includes other education, counselling, and treatment services. Availability of sterile needles varies from two days per week to every day, depending upon the institution. Times of program operation also vary, although sterile needles are generally available during a two-to-four-hour period in either the morning or evening.¹⁸⁵

Harm-reduction kits are provided rather than single needles. These kits must by policy include a syringe in a hard plastic transparent case, distilled water, and an alcohol swab. Some institutions also provide a cooker and filters in their kits. Two different gauges of syringes are available to people who inject drugs, depending upon whether the person is injecting heroin or cocaine. Prisoners participating in the program are mandated to keep their needle inside the hard plastic case at all times, whether the syringe is on their person or in their cell. In the case of a search by staff, they must identify that they have the needle and its location.¹⁸⁶ Needles that are not part of the official program are prohibited and are confiscated if found.

While the tendency of many prison jurisdictions is to elaborate exhaustive sets of rules and regulations on all issues, the Spanish guidelines adopt a very progressive and pragmatic approach to the program. One example of this is seen in their approach to staff safety, as set out in the Framework Program:

It should also be taken into account that [it] is unadvisable to establish a large number of rules, since an excessive number of rules dilutes the importance of the basic rules. It is easier to ensure compliance with a minimum number of basic rules that have real impact on maintaining the safety of the program than to implement a program with many accessory rules [that] may cause effective preventive measures to be neglected, and therefore lead to an increased risk of accidents.¹⁸⁷

There are a number of features of the Spanish policy that are worth closer examination.

First, the program guidelines do not mandate strict adherence to one-for-one exchange. While they advise that “the rule should be exchange, i.e., the previous syringe must be returned before a new kit is handed out,” they also recognize that “a flexible attitude should be maintained towards [the one-for-one rule’s] application



Harm reduction kit,
Soto de Real Prison, Madrid
(photo: Peter Dimakos)

Prisoners participating in methadone maintenance are not disqualified from accessing the needle exchange program.

Only persons with mental health issues or those who are particularly violent may be excluded from the needle exchange program.

keeping in mind that the primary objective of the program is to prevent shared use of syringes.”¹⁸⁸ The guidelines advise that “The number of kits to be supplied depends on the frequency of exchange and the user’s consumption habits: it should be sufficient to cover the inmate’s needs so that he does not have to reuse the syringe before the next day of exchange.”¹⁸⁹

Second, prisoners participating in methadone maintenance are not disqualified from accessing the needle exchange program. There are three reasons cited for this decision. The first is a recognition that some drug users on methadone will continue to inject either sporadically or habitually, and that this usually indicates that they are receiving an insufficient dose of methadone. The second is in recognition that people on methadone may still inject cocaine. The third is that methadone patients may act as “couriers,” obtaining sterile needles for other people who inject drugs who do not wish to identify themselves to the prison health unit.¹⁹⁰

The guidelines also enable prisoners living in drug-free units or involved in abstinence-based programs to access sterile needles. It is recommended that requests for needles by these prisoners be “approached from a therapeutic point of view, and appropriate therapeutic measures taken to help him to overcome the relapse, but access to sterile injection material should never be denied.”¹⁹¹

Correctional officers reported very positive experiences with the needle exchange pilot project.

The only instances in which participation in the needle exchange program is restricted are in the cases of persons with mental health issues who pose a danger or those classified as particularly violent. In each of these cases, the guidelines suggest that individuals be assessed on a case-by-case basis. For example, in the case of violent prisoners, prison officials are encouraged to “regulate the means of access by especially dangerous inmates, bearing in mind that it is always preferable to adopt special security rules with these inmates than to deny access to sterile syringes.”¹⁹² Involvement in the program can also be denied if an individual uses a needle as a weapon, or continually violates program rules.¹⁹³

Evaluation and lessons learned

To evaluate the original Basauri pilot project, a monitoring committee was established to review and assess the program as it progressed.¹⁹⁴ Evaluations that involved consulting prisoners and staff were conducted at zero, three, and six months. A 12-month evaluation was deemed impossible, as the prison’s high turnover rate meant that few prisoners remained in the institution from the start of the pilot until the 12-month point. However, an evaluation with prison and non-governmental organization staff was done after 22 months.

Prison needle exchange programs facilitate referral of users to drug addiction treatment programs.

The prisoners accessing the program experienced no obstruction from correctional officers, and supported the fact that the program was run by the external non-governmental organization. It was noted that this personalized aspect of the program was preferable to an anonymous dispensing machine. Furthermore, the evaluation found that drug consumption among the prisoners had not increased and that there was a reduction in high-risk behaviours.

Correctional officers also reported very positive experiences with the pilot. They reported no problems or conflicts with prisoners as a result of the program, and there were no instances of syringes being used as weapons. While they considered the program to be positive, they expressed a preference that it be run by prison staff rather than by an external organization.

The staff of the non-governmental organization reported no instances of prisoners being

punished by prison staff for accessing the program, and that the program provided a useful tool to reach prisoners with health-promotion messages and to refer them to other health programs. They also suggested that some flexibility was necessary in the program, in that a strict one-for-one exchange policy was not always practical. This issue was debated in the monitoring committee. The non-governmental organization staff argued in favour of flexibility regarding this policy. Their principle concern was that they did not want to deny a sterile needle to prisoners who injected drugs and who did not have a needle to exchange, since this would place the prisoner in a situation where he would be forced to share needles. The prison guards, however, were concerned with security issues. In the end, an 80% return rate was agreed as an acceptable standard (the program's return rate was 82%).

Evaluations of the other pilot projects were also positive. In discussing the experience of nine prison needle exchanges, a 2001 report prepared by the National Plan on Drugs noted that “[t]hese experiences have shown that these programmes can be reproduced in a penitentiary environment without resulting in any distortion or direct problems.”¹⁹⁵ The 2002 document, *Needle Exchange in Prison: Framework Program*, provided the following conclusions concerning the evaluations of Spanish prison syringe exchange programs:¹⁹⁶

- Implementation of a NEP, as in the community outside prisons, is feasible and adaptable to the conditions of execution of the prison sentence.
- NEPs in prison, as in the community outside prisons, produce behavioural changes that lead to a reduction in the risks associated with injection drug use.
- NEPs in prison facilitate referral of users to drug addiction treatment programs.
- Implementation of a NEP does not generally cause an increase in drug use or, specifically, an increase in parenteral heroin or cocaine use.
- A NEP in prison should operate with a certain degree of flexibility and be tailored to the individual circumstances of each prisoner, but without forgetting the conditions for implementation established in each program.
- It is feasible for a NEP and other drug addiction prevention or intervention programs to coexist.

It is always preferable to find a way to provide prisoners who injects drugs with a sterile needle than force them into a position where they will share.

The Spanish experience of prison syringe exchange has also found that levels of intravenous drug use have remained unchanged, there have been no accidental needle-stick injuries, there has been no increase in conflict among prisoners or between prisoners and staff, there have been no instances of syringes being used as weapons, and staff support for the programs has grown with the experience of implementation.¹⁹⁷

Now that prison needle exchange has been expanded nationally, guidelines for ongoing evaluation have been developed as part of the Framework Program. A computer software package called SANIT is used in each prison to record the number of users of the program, number of syringes supplied and returned, enrolments/withdrawals from the program, and reasons for withdrawals. Health status is also included. To maintain the confidentiality of the program users, a randomly generated number or pseudonym is used to identify each participant. In addition to quantitative data, the evaluation also includes qualitative feedback from prisoners and staff. Standard anonymous questionnaires for collecting this data are included within the Framework Program document. It is suggested that evaluations be done on at least an annual basis, if not more regularly (ie, three-, six-, and 12-month intervals). As a result, ongoing evaluation and assessment of the programs will be available annually on a national basis.

Three lessons emerge from a review of the Spanish experience.

Prison needle exchange programs can be quickly implemented on a national basis where political will is combined with a solid implementation plan.

First, those responsible for the administration of the needle exchange programs have maintained a steadfast commitment to the health objectives and benefits of the program, a harm-reduction philosophy, and the right to health of people in prison. As a result, the Spanish prison system has been able to develop very progressive, pragmatic, and flexible approaches to challenging issues that arise in the programs. Their solutions to controversial issues such as strict one-for-one syringe exchange, access to needle exchange for prisoners who are supposedly “drug free” (ie, those on methadone maintenance or living in drug-free units), and access to syringes for violent or psychotic prisoners are all underpinned by the fundamental principle that people in prison have a right to protect themselves against HIV and HCV infection, that harm-reduction responses must be adapted to meet individual and unique needs, and that it is always preferable to find a way to provide prisoners who injects drugs with a sterile needle than force them into a position where they will share. This is a valuable lesson for other jurisdictions.

Second, the Spanish example demonstrates the value of providing clear guidelines and principles for prison syringe exchange programs, yet allowing some flexibility in how each individual institution implements those guidelines. This is particularly important given that a one-size-fits-all policy would have been difficult to impose on a system of 69 different prisons of different sizes, regions, security levels, etc. However, providing clear guidelines and principles on implementation, and clear political instruction that these programs were to be implemented by a deadline, has allowed institutions to make such programs available within their own unique institutional environments.

Which leads to the final lesson from the Spanish experience. Prison needle exchange programs can be quickly implemented on a national basis where political will is combined with a solid implementation plan. At the end of 2001, needle exchange programs were in operation in 11 prisons. Just 18 months later, the legislative and policy infrastructure was in place for implementation in all 69 Spanish prisons, with needle exchange programs up and running in 27 of them.

Current situation

At present, the legislation and policy required for the implementation of needle exchange programs in all 69 prisons under the jurisdiction of Spain’s Ministry of the Interior exists, with the exception of psychiatric prisons and one high-security-level prison. By the end of 2002, syringes had been distributed in 27 institutions, increasing to 30 prisons by the end of 2003.¹⁹⁸ A pilot needle exchange program has also been established in one of the 11 prisons under the autonomous jurisdiction of the government of Cataluña. Ongoing annual evaluation and assessment of the programs within the jurisdiction of the Spanish Ministry of the Interior will be conducted on a national basis.

Moldova

Summary

The first prison needle exchange program in Moldova was initiated in May 1999 in Prison Colony 18 (PC18) in Branesti. Originally, sterile syringes were provided to prisoners through the prison health unit. However, after four to five months, the distribution method was

changed to a peer model, which has been continued.

Based upon the success of the pilot project in PC18, a second syringe exchange program was initiated in May 2002 in Prison Colony 4 (PC4) in Cricova. The program in PC4 is also peer based. A third project, in the women's prison in Rusca, was opened in August 2003.

HIV/AIDS, HCV, and IDU in Moldova

Prior to 1995, fewer than 10 cases of HIV infection were reported annually in Moldova. However, the subsequent epidemic of HIV infection among people who inject drugs has driven these figures significantly higher. According to UNAIDS/WHO, by the end of 2001 there were approximately 1500 adults (aged 15 to 49) in Moldova infected with HIV, the majority becoming infected via injection drug use. In a 2002 report, UNAIDS/WHO identified 66.7% of AIDS cases within Moldova (73.7% of men, 57.1% of women) as being linked to injection drug use.¹⁹⁹ Physicians working within the country have stated that as many as 83% of all HIV infections are now linked to injection drug use.²⁰⁰

As of September 2002 there were 210 known prisoners living with HIV/AIDS in Moldovan prisons.

HIV/AIDS, HCV, and IDU in Moldovan prisons

As of September 2002 there were 210 known prisoners living with HIV/AIDS in Moldovan prisons, which reflects an HIV/AIDS prevalence rate in the prison system approximately 100 times higher than in the general community.²⁰¹ Twelve percent of known cases of HIV infection in Moldovan prisons are among incarcerated women. However, these statistics underrepresent the extent of HIV prevalence, since they only include prisoners whose HIV status is known. There is no universal HIV testing of the prison population, and it is assumed that the true prevalence of HIV in prisons is higher.²⁰²

Known Cases of HIV/AIDS in Moldova

YEAR	GENERAL POPULATION	PRISON POPULATION²⁰³
1997	404	38
1998	408	78
1999	155	122
2000	64	134
2001	1300	179
to September 2002	1620	210

History of the response to HIV/AIDS, HCV, and IDU in Moldovan prisons

The development of harm-reduction initiatives in Moldovan prisons has been led by Health Reform in Prisons, a non-governmental organization of prison doctors established in 1997 by the former chief of the prison health department. Because the members of Health Reform in Prisons were themselves current or former prison physicians, the organization was in a unique position vis-à-vis the prison administration to be able to advocate for the implementation of harm-reduction measures.

In May 1999 a pilot prison syringe exchange program was established at Prison Colony 18, a medium/maximum-security prison with 1000 prisoners.

Health Reform in Prisons, with the cooperation of the Moldovan Ministry of Prisons and financial assistance from the Open Society Institute of the Soros Foundation Network, began delivering HIV prevention programs in prisons in 1999.²⁰⁴ The organization went on to provide HIV and harm-reduction programs and services in all 19 prisons in Moldova. These activities include the provision of HIV prevention education for prisoners and staff, peer education, the creation and dissemination of educational materials, the purchase of HIV-prevention and harm-reduction tools, the distribution of condoms and disinfectants, and the provision of sterile syringes in two prisons.

Up to September 2002, the project had reached approximately 14,000 prisoners (79% of all prisoners in Moldova) and 1600 prison staff. The organization distributes condoms, disinfectant, and information in all Moldovan prisons. Since the project was started, over 30,000 items of information have been distributed.²⁰⁵

Introduction of needle exchange/distribution programs

The first program

In May 1999 a pilot prison syringe exchange program was established.²⁰⁶ The site chosen was Prison Colony 18 in Branesti. There were several reasons why PC18 was chosen for the pilot. These included its proximity to the city of Chisinau (the capital of Moldova, where the NGO coordinating the project is based), the fact that it was the prison with the lowest average age of prisoners (24 to 26 years old), and because at that time it had the highest known number of prisoners known to be living with HIV/AIDS (18 people).

PC18 is a medium/maximum-security prison with a population of approximately 1000 men. It was originally built in 1950 to house 250 people. The Moldovan prison system is a military system. Prison staff at PC18 include approximately 200 correctional officers (who are soldiers) and 100 non-military staff. All prisoners in the institution work at one of several prison industries. These include underground stone mining, agricultural and livestock cultivation, grain milling, and baking.

To make the needle exchange genuinely anonymous, the prison medical unit recruited eight prisoners as secondary exchange volunteers to work throughout the penal colony.

The Prison Administration of the Ministry of Justice was initially reluctant to authorize the project due to concerns that the provision of sterile needles would lead to an increase in drug use. However, these concerns were assuaged by the results of an anonymous survey of prisoners that demonstrated that as many as eight to 12 prisoners were sharing one needle, and that some people were using homemade needles, to inject drugs. On 3 December 1999, Order 115 was enacted, authorizing the establishment of the needle exchange in PC18.

The pilot program in PC18 evolved through two stages. During stage one needles were distributed hand-to-hand to prisoners through the prison medical unit. During the four or five months that this distribution system was in place, between 40 and 50 needles were exchanged.

However, the project team decided that this method of distribution was not satisfactory. Their most significant concern was that the needle exchange was being accessed by only 25% to 30% of the prisoners known to inject drugs. A number of barriers were identified by Dr Nicolae Bodrug, head of the prison medical unit, who was responsible for coordinating the project. These included difficulty in establishing a rapport between the medical staff and

the prisoners who were injecting, a lack of anonymity and of confidentiality in the service, and the fact that needle exchange was only available during office hours. According to Dr Bodrug, “To make the needle exchange genuinely anonymous, we recruited eight secondary exchange volunteers to work throughout the penal colony. The advantage is a much higher degree of trust and confidentiality.”²⁰⁷ This decision inaugurated stage two of the program.

Under stage two of the program, eight peer volunteers were trained to provide harm-reduction services in four different sites in the prison. Two peer volunteers were assigned to work at each site and they are available on a 24-hour basis, as the sites are based within the prison living units (barracks-style accommodations, with 70 or more men living and sleeping in the same large room). The activities and programs are carried out in cooperation with the prison physician. The role of the physician is to act as project supervisor and as a link between the peer volunteers, prison staff, and Health Reform in Prisons personnel. In the first nine months of 2002, 65% to 70% of people known to inject drugs in the prison were accessing the program through the peer volunteers. In 2002, the peer volunteers in PC18 exchanged 7150 syringes.²⁰⁸



Harm reduction and HIV-prevention information, Prison Colony 18, Branesti, Moldova. (photo: Elena Vovc)

Evolution of Syringe Exchange in Prison Colony 18: Needles Exchanged Annually²⁰⁹

YEAR	SYRINGES EXCHANGED
2000	115
2001	4350
2002	7150

In addition to one-for-one syringe exchange, peer volunteers also distribute condoms, disinfectants, antiseptic pads, and razors for shaving. They also provide harm-reduction and HIV-prevention information, including information on safer injecting and post-injection problems. The team of peer volunteers changes every year.

Expansion to other prisons

Based upon the success of the pilot project, on 16 May 2002 Order 52 authorized the implementation of a second needle exchange project in Prison Colony 4, a men’s institution in Cricova housing 1200 prisoners. This program is also peer based and uses three peer volunteers. During the first few months of the project, approximately 40 to 45 prisoners used the exchange. By the end of the year the number of prisoners accessing the needle exchange program had increased to approximately 160.²¹⁰ In PC4, the peer volunteers exchanged 7555 syringes during 2002.²¹¹

Peer volunteers also distribute condoms, disinfectants, antiseptic pads, and razors for shaving.

**Distribution of Harm-Reduction Tools in Moldovan Prisons:
2002 System-Wide Figures²¹²**

BLEACH KITS	1,026
IODINE	211
SHAVING RAZORS	3,550
SYRINGES	14,705
CONDOMS	100,056

Evaluation and lessons learned

As reported by Dr Nicolae Bodrug, physician in PC18, normalizing the concept of needle exchange within prisons was a challenge for both staff and prisoners. However, attitudes changed over time. Says Dr Bodrug, “We emphasized that harm reduction is a practice that works well in other places and that can protect staff as well as inmates from HIV infection.”²¹³

The practice of using prisoners as volunteers for needle exchange has had significant positive results in others areas.

One significant barrier to the eventual acceptance and success of the program in PC18 was that initially prison guards continued to consider syringes as contraband, and to search for and confiscate them from prisoners. While drug possession and distribution remain illegal in the prison, Dr Bodrug explains: “We eventually got the guards to agree that the project syringes would be ‘legal’ and not confiscated.”²¹⁴

The practice of using prisoners as volunteers for needle exchange has had significant positive results in others areas, including decreasing stigmatization and increasing the self-esteem of prisoners living with HIV/AIDS, increasing awareness of HIV transmission among the prison population, and enhancing the credibility of the health services by creating a more humane image.²¹⁵ While using prisoners increases the trust in and anonymity of the program, there is the potential for the quality of the information disseminated to be less than that provided directly by experienced health-care staff. Therefore, there must be a commitment to ongoing training and support for the peer volunteers.

The Moldovan projects do not adhere to a strict one-for-one exchange policy. Unlike the programs in Western Europe, there are also no plastic storage cases provided for the syringes, nor are there regulations about where they may be stored. Initially, the decision against providing plastic cases was made on economic grounds. Later, it became clear that the programs were working well and safely without such storage cases and it was therefore decided they were unnecessary. The Moldovan projects have experienced no instances of syringes being used as weapons, and no problems with dirty needles.

Of the experience of establishing the first prison needle exchange project in Moldova, Dr Bodrug says:

It took two years to break the ice of mistrust. We had to learn a lot, say strange things, and act oddly in front of a [sceptical] majority. But harm reduction became normal. And with the head of the prison administration in favor of harm reduction, as well as the minister of justice now, we can look forward confidently to expansion.²¹⁶

Current situation

A third prison needle exchange was started in the women’s prison in Rusca in August 2003. In 2003 there were 17 known prisoners living with HIV/AIDS in the women’s institution, 12% of the total population in the institution.²¹⁷

Kyrgyzstan²¹⁸

Summary

Kyrgyzstan initiated a pilot prison needle exchange project in October 2002. In early 2003 approval was given to expand needle exchange into all 11 Kyrgyz prisons. Needle exchanges are now operating in all prisons.

In Kyrgyzstan, needle exchanges are now operating in all prisons.

HIV/AIDS, HCV, and IDU in Kyrgyzstan

The sharp increase in intravenous drug use, coupled with a difficult social and economic situation, is creating a serious risk of an escalating HIV epidemic in Kyrgyzstan. As of June 2003 there were 825 known cases of HIV or AIDS in the country, 82% of which were linked to injection drug use.²¹⁹ According to a December 2002 report published by UNAIDS and the WHO, a “[m]ore substantial spread of HIV is now also evident” in Kyrgyzstan.²²⁰

HIV/AIDS, HCV, and IDU in Kyrgyz prisons

In the 11 prisons in Kyrgyzstan, the number of identified prisoners living with HIV/AIDS has been steadily rising in recent years. In 2000 there were only three known cases of HIV in Kyrgyz prisons. In September 2001 this number had increased to 24, the majority being people who inject drugs. As of November 2002 there were more than 150 prisoners living with HIV/AIDS in Kyrgyzstan, 56% of all known cases in the country.²²¹

Injection drug use and needle sharing are highly prevalent in Kyrgyz prisons. A survey conducted by a Kyrgyz non-governmental organization found that 100% of prison staff agreed that drugs are being used in the prisons. The survey also found that 90% of drug users in prisons said they shared needles and did not disinfect them.²²²

History of the response to HIV/AIDS, HCV, and IDU in Kyrgyz prisons

HIV prevention programs in prisons started in 1998 before the first case of HIV was identified. Initially, the response consisted of education programs for prisoners and prison staff.

In February 2001 the Main Directorate for Penalty Implementation (MDPI) and its Department of Correctional Institutions issued a “prikaz” (order) “on prevention of HIV/AIDS in the prison institutions of Kyrgyzstan” urging prisons to take steps to prevent the spread of HIV among prisoners. Based on this order, various HIV prevention and harm-reduction initiatives were implemented. These included the provision of condoms and disinfectants, HIV-prevention education for prisoners and staff, peer education, and voluntary HIV testing. Unofficial needle exchange was also initiated, specifically targeting those living with HIV/AIDS.

Introduction of needle exchange/distribution programs

The first program

In October 2002 a pilot needle exchange project was introduced in Prison IK-47, a maximum-security institution. The project provides services for approximately 50 prisoners who exchange needles on a daily basis (the project averages approximately 50 exchanges per day).

It was decided that exchanges should take place in a location where prisoners cannot be seen by guards; they therefore take place in the medical wards. Syringe exchange is provided in the narcological unit of the central prison hospital, and all prisoners have an opportu-

nity to avail themselves of the program. A prisoner asks to come to the medical unit to receive medical service and while there he exchanges his syringe. The pilot also provides secondary exchange using prisoners as peer volunteers, as in the Moldovan model. The project coordinators found that both options for syringe exchange were needed.

At the start of the pilot, everyone was given one syringe. Exchange was made on a one-for-one basis. Only the prisoners involved in the pilot were allowed to access the exchange. Records were maintained of exchanges, and education is provided for staff.

Expansion to other prisons

In early 2003 an order was issued approving the provision of sterile needles in all Kyrgyz prisons. As of September 2003 needle exchange programs were operating in six of the 11 prisons in Kyrgyzstan (five men's prisons and one women's prison). In February 2004 funding was obtained to expand the programs to all 11 prisons and by April 2004 sterile needles were available in all prisons.²²³

In all 11 institutions, needle exchange is done using prisoners trained as peer outreach workers who work with the medical unit. This model was adopted following concerns that emerged when the medical unit was the sole point of exchange. Because needles could only be accessed from the medical unit during the day, and most drug trafficking took place in the evening, some non-drug using prisoners were accessing sterile needles during the day that they would later sell at night to prisoners who injected drugs. This problem was rectified by the implementation of the peer outreach worker model. Since the outreach workers live in the prison units, they are available to distribute sterile needles 24 hours a day, and the for-profit market for needles was effectively eliminated.

In September 2003 a total of approximately 470 drug users were accessing the six needle exchange programs then in operation on a daily basis. In April 2004, with programs established in all 11 prisons, this figure was approximately 1000.²²⁴ Drug users are provided with one syringe and three extra needle tips. This allows prisoners who inject drugs to inject more – up to three times a day without having to reuse a syringe. This also reduces the cost of the syringe exchange program, since tips cost less than complete needles.

There have been no instances of syringes being used as weapons, and prison medical staff have identified a reduction in injection-related health problems such as abscesses.

Current situation

Syringe exchange programs are currently operating in all 11 Kyrgyz prisons. There are plans to pilot test a methadone maintenance treatment program in 2004.

Belarus

Summary

The Republic of Belarus implemented a pilot syringe exchange program in one prison, Reformatory School 15/1 in Minsk, in April 2003.

HIV/AIDS, HCV, and IDU in Belarus

There were 5165 people known to be living with HIV/AIDS in Belarus as of 1 September 2003.²²⁵ HIV and injection drug use are issues of significant concern. In April 2003 there were approximately 9400 persons officially registered with drug treatment services. The number of people registered with drug treatment services has experienced an annual growth

of 20% to 40%. However, these treatment figures are assumed to be a low estimate of the true circumstances, with the actual number of drug users estimated at 40,000 to 43,000. Ninety-one percent of drug users in Belarus are people who inject drugs. Injection drug use is the primary mode of HIV transmission in Belarus, with 75.5% of people living with HIV/AIDS in the country being infected through IDU.²²⁶

HIV/AIDS, HCV, and IDU in Belarus prisons

As of May 2003 there were 1131 prisoners in Belarus known to be living with HIV. This represents 22.5% of all known HIV cases in the country.²²⁷

History of the response to HIV/AIDS, HCV, and IDU in Belarus prisons

Prisoners in Belarus must undergo mandatory HIV testing when entering detention centres.²²⁸ The syringe exchange program is one component of a project that provides education for staff and prisoners, peer education, provision of information, voluntary HIV testing, and condom and bleach distribution. The project works with the support of the Committee on Execution of Penalties of the Ministry of Internal Affairs and with the prison administration.

Introduction of needle exchange/distribution programs

The pilot program was implemented in April 2003 at the Reformatory School 15/1 in Minsk, a prison with a population of 2000. This site was selected based on the availability of scientific and medical specialists and because the prison also houses the National Hospital, which provides primary HIV care for all known HIV-positive Belarussian prisoners.²²⁹

The pilot is scheduled to run until 2004. There are 28 registered drug users in the prison, although it is estimated that the actual number of people who inject drugs is approximately 200. Fifteen prisoners are known to be HIV-positive. The program is open to all prisoners in the institution. The program follows the Moldovan model, and uses 20 volunteers from the prisoner population to distribute needles to their peers. During the first month over 100 needles were distributed.²³⁰

Evaluation and lessons learned

A number of challenges were identified in establishing the program, including the reluctance of staff, the lack of a legal framework upon which to base a prison needle exchange program, the short duration of the pilot, and the fact that prisoners using drugs still face penalties if discovered. There have been no instances of needles being used as weapons. The program has yet to be evaluated.²³¹

Current situation

The pilot was originally scheduled to run until January 2004. This term was extended until June 2004. Concurrently, the needle exchange program was extended to two other prisons. The Ministry of Internal Affairs is prepared to expand prison syringe exchange throughout the country, although securing funding for such an initiative is a major barrier to realizing this goal.²³² Consideration is also being given to the possibility of initiating methadone treatment.²³³

The Republic of Belarus implemented a pilot syringe exchange program in one prison in April 2003.



Analysis of the Evidence

Refuting objections

A number of objections have consistently been made against the implementation of needle exchange programs in prisons. In many countries, including Canada, these objections have formed the basis of politicians' and prison system officials' rejections of needle exchange programs. The four principal objections to prison needle exchange programs are:

1. The implementation of prison needle exchange would lead to increased violence and the use of syringes as weapons against prisoners and staff.
2. The implementation of prison needle exchange would lead to an increased consumption of drugs, and/or an increased use of injection drugs among those who were previously not injecting.
3. The implementation of prison needle exchange would undermine abstinence-based messages and programs by condoning drug use.
4. The successful implementation of prison needle exchange programs does not indicate that other jurisdictions will be able to implement successful programs because existing programs reflect specific and unique institutional environments.

Increased institutional safety

One of the most important lessons to emerge from international experience is that implementing prison needle exchange programs does not necessitate a trade-off between health and security. In fact, as explained by Stöver and Nelles in a 2003 review of the evaluations conducted of prison needle exchanges:

In no case had needles and syringes been used as weapons either against personnel or other inmates. This was and is one of the controversial issues facing prison-based SEPs [syringe exchange programs]. Syringes were not misused and disposal of syringes did not exhibit any problem. For reasons of safety in the

working place, it is interesting to note that exchange rates within SEPs are high (almost 1:1): the return rate for two prisons in Lower Saxony were 98.9% for the dispensing machine in the women's prison in Vechta, and 98.3% in the men's prison in Lingen, Gross-Hesepe.... Therefore the risk of needle stick injuries by syringes not properly disposed of is very low.²³⁴ [emphasis added]

The safety of these programs has been noted by officials from the Correctional Service of Canada. In January-February 1999 a delegation from the CSC's Study Group on Needle Exchange Programs travelled to Switzerland to observe the syringe exchange initiatives in three different prisons. Among the findings of the delegation's report was a note on the safety of these programs.

Inmates involved in the needle exchange program are required to keep their kit in a pre-determined location in their cells. This assists the staff when they enter the cell to conduct cell searches. Because syringes and needles are an approved program, there is no need for the offender to conceal them in their cells. To date, no injury has been inflicted on staff by a needle.²³⁵

In no case have needles and syringes been used as weapons either against personnel or other inmates.

Providing prisoners with access to the means necessary to protect them from contracting HIV and HCV is in fact compatible with the interests of workplace safety and of the maintenance of safety and order in the institutions.

All the international evidence indicates that there are already needles present within the prisons of many countries. Therefore, any suggestion that the implementation of prison needle exchange will introduce syringes into a "needle-free" environment is demonstrably false. Therefore the question becomes: Which situation is preferable? The status quo – where there are syringes in prisons, the number and location of which are unknown, but these syringes are most likely contaminated with disease – or the situation in institutions with well-managed needle exchange programs, in which the number of syringes in circulation is known, the prisoners who have them are known, and the needles are sterile, or at least used by only one person whose identity is known? From a workplace health and safety perspective, the second scenario is preferable to the first.

The safety of prison needle exchange programs has been noted by officials from the Correctional Service of Canada.

The Spanish Ministry of the Interior and the Ministry of Health and Consumer Affairs, in their 2002 guidelines on the implementation of prison needle exchange programs, succinctly summarizes the safety benefits of needle exchange:

The start-up of a NEP should not increase the risk, but rather, as previously stated, result in greater safety. First of all, illicit syringes, which are usually hidden and unprotected, are replaced by program syringes equipped with a rigid protective case. Secondly, in the event of an accident, it is less likely that the syringe has been used because the inmate can and should exchange it for a new one at the first opportunity after use. Thirdly, in the event that the syringe has been used, it is less likely that it has been shared by various inmates, thus reducing the probability of it being infected and enabling the user to be identified with greater cer-

tainty, which allows preventive actions to be taken if necessary. Finally, in the long term, reduction of parenterally transmitted diseases will make prisons a healthier and less risky environment.²³⁶

No increase in drug consumption or injecting

The belief that needle exchange programs promote injection drug use has historically been a barrier to the implementation of this effective harm-reduction measure in both the community and in prison. However, within prisons this argument is complicated by the fact that many prisoners are incarcerated as a result of drugs or of drug-related offences.

Reduction of parenterally transmitted diseases will make prisons a healthier and less risky environment.

Consequently, providing bleach or sterile needles to prisoners is seen to be condoning or promoting behaviour that the prison should be seeking to eradicate as part of the individual's "rehabilitation." Acknowledging the reality of drug use in prisons is also difficult for prison systems because it may be perceived as an admission of the failure of such systems and their personnel to provide effective drug programming and to maintain institutional control and security.

In the case of prison syringe exchange, scientific evaluations have consistently found that the availability of sterile syringes *does not* result in an increased number of drug injectors, an increase in overall drug use, or an increase in the amount of drugs in the institutions. In a recent review of 11 evaluated prison needle exchange programs in Switzerland, Germany, and Spain, Stöver and Nelles found the following:²³⁷

Prison Country	Drug use in the institution	IDU in the institution
Am Hasenberg Germany	No increase	No increase
Basauri Basque Country	No increase	No increase
Hannöversand Germany	No increase	No increase
Hindelbank Switzerland	Decrease	No increase
Lehrter Strasse Germany	No increase	No increase
Lichtenberg Germany	No increase	No increase
Lingen I Germany	No increase	No increase
Realta Switzerland	Decrease	No increase
Saxerriet Switzerland	No data	No data
Vechta Germany	No increase	No increase
Vierlande Germany	No increase	No increase

These findings demonstrate that the provision of sterile needles to prisoners has not resulted in either increased drug consumption or an increase in drug injection among prisoners.

There is evidence in a number of countries, including Canada, that many prisoners inject drugs for the first time while in prison. The argument that a needle exchange program would lead to prisoners begin using injection drugs is therefore undermined by the fact that this behaviour is already the norm in many countries *without* prison needle exchange programs. In these jurisdictions individuals are forced to share or reuse needles, creating a high risk of HIV and HCV transmission.

While making sterile needles available to incarcerated drug users has not led to an increase in drug use, it has led to a decrease in the number of prisoners contracting HIV, HCV, and other infections.

Scientific evaluations have consistently found that the availability of sterile syringes *does not* result in increased drug consumption or an increase in drug injection among prisoners.

Part of a continuum of drug-related programming

The provision of sterile needles has not meant condoning the use of illegal drugs in prisons. The provision of sterile needles in prisons in the six countries examined in this report has not resulted in prison officials condoning or otherwise permitting the use, possession, or sale of drugs. In all cases, drugs remain prohibited within institutions where needles exchange is in place, and security staff is instructed to locate and confiscate all such contraband (including needles that are not part of the exchange program). In this sense, the policy and practice is no different than in jurisdictions that do not have needle exchange programs. However, while possession of illicit drugs remains illegal, possession of needles that are part of the official needle exchange programs is not.

Needle exchange programs signify that elected and prison officials take seriously their legal obligation to protect the health of prisoners under their care and control. The recognition that drugs are part of the reality of prisons, despite the great expenditure of resources to eliminate them, underpins this pragmatic response to the problem of drug use and HIV and HCV infection. When drugs find their way into the prison and are used by prisoners, the priority must be to protect prisoners' health by preventing the transmission of HIV and HCV via unsafe injecting practices.

Ideally, needle exchange programs should be one component of a comprehensive drug service within prisons that includes abstinence-based programs, drug treatment, drug-free units, and harm-reduction measures. From this perspective, the availability of sterile needles does not undermine or impede the provision of other programs, but rather offers drug users more options for improving their health status, and a potentially greater interaction with the range of health and drug treatment options offered in a particular institution. In the case of the German pilot programs, the evaluator found that the needle exchange program actually *increased* the number of people accessing drug treatment services, demonstrating that needle exchange programs can serve as valuable points of contact and referral for a difficult-to-reach drug-using population. This was also the experience in Spain, where the Ministry of the Interior and the Ministry of Health and Consumer Affairs concluded not only that “[i]t is feasible for a NEP and other drug addiction prevention or intervention programs to coexist,” but also that “NEPs in prison facilitate referral of users to drug addiction treatment programs.”²³⁸

Nonetheless, prison officials and staff often struggle with philosophical and practical issues related to drug use when implementing needle exchange programs. As was seen in

Needle exchange programs in prison facilitate referral of users to drug addiction treatment programs.

Prison Colony 18 in Moldova, and in other jurisdictions, prison staff trained in an ethos of a zero-tolerance approach to drugs and drug use and an abstinence-based approach to drug treatment have had to come to terms with confiscating drugs but not injection equipment.

Refusing to make sterile needles available in prison systems where injection drug use and needle sharing take place is to condone the spread of HIV and HCV.

However, as the experience in Germany and Moldova demonstrates, staff attitudes have changed as staff have learned first-hand about the needle exchange programs and the harm-reduction ethos, and as they have participated in the implementation and review of needle exchange programs. This is the same process that has been observed in the community, where police attitudes have evolved to accommodate needle exchange programs. Police forces in countries with community needle exchange programs have integrated the broader harm-reduction philosophy into their work without undermining their mandate to protect and safeguard the populations they serve.

In fact, a harm-reduction approach is consistent with the ultimate aim of protecting and preserving life. As the head of the Merseyside Police Drug Squad has stated:

As police officers, part of our oath is to protect life. In the drugs field that policy must include saving life as well as enforcing the law. Clearly, we must reach injectors and get them the help they require, but in the meantime we must try and keep them healthy, for we are their police as well.... People can be cured of drug addiction, but at the moment they cannot be cured of AIDS.²³⁹

This sentiment was echoed by Martin Lachat, the Interim Director of Hindelbank institution in Switzerland in 1994:

The transmission of HIV or any other serious disease cannot be tolerated. Given that all we can do is restrict, not suppress, the entry of drugs, we feel it is our responsibility to at least provide sterile syringes to inmates. The ambiguity of our mandate leads to a contradiction that we have to live with.²⁴⁰

In prisons in all six countries studied for this report, prison needle exchange programs are part of larger harm-reduction initiatives. Other harm-reduction measures provided to prisoners include HIV/HCV education, substitution therapy for drug treatment, condom distribution, distribution of bleach or other disinfectants, antiseptic wipes, razors for shaving, and anonymous HIV and HCV testing.

In reality, the refusal on the part of elected and prisons officials to make sterile needles available in prison systems where injection drug use and needle sharing take place is to condone the spread of HIV and HCV in the prison population and in the community at large. Moreover, the provision of sterile needles to prisoners is not incompatible with the goal of reducing drug use in prisons.

Positive prisoner and public health outcomes

Prison needle exchange programs reduce risk behaviour and prevent disease transmission

The most important lesson emerging from the international evidence on prison needle exchange is that these programs are very effective in reducing needle sharing and therefore in preventing the transmission of HIV and HCV. In a recent review of evaluated prison needle exchange programs in Switzerland, Germany, and Spain, Stöver and Nelles found that the pro-

grams strongly reduced syringe sharing (seven of nine prisons) and strongly reduced (two of five prisons) or resulted in no increase (three of five prisons) in the prevalence of HIV/HCV.²⁴¹

Prison Country	Syringe sharing	Prevalence of HIV/HCV
Am Hasenberg Germany	Strongly reduced	Not investigated
Basauri Basque Country	No data	Strongly reduced
Hannöversand Germany	Strongly reduced	Strongly reduced
Hindelbank Switzerland	Strongly reduced	No increase
Lehrter Strasse Germany	Strongly reduced	Not investigated
Lichtenberg Germany	Strongly reduced	Not investigated
Lingen I Germany	Strongly reduced	No increase
Realta Switzerland	Single cases	Not investigated
Saxerriet Switzerland	No data	Not investigated
Vechta Germany	Strongly reduced	No increase
Vierlande Germany	No change	Not investigated

Other positive outcomes on prison health

In addition to the reductions in HIV and HCV transmission detailed in the section above, international evidence has shown that needle exchange programs result in other positive outcomes for the health of prisoners. Perhaps the most significant positive outcome is the dramatic decrease in fatal and non-fatal heroin overdoses among incarcerated people who inject drugs. For example, the Swiss prison of Hindelbank averaged between one and three fatal heroin overdoses annually during the years before the needle exchange program was implemented. Since the program has been in place, Hindelbank has experienced only one fatal heroin overdose in the past nine years.²⁴² This experience was also reported in the Swiss prison of Oberschöngrün, which has a heroin maintenance program in addition to a syringe exchange. Prior to the implementation of needle exchange, staff at the prison estimated there was approximately one non-fatal overdose a week and approximately two fatal overdoses annually. Overdoses of any kind are now extremely rare, and the prison has experienced only one overdose death since 1995.²⁴³ Prison needle exchanges therefore save lives, not only by preventing transmission of HIV and HCV, but also by preventing overdose deaths.

Prison needle exchanges therefore save lives, not only by preventing transmission of HIV and HCV, but also by preventing overdose deaths.

The prison staff interviewed as part of this report offered two reasons why the provision

The other significant health benefit experienced has been a decrease in abscesses and other injection-related infections.

of needle exchange has resulted in such significant decreases in overdoses. The first is that providing each injection drug user with his/her own personal needle enables the individual to consume a smaller amount of drug with each injection. In the past, when a syringe was shared among many prisoners, a person who injected drugs would only have limited access to it and would be more likely to inject large doses on those rare occasions when he/she was in possession of the syringe. The second reason cited was that the implementation of needle exchange and the adoption of a harm-reduction philosophy within the institution fundamentally changed the way that prison health and social work staff were able to engage in counselling with prisoners. Because injection drug use was recognized as a reality by all concerned, counsellors and health workers and prisoners were able to be much more open and frank in discussions about drug use and harm reduction. The need for prisoners to pretend to be “drug free” was therefore removed, and honest discussions about risk behaviour and overdose were able to take place in an atmosphere where prisoners did not fear sanctions for admitting their drug use.

The other significant health benefit experienced has been a decrease in abscesses and other injection-related infections. Both Hindelbank and Oberschöngrün reported a near disappearance in abscesses, which had been a major problem before the needle exchange programs were implemented. Staff at Hindelbank noted that this has resulted in significant cost savings to the prison, as treating abscesses had previously been a significant part of the work of the prison medical staff.

Effective in a wide range of institutions

Prison officials have sometimes dismissed the evidence of the effectiveness of prison needle exchange programs by characterizing these programs as “boutique” projects that are in place only in unusual prison environments (ie, small institutions, women’s prisons, those with docile prisoner populations, etc). Therefore, this argument goes, the success of these programs has no implication for life in “real” prisons.

The Moldovan and Spanish prisons where needle exchange programs have proven effective have prisoner populations larger than *any* Canadian federal institution.

While it is true that the initial Swiss pilot projects were conducted in prisons that are small by most standards (Oberschöngrün has a population of 75, while Hindelbank has a population of 110), subsequent programs have been successfully implemented in a wide variety of settings in both civilian and military systems. In Germany, for example, needle exchange programs have been introduced in prisons as small as 50 people (the women’s prison in Hannöversand) and as large as 500 (Am Hasenberge men’s prison in Hamburg). In Moldova, syringe exchange programs operate in medium/maximum security men’s prisons with populations of 1000 or more. Soto de Real prison in Madrid, which was visited in the preparation of this report, has a population of approximately 1600 prisoners. Thus, the Moldovan and Spanish prisons where needle exchange programs have proven effective have prisoner populations larger than *any* Canadian federal institution. Indeed, in Spain, needle exchanges were in place in 30 prisons as of 2002 – prisons of varying sizes and *all* security levels.

Needle exchanges have been established in prisons with radically different physical environments. In Western European prisons, programs have proven effective in prisons where prisoners are housed in ranges of individual cells, each housing one or two prisoners. This is similar to the Canadian situation. In contrast, in Moldova needle exchange programs have

proven effective in barracks-style facilities that have 70 or more prisoners living and sleeping in a single room.

The cases examined also demonstrate that needle exchange projects can be successfully implemented in jurisdictions that are relatively well resourced and financed (Switzerland, Germany, Spain), as well as in countries in economic transition that operate with significantly less funding and infrastructural supports (Moldova, Kyrgyzstan, Belarus). However, it bears mentioning that some of the countries in transition studied for this report have been able to take advantage of resources from international donors to implement needle exchange programs.

Prison needle exchange programs have been successfully implemented by taking into account not only institutional size, security level, or structure of the particular prison in which a program was started, but also the needs of the prisoner population. In the six countries examined for this report, needle exchange pilot projects have been initiated in response to high rates of HIV prevalence and/or high levels of injection drug use within prisons. Once this need has been recognized, in each jurisdiction examined, prisons have shown flexibility and creativity by implementing a needle exchange program adapted to the needs of the particular population and institutional set-up in an institution.



Needle exchange programs have proven effective in barracks-style facilities such as Prison Colony 18, Branesti, Moldova. (photo: Elena Vovc)

Different methods of needle distribution have been effective

Among the prison needle exchange programs reviewed above, different countries (and different prisons within a given country) have adopted different methods to distribute (or exchange) needles. There are important lessons to be learned from the experience of different countries employing different methods of needle distribution. These lessons are particularly important to jurisdictions and prisons planning the implementation of needle exchange programs in prison. The different methods used by the countries studied for needle distribution were:

- distribution by prison nurses or physicians based in a medical unit or other area(s) of the prison
- distribution by prisoners trained as peer outreach workers
- distribution by external non-governmental organizations or other health professionals who come into the prison for this purpose
- distribution by one-for-one automated needle-dispensing machines

Each distribution method has its own unique opportunities and challenges. It is difficult to simply characterize these as “advantages” or “disadvantages” of a particular distribution method, since that would require a subjective assessment based on the philosophy, policies, or physical facility in a given prison system or prison. An “advantage” from the perspective of one jurisdiction or prison may be a “disad-

The number of kits to be supplied depends on the frequency of exchange and the user’s consumption habits.

vantage” from the perspective of another, depending upon the nature and ethos of the programs themselves.

The issue of requiring a one-for-one needle exchange illustrates this point. While some of the jurisdictions examined for this report adhere to a strict one-for-one policy, others do not. Hindelbank, for example, uses dispensing machines that operate on a one-for-one basis, but also provides hand-to-hand up to five additional “points” or needle tips to program participants who have trouble finding veins to inject into. Spain has also shown flexibility in its approach. While Spanish guidelines acknowledge that “the rule should be exchange, i.e., the previous syringe must be returned before a new kit is handed out,” they direct that “a flexible attitude should be maintained towards [the one-for-one rule’s] application keeping in mind that the primary objective of the program is to prevent shared use of syringes.”²⁴⁴ The guidelines advise that “[t]he number of kits to be supplied depends on the frequency of exchange and the user’s consumption habits: it should be sufficient to cover the inmate’s needs so that he does not have to reuse the syringe before the next day of exchange.”²⁴⁵

While certain features may represent an advantage in one needle exchange program and a disadvantage in another, the evidence from the six needle exchange programs studied clearly shows that there are distinct features and outcomes associated with each method of distribution.²⁴⁶ Each method is reviewed in turn.

Hand-to-hand distribution by prison nurse and/or physician

- Provides personal contact with prisoners and an opportunity for counselling
- Can facilitate outreach to and contact with previously unknown drug users
- Prison maintains high degree of control over access to syringes
- One-for-one exchange or multiple syringe distribution possible (as necessary, and as reflects individual prison policy)
- Lower degree of anonymity and confidentiality, which may reduce the participation rate (although high acceptance by prisoners is possible if confidentiality is maintained)
- Access more limited, as syringes are available only during the established hours of the health service (this is particularly true if the prison follows a strict one-for-one exchange policy)
- Creates possibility of proxy exchanges by prisoners obtaining syringes on behalf of those who do not want to participate in person due to lack of trust with staff

Hand-to-hand distribution by peer outreach workers

- High acceptance by prisoners
- High degree of anonymity and trust
- High degree of accessibility (peer outreach workers live in the prison units, and are available at all hours)
- No direct staff control over distribution, which can lead to increased fears of workplace safety among staff
- One-for-one exchange more difficult to ensure

Hand-to-hand distribution by external non-governmental organizations or health professionals

- Provides personal contact with prisoners and an opportunity for counselling
- Facilitates outreach to and contact with previously unknown drug users

- Prison has opportunity to maintain high degree of control over access to syringes
- One-for-one exchange or multiple syringe distribution possible (as necessary, and as reflects individual prison policy)
- Provides a higher degree of anonymity and confidentiality, as there is no interaction with prison staff
- Access limited. Syringes available during set hours or set times of the week (this is particularly true if the program follows a strict one-for-one exchange policy)
- Anonymity and confidentiality may be compromised by policies that require the external agency to provide information on participation to the prison
- There can be mistrust by prison staff of the external services providing syringes
- External workers may experience more barriers in dealing with the prison bureaucracy than internal prison health staff
- Turnover in staff of non-governmental organization may result in a lack of program continuity and lack of a consistent “face” for the program for prisoners and prison staff

Automated dispensing machines

- High degree of accessibility (often multiple machines are in various places in the institution, which can be accessed outside the established hours of the medical service)
- High degree of anonymity, as there is no involvement with staff
- High acceptance by prisoners
- Strict one-for-one exchange
- Machines are vulnerable to vandalism and damage by prisoners and staff who are not in favour of this program
- Technical problems with functioning of the dispensing machines can mean syringes are unavailable for periods of time, which can decrease prisoner confidence in the program
- Some prisons are not architecturally suited for the use of dispensing machines (ie, lack of discreet areas freely accessible to prisoners in which machines may be placed)
- Because the machines must be custom designed and individually constructed, the expense of providing them in sufficient numbers in multiple prisons can be prohibitive for some prison systems.

It is crucial to have supportive leaders at the highest level to successfully create and implement prison needle exchange programs.

Common factors in effective prison needle exchange programs

The evidence from the prison needle exchange programs studied for this report shows that the actual method of needle distribution is less important than ensuring that the program responds to the needs of the institution, the prisoner population, and the prison staff. As detailed above, prison needle exchange programs have adopted various methods of syringe exchange/distribution. Each of these methods has proved successful, and has been implemented without jeopardizing the safety or security of the institution. Despite the differences in the various needle exchange programs examined for this report, the combined evidence of the programs indicates a number of common factors characterizing effective prison needle exchange programs. These common factors are reviewed in this section.

Educational workshops and consultations with prison staff have been a key aspect in the development of prison needle exchange.

Leadership of prison administration and support of prison staff

As with other controversial measures, or those measures that apparently run counter to accepted orthodoxy within a system, it is crucial to have supportive leaders at the highest level to successfully create and implement prison needle exchange programs. Practically, this may mean leadership by key senior officials responsible for prison health-care services, or prisons generally, and support by the

head of the prison in which the needle exchange is being established. The support of prison staff has also been shown to be an integral part of successful programs. In all jurisdictions visited for this report, educational workshops and consultations with prison staff have been a key aspect in the development of prison needle exchange.

This is not to say, however, that staff in these institutions have been universally supportive from the start. In several cases, as is evidenced in the evaluations, staff members were reluctant at the start, yet grew to support the program over time as its benefits were experienced first-hand. The initial reluctance of staff makes the need for committed, informed, inclusive leaders supporting the implementation of prison needle exchange programs all the more important. While bottom-up processes that include the involvement and cooperation of staff have been shown to be successful, there is mixed evidence on the success of top-down approaches, where the implementation of prison needle exchanges is directed by government. Switzerland has experienced problems when a strictly top-down approach has been followed. On the other hand, the experience in Spain has shown that it is possible for government, including parliament, to take a leading role in setting the agenda for the implementation of needle exchange programs as long as practicality and flexibility at the prison level are encouraged.

Need for confidentiality and trust

The issue of confidentiality has been a key factor in the creation of successful needle exchange programs. From the perspective of many prisoners, confidentiality is the most important factor in establishing trust in the needle exchange program. Inside any prison, absolute confidentiality of prisoners' personal information may be impossible. However, in the context of prison needle exchange programs, it is crucial to preserve the confidentiality of prisoners who use drugs and access sterile needles to the greatest extent possible. The successful programs examined in this report have all striven to identify needle distribution methods that would gain the trust of the prisoner population and thereby maximize participation in the program.

It is crucial to preserve the confidentiality of prisoners who use drugs and access sterile needles to the greatest extent possible.

In some prisons, syringe-dispensing machines located in areas where prisoners are housed have proved the best mechanism for confidential needle distribution. In those institutions where a person-to-person method of exchange is in place, it has been shown that identifying a discreet area of the prison in which to conduct the service is a factor in its success. The importance of confidentiality was demonstrated quite vividly in the Moldovan experience, where the needle exchange pilot in Prison Colony 18 saw a significant increase in uptake when the physician decided to use peer outreach workers rather than the medical unit as a point of contact with prisoners who inject drugs. The experience in the Spanish pilot program in Bilbao, where the evaluations found that prisoners preferred the program to be administered by an external non-governmental organization rather than prison

staff, is also an indication of the importance of confidentiality to the program's users. Similarly, the evaluation of the two German pilots found that the program that used a hand-to-hand distribution method through health-care staff enjoyed less trust from prisoners than did the one using anonymous dispensing machines.

That said, the Bilbao project also indicated that absolute anonymity is perhaps less important to the people who inject drugs than is trust in the person(s) or agency running the program and the quality of the service provided. The Bilbao evaluation found that the prisoners valued the personal interaction with workers from an external non-governmental organization who conducted the exchanges, and in fact identified this as a preferable distribution method than anonymous dispensing machines.

Adequate access to needles

In addition to maximizing confidentiality, providing adequate access to the needle exchange program has also been a key factor in ensuring that programs meet prisoner needs. In some cases, this has been accomplished by the placement of multiple dispensing machines within a single institution, as was the case in the Hindelbank pilot. When person-to-person methods of distribution have been chosen, such as in the Lingen 1 Dept Groß-Hesepe pilot in Germany or the Bilbao pilot in the Basque region, staff sought to identify areas of the prison that were both discreet *and* easily accessible to prisoners. In the Moldovan experience, the decision to use a peer-based structure allowed for 24-hour access, since the peer outreach workers lived in the prison units where they distributed needles.

Needle exchange as part of a harm-reduction program

It has also been shown that the goal of reducing HIV and HCV transmission is best accomplished when prison needle exchange is one component of a broader, comprehensive harm-reduction strategy. In prisons in all six countries studied for this report, prison needle exchange programs are part of larger harm-reduction initiatives. Other harm-reduction measures provided to prisoners include HIV/HCV education, substitution therapy for drug treatment, condom distribution, distribution of bleach or other disinfectant, antiseptic wipes, razors for shaving, and anonymous HIV and HCV testing. Although the issue has not been scientifically evaluated, from the primary evidence and experience presented in this report it appears that prison needle exchange programs and other harm-reduction measures are mutually reinforcing, and that the (prior) existence of other harm-reduction measures has contributed to the successful implementation of needle exchange programs.

The goal of reducing HIV and HCV transmission is best accomplished when prison needle exchange is one component of a broader, comprehensive harm-reduction strategy.

In some prisons, this comprehensive harm-reduction approach includes not screening for THC (the active ingredient in cannabis) as part of urinalysis drug-testing programs used in the prison. A number of prisons visited as part of this report have made the decision not to screen for THC, or not to penalize for the presence of THC, as they believe that doing so would encourage many prisoners to abandon cannabis use in favour of injecting drugs to avoid detection.

Importance of evidenced-based decision-making: evaluating pilot projects

One final common aspect is the use of a well-evaluated pilot project as a first step to expansion. In some countries a single pilot has been used, while others such as Germany imple-

mented two pilots running in parallel. The outcomes of the pilot program evaluations have then been used to guide future planning. In some instances (Switzerland, Germany, Spain) the prisons selected for the initial pilot programs were relatively small institutions and/or open or half-open institutions with lower security levels. In these cases, programs were tested and evaluated in these prison environments before expanding the programs into larger, closed prisons with higher security levels. However, in Moldova the pilot needle exchange was done in a medium/maximum-security prison with a population of approximately 1000 prisoners.

The experience of the six countries studied for this report demonstrates that pilot projects can be undertaken quickly and do not have to delay broader implementation of needle exchange programs. For example, in Kyrgyzstan a pilot needle exchange was opened in October 2002, in early 2003 approval was given to expand the program, as of September 2003 programs were operating in six of 11 prisons, and by April 2004 programs were operating in all 11 prisons. Nor do evaluations have to be fully completed before programs are expanded to other prisons. For example, in Belarus a program was piloted in one prison beginning in April 2003, scheduled to run until January of 2004. Although the term of the pilot was extended to June of 2004, it was also extended to two other prisons, and the Ministry of Internal Affairs signalled its willingness to expand needle exchange to prisons throughout the country. It is important to note that in the prison systems presented in this report, pilot projects have not been relied on as a tactic to delay the broader implementation of needle exchange programs.

Not only are evaluations important in the expansion of needle exchange programs within a jurisdiction, but they are also of great use to the broader international community. Rigorous evaluations of pilot needle exchange programs (and expanded programs) contribute important information to the international literature regarding prison needle exchange programs. The findings of evaluations provide the evidence for other jurisdictions. With such evidence, more jurisdictions can demonstrate leadership and generate consensus surrounding the need for, and implementation of, prison needle exchange programs.



Needle Exchange Programs Should Be Implemented in Prisons in Canada

Needle exchange programs recommended since 1992

As presented in detail above, the rate of HIV infection in Canadian prisons is estimated to be at least 10 times that of the general population, and the rate of HCV infection is approaching 30%. The results of numerous studies clearly indicate the need for programs that reduce the risk of HIV and HCV transmission among injection-drug-using prisoners. Indeed, the results of numerous studies indicate rates of HIV and HCV infection and injection drug use equal to or higher than those in countries that have already implemented prison needle exchange programs.

In Canada, since 1992 numerous reports have been produced by both governmental and non-governmental bodies that have explicitly called for the provision of sterile needles to prisoners in Canadian prisons (federal and provincial/territorial). These include:

- 1992 – *HIV/AIDS in Prison Systems: A Comprehensive Strategy*, Prisoners' HIV/AIDS Support Action Network²⁴⁷
- 1994 – *HIV/AIDS in Prisons: Final Report of the Expert Committee on AIDS and Prisons*, Expert Committee on AIDS and Prisons, Correctional Service of Canada²⁴⁸
- 1996 – *HIV/AIDS and Prisons: Final Report*, Canadian HIV/AIDS Legal Network and the Canadian AIDS Society²⁴⁹
- 1997 – *HIV, AIDS, and Injection Drug Use: A National Action Plan*, Task Force on HIV/AIDS and Injection Drug Use²⁵⁰
- 1998 – *HIV/AIDS in the Male-to-Female Transsexual/Transgendered Prison*

*Population: A Comprehensive Strategy, Prisoners' HIV/AIDS Support Action Network*²⁵¹

- 1999 – *Final Report of the Study Group on Needle Exchange Programs*, Study Group on Needle Exchange Programs, Correctional Service of Canada²⁵²
- 2002 – *Action on HIV/AIDS and Prisons: Too Little, Too Late – A Report Card*, Canadian HIV/AIDS Legal Network²⁵³
- 2003 – *Unlocking Our Futures: A National Study on Women, Prisons, HIV, and Hepatitis C*, Prisoners' HIV/AIDS Support Action Network²⁵⁴
- 2003 – *Protecting Their Rights: A Systemic Review of Human Rights in Correctional Services for Federally Sentenced Women*, Canadian Human Rights Commission²⁵⁵

In addition, two reports from House of Commons committees have called for CSC to allow incarcerated offenders access to harm-reducing interventions in order to reduce the incidence of bloodborne diseases in a manner consistent with the security requirements within institutions:

- 2002 – *Policy for the New Millennium: Working Together to Redefine Canada's Drug Strategy*, Report of the Special Committee on Non-Medical Use of Drugs²⁵⁶
- 2003 – *Strengthening the Canadian Strategy on HIV/AIDS*, Report of the House of Commons Standing Committee on Health²⁵⁷

Taken together, these 11 reports plus this report (*Prison Needle Exchange: Lessons from A Comprehensive Review of International Evidence and Experience*) present evidence of the

Governments and prison officials in Canada must take decisive action to reduce the harms known to be associated with injection drug use, including HIV and HCV transmission.

effectiveness of needle exchange programs and provide ample evidence of the need for such programs in Canadian prisons. In light of this body of evidence and informed opinion supporting the introduction of needle exchange programs in Canadian prisons, it is not credible for elected and prison officials in Canada to claim that they are unaware of the health risks associated with injection drug use in Canadian prisons, or of the existence of a proven-effective means to reduce those harms – namely, needle exchange programs. Despite the support for needle exchange programs from groups and individuals who speak with credibility and authority on the issue, governments and prison officials in Canada have failed to take decisive

action to reduce the harms known to be associated with injection drug use, including HIV and HCV transmission.

All of the above-noted reports are from credible sources and contain important evidence to support prison needle exchange programs. However, three are exceptionally significant because of the confluence of processes and people involved in the evidence gathering, production, and publication of each.

Expert Committee on AIDS and Prisons

The 1994 *HIV/AIDS in Prisons: Final Report of the Expert Committee on AIDS and Prisons* by the Expert Committee on AIDS and Prisons (ECAP) was published by the Correctional Service of Canada. In 1992 ECAP was established at the direction of the Solicitor General of Canada to assist the federal government to promote the health of federal prisoners and to protect CSC staff, and to prevent the transmission of HIV and other infections within federal correctional facilities. Committee members were a clinical immunologist, researcher, and ethicist; a physician and member of CSC's Health Care Advisory Committee; a social work

professor of Aboriginal ancestry; and a former commissioner of CSC. Committee observers included CSC and Health Canada staff. ECAP reviewed laws and policies, visited correctional facilities, interviewed prisoners, prison staff, and interested and expert individuals and bodies, and received submissions from 91 Canadian and international agencies and Canadian governments and governmental agencies. ECAP presented its findings at meetings and conferences and distributed its draft report widely. It received feedback from 50 groups, individuals, and agencies.

ECAP reviewed and assessed the current situation and debate regarding prevention of the harms associated with injection drug use in prisons. Regarding sterile injection equipment, ECAP recommended:²⁵⁸

In order to prevent the transmission of infectious diseases, in particular HIV, due to the sharing of unclean injection equipment, and because injection equipment may not be effectively or consistently cleaned by bleach, ECAP has concluded that access to sterile injection equipment by inmates must be addressed by CSC. Therefore, ECAP recommends that research be undertaken that will identify ways and develop measures, including access to sterile injection equipment, that will further reduce the risk of HIV transmission and other harms from injection drug use in federal correctional institutions. This research should be carried out with the active involvement of Health Canada and by individuals independent of but in collaboration with CSC. It should be preceded by consultation with inmates, staff, community groups and independent experts. It should include one or more scientifically valid pilot projects, and should be accompanied by planning, communication and education that will expedite making sterile injection equipment available in the institutions.

Study Group on Needle Exchange Programs

The 1999 *Final Report of the Study Group on Needle Exchange Programs* was prepared by the Study Group on Needle Exchange Programs, convened by CSC. The Study Group was specifically convened to investigate the issue of introducing needle exchanges into Canadian federal prisons. The Study Group included Dr Peter Ford, an internal medicine specialist in infectious disease, physician contracted to CSC to provide care to HIV-positive prisoners in several institutions in Ontario, and co-author of four epidemiological studies on HIV and HCV prevalence in Canadian prisons. Other members of the Study Group included CSC staff (security, health services, and women-offenders representatives), health and community organizations, Health Canada, prisoners, and the public. The project included a CSC task force of health service and security representatives that visited three Swiss prisons to learn more about harm-reduction strategies, and more specifically needle exchange programs.

In the *Final Report of the Study Group on Needle Exchange Programs*, the Study Group recognized that a needle exchange project:²⁵⁹

- would advance the government's promise of building safer communities and reinforce the Solicitor General's commitment to public safety and protection

CSC's own Study Group recognized in 1999 that a needle exchange project would advance the government's promise of building safer communities and reinforce the Solicitor General's commitment to public safety and protection.

- can reach offenders who are at relatively high risk for HIV and HCV infection and act as a gateway that links them to other appropriate health-care services, drug treatment programs, and counselling and social services, encouraging reintegration of offenders back into the community
- is not and cannot be a stand-alone program, and must be offered as part of comprehensive prevention and treatment programs such as methadone maintenance, substance abuse and addictions programs, and counselling

The Study Group issued a consensus recommendation that the CSC do the following:²⁶⁰

To obtain ministerial approval in principle for a multi-site NEP [needle exchange program] pilot program in men and women’s federal correctional institutions, including the development and planning of the program model; and the implementation and evaluation of the pilot program.

Standing Committee on Health

In June 2003 the House of Commons Standing Committee on Health issued its report, *Strengthening the Canadian Strategy on HIV/AIDS*. The Committee is made up of members of Parliament from all political parties sitting in the House of Commons. It heard oral testimony and accepted written evidence from numerous groups, organizations, and individuals, including Health Canada, Correctional Services Canada, the Canadian HIV/AIDS Legal Network, and the Canadian Association for HIV Research. Despite the fact that the focus of the Committee’s examination and resulting recommendations was on funding levels for the Canadian Strategy on HIV/AIDS, the Committee recommended with respect to harm reduction in federal prisons that:²⁶¹

Correctional Service Canada provide harm reduction strategies for prevention of HIV/AIDS amongst intravenous drug users in correctional facilities based on eligibility criteria similar to those used in the outside community (as per the recommendation of the December 2002 report of the Special Committee on Non-Medical Use of Drugs).

The Special Committee on Non-Medical Use of Drugs recommended that “Correctional Service Canada allow incarcerated offenders access to harm-reducing interventions, in order to reduce the incidence of blood-borne diseases, in a manner consistent with the security requirements within institutions.”²⁶²

In her response to the Standing Committee’s report, the Minister of Health did not directly address this recommendation.²⁶³

Canadian prisons (both federal and provincial/territorial) have a legal obligation to provide prisoners with access to sterile needles.

Legal obligation to respect, protect, and fulfill prisoners’ right to health

As examined above (see the chapter on Human Rights and Legal Standards Relevant to Injection Drug Use, HIV, and Hepatitis C in Prisons) there are numerous international as well as Canadian instruments that detail the legal and ethical responsibility of Canadian governments to provide health care, including HIV and HCV prevention measures, to prisoners. Based on the guarantees

contained and standards presented in these instruments, it can be argued that Canadian prisons (both federal and provincial/territorial) have a legal obligation to provide prisoners with access to sterile needles. Further, it can be argued that prisoners who have suffered damage or harm as a result of the failure on the part of prison authorities to provide access to sterile needles might have a successful legal cause of action against such authorities. Such an action could be based on the Charter and the common law (for example, an action in negligence).

Inadequacy of bleach

In Canada, bleach is available as a harm-reduction measure in many prisons.²⁶⁴ Bleach is an important harm-reduction option for injection-drug-using prisoners who do not have access to sterile needles. However, it is not a substitute for sterile needles among people who risk HIV and HCV infection as a result of injection drug use.

The efficacy of using bleach to eliminate HIV in syringes has been well established,²⁶⁵ but bleach is not fully effective in reducing HCV transmission.²⁶⁶ As well, previous studies indicate that many injection drug users have trouble remembering how to properly disinfect syringes using bleach.²⁶⁷ In numerous studies, half or more of injection drug users do not know or do not practise the proper method of using bleach for disinfecting needles.²⁶⁸ Therefore, bleach is not regarded as the gold standard for preventing the transmission of infectious diseases among injection drug users. Further, and specific to harm-reduction measures in the prison environment, evidence from Australia indicates that a substantial proportion of prisoners do not avail themselves of bleach even when it is made available.²⁶⁹ The probability of effective decontamination of needles using bleach is further decreased in prison because cleaning is a time-consuming procedure and some prisoners may be reticent to engage in any activity that increases the risk that prison staff will be alerted to their illicit drug use.

While providing bleach to prisoners is a positive measure, problems with program uptake, as well as the limited effectiveness of bleach in preventing HCV transmission, suggest that this intervention alone is clearly an inadequate response to drug-related harm in prisons. It has even been suggested that the reuse of an HIV-contaminated syringe cleaned with bleach may actually *increase* the risk of HIV transmission.²⁷⁰ Many studies promoting the value of bleach as a harm-reduction measure still conclude that access to sterile syringes is preferable to disinfecting previously used needles.²⁷¹

The experience of the needle exchange programs studied for this report indicates a number of other health benefits associated with needle exchange for prisoners, benefits that cannot be realized with bleach. These benefits include a significant reduction in abscesses and other vein problems that result from reusing dull or damaged needles, and a significant decrease in fatal and non-fatal overdoses in some institutions.

Needle exchange programs have also improved staff safety by reducing or eliminating the risk to prison staff of accidental needle-stick injuries from concealed syringes during cell and personal searches. The provision of bleach does not offer this benefit to prison staff, as needles are still considered contraband within the institutions and are therefore hidden rather than stored safely in visible areas.

That bleach is a suboptimal public health measure is true not only in the Canadian context, but also in all prison systems throughout the world that provide bleach or other disinfectants, but not access to sterile needles. According to UNAIDS, the provision of full-strength bleach to prisoners as a harm-reduction measure has been adopted in prisons in Europe, Australia, Africa, and Central America.²⁷² Elected and prison officials in jurisdictions where prisoners have been provided with bleach in the absence of sterile needle distribution

could significantly improve the health and safety of prisoners, prison staff, and the community by instituting needle exchange programs.

Methadone maintenance therapy a partial solution to the harms of IDU

Methadone is a crucial element of a comprehensive harm-reduction strategy, both in prisons and in the community.

Methadone is a crucial element of a comprehensive harm-reduction strategy, both in prisons and in the community. Taken orally, methadone is successful in blocking the effects of opiate withdrawal symptoms.²⁷³ As a result, methadone maintenance therapy (MMT) is effective in reducing major risks, harms, and costs associated with untreated opiate addiction among patients attracted into and successfully retained in MMT.²⁷⁴ MMT is associated with reduced HIV and viral hepatitis transmission rates.²⁷⁵ Worldwide, an increasing number of correctional systems are offering MMT to prisoners.²⁷⁶ Evaluations of MMT programs in prisons have indicated positive results.²⁷⁷ For example, results from a prison in New South Wales, Australia, indicated lower rates of heroin use, injection drug use, and syringe sharing among those enrolled in MMT compared with prisoners in a control group.²⁷⁸

In Canada, in May 2002 CSC expanded access to MMT.²⁷⁹ Under the new policy, prisoners on methadone maintenance at the time of incarceration may continue methadone, and prisoners who meet the expanded access criteria may apply to initiate MMT while incarcerated. The expansion of access criteria for MMT was based in part on evaluations undertaken by CSC demonstrating that MMT has a positive impact on release outcome and on institutional behaviour.²⁸⁰ Access to MMT in provincial and territorial prisons varies widely.²⁸¹

Despite its value, there are several reasons why providing methadone maintenance in the absence of needle exchange is an insufficient response to the risk of HIV and HCV transmission in prisons via injection drug use. The primary reason is that MMT, as a form of drug treatment for heroin dependence, does not benefit prisoners who do not access the treatment program. There are at least four potential circumstances in which prisoners will not access, or not have access to, MMT. First, prisoners who inject heroin may choose not to access MMT. Second, despite an addiction to heroin, prisoners may not meet all of the criteria for admission to the MMT program or may fail to meet ongoing eligibility criteria once on MMT. Third, under current CSC policy, limits have been placed on the number of prisoners enrolled in MMT at any one time, based on the capacity to administer the program within each institution. The issue of lack of capacity and resources is not unique to CSC and is likely shared by a number of Canadian provincial/territorial systems. Fourth, it takes time to process an application for MMT and to initiate MMT once a prisoner is accepted into the program. Therefore, there will be numerous situations where prisoners with a heroin addiction will continue to inject heroin and potentially engage in high-risk behaviours, despite the existence of MMT programs within the prison.

Additionally, under accepted guidelines, MMT is only for drug users who are physically dependent upon opiates according to standard criteria (usually those set out in the *Diagnostic and Statistical Manual of Mental Disorders*, published by the American Psychiatric Association). Therefore, MMT is not medically indicated for people who are occasional or recreational users who inject opiates, who again will likely continue to inject and to share syringes where needle exchange is not provided. Within prisons, barriers often exist to the optimal provision of methadone. As a medical therapy, a methadone program requires the involvement of a prison physician who is both trained in methadone provision and philo-

sophically supportive of the use of substitution treatment. In Canada and internationally, such physicians may not be present in all prisons.

Similarly, prisoners may continue to inject illicit drugs, including drugs other than heroin, even during MMT treatment. This reality has been recognized by the Spanish government and is cited as one of the reasons for allowing prisoners on methadone programs to also access needle exchange.²⁸² Ongoing injection of heroin might occur where prisoners do not receive a methadone dose sufficient to address withdrawal symptoms, or where prisoners inject narcotics to self-treat pain associated with chronic illness.

Finally, methadone is only a useful treatment for opiate dependency. It is not a harm-reduction option for those who inject non-opiates such as cocaine. Therefore, MMT does not address the unsafe injecting practices of these drug users.

To summarize, while MMT is an essential element of a harm-reduction strategy, alone or even in combination with bleach distribution, it is not a sufficient response to the risk of disease transmission via injection drug use in prisons. Furthermore, for reasons similar to those set out in the preceding section on the inadequacy of bleach, the implementation of needle exchange programs in prisons has achieved other important benefits in the areas of prisoner health and staff safety that cannot be replicated by MMT alone or in combination with bleach.

Opinions of prison staff

Part of the reluctance of Canadian federal and provincial/territorial governments to introduce needle exchange programs is attributable to the real and expected objections of staff. In 1999 the Union of Solicitor General Employees, representing correctional officers, opposed needle exchange programs in federal institutions.²⁸³ However, the evidence regarding the attitudes of individual prison staff with respect to needle exchange programs is inconclusive. For example, when researchers from the Expert Committee on AIDS and Prisons surveyed CSC staff attitudes toward HIV prevention initiatives, 15% of correctional officers and 31% of health-care staff were in favour of making syringe exchange programs available to prisoners.²⁸⁴ The survey was conducted 10 years ago. Since that time there has been new evidence of significant increases in HIV and HCV infection rates among prisoners, of the successful and safe implementation of prison needle exchange programs in other jurisdictions, of the implementation and subsequent expansion of MMT in federal prisons, and of updated HIV/AIDS education programs. Attitudes and opinions can change. This change can result from knowledge and information gained through first-hand or through workplace education programs. Therefore, it is reasonable to expect that the number of staff supporting the implementation of needle exchange programs would be higher today.

Canadian elected and prison officials should be aware of the evidence of staff attitudes in other jurisdictions. A recent review of studies of needle exchange programs in Switzerland, Germany, and Spain found that staff were generally supportive of the programs, although survey response rates varied.²⁸⁵ And as noted in this report, particularly in relation to the situation in Germany and Moldova, staff attitudes have changed as staff have learned first-hand about the needle exchange programs and the harm-reduction ethos, and as they have participated in the implementation and review of needle exchange programs.

It is important to highlight that Canadian jurisdictions have safely and successfully introduced harm-reduction measures such as condoms and bleach in prisons in recent years despite the initially controversial nature of such measures. The implementation of these programs has demonstrated that despite initial concerns in some quarters, harm-reduction mea-

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asures have not “sent the wrong message” or led to increased drug use and smuggling, violence against staff and between prisoners, and vandalism. This history, combined with the lessons learned from needle exchange programs in other jurisdictions, should be remembered in response to staff concerns that the implementation of needle exchange programs in prisons would lead to similar negative consequences.

Cost-effectiveness of prison needle exchange programs

There is no direct evidence of the cost-effectiveness of prison needle exchange programs. There is evidence of the cost-effectiveness of community needle exchange programs. A recent Australian report concluded that money invested in community needle exchange programs in that country had resulted in a greater than fifteen-fold return in savings resulting from infections prevented over a 10-year period.²⁸⁶ A mathematical cost-effectiveness model using the United States as an example determined that the economic benefits of needle exchange and disposal programs are substantial.²⁸⁷ An analysis of needle exchange programs in New York State demonstrated both cost-effectiveness and cost-saving from a societal perspective.²⁸⁸

Even in the absence of prison-specific economic analysis, there is a strong argument that prison needle exchange programs are cost-effective on a societal level. Arguably, the results of studies that have measured the cost-effectiveness of community-based needle exchange programs are valid indicators of the potential cost savings attributable to prison-based programs. If for no other reason, because the majority of prisoners return to the community and access health and social services there, most of the costs of HIV and HCV infection will eventually fall to the community. Therefore, an examination of the cost-effectiveness of needle exchange programs should not be limited to the cost savings for the budgets of prison system. This is especially the case in a country such as Canada, where both the federal government and provincial/territorial governments significantly fund the health care and prescription drugs in the community (and entirely fund these services in prisons). So any economic analysis must take into account the overall savings in government expenditures.

At a case-by-case level, the cost savings associated with preventing HIV and HCV transmission are substantial. With respect to HIV, a recent Canadian study showed that the mean direct cost of providing medical care (including pharmaceutical, inpatient, outpatient, and homecare costs) for one patient for one month in Alberta in 1997-1998 was \$1036, adjusted to 2001 dollars.²⁸⁹ Therefore, on an annual basis, every case of HIV prevented would result in a savings of \$12,432 measured in 2001 dollars. To put this amount in perspective, the cost of one automated syringe-dispensing machine is approximately €3000,²⁹⁰ the equivalent of approximately \$4700 Canadian. Even assuming that needle exchange programs prevent relatively few cases of HIV or HCV transmission among prisoners who inject drugs, needle exchange programs would pay for themselves many times over. They would also likely reduce the health-care resources currently dedicated to treating other health problems associated with injection drug use, such as injection-site and other infections.

Time for elected officials and prison authorities in Canada to act

Canadian prisons should implement needle exchange programs without delay. Non-governmental and governmental organizations, study groups and committees have called on Canadian prisons to do so since 1992. The experience and evidence from all six countries where prison needle exchange programs exist demonstrate that such programs:

- do not endanger staff or prisoner safety, and in fact make prisons safer places to live and work

- do not increase drug consumption or injecting
- reduce risk behaviour and disease (including HIV and HCV) transmission
- have other positive outcomes for the health of prisoners
- have been effective in a wide range of prisons in six countries
- have successfully employed different methods of needle distribution to meet the needs of staff and prisoners in a range of prisons

Not only are needle exchanges a proven effective public health measure for reducing the harms associated with injection drug use, including HIV and HCV transmission; federal and provincial/territorial governments in Canada have a legal obligation to respect, protect, and fulfill prisoners' right to health. This right is recognized in international law, and includes the right to preventive health-care measures. In the context of the HIV/AIDS epidemic, needle exchange programs have been proved an effective preventive health measure for those at risk of HIV infection. Given the persistence of illicit drug use in prison, and the evidence of needle sharing among prisoners who inject drugs, prison needle exchange programs are crucial to the right to health for prisoners who inject drugs.

Canadian prisons should implement needle exchange programs without delay.

In addition, there are sound reasons to believe that prison needle exchange programs are cost-effective and would even result in cost savings for Canadian governments.

Canadian governments should make important public health decisions based on the evidence and their legal obligations, not on public opinion or political expediency. Nor should elected or prison officials make a decision about prison needle exchange programs by ignoring the evidence and their legal obligations, as has been the case for too long in Canada. Leadership from elected officials and prison authorities is required. Leadership is also required from individual prison staff, both correctional staff and health service staff, and from outside physicians who work in prisons. Governments in Canada, and in particular CSC, have been among the leaders in introducing harm-reduction measures in prisons. Individual prison systems in Canada have already introduced condom and bleach distribution and MMT, and provide HIV education to prisoners and staff – although work needs to be done to ensure that prisoners throughout Canada have reliable access to such measures.

Despite the debate and resistance that surrounded the introduction and implementation of harm-reduction measures, they are now widely accepted as part of the prisons systems' responsibility to prisoners and have not compromised institutional security and good order in Canadian prisons. The existence of these measures and the experience of their implementation, along with international experience of and evidence from prison needle exchange programs, represent the building blocks for the introduction of needle exchanges in Canadian prisons.

Recommendation

Both federal and provincial/territorial correctional services in Canada should immediately take steps to implement multi-site pilot needle exchange programs.



Conclusion: A call for leadership on prison needle exchange programs

Although the number of countries that have implemented prison syringe exchange is relatively small, programs have been successfully implemented in a wide range of prison settings. Prison needle exchange programs can be found in countries of Western Europe, Eastern Europe, and Central Asia. They are operating in well-funded prison systems and severely underfunded prison systems. They are operating in civilian prison systems and military prison systems, and in institutions with drastically different physical arrangements for the housing of prisoners. They are operating in men's and women's institutions, and in prisons of all security classifications and all sizes. They are operating as individual pilot projects, and as integrated components of overall prison policy. They utilize various methods for distributing syringes.

While these prison syringe exchange programs have been implemented in diverse environments and under differing circumstances, the results of the programs have been remarkably consistent. Improved prisoner health and reduction of needle sharing have been achieved. Fears of violence, increased drug consumption, and other negative consequences have not materialized. Based on the evidence and experience presented in this report, it can be concluded unequivocally that prison needle exchange programs effectively and successfully address the interrelated issue of injecting drug use, HIV, and HCV in prisons.

However, when it comes to the issue of needle exchange in prison, objective evidence has often proved secondary to political and ideological considerations, and public apathy toward issues faced by prisoners, prison staff, and prison systems. Many countries that exhibit significant rates of HIV, HCV, and injection drug use in prisons refuse to consider needle exchange programs despite the evidence of their effectiveness and safety. This has even been

the case in countries, including Canada, that have acted to implement other harm-reduction measures to address injection drug use, HIV, and HCV in prisons. Yet, as has been explored in this report, a harm-reduction strategy that does not include sterile needle exchange is not only a suboptimal public health measure; it is in contravention of international norms related to prison health, and fails to meet best practice.

Given the report's goal, among the lessons learned from the research conducted for this report, two stand out in encouraging prison systems with HIV and HCV epidemics driven by injection drug use to implement needle exchange programs.

The first lesson is that prison needle exchange is a pragmatic and necessary health response to the problems of HIV, HCV, and injection drug use that has been proven to be effective and safe. Needle exchange has been available in some prisons for as long as 10 years, and it is an approach that has been rigorously evaluated everywhere it has been enacted. Prison systems and governments can no longer avoid their responsibilities to provide for the health of prisoners by dismissing prison needle exchange programs as something new or untested. They are neither.

The second lesson that emerges is that no matter how effective in practice, prison harm-reduction initiatives remain controversial. Decisions about prison conditions, or the failure to make decisions, are often unrelated to the evidence, to the detriment of the health of prisoners, prison staff, and the general public. For some people, prisons become a focal point for expressions of political ideology, with little regard for the evidence about measures that in fact promote the health and safety of prisoners, prison staff, and the general public. This was demonstrated in the case of Germany, where long-term successful needle exchange programs were terminated by newly elected governments.

These two lessons point to the need for leadership from elected officials and prison authorities on the issue of prison needle exchange programs. Leadership is also required from individual prison staff (both correctional staff and health service staff) and from outside physicians who work in prisons. In the context of needle exchange programs in prisons, leadership implies a number of attributes. First, leadership implies an understanding of the legal obligations of prison systems to respect, protect, and fulfill prisoners' right to health. Second, leadership implies knowledge of the experience of and evidence from existing prison needle exchange programs. This report is a comprehensive resource for such knowledge. Third, leadership implies a willingness and commitment to make prison needle exchange programs responsive to the needs of prisoners and prison staff (both health care and correctional). This means involving prisoners and prison staff in the design and implementation of programs.



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- ²⁰² Figures provided by Health Reform in Prisons, November 2002.
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