

**PUBLIC HEALTH AGENCY *of* CANADA**

**Atlantic Region**

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**Environmental Scan of Injection Drug Use,  
Related Infectious Diseases,  
High-risk Behaviours,  
and Relevant Programming  
in Atlantic Canada**

**March 2006**



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Prepared for  
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The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the Public Health Agency of Canada.

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## **EXECUTIVE SUMMARY**

### **PURPOSE AND BACKGROUND**

In early 2005, the Atlantic Regional Office of the Public Health Agency of Canada commissioned an environmental scan of injection drug use in Atlantic Canada in order to update the information provided in a similar study conducted in 2000. Government, community, health service, and social service stakeholders believed that the nature of the issues associated with injection drug use (i.e., the scope of the issue, drugs used, government and community initiatives) had evolved significantly in the region over the five-year period and that updated information was needed to determine priorities for strategic public health action and inter-sectoral collaboration.

It is anticipated that this document will be instrumental in strengthening the evidence base for harm-reduction policies and programs in the Atlantic region by articulating the extent of, and problems associated with, injection drug use in the region; identifying trends and characteristics of injection drug use across sub-populations and provinces; and documenting programs, services, and policy responses targeted to people who inject drugs, including the strengths and gaps in these efforts.

### **SUMMARY OF FINDINGS**

Significant achievements have been made in the Atlantic region since 2000 with respect to provincial and regional initiatives to address the harms associated with injection drug use. Examples of new program and policy initiatives include the development of the Nova Scotia HIV/AIDS Strategy and Blood Borne Pathogen Strategy, the development of a harm-reduction policy in Prince Edward Island, increased availability of methadone maintenance treatment (MMT) programs in New Brunswick and Nova Scotia, and increased availability of needle exchange programs (NEPs) in the four Atlantic provinces. Community-based organizations form a vital component of the harm-reduction efforts in the region, leading outreach and needle exchange for people who inject drugs as well as prevention education for HIV and hepatitis C (HCV) issues. Multi-stakeholder collaborations are actively addressing issues around injection drug use, including the Harm Reduction Fora, the OxyContin Task Force in Newfoundland and Labrador, and the Community Partnership on Prescription Drug Abuse in Cape Breton. Provincial governments, health authorities/districts, and community-based organizations are together providing a wide variety of addictions services from primary prevention to rehabilitation. There is a strong research infrastructure in Atlantic Canada, with research centres in the field of addictions and HIV/HCV risk behaviours, as well as needs assessment projects undertaken by several community-based organizations in the region.

Despite these advances in harm-reduction programs and policies in Atlantic Canada, injection drug use remains a serious public health issue in 2005, as do many of the social and economic inequities underlying drug use (such as lower incomes, higher rates of unemployment, and a smaller proportionate share of the national wealth than much of the rest of Canada).

Patterns with respect to the types of drugs used have changed across the region. The most

common settings for injecting drugs in Atlantic Canada appear to be private homes and public washrooms, except for Halifax, where the street remains a common setting for injecting. Since 2000, there has been a rise in the number of people who inject prescription drugs (particularly OxyContin and Dilaudid), a trend that should be considered as collaborative work proceeds to implement comprehensive harm-reduction approaches. As well, the use of anabolic steroids was reported by 8% of youth aged 15-18 years throughout Cape Breton, and of those who used anabolic steroids, 17.6% reported having practiced injection.<sup>1</sup>

There were significant improvements with respect to reports of risky sexual behaviours among people who inject drugs (i.e., reductions in unsafe sex involving casual and regular partners and sex trade clients). However, there were reports of increases in risky injection behaviours among people who inject drugs, particularly with respect to the sharing of needles and other injection equipment. This indicates that messages to prevent sharing of injection equipment have not been effective in reducing these behaviours. Lack of access to clean equipment continues to be a problem throughout Atlantic Canada, particularly in rural areas and small towns.

On a regional basis there appears to be an upward trend in the number of HIV cases diagnosed annually between 2000 (n=34) and 2004 (n=47). There was a decrease in diagnosed cases between 2000 and 2002 and then a significant increase between 2002 and 2004. There has been a 50% increase in the number of HIV cases diagnosed between 2000 (n=16) and 2004 (n=32) in Nova Scotia and Prince Edward Island, as well as an increase in the proportion of those HIV cases that are attributed to injection drug use (n=1 in 2000 to n=6 in 2004). New Brunswick is the only province with a decrease in new HIV test reports.

The number of reported hepatitis B (HBV) cases has decreased in all provinces except for Newfoundland and Labrador, where the number of new infections increased from between two to four cases per year between 2000-2003, to 25 cases in 2004.

There has been no clear regional trend in the number of HCV cases diagnosed between 2000 (n=519) and 2004 (n=547). However, the number of newly diagnosed HCV cases increased by 45% in Newfoundland and Labrador (from 43 cases in 2000 to 78 cases in 2004), with injection drug use cited as a risk factor in 24% to 35% of the cases. In Nova Scotia and New Brunswick, there have been slight decreases in the number of new HCV cases. In Nova Scotia there has been an increase over time in the number of new HCV cases where injection drug was identified as a risk factor. In 2004, where risk factors were identified, injection drug use was identified as a risk factor in 59% of new HCV cases. The increased misuse of OxyContin may be responsible for some of this increase. Within the federally incarcerated population in Canada, there was an increase in HCV prevalence from 20.1% in 2000 to 25.2% in 2004. It should be noted that these increases in HCV cases may be explained by changes in testing practices or indicate the success of awareness campaigns urging individuals to get tested, but it would require research outside the scope of this environmental scan to make this assessment.

It is very difficult to attempt to estimate the number of individuals involved in injection drug use in the region. It is not possible to identify trends on a regional or provincial basis related to the number of individuals using injection drugs. The only method available to

estimate the prevalence of injection drug use is the number and proportion of HCV cases for which injection drug use was identified as a risk factor. Based on this method, the minimum extent of injection drug use would appear to be stable, involving at a minimum 2,000 individuals in the region. It needs to be remembered that these figures represent a very conservative estimate, as a significant proportion of individuals with HCV have not been tested and in some cases may have been tested outside of the region. Additionally, not all people engaged in IDU contract HCV.

This environmental scan includes an assessment of currently available programs and services spanning the continuum of harm reduction. Given the evidence that many people who inject drugs are initiated into it during their teenage years, it is important that primary prevention programs not only emphasize avoidance of drug use, but also avoidance of using drugs by injection, consistent with a harm-reduction approach. There are still gaps in the availability and accessibility of harm-reduction services (e.g., NEPs and MMT) for many people who live in the rural areas of the region and for persons who live in correctional facilities. Significant policy and service delivery barriers remain for individuals incarcerated in provincial prisons in accessing MMT and condoms, and NEPs are not available in any provincial or federal correctional institution. Increased demand for NEP services is not matched by corresponding increases in operating budgets, and community-based organizations are reliant on fund raising to sustain these highly effective harm-reduction services.

Shortage of program space for individuals needing addictions treatment is a problem across Atlantic Canada, particularly for rural or small town communities. There is also insufficient youth- and women-focused addictions programs in the Atlantic region that take into account the particular needs and issues of these sub-populations.

Barriers also remain for people who use injection drugs with respect to health services, as they often face stigma and judgmental attitudes on the part of health care professionals, thereby causing them to avoid seeking primary health care until they are very ill and need emergency help. Efforts are needed to better prepare and support primary health care professionals in providing comprehensive and consistent primary health care to people who inject drugs.

There is a significant gap in information about injection drug use among Aboriginal people and African Canadians. Aboriginal people appear to begin using drugs at an earlier age and experience numerous barriers to participating in harm-reduction services, including travel distance and the lack of culturally appropriate programs. African Canadians in the Atlantic region also face challenges in relation to higher-than-average unemployment and illiteracy rates as well as problems with inadequate housing, thus increasing their vulnerability for risk-taking behaviours.<sup>2</sup>

## **PROGRAM AND POLICY GAPS**

Despite the progress that has been made, there remain significant issues related to injection drug use in Atlantic Canada that require urgent attention. This environmental scan highlights a number of trends and program and policy gaps that could inform future planning. They are grouped by program or policy area for ease of reference and to

facilitate targeted follow-up in improving services and policies that fall within each jurisdiction or mandate.

### **Substance Abuse Prevention**

- Teachers and parents need to have better access to training resources that help them identify when youth need addiction treatment and how to access that treatment. Universal, selective, or indicated prevention, based in schools and at home, can shift attitudes, knowledge, behaviours, and social conditions in ways that reduce the chances that someone, particularly youth, will begin misusing drugs in the first place or will begin using them in more harmful ways, such as by injection.<sup>3</sup>
- Substance abuse prevention, needs to be grounded in a harm-reduction approach, related to the realities of drug use by youth. Peer based education and counseling is very effective, including peer negotiation skills, building self-esteem, and providing positive recreational alternatives to drug use. Programming needs to dispel the mystique associated with injection, and provide education about the health consequences of mixing different drug types etc, Peer education and outreach is also a valuable method of providing harm-reduction education to persons who are new to injection drug use. More experienced users of injection drugs, particularly those who use NEPs, can be encouraged to conduct collective needle exchanges and to act as safer injection mentors.
- The issue of the misuse of prescription medications indicates that improvements need to be made in the drug prescribing practices of physicians in the Atlantic region.

### **Government Funders and Policy Makers**

- Policy coherence is needed with respect to a harm-reduction approach. Consideration should be given to the official adoption of a harm reduction approach for the planning and program delivery of all initiatives funded or delivered by the federal government, provincial/territorial governments, non-governmental organizations, and communities.
- Leadership and coordination are necessary to integrate a harm-reduction approach to enhance the implementation, accessibility, and effectiveness of NEPs and to address barriers in all settings in Atlantic Canada, including the consideration of pilot projects in correctional facilities. This approach needs to involve law enforcement, justice, all levels of government, community groups, and others.
- Consideration should be given to developing a mechanism to coordinate the efforts of the many harm-reduction partners in the region to maintain linkages among programs and organizations and to facilitate partnership building among community organizations and researchers with common interests in researching specific injection-drug-use-related topics.
- The integration of NEP and MMT services that support people who inject drugs into the ongoing operating budgets of regional health authorities and provincial governments would help to ensure their continuity. Essential harm-reduction services should be provided from a human rights perspective, rather than from a “charities” model requiring fund raising.

## **Community Outreach and Needle Exchange Programs**

- Organizations providing outreach and NEPs should work to increase the accessibility of their programs, exploring creative outreach mechanisms such as the facilitation of collective exchangers and “natural helpers” among people who inject drugs, who reach into injection drug use communities with harm-reduction knowledge and services (e.g., as used by the Mainline Needle Exchange and the AIDS Coalition of Cape Breton).
- Organizations should explore the modification of service delivery to take into account public injection settings such as gyms and fitness clubs (for those who inject anabolic steroids), more culturally appropriate hours of operation (e.g., evenings and weekends), potential partnerships with pharmacies, and mobile injection sites. Availability can also be enhanced in rural areas and in correctional facilities.
- Some interviewees also called for the introduction of safe injection facilities, staffed by nurses. Also, the reports of unsafe disposal of needles indicate that the installation of secure needle drop boxes in key injection areas would reduce risk for the general public.

## **Addiction Treatment**

- Access to MMT programs is needed in all areas of Atlantic Canada, and particularly, mechanisms should be explored for the provision of MMT in rural or small town communities through local physicians and pharmacies and through a comprehensive model of counseling and support.
- Existing MMT programs could benefit by reviewing rules and regulations to ensure the removal of non-necessary barriers to the effective care of people who inject drugs. Government health officials and Colleges of Physicians and Surgeons should consider ensuring that comprehensive services are available to persons who participate in methadone programs, including primary health care, counseling, education, and support services.
- There is a need for more addiction program spaces across the Atlantic region, including youth- and women-focused addictions programs that take into account the particular needs and issues of these sub-populations.

## **Primary and Specialized Services**

- There is a need for health care providers to expand specialized services to improve access to health services that positively impact the health and well-being of people who inject drugs.
- Curricula and on-the-job training for health and other relevant professionals would help build sensitivity and awareness of injection drug use issues. Increased training would be appropriate for health professionals, particularly in the area of MMT, and for emergency room personnel to respond to crisis situations, such as overdose, so that persons in crisis have access to appropriate treatment by first-line service providers.

## **Corrections**

- In prisons where inmates inject illegal drugs, pilot projects should be considered to make sterile injection equipment available.
- Provincial jurisdictions should ensure that condoms, dental dams, and water-based lubricant are more easily and discreetly available in correctional facilities under their jurisdiction, and federal prisons should ensure routine compliance with the current policy respecting the discreet provision of these supplies. The availability of safe tattooing in all prisons could also be considered.
- Provincial prison administrators should consider making MMT available in provincial prisons not only to those who initiated such treatment before entering prison, but also to those who wish to initiate treatment once incarcerated. MMT availability in prisons needs to be complemented by its availability in the community.
- For prison inmates living with HIV or HCV, efforts are needed to ensure that care and treatment match the community standard of care, including palliative care, access to investigational drugs, and alternative therapies.

## **Research and Knowledge Sharing**

- Increased resources need to be dedicated by provincial health ministries for disease-surveillance activities. Regional partners should explore the development of a framework for reporting regularly, using agreed-upon indicators, on injection drug use and its consequences; develop the tools necessary to collect and disseminate the relevant data and information; and monitor progress made to address this critical issue. There is room for improvements in the surveillance of the injection drug use situation and its consequences in Atlantic Canada through data collection, targeted studies, and research to assess causes, co-factors, and effectiveness of interventions.
- Research is needed to enhance knowledge dissemination and education regarding injection drug use; its determinants; and its health and social effects. Research is also needed to understand public attitudes regarding harm-reduction principles and specific harm-reduction strategies.
- Further research would be valuable for filling gaps in information regarding injection drug use among rural populations, Aboriginal people, African Canadians, immigrants, Acadians, and francophones and for testing successful models of youth-centered harm-reduction interventions, particularly with respect to the use of OxyContin.
- Higher quality program evaluations need to be undertaken in the Atlantic region to learn more about the efficiency and effectiveness of programs for people who inject drugs, and a common set of indicators related to injection drug use for the region should be developed.

# INTRODUCTION

## BACKGROUND

### Injection Drug Use and HIV/HCV Transmission

Canada is in the midst of a public health crisis related to HIV/AIDS, hepatitis C (HCV), and injection drug use. The spread of HIV and HCV among people who inject drugs in Canada merits serious and immediate attention. There have been several studies documenting a rise in the prevalence and incidence of HIV among people who inject drugs in the larger cities of Canada, but a rise in the number of persons who inject drugs who are infected with HIV has also been observed outside major urban areas.<sup>4</sup> The health of people who inject drugs is a matter of concern in its own right. Given the geographic mobility of people who inject drugs and their social and sexual interaction with non-users, the problem of HIV and HCV infections among those who inject drugs ultimately affects all of Canadian society. The micro-epidemics of HIV and HCV are not isolated within certain sub-populations, but have an impact on the broader population.

In the early 1980s, the Canadian HIV epidemic was concentrated among men who have sex with men. By the early to mid-1990s, there was a change toward increased transmission among people who inject drugs, and by 1999, approximately 34% of the estimated 4,190 new HIV infections that occurred in Canada that year were among people who inject drugs. The 2002 national estimates indicate that the proportion of new infections among people who inject drugs decreased slightly to 30% in 2002 (800-1,600 of a total 2,800-5,200 new infections). Surveillance data as of June 30, 2004 indicate that in 2003, 18.4% of adult positive HIV tests reported to the Public Health Agency of Canada's Centre for Infectious Disease Prevention and Control were attributed to injection drug use, down from a peak of just over 33% in 1996 and 1997. Recent figures from Health Canada sentinel centres across the country indicate that between 55% and 80% of persons who inject drugs test positive for HCV.<sup>5</sup> In Atlantic Canada between 2000 and 2004, injection drug use was an identified risk factor for 38% of new reported cases of HIV in New Brunswick, 52% in Prince Edward Island and Nova Scotia, and 10% in Newfoundland and Labrador. For HCV, injection drug use is identified as a risk factor 24% to 59% of cases in the Atlantic provinces.<sup>6,7</sup>

### Harm Reduction

Harm reduction is a public health approach or philosophy which has as its first priority a decrease in the negative consequences of drug use. The harm-reduction approach can be contrasted with abstentionism, the dominant policy in North America, which emphasizes a decrease in the prevalence of drug use. Harm reduction tries to reduce problems associated with drug use and recognizes that abstinence is not the only acceptable or important goal.<sup>8</sup> Rather, harm reduction aims to provide or enhance the skills, knowledge, resources, and support that people who use drugs

#### Harm Reduction

Harm reduction is a public health approach to dealing with drug-related issues that places first priority on reducing the negative consequences of drug use rather than on eliminating drug use or ensuring abstinence.

Canadian Centre on Substance Abuse

need to be safer and healthier. Harm reduction involves setting up a hierarchy of goals, with the more immediate and realistic ones to be achieved in steps on the way to risk-free use or, if appropriate, abstinence; it is consequently an approach which is characterized by pragmatism.<sup>9</sup> The approach is based on the belief that moral condemnation of groups at risk will lead to reduction in contact with health services and therefore be counterproductive, and that the majority of people who use drugs are willing and able to change behaviour if the right conditions apply. The harm reduction philosophy:<sup>10</sup>

- considers risk-taking behaviour as a natural part of our world and suggests that work should be focused on minimizing the harmful effects of these behaviours rather than focusing on the cessation of the behaviour.
- supports the involvement of individuals in the creation and/or delivery of programs and services that are designed to serve them; these programs and services should be offered in a non-judgmental and non-coercive manner.
- recognizes the impact of issues such as poverty, classism, racism, homophobia, social isolation, past trauma, and other social inequities on both people's vulnerability to, and capacity for, effectively dealing with risk-taking behaviour.

See Appendix One for a list of terms and concepts that clarify the continuum of drug use patterns and the health and medical framework within which drug use is discussed in this document.

### **Vulnerabilities Associated with Injection Drug Use**

The use of injection drugs is associated with a number of health issues, including overdose; suicide; transmission of diseases such as HIV, HCV, and other blood-borne infections; abscesses; infections; poor nutrition; endocarditis; and adverse drug interactions. The sharing (borrowing and lending) of needles and syringes is well established as a means of transmitting HIV and HCV infections and is a common behaviour among people who inject drugs. Much of the harm related to injection drug use often results from a combination of limited needle availability, poor hygiene surrounding self-injection, and inadequate injection technique. Injecting with dull needles (needles that have been used several times) produces larger punctures than necessary, causing skin, tissue, and venous scarring in regular or frequent injectors. Repeated use of damaged sites and improper injection technique may result in abscesses, ulceration, venous scarring, and circulatory damage when veins "clog" (thrombosis) or collapse.

Unsterile skin or syringes, needles, and other paraphernalia can introduce a variety of infectious agents. Contracting HIV or viral hepatitis by using injection equipment with traces of someone else's blood is not the only risk. Organisms common to the skin surface can contribute to the development of bacterial infections. The water used to prepare drugs for injection may provide another source of bacteria, viruses, and other infectious agents. Even skilled injection drug users with sterile injection equipment and clean skin cannot prevent injecting the insoluble (and/or harmful) diluents and impurities most black market drugs contain. Malnutrition, sleep deprivation, poor personal hygiene, high stress levels, inadequate shelter, and poverty – health challenges faced by many people who use injection drugs – have a negative impact on the immune system and frequently

exacerbate all of the previously described harms. In addition, the analgesic and cough suppressing properties of opiates work to mask the symptoms of existing illness or injury, until the maladies become severe.

People who inject drugs often have histories of child abuse, sexual exploitation, mental illness, homelessness, and incarceration. Their use of injection drugs – an illegal activity – has the effect of further marginalizing these individuals, making it very difficult to support them with services. Dissatisfaction with, and fear or distrust of, medical institutions have an additional negative effect on the willingness of people who inject drugs to take measures to improve or maintain their health status. Key informants also noted that alcohol abuse is the most common substance-use-related problem in the Atlantic region, and that people who inject drugs often report that they were also using alcohol the first time they injected and/or shared needles.

## **RATIONALE**

The Atlantic Regional Office of Health Canada's Population and Public Health Branch (now the Atlantic Regional Office of the Public Health Agency of Canada) commissioned an environmental scan study in 2000 to develop a baseline profile of injection drug use across the four Atlantic provinces. At that time, there was very little regional information on injection drug use and harm reduction. The document *Profile of Injection Drug Use in Atlantic Canada*<sup>11</sup> reported the findings from that study and provided baseline information relating to what was known about injection drug use in the region at that time. The document detailed the kinds of drugs being injected, drugs of choice, drug use settings, information about demographic characteristics (gender, age, etc.), the prevalence of HIV and HCV, and the risk behaviours among people who inject drugs in the region.

It has been recognized among regional stakeholders that since 2000, many achievements have been made in harm reduction in the Atlantic region, as well as nationally, and that these achievements were accomplished through effective partnerships among stakeholders who each work with different populations and provide assistance in different aspects of individual's lives. This population health approach is reflected in several important accomplishments in the Atlantic region:

- completion of provincial HIV/AIDS Strategies in Nova Scotia and initiation of a process to develop a Strategy for Newfoundland and Labrador
- development of the Nova Scotia Blood Borne Pathogen strategy
- introduction of MMT programming in New Brunswick and Nova Scotia
- development of a harm-reduction policy in Prince Edward Island
- establishment of the Addictions Research Centre in Prince Edward Island
- linkages between the provincial Directors of Addictions in the Atlantic region and the reinvigoration of Canada's Drug Strategy (CDS)
- formation of the OxyContin Task Force in Newfoundland and Labrador and the Community Partnership on Prescription Drug Abuse in Cape Breton (Nova Scotia).

The following national-level policy developments also have had an impact on the program and policy environment in Atlantic Canada:

- announcement of Canada's HIV/AIDS Action Plan as defined by *The Federal Initiative to Address HIV/AIDS in Canada: Strengthening Federal Action in the Canadian Response to HIV/AIDS*<sup>12</sup> and *Leading Together: Canada Takes Action on HIV/AIDS (2005 – 2010)*<sup>13</sup>
- establishment by the Correctional Service of Canada of universal access to MMT and of safer tattooing pilots in six prisons
- discussion of a pilot needle exchange program (NEP) by the Correctional Service of Canada
- development of HCV peer education programming by the Correctional Service of Canada, in partnership with the John Howard Society
- funding of \$200,000 for reinvigoration of Canada's Drug Strategy for health promotion, prevention, and harm-reduction programs
- development of a methadone think tank and discussion of women's access to services following incarceration
- funding of \$460,000 from Justice Canada for the development of Drug Treatment Courts
- development of a supervised injection site and heroin prescription pilot project in Vancouver, with evaluation funded by Canada's Drug Strategy
- initiation of the I-Track pilot survey, Enhanced Surveillance of Risk Behaviour Among Injection Drug Users, by the Public Health Agency of Canada's Centre for Infectious Disease Prevention and Control.

Overall, community-based organizations have significantly contributed to efforts to address the needs of individuals living with addictions and to help individuals cope with the implications for their lives, both in communities and in institutions. Community-based organizations have provided leadership in the evolution of programming in the areas of addictions and harm reduction, ranging from the provision of harm-reduction tools (such as providing clean needles and safer crack smoking kits), to direct support to individuals, to in-depth participation in developing policy decisions.

Harm reduction is an important priority for the Public Health Agency of Canada, and is an approach which explicitly guides its HCV and HIV/AIDS programs and community projects. The Atlantic Regional Office of the Public Agency of Canada hosted two regional Harm Reduction Fora (in January 2003 and March 2004) which brought together key stakeholders to promote understanding, build partnerships, and increase awareness around harm-reduction initiatives in Atlantic Canada, especially those relating to injection drug use. Participants included provincial government representatives from all four provinces, the Correctional Service of Canada, the Addictions Research Centre, community-based organizations, and Health Canada/Public Health Agency of Canada.

Multiple stakeholders recognized that there have been shifts in injection drug use (i.e., the scope of the issue, drugs used, government and community initiatives) in Atlantic Canada since 2000, and that up-to-date information was needed to determine priorities for strategic public health action and inter-sectoral collaboration. The 2004 Harm Reduction Forum reached consensus from a variety of perspectives that Atlantic Canada's "drug scene" has changed significantly since 2000. Injection drug use is a growing concern in

Atlantic Canadian communities based on indicators such as discarded needles, the increased demand on the needle exchange and methadone programs, increasing non-medical use of prescription drugs, and increased media attention. Stakeholders across government and non-governmental organizations recognized that attempts to address the full scope of drug use issues should be preceded by the collection of updated information to allow evidence-based decision making within a variety of program and policy contexts. Thus, a recommendation was made at the 2004 Harm Reduction Forum that the 2000 environmental scan be updated.

## **PURPOSE**

Recognizing that the situation in Atlantic Canada has evolved with respect to injection drug use since 2000, the Atlantic Regional Office of the Public Health Agency of Canada commissioned a new injection drug use environmental scan in 2005 to update the 2000 study. The environmental scan was to describe injection drug and crack cocaine use and other drug-related activities in Atlantic Canada that may put people at risk of contracting HCV and HIV. The environmental scan was to include information about the prevalence and distribution of HCV and HIV in the region; the prevalence of other serious injection-drug-related illnesses; an analysis of injection drug use from the perspective of social and economic inequities; and an inventory of injection-drug-use- and other drug-use-related services available in the region, such as prevention, harm reduction, and treatment programs – their location, their funders, their impact, as well as the strengths and weaknesses in the continuum of prevention, harm reduction, and treatment services. In short, the 2005 environmental scan was intended to build on the information and analysis provided by the 2000 *Profile of Injection Drug Use in Atlantic Canada*.

This report presents the results of the 2005 environmental scan and includes an in-depth review of the current state of injection drug use and related issues in Atlantic Canada..

It is anticipated that this document will be instrumental in strengthening the evidence base by articulating the extent of, and problems associated with, injection drug use in Atlantic Canada; identifying trends and characteristics of injection drug use across sub-populations and provinces; and documenting programs, services, and policy responses targeted to people who inject drugs, including the strengths and gaps in these efforts.

## **TARGET AUDIENCE**

The Atlantic Regional Office of the Public Health Agency of Canada intends to use this document to guide the development and strengthening of partnerships and collaborative efforts across sectors, stakeholders, and jurisdictions and to guide future programmatic and policy-based public health action on the problems associated with injection drug use in the region. Other stakeholders may use the document to assist them in their efforts to secure additional funding for harm-reduction programming, to promote and increase public support for harm reduction in their communities/provinces, to increase awareness of regional realities with respect to injection drug use, and to advocate for enhancements/expansion of existing programs and services to areas and populations where there are gaps or greater health disparities among vulnerable populations.

As the document will be used in a variety of ways and for disparate purposes, it has been written to be balanced, respectful, and inclusive of the philosophies, approaches, and priorities of a broad range of stakeholders, from government policy makers to grass-roots community-based organizations. These stakeholders include the Atlantic Regional Office of the Public Health Agency of Canada, Health Canada's First Nations and Inuit Health Branch and Canada's Drug Strategy, the Correctional Service of Canada, Public Safety and Emergency Preparedness Canada; provincial departments of health, corrections, and addictions; community-based HIV/AIDS organizations; peer groups of injection drug users; hepatitis C organizations; correctional service organizations; needle exchange providers; and methadone treatment partners. The document will be translated, published by the Atlantic Regional Office of the Public Health Agency of Canada in both official languages; and broadly disseminated to harm reduction stakeholders in Atlantic Canada.

## **METHODOLOGY**

The Request for Proposals to conduct the environmental scan, developed by the Atlantic Regional Office of the Public Health Agency of Canada with input from community organizations and provincial government partners, was released in January 2005. Pyra Management Consulting Services, independent evaluation consultants, were contracted to conduct the environmental scan including instrument development, data collection, data analysis, and writing of the final report. The consultants worked closely with staff of the Atlantic Regional Office of the Public Health Agency of Canada and with an Advisory Committee, comprised of a sub-group from the Harm Reduction Forum, convened to help steer the environmental scan. The Advisory Committee included representatives from the Atlantic Regional Office of the Public Health Agency of Canada, Health Canada's First Nations and Inuit Health Branch and Canada's Drug Strategy, other federal departments, provincial governments, and community organizations. The evaluation consultants designed the data collection tools based on input from the Advisory Committee and the data collection tools used for the 2000 study. The environmental scan was conducted between March and August 2005, and the report from the project underwent further revisions in January 2006.

This environmental scan was undertaken using two main data collection methods: 1) a literature review and 2) interviews with key informants and people who inject drugs. The qualitative interviews comprised one-on-one telephone interviews with individuals (key informants) who work regularly with people who inject drugs, and face-to-face interviews with people who inject drugs themselves. The face-to-face interviews were conducted by persons from community-based organizations who had already established trusting relationships with people who inject drugs. Injection drug users who participated in the interviews were asked to base their responses on their expertise about the injection drug use situation in the community, rather than on their own behaviour. Individuals from the following communities agreed to be interviewed for the project:

- New Brunswick: Moncton, Saint John
- Newfoundland and Labrador: St. John's
- Nova Scotia: Halifax, Sydney
- Prince Edward Island: Charlottetown.

The Atlantic Regional Office of the Public Health Agency of Canada provided funds to pay the interviewers and to provide an honorarium to each of the people who participated in the interviews. Interview data was recorded through detailed notes and was analyzed by the evaluation consultants.

In addition to the interviews, reports and articles published over the past five years about injection drug use in the Atlantic provinces and elsewhere in Canada were identified by Advisory Committee members. The reports were reviewed to compare with trends identified in the data from the interviews and to fill in any potential gaps in the information collected through the interviews. The research methods are described in greater detail in Appendix Two. The data collection tools are included in Appendix Three.

## **STUDY LIMITATIONS**

Qualitative interviewing is exploratory in nature and thus provides rich and valuable insights into people's opinions and experiences but is not intended to be generalized or quantified. A particular limitation of this qualitative study is that the interviews with people who inject drugs and with key informants were not recorded. Interviewers did their best to capture verbatim the comments of respondents. The data analysis presented within the report is representative of the interviewers' best attempts to reproduce exactly what was said during the interviews. Furthermore, the data are somewhat lacking in reliability because they are based on second-hand reports of issues and behaviours in the injection drug communities, without directly asking members of those communities about their own lived experience. However, in light of efforts to minimize ethical problems, these second-hand accounts were a compromise and were less invasive to people who inject drugs.

The Atlantic Regional Office of the Public Health Agency of Canada originally intended this environmental scan to examine the impact of the determinants of health and the relationship between social and economic inequities and the prevalence of injection drug use. The Advisory Committee agreed that while this is an important issue, a thorough analysis of the relationship requires a research project that is beyond the scope of the current environmental scan. Therefore, although key informants were asked one question about social and economic inequities, this was not a major focus of the study.

Another goal of the environmental scan was to estimate the prevalence of injection drug use in Atlantic Canada. People with expertise in epidemiology were consulted about the best means of accurately providing a prevalence estimate. It was suggested that this task required more resources than were available for this environmental scan.



# A POPULATION HEALTH APPROACH TO UNDERSTANDING INJECTION DRUG USE

## POPULATION HEALTH

The population health approach aims to maintain and improve the health of the entire population and to reduce inequities in health status among population groups. To reach these objectives, it considers the entire range of factors and conditions (commonly referred to as the determinants of health) – and their interactions – that have been shown to influence health over the life course. The resulting knowledge is used to develop and implement policies and actions that will achieve health gains. Actions that result in good health also bring wider social, economic, and environmental benefits for the population at large. These benefits include a sustainable and equitable health care system, strengthened social cohesion and citizen engagement, increased national growth and productivity and improved quality of life.

It is stated in *The Federal Initiative to Address HIV/AIDS in Canada* that the Government of Canada and its partners “...will work toward a Canada free from HIV and AIDS and the underlying conditions that make Canadians vulnerable to the epidemic.” According to *The Federal Initiative*, HIV/AIDS must be addressed not only from a biological point of view but also from social, economic, and human rights perspectives, taking into account the root causes, determinants of health, and other dimensions of the epidemic. Thus, harm-reduction programs and policies should reflect the root causes of drug addiction and HIV and HCV infection due to individuals’ social, economic, ethno-cultural, behavioural, or age- or gender-related vulnerabilities.

### Key Determinants of Health:

- Income and social status
- Social support networks
- Education and literacy
- Employment/working conditions
- Social environments
- Physical environments
- Personal health practices and coping skills
- Healthy child development
- Biology and genetic endowment
- Health services
- Gender
- Culture

Public Health Agency of Canada

## THE LINK BETWEEN SOCIAL/ECONOMIC EXCLUSION AND HEALTH

The terms “inequity” and “inequality” are both used in this environmental scan to reflect the underlying vulnerabilities that place individuals at greater risk of the harms associated with injection drug use. Health “inequality” is generally used as a *descriptive* term to designate disparities among groups. Health “inequity” is more *normative* and is related to social justice and human rights. Thus, inequities refer to material, social, gender, racial, income, and other social and economic inequalities that are beyond the control of individuals and are therefore considered unfair and unjust. Inequities in society stem from cultural, social, and economic systems that can be changed. These inequities are related to all types of chronic disease including communicable and non-communicable disease and mental illness. Low-income groups, on average, have higher rates of chronic disease and mortality than higher-income groups. Evidence shows that interventions that focus on individual risk behaviours have a limited potential for decreasing health

inequities. For strategies to affect the root causes of inequity, they must focus on social and economic factors.<sup>14</sup>

Atlantic Canada has more social, economic, and health inequities and higher rates of chronic disease than the rest of Canada. The region has a generally poorer health profile, lower incomes, higher rates of unemployment, and a smaller proportionate share of the national wealth than the rest of Canada. There are also marked differences both among and within the Atlantic provinces. Social and economic exclusion creates inequities that exclude vulnerable groups from resources they need to live healthy and fulfilling lives as participating members of society. People who are socially and economically excluded from society suffer from feelings of vulnerability, powerlessness, and hopelessness. In turn, these feelings of exclusion are strongly related to risk behaviours associated with drug use and unsafe sexual practices. Adverse economic and social conditions are associated with the higher prevalence of almost all types of chronic disease, including both communicable and non-communicable disease and mental health problems.<sup>15</sup>

A resiliency study<sup>16</sup> in three small coastal communities in Nova Scotia and Newfoundland and Labrador explored indicators of risk factors, protective factors, and outcomes (both positive and negative). Economic disadvantage, distress, and hardship were prevalent risk factors or challenges cited by community members. Communal apathy and anger were evident in the tendency of some residents to blame forces outside and inside the community, and in expressions of powerlessness and resentment. While community development activity was present in all sites, the level of citizen participation in the community process was low. Cultural barriers and divisions were evident in the two Nova Scotia Acadian communities of Cheticamp and Isle Madame. Low levels of education were a problem, especially among displaced workers. Geographic isolation posed a barrier for people without transportation, and social isolation was a problem for some newcomers. Seven risk factor themes emerged: economic disadvantage and unemployment, communal apathy and anger, low levels of participation in community process and development, cultural barriers, low literacy and education levels, geographic isolation, and social isolation. The communities with these risk factors cited alcohol and other drug use as significant societal problems:

*I'm not an expert, but I'm sure along with the stress of worrying about where the money is going to come from - I mean if you bring the stress into the home, violence and abuse and alcohol, drugs, whatever comes with it. I know that not so long ago I seemed to be in that circle of people [where] drugs and alcohol were the answer.<sup>17</sup>*

This study supports the concept that social and economic exclusion is related to higher rates of risk behaviours and mental health problems (including addictions). A useful framework for understanding the impact of inequities and social and economic exclusion on health are the materialist, psycho-social, and political/economic pathways or mechanisms that lead to chronic disease in society:

- The materialist pathway considers lack of resources such as adequate income, toxic environments, affordable housing, and access to education and employment.

- The psycho-social pathway looks at how these material factors translate into biological factors such as chronic stress, which then can lead to disease. It also looks at how social issues such as social support, discrimination, and lack of connections to social infrastructures such as political decision making and financial institutions lead to disease.
- The political/economic pathway considers the structural root causes of chronic disease. It asks why and how. What are the structures, systems, and policies that create poverty and social stress?

The population health approach recognizes the role of social and economic factors and explicitly aims to reduce health inequities among vulnerable groups and thereby improve the health of the entire population. This environmental scan attempts to apply this approach to the issues related to injection drug use in Atlantic Canada.

## **THE LINK BETWEEN SOCIAL DETERMINANTS OF HEALTH AND INJECTION DRUG USE**

In 1974, Health and Welfare Canada issued the landmark report, *A New Perspective on the Health of Canadians*. The Lalonde Report, as it is called, recognized specific behavioural risk factors for chronic disease. Unsafe sexual activity and injection drug use are now considered to be behavioural risk factors for communicable chronic diseases such as HIV/AIDS and HCV, and the determinants of health apply to these behaviours just as they do to smoking, unhealthy diet, lack of physical exercise, overweight, and alcohol abuse.

In this environmental scan, key informants were asked to think about the people who inject drugs in their communities and what they know about their life circumstances, such as where they live, if and where they are employed, their educational background, and their family situation. Based on their knowledge of the people who inject drugs in their community, key informants were asked what barriers they think impact people who inject drugs. There were a number of commonly identified barriers cited by the majority of respondents, including:

- lack of housing
- difficulty in securing and maintaining employment
- poverty
- lack of social support networks
- family history of abuse and violence
- stigma and discrimination, especially when trying to access health care services
- lack of access to appropriate health services
- lack of formal education
- mental illness.

All of these barriers have been documented in the literature.<sup>18,19,20,21,22</sup> The 2002 I-Track pilot survey reported that 55.5% of study participants had less than a high school education.<sup>23</sup> A Nova Scotia study found that 63% of people who inject drugs in a semi-

rural community had less than a grade 12 education.<sup>24</sup> Unemployment among people who inject drugs has been reported at 85% for participants in an evaluation of a community-based methadone program in Nova Scotia.<sup>25</sup> This rate appears to be consistent with needs assessment results in Fredericton, New Brunswick,<sup>26</sup> and with other studies across Canada.<sup>27</sup>

The age of first injection varies by community, but on average occurs in late adolescence or in the early twenties in Canada. Social networks and the availability of injectable drugs influence the onset and continuance of injection drug use. However, certain groups and individuals are more susceptible, especially street-involved youth, Aboriginal people, prison populations, and sex trade workers. Also, many people who inject drugs report a history of physical, emotional, and/or sexual abuse. For many Aboriginal people, a loss of culture, poverty, low education, unstable family structure, and poor social support networks also increase vulnerability to injection drug use.

Several key informants and people who inject drugs interviewed for this environmental scan believe that there are important socio-economic conditions that predispose people to addiction and the use of injection drugs. However, the 2000 report *A Socio-Demographic Profile of Drug Users in Canada* concluded that there is not a clear linear relationship between income and injection drug use.<sup>28</sup> Moreover, the studies reviewed for this report found that there are two income groups that demonstrate higher than average illicit drug use – lower-income groups and higher-income groups.<sup>29</sup> A few key informants in this environmental scan discussed this issue during their interviews as well, offering cautions that assumptions should not be made that all people who inject drugs live in poverty. However, a number of the people who inject drugs who were interviewed for this environmental scan acknowledged the role of poverty in injection drug use and noted that people with lower incomes are more likely to share injecting equipment because they cannot afford to purchase new equipment.

In general, there is a strong link between social and economic inequities and injection drug use. People who inject drugs are more likely to experience homelessness and unemployment, lack education, have a history of family violence, and in some cases, have lower incomes. Given that behavioural risk factors are more prevalent among lower socio-economic groups, to be successful, behavioural and lifestyle interventions require supportive social and economic environments for these groups. While effective for higher socio-economic groups, lifestyle interventions cannot alleviate the deeper influences of poverty and social disadvantage on health. This understanding of the vulnerabilities underlying the harms associated with injection drug use (such as HIV and HCV infection) is an essential component of a population health approach to addressing injection drug use.

## GENERAL DESCRIPTION OF INJECTION DRUG USE IN ATLANTIC CANADA

The following section summarizes drug use patterns, in terms of the types of drugs most commonly used and the most common settings for injection drug use that were reported by participants in the environmental scan.

### ESTIMATED NUMBER OF PEOPLE WHO INJECT DRUGS

The actual number of people who inject drugs in Atlantic Canada, or in Canada as a whole, is unknown. It is very difficult to acquire accurate information on rates of use because injection drug use is illegal and, by its nature, hidden from mainstream society. People who inject drugs are under-represented in surveys for many reasons. Because illicit drug use is often clandestine, it is difficult to quantify the extent of injection drug use in the population, as well as difficult to reach out to people who inject drugs to conduct research or to provide services.

Rough estimates of the number of people who inject drugs can be generated through the triangulation of various sets of proxy data. Estimates of percentage contribution to the 2002 national HIV/HCV incidence and prevalence totals by province and territory and exposure category could serve as proxy data for the number of people who inject drugs in each of the Atlantic provinces. Based on rates of injection drug use in comparable cities and regions as well as the incidence of HIV/HCV infection among people who inject drugs in the province, it is possible to develop estimates of the total number of people who inject drugs in each of the provinces.

*It seems like 3 or 4 years ago nobody used needles, now it seems like every second person you run into is an IV user. The amount of people using now has really increased. Most are using prescription drugs, so they're not too hard to secure. There's been a real big influx in [people who inject drugs] in the community.*

Key informant

In terms of trends in the number of people who inject drugs, NEPs in the Atlantic region report seeing dramatic increases not only in the number of needles that they distribute but also, in some cases, encountering more new clients on a monthly basis than before.<sup>30</sup> While this may be an indicator of the increased prevalence of injection drug use, it could just as easily indicate a growing knowledge about, and comfort with, the concept of needle exchange among the same number of people who inject drugs. The increase in needle distribution and new clients may simply reflect a greater proportion of the existing population coming forward to access the services. Another method that has been used in Alberta is to extrapolate the number of needle exchange clients. Based on survey results among people who inject drugs, Safeworks Calgary estimates that for every client who injects drugs, there are approximately four other individuals using injection drugs who are not clients.

The ratio of needle exchange clients to non-clients within a local injection drug population will vary depending on availability, accessibility, and quality of the services provided.

Estimates of the number of people who inject drugs in Canada range from 50,000 to 125,000.<sup>31,32,33</sup> Although the exact numbers of people who inject drugs across the Atlantic region are unknown, the reported number of HCV cases can provide some insight. The estimated number of people who inject drugs in each province, based on the reported number of HCV cases that identified injection drug use as a risk factor, is provided in Table 1. As a significant proportion of people who have HCV have not been tested, it should be noted that the figures presented in Table 1 are very conservative and significantly under-represent the prevalence of injection drug use. Due to data limitations, the figures in Table 1 should only be used as rough estimates of the number of people who inject drugs in Atlantic Canada. It is difficult to determine if changes in the estimates from 2000 are due to issues of data quality or due to other trends. It should also be noted that provincial-level estimates somewhat obscure the fact that there are “hot spots” of injection drug use within provinces, largely concentrated around urban centres where the drug trade is most active.

<b>Table 1: Estimated Number of People Who Inject Drugs in Atlantic Canada</b>				
<b>Province</b> <sup>4</sup>	<b># of HCV Cases</b>	<b>% with IDU as Risk Factor</b>	<b>Minimum Estimates</b>	
			<b>2004</b>	<b>2000</b>
New Brunswick <sup>1</sup>	1,839	45.0%	827	429
Nova Scotia <sup>2</sup>	2,993	58.8%	1,064	1,200
Newfoundland and Labrador <sup>3</sup>	475	29.5%	140	161

1. Total new cases from 1995 to 2004.
2. Total new cases from 1995 to 2004. Risk factor data only available for 1,808 cases; therefore percentage is calculated as 1,064/1,808.
3. Total new cases from 1995 to 2004.
4. Information not available for Prince Edward Island.

Sources:

Hepatitis C Enhanced Surveillance Database, Public Health Agency of Canada  
 Epidemiological data: HIV, HBV and HCV for Newfoundland and Labrador, Newfoundland and Labrador Department of Health  
 Hepatitis C Surveillance Report, Nova Scotia Department of Health.

The third column in Table 1 indicates the percentage of HCV cases in which injection drug use was cited as one risk factor. It should be noted that injection drug use is not necessarily the only risk factor attributed to these HCV cases – other risk factors may have also been reported for these cases (including blood products, dialysis, household contact, acupuncture, tattooing, ear piercing, body piercing, electrolysis, percutaneous puncture, and sharing needles).

**TYPES OF DRUGS BEING INJECTED**

Participants in this environmental scan were aware of a number of different types of drugs being injected across Atlantic Canada. As in the 2000 study, Dilaudid and cocaine were the drugs

*Dilaudid has become more common than cocaine or crack in recent years. It's become the street drug of choice. People get prescriptions, fill them, and are selling them as IV drugs.*

Key Informant

identified as those most commonly injected. The majority of the participants (84% or n = 81) reported that Dilaudid was being injected in their communities, and 78% (n=75) identified cocaine. These data are consistent with the results of needs assessments conducted in Fredericton, New Brunswick, in 2005<sup>34</sup> and in Prince Edward Island in 2002.<sup>35</sup> The Fredericton Site Committee for the Canadian Community Epidemiology Network on Drug Use attributed the elevated use of Dilaudid in Fredericton to the wide availability of the drug through prescriptions.<sup>36</sup>

Seventy-seven per cent (n=74) of interviewees in this environmental scan were aware of the use of OxyContin, compared to the 2000 environmental scan, in which only 10% of respondents selected awareness of the use of “other opiates” as a category that would have included OxyContin. The apparent trend of increased use of OxyContin was also noted by the OxyContin Task Force in Newfoundland and Labrador, which reported that use of OxyContin has increased dramatically since 2001.<sup>37</sup>

Other drugs that interviewees in this environmental scan identified as being injected in their communities included (the number in brackets indicates the number of people who identified the drug):

- morphine (38)
- crack (27)
- Ritalin (19)
- heroin (17)
- MS Contin (12)
- other amphetamines (9)
- Demerol (4).

*There are harder drugs more easily available than there used to be. Cocaine, opiates and ecstasy are readily available in schools, and on the street, where it used to be grass, hash and acid. There are a lot more designer drugs on the go than there used to be.*

Person who injects drugs

In the 2000 environmental scan, 47% (n=34) of interviewees were aware of heroin in their communities, while only 18% (n=17) were aware of heroin use in 2005. Likewise, in 2000, 27% (n=20) of interviewees were aware of the use of Demerol in their communities; in 2005 the level of awareness of Demerol use dropped to 4% (n=4) of interviewees.

## DRUGS OF CHOICE

A lot of people are using many different prescription drugs – anything they can get their hands on with an opiate in it.

Person who injects drugs

In both the 2000 and 2005 environmental scans, interviewees were asked to identify the top drugs of choice for people who inject in their communities. Consistent with the data about awareness of types of drugs being used, as reported above, Dilaudid and cocaine/crack were identified as the first drugs of choice by many respondents in 2005. These drugs of choice are the same as reported in the 2000 study. A notable difference from the 2000 environmental scan is that OxyContin was most often named as the drug of second or third choice after Dilaudid in 2005, while in 2000 the most commonly cited drug of second and third choice after Dilaudid was cocaine/crack. The Canadian Community Epidemiology Network on Drug Use (CCENDU) has also reported a substantial increase in the numbers of people in Atlantic Canada who dissolve and inject

OxyContin.<sup>38</sup> Many key informants in 2005 noted that many people who inject drugs inject more than one type of drug. This is consistent with the 2000 study, evidence reported in Newfoundland and Labrador,<sup>39</sup> in Nova Scotia,<sup>40</sup> and with studies from elsewhere in Canada. The 2004 I-Track pilot survey found that study participants inject an average of four different types of drugs.<sup>41</sup>

Noted by several interviewees in the 2005 study is discomfort with the term “drugs of choice.” It was suggested that there is often no choice involved in which drug is injected, but rather it is an issue of access. In many communities, it appears that the choice of drugs is limited by the available supply, so the term “drug of choice” may be inaccurate. Many key informants in the 2005 study noted that people will “inject whatever they can get their hands on,” a perspective validated by a cocaine assessment study conducted in Nova Scotia.<sup>42</sup>

## PROCUREMENT OF INJECTION DRUGS

Along with changes in the types of drugs predominantly being injected, there have been changes in how injection drugs are procured. Interviewees reported that to get the money to purchase drugs, people engage in criminal activities such as robberies, break-and-enters, theft, or shoplifting of items that they take to cash in at pawn shops or directly trade for drugs. Women who inject drugs were commonly reported to engage in prostitution or to directly trade sex for drugs, and there were also some reports of male prostitution. Some men were reported to manipulate young women into the sex trade (i.e., pimp) to make money for drugs. The primary source of prescription opiates was through drug dealers who “double-doctor,” through robberies of drug stores, or by pressuring or threatening physicians into writing prescriptions.

It is a lot easier to get drugs – you can get them on practically any street corner these days. Anybody with a severe injury has little or no problem getting a script from their doctor.

*We should stop letting doctors give pills like it's candy. People who have an injury will purposely injure themselves so that they can get a prescription. I've seen doctors feeling intimidated by their patients so they'll give them the pills just to get rid of them. I've done it – I've said that they have gotten me hooked, and that they are going to give the script to me*

Person who injects drugs

## SOCIAL CONTEXT OF INJECTION DRUG USE

Interviewees in both the 2000 and 2005 environmental scans were asked to indicate the extent to which injection drug use occurs in various settings and social contexts. In comparison to the 2000 study, where the street was reported as the most common setting for injection drug use, both key informants and people who inject drugs reported private homes as being the most common setting for injecting drugs in 2005.

Interviewees specifically named their own home, friends' homes, or the homes of dealers as places where injecting

*People are injecting in public places – outdoors (parks, behind buildings, in alleys, parking lots), public washrooms (like at Tim Hortons, night clubs, bars, or in gas stations), in vehicles - and I've seen people inject on the street. You didn't see that before. Now IDU is very open – there are now shooting galleries or “crack shacks” where people congregate to shoot up, in the same room, rooming houses or apartments, like a group activity.*

Key informant

occurs. Public washrooms were also mentioned by the majority of interviewees as a common setting. Specific locations of public washrooms cited included donut shops, gas stations, shopping malls, and stores. The reason for the popularity of public washrooms as an injection site was explained by one interviewee who said: “there’s always water and it’s private.” These settings are consistent with findings from injection drug use needs assessment studies in Fredericton, New Brunswick,<sup>43</sup> and in Prince Edward Island.<sup>44</sup>

A few different settings emerged as themes in specific provinces. The majority of New Brunswick interviewees identified alleyways as a setting where injection takes place, although this theme did not emerge in the other provinces. Interviewees in Prince Edward Island and Newfoundland and Labrador identified private vehicles as common places for injecting, but this was not identified by interviewees in the other provinces. “Crack shacks” or shooting galleries were identified by some of the interviewees in New Brunswick and Nova Scotia, while they were not mentioned by interviewees in Prince Edward Island and Newfoundland and Labrador. Parks were also mentioned as a setting by a few interviewees in both Prince Edward Island and in Newfoundland and Labrador, but not in New Brunswick nor in Nova Scotia. The street remains a common setting for injecting drugs in Halifax, Nova Scotia.



## SNAPSHOT OF HIV, HEPATITIS B, AND HEPATITIS C RATES AND RISK BEHAVIOURS IN PEOPLE WHO INJECT DRUGS IN ATLANTIC CANADA

*People think – why not, we're sleeping together so why not share a needle? Crystal meth, cocaine and E enhance sex – people are so wasted that they don't care about using condoms.*

Person who injects drugs

People who inject drugs and engage in unsafe injection or sexual behaviours are at increased risk for HIV, HBV, and HCV. This section explores the incidence and prevalence of these diseases among people who inject drugs, as well as the prevalence of specific risk behaviours. It is important to note that due to challenges in disease surveillance, especially for illicit behaviours such as injection drug use, it is likely that the numbers under-report the actual prevalence of disease attributed to injection drug use.<sup>45,46</sup> Although sexual and injection behaviours are discussed separately, it is important

to note that these risk behaviours are strongly inter-related in sexual relationships among people who inject drugs.

### HIGH-RISK INJECTION BEHAVIOURS

The sharing (borrowing and lending) of needles and syringes is well established as a means of transmitting HIV/HCV infection and is a common behaviour among people who inject drugs. Sharing of other injection drug equipment such as spoons/cookers, filters, and water, often referred to as “indirect sharing,” is also associated with HIV and HCV transmission.<sup>47</sup>

Key informants in this environmental scan were asked a series of questions about their awareness of injection and sexual risk activities among the people who inject drugs in their communities.

Interviewees were asked to estimate the prevalence of various unsafe injection and sexual behaviours on a five-point scale ranging from 0% (none) to 100% (all). The scale consisted of 25%-point increments, and participants were provided with an “unsure” option to discourage guessing. An open-ended question was asked to

encourage people to share any additional information they may have had related to risk-taking behaviours. It is important to note that many of the key informants did not feel that they had enough information to adequately estimate the proportion of people injecting drugs who participate in some or all of the risk behaviours listed in the interview. For example, only 23 of the 48 key informants interviewed provided an estimate about the prevalence of sharing used needles. Table 2 shows the percentage of key informants (of those who responded) that estimate that at least half of people who inject drugs participate in certain certain unsafe injection behaviours.

*[Persons who inject drugs] are aware of the risks but when it comes down to it, they think 'it will never happen to me.' They might be knowledgeable, but it's still ignored. Most people don't even think about it or don't care – they say “you only get it once.” They have no clue about different strains.*

Key informant

<b>Table 2: Proportion of Key Informants Who Believe That at Least Half of People Who Inject Drugs Engage in Risk Injection Behaviours</b>		
<b>Unsafe Injecting Behaviours</b>	<b>2005</b>	<b>2000</b>
Shared used needles	54%	47%
Shared needles cleaned with bleach	29%	60%
Front or back loading	64%	68%
Share spoons, filters, water, etc.	81%	60%
Booting*	46%	70%

\* Booting involves drawing blood back into the syringe and re-injecting one or more times.

There were notable increases in 2005 (compared to 2000) in the proportion of key informants who felt that 50% or more of people who use injection drugs engage in the sharing of needles (54% in 2005 versus 47% in 2000) and other injection equipment such as spoons, filters, water, etc. (81% in 2005 versus 60% in 2000). Fewer key informants reported that 50% or more of people who inject drugs engage in the risk behaviours with respect to sharing needles cleaned with bleach (29% in 2005 versus 60% in 2000) and booting (46% in 2005 versus 70% in 2000).

People who inject drugs who participated in this environmental scan also provided information about unsafe injecting practices. The majority (60%) of injection drug users interviewed indicated that they know that sharing needles and equipment occurs within their community. They also reported unsafe practices such as use of their own needles over and over again, putting needles on the floor, taking the cap off a syringe with their teeth, sharing the “wash” from needles, sharing straws for snorting, not swabbing the injection site, spattering blood, discarding used needles in garbage cans or on the street, sharpening blunt needles on matchboxes, using needles as a weapon to commit robberies, “home” tattoos, sharing razors and toothbrushes, and carelessly picking up someone else’s needle. The reports of the increasing tendency for people who use injection drugs to inject in shooting galleries, “crack shacks,” or “opium dens” are cause for concern with respect to their potential to create more opportunities for needle sharing and other unsafe injection practices among groups of people who inject drugs.

*Some people don't watch what they are doing. They just lay the needle down and misplace it, and then pick up any needle and use it, not knowing if it was their own needle.*  
Person who injects drugs

The sharing of crack pipes has been identified as a potential source of transmission for HCV because the heat of the pipe causes cracked and bleeding lips.<sup>48</sup> For this reason, the environmental scan asked key informants to estimate the proportion of their community who smoke crack cocaine. The majority of respondents indicated that they did not know, and among those who did respond, estimates ranged from 5% to 100%, making the data unreliable for determining the prevalence of crack cocaine use in the Atlantic region.

*A few people do share needles because they figure they know the people they are sharing with and trust them.*  
Person who injects drugs

Information about unsafe injection practices identified in this environmental scan is consistent with other studies from Atlantic Canada. A needs assessment conducted by AIDS New Brunswick found that 35% of study participants reported sharing equipment, and 43% of participants reported letting someone else use their needle after they had already used it.<sup>49</sup> A needs assessment conducted by AIDS PEI found that 48% of study participants share needles,<sup>50</sup> and a cocaine assessment in Nova Scotia found that of cocaine users who use needles to inject their drugs, one-third reported that they share needles.<sup>51</sup>

The prevalence of sharing injecting equipment is not unique to Atlantic Canada. Studies in other Canadian regions have also identified high rates of equipment sharing.<sup>52</sup> Results of the I-Track pilot survey indicate that, overall, 24.5% of study participants reported injecting with used needles in the six months before the survey. People who inject drugs borrow mostly from people with whom they inject, most often close friends/family or regular sex partners. Indirect sharing also occurs frequently among people who inject drugs. Of study participants in the I-Track pilot survey, 43.2% (range: 31.7% in Toronto to 53.5% in Regina) reported borrowing other previously used injecting equipment (filters, cookers, water) for injecting purposes in the preceding six months; 32.9% reported lending or passing on other injecting equipment in the six months prior to the survey.

Identified by those interviewed for this environmental scan as the most common reason for sharing needles is the lack of access to clean equipment. Limited access was attributed to lack of rural access to needle exchanges, needle exchanges being closed, being unable to purchase needles from a pharmacy, and the reluctance of people in rural areas to be seen purchasing needles in their small communities. Although some interviewees reported that they are able to purchase needles in pharmacies, the majority reported barriers to accessing clean needles through drug stores. Lack of access to clean equipment has also been identified in the literature as a main reason for sharing injection equipment.<sup>53</sup> There has been some research suggesting that the sharing of injection equipment continues even when there is access to sterile equipment.<sup>54</sup> The research found that people who use injection drugs form social networks to facilitate easy access to drugs for companionship and safety. There is trust and a sense of obligation and intimacy among social network members that may increase the likelihood of sharing equipment. Overall, a key finding is that the messages to prevent sharing of injection equipment have not been effective in reducing these behaviours.

Another important reason for making clean injection equipment widely available is that some people who inject drugs develop a strong attachment to the act of injection itself. These people are sometimes described as having strong “needle habits.” They tend to inject a variety of drugs, to inject water if no drugs are available, to relapse quickly after periods of abstinence, and to

*Some drug stores won't sell you long-tip needles, or will ask you a lot of questions if you ask for them. They won't sell needles to you if they think you're buying them to shoot drugs. Pharmacists have poor attitudes and are making moral judgments and refusing to sell clean needles. Some [people who inject drugs] will not be sold to and are asked not to come back into the store.*

Person who injects drugs

*Injecting drugs used to be about getting “high” but now the needle and the procedure of getting high (cooking the drug, drawing it up in the syringe, flagging) is as important as the drug itself. People are equally addicted to the needle as well as the drug.*

Key informant

reject the use of methadone except in an injectable form. This is because the act of self-injection becomes a pleasurable activity through frequent association with the drug effects. Syringes and other paraphernalia such as tourniquets also come to invoke pleasurable sensations by the same process.

## HIGH-RISK SEXUAL BEHAVIOURS

Sexual risk behaviours are also associated with HIV infection among people who inject drugs; many are involved in unprotected commercial sex, and condom use with regular and casual partners is low. Many people who inject drugs in Canada are involved in the commercial sex trade, and studies report inconsistent condom use with clients. Among people who inject drugs in the I-Track pilot survey, 39.5% of females reported engaging in commercial sex work in the six months before the survey. According to the same survey, condom use among female injection drug users during penetrative sex with client partners was generally high but was less so during oral sex: 5.7% reported never using a condom during oral sex, and an additional 17.6% reported inconsistent condom use during oral sex.

Among people who inject drugs who have regular and casual opposite sex partners, condom use is low. Analysis of condom use among I-Track pilot survey participants indicated that reported condom use during penetrative and oral sex in the preceding six months was more infrequent with casual sex partners than with client sex partners, and more infrequent still with regular sex partners. This pattern of decreased condom use in more stable relationships was reported by both male and female users of injection drugs. Among males, 19.4% and 56.6% reported never using a condom during penetrative and oral sex, respectively, with their casual sex partners in the preceding six months. Among females, 28.4% and 34.0% reported never using a condom with casual sex partners during penetrative and oral sex, respectively, in the preceding six months. There were no marked differences in reported condom use among participating sites.

Table 3 shows the percentage of this environmental scan's key informants (of those who responded) who estimated that at least half of people who inject drugs participate in certain sexual activities.

<b>Unsafe Sexual Activities</b>	<b>2005</b>	<b>2000</b>
Involved in the sex trade	30%	23%
Unsafe sex with trade clients	43%	52%
Unsafe sex with casual sexual partners	64%	77%
Unsafe sex with regular partner	78%	91%

Fewer key informants reported that 50% or more of people who inject drugs engage in risk behaviours with respect to unsafe sex with clients (43% in 2005 versus 52% in 2000), unsafe sex with casual partners (64% in 2005 versus 77% in 2000), and unsafe sex with a regular partner (78% in 2005 versus 91% in 2000). However, it is important to remember that the 2000 and 2005 environmental scans were based on different samples

of key informants, and many key informants felt that they were unable to provide estimates of prevalence. Therefore, any differences between the mean ratings for both years should be interpreted with caution.

Some interviewees reported high-risk sexual activity in the social context of group sex, such as orgies and sex parties (both gay and heterosexual), as well as related to the preference of some male clients of sex trade workers to have sex without a condom. Several mentioned that some people who inject drugs engage in “marathon sex” or “gang bangs,” and noted that physical damage through bruising and friction burns increases risk for HIV/HCV transmission. There were also reports that some youth engage in oral sex parties and that many young people do not see oral sex as carrying risk and thus do not feel the need to use any protection.

*Lots of drug users are not practicing safer sex – they either don't think about it or don't care. Many assume that they've already been infected through sharing injecting gear – so they don't bother with a condom.*

Key informant

## **HIV PREVALENCE AND INCIDENCE**

### **National HIV Estimates**

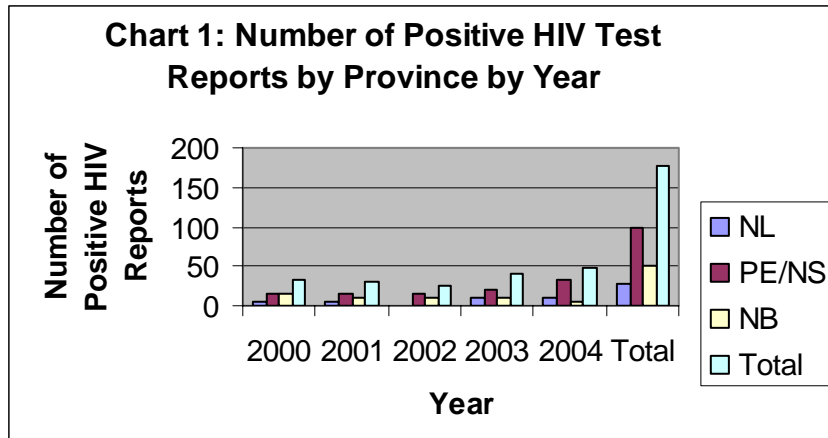
Available data indicate high levels of risky injecting and sexual behaviours among people who inject drugs, suggesting that the potential for the transmission of HIV in these populations continues to be significant.<sup>55</sup> According to national HIV prevalence and incidence estimates, 30% or 800-1,600 of the estimated 2,800-5,200 new HIV infections that occurred in Canada in 2002 were among people who inject drugs.<sup>56</sup> A similar trend has been observed in the number of positive HIV test reports attributed to injection drug use reported to the Public Health Agency of Canada's Centre for Infectious Disease Prevention and Control. The proportion of adult positive HIV tests attributed to injection drug use, after peaking at just over 34% of the total in 1999, gradually decreased to 24.0% in 2002.

In Canada, injection drug use accounts for 7.4% of cumulative adult AIDS cases and 16.7% of cumulative adult positive HIV test reports up to June 30, 2004.

Public Health Agency of  
Canada

### **Regional HIV Estimates**

Chart 1 and Table 4 summarize the total number of new HIV cases in the four Atlantic provinces. Chart 2 and Table 5 summarize the number and proportion of those cases that are attributed to the risk behaviour of injection drug use.

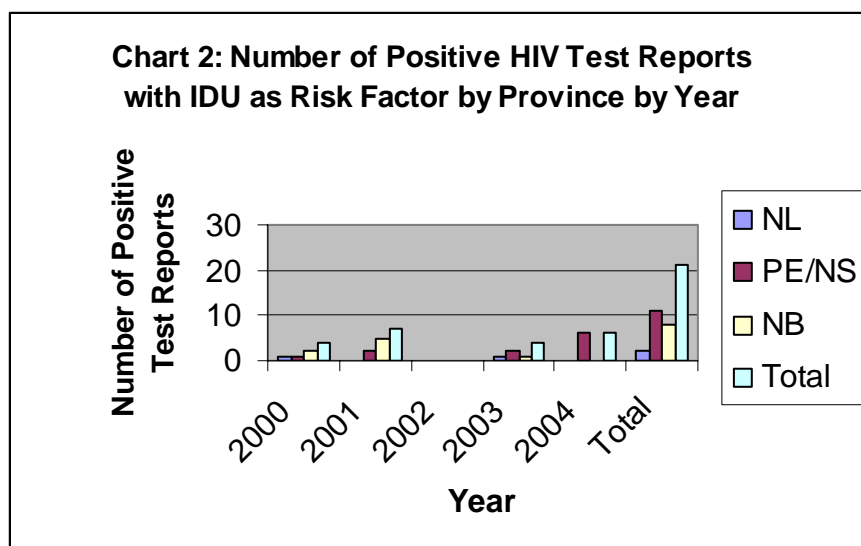


Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

**Table 4: Number of Positive HIV Test Reports by Province and Year**

Province	2000	2001	2002	2003	2004	Total
Newfoundland and Labrador	4	4	1	11	9	29
Prince Edward Island and Nova Scotia	16	15	16	19	32	98
New Brunswick	14	11	9	11	6	51
<b>Total</b>	<b>34</b>	<b>30</b>	<b>26</b>	<b>41</b>	<b>47</b>	<b>178</b>

Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.



Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

<b>Province</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Total</b>
Newfoundland and Labrador	1 (25%)	0 (0%)	0 (0%)	1 (9%)	0 (0%)	<b>2 (7%)</b>
Prince Edward Island and Nova Scotia	1 (6%)	2 (13%)	0 (0%)	2 (11%)	6 (19%)	<b>11 (11%)</b>
New Brunswick	2 (14%)	5 (45%)	0 (0%)	1 (9%)	0 (0%)	<b>8 (16%)</b>
<b>Total</b>	<b>4 (12%)</b>	<b>7 (23%)</b>	<b>0 (0%)</b>	<b>4 (10%)</b>	<b>6 (13%)</b>	<b>21 (12%)</b>

Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

As of June 30, 2004, there has been a cumulative total of 1,223 HIV-positive test reports in the Atlantic provinces. Of those cases, 85% are males and 15% are females. Cases by province are shown in Table 6.

<b>Province</b>	<b>Males</b>	<b>Females</b>	<b>Total</b>
New Brunswick	299	41	340
Newfoundland and Labrador	177	50	227
Nova Scotia and Prince Edward Island	564	92	656
<b>Atlantic Canada</b>	<b>1,040</b>	<b>183</b>	<b>1,223</b>

Source: *HIV and AIDS in Canada: Surveillance Report to December 31, 2004*, Public Health Agency of Canada, [www.phac-aspc.gc.ca/pphb-dgsp/hast-vsmt/public\\_e.html](http://www.phac-aspc.gc.ca/pphb-dgsp/hast-vsmt/public_e.html)

## **HEPATITIS B INCIDENCE**

A 2001 report published by Health Canada estimated that the prevalence of HBV among people who inject drugs is 80%.<sup>57</sup> It has also been estimated that one-third of new HBV infections are associated with injection drug use.<sup>58</sup> In 1998, there was an outbreak of HBV among people who inject drugs in Cape Breton and Amherst, Nova Scotia, (where it triggered the initiation of Mainline Needle Exchange's outreach program). Data for the years 1995 to 1999 are summarized in Table 7 below.

<b>Province</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>Total</b>
Newfoundland and Labrador	3	2	3	3	2	<b>13</b>
Prince Edward Island	0	1	0	1	4	<b>6</b>
Nova Scotia	44	47	28	40	21	<b>180</b>
New Brunswick	23	14	6	11	14	<b>68</b>
<b>Total</b>	<b>70</b>	<b>64</b>	<b>37</b>	<b>55</b>	<b>41</b>	<b>267</b>

Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

Data for the years 2000 to 2004 are summarized in Table 8 below.

<b>Province</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003 *</b>	<b>2004 *</b>	<b>Total</b>
Newfoundland and Labrador	4	3	2	2	25	<b>36</b>
Prince Edward Island	0	1	0	1	3	<b>5</b>
Nova Scotia	13	16	9	12	8	<b>58</b>
New Brunswick	9	7	10	0	7	<b>33</b>
<b>Total</b>	<b>26</b>	<b>27</b>	<b>21</b>	<b>15</b>	<b>43</b>	<b>132</b>

\* 2003 and 2004 numbers are preliminary and subject to change.

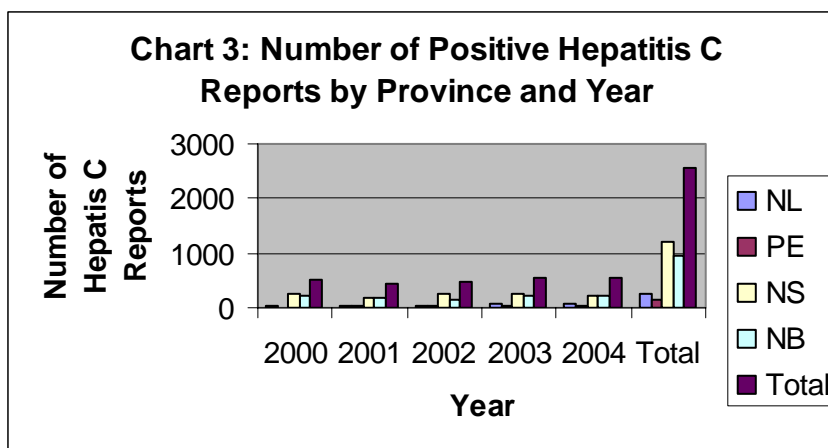
Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

Between the 1995-2000 period and the 2000-2004 period, it appears that the numbers of positive HBV test reports decreased by about 50% in the Atlantic provinces. One possible explanation is that more people have learned about, and taken advantage of, the vaccine for HBV. Recently, the numbers of HBV cases have fallen in all provinces except for Newfoundland and Labrador, where the numbers of new infections went from between two to four per year between 2000-03, to 25 in 2004.

### **HEPATITIS C INCIDENCE**

In certain populations of persons who inject drugs, greater than 80% are infected with HCV, typically within the first year of drug use.<sup>59</sup> The high prevalence of HCV and ease of transmission through contaminated injection equipment mean that people who inject drugs are at considerable risk of infection.<sup>60</sup> It has been estimated that between 55%<sup>61</sup> and 70%<sup>62</sup> of new HCV infections in Canada are attributable to injection drug use. The Canadian I-Track pilot survey found a 63.8% HCV prevalence rate among people who inject drugs who are participating in the study. Similar rates have been found in other Canadian studies.<sup>63</sup> A recently published HCV surveillance report from Nova Scotia found that injection drug use was identified as a risk factor in 59% of cases.<sup>64</sup> The Nova Scotia report also observed that there has been an increase over time in the number of people reporting injection drug use as a risk factor. Data from Newfoundland and Labrador indicate that between 2000 and 2005, the percentage of cases of HCV with injection drug use cited as a risk factor ranged from 24% to 35%.<sup>65</sup>

From 2000 to 2004, there were 2,561 cases of HCV reported in Atlantic Canada,<sup>66</sup> as shown in Chart 3 and Table 9.



\* The 2003 and 2004 numbers for all provinces are preliminary and subject to change.

\*\*The 2004 numbers for Nova Scotia come from the Nova Scotia Department of Health Surveillance Report.

Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

Province	2000	2001	2002	2003 *	2004 *	Total
Newfoundland and Labrador	43	46	39	57	78	<b>263</b>
Prince Edward Island	11	27	38	38	31	<b>145</b>
Nova Scotia**	254	195	257	256	236	<b>1,198</b>
New Brunswick	211	179	149	214	202	<b>955</b>
<b>Total</b>	<b>519</b>	<b>447</b>	<b>483</b>	<b>565</b>	<b>547</b>	<b>2,561</b>

\* The 2003 and 2004 numbers for all provinces are preliminary and subject to change.

\*\*The 2004 numbers for Nova Scotia come from the Nova Scotia Department of Health Surveillance Report.

Source: Notifiable Diseases Reporting System, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

## HIV AND HEPATITIS C CO-INFECTION

About 23% of the approximately 49,600 Canadians living with HIV are also co-infected with HCV.<sup>67</sup> As HIV and HCV share some common transmission routes, co-infection with these two viruses is common. HCV co-infection is especially prevalent in persons who acquired HIV through injection drug use. The immunodeficiency associated with HIV infection appears to accelerate the course of HCV. The impact of the treatment of either virus on the natural history of the co-infected patient remains speculative. Chronic liver disease and hepatocellular carcinoma related to HCV are emerging as increasingly common causes of death in persons with HIV, as their overall mortality and life expectancy increase as a result of highly active antiretroviral therapy (HAART).<sup>68</sup> A 2001 report prepared for Health Canada estimated the number of Canadians co-infected

with HCV and HIV to be 11,194, of which 70% are people who inject drugs. It was estimated in the same report that 191 people in Atlantic Canada are co-infected.<sup>69</sup>

## POPULATION-SPECIFIC ANALYSIS OF INJECTION DRUG USE IN ATLANTIC CANADA

Key informants were asked to provide information about trends in the age, gender, ethno-cultural identity, and urban and rural differences among people who inject drugs in Atlantic Canada. Some key informants also offered insights about the socio-economic status of people who inject drugs. Each one of these sub-populations is explored separately below, with respect to their particular vulnerabilities and needs.

### YOUTH

The youth group is best defined by taking into account that prevention necessarily involves a time period prior to the period of interest (i.e., later childhood – ages 7 to 12), and that psycho-social development is often delayed among high-risk youth. Thus, for the purposes of this environmental scan, “youth” refer to those between the ages of 12 and 25. Youth are not a homogeneous population, and it is important to distinguish as much as possible among sub-populations of youth based on gender, urban-rural differences, level of risk, street involvement, cultural background, and stage of psycho-social development. More people today are injecting at a younger age, such as 14 to 15 years of age.

Youth are at particular risk of HIV/HCV infection through injection drug use due to their relative inexperience, lack of knowledge of risk factors and of consequences such as overdosing, and often because of their general lack of concern. A 1998 Canadian study found that street youth did not see the first injecting experience as a major event, but claimed that everyone was doing it or that it was just another way to take a drug. Similarly, it did not seem to matter which drug they took; they used whatever was available.<sup>70</sup> The first injecting experience “just happened” for one-third of a sample of youth in a study in Queensland, Australia, while there was some degree of planning or at least contemplation of injecting for the remainder. A very high proportion of these youth was intoxicated at the time of first injection.

The average age of first injection for people who inject drugs in Canada is 21.4 years of age. However, it is important to note that 30% of people who inject drugs began injecting at the age of 16 years or younger.<sup>71</sup> Experience in Atlantic Canada appears to be consistent with this Canadian trend. Interviewees for this environmental scan reported that drug use started as young as 11 years of age, although the majority reported that initiation into drug use happened around the ages of 16 to 18 years. A 2005 needs assessment involving people who inject drugs in New Brunswick found that many people began injecting in their late teens or early twenties.<sup>72</sup>

*When I started injecting, I was 15 and the youngest in the group. Now, I see more people that age injecting.*

Person who injects drugs

Similar to the reports from the 2000 environmental scan, almost all of the key informants who participated in the 2005 scan stated that people who inject drugs in their communities were most commonly between 18 and 44 years of age, with the most commonly cited age range being between 25 and 34. This finding is consistent with

studies from elsewhere that have reported the average age of people who inject drugs to range from 28 to 35 years.<sup>73,74</sup> Many key informants and people who inject drugs shared their belief that the number of younger people who inject drugs is growing. This trend was also identified in the 2000 environmental scan. It is the experience of people who inject drugs and those who work with them in Atlantic Canada that there is an increasing number of youth injecting drugs in the region. It is apparent through the experience of the key informants who participated in the 2005 environmental scan, as well as from research from elsewhere, that there is a significant number of people under the age of 20 years who inject drugs.<sup>75</sup>

Some organizations that provide services to people who inject drugs also report that they are currently serving more young people than in the past.<sup>76,77</sup> The 2005 Fredericton needs assessment conducted by AIDS New Brunswick found that in the April 2004 to September 2005 reporting period, over 50% of 145 NEP clients were under the age of 30. There are indications from recent studies elsewhere in Canada that the average age of NEP clients is 32 years, which is higher than reported in previous research.<sup>78</sup>

*Younger [people] are injecting at high school and at school functions – like field trips, class parties. They also do it at rave parties, their friends' homes.*

Key informant

The technical reports of both the Nova Scotia and New Brunswick 2002 student drug use surveys reported heroin use over time among youth in grades 7, 9, 10, and 12. In Nova Scotia, the percentage of students reporting use of heroin is the same for 1991 and 2002 (1.6%).<sup>79</sup> In New Brunswick, heroin use among students decreased from 2.4% in 1996 to 1.9% in 2002.<sup>80</sup> It is important to note that the student drug use surveys only included youth who were attending schools. Youth who have left school, including street youth, were not included in the data. In the 2002 Student Drug Use Survey in New Brunswick, 5% of students, overall, reported using LSD, solvents or inhalants, and tranquillizers (non-medical use). Less than 5% of students

reported using cocaine/crack, steroids, PCP, heroin, and ecstasy, and less than 1% of the grade 7, 9, 10, and 12 students in Nova Scotia, New Brunswick, and Prince Edward Island who were surveyed had injected drugs in the year preceding the study period.<sup>81</sup> According to another study, 2% of students injected drugs in Nova Scotia and Prince Edward Island.<sup>82</sup> In marked contrast to these findings is the result of a survey conducted by the Hepatitis Outreach Society in Cape Breton, Nova Scotia: in a survey of 1,000 students, 7.4% identified that they had engaged in injection drug use.<sup>83</sup> Whatever the actual prevalence of injection drug use among students, efforts to deter youth from going from oral or inhalant drug taking to injection drug use could be a major component of harm-reduction education efforts.

Although issues about street youth were not discussed by people interviewed for this environmental scan, evidence suggests that these youth have high rates of injection drug use.<sup>84</sup> Older data from a 1991 Halifax study found that 33% of street youth reported using cocaine, and 20% reported using crack.<sup>85</sup> Results from the I-Track pilot survey showed that the mean age of initiation to injection drug use was 21.4 years in the study population, and 30% reported beginning to inject at the age of 16 years or

*Younger people are using harder drugs vs. softer drugs like it used to be – and they are injecting them.*

Key informant

younger.<sup>86</sup> Results from a Montreal study of street youth aged 14 to 25 years, from 1995 to 2000, showed that 47.2% of the study participants had injected drugs, and 36% had injected drugs in the previous six months. Injection drug use was found to be the strongest indicator of HIV sero-conversion. A 2005 survey of 35 street youth conducted by the ARK Youth Outreach Program in Nova Scotia found that 54% of survey participants reported injecting at least one drug. Thirty-three of the 35 respondents indicated that they experienced health problems related to their drug use, including sleep and food deprivation, paranoia, black outs, suicidal feelings, violent feelings, and infections. Thirty-three individuals were homeless more than once in their life, and 33 respondents indicated that they had had an experience of drug use before becoming homeless. The youth surveyed named several causes of homelessness, including lack of income, family, eviction, and addictions.<sup>87</sup> High rates of injection drug use among street youth have been found in other cities across Canada as well.<sup>88</sup>

Over one-third of the people who inject drugs who were interviewed for this environmental scan indicated that younger people use different drugs compared to older people. A number of respondents stated that there are some drugs that tend to be used by youth, such as prescriptions, including Ritalin, and designer drugs. The OxyContin Task Force in Newfoundland and Labrador found that there are increasing numbers of youth participating in addiction treatment services who have addiction issues related to OxyContin.<sup>89</sup> It appears that the trend for youth to misuse prescription drugs is common throughout North America. A recent American study revealed that one in 10 teenagers reported abusing OxyContin,<sup>90</sup> indicating that the misuse of prescription narcotics is a widespread trend and that there is a distinct possibility for the prevalence of OxyContin misuse to increase.

Youth-related themes identified from the data from this environmental scan included the following observations from key informants and people who inject drugs:

- Many youth use more than one drug (i.e., are “poly-drug users”), and they mix different drug types and tend to experiment more with all drugs that are available to them, as compared to older people who inject drugs. This is consistent with a study undertaken by the ARK Youth Outreach Program in Nova Scotia, which found that the majority of youth surveyed indicated that they had tried many different drugs at least once. The majority had tried LSD (97%), cocaine (94%), crack (80%), ecstasy (86%), speed (77%), Dilaudid (66%), and PCP (71%). A harm-reduction approach to drug experimentation among youth would provide factual information about the effects of these drugs, especially in combination, and discourage youth from initiating drug use through injection.
- Younger people who inject drugs tend to do it as a social activity. Peer pressure is a significant social force among youth and is likely an essential component of most youth’s initiation into drug use in general, and injection drug use in particular. This points to the need to address universal and targeted prevention of drug use and initiation into injection drug use from a peer-based

*Young people are more likely than older people to use opiates in combination. Or they'll mix both opiates and cocaine.*  
Key informant

*Younger people often are not physically addicted, they do it to be cool, often at parties. They are proud of it and do it in groups.* Key informant

perspective (e.g., through peer education and counseling, peer negotiation skills, building self-esteem, providing positive recreational alternatives to drug use, etc.). Youth are more open about their drug use and more likely to inject drugs in public places. This has implications for outreach services which will most effectively provide harm reduction for youth if they are delivered “where they are at” in their natural settings. Mobile NEPs through outreach vans, for example, are an effective means of intervention in public venues.

- Younger people who inject drugs may not know how to use them properly; they may have others inject for them or use unsafe injecting practices; they tend to inject in the same spot on their body and are more prone to overdose. Some interviewees reported that young people are more irresponsible with dirty needles and do not always properly dispose of them. Some of the interviewees reported the unsafe disposal of needles and condoms by youth in public areas, increasing the risk of injury for the general public. Again, peer education and outreach would be a valuable method of providing harm-reduction education to individuals new to injecting drugs. More experienced injection drug users, particularly those who use NEPs, could be encouraged to conduct collective needle exchange for youth who are new to injection drug use and act as safer injection mentors.

*A young person who is inexperienced will use the same vein over and over again. They don't tie off and end up doing a lot of damage to themselves. Experience lets you know when something is going wrong; it seems to be the younger ones that overdose.*  
Person who injects drugs

*Their injection practices depend on who they learned to use drugs from. If younger people learn about injecting from an older person they probably learn more about how to stay safer – about HIV, hep C and other stuff.*  
Person who injects drugs

- Youth are less likely to access addiction treatment services. Given the shortage of youth-focused addiction treatment services in the Atlantic provinces, this is an area for provincial governments and health districts/authorities upon which to improve. Teachers and parents could also have better access to training resources to help them identify when youth need addiction treatment and how to access that treatment.
- Some interviewees reported that youth are engaging in group sex and do not see oral sex as risky behaviour. Also, some youth are sharing tattooing equipment.

## WOMEN

Women represent an increasing proportion of those with positive HIV test reports in Canada and in 2003 accounted for one-quarter of positive HIV test reports. Heterosexual contact and injection drug use are the two major risk factors for HIV infection in women. Among positive HIV test reports for women between 1985 and 2003, the proportion attributed to injections drug users varied between 27% and 47.5%, peaking in 1999, with a slight decrease since.<sup>91</sup> Injection drug use accounted for almost 30% of HIV-positive test reports among adult women in the first six months of 2004. Findings from

*Women are at higher risk for violence and sexual assault when seeking and/or using drugs.*  
Key informant

the Vancouver Injection Drug User Study (VIDUS) showed that during the period May 1996 to December 2000, HIV incidence rates among women who inject drugs in that city were about 40% higher than those of the men who inject drugs.<sup>92</sup>

Key informants to this environmental scan from needle exchanges and addiction treatment services in Atlantic Canada indicated that the majority of their service users are male. As in the 2000 environmental scan, most respondents identified that there are more men who inject drugs than women. This experience is supported by reports from other jurisdictions across Canada. About one-quarter of the people who inject drugs in Canada are women. Generally, women who inject drugs tend to be younger than males, are more likely to be involved in the sex trade, and are more likely to experience a power imbalance in their relationships.<sup>93</sup> This power imbalance impacts their access to drugs and to safer injection and sexual practices and puts them at greater risk of infectious diseases such as HIV, HBV, and HCV.

*Women with children have a lot of fear around losing custody of their children if it's found out that they are injecting drugs.*

Person who injects drugs

One of the key differences between male and female injection drug users is that women are more likely to attempt to conceal their injection drug use by injecting in discreet sites on their bodies – such as on their breasts, underarms, behind the knees or thighs, or between the toes. Several interviewees also reported that women's veins tend to collapse or scar more easily and thus women have to rotate injection sites more often.

People who inject drugs who were interviewed for this environmental scan described failure to use condoms as the most common unsafe sexual behaviour in their communities. Issues surrounding condom use for women were raised by several individuals who inject drugs. One issue of concern is that some clients of sex trade workers insist on sex without condoms. Another issue for women is that some dealers sell drugs for sex. Both of these situations make women vulnerable to infectious diseases as well as violence or abuse. These issues are also documented in research that has taken place outside of Atlantic Canada.<sup>94</sup>

*Boyfriends do it first then girlfriends get curious, they're tired of being left behind for drugs. If you can't beat 'em, join 'em. A lot of women get their boyfriend to prepare the drugs and inject them. The men sometimes cut the drugs or substitute drugs and don't tell the women. Sometimes guys get women hooked on drugs so they can score for them.*

Person who injects drugs

Power issues are one aspect of the gender dynamics that play out in injection behaviours. Issues of power and control identified in the 2000 environmental scan also persist in 2005. Many interviewees commented on the power imbalance in male-female relationships. Males will often control the supply of drugs or demand that the female partner sell sex for enough money to buy drugs for both partners. Many of the interviewees indicated that women are often injected by their partners and, in some cases, against their will. Women often have less power in their relationships with men and are therefore unable to safely negotiate the use of safer injection or sexual practices. In some cases, women rely on a male partner for access to their drugs.<sup>95</sup> Male sex partners also appear to be the people who most often initiate women into injection drug use.<sup>96</sup> Women are more likely than men to report being injected by a helper,<sup>97</sup> although it is

not known how many are being injected unwillingly. There is also evidence that women are biologically more vulnerable, especially to HIV/HCV transmission through heterosexual intercourse.<sup>98</sup> Involvement in sex work increases the risk for infection, and the risk increases proportionally with increasing numbers of clients.<sup>99</sup> Women who inject drugs often have a history of physical and/or sexual abuse, which contributes to their inability to negotiate safer practices and therefore increases their risk.<sup>100,101</sup>

*Definitely the women are different because the dealer may say: "give me a blow job and I'll give you free drugs and if you do my buddies, I'll give you more."*

Person who injects drugs

Almost all of the key informants in Atlantic Canada identified a gender difference in how drugs are acquired. Interviewees suggested that many women become involved in sex work either for money to buy drugs or for direct access to drugs. This differs for men, many of whom engage in robberies to fund their drugs. This observation is supported by research from both within and outside of Atlantic Canada. Many women who inject drugs are involved in the commercial sex trade and have been profoundly impacted physically, emotionally, sexually, and spiritually by this involvement.<sup>102</sup> Thirty-nine per cent (39%) of female participants in the national I-Track pilot study of injection drug use reported involvement in sex work.<sup>103</sup>

There is also gender inequity with respect to access to addictions treatment. Only Prince Edward Island's provincial addiction services mentions women-specific addictions treatment programs. In the Fredericton/Woodstock area of New Brunswick during 2003-2004, of the 696 residents admitted into the provincial out-patient addictions treatment program, only 35% were female. Women in treatment programs are more likely than men to be financially dependent and less likely to seek treatment. Some research has suggested that treatment such as methadone is less successful for women, perhaps due to the lack of focus on the social status and economic realities faced by women.<sup>104</sup> Women who have children or who are pregnant often fear admitting that they use drugs because of the risk of losing their children. A family-oriented approach to services – primary health care, addiction treatment, social services – is essential for meeting the needs of women.

Further work needs to be done by appropriate stakeholders, including governments, health care institutions, health care providers, and HIV-positive women, to develop responsive models for health care and support delivery that acknowledge and affirm the multiple roles that women play and the importance of including these in care and support plans. With respect to reducing the harms of injection drug use among women, targeted interventions are needed to build women's feelings of empowerment and ability to negotiate safer sex and drug use. Addiction treatment service providers could ensure that treatment options are more focused on the needs of women, and that women are treated as women (not just as mothers), while also acknowledging and accommodating their roles as caregivers through family-centred models of treatment. As with barriers to treatment, social and economic factors prevent HIV-positive women from keeping to a drug regimen. However, women are faced with an additional burden: as traditional family caregivers, they give much of their time and energy to taking care of others. Skipping medications, or taking drugs later than recommended, can reduce the overall level of health among women living with HIV and/or HCV.

## PEOPLE WHO LIVE IN URBAN VERSUS RURAL AREAS

Although the use of injection drugs is often associated with urban and inner city problems, there is considerable evidence of their use in rural communities as well. Injection drug use is particularly well-documented in rural Nova Scotia.<sup>105</sup> The 2005 Mainline Needle Exchange final report found that there are substantial pockets of people who inject drugs in the small towns and rural communities of southwestern Nova Scotia, and that rural injection drug users have limited access to harm-reduction services and limited awareness of the risks of sharing drug paraphernalia other than needles.

Much like the environmental scan conducted in 2000, there were no consistent trends identified in the 2005 environmental scan data about differences in the urban and rural use of injection drugs. There were people interviewed in all four provinces who believe that there are differences in urban and rural drug use patterns and an almost equal number who believe there are no differences. Individuals who believe that there are differences in rural and urban patterns of injection drug use noted the following:

- There are few or no services for people who inject drugs in rural areas. In addition to a lack of needle exchanges, methadone programs and other supports for addictions treatment are lacking.
- Due to the lack of NEPs, sterile needles are not readily available in rural areas, often resulting in the re-use or sharing of needles and equipment. Fear of being identified keeps most people who inject drugs in rural areas from accessing clean needles through their local pharmacy.
- Drugs are not as readily available in smaller communities, or the choice of drug is limited.
- There is greater acceptance of injection drug use in urban areas, so that people who live in urban areas tend to be more open about using injection drugs. In rural areas, people who use injection drugs tend to be more isolated and more discreet about their injection activities.
- Specific rural areas have different cultures that determine the prevalence of injection drug use and the types of drugs injected. For example, a community near the American border may have a high prevalence of prescription opiates due to cross-border trade, while another community close to the ocean ports may have greater cocaine use due to the ease of importing and exporting by sea.
- Certain communities and neighbourhoods within urban areas have a greater prevalence of injection drug use, and different neighbourhoods have different cultures around injection drug use.

*There are more chances that someone may find out about drug use in small communities. You couldn't go to a pharmacy in a small community because there is always a chance that they will know you. There is no needle exchange so you have to buy needles, people notice and start talking, but in a bigger city you can blend in. And it's harder to get drugs in small communities.*

Person who injects drugs

There is not much available research on the differences between urban and rural injection drug use patterns. Much like the perspectives of key informants, existing research presents different conclusions about the impact of urban versus rural living on injection

drug use. The 2005 Canadian Addiction Survey concluded that “differences in illicit drug use between rural and non-rural residents are generally small.”<sup>106</sup> Conversely, studies in Atlantic Canada have found that people who inject drugs in rural areas are more likely to engage in risk-taking behaviours, primarily due to lack of services and reluctance to seek services because of lack of confidentiality. Three-quarters of the rural-dwelling injection drug users who were interviewed for a provincial needs assessment in Nova Scotia said they shared needles and equipment, a finding that the study authors attributed to the lack of access to clean needles in rural areas.<sup>107</sup> The same needs assessment found that distance from treatment programs is a significant barrier for rural people who inject drugs.

The 2005 final report for the Mainline Needle Exchange in Nova Scotia found that its core group of 74 individuals who inject drugs, who acted as “natural helpers” in Health Districts 1, 2, and 3, served up to 180 people who inject drugs in areas outside Halifax. (Natural helpers provide clean equipment to other injection drug users they know in their communities and link them to NEP services). People injecting drugs who do not have access to clean needles through the NEP either purchase needles or steal them from pharmacies, hospitals, or known diabetics.<sup>108</sup>

The rural-urban mix in the Atlantic region is dramatically different from that in the rest of Canada, a reality that also affects health outcomes. Based on the 2001 census,<sup>109</sup> just 20% of the Canadian population lives in rural areas, compared to 55% in Prince Edward Island, 50% in New Brunswick, 44% in Nova Scotia, and 42% in Newfoundland and Labrador.<sup>110</sup>

Rural populations have lower incomes than those in urban regions, with Nova Scotia registering the greatest rural-urban income disparity in Canada, and the other three Atlantic provinces recording the smallest disparities. Communities dependent on fishing, farming, mining, and other natural resources have suffered declines in economic viability in the last decade, and with economic hardship often come increasing rates of mental health concerns and addictions. A 2001 qualitative study of six Nova Scotia fishing communities<sup>111</sup> found that the collapse of the ground fishery in the early 1990s has affected women’s health and well-being adversely. The major health problem that the women reported was stress, and they also reported anxiety and depression. More gambling addiction, alcohol and other substance abuse, and domestic violence were appearing in the communities, especially among men.

Overall vulnerability to injection drug use and HIV and HCV infection appears to be greater in rural areas, a situation further compounded by less access to harm-reduction services. Further research is needed about rural populations and their vulnerability to HIV and HCV, as well as about the prevalence and nature of injection drug use in rural areas. The interviews for this environmental scan were conducted with key informants and people who inject drugs who are largely based in urban centres. Deeper information about issues in rural Atlantic communities would require interviewing more individuals who work and live in rural areas.

## ETHNO-CULTURAL MINORITIES

In Canada as a whole, 4.4% of the population is Aboriginal. Four health regions in Atlantic Canada exceed or are close to that proportion.<sup>112</sup> The Labrador health region has the largest proportion of Aboriginal people in Atlantic Canada at 28.7%; the Grenfell health region, which includes northern Newfoundland, has 9.6%; and Miramichi, New Brunswick, and Cape Breton, Nova Scotia, both have 4%. Nationally, almost half of the Aboriginal population lives in cities, but most Aboriginal people in Atlantic Canada live in rural communities.<sup>113</sup>

Aboriginal Canadians are over-represented among reported AIDS cases in Canada,<sup>114</sup> accounting for 14.4% of AIDS cases with known ethnicity. Nearly half (45%) of all positive HIV test reports among Aboriginal Canadians are attributable to females, yet females account for only 16.7% of positive HIV test reports among white Canadians. Injection drug use is the leading HIV exposure category for Aboriginal Canadians, accounting for 59.4% of positive HIV test reports among Aboriginal people, a significantly higher proportion than the 30% attributed to people who inject drugs among new infections overall.

The literature is fairly clear that Aboriginal Canadians have a higher risk of injection drug use than other Canadians.<sup>115,116,117</sup> Aboriginal people experience many social disadvantages that place them at increased risk of injection drug use and of the infectious diseases related to injection drug use. As noted by Health Canada in the document *Reducing the Harm Associated with Injection Drug Use in Canada*, “Aboriginal Canadians have many social disadvantages that are frequently associated with drug misuse – poverty, low education, unstable family structure, physical abuse, and poor social support networks. These social disadvantages have been precipitated or exacerbated by discrimination, the after-effects of residential schools, and barriers to health care such as language barriers and the lack of culturally sensitive or appropriate services.”<sup>118</sup> Aboriginal people are over-represented in groups most vulnerable to HIV/HCV, such as injection drug users, sex trade workers, and prisoners. The Romanow Commission reported growing rates of HIV infection and high rates of disability, cardiac problems, and exposure to alcohol abuse and drug addiction among Aboriginal people.<sup>119</sup> Aboriginal people have consistently lower life expectancy; high rates of obesity; and high rates of alcohol, smoking, and substance abuse among young people. One-third of the Aboriginal population is under the age of 15, and a high percentage of these children live in lone-parent families. Suicide rates among Aboriginal men aged 16 to 30 are approximately 10 times higher than among non-Aboriginal men.

A Nova Scotia study involving interviews with 14 Aboriginal people who use injection drugs found that the majority of participants began using alcohol and drugs between the ages of 12 and 14 years. The study also found that Aboriginal people living on reserve experience barriers to accessing harm-reduction services, due to the distance to existing services, the lack of culturally appropriate programs, and the lack of alternatives such as home-based services.<sup>120</sup>

Similar to the data presented in the 2000 report, most of the key informants who participated in the 2005 environmental scan were not aware of any differences in the

injection drug use of people of varying ethnic or cultural backgrounds. Only seven interviewees were able to provide information related to ethnic and cultural differences. They all commented on issues related to the Aboriginal population, noting in particular that First Nations people on reserves are more likely to keep their injection drug use hidden. It was also noted that there are very few culturally appropriate resources for First Nations people and that methadone is not available on reserves.

African Canadians in Nova Scotia, as in Canada as a whole, comprise 2% of the population. Newfoundland and Labrador, Prince Edward Island, and New Brunswick have a much smaller African-Canadian population (0.1%, 0.2%, and 0.4% respectively).<sup>121</sup> It is known that African Canadians are over-represented among reported AIDS cases in Canada: 20.7% of AIDS cases with known ethnicity.<sup>122</sup> There has also been an increase in the proportion of HIV cases reported among African Canadians, especially women. Half (49.5%) of all positive HIV test reports among African Canadians are attributable to females, yet females account for only 16.7% of positive HIV reports among white Canadians. Positive HIV test reports indicate that heterosexual exposure is the leading exposure category for African Canadians, accounting for 84.5% of positive reports for this population.

Heart disease, cancer, high blood pressure, arthritis, chronic asthma, and diabetes are prominent among African Canadians. Their poverty rates are very high. A report looking at segregation in Canadian cities that included Dartmouth and Halifax, Nova Scotia, found that 40% of African Canadians lived in areas with poverty rates above 30%. The total poor in Dartmouth and Halifax was approximately 15% and 17%, respectively, but the poverty rate for African Canadians was 40.6% in Dartmouth and 39.7% in Halifax. By contrast, the poverty rate among those of European heritage was 12.6% in Dartmouth and 15.9% in Halifax.<sup>123</sup> Negative, differential treatment on the basis of race, class, and gender has been described in a Nova Scotia study of African-Canadian women.<sup>124</sup> The three rural African-Canadian communities in this study have high degrees of segregation and lack the resources necessary to build healthy infrastructures in education, housing, employment, and recreation. The three communities have a 65% unemployment rate, higher-than-average rates of illiteracy, inadequate housing, and few social assistance resources.

Overall, there are significant gaps in information about Aboriginal and African-Canadian issues with respect to injection drug use. There are few studies, indicators, or statistics on the health of African Canadians in the Atlantic provinces, and there is no information available about injection drug use in other ethno-cultural communities in Atlantic Canada, such as immigrants, Acadians, and francophones. This is an area needing extensive study in order to understand how best to reduce the harms associated with the greater vulnerability experienced by these populations.

## **PRISON POPULATIONS**

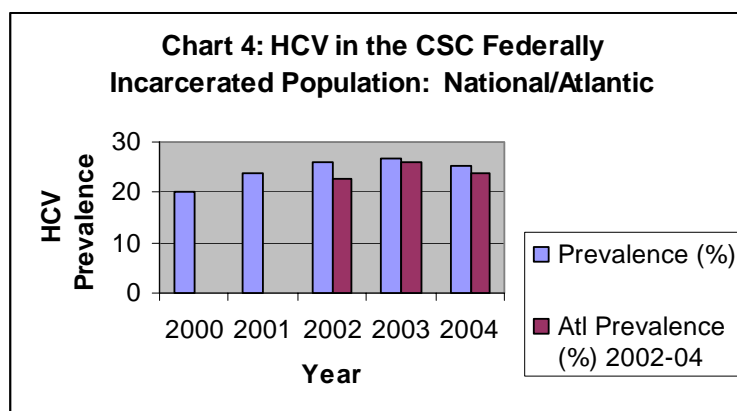
Certain populations that are highly vulnerable to HIV and HCV infection have a heightened probability of incarceration because of their involvement in behaviours such as drug use and sex work. Addictions pose a major challenge for Canada's correctional system. The statistics depict the reality:<sup>125</sup> substance abuse is identified as a contributing

factor to the criminal behaviour of 70% of the offenders admitted to federal institutions. Of those, 61% abuse alcohol, 69% abuse drugs, 47% abuse both alcohol and drugs, and 44% are poly-drug users. Over 20% of the offenders admitted to federal prisons have at least one drug-related conviction.

Injection drug use is also a problem among prisoners. Research has demonstrated that between 19% and 56% of inmates have used injection drugs while they were incarcerated, and the majority of prisoners who injected drugs reported sharing needles.<sup>126,127,128,129</sup> Estimates of HIV prevalence among prisoners vary from 1% to 4% in men and from 1% to 10% in women, and in both groups, infection is strongly associated with a history of injection drug use. Once in prison, many continue injecting. For example, in a federal prison in British Columbia, 67% of inmates responding to one survey reported injection drug use either in prison or outside, with 17% reporting drug use only in prison. In Canada's federal prison system (which houses people sentenced to prison terms of two years or more), the number of reported cases of HIV/AIDS rose from 14 in January 1989 to 159 in March 1996 to 251 in 2002. This means that 2.01% of all federal prisoners are known to be HIV-positive.<sup>130</sup> While less than 3% of the national population is Aboriginal, Aboriginal people represent 15% of the federal prisoner population.

Among female inmates in a Quebec prison in 1994, 38% reported injecting drugs before they were incarcerated, and about half of these women had shared needles. Of those who reported drug injecting before going to prison, 11% admitted to injecting drugs during their incarceration, and most (80%) shared needles. Among male inmates in this same study, 26% reported that they had injected drugs before being incarcerated, and about half of these had shared needles. Of those who admitted to injecting drugs outside prison, 2% reported injecting drug use during their incarceration, and most (92%) shared needles.<sup>131</sup>

Interviewees for this environmental scan corroborated the evidence that incarcerated populations have a higher prevalence of HIV, HBV, and HCV and are at increased risk for transmission due to the high prevalence of risk behaviours that occur within correctional institutions.<sup>132,133,134</sup> There has been little change since 2000 in the prevalence of risk behaviours related to injecting among prison populations. Surveillance data from the Correctional Service of Canada indicates that at the end of 2004, 1.43% of federally sentenced inmates (N=188) were known to be HIV-positive.<sup>135</sup> The HIV infection rate among women offenders (3.44% at end of 2004) was higher than among men offenders (1.37%). The number of known HCV-positive inmates at the end of 2004 represented 25.2% (N=3,303) of the incarcerated population, a significant increase from 20.1% in 2000.<sup>136</sup> As demonstrated in Table 10, the prevalence of HCV in the federally incarcerated population has increased since 2000. The reported rates of HCV infection were higher among women (37.6% at end of 2004) than among men (24.8%).<sup>137</sup> In the Atlantic region, the prevalence of HCV in the federally incarcerated population was 23.7% in 2004. Chart 4 and Table 10 present the frequency, Canadian prevalence, and Atlantic region prevalence of HCV in the federally incarcerated population over time.



Source: Infectious Diseases Surveillance System, preliminary data, 2006, Correctional Service of Canada.

	2000	2001	2002	2003	2004
Frequency	2,524	2,993	3,173	3,260	3,303
Canadian Prevalence (%)	20.1	23.6	25.8	26.8	25.2
Atlantic Prevalence (%)			22.8	25.9	23.7

Source: Infectious Diseases Surveillance System, preliminary data, 2006, Correctional Service of Canada.

## PEOPLE WHO INJECT ANABOLIC STEROIDS

Understanding of the injection of anabolic steroids is minimal in the Atlantic region and in Canada as a whole. The AIDS Coalition of Cape Breton conducted a research project<sup>138</sup> with the aim of eventually developing and implementing new strategies within its Sharp Advice Needle Exchange (SANE) to better meet the needs of injection steroid users in Cape Breton. A total of 423 people participated in the survey: 239 males and 184 females. Participants included 301 students, the majority between 15 and 18 years of age in grades 10, 11, and 12 from three public high schools; nine members of a Youth Centre; and 113 members of five fitness facilities in industrial Cape Breton. Of the 423 respondents, 34 or 8% admitted to taking anabolic steroids: 19 of them students and the others gym members. Of the 34 who had taken anabolic steroids, 28 are male, six are female, and 61.7% were between 15 and 18 years of age. Among those who disclosed that they had taken anabolic steroids, 17.6% have injected anabolic steroids, 41.2% have taken oral steroids, and 41.2% have taken both oral and injectable steroids. Of those who injected steroids, 40% have engaged in risk behaviour. The majority (62.5%) of those who engaged in risk behaviour did so knowing that HCV can be contracted through high-risk activity. However, 62.6% of all respondents were not aware of the needle exchange, although 64.3% would use the services offered by the SANE if required. Of those who would not use the services offered by the SANE, 40% cited social standing as preventing them from accessing the services.

While they comprise a small proportion of injection drug users, it is important to include users of anabolic steroids in harm-reduction messages and programs, and targeted outreach to high schools, sports teams, and gyms could be included in harm-reduction programming.

# **PROGRAM AND POLICY ENVIRONMENT IN ATLANTIC CANADA**

## **INTRODUCTION**

This section provides an overview of programs and services available between 2000 and 2005 for people who inject drugs throughout the Atlantic provinces. To be most effective, efforts to reduce the harms associated with injection drug use, such as HIV or HCV infection, need to be directed from social, economic, and human rights perspectives. Thus, harm-reduction programs and policies need to reflect the root causes of drug addiction and HIV and HCV infection, due to the individual's social, economic, ethno-cultural, behavioural, or age- or gender-related vulnerabilities. Addressing injection drug use from a population health approach encompasses a wide range of programs and services and is contingent upon the policy environment within which they operate. It was recommended in the federal/provincial/territorial document *Reducing the Harms Associated with Injection Drug Use*<sup>139</sup> that comprehensive action in several key areas is needed in order to reduce the impacts of injection drug use. Consistent with the approach presented in that document, programs and services discussed in this section are organized along the continuum from prevention to treatment.

Information for this section was gathered from interview data as well as from the Inventory of Services, Programs, Policy Initiatives and Research Activities in Atlantic Canada which was created as part of this environmental scan. The purpose of the inventory is to provide an overview of the many organizations involved in addressing injection drug use issues throughout the region. Organizations and contact people for the scan were identified from numerous sources, including the *Profile of Injection Drug Use in Atlantic Canada* published in 2000, internet searches on keywords related to injection drug use, and input from members of the Advisory Committee overseeing the development of this environmental scan. Although the data for this section come from several sources, it should be noted that it is not necessarily a comprehensive picture of all programming in the Atlantic region. In each section, some organizations are identified to illustrate aspects of programming that exist in various parts of Atlantic Canada.

This section is organized by stakeholder group (or programming type), each beginning with an overview of best practices or recommended contributions. Then, an overview of the services, initiatives, and programs under each of those stakeholder groups is provided; in some cases, there is enough information to provide a provincial overview, while in other cases there is a discussion at a regional level. Finally, there is a conclusion for each stakeholder group or programming type, identifying the key achievements and gaps.

## **SUBSTANCE ABUSE PREVENTION PROGRAMS**

### **Best Practices**

In North America, target groups for preventive initiatives are increasingly being classified according to risk level (i.e., universal, selective, and indicated targets), a framework that is seen as more discriminating than the terms “primary” and “secondary”

prevention.<sup>140</sup> Program focus, intensity, and duration need to vary according to these target groups.

Universal prevention refers to preventive activities which target a broad or “universal” population (e.g., all students in certain grades) with the aim of promoting the health of the population or preventing or delaying the onset of substance use. Children and youth, as well as parents and families, are often the focus of universal preventive efforts intended to address risk factors and practices relating to short- or long-term health and social problems (such as traffic accidents and other trauma, unwanted pregnancies, suicide, etc.). Measures often associated with universal prevention include awareness campaigns, school drug education programs, multi-component community initiatives, and, in the case of alcohol and tobacco, various measures to control their availability and price. Schools are a strong setting for universal programming for youth and can provide appropriate programming in all grades. Given that a significant number of children have initiated substance use by age 12, primary preventive efforts need to give particular attention to 9- and 10-year-olds, before use begins.<sup>141</sup> For universal youth programs, a minimum level of intensity is usually one 45- to 60-minute contact a week for at least 10 weeks. Programs that provide “booster” sessions in subsequent years to reinforce earlier lessons have been shown to be particularly effective.

Some youth and their families experience particular challenges due to academic problems, family dysfunction, poverty, and family history of substance use problems (that may include genetic predisposition). It makes sense to “select” such persons or families for more intensive programming on the basis of these risk factors. Selective prevention aims to generally reduce the influence of these risks and to prevent or reduce substance use problems by building on strengths such as coping strategies (a personal resiliency attribute) and other life skills. Children in difficult environments clearly benefit from selective prevention interventions in the pre-school and early school years. Early childhood education programs, that involve and support parents in nurturing their children and that include home visits, have shown evidence of effectiveness in preventing substance use and other later problems. Because adolescent males are currently more likely than females to use substances in risky ways, prevention needs to be directed more intensely to males. Family-based approaches are designed to improve family functioning and reduce various anti-social behaviours, including the risk of problematic youth substance use.

Some young people who are using substances regularly may be at high risk of developing drug dependence and usually experience an array of other health and social problems. These young people can benefit from indicated prevention programming that is typically even more intensive. Indicated prevention often involves an outreach component to identify, engage, and work with these youth to minimize the harm associated with their lifestyle. A range of other services (including intervention, case management, and referral to address various issues) is often necessary for these students and can be available from schools or community agencies. The focus of activity needs to be in minimizing harm in the context of the day-to-day challenges facing these young people.

Prevention strategies (including public awareness, education, skill development, social marketing, community action, and policy development) work together over time to shift attitudes, knowledge, behaviours, and social conditions in ways that reduce the chances

that someone, particularly youth, will begin misusing drugs in the first place, or begin using them in a more harmful ways, such as by injection. Because many people who inject drugs began injecting in their teenage years, it is important that primary prevention begin at a young age.<sup>142</sup> Because psycho-social development is often delayed among high-risk youth, programming for these young people up to approximately age 24 is considered. Prevention necessarily involves a time period prior to the period of interest; consequently, later childhood (ages 7-12) issues are also considered to contribute to primary prevention. Youth are not a homogeneous population, and interventions need to take into account sub-populations of youth based on gender, urban-rural differences, level of risk, cultural background, and stage of psycho-social development.<sup>143</sup> Research shows the need for prevention efforts to be targeted to people who are just beginning or contemplating injecting drugs,<sup>144</sup> and demonstrates the effectiveness of peer-based approaches.<sup>145</sup>

Since 2000, several community-based organizations have applied for and received funding from federal government programs to develop and implement peer-based prevention approaches. In some cases, programs are specifically targeted to populations identified in the literature as being at higher risk for infection (e.g., incarcerated youth).

Best practice in primary prevention is to prevent problems associated with substance use by prevention activities designed to encourage youth not to use and activities designed to encourage users to avoid high-risk practices that could lead to serious problems or harm. The following principles, according to Health Canada's *Preventing Substance Use Problems Among Young People: A Compendium of Best Practices*, are recommendations for effective programming to prevent and reduce substance-use harm among youth, based on evidence from the scientific literature:<sup>146</sup>

#### ***Build a Strong Framework***

- *Address protective factors, risk factors, and resiliency:* Focus on the factors that most directly promote resiliency or, conversely, contribute to substance use problems in the population of interest.
- *Seek comprehensiveness:* Tie activities to complementary efforts by others in the community for a holistic approach and seek support through policy and government regulation.
- *Ensure sufficient program duration and intensity:* Make certain there is sufficient contact time with participants; age-appropriate coverage needs to occur through childhood and adolescence and needs to be intensified as the risk of participants increases.

#### ***Strive for Accountability***

- *Base program on accurate information:* Base program aims on reliable and, ideally, local information on the nature and extent of youth substance use, problems associated with use, and user characteristics.
- *Set clear and realistic goals:* Establish goals, objectives, and activities that address local circumstances, are linked logically, and are measurable and time-limited.
- *Monitor and evaluate the program:* Evaluate the process and impact of efforts and ensure that costs are in line with program benefits.

- *Address program sustainability from the beginning:* From the outset, work toward long-term sustainability and integration of the program into the core activities of the relevant organization in the community.

### ***Understand and Involve Young People***

- *Account for the implications of adolescent psychosocial development:* See substance-use issues within the context of the stages of adolescent development in order to respond most effectively.
- *Recognize youth perceptions of substance use:* In order to be credible with participants, programs need to take account of the way young people view the benefits and the risks associated with substance use.
- *Involve youth in program design and implementation:* Young people need to see themselves, and to be seen by others, as their own best resource for minimizing any harm associated with substance use.

### ***Create an Effective Process***

- *Develop credible messages:* Both the explicit and implied messages delivered in a program need to be viewed as realistic and credible by participants.
- *Combine knowledge and skill development:* Skill development needs to be a central element in programs, and it needs to be accompanied by accurate, objective information.
- *Use an interactive group process:* Engage and involve participants in skill development activities and discussions.
- *Give attention to teacher or leader qualities and training:* Select and train leaders or teachers who demonstrate competence, empathy, and an ability to promote the involvement and interaction of young people.

Poulin and Nicolson<sup>147</sup> found that stakeholders were in agreement with harm reduction as an approach for senior high students, but not for junior high/middle school students. Abstinence-based drug education is recommended for junior high and middle schools, partially due to lower drug use prevalence and partially due to the wide variation among students with respect to maturity and the related impact on understanding that harm minimization is not permission to use substances.

## **The Program Environment**

There are numerous organizations throughout the Atlantic region involved in substance-abuse prevention, including community-based organizations, correctional services, and publicly funded addictions services. In addition, each of the four Atlantic provincial Divisions of the RCMP have Drug Awareness Coordinators who, as part of their mandate of community policing, and given the direct link of substance abuse and crime, are involved in problem-solving partnerships and in delivering prevention programs in their respective communities. The RCMP demand-reduction efforts are addressed through the Drug Awareness Service (DAS).

### ***New Brunswick***

The New Brunswick Department of Health and Wellness (Public Health) supports Regional Addiction Services in all health regions of the province. Program delivery varies among regions, but each region offers the following programs: Detoxification

Program, Out-patient Programs, and Wellness. Substance-abuse prevention services falls within the Wellness program area, which provides health promotion, prevention, and intervention services to reduce addiction risk among New Brunswickers. Services include information and education resources on addiction issues for the education system, workforce, professionals, and public at large; direct one-to-one services and community-based programs; information on intervention and treatment services; encouragement for community initiatives such as support groups to complement treatment programs; services to children and families dealing with chemical dependency; and training opportunities for professionals who work with these families. Wellness workers consult with community-based groups to identify resources and programs for addressing addiction-related issues identified by the community.

PASAGE Saint John Inc. (Preventing Addiction, Substance Abuse and Gambling Education), supported by the United Way of Greater Saint John and Health Canada (as well as other donors), provides support and referral for parents who are troubled with their adolescent's behaviour, with an emphasis on those experiencing problems connected to substance abuse and addiction. Services include workshops and support meetings for parents, public education speakers, and youth programs such as "Too Cool for Drugs."

### ***Newfoundland and Labrador***

Substance use and gambling education, prevention, and treatment services are provided by the Mental Health and Addictions programs of the four Regional Integrated Health Authorities in the province. Intervention and treatment services are available for those affected by their own or another's use of substances and/or gambling. Services provided include a detoxification and an opioid treatment program in St. John's, education/prevention and counseling services through 22 offices across the province, as well as a 21-day adult in-patient treatment program in Corner Brook. Additionally, funding has been provided and planning is under way for the development of an Adolescent Day program in St. John's. Provincial policy development and program standards are the responsibility of the Department of Health and Community Services. The Department recently launched a provincial awareness campaign that includes print and web-based materials ([www.getuponit.ca](http://www.getuponit.ca)). This campaign, which targets young people and their parents, provides information about alcohol, drugs, and gambling and includes information about available services.

There are Native Friendship Centres in St. John's and Goose Bay. The Friendship Centres offer a Prevention Education program which includes alcohol and drug education programs integrated into the curriculum in most Federal and Band schools; education workshops aimed mostly at the youth, conducted by the Community Addiction Counselor, to reach potential abusers before the fact; and a public information program which delivers community workshops and distributes information packages.

### ***Nova Scotia***

The Nova Scotia Health Department is responsible for defining core services, development and review of standards and best practices for service delivery, development of provincial policy, monitoring and audit of programs, consultation with service providers in the District Health Authorities, and facilitation of provincial program development.<sup>148</sup> Addiction programs and services are delivered to Nova Scotians through

the District Health Authorities. Services span the continuum from prevention, community education, early identification and referral, to treatment and rehabilitation. Community-based Prevention and Health Promotion programs work to prevent the use of drugs, to delay the onset of use by younger children, and to prevent harms related to drug use and gambling by adolescents and adults.

The Red Door Adolescent Health and Support Centre in Kentville is a non-judgmental, community-based, non-profit organization, providing confidential health clinic services, health education, and health promotion to youth and adults aged 13 to 30 years. It provides educational counseling and clinical services to youth to enable them to make informed, responsible choices with respect to substance use as well as sexual health. Accessible clinical services for youth include confidential HIV/AIDS testing and counseling and workshops designed to meet the needs of youth on topics such as HIV/AIDS, depression and self-esteem. ARK Outreach in Halifax provides a youth drop-in for homeless and street-involved youth, ages 16 to 24, with services including support, advocacy, programs, and food.

The AIDS Coalition of Cape Breton had an Injection Steroid Project, with the overall goal to reduce risk behaviour among injection steroid users in Cape Breton. Three objectives were outlined for this project: to increase understanding of risk behaviour within the injection-steroid-using population in Cape Breton; to increase knowledge of HCV and transmission of this disease in the communities most likely to be at risk of contracting the disease through injection steroid use; and to increase access to the Sharp Advice Needle Exchange for injection steroid users. The AIDS Coalition of Cape Breton has completed the research component of the project and is now working to develop and implement new strategies within the Sharp Advice Needle Exchange to better meet the needs of injection steroid users in Cape Breton.

There are also several crime prevention initiatives in Cape Breton, led by the Cape Breton Regional Police, which works with the school board on drug-related issues, and is a member of Community Partnership for the Cape Breton Regional Municipality.

### ***Prince Edward Island***

Prince Edward Island's Provincial Addiction Services has two substance-abuse prevention initiatives. One is the Early Intervention program, called the "10-hour Pathways," which is offered to adults who are dealing with a consequence of their use or misuse of chemicals (e.g., an impaired driving conviction, an act of violence, or a parole violation). Clients may or may not be addicted, but require further intervention or education to prevent them from repeating the consequence of their use or abuse. The other is the Student Assistance Program offered in the schools in 80-minute sessions. Students sign up voluntarily without pressure from parents or friends. A maximum of 14 students participate in two streams: a Friendship Group for youth who are living with alcohol or are affected by it, and a Harmfully Involved Group for teens who are assessed as being involved with alcohol or drugs.

## **Conclusions**

Very few of the substance-abuse prevention programs in Atlantic Canada apply all of the best practice elements defined by Health Canada. Many focus on the crime-prevention elements of drug or alcohol use, and some are strongly abstinence-based rather than taking a harm-reduction approach. For example, the substance-abuse prevention programs that do exist in Atlantic Canada focus on preventing substance use in the first place, as opposed to preventing those who are using substances from starting to inject. According to key informants, it is extremely difficult to keep people who are addicted from injecting. Injection behaviour is largely driven by the long-term effect of drugs, the high cost of illicit drugs, and the mystique associated with injection. They observed that the longer people consume a drug, the more tolerant they become to that drug, and they often seek methods of consumption that produce a more pronounced effect. Key informants were not aware of any prevention program targeting current drug users in order to prevent them from injecting – although some efforts are under way to understand the factors that lead people to inject. Given the national data that most people who inject drugs have their first experience injecting in their teens, these messages need to be targeted to youth, particularly to senior high school students. Prevention strategies that try to shift users from injecting to other forms of drug use, such as smoking, also have serious potential health and social consequences. For example, people who smoke crack do so more frequently than those who inject, so they require more money for drugs and are more likely to live in poverty and/or to participate in crime or the sex trade to support their addiction.

## **COMMUNITY OUTREACH AND NEEDLE EXCHANGE PROGRAMS**

### **Best Practices**

An integral part of reducing the harm associated with injection drug use is community outreach, and best practices in community outreach have a strong peer-based component. Peers are often seen as the most credible and trustworthy people to provide individuals who inject drugs with information to reduce the risk associated with drug use and link them with health, social, and addiction services. Peers are also in the best position to provide referrals to drug-user groups and networks.

Outreach involves a range of activities to reduce the harm associated with injection drug use.<sup>149</sup> These activities are designed to make contact with people who use injection drugs and reduce the harms associated with drug use, injecting, and sharing or re-using needles. Harms from injection drug use include HIV, HCV, and HBV infection, as well as overdose. Examples of outreach initiatives include needle and syringe exchange programs, education and support programs to reduce the harms associated with re-using needles and equipment, or social supports such as providing access to safe housing.

NEPs are a crucial component of a harm-reduction approach to injection drug use. People who inject drugs often share needles and syringes, a frequent mode of transmitting HIV and HCV. The rationale underlying NEPs is that if people who inject drugs are provided with sterile syringes and needles, this will reduce the sharing of drug equipment and thus decrease the transmission of blood-borne diseases such as HIV and HCV. Studies have

concluded that NEPs are effective in reducing the spread of HIV/HCV, do not increase the number of people who inject drugs or lower the age of first injection, and do not increase the number of needles discarded in a community or change the locations where needles are disposed.<sup>150</sup> Needle exchange is well-documented in the literature as an effective strategy for assisting people who inject drugs to reduce their risk for infectious diseases. International research has also demonstrated a decrease in the rate of HIV/HCV infection in cities with NEPs. In addition, the availability of NEPs increases the likelihood that people who inject drugs will seek treatment.<sup>151,152</sup>

Harm-reduction initiatives such as NEPs go well beyond the provision of sterile needles and syringes, alcohol swabs, cotton filters, and appropriate “sharps” containers for the safe disposal of used equipment. They also facilitate efforts to link people who inject drugs with health and social services that they may not otherwise access, including referrals to treatment and counseling services; facilitation of entry into drug treatment, mental health, and infectious disease treatment programs; counseling and education consultations; distribution of educative material include information sheets, pamphlets, and other resources; and referrals to other health, social, and legal services. Many NEPs offer outreach as well as fixed locations. NEPs help to build partnerships among all the service providers that work with the drug-using population and are well-positioned to make contact with and advise people using drugs, including acting as a gateway to treatment, counseling, and other community services when requested or appropriate.

*People are more comfortable using needle exchanges. At first, they were concerned about using needle exchanges in case police were involved or found out. The fact that needle exchange exists shows that there is more understanding about injection drug use.*

Key informant

### **The Program Environment**

There are currently six organizations in Atlantic Canada offering NEPs: two in New Brunswick, two in Nova Scotia, and one in each of Newfoundland and Labrador and Prince Edward Island. Four of the programs have an outreach component to their services. There are a few other organizations that distribute clean needles to their clients upon request, but do not advertise themselves as needle exchange services because they have no funding to support the service.

Needle exchange services in Atlantic Canada have experienced significant growth in the number of needles that they distribute on an annual basis, as well as increases in the number of people who inject drugs that seek their services. It is impossible to tell if the increase in demand for the service indicates that there are more people injecting drugs than in the past, or if word of mouth about the existence of the needle exchange services has resulted in more people knowing about, trusting and using the service. Whatever the reason for the mounting demand for clean needles, community organizations report that they lack adequate resources to meet the increasing demand for services.

### ***New Brunswick***

There are currently two NEPs in New Brunswick – one is operated by AIDS Saint John in Saint John, and the other is operated by AIDS New Brunswick in Fredericton. Both programs are seriously under-funded as neither receives any operational funding. The

only resources received come in the form of supplies (e.g., clean needles, condoms) currently provided by the New Brunswick Department of Health and Wellness. Operational funding for NEPs continues to be an issue in New Brunswick; as funding for direct health services is a provincial responsibility, greater provincial leadership in this area should be considered. The two New Brunswick community-based programs do their best with the limited resources that they have, although they know that they are only reaching a small percentage of the people in need of NEP services.

AIDS Saint John offers harm-reduction and methadone programs. It has operated a NEP for 10 years and provides support and information to people who inject drugs who are living with HIV and/or HCV. AIDS Saint John is leading efforts to establish a late night drop-in and needle exchange for sex trade workers in the inner city area of Saint John.

AIDS New Brunswick provides confidential needle exchange services, but struggles with lack of adequate staffing. Its NEP is a walk-in service available through a primary outlet at AIDS New Brunswick during regular business hours. A satellite site is also offered at the Community Health Clinic. With operational funding, AIDS New Brunswick would be able to explore implementation of an evening program and/or satellite sites on the north side of Fredericton, in Minto, and in the Doaktown area.

SIDA/AIDS Moncton, a community-based AIDS service organization providing support to those infected/affected by HIV, has several HIV-prevention community programs and is presently working to establish a needle distribution program to serve the Greater Moncton area.

### ***Newfoundland and Labrador***

The AIDS Committee of Newfoundland and Labrador operates the only needle exchange in the province, and with project funding from the Atlantic Regional Office of the Public Health Agency of Canada, carried out a needs assessment with people who inject drugs in the St. John's area in early 2006. The AIDS Committee of Newfoundland and Labrador is a consumer-focused, non-profit organization that provides supportive programs and services aimed at preventing HIV/AIDS and supporting persons living with and affected by HIV/AIDS. The Newfoundland and Labrador Department of Health and Community Services has committed \$50,000 annually to the NEP in St. John's, as part of the provincial harm-reduction strategy which includes access to methadone maintenance treatment (MMT) and NEPs. Community-based HIV/AIDS organizations, such as the Conception Bay North AIDS Interest Group and the AIDS Committee Western Newfoundland Inc., provide care and support, as well as raise community awareness about issues related to HIV/AIDS, but do not currently provide NEPs.

### ***Nova Scotia***

Currently, the government of Nova Scotia provides close to \$300,000 in funding for the two NEPs in the province: operated by the AIDS Coalition of Cape Breton (Sharp Advice Needle Exchange) and the Mainline Needle Exchange in Halifax. Mainline currently receives a total of \$290,000 from the Nova Scotia Department of Health and District Health Authorities 4, 5, and 6. Given the importance of social networks for people who inject drugs, the Mainline Needle Exchange offers peer counseling around injection drug use and risk behaviours. The goals of Mainline are to reduce the acquisition and transmission of HIV, HBV, and HCV among people who inject drugs and to increase

awareness and knowledge of HIV/AIDS, HBV, and HCV and of the health and social issues affecting people who inject drugs. Sharp Advice Needle Exchange Outreach, a project of the AIDS Coalition of Cape Breton, aims to reduce the spread of blood-borne pathogens within the needle-using community through the distribution of injection drug equipment, condoms, education on risk factors, and referrals.

*A lot of people here are very private about their IV use so they tend not to want to meet the Mainline outreach worker. Instead, they get their supplies from a natural helper.*

Key informant

There are a number of community-based organizations which provide outreach services to Nova Scotians living with or vulnerable to HIV/HCV. The Hepatitis Outreach Society (HOS) initiated a peer-based program, the “Island of Hope Peer Education and Training Program”, which has trained 16 youth as peer educators about HCV in Cape Breton. Additionally, the HOS in Cape Breton works with people who inject drugs to prevent high-risk activities and presents “Hepatitis 101” courses to schools and facilitates focus groups and workshops with high-risk youth. ARK Outreach in Halifax provides a youth drop-in for homeless and street-involved youth, ages 16 to 24, with services including support, advocacy, programs, and food. The South Shore AIDS Awareness Association, Northern AIDS Connection Society, AIDS Coalition of Nova Scotia, and the AIDS Coalition of Cape Breton all work throughout the province to promote and support the health and well-being of persons living with and affected by HIV/AIDS and to reduce the spread of HIV/AIDS in Nova Scotia. Healing Our Nations, the Atlantic First Nations AIDS Network, teaches and supports Aboriginal people around the prevention of HIV/AIDS in a manner that is respectful of native ways of life. Stepping Stone is a peer-directed, non-profit organization that supports individuals involved in the sex trade by contributing to their health, safety, and well-being.

### ***Prince Edward Island***

AIDS PEI, based in Charlottetown, is a non-profit, community-based, volunteer-driven organization whose purpose is to prevent the spread of HIV in the community and to create a supportive environment for those infected by HIV/AIDS. AIDS PEI operates the only NEP in the province.

### **Conclusions**

Three major gaps exist in Atlantic Canada in the area of outreach and NEP programming. First, it appears that almost all outreach programming is concentrated in urban areas within the Atlantic provinces. While NEPs appear to be working well in the communities where they are located, there are still large areas of Atlantic Canada that do not have such programs. This is especially true in rural areas or small towns where needle exchange services are largely unavailable. With a few exceptions, such as a program for youth at risk in Pictou, Nova Scotia, organized by the Mainline Needle Exchange and Sharp Advice Needle Exchange, there are no targeted

*There is some awareness of the needle exchange – but some people won’t come because it’s at the AIDS Committee. So, we give needles that we get there to a lot of our friends.*

Person who injects drugs

prevention programs evident in rural areas, where it is known that injection drug use occurs. Moreover, NEPs have often been centralized within the large cities, limiting access even within the cities.

*It's harder to get needles at drugstores – some hassle you about needles. Some will only sell needles by the box now – they won't just sell you a package any more, and people can't afford that – they end up re-using or sharing needles.*  
Person who injects drugs

Another barrier is that, due to human resource constraints, the hours of operation of NEPs are often very restricted; regular business hours are often inappropriate for the provision of services to people who inject drugs. Some NEPs have tried to address these access problems by allowing collective exchangers to carry needles to other people injecting drugs who do not directly access the

NEPs. It is interesting to note that many interviewees reported that drug dealers act as collective exchangers. Some programs offer a mobile delivery service to certain parts of the province.

Pharmacies, particularly in rural areas, may be one of the few places in which sterile syringes may be obtained and could be encouraged to provide needle exchange services in their communities. Pharmacies are particularly important sources of clean needles during holidays when community-based organizations are not open.

*The riskiest time for unsafe injecting was when the needle exchange was closed on holidays. I would try not to share my needle, but I would have to use it as much as 50 times.*  
Person who injects drugs

All of the peer-based initiatives identified in this environmental scan are, or were, supported by one-time, project-based funding. Community-based organizations that spearhead these programs do not have sufficient resources to continue operational programs once project-based funding has expired. In some provinces, there are no public funds provided to support existing needle exchange services, which are funded solely by donations made to the sponsoring organization. Research has demonstrated that investment in NEPs is an effective health-promotion and harm-reduction approach, and inadequate public funding for needle exchange services is a significant gap in addressing injection drug use issues in the region.

The third major gap is the lack of investment in well-structured evaluation to determine the impact of prevention initiatives. Thorough evaluation of existing initiatives will help organizations with future planning and assist funding agencies in determining priorities for future funding.

## **ADDICTION TREATMENT SERVICE PROVIDERS**

### **Best Practices**

Addiction treatment services vary widely and can include assessment services, residential programs, day programs, withdrawal management services, or opiate replacement programs. Best practices in addiction treatment<sup>153</sup> are based on evidence of efficacy and include a range of services and treatment approaches (e.g., professional counseling, peer counseling, detoxification, residential services, referral and community service

coordination, and housing). The publicly funded addiction treatment services in Atlantic Canada provide a range of addiction treatments, such as addictions counseling, withdrawal management services, assessment services, residential programs, and day and evening programs. Detoxification is not the same as treatment. It is often considered an entry point to the treatment process. Sometimes individuals may require detoxification services more than once. Other individuals may choose not to follow-up with treatment after detoxification. Those individuals who become dependent on narcotics because of chronic pain also need alternative options for pain management. There are two widely accepted approaches to withdrawal management of opioids:<sup>154</sup>

***Non-medically assisted detoxification:*** This is the provision of support during the abrupt cessation of the drug (what is referred to as “cold turkey”). Since opiate withdrawal generally does not lead to the seizure activity that can result from some other substances (e.g., alcohol or benzodiazepines), this approach is considered a safe method. It can, however, result in extreme discomfort for the individual with symptoms peaking around the third day. The fear of experiencing these withdrawal symptoms can often stop someone from using non-medically assisted detoxification.

***Medically assisted detoxification:*** This is the use of pharmacological (drugs) assistance for withdrawal. This approach can include symptom modification through the use of the medication Clonidine or substitution with a longer-acting opioid that is gradually tapered, such as methadone.

MMT is one form of medically assisted treatment which has been demonstrated to reduce injection drug use, reduce needle sharing, and reduce the harms associated with injecting opiates.<sup>155</sup> Methadone remains the only opioid approved for the long-term treatment of opiate dependence. It is a synthetic narcotic drug used to treat persons who are dependent on opiates such as heroin, morphine, or OxyContin. In contrast to the short-acting drugs administered by injection, it is a long-acting opioid that can be orally ingested. MMT is most effective when the provision of methadone is accompanied by the medical and social supports that individuals need to stabilize their lives. The long-lasting effect of methadone allows a drug user to seek employment and facilitates reintegration into the community. The safety and effectiveness of MMT has been documented in scientific and medical publications.<sup>156</sup> MMT programs have been credited with decreasing opioid use, reducing criminality, and improving the general health of the drug user. Another important benefit of MMT is that it helps decrease the spread of HIV/HCV, as methadone is typically administered orally rather than by syringe. Methadone clinics are also potentially excellent sites for disease prevention and education. Patients can be offered screening and counseling for transmissible diseases and can be provided with information on safe sex, on the risks of sharing needles, and on methods for cleaning syringes. A cost-benefit analysis was performed on a methadone program in New Brunswick. The study found that an investment of \$3,000 per person per year will produce estimated savings to the health care and justice systems of \$43,769. In other words, investing one dollar into a methadone program can yield a return of approximately 16:1.<sup>157</sup>

## The Program Environment

### *New Brunswick*

In New Brunswick, there are four methadone programs – in Moncton, Miramichi, Fredericton, and Saint John. There are 29 physicians licensed to provide methadone in the province.<sup>158</sup> The New Brunswick Department of Health and Wellness provides a continuum of in-patient, out-patient, and community care to improve outcomes for individuals and communities affected by substance abuse and gambling addictions. There are Regional Addiction Services in all health regions of New Brunswick. Program delivery varies among regions, but each region offers the following programs:

- Detoxification Program – provides a safe and secure environment where clients can stay until their withdrawal symptoms have eased. Clients get help to end a harmful lifestyle focused on the abuse of alcohol and other drugs, and to take steps toward rehabilitation and recovery. Adolescents are admitted to detox centres only when all other attempts to end their substance abuse problem have failed, and when they must be kept under supervision to ensure sobriety.
- Out-patient Programs – offer a broad range of services for individuals, and their loved ones, who are suffering from substance abuse or compulsive gambling. Services include assessments, consultations, and counseling. Out-patient programs provide extensive after-care services for the detoxification program and operate as a referral point to the short-term residential program. Most clients in out-patient counseling recover successfully. The Youth Addiction Services Program is designed for youth in schools who are abusing alcohol and other drugs. This program includes treatment at different phases, services for the youth's parent(s) or significant others, training for school guidance counsellors, and community education.
- Wellness – Community Service provides health promotion, prevention, and intervention services to reduce addiction risk among New Brunswickers, including information and education resources on addiction issues.

Programs which are available provincially include:

- Short-term Residential Programs – provide a complete change in environment for those who are not able to effectively deal with their addiction in their home environment. Group therapy, education, stress management, and self-awareness sessions, combined with a therapeutic environment, provide participants with new skills to achieve and maintain a healthy lifestyle. There are two residential programs offered in the province: in Campbellton and Saint John. These programs are delivered by a multi-disciplinary team, which may include social workers, nurses, and alcoholism attendants.
- Long-term Residential Program – Lonewater Farm is a 40-bed unit for men who require extensive support in their recovery. It addresses the long-term effects of addiction and assists clients to gradually re-integrate into the community. While the request for a similar program is much lower, Regional Addiction Services in Saint John has a long-term program specifically for females.

The National Native Alcohol and Drug Abuse Program (NNADAP) is a Health Canada program aimed at reducing high levels of alcohol, drug, and solvent abuse among on-

reserve populations. The NNADAP supports four addiction treatment centres in New Brunswick: Kingsclear First Nation Outpatient Program, the Lone Eagle Long Term Treatment Centre (Big Cove), the Rising Sun Rehabilitation Treatment Centre (Eel Ground), and the Tobique Addiction Rehab Centre.

### ***Newfoundland and Labrador***

The June 2004 OxyContin Task Force Report, submitted to the Government of Newfoundland and Labrador, recommended the creation of a methadone program for the province. It also recommended establishing a Methadone Advisory Committee to oversee the development and implementation of MMT programs in the province, including the drafting of clearly established methadone maintenance guidelines, licensing and training requirements for MMT programs, and other options for treatment. In June 2005, an interim methadone service was established in the Eastern Region, and the full methadone program is expected to be operational in the near future.<sup>159</sup>

The Addictions Services provided by the Government of Newfoundland and Labrador include:

- Detoxification services through the Recovery Centre in St. John's, which is a provincial non-medical detoxification service operated by the Addictions Services Branch of the Eastern Regional Integrated Health Authority.
- Treatment services of Addictions Services available to anyone in the community. Initial referrals are made to a local Addictions Services office for a comprehensive medical and psycho-social assessment of the client's problems and needs. The results of the assessment are used to determine the most appropriate type of treatment plan for the rehabilitation process. This plan may include a referral to outside agencies that provide services not offered by Addictions Services. Following assessment, clients are matched to the most appropriate service available to them.
- Out-patient services available to individuals and family members. Individual treatment programs are established for those who are experiencing alcohol and other drug dependency. Treatment is offered in individual, family, and group settings.
- In-patient services provided by the Humberwood Centre located in Corner Brook, the only residential treatment program for substance abuse and gambling addiction in the province of Newfoundland and Labrador. The Centre provides a three-week in-patient treatment service for men and women aged 18 years and older, who have a recognized chemical dependency and/or a gambling problem and have been referred by an Addiction Services out-patient counsellor following assessment. The treatment program focuses on the physical effects of alcohol and other drug dependencies and/or problem gambling, emotional and personal issues, and the effect of dependency on relationships. Clients participate in individual and group counseling, relaxation and leisure therapy, and education sessions. An extensive follow-up program is also provided through the Addictions Services out-patient offices at the completion of in-patient treatment.

Community-based addictions resources in Newfoundland and Labrador are limited, and the current system is often overburdened. Given the current level of resources, wait lists for out-patient addictions counseling services exist across the province ranging from two weeks to several months and in some cases, up to a year. This is not considered best

practice for addictions treatment. When individuals are ready for and request treatment, they are generally motivated to attend treatment sessions. Addiction counseling services need to be available. Delays in initiating treatment at that point can result in individuals changing their minds and continuing to use substances, thus increasing the potential harm to the individual, the family, and the community.

The National Native Alcohol and Drug Abuse Program supports two addiction treatment centres in Newfoundland and Labrador: Saputjivik (Care Centre) of the Labrador Inuit Health Commission operating in North West River and the Charles J. Andrew Restoration Centre in Sheshatshiu.

### *Nova Scotia*

Addiction programs and services supported by the Nova Scotia Health Department are delivered to Nova Scotians through the District Health Authorities.<sup>160</sup> Services span the continuum from prevention, community education, early identification and referral, to treatment and rehabilitation. Included are withdrawal management (detoxification and addiction education programs), community-based programs (outpatients and structured treatment), problem gambling services, and community education. District Health Authorities deliver addiction services using a client-centered treatment philosophy. This includes client self-determination coupled with service options that are diverse, flexible, and accommodating. The process is aimed at optimizing the health of individuals harmfully involved with alcohol, drugs, and/or gambling through the provision of a comprehensive range of integrated bio-psycho-social treatment services. Programs and services may be available on a residential, day, or out-patient basis, and may include individual, group, and/or family programming.

In 2002, the Government of Nova Scotia invested an additional \$1.8 million (\$2.1 million in 2005/06) to enhance addiction services for rural women and youth. Increases in programming uptake occurred within the three years of the Enhanced Services Initiative. Overall, the number of full-time employees in the District Health Authorities increased by 12%, thus increasing the number of programs for women and youth. For example, Addiction Services in western Nova Scotia used the additional resources to carry out a systematic review and analysis of data and best practices to develop enhanced services for rural adolescents and women. A collaborative approach to planning, involving a multiplicity of partners, was followed. School-based prevention, early intervention, and counseling services were developed and made available in every junior and senior high school in the area on a scheduled basis. Programming for women included structured treatment, women's life enhancement, and family series programming. Treatment for nicotine addiction included assessment, individual and group treatment, and, where appropriate, the provision of nicotine-replacement therapies. In all respects, the focus of programming was to address barriers to accessibility and to provide programming that was more appropriate to the needs and life circumstances of targeted client populations. By comparing relevant indicators, it was determined that, in a one-year period, the number of adolescent clients increased by 94%, the number of female clients by 53%, and the total number of Addiction Services clients by 37%.

Targeted programming for adolescents, women, families, and/or driving-while-impaired offenders is offered where appropriate. Programs sponsored by the Nova Scotia Health Department include:

- Community-based Counseling – allows people to access treatment by appointment, on an outpatient basis, in communities throughout western Nova Scotia.
- Withdrawal Management (Detoxification) – provided in Middleton, Lunenburg, and Yarmouth, designed for those individuals who need supportive counseling and medical assistance to deal with the physical and psychological withdrawal stages of dependency and addiction.
- Addictions Education Program – provided in Middleton, Lunenburg, and Yarmouth, is a short-term program (provided both on an in-patient and day basis) to help individuals better understand the nature of substance misuse, relapse signs and symptoms, and early coping strategies to avoid harmful involvement with alcohol, drugs, or gambling.
- Structured Treatment Program – provided in Middleton, is a residential treatment program designed for those individuals who are experiencing more severe and chronic substance misuse and gambling problems. Education, opportunities for personal reflection, and recovery planning are offered over a three-week period in a professionally facilitated group setting.

In Nova Scotia, methadone is available through Addiction Prevention and Treatment Services in Dartmouth and is also available in Sydney through the Addiction Services program of the Cape Breton District Health Authority.<sup>161</sup> Approximately 35 physicians are licensed to prescribe methadone in Nova Scotia. Acupuncture clinics for people who inject drugs are also available in Nova Scotia.

Direction 180 offers a low-threshold, community-based methadone program that uses harm-reduction principles to decrease the spread of HIV/AIDS, HBV, and HCV among people who inject drugs. A comprehensive evaluation of Direction 180 has made a significant contribution to understanding the impacts of community-based methadone programs in the Atlantic-Canadian context. In its most recent evaluation, Direction 180's clients identified that participating in the program had helped them to improve stability in their lives, improve their self-care through means such as healthier eating and exercise, improve their decision-making ability and sense of responsibility, reduced drug-related criminal activity, and improved relationships with others. Participating in the program also gave clients a sense of hope for the future. The program also achieved a significant decrease in sharing needles.<sup>162</sup>

The Mi'kmaq Native Friendship Centre in Halifax has a maintenance program which provides one-on-one counseling; referrals to detox, treatment, health care, mental health unit, etc.; follow-up upon release from a treatment program to help clients remain free from addictive materials; after-care which introduces clients to job training, job counseling, or education upgrading in order to permanently break the alcohol and drug cycle; and a diversion program taking the form of recreation, fitness, and cultural programs, to offer clients a positive substitute to the alcohol and drug scene.

The National Native Alcohol and Drug Abuse Program supports two addiction treatment centres in Nova Scotia: Eagle's Nest Recovery House (Shubenacadie) and the Mi'kmaw Lodge Treatment Centre (Eskasoni).

### ***Prince Edward Island***

Prince Edward Island Addiction Services aims to provide a continuum of addiction services to help Islanders live healthy, successful lives without relying on alcohol, drugs, or addictive behaviours. Its treatment model is based on a disease model with the goal of abstinence through the support of self-help groups. Its Adolescent Addictions Program provides adolescent assessment, counseling, education, and treatment programs, available in the province's five Health Regions. Other Addiction Services programs include assessment and referral, in-patient detoxification, out-patient detoxification, rehabilitation, after-care for clients who have completed the rehabilitation program, early intervention, family programs, student assistance, extended care, women-specific programs, gambling programs, and smoking cessation. Methadone is currently only available through a pilot program in Prince Edward Island.

### **Conclusions**

The growing number of new methadone programs is a positive trend in Atlantic Canada, given the many benefits of methadone for people who inject drugs. However, access to methadone programs is still a major challenge, especially for individuals living in rural areas. Shortage of program space for individuals needing addictions treatment is a problem across Atlantic Canada, particularly for rural or small town communities. Almost half the individuals who inject drugs who participated in the 2004-05 Fredericton injection drug use study reported that they had been denied access to a treatment program (primary detoxification and MMT). The main reason access was denied was because the program was full. There is also insufficient availability of youth-focused, peer-based addictions programs that take into account the particular needs and issues faced by youth. The lack of methadone treatment in Prince Edward Island and in Newfoundland and Labrador is a particular problem with respect to options for people using opiates. Even where MMT programs are available, improvements to the rules and regulations of methadone programs could be made, where appropriate, to remove barriers to the effective care of people who inject drugs. One of these barriers is the array of rules and regulations to which patients are subjected, including rigorous assessment procedures, mandatory daily visits, abstinence as a condition of treatment, and random urine sampling. Also, funding of methadone programs in Atlantic Canada is inadequate, and in many provinces too few physicians and pharmacists participate in providing MMT. People who participate in methadone programs need to have access to comprehensive services including primary health care, counseling, education, and support services.

## **HEALTH CARE SERVICES FOR PEOPLE WHO INJECT DRUGS**

### **Best Practices**

People who inject drugs face a variety of barriers in accessing health care and social services such as primary health care, community clinics, pharmacy services, residential

care, palliative care, and housing services.<sup>163</sup> The principle of abstinence is a predominant demand in health care settings and is seen by many health care providers as the only acceptable premise, standard, or goal in providing services to drug users. From a purely technical perspective, professionals who tolerate or permit illegal drug use on the premises may be prosecuted (for possession, trafficking, aiding or abetting, or criminal negligence) under the *Controlled Drugs and Substances Act* or face professional discipline such as fines or the suspension or revocation of their licenses.<sup>164</sup>

However, in some circumstances, service providers operate from the perspective that they cannot provide proper care, treatment, and support if they must insist on their clients abstaining from drugs. For example, some providers of hospice services feel they should not close their doors to a client who is not ready to stop using. Some health care providers prefer to allow their patients to continue using while receiving medical care, rather than let them suffer withdrawal symptoms that could interfere with their medical treatment.<sup>165</sup>

Many health care and health service providers work with people who use injection drugs. These include the staff of NEPs and AIDS service organizations; health care professionals at hospitals, clinics, prisons, and drug treatment centres; homeless shelter workers; residential hospice staff; and employees of occupancy hotels and supportive housing. Provision of services to people who inject drugs need to be guided by principles of respect, dignity, humanity, autonomy, and health. Health care and health service providers could be trained to recognize the specific health issues of people who inject drugs, understand the value of a harm-reduction approach, and develop sensitivity towards people who inject drugs. The *Canada Health Act*, Section 3 states:

*It is hereby declared that the primary objective of Canadian health care policy is to protect, promote and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers.*

Although officially there is universal access to health care in Canada, people who inject drugs still experience barriers to accessing health care services and realizing the right to health, due to the stigma associated with drug use. A harm-reduction approach in the health care settings includes acknowledging that judgmental or hostile attitudes towards people who inject drugs will deter them from seeking care. A human rights perspective recognizes that every individual has the right to access health care services without barriers.

Health care services that adopt a harm-reduction approach to providing care to people who inject drugs may implement some of the following approaches:<sup>166</sup>

- Recognize that if patients who use drugs are not permitted do so within the facility, it is likely they will choose to remain on the street (which clearly increases the risk to the individual and the community).
- Offer patients counseling that may serve to explore the reasons for escalating drug use (e.g., inadequate pain management) and support patients in developing their own strategies, including possible alternative plans, for drug consumption or assisted injection.
- Provide the patient with any legal drugs in an attempt to reduce cravings.

- Provide safer injection education as a means of fostering and maintaining a drug user's ability to inject, perhaps by enlisting the help of a friend of the patient or some other person who is comfortable helping the patient inject, or by promoting novel approaches to injection (e.g., alternate injecting sites on the body).
- Explore whether other methods of consumption are desirable or possible (e.g., smoking) or explore alternative interventions that would fall within the profession's ethical guidelines (e.g., inserting a subcutaneous butterfly valve that can be used for the self-administration of drugs).

People injecting drugs who have HIV and/or HCV access medical treatment either through primary care providers such as a family physician or through specialized treatment care. For people who inject drugs and need medical treatment for HIV/AIDS (such as antiretrovirals) or hepatitis, health care providers may feel conflict about whether it is appropriate to prescribe complicated treatment regimens for individuals who have unstable lifestyles. A rights-based approach to providing HIV or HCV care for people who inject drugs could include the following approaches:<sup>167</sup>

- Discuss the benefits and risks of therapy with the patient. Emphasize the consequences of non-compliance.
- Prescribe the simplest possible regimen. Even experimental once-a-day regimes should be considered.
- Provide patients with counseling and support so that it may be easier for them to adhere to the treatment regimen, which may include directly observed therapy or the use of a beeper. Provide appropriate references regarding community care, supportive housing, and further contacts.
- Maintain a flexible schedule with respect to these patients. Note that they may not be able to follow-up on appointments. Efforts should be made to provide them with care, even on a drop-in basis.

People who inject drugs have primary health care needs that can be complicated by their drug use. In a Toronto study, more than half of the people who inject drugs who participated in the study reported that they are currently experiencing severe health problems. Half of the sample had experienced a drug overdose in their lifetime, and one-third of those people reported that they had never received medical treatment of any kind for drug overdose incidents.<sup>168</sup> In a 2004-05 injection drug use study where 47 current and former users of injection drugs in the Fredericton, New Brunswick, region were interviewed, most participants had accessed a variety of health services within the past year, and 81% had a family doctor. The most common health services accessed were a pharmacy, a family doctor, or the hospital. Barriers to accessing health services included stigma/discrimination on the part of service providers, as well as waiting lists, limited hours, and not enough services.

Because of the stigma associated with injection drug use and the often judgmental attitudes of health professionals, many people who inject drugs avoid seeking primary health care until they are very ill and need emergency help. People who inject drugs often do not receive comprehensive or consistent primary health care.<sup>169</sup> The criminal status of the possession of

*Some of my friends think that cops are watching people who go to the needle exchange, even to do this interview.*

Person who injects drugs

controlled substances or injection equipment deters people who inject drugs from seeking the health care that they need.

### **The Program Environment**

The Mainline Needle Exchange in Nova Scotia and its partners have received federal project funding for a pilot project called “Taking it to the Streets.” The purpose of the project is to improve access to health services that positively impact the health and well-being of people who inject drugs. A two-person team will go to areas of Halifax known for high injection drug use to provide needle exchange services, offer peer support, and facilitate access to other social and health services.

The AIDS Committee of Newfoundland and Labrador provides a nurse-run primary care clinic, often used by people who do not normally seek health care by other means, including people who use injection drugs. AIDS Saint John in New Brunswick also has regularly scheduled visits of an HIV testing nurse. Nova Scotia’s Stepping Stone and Mainline Needle Exchange also have an outreach nurse from Planned Parenthood who administers anonymous HIV testing on-site.

### **Conclusion**

Lack of availability and access to primary health care services for people who inject drugs represent a significant gap in programming in Atlantic Canada. The results of the pilot program at the Mainline Needle Exchange in Nova Scotia will help to inform the future direction for this work. Finding mechanisms that enable people who inject drugs to access the health services that they need in an easy and coordinated way is key to their health and well-being.<sup>170</sup>

The basic ethical issue is the imperative to care adequately for drug users who are living with HIV and/or HCV. According to ethical principles, behaviour should not be imposed on drug-dependent persons that exceeds their current level of ability. Drug-dependent persons should be treated for their illnesses, fed, and provided with shelter – their dignity and self-worth must be nurtured and their drug needs tolerated so that they can begin to address their difficult circumstances. Attempting to free a person from addiction is probably not the goal to be pursued when that person, dependent on drugs for many years, is in the final stages of a terminal illness such as AIDS or hepatitis.<sup>171</sup>

The Canadian HIV/AIDS Legal Network<sup>172</sup> recommends that laws be changed to permit provision of currently illegal drugs to drug users while they are in care. This would remove a barrier to drug users accessing health care and other social services and would remove the threat of criminal liability for service providers who wish to provide care, treatment, and support without insisting on abstinence by patients who use illegal drugs. In the short term, measures could be undertaken to ensure better care, treatment, and support of people who use illegal drugs, including people living with HIV/AIDS. In particular, professional associations could develop ethical and practice guidelines for service providers in different areas of care involving HIV/AIDS and injection drug use.

## CORRECTIONS

### Best Practices

The 1993 World Health Organization (WHO) *Guidelines on HIV infection and AIDS in prisons* state, as a general principle, that prisoners have the right to receive health care, including preventive measures, equivalent to that available in the community without discrimination. This is consistent with the Mission of the Correctional Service of Canada, where it is stated that the provision of a “safe, secure and clean environment that promotes health and well-being” is a “strategic objective.” Many people who inject drugs prior to entering the prison system continue injecting in prison and are more likely to share injection equipment, creating a high risk of HIV/HCV transmission.<sup>173</sup> Despite the sustained efforts of prison systems to prevent drug use by prisoners – by doing what they can to prevent the entry of drugs into prisons – the reality is that drugs can and do enter. A number of studies have provided evidence of the extent of injection and other drug use in prisons. From a public health and human rights perspective, sterile injection equipment need to be made available for prisoners who inject drugs. In prison systems where the distribution of sterile injection equipment has not yet started, pilot projects should be considered as soon as possible. For over a decade, it has been recommended that Canadian correctional systems move ahead with implementing NEPs in prisons.<sup>174</sup> As of 2005, no Canadian prison system had started a NEP. However, the Correctional Service of Canada, the federal agency responsible for persons serving sentences of two years or more, has asked the Public Health Agency of Canada to conduct a scientific and technical review of prison NEPs in corrections jurisdictions internationally and to provide advice to the Correctional Service. The Public Health Agency report is expected in 2006.

All prisoners have the right to receive health care, including preventive measures, equivalent to that available in the community without discrimination, in particular with respect to their legal status or nationality. The general principles adopted by national AIDS programmes should apply equally to prisoners and to the community.

World Health Organization, 1993

The 1993 WHO guidelines on HIV infection and AIDS in prisons include the following best practices:<sup>175</sup>

- Drug-dependent prisoners should be encouraged to enroll in drug treatment programs while in prison, with adequate protection of their confidentiality. Such programs should include information on the treatment of drug dependency and on the risks associated with different methods of drug use.
- Prisoners on methadone maintenance prior to imprisonment should be able to continue this treatment while in prison. Methadone maintenance should also be available for prisoners to initiate in prisons.

The prevention of HIV and HCV transmission in prisons is hampered by the denial of some governments of the existence of injection drug use and sexual intercourse in prisons, rather than by a lack of evidence that key interventions work. There is ample evidence that drug use in general, injection drug use in particular, and sexual intercourse

between inmates are widespread in such institutions. Furthermore, there are data indicating that the risk of HIV/HCV infection in prisons is usually higher than in the general community: prisons are a high-risk environment for HIV/HCV infection. Once this has been accepted, governments have a wide range of program options for preventing HIV/HCV transmission in prisons.<sup>176</sup>

The evidence shows that such programs should include all the measures against HIV and HCV transmission which are carried out in the community outside prisons, including HIV and HCV education; testing and counseling performed on a voluntary basis; the distribution of clean needles,<sup>177</sup> syringes, and condoms; and drug-dependence treatment, including substitution treatment. For example, diluted bleach or another effective viricidal agent, together with specific detailed instructions on cleaning injecting equipment, should be made available in prisons housing people who inject drugs or where tattooing or skin piercing occurs. All these interventions have proved effective in reducing the risk of HIV and HCV transmission in prisons. They have also been shown to have no unintended negative consequences. The available scientific evidence suggests that such interventions can be reliably expanded from pilot projects to nation-wide programs.

Best practices for prevention programs in prisons include education on HIV/AIDS and HCV; voluntary testing and counseling; the distribution of condoms, bleach, needles, and syringes; and substitution therapy for people who inject drugs. Four elements of prevention programs in prisons have been studied extensively: the provision of bleach for cleaning needles and syringes, needle and syringe programs, MMT, and the provision of condoms.<sup>178,179</sup>

Programs providing clean needles and syringes in prisons were satisfactory in all studies reported. Drug consumption by inmates participating in such programs was stable or decreased over time, reported sharing of needles and syringes declined dramatically, and no cases of inmates acquiring HIV, HBV, or HCV were reported in any prison with a functioning needle and syringe program. There were no reported instances of initiation of injecting by inmates who did not inject before the introduction of a program, and the use of needles or syringes as weapons was not reported.

Substitution treatment programs in prisons are relatively easy to carry out, appear to have benefited drug-dependent inmates, and have reduced the frequency of illicit drug use in prison and reduced involvement in the prison drug trade. The literature also indicates that MMT reduces the frequency of injecting and self-reported syringe sharing among drug-dependent inmates, indicating a significant reduction in the risk of HIV and HCV transmission.

Where condoms are made available, usually through automatic distribution machines, studies found low levels of harassment of users of the machines by other inmates and few incidents of improper condom disposal. The reported level of safer sex was high among those who engaged in sex, and there was no evidence of any unintended consequences as a result of condoms being available.

## **The Program Environment**

In the federal prison system, as part of a physical and mental health assessment at admission, all inmates are offered voluntary testing for HIV, hepatitis A, B, and C, sexually transmitted infections (STIs), and tuberculosis. Testing for infectious diseases is also available upon request by an inmate at any time throughout his/her sentence, or by recommendation of the facility physician, as part of contact tracing, upon clinical indication of infection, or after involvement in an incident where significant exposure to an infectious agent may have occurred.

Correctional Service of Canada reception units deliver the Reception Awareness Program (RAP), which focuses on infectious disease awareness and prevention. Health services offered by the Correctional Service include testing, treatment, and programs to address substance abuse, including methadone treatment for severely opioid-dependent offenders.

The National Substance Abuse Program (NSAP) developed by the Correctional Service of Canada offers a number of programs in federal institutions for people who inject drugs including education and addictions treatment.

The National HIV/AIDS Peer Education and Counseling (PEC) Program and Circles of Knowledge Keepers (an Aboriginal PEC program) contain information on infectious diseases and are training programs for inmates to become “peer educators” who provide support and education to other inmates around HIV and other infectious diseases. There is a women’s component of PEC that contains additional information related to how HIV/AIDS and other infectious diseases affect them.

A health education program, “Choosing Health in Prisons” (ChiPs), provides information on various health-related issues such as nutrition, exercise, stress management, and infectious diseases. ChiPs is delivered to inmates in individual and group sessions as opportunities occur. Health education and information programs from public health and AIDS service organizations are also made available to inmates.

In addition to the above, the Correctional Service of Canada has a Special Initiatives program, whereby inmates are encouraged to submit proposals for projects or activities related to HIV/AIDS and HCV education and prevention. In the Atlantic region, several inmate-led projects have received funding, including a calendar of inmate paintings with HIV/HCV themes, a t-shirt encouraging testing, and posters with HIV prevention messages.

In prisons, sexual activity is considered to be a less significant risk factor for HIV and HCV transmission than the sharing of injection equipment. Nevertheless, it does occur and puts prisoners at risk of contracting HIV/HCV infection. Condoms, dental dams, and water-based lubricant are, by policy, routinely and discreetly available in federal prisons. In some provincial prisons, condoms, dental dams, and lubricant are not available, and in other provincial prisons they are neither easily nor discreetly available. Some jurisdictions such as Nova Scotia have a policy of making condoms available only through prison health services.

In Canada, 45% of federal prisoners have reported having had a tattoo done in prison. Tattooing is a social activity and involves sharing needles, which makes it risky.

Recently, the federal government launched a new initiative to pilot safer tattooing in six federal prisons across the country. The pilots will be evaluated in 2006.

Today, in the federal and in most provincial and territorial correctional systems, prisoners who were already on MMT at the time of incarceration can continue such treatment in prison. However, few systems allow prisoners to initiate MMT while incarcerated. Only the federal system and the British Columbia provincial system have formal methadone initiation programs. The provision of MMT to opiate-dependent prisoners who were not receiving it before incarceration, is an important measure to reduce the likelihood of inmates who inject drugs using shared equipment. The availability of methadone to inmates who are leaving the correctional system is a significant issue, due to the lack of methadone availability in most communities in Atlantic Canada. Prison-based MMT needs to be complemented by ongoing treatment in the community of release.

Most Canadian prison health care services do their best to provide prisoners with HIV or AIDS with good care and often refer prisoners to outside specialists for HIV-related care. However, prisoners report that they sometimes receive care and treatment that is not up to the standard that they received in the community, or even in other prisons in which they have been incarcerated. Other issues in the correctional setting include the increase in the number of sick prisoners; prisons not being equipped to deal with prisoners who require long-term, ongoing care and treatment (including palliative care); and the difficulty of accessing investigational drugs and alternative therapies.

The John Howard Society has branch offices in all four Atlantic provinces and provides support to current and recently released inmates and their families. The Society works with people who have come into conflict with the law; reviews, evaluates, and advocates for changes to the criminal justice system; engages in public education on matters relating to criminal law and its application; and promotes crime prevention through community and social development activities. Some of its specific programs include addiction services, such as the Choices Substance Abuse Treatment Program, which has the goal of reducing the risk for relapse into substance abuse and criminal behaviour. The objectives of the Choices Program are to develop motivation for behavioral change, and to encourage attitudes that deter substance abuse and enhance problem solving and coping strategies that will be effective in reducing the risk of relapse. The John Howard Society of Greater Moncton (New Brunswick) developed a pilot project called the "Youth H.O.P.E. Program" which was an HCV peer education program for at-risk youth in custodial settings.

The Elizabeth Fry Society has community-based agencies in Nova Scotia (Sydney and Halifax), New Brunswick (Moncton and Saint John), and Newfoundland and Labrador (St. John's), providing services for women involved with the justice system, particularly women in conflict with the law. The Elizabeth Fry Society advocates for legislative and administrative reform and offers fora within which the public may be informed about, and participate in, aspects of the justice system which affect women.

In New Brunswick, the Saint John Community Chaplaincy is an inter-denominational community organization devoted to the support of those in local neighbourhoods who have been released from prison and those with family members in prison, and to the promotion of a greater understanding of the criminal justice system.

In Newfoundland and Labrador, psycho-educational programming is offered in all five Correctional Centres for provincially sentenced offenders, including the Newfoundland and Labrador Correctional Centre for Women (NLCCW) in Clarenville. Individual counseling supplements group programming. The National Substance Abuse Program (NSAP), developed by the Correctional Service of Canada, is offered in three male correctional centres while the WOSAP, the equivalent program for females, is offered at the NLCCW. These treatment initiatives target federally sentenced inmates as well as longer-term provincial prisoners. Psycho-educational programming is also delivered in several community districts through contractual arrangements with the John Howard Society. This includes a residential addictions program – MIMOSA at Howard House – a community-based halfway house. Individualized counseling is also provided by Addictions Services, Eastern Health, for offenders under community supervision. HIV/HCV/HBV testing is provided to inmates on request or when recommended by Health Services staff, provided that the inmate consents. Twinrix vaccine for hepatitis A and B is administered to inmates newly diagnosed with HCV. Health promotion programming is not conducted formally but as part of the health screening assessment of new inmate admissions. The Newfoundland and Labrador correctional system provides harm-reduction initiatives such as condoms, dental dams, and access to bleach, as well as health-promotion programming and MMT, but does not provide needle exchange for offenders in custody.

## **POLICY MAKERS AND FUNDERS**

An effective approach to injection drug use requires collaboration and coordination with respect to substance misuse, HIV/AIDS, HCV, and other issues, through such vehicles as inter-departmental working groups, federal/provincial/territorial committees, and inter-sectoral task forces. A focus on reducing the harm associated with injection drug use requires strong partnerships between health and enforcement sectors in order to reduce tensions, build synergies, and ensure that both sectors are working together to achieve complementary goals. The efforts of one sector should not impede the work of the other.<sup>180</sup>

Over the past few years, there has been an emergence of multi-stakeholder partnerships formed in a number of communities throughout the Atlantic region. Many of these initiatives are supported with time-limited project funding through federal government programs such as the AIDS Community Action Program, the Community Initiatives Fund of Canada's Drug Strategy, or the Community-Based Support and Research Program which is a part of the Hepatitis C Prevention, Support and Research Program. In some cases, the development of partnerships has been supported by provincial resources, such as the development of the inter-agency OxyContin Task Force in Newfoundland and Labrador. These community partnerships often bring together people from community-based organizations, addictions services, correctional services, enforcement agencies, and public health agencies. When organizations work together through partnerships, each organization builds its own capacity to respond to injection drug use issues through new connections made with other partners. The participation of partners from multiple perspectives enables the creation of more comprehensive strategies to address injection drug use.

To allow for coordination and collaboration, the government's response and role, at provincial and federal levels, should be broadened. Importantly, government can take a lead in addressing policy and resource issues that place constraints or barriers to providing the full continuum of services and programs for people who use injection drugs across and within all four Atlantic provinces. For example, some jurisdictions base their policies solely on the strategies

*In my community we tried to set up a needle exchange, but town council explained if we allow you to start a needle exchange we will be telling the drug users that it's okay to inject drugs.*

Key informant

of abstinence and criminalization of addiction. A harm-reduction approach requires that jurisdictions accept a pragmatic approach recognizing that drug use will continue with or without programs such as NEPs. Governments could mandate that all regional, provincial, and municipal jurisdictions need to break down barriers and enable service providers to address more fully the inequities, discrimination, stigma, exclusion, violence, and other social determinants that are at the root of HIV/HCV vulnerability and drug addiction.<sup>181</sup> Full commitment to harm-reduction principles is lacking in some jurisdictions, and essential services such as MMT and NEPs are falling through the cracks of funding programs which do not provide ongoing operational support to the organizations delivering such services.

## RESEARCH

Addiction research, and research directed at injection drug use in particular, are critical to maintaining a sound base of evidence that reflects current knowledge about drug use prevalence and trends, best practices, and program outcomes. Research is particularly important in exploring innovative and alternative approaches that are being piloted, evaluated, and adopted in various contexts. Applied research allows stakeholders to learn more about options for program and service expansion, policy alternatives, and alternate methods of service delivery (e.g., varying thresholds for addiction treatment eligibility).

There is a strong research infrastructure in the Atlantic region around issues of addictions, HIV/AIDS, and HCV. Some examples of research initiatives, institutions, and individuals include:

- Dr. Christiane Poulin – the Canada Research Chair in Population Health and Addictions at Dalhousie University, Halifax, Nova Scotia. She was the prime force for the development of standardized methods for student drug use surveys in the four Atlantic provinces, resulting in the successful implementation of the survey to about 14,000 junior and high school students in 1996, 1998, and 2002. Atlantic Canada is the only region in the country to have accomplished standardization in its adolescent surveys on substance use. These methods have provided the four provinces with comparative cross-sectional epidemiological information and the ability to evaluate school interventions using an experimental study design. Dr. Poulin and her interdisciplinary, inter-provincial team recently received funding from the Public Health Agency of Canada's Population Health Fund to undertake a three-year program of research applying multi-level techniques to identify individual-, peer-, family-, school-, and community-level determinants of adolescent students' addictions-related health. Dr. Poulin recently completed the field work of a four-year, school-based,

harm-minimization intervention, funded by the Canadian Institutes of Health Research, based on a cooperative participatory research approach. The broaching of harm minimization for adolescents has major implications for policy and programming in health and education. Dr. Poulin's research program on stimulant use among adolescents uses a multi-disciplinary approach to obtain a comprehensive understanding of the interrelationships among prescribers, teachers, and youth pertaining to medical and non-medical stimulant use.

- Dr. Jacqueline Gahagan – an Assistant Professor at Dalhousie University in the School of Health and Human Performance in Health Education/Health Promotion, with cross-appointment to Community Health and Epidemiology, Nursing, International Development Studies, and Women's Studies. Dr. Gahagan's research areas include sexual and reproductive health; gender-based analyses of HIV/HCV prevention, care, treatment, and support programs and policies; harm reduction; injection drug use; and access to health care resources among socially marginalized populations, in particular, homeless youth.
- Dr. Lois Jackson – a researcher at the School of Health and Human Performance at Dalhousie University. Her focus is on the health and well-being of vulnerable populations, such as female sex trade workers and women who inject drugs; the social determinants of health; and the social influences on physicians' practices. Her publications include studies of gender differences, community and interpersonal influences on injection, and sex behaviours among people who inject drugs.
- Atlantic Interdisciplinary Research Network (AIRN) for Social and Behavioural Issues in the Hepatitis C Virus (HCV) and HIV/AIDS – a partnership among researchers at Memorial University (Newfoundland and Labrador), Dalhousie University, and the University of New Brunswick. With \$559,040 in funding over three years from the Canadian Institutes of Health Research, the AIRN is looking at the multiple and complex ways in which inter-personal relations, community relations and values, as well as macro-level conditions, are inter-related and combine to influence patterns of behaviour. The purpose of the AIRN is to enhance capacity and maximize productivity by collaborative contributions to a research agenda for the prevention of, and enhancement of care related to, both diseases. The AIRN will develop eight research studies to specifically address the following issues: epidemiology and surveillance of HIV/AIDS, HCV, and HIV/HCV co-infection; socio-demographic characteristics and patterns of health service use; injection drug use and safe/safer practices in rural areas; harm reduction in correctional settings; the psychological impact of living with HCV; and the impact of income support policies and medication coverage policies. Over the next three years, the team will extend beyond the core group to collaborate with other academic researchers and members from different sectors, including government, health care and service provision organizations, and community-based organizations.
- Addictions Research Centre, Correctional Service of Canada (Research Branch) – based in Montague, Prince Edward Island, since 2001. Responding to the Correctional Service's need for a focused effort on addictions, the Addictions Research Centre was established with a mandate to conduct addictions research related to corrections. In addition, the Centre is to encourage and stimulate addictions research in the criminal

justice system and to develop a coordinated program of applied research activity across jurisdictions. The goals of the Addictions Research Centre are to meet the applied research needs of the Correctional Service of Canada in policy development, programming, and management practices; to promote research in addictions and corrections; to provide a location for internationally recognized researchers to conduct their work; to build cooperative and complementary relationships with partners; and to provide research training and development.

- Canadian Community Epidemiology Network on Drug Use (CCENDU) – established in response to a 1995 feasibility study that identified the need for a Canada-wide surveillance system on substance use. Spearheaded by the Canadian Centre on Substance Abuse and guided by a steering committee, the CCENDU is a collaborative project involving federal, provincial, and community agencies with intersecting interests in drug use, the health and legal consequences of drug use, treatment, and law enforcement. Its strategic vision is: “A partnership to monitor emerging drug trends and associated factors.” The primary goal of the CCENDU is to coordinate and facilitate the collection, organization, and dissemination of qualitative and quantitative information on drug use among the Canadian population at the local, provincial, and national levels. Further, the CCENDU aims to foster networking among key multi-sectoral partners, to improve the quality of data being gathered, and to serve as an early warning system concerning emerging trends. One of the 12 CCENDU sites is in Fredericton, New Brunswick. Each local site collects, collates, and interprets data and information in eight major drug use areas (alcohol, cocaine, cannabis, heroin, sedative-hypnotics and tranquilizers, hallucinogens other than cannabis, stimulants other than cocaine, and licit drugs) and in six indicator areas (prevalence, law enforcement, treatment, morbidity, mortality, and HIV/HCV, which includes injection drug use and needle exchange information) to produce local reports. Resources permitting, a national report is produced each year as a compilation of local data, with special focus given to current, high-priority issues.

Despite these research strengths in Atlantic Canada, there remain some key gaps in evidence-based understanding of injection drug use issues in the region. In general, there is insufficient information on injection drug use patterns, and there are no reliable estimates of the number of people injecting drugs in Canada or within specific regions such as Atlantic Canada.<sup>182</sup> There are also very few data available about specific sub-populations of people who inject drugs, such as women, Aboriginal people, African Canadians, youth, and rural residents.

Several Canadian reports recognize the need for more research on many issues related to injection drug use and successful models of harm-reduction interventions, as well as improved surveillance of risk behaviours and disease prevalence associated with injection drug use. Mechanisms for effectively disseminating knowledge about injection drug use have also been identified as a priority.<sup>183,184,185</sup> In June 2005, the Canadian Centre on Substance Abuse published a report identifying the need for “meaningful, standardized, comparable data” about addiction services across Canada.<sup>186</sup> The report *Reducing the Harm Associated with Injection Drug Use in Canada* recommended the development of a framework and tools to facilitate regular reporting on a set of agreed-upon indicators related to injection drug use.<sup>187</sup>

In Atlantic Canada, there have been some research projects over the past few years, most of them involving the collaborative effort of research partners. The Cape Breton Study in 1997 examined injection drug use and risk behaviours, and the Springhill Institution Study in 1998 examined the epidemiology of HIV, HBV, and HCV in a federal prison.<sup>188</sup> Several community-based organizations have undertaken research to assess the needs of the injection drug-using populations that they serve.<sup>189,190,191,192,193</sup> In New Brunswick, economic costing research was completed on methadone programs in 2004,<sup>194</sup> and in Nova Scotia, a community organization and university partnered in 1999 to explore unsafe and safer injection drug use practices.<sup>195</sup>

In recognition of the research interest, experience, and need in Atlantic Canada, a workshop was convened in 2003 to explore possibilities for developing a coordinated approach to HIV and HCV research in the region.<sup>196</sup> Participants identified numerous research gaps, as listed below. The first four were identified as the most important priorities.

- Research with marginalized groups.
- Harm-reduction research/programming – demonstrating the value of the approach.
- Research about the determinant of health – what determines the high risk behaviours of many Atlantic Canadians.
- Policy advocacy research and/or strategies that enable decision makers to support harm reduction approaches.
- Epidemiological information.
- Research about program and service effectiveness.
- Specific issues around the need for harm-reduction strategies for men having sex with men in the prison context.
- Research to justify the need for safe sites for tattooing and needle exchanges in prisons.
- Funding resources, access, and comparisons.
- Dissemination of research strategies.

In addition to identifying research priorities, workshop participants determined that a mechanism to coordinate injection-drug-use-related, inter-sectoral research throughout the four Atlantic provinces would be feasible, if resources were available to support the organizational infrastructure needed to foster such collaboration.

Although several ongoing regional studies in Canada collect risk behaviour data on injection drug use and a large number of one-time, cross-sectional surveys on risk taking among people who inject drugs have been conducted, it is challenging, if not impossible, to compare levels of risk behaviours among data sets. In addition to disparities across study methodologies, different researchers have collected risk behaviour data using different questions or differently worded questions, different variable or concept definitions, different time frames for reported behaviours, and different response categories. It is therefore difficult to use available injection drug use risk behaviour

information to identify trends or to help evaluate the effectiveness of prevention programs and policies at more than the regional or local level.

In addition, although the national HIV estimates for 2002 show a slight decline in the number of new infections attributed to injection drug use in that year, the relative lack of behavioural trend data hinders the reliable interpretation of this finding. The establishment of the I-Track pilot survey will permit the tracking of injection and sexual risk behaviours over time, will provide important trend data that could be used to inform prevention program design, and would help evaluate program effectiveness. Such behavioural data could also be used to interpret changes in HIV prevalence and incidence among people who inject drugs and would serve as an early warning system for the spread of HIV in this population. The high levels of risky injection and sexual behaviours reported in sentinel sites across Canada by people who inject drugs suggest that the potential for the transmission of HIV in these populations continues to be significant. Behavioural surveillance of key sub-groups of people who inject drugs, namely street-involved youth and inmates, is also needed to formulate an appropriate response to the evolving HIV/HCV epidemic among individuals who use injection drugs in Canada.



# **SUMMARY AND ASSESSMENT OF PROGRAM AND POLICY GAPS**

## **OVERALL CONCLUSIONS**

### **Strengths**

Significant achievements have been made in the Atlantic region since 2000 with respect to provincial and regional initiatives to address the harms associated with injection drug use. The development of a provincial HIV/AIDS Strategy and Blood Borne Pathogen Strategy in Nova Scotia incorporating a harm-reduction framework sets a positive model for the other provinces. Prince Edward Island has developed a harm-reduction policy, and the availability of MMT programs has increased in two of the provinces (New Brunswick and Nova Scotia). There have also been increases since 2000 in the availability of NEPs in the four Atlantic provinces. In the federal and in most provincial correctional systems, prisoners who were already on MMT at the time of incarceration can continue such treatment in prison. In the federal system inmates can also be initiated on MMT. Tattooing pilots are in place within six federal corrections institutions, and prison NEPs are being reviewed at the request of the Correctional Service of Canada by the Public Health Agency of Canada.

Community-based organizations form a vital component of harm-reduction efforts in the region and lead in many areas such as community outreach, needle exchange, and prevention education related to HIV and HCV. Multi-stakeholder collaborations are actively addressing issues around injection drug use, such as the Harm Reduction Fora, the OxyContin Task Force in Newfoundland and Labrador, and the Community Partnership on Prescription Drug Abuse in Cape Breton (Nova Scotia). In some provinces, growing awareness about the problems of prescription drug misuse has led to increased public awareness and support for the introduction of harm-reduction services.

Provincial governments, health authorities/districts, and community-based organizations are together providing a wide variety of addictions services from substance abuse prevention to rehabilitation. Finally, there is a strong research infrastructure in Atlantic Canada, with major centres of research leading the field in examining addictions and HIV/HCV risk behaviours. Progress has been made in understanding more about the needs of people who inject drugs, largely due to the needs assessment efforts of several community-based organizations in the region.

There were significant improvements (fewer key informants reporting that 50% or more of persons injecting drugs were engaging in risk behaviours) with respect to unsafe sex with clients (43% in 2005 versus 52% in 2000), unsafe sex with casual partners (64% in 2005 versus 77% in 2000), and unsafe sex with regular partners (78% in 2005 versus 91% in 2000).

### **Challenges**

In 2005, injection drug use remains a serious public health issue in Atlantic Canada, as do many of the social and economic inequities underlying drug use. Atlantic Canada

continues to have more social, economic, and health inequities and higher rates of chronic disease than the rest of Canada. The region has a generally poorer health profile, lower incomes, higher rates of unemployment, and a smaller proportionate share of the national wealth than much of the rest of Canada.

Estimates of the number of people who use injection drugs in the Atlantic provinces have not changed significantly since 2000. However, the patterns with respect to the types of drugs used have changed. Since 2000, misuse of prescription OxyContin has increased, drastically in some communities, with higher numbers of overdoses and greater criminal activity. An increased percentage of key informants and people who inject drugs reported risky injection behaviours amongst those injecting drugs: more interviewees reported that 50% or more of people who inject drugs engage in the sharing of needles (54% in 2005 versus 47% in 2000) and other injection equipment such as spoons, filters, water, etc. (81% in 2005 versus 60% in 2000). Overall, a key finding is that the messages to prevent sharing of injection equipment have not been effective in reducing these behaviours, and that lack of access to clean equipment continues to be a problem throughout Atlantic Canada, particularly in rural areas and small towns. Many interviewees reported that pharmacies are unwilling to sell needles to individuals if they suspect that they will be used for non-prescription drug use, creating an unnecessary barrier to people who inject drugs who are making harm-reduction attempts.

It is difficult to draw conclusions about trends in HIV rates in the Atlantic provinces as some have very low numbers of new cases. However, the compiled numbers for Prince Edward Island and Nova Scotia indicate a 50% increase in the number of new HIV cases between 2000 (n=16) and 2005 (n=32) and an increase in the proportion of those HIV cases that are attributed to injection drug use (6% in 2000 to 19% in 2005).

The numbers of HBV cases have fallen in all provinces except for Newfoundland and Labrador, where the numbers of new infections went from between two to four per year between 2000-03, to 25 in 2004. The number of new HCV cases in Newfoundland and Labrador also increased significantly – from 43 cases in 2000 to 78 cases in 2004, a 45% increase. Data from Newfoundland and Labrador indicate that between 2000 and 2005, the percentage of cases of HCV with injection drug use cited as a risk factor ranged from 24% to 35%.<sup>197</sup> A recently published HCV surveillance report from Nova Scotia found that injection drug use was identified as a risk factor in 59% of cases.<sup>198</sup> The increased injection of OxyContin may be responsible in large part for these increases in HBV and HCV cases.

Barriers to harm reduction persist in many areas of Atlantic Canada and include the following:

- There are inadequate substance abuse prevention programs that take a harm-reduction approach, particularly in terms of preventing those who are using substances from starting to inject.
- While there has been some increase in the number of harm-reduction services throughout Atlantic Canada, it is apparent that not all public policy decision makers in the region value harm-reduction approaches as an integral component of public health services. This is evidenced by the need for charitably funded NEP services to exist. Efforts are required to increase

public and policy maker understanding and commitment to harm-reduction values and services.

- There is a significant lack of available and accessible harm-reduction services including NEPs and MMT for people who inject drugs throughout the Atlantic region. This is a particular problem for many people who live in the rural areas of the region and for persons in correctional facilities. Many pharmacies are not operating under principles of harm reduction and are creating barriers to individuals who wish to purchase clean needles.
- Inmates take part in behaviours that place them at elevated risk for infectious diseases, given the prevalence of inject drug use in prisons. Significant policy and service delivery barriers remain for prisoners in accessing MMT and condoms, and NEPs are still not available in any correctional institutions.
- Currently operating NEPs are experiencing a dramatic increase in the demand for their services. Increased demand is not matched by corresponding increases in operating budgets. This is a particular problem for the NEPs which are funded only by the fund-raising efforts of charitable organizations. Although proven effective, public health services for people who use injection drugs, where they exist, are in jeopardy due to the lack of funding sustainability.
- The growing number of new methadone programs is a positive trend in Atlantic Canada, given the many benefits of methadone for people who inject drugs. However, access to methadone programs is still a major challenge, especially for individuals living in rural areas. Shortage of program space for individuals needing addictions treatment is a problem across Atlantic Canada, particularly for rural or small town communities.
- There is a lack of appropriate health services available and accessible to people who use injection drugs. Because of the stigma associated with injection drug use and the often judgmental attitudes of health care professionals, many people who inject drugs avoid seeking primary health care until they are very ill and need emergency help. Efforts are needed to better prepare and support primary health care professionals in providing comprehensive and consistent primary health care to people who inject drugs.
- Many youth use more than one drug (i.e., are “poly-drug users”), and they mix different drug types and tend to experiment more with all drugs that are available to them, as compared to older people who inject drugs. Younger people who inject drugs tend to do it as a social activity. Youth are more likely to inject drugs in public places and practice unsafe injection practices. They are also less likely to access addiction treatment services.
- There are insufficient youth- and women-focused addictions programs that take into account the particular needs and issues of these sub-populations.
- Generally, women who inject drugs tend to be younger than males, are more likely to be involved in the sex trade, and are more likely to experience a power imbalance in their relationships. This power imbalance impacts their

- access to drugs and to safer injection and sexual practices, and puts them at greater risk of infectious diseases such as HIV, HBV, and HCV. There is also gender inequity with respect to access to addictions treatment.
- Aboriginal people appear to begin using drugs at an earlier age and experience numerous barriers to participating in harm-reduction services including travel distance and the lack of culturally appropriate programs.
  - There is a lack of information about injection drug use among people of other ethno-cultural minorities in the Atlantic region, such as African Canadians, who face challenges in relation to higher-than-average unemployment and illiteracy rates as well as problems with inadequate housing, all of which increases their vulnerability for risk-taking behaviours.
  - There has been a rise in the number of people who inject prescription drugs, a trend that needs to be considered as collaborative work proceeds to implement comprehensive harm-reduction approaches.
  - Consumption of anabolic steroids was reported by 8% of youth aged 15-18 years across Cape Breton, and of those who used anabolic steroids, 17.6% reported injecting them.<sup>199</sup> The majority of these youth did not know about the NEP in their community and reported that they likely would not access its services.
  - There are major gaps in information about injection drug use, which if complete, would support program planning efforts. Specific gaps in information exist in understanding injection drug use within rural, Aboriginal, and African-Canadian populations. Further research would also be valuable for testing successful models of youth-centered, harm-reduction interventions, particularly with respect to the use of OxyContin.
  - Generally, the circumstances and contexts surrounding initiation into injection drug use requires more research, such as the role alcohol plays in the initiation into injection drug use in Atlantic Canada.
  - Additional research is needed to understand the reasons behind changes in the number of HIV, HCV, and HBV cases. Research would help assess if the numbers can be explained by changes in testing practices or by the success of awareness campaigns urging individuals to get tested.
  - With a few notable exceptions (such as the evaluation of Direction 180 in Halifax, Nova Scotia, or the evaluation of anonymous HIV testing in New Brunswick correctional facilities), higher quality program evaluations need to be undertaken in the Atlantic region to learn more about the efficiency and effectiveness of programs for people who inject drugs. Evaluating programs offers opportunities to improve existing programs and to identify effective practices to support the implementation of new programs. There is no common set of indicators related to injection drug use for the region, which would support a common approach to evaluation. One example of a program issue that requires more research is the impact of NEP policies on the (un)safe disposal of used needles. Strict enforcement of one-to-one exchange in NEPs

may result in increases in unsafe disposal of needles in the community. A better system of monitoring, tracking, and surveillance of NEPs, in particular the “exchange” component of the services, would assist in providing evidence of effectiveness and positive impact to key stakeholders, including those from the enforcement, health, and education sectors.

- There is no formal mechanism for ongoing knowledge sharing among the people who develop and provide services for people who inject drugs. Such a mechanism would help to increase the capacities of those presently working in this field and make it easier for new people beginning work with individuals who inject drugs to access the expertise of others.

## **PROGRAM AND POLICY GAPS**

Despite the progress that has been made, there remain significant issues related to injection drug use in Atlantic Canada that require urgent attention. This environmental scan highlights a number of trends and program and policy gaps that could inform future planning. The recommendations for future action emerge directly from the interview data and document the review findings of this environmental scan. They are grouped by stakeholder group for ease of reference and to facilitate targeted follow-up in improving services and policies that fall within each jurisdiction or mandate.

### **Substance Abuse Prevention**

Because many people begin injecting drugs in their teenage years, it is important that substance abuse prevention begins at a young age and thus needs to be primarily led by schools and parents. Substance abuse prevention strategies (including public awareness, education, skill development, social marketing, community action, and policy development) act together over time to shift attitudes, knowledge, behaviours, and social conditions in ways that reduce the chances that someone will begin misusing drugs in the first place, particularly youth, or will begin using them in more harmful ways, such as by injection.<sup>200</sup>

Teachers and parents need to have better access to training resources to help them identify when youth need addiction treatment, and how to access that treatment.

There are very few substance abuse prevention programs in Atlantic Canada which apply all of the best practice elements defined by Health Canada.<sup>201</sup> Many focus on the crime prevention elements of drug or alcohol use, and some are strongly abstinence-based rather than taking a harm-reduction approach. Programs need to be introduced (at least in senior high school)<sup>202</sup> that are grounded in the realities of drug use by youth, such as dispelling the mystique associated with injection, providing education about the health consequences of mixing different drug types, providing peer education and counseling, developing peer negotiation skills, building self-esteem, providing positive recreational alternatives to drug use, etc. Peer education and outreach would be a valuable method of providing harm-reduction education to people new to injecting drugs. Individuals more

*We need way more education on drugs in school. There should be drug counselors in schools and they should be bringing past drug users into the schools to speak to youth – this is one of the most effective ways to reach youth.*

Key informant

experienced in injection drug use, particularly those who use NEPs, could be encouraged to conduct collective needle exchange for youth who are new to injection drug use and to act as safer injection mentors.

The misuse of prescription medications indicates that improvements need to be made in the drug-prescribing practices of physicians in the Atlantic region; alternate pain management methods need to be explored for those who are legitimately suffering from pain.

### **Government Funders and Policy Makers**

Research evidence suggests that disease-prevention strategies need to connect social and economic factors with the health and well-being of society. These strategies could also be coordinated around a central vision of harm reduction and include all sectors of government and all levels of the community in their design and implementation. Specifically, a harm-reduction approach could be officially adopted into the planning and program delivery of all initiatives funded or delivered by the federal government, provincial/territorial governments, non-governmental organizations, and communities and in a variety of sectors, including public health, addictions, HIV/AIDS, HCV, Aboriginal peoples, corrections, mental health, social housing, justice, enforcement, education, and employment. Additionally, a harm-reduction approach can span addictions programs, education and corrections departments, as well as the health sector.

NEPs and MMT programs are important points of access to services for people who inject drugs, as demonstrated in part by the increasing number of people using NEPs. Many of the programs and services in existence are time-limited projects or are supported solely by the charitable fund-raising efforts of non-profit organizations. There are some organizations that are operationally funded to support people who inject drugs, but the majority of programs, particularly in the area of substance abuse prevention, are project-based, or are completely sustained by volunteers and fund raising. To ensure their continuity, services that support people who inject drugs need to be integrated into the ongoing operating budgets of regional health authorities and provincial governments. Essential harm-reduction services should be provided from a human rights perspective, rather than from a “charities” model of fund raising. To support effective harm-reduction programming, law enforcement jurisdictions might explicitly state that they do not monitor activities of NEPs, and that they support the harm-reduction model at least indirectly by steering clear of NEPs and their clients. In areas where community members do not support a harm-reduction approach, such as the provision of NEPs, it could be appropriate for the government to sponsor and deliver social marketing messages that educate the general public about the value of a harm-reduction approach and its benefits for the whole community.

Leadership and coordination is necessary to integrate a harm-reduction approach with law enforcement, justice, all levels of government, community groups, and others to enhance the implementation, accessibility, and effectiveness of NEPs and to address barriers in all settings in Atlantic Canada, including the consideration of pilot projects in correctional facilities.

To facilitate a coordinated approach to the implementation of desired actions, it would be helpful to have a mechanism to coordinate the efforts of the many partners in the region

who are working on these issues, such as through a regional harm-reduction network. In addition to maintaining linkages among programs and organizations, such a network could also facilitate partnership building among community organizations and researchers with common interests in researching specific injection drug use-related topics. Research priorities have been articulated for the Atlantic region; collaborative efforts are needed to secure the necessary funding to engage in the research.

### **Community Outreach and Needle Exchange Programs**

Outreach is integral to a harm-reduction approach. NEPs are a critical part of a comprehensive harm-reduction strategy. Atlantic Canada is in need of more NEPs, with particular attention paid to enhancing the availability of these services to people in rural areas and people in correctional facilities, and to ensuring the sustainability of currently provided services. Organizations providing outreach and NEPs should consider increasing the accessibility of their programs, exploring creative outreach mechanisms such as the facilitation of collective exchangers and people who inject drugs serving as “natural helpers,” who reach into injection drug use communities with harm-reduction knowledge and services. Organizations should also explore the modification of service delivery to take into account public injection settings, gyms and fitness clubs (for those who inject anabolic steroids), more culturally appropriate hours of operation (at least with evening and weekend hours), potential partnerships with pharmacies, and mobile injection sites. NEPs need to be located close to where drugs are sold and consumed. Training should be provided to pharmacists in the principles of harm reduction and they should be encouraged to partner with NEPs to expand access to clean injection equipment for people who inject drugs in communities across Atlantic Canada.

*We need to have more outreach workers, like street nurses, on the streets instead of in their cushy offices. We should also have drop-in centres where there people who know about the services available to addicts. They could also offer free care at this type of place.*

Key informant

*A lot more education is needed for pharmacists so that they won't turn people away or give you such a hard time when you go to buy needles. And you should be able to get needles at the hospital emerg 24/7 without having to answer a thousand questions.* Person who injects drugs

Some interviewees who participated in this environmental scan also called for the introduction of safe injection facilities staffed by nurses. Also, the reports of unsafe disposal of needles indicates that secure needle drop boxes in key injection areas could be installed in order to reduce risk for the general public.

Community-based organizations need to continue working to foster and increase harm-reduction initiatives; increase access to effective health, social, treatment, and rehabilitation services; and enhance social integration and reintegration (e.g., for prisoners returning to their communities upon release from a correctional facility). Also, ongoing efforts are needed to foster the involvement of people who inject drugs and drug user networks in reducing the harms associated with injection drug use. Finally, peer education, regarding subjects such as safer injection practices and purity testing for overdose prevention, is an area that could be further developed.

## Addiction Treatment

*There needs to be a safe house for women [who inject drugs] so that they can escape the cycles of addiction, sex trade and dependence on abusive partners.*

Key informant

Just like NEPs, the availability of, and accessibility to, a range of addiction treatment options is a major component of a harm-reduction approach. As noted in the document, *Reducing the Harms Associated with Injection Drug Use*,<sup>203</sup> a variety of options can be provided based on evidence of effectiveness, such as professional counseling, peer counseling, detoxification, and residential-based services. MMT is an effective means of reducing injection drug use, needle sharing, and the harm associated with injection of opiates as a criminal activity.<sup>204</sup> Some interviewees also called for more research about alternate forms of addiction treatment, since MMT is not effective

for everyone. Some suggested that other opiate replacement therapies be explored, such as providing addicts with a safe supply of the substance on which they are dependent, with fixed regulated doses provided by government. Addiction services need to ensure that programs and services meet the requirements of people who use drugs, including individuals with multiple substance abuse problems and mental illness, and take into account gender, age, geographic location, disability, and ethnicity. Also, substance misuse treatment and rehabilitation services need to be linked to medical care and treatment for HIV/AIDS, HBV, and HCV, as well as to adjunct services such as housing and employment.

MMT programs need to be increased to reach all areas of Atlantic Canada, and particularly, mechanisms need to be developed for the provision of MMT in rural or small town communities through local physicians and pharmacies. Consideration can also be given to an expansion of addiction services in general, based on a comprehensive approach to MMT that includes drug substitution, counseling, and community supports.

*There should be low threshold methadone programs that are more supportive of addicts. So, if they have dirty urine when on the methadone program – like with weed, crack, benzos – it should not affect their methadone program because they were there for their opiate addiction and we should only have to work at one stage at a time.*

Person who injects drugs

Existing MMT programs can make efforts to improve rules and regulations in order to remove any unnecessary barriers to the effective care of people who inject drugs. Government health officials and Colleges of Physicians and Surgeons can ensure that comprehensive services are available to persons who participate in MMT programs, including primary health care, counseling, education, and support services.

## Primary and Specialized Services

Expanded specialized health care services are needed, such as those offered by Mainline Needle Exchange in Nova Scotia in their project called “Taking it to the Streets,” which aims to improve access to health services that positively impact the health and well-being of people who inject drugs. The project’s two-person team goes to areas of Halifax known for high injection drug use to provide needle exchange services, offer peer

support, and facilitate access to other social and health services. Additional primary care clinics and outreach services are also valuable models for the provision of health services to people who inject drugs. Generally, safe and confidential health services need to be made available to those injecting drugs.

Many people who inject drugs report significant health problems as well as difficulties in accessing appropriate health care when they need it. Addressing this issue requires efforts to be made in educating and supporting health professionals to provide appropriate care to people who inject drugs. Curricula and on-the-job training for health and other relevant professionals should be provided to build sensitivity and awareness of injection drug use issues. Training can be provided to health professionals, particularly in the area of MMT, in collaboration with associations of health professionals and other relevant institutions. Also, special training could be provided for emergency room personnel to respond to crisis situations, such as overdose, so that persons in crisis have access to appropriate treatment by first-line service providers.

### **Corrections**

Pilot projects should be considered to make sterile injection equipment available in prisons where inmates inject illegal drugs.

Provincial jurisdictions can ensure that condoms, dental dams, and water-based lubricant are more easily and discreetly available. Federal prisons can ensure ongoing compliance with its stated policy that these supplies are discreetly available at all times. Safe tattooing could also be available in all prisons.

Consideration should be given to making MMT available not only to those who have initiated the treatment before entering prison, but also to those who wish to initiate treatment once incarcerated. MMT availability in prisons needs to be complemented by its availability in the community. Finally, for prisoners living with HIV or HCV, care and treatment needs to match the community standard of care, including palliative care, access to investigational drugs, and alternative therapies.

### **Research and Knowledge Sharing**

Information is a critical tool for people who work with those who inject drugs. Ongoing research about injection drug use is essential to provide evidence about current issues and effective interventions. Access to timely data about risk factors and diseases associated with injection drug use is necessary to support program planning. It is particularly important to have ongoing access to information from other regions and countries about alternative approaches that are being implemented and evaluated.

Access to reliable disease prevalence data is a gap in Atlantic Canada, often due to the limited resources that provincial health ministries are able to commit to disease surveillance activities. There are significant challenges experienced in Atlantic Canada around disease surveillance, including the lack of human resources necessary to support surveillance systems, lack of proactive testing of all at-risk populations, and lack of an integrated national database that links public health information with treatment information and other health data.<sup>205</sup>

Regional partners should develop a framework for reporting regularly, using agreed-upon indicators, on injection drug use and its consequences, develop the tools necessary to collect and disseminate the relevant data and information, and monitor progress made to address this critical issue. There is room for improvements in the surveillance of the injection drug use situation and its consequences in Atlantic Canada through data collection, targeted studies, and research to assess causes, co-factors, and effectiveness of interventions. Research is needed to enhance knowledge dissemination and education regarding injection drug use, its determinants, and its health and social effects for health and social service professionals, public policy decision makers, enforcement and justice officials, persons who inject drugs, inmates in correctional facilities, and the community at large. Research could also be conducted to understand public attitudes regarding harm-reduction principles and specific harm-reduction strategies.

## APPENDIX ONE: DEFINITION OF TERMS AND CONCEPTS

One important way to lessen the stigmatization of individuals who inject drugs is to avoid labels that generically classify all people who use psycho-active drugs into one category. The following are some useful definitions from the Canadian Society of Addiction Medicine<sup>206</sup> that clarify the continuum of drug use patterns as well as the health or medical (versus criminal) framework within which drug use is discussed throughout this document.

**Psychoactive Substance:** A substance that affects thinking (cognitive), feeling (affective), and/or perceptual processes of the brain. Examples include depressants, stimulants, hallucinogens, opioids, inhalants, etc.

**Substance Abuse:** A medical diagnosis, as specified in the *Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition* (DSM IV), referring to the excessive use of a drug whereby it creates problems for the individual and/or others. The individual continues to use the drug despite these negative consequences – physical, mental, social, emotional, legal, or economic. An individual may abuse different drugs without necessarily developing a physical or psychological dependence on them.

**Substance Misuse:** Use of any legal, prescription, or over-the-counter (OTC) substance for a purpose not consistent with legal guidelines or medical recommendations for dosage intervals or amounts.

**Addiction:** A primary, chronic disease characterized by impaired control over the use of a psychoactive substance and/or behaviour. Clinically, the manifestations occur along biological, psychological, sociological, and spiritual dimensions. Common features are change in mood, relief from negative emotions, provision of pleasure, pre-occupation with the use of substance(s) or ritualistic behaviour(s), and continued use of the substance(s) and/or engagement in behaviour(s) despite adverse physical, psychological, and/or social consequences. Like other chronic diseases, it can be progressive, relapsing, and fatal. Drug addiction refers to a psychological and/or physical need to take a drug on a regular basis to experience the drug's effects and to avoid the discomfort of its absence (withdrawal). Addiction is usually characterized by drug-seeking behaviour whereby the individual continues to use the drug despite negative consequences.

**Drug Dependence:** Psychological and/or physical dependence on a drug resulting from the use of that drug on a periodic or continuous basis. This dependence is usually characterized by tolerance and withdrawal symptoms. An individual who uses the drug feels unable to function without taking the drug.

**Injection Drug Use:** The consumption of drugs by injection with a needle and syringe. Injection may be intramuscular, as in anabolic steroid use, or subcutaneous (also known as “skin popping”), as with some heroin use. Most people who inject drugs practice intravenous injection. Although intravenous injection is somewhat difficult to execute, injection creates faster delivery of the drug effect and causes less local tissue damage (which can occur when injecting relatively impure black market drugs intramuscularly or subcutaneously).



## **APPENDIX TWO: METHODOLOGY**

### **DESCRIPTION OF THE SAMPLE FOR THE ENVIRONMENTAL SCAN**

The environmental scan was conducted in the four Atlantic provinces both to provide a regional perspective on injection drug use and to highlight provincial differences across the region. Independent evaluation consultants were contracted to conduct the environmental scan including instrument development, data collection, data analysis, and writing of the final report. The consultants worked closely with staff of the Atlantic Regional Office of the Public Health Agency of Canada and the Advisory Committee throughout the project. The study used qualitative research methods including one-on-one telephone interviews with people (key informants) who work regularly with people who inject drugs, and face-to-face interviews with people who inject drugs. Each of these methods is described separately below.

### **KEY INFORMANT INTERVIEWS**

#### **Instrument Development**

The evaluation consultants designed a telephone interview guide for key informants based on input from the Advisory Committee and the data collection tools used for the 2000 environmental scan. The Advisory Committee provided feedback on a draft version of the telephone interview guide, which was incorporated into the final version. The final version of the Key Informant Interview Guide is in Appendix Three.

#### **Sample Selection**

A purposive sampling approach was used to establish the sample of key informants for the study. In particular, a maximum variation sampling approach was used, which is defined by Patton as a method that “aims at capturing and describing the central themes or principal outcomes that cut across a great deal of participants or program variation.”<sup>207</sup>

In order to generate the key informant sample, Advisory Committee members provided the consultants with the names of individuals who work with people who inject drugs. The compiled list of potential participants included 78 names. The resources available for the study limited the number of key informants to 50. In order to select key informants from the list of 78 names, the Advisory Committee agreed that the sample of 50 key informants should be representative of the four Atlantic provinces, corresponding to the percentage of funding that is supplied to each of these provinces by the Atlantic Regional Office of the Public Health Agency of Canada for the AIDS Community Action Program (ACAP). The ACAP funding percentages and corresponding sample size for the study are:

- New Brunswick: 26%, 13 cases,
- Newfoundland and Labrador: 24%, 12 cases,
- Nova Scotia: 36%, 18 cases, and
- Prince Edward Island: 14%, 7 cases.

The Advisory Committee also suggested that it would be helpful to ensure that key informants in varying types of occupations were interviewed. To achieve this diversity for each province, potential key informants were categorized by the operational characteristics of their organization (community-based organization, government, or research organization) and also by their activity or service type (substance abuse prevention, outreach, addiction treatment, or health services).

Because there were more potential key informants than necessary, the total list of potential key informants by organization category was subjected to a random sampling process using an on-line random sample generator ([www.epri-peac.com/calculators/random.html](http://www.epri-peac.com/calculators/random.html)). After this process, no further modifications were required to distribute the cases adequately by province.

## **Interviews**

All key informants selected for the interviews were contacted via e-mail and invited to participate in the project. For participants without an e-mail address, contact was made via telephone. At least two follow-up telephone calls were made to people who did not respond to the first contact attempt.

All interviews were conducted via telephone by an experienced interviewer. Key informants were provided with a copy of the questions in advance of the interview. While all key informants were offered the option to undertake the interview in French, no one elected to do so. Participants were informed that responses from the interviews would not be directly attributed to specific individuals in any reporting of the data and that sample quotes used for illustration purposes in the final report would not identify respondents.

Throughout the interview, the interviewer used a scripted guide that included probes to further investigate questions. Detailed notes were taken during the interview, and post-interview notes and observations from the interviewer were compiled within 30 minutes of each interview.

## **Challenges**

Considerable time and effort was expended attempting to contact key informants. The interviewer went beyond the agreed-upon process to reach as many of the key informants as possible, sometimes making up to 10 telephone contact attempts. After multiple contact attempts over a four-week period, the response rate of the key informant sample was only 21 out of 50 potential participants. It was agreed by the Advisory Committee to expand the sample to include all of the original 78 names generated by Committee members, and an additional 43 names were added to the list. In total, 121 people were contacted and invited to participate. With the expanded list and assistance from members of the Advisory Committee to solicit participation, the interviewers were able to complete 48 interviews for the study.

Of the original 50 key informants, 11 declined to participate, 10 referred the interviewer to another person in their organization, and nine agreed to participate but were not available at the time scheduled for interview. Multiple attempts were made to reschedule interviews with those who were unable to participate at the scheduled time; however, only two of those key informants were successfully interviewed. Of the additional 71

key informants who were contacted, 11 declined to participate, 10 referred the interviewer to another person, and two agreed to participate but were not available at the scheduled time, nor were they able to participate later. Of the 121 key informants, 25 did not return e-mails or respond to voice mail messages. Other situations encountered included one key informant who had retired; another who was already involved in a separate component of the project and therefore declined to participate; one who agreed to participate by completing the survey electronically, but failed to submit the completed survey; and two who requested and received confirmation from the Atlantic Regional Office of the Public Health Agency of Canada that the project was valid, yet still failed to participate.

Because of the initial low participation rate, the carefully constructed sample that ensured regional and occupational variation in the key informant interviews was compromised with the addition of 71 names. Despite this change, representation across the Atlantic provinces ended up being very similar to the original plan as shown in Table A1.

<b>Table A1: Key Informant Interviews: Planned vs. Completed</b>				
<b>Province</b>	<b>Number of Interviews Planned</b>	<b>% of Total</b>	<b>Number of Interviews Completed</b>	<b>% of Total</b>
New Brunswick	13	26%	13	27%
Newfoundland and Labrador	12	24%	9	19%
Nova Scotia	18	35%	19	39%
Prince Edward Island	8	15%	7	15%
<b>Total</b>	<b>51</b>		<b>48</b>	

## **INTERVIEWS WITH PEOPLE WHO INJECT DRUGS**

Originally, the Advisory Committee planned to hold a focus group in each province with people who inject drugs. Upon further discussion, it was agreed that one-on-one interviews would be more effective, particularly if they were conducted by persons from community-based organizations who had already established trusting relationships with people who inject drugs.

The Atlantic Regional Office of the Public Health Agency of Canada issued a call for people who would be willing to conduct the interviews with people who inject drugs. Individuals from the following communities agreed to carry out interviews for the project:

- New Brunswick: Moncton, Saint John
- Newfoundland and Labrador: St. John's
- Nova Scotia: Halifax, Sydney
- Prince Edward Island: Charlottetown.

The Public Health Agency of Canada provided funds to pay the interviewers and to provide an honorarium to each of the people who participated in the interviews.

## Instrument Development

The consultants created an interview guide designed to collect information complementary to the information being collected in the key informant interviews. The guide was reviewed in detail with the interviewers during a teleconference. The final interview guide incorporated feedback from the Advisory Committee and the interviewers. A copy of the final version of the interview questions for people who inject drugs can be found in Appendix Three.

All interviewers participated in a teleconference with the evaluation consultant to ensure consistency in use of the data collection instrument. Interviews were not recorded, so as to increase the comfort level of participants. Instead, the interviewers took detailed notes which were submitted to the evaluation consultants for analysis.

## Sample Selection

During the teleconference with the evaluation consultant, interviewers agreed to select their own candidates for interviews. Interviewers attempted to interview people with knowledge about the community of people who inject drugs. In addition, interviewers tried to interview people of different genders, ages, and geographical locations (e.g., urban vs. rural). The distribution of interviewees across the Atlantic region is shown in Table A2.

<b>Province</b>	<b>Number of Interviews Planned</b>	<b>Number of Interviews Completed</b>
New Brunswick	12	12
Newfoundland and Labrador	10	10
Nova Scotia	18	18
Prince Edward Island	10	10
<b>Total</b>	<b>50</b>	<b>50</b>

## DATA ANALYSIS

The interviewers' notes from the interviews were subjected to thematic analysis. The results from the close-ended questions from the key informant interviews were presented as frequencies in table format or bar graphs with accompanying text. Microsoft Word was used to record qualitative information. Microsoft Excel was used to record quantitative information to enable tabulations and charts.

As the analysis was conducted, the data were compared and contrasted to the data from the 2000 environmental scan. In addition, the data were analyzed for provincial themes that differ from the Atlantic region themes.

## APPENDIX THREE: DATA COLLECTION TOOLS

### ENVIRONMENTAL SCAN INTERVIEW GUIDE FOR KEY INFORMANTS

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#### **Purpose**

The purpose of the interviews is to assess stakeholder opinions about:

- prevalence and distribution of injection drug use;
- the profile of people who use injection drugs including health status, age, risk behaviour, knowledge of status, types of drugs being used;
- the impact of determinants of health and social inequities on injection drug use; and
- to identify ongoing programs and initiatives that serve people who inject drugs.

#### **Process**

Identified interview candidates will be contacted initially by e-mail to request their participation in a 60 minute telephone interview. Interview candidates indicating their willingness to participate in the interview will be offered the opportunity to schedule a mutually convenient time for the interview and a copy of the interview questions will be sent to them electronically. Interview candidates indicating that they are unwilling to participate in an interview will be thanked for their time and no further contact will be made; and interview candidates not reached by e-mail the first time will be re-contacted within one week and an attempt will be made to contact via telephone as well. All interviews will be conducted via telephone. Detailed notes will be taken during the interview, and post-interview notes and observations from the interviewer will be compiled within thirty minutes of each interview. Responses from the interviews will not be directly attributed to specific individuals in any reporting of the data. Although working with a small sample, every effort will be made to ensure that sample quotes used for illustration purposes in the final report do not identify respondents specifically. The script to guide the interviewer is shown in italicized text. Questions to be asked of the interviewees are shown in bold text. Instructions to the interviewer are in capital letters.

#### **Introduction**

Hello, my name is <interviewer name>. Thank you very much for agreeing to take part in an interview about injection drug use in Atlantic Canada. The interviews that we are conducting are part of a project coordinated by the Public Health Agency of Canada to help us gain a better understanding of the issues related to injection drug use in the Atlantic region. As part of this project, we are conducting interviews with a number of people throughout the region who are working or volunteering with programs or projects that work with people who inject drugs. The information that we are collecting will help governments and community-based organizations make decisions about future priorities for services and programs for people who use injection drugs.

We are interviewing about 50 people who work with people who inject drugs for this project. We will also be talking to a number of people who inject drugs. The responses from ALL of the interviews will be combined in a report about injection drug use in Atlantic Canada, so any comments that you make during the interview will not be connected to your name in any way. We will put a list of the names and organizational affiliations of people who participated in the interviews in the Appendix of the report, however no specific comments will be associated with anyone's name. Before I begin asking you the interview questions, do you have any questions for me?

## **Interview Questions**

I would like to start off the interview by asking you about the work that you do related to injection drug use. Occasionally I will use the word 'community.' When I say the word 'community,' I am referring to the community of people that you work with.

1. What is your role related to injection drug use?
2. Can you describe for me the community that is served by the work of your organization?

PROBE: For example perhaps your organization serves a particular population such as women, or perhaps it is defined by a geographic location.

3. In what type of setting does your work with people who inject drugs take place?

PROBE: Examples of settings might include a correctional facility, street-outreach, community-based clinic, needle exchange, community-based HIV or Hepatitis organization, out-patient addiction service, detox/rehab centre, police department.

4. As part of this project, we are trying to create an inventory of services and programs related to injection drug use. To make it easier to organize the inventory, we have identified four different categories. I am going to read the four categories to you, and then I am going to ask you to identify which categories best describe the type of work that your organization does to related injection drug use. You may find that your work fits into more than one category, which is fine.

Primary Prevention: Primary prevention initiatives mainly focus on preventing injection drug use before it begins. Examples of primary prevention initiatives include school-based programs to prevent substance abuse or initiatives with health clubs to raise awareness about injecting steroids.

Outreach Initiatives: Outreach initiatives include activities designed to make contact with people who use injection drugs and reduce the harm associated with drug use, injecting and sharing or re-using needles. Examples of outreach initiatives include needle and syringe exchange programs, education and support programs to reduce the harms associated with re-using needles and equipment, or social supports such as providing access to safe housing.

Addiction Treatment Services: Addiction treatment services vary widely and can include assessment services, residential programs, day programs, withdrawal management services or opiate replacement programs.

Health Services for People Who Inject Drugs: People who inject drugs that have HIV, Hepatitis C or both access treatment either through primary care, such as a family physician or through specialized treatment care.

Which of these categories best describes the work that your organization does related to injection drug use? CHECK ALL THAT APPLY.

- \_\_\_\_\_ Primary Prevention
- \_\_\_\_\_ Outreach
- \_\_\_\_\_ Addiction Treatment Services
- \_\_\_\_\_ Health Services for People Who Inject Drugs
- \_\_\_\_\_ None of the above apply ASK RESPONDENT TO EXPLAIN WHY:

PROBE: We are interested in specific details about the programs and projects that you and/or your organization have underway that meet the needs of people who inject drugs. This can include your programs or projects that have a broader audience than people who inject drugs if those particular programs benefit people who inject drugs.

5. For each program or project that you have, could you please tell me the project or program name and a brief description of the goal and target population? We are also interested in the approximate number of people who inject drugs that were served by the program in the last year.

Project/Program Name	Goal and Population Served	Category (primary prevention, outreach, addiction treatment, health services)	Estimated # of People Who Inject Drugs Served in the Last Year

6. What other groups or organizations in your community do work related to injection drug use?

FOR EACH PROGRAM NAMED, ASK FOR A CONTACT NAME AND PHONE NUMBER AND/OR E-MAIL ADDRESS IF AVAILABLE. USE REVERSE OF THIS PAGE IF MORE SPACE IS NEEDED.

Organization Name	Contact Name	Phone/E-mail

7. What other programs do you feel are needed to address injection drug use in your community?

8. In your experience, what have been the most successful programs for people who inject drugs in your community?

PROBE: For example, peer counselling, street outreach, or specific addictions treatment programs.

9. As you know, some programs work better than others. In your experience, what activities or programs have been less successful for people who inject drugs in your community?

I would now like to ask for your thoughts about current trends that you have observed related to injection drug use in your community. Remember, when I say the word 'community', I am referring to the community of people that you work with.

10. When you think about injection drug use in your community, what would you say has changed over the last four or five years?

PROBE: Examples of potential changes might be in the numbers of people using injection drugs, the age range of people using injection drugs, the type of drugs being used, the places where people inject, the number of needle exchanges.

11. What do you estimate to be the number of people who inject drugs in your community?

12. What information did you use to come up with your estimate of the number of people who inject drugs in your community?

PROBE: Examples of types of information that people might use to help them come up with their estimates might be the number of needles accessed through a needle exchange program, number of people seeking treatment of addiction or number of drug-related arrests.

We are trying to create a profile of people who inject drugs in Atlantic Canada, including details such as sex, age, types of drugs being used and so on.

13. To your knowledge, what drugs are people injecting in your community?

14. What would you say are the top three drugs being injected in your community?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

15. I am going to read you a list of places where people inject drugs. For each one, please tell me by answering 'yes' or 'no' which ones are settings in your community where people inject drugs. If you are not sure about any of the items that I read, please feel free to say 'unsure'.

Setting	Yes	No	Unsure
The street			
Private home			
House parties			
Bars/pubs/clubs			
Shooting galleries			
Crack houses			
Correctional facilities			
Detox/Addiction Treatment Centres			
Public Schools			
Community College/University			

Other settings, please specify:			
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16. To your knowledge, of all the settings where people inject drugs what would be the three most common settings in your community?
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
17. (a) Are you aware of any differences in the injection drug use activities of male and female people who use injection drugs in your community?  
 PROBE: Differences could include things like type of drugs used, drug use patterns, overall numbers - perhaps more people of one sex than another.
- (b) Research about the differences in injecting behavior between men and women has found that some women are injected by their partners, sometimes unwillingly. In your opinion, is this an issue for the women who inject drugs in your community?
18. I would like to read for you a series of age categories. After I have read them, I will ask you which are the three most common age groups of people who inject drugs in your community. READ LIST OF AGE RANGES BELOW.
- (a) In your experience, which of the age ranges that I just read would represent the greatest proportion of people who inject drugs in your community?  
 PLACE NUMBER 1 NEXT TO SELECTED AGE RANGE OR: UNSURE.
- |                           |                         |
|---------------------------|-------------------------|
| _____ 17 years or younger | _____ 45-54 years       |
| _____ 18-24 years         | _____ 55-64 years       |
| _____ 25-34 years         | _____ 65 years or older |
| _____ 35-44 years         |                         |
- (b) What age range would be the second most common age range for people who inject drugs in your community?  
 PLACE NUMBER 2 NEXT TO SELECTED AGE RANGE OR CIRCLE  
 UNSURE HERE: UNSURE
- (c) What age range would be the third most common age range for people who inject drugs in your community?  
 PLACE NUMBER 3 NEXT TO SELECTED AGE RANGE OR CIRCLE  
 UNSURE HERE: UNSURE
19. Are you aware of any differences in the injecting drug use activities of people of different ages?  
 PROBE: Examples of patterns could be type of drugs used, settings where drugs are injected, or where they get their drugs.
20. Are you aware of any trends or patterns related to the age of people who use injection drugs in your community?  
 PROBE: Examples of trends could be change in the age when people first start using injection drugs or age-related trends in the use of services such as needle exchanges.

21. Do you know if there are any differences in the injection drug use activities of people from different ethnic or cultural communities? If so, could you please describe the differences?

22. Are you aware of any urban/rural differences in injection drug use activities?  
 PROBE: For example are the drugs of choice or settings for injecting drugs different in rural areas compared to cities?

As part of this project, we are trying to gain a better understanding about some of the potential risk activities of people who inject drugs in the Atlantic provinces. I am now going to read you a list of activities associated with injection drug use.

23. For each of the activities that I read, please estimate the percentage of injection drug users in your community that you estimate are engaging in these activities. For this question we are using the following percentages 0%, 25%, 50%, 75% and 100%. If when I read an item you are unsure about the percentage of people who inject drugs in your community who might be engaging in the activity, please just say 'unsure.'

ACTIVITIES: What percentage of people who inject drugs in your community:	UNSURE	0%	25%	50%	75%	100%
Share used needles						
Share needles cleaned with bleach						
Always use a new needle						
Share spoons, filters, water, snorting equipment etc.						
Front or back loading, rinsing, dividing, splitting (i.e. transferring part of the drug solution from one syringe to another such as by removing the plunger or needle of the second person's syringe)						
Booting (i.e. drawing of blood back into the syringe and re-injecting one or more times)						
Unsafe sex with regular sexual partners						
Unsafe sex with casual sexual partners						
Unsafe sex with sex trade clients or workers						
Involved in the sex trade						
Have been tested for HIV						
Have been tested for Hepatitis B						
Have been tested for Hepatitis C						

24. (a) Is there anything else that you can tell us about unsafe injection or unsafe sexual behaviours among the people who inject drugs in your community?  
 (b) What can you tell us about unsafe household behaviours, such as sharing razors?

25. (a) What percentage of your community would you estimate smoke crack cocaine?

(b) What proportion of the people in your community who smoke crack cocaine would also inject drugs?

26. Can you tell us anything about safe practices in your communities?

We are interested in learning about the proportion of people who use injection drugs that seek testing for HIV, Hepatitis B and C.

27. Approximately what percentage of people who inject drugs that you work with have

- (a) disclosed to you that they have been tested for HIV: \_\_\_\_\_
- (b) disclosed to you that they have been tested for Hepatitis B: \_\_\_\_\_
- (c) disclosed to you that they have been tested for Hepatitis C: \_\_\_\_\_
- (d) disclosed that they have not been tested: \_\_\_\_\_
- (e) not disclosed whether or not they have been tested: \_\_\_\_\_

One of the objectives of the project on which we are working is to explore the relationship between social and economic inequities and injection drug use in Atlantic Canada. Social and economic exclusion happens when people don't have and can't get the education, jobs, decent housing, health care and other things they need to live comfortably, to take part in society and to feel that they are valued and respected members of their community. Social and economic exclusion creates inequity. Inequity occurs when things are unfair or unjust. For example, the gap between rich and poor, lack of access to housing and education and low levels of social support. There can be inequities because of gender, race, income, resources and other social and economic factors. Inequity has an impact on all of the factors that make a person or a community healthy or unhealthy. I would like to ask you to think about the people who inject drugs in your communities and what you know about their life circumstances such as where they live, if and where they are employed, their educational background and their family situation.

28. What do you think are the barriers that impact people who inject drugs in your community? In other words, what are the social and economic inequities they face?

PROBE: Examples of barriers might be related to housing, employment, or discrimination.

29. Finally, we are interested in reviewing any reports or other documents related to injection drug use in Atlantic Canada that have been published since the year 2000.

Are you aware of any such reports or documents and how we might obtain a copy?  
OBTAIN TITLE OF DOCUMENTS, AUTHOR IF AVAILABLE AND SOURCE.  
RECORD ON REVERSE OF THIS PAGE.

30. Before we end the interview, is there anything else that you would like to add about injection drug use in Atlantic Canada that you think might be helpful to our project?

I would like to thank you very much for your time and for sharing your experience and expertise with us. As I mentioned when we began the interview, all of the data we collect

through interviews will be used to help us write a report about the current picture of injection drug use in Atlantic Canada. The report will be available through the Public Health Agency of Canada later this year. Once again, thank you very much for your time.

## QUESTIONS FOR PEOPLE WHO USE INJECTION DRUGS

### Purpose

The purpose of the interviews is to assess stakeholder opinions about:

- prevalence and distribution of injection drug use,
- the profile of people who use injection drugs including health status, age, risk behaviour, knowledge of status, types of drugs being used,
- the impact of determinants of health and social inequities on injection drug use, and
- to identify ongoing programs and initiatives that serve people who inject drugs.

### Process

Community-based organizations with experience in working with people who inject drugs will recruit and interview people who inject drugs. An honorarium of \$25 will be provided to interviewees to honor their contribution to the project.

People who will be conducting interviews will participate in a conference call with the project contractor to ensure consistency in approach to data collection and note taking. The interviewer will take detailed notes during the interview, and post-interview notes and observations from the interviewer will be compiled within thirty minutes of each interview. Interviews will not be recorded.

Responses from the interviews will not be directly attributed to specific individuals in any reporting of the data.

### Interviewer Details

Name of Interviewer: \_\_\_\_\_

Phone Number: \_\_\_\_\_ e-mail address: \_\_\_\_\_

### Interviewee Details

City, Town or Community: \_\_\_\_\_

Province: \_\_\_\_\_

Date of Interview: \_\_\_\_\_

Sex of Interviewee: \_\_\_\_\_ Age of Interviewee: \_\_\_\_\_

### Introduction

Points to be made by the interviewer in their introduction are:

- The interview is part of a project about injection drug use in Atlantic Canada.
- The project is coordinated by the Public Health Agency of Canada.
- For the project, we are interviewing both people who inject drugs and people who work in programs for people who inject drugs.
- The information that we are collecting will help governments and community-based organizations make decisions about future priorities for services and programs.
- The responses from ALL of the interviews will be combined in a report about injection drug use in Atlantic Canada.

- Any comments that you make during the interview will not be connected to your name in any way. We may use direct quotes in the report, however no specific comments will be linked to anyone's name.
- If there are any questions that you don't want to answer, just tell me. You are also free to end the interview at any time, and
- Before I begin asking you the interview questions, do you have any questions for me?

## **Interview Questions**

1. What has changed about injection drug use in your community over the last few years?  
 PROBE: Examples of changes might be in the numbers of people using injection drugs, the age range of people using injection drugs, the type of drugs being used, the places where people inject, the number of needle exchanges, easier or harder to get drugs and/or needles.
2. What drugs are being injected in your community today?
3. What would you say are the top three drugs that people are injecting in your community?
4. Where are the most common places that people inject drugs in your community?
5. How do most people in your community get their drugs?  
 PROBE: Buy them, trade sex for drugs, crime.
6. Where do most people in your community get their needles for injecting?
7. Do women and men inject drugs in different ways? In different locations? In different sites on the body? Are there any other differences between men and women who inject drugs?  
 PROBE: Differences could include things like type of drugs used, differences in the number of men or women injecting drugs, or special issues faced by women such as being injected by partners.
8. (a) In your experience, what is the age range of people who use injection drugs in your community? (b) What do you think is the average age of most of the people in your community who inject drugs?
9. Are there any differences between older and younger people who inject drugs? Do older and younger people inject drugs in different ways? In different locations? In different sites on the body?  
 PROBE: Examples of differences could be type of drugs used or how often drugs are used.

10. In your experience, have you noticed a difference in injection drug use in the city compared to smaller communities?

PROBE: For example are the available drugs or settings for injecting drugs different in smaller communities compared to cities?

11. Do you think people in your community are aware of the risks related to:  
(interviewer to circle yes or no)

- |                |     |    |
|----------------|-----|----|
| a. HIV         | Yes | No |
| b. Hepatitis B | Yes | No |
| c. Hepatitis C | Yes | No |

12. What can you tell me about unsafe injecting behaviours in the community?

13. What can you tell me about unsafe sexual behaviours in the community?

14. Are you aware of any other activities happening in your community that are putting people at risk for HIV or Hepatitis B or C?

15. If you were going to give advice to the government about meeting the needs of people who inject drugs, what would you tell them is needed?

Thank you very much for sharing your time and experience.

**ATLANTIC CANADA INJECTION DRUG USE ENVIRONMENTAL SCAN  
PROVINCIAL EPIDEMIOLOGY SURVEY**

Please return by May 6, 2005 via fax to (902) 866-0699  
 You may obtain an electronic copy of this document by  
 sending an e-mail request to iduscan@pmcs.ca

1. Your name: \_\_\_\_\_ Title: \_\_\_\_\_

2. Department: \_\_\_\_\_ Tel #: \_\_\_\_\_ Fax #: \_\_\_\_\_

3.(a) Statistics and Surveillance: HIV/AIDS Cases to Date

Reporting time frame: From: \_\_\_\_/\_\_\_\_ (mm/yy) To: \_\_\_\_/\_\_\_\_ (mm/yy)

Total HIV/AIDS Cases to Date*	# cases	% total
Gender:		
Male		
Female		
Unspecified		
Risk Factors:		
History of IDU		
Unspecified		
*Please include both HIV and AIDS cases, removing duplicates where possible.		

(b) History of Injection Drug Use as a Risk Factor by Year of HIV/AIDS Diagnosis

Year of HIV/AIDS Diagnosis	# cases with IDU history	% total cases diagnosed in year
Before 1990		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005 (to: _____ specify month)		

4. Do you have any comments regarding trends or patterns in HIV/AIDS epidemiology among people who inject drugs in your province?

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5.(a) Statistics and Surveillance: Hepatitis B Cases to Date

Reporting time frame: From: \_\_\_\_/\_\_\_\_ (mm/yy) To: \_\_\_\_/\_\_\_\_ (mm/yy)

Total Hepatitis B Cases to Date*	# cases	% total
Gender:		
Male		
Female		
Unspecified		
Risk Factors:		
History of IDU		
Unspecified		

(b) History of Injection Drug Use as a Risk Factor by Year of Hepatitis B Diagnosis

Year of Hepatitis B Cases to Date	# cases	% total
Before 1990		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005 (to: ___ specify month)		

6. Do you have any comments regarding trends or patterns in Hepatitis B epidemiology among people who inject drugs in your province?

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7.(a) Statistics and Surveillance: Hepatitis C Cases to Date

Reporting time frame: From: \_\_\_\_/\_\_\_\_ (mm/yy) To: \_\_\_\_/\_\_\_\_ (mm/yy)

Total Hepatitis C Cases to Date	# cases	% total
Gender:		
Male		
Female		
Unspecified		
Risk Factors:		
History of IDU		
Unspecified		

(b) History of Injection Drug Use as a Risk Factor by Year of Hepatitis C Diagnosis

Year of Hepatitis C Diagnosis	# cases with IDU history	% total cases diagnosed in year
Before 1990		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005 (to: _____ specify month)		

Do you have any comments regarding trends or patterns in Hepatitis C epidemiology among people who inject drugs in your province?

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9. Age distribution of HIV/AIDS, Hepatitis B, and Hepatitis C Cases with injection drug use as a risk factor:

Age Group at Diagnosis (IDU as risk factor):	# HIV/AIDS cases	# Hepatitis B cases	# Hepatitis C cases
< 15 years			
15 - 19 years			
20 - 29 years			
30 - 39 years			
40 - 49 years			
50 - 59 years			
60+ years			
Unspecified			
TOTAL CASES			

10. Is there any thing else you can tell us about the prevalence of HIV, Hepatitis B, Hepatitis C, or other communicable diseases (e.g. TB) among the people who inject drugs in your province?

—

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History of Provincial Deaths Due to Drug Overdose by Year

Year of Diagnosis	# cases with IDU history	% total cases diagnosed in year
Before 1990		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005 (to: _____ specify month)		

12. The final report of the environmental scan will include a listing of research, reports and other recent documents related to injection drug use in the Atlantic region. Please list any documents or reports that contribute to a greater understanding of injection drug use and communicable diseases (e.g. HIV/AIDS, Hepatitis B, Hepatitis C) in your province.

Title of Document:	Author/Organization:	How to Obtain:
--------------------	----------------------	----------------

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

13. Do you have any additional comments?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please return questionnaire by fax by April 30, 2005 to (902) 866-0699.  
Thank you for your time and collaboration!



## **APPENDIX FOUR: KEY INFORMANTS**

Bea Arsenault, Mainline Needle Exchange, Halifax, Nova Scotia

Claudette Arsenault, Addictions Services, New Brunswick

Kim Baldwin, Addictions and Mental Health, Department of Health and Community Services, St. John's, Newfoundland and Labrador

Larry Baxter, AIDS Coalition of Cape Breton, Halifax, Nova Scotia

Trish Chevie, Prince Edward Island Legal Aid, Charlottetown, Prince Edward Island

Cindy Coles, Hepatitis Outreach Society, Sydney, Nova Scotia

Preseley Connelly, Injection Steroid Project, AIDS Coalition of Cape Breton, Sydney, Nova Scotia

Carolyn Davison, Prevention and Treatment Services, Department of Health Promotion and Protection, Halifax, Nova Scotia

Julie Dingwell, AIDS Saint John, Saint John, New Brunswick

Margaret Dykeman, Community Health Clinic, Fredericton, New Brunswick

Val Elson, Addictions Services, Grand Falls, Newfoundland and Labrador

Mahnaz Farhang-Mehr, Communicable Disease Prevention, Department of Health, Halifax, Nova Scotia

Haley Flaro, AIDS New Brunswick, Fredericton, New Brunswick

Monique Fong, Healing Our Nations, Dartmouth, Nova Scotia

Barb Gibson, AIDS PEI, Charlottetown, Prince Edward Island

Allan Greene, Murphy's Pharmacies, Parkdale, Prince Edward Island

Carolyn Hapgood, C Step Program, John Howard Society of Newfoundland and Labrador, St. John's, Newfoundland and Labrador

Nancy Hicks, Ridgewood Addiction Services, Atlantic Health Sciences Centre, Saint John, New Brunswick

Geri Hirsch, Hepatology Services, Capital District Health Authority, Halifax, Nova Scotia

Dr. Lois Jackson, Dalhousie University, Halifax, Nova Scotia

Blair Kasouf, Addiction Services, Sydney, Nova Scotia

Sarah Kinney, Youth H.O.P.E. Program, John Howard Society of Greater Moncton, Moncton, New Brunswick

Barb Lacey, Addictions and Mental Health, Western Hospital, Alberton, Prince Edward Island

Bonnie Lambert, Ridgewood Addiction Services, Atlantic Health Sciences Centre, Saint John, New Brunswick

Wanda Livingston, Safe Haven Program, Charlottetown, Prince Edward Island

Valerie MacCallum, John Howard Society, Fredericton, New Brunswick

Cindy MacIsaac, Direction 180, Halifax, Nova Scotia

Jeannine MacNeil, Stepping Stone, Halifax, Nova Scotia

Maryann MacNeil, Drug Awareness Coordinator, RCMP New Brunswick Division, Fredericton, New Brunswick

Marvin McNutt, Department of Justice, St. John's, Newfoundland and Labrador

Patti Melanson, Phoenix Youth, Halifax, Nova Scotia

Jeff Mitchell, West-Bridge House, John Howard Society, Stephenville, Newfoundland and Labrador

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