

Injection Drug Use and HIV in Canada

This fact sheet provides a snapshot of the HIV/AIDS epidemic among people who inject drugs (also called IDU) in Canada. It is one of a series of fact sheets providing easy to use epidemiological information on the state of HIV/AIDS in Canada.

All epidemiological information is approximate, based on the best available national data. Most of the data in this fact sheet come from either a national population-specific surveillance system or national HIV estimates. More information about these data sources can be found in the section “Where do these numbers come from?” at the end of this fact sheet.

People who inject drugs are at risk of HIV and hepatitis C (also known as HCV) if they:

- borrow non-sterile syringes/needles when injecting drugs;
- borrow non-sterile equipment used in preparing the drug for injection; or
- have unprotected vaginal or anal sex (sex without a condom).

It is estimated that 4.1 million Canadians have injected drugs at some point in their lives.

Because people who inject drugs are a highly marginalized and hidden population, it is hard to get an accurate picture of who they are. However, based on the Canadian Addiction Survey conducted in 2004, 4.1 million Canadians reported having injected drugs in

their lifetime. Of those, 269,000 people reported having injected a drug that year.¹

The best description we have of people who inject drugs in Canada comes from a national population-specific surveillance system called I-Track. However, caution should be used when using I-Track data because we don't know if those who participated in this study are representative of all people who inject drugs in Canada. Of the people who participated in the I-Track study, two thirds were male and one third were female. The average age of participants was 35 years.²

Based on population-specific surveillance, people who inject drugs may engage in unsafe practices that place them at risk of acquiring HIV or hepatitis C.²

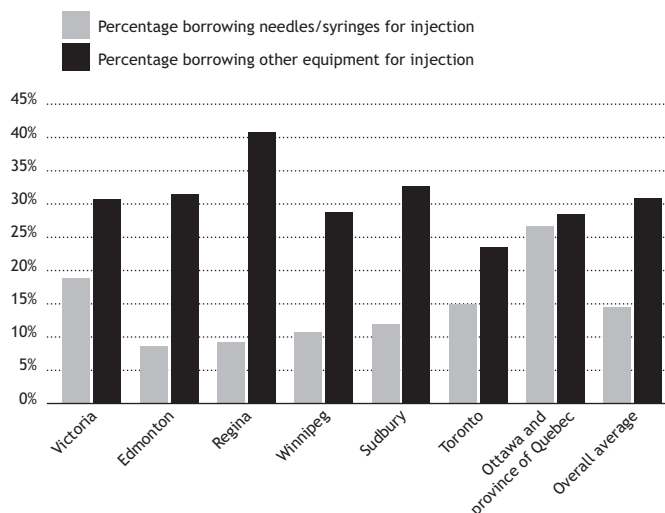
The hidden nature of injection drug use makes it hard to know how many people engage in

behaviours that place them at risk of acquiring HIV or hepatitis C. However, I-Track provides information on the occurrence of ‘risky’ injecting behaviours in those who participated in the study.

In the 6-month period before their I-Track survey interview:

- 15% of people who inject drugs reported borrowing needles/syringes already used by someone else. This ranged from 9% to 27% at I-Track sites (Figure 1).
- 31% of people who inject drugs reported borrowing other injection equipment already used by someone else. This ranged from 24% to 41% at I-Track sites (Figure 1).

Figure 1. Percentage of people who inject drugs who say they borrowed needles/syringes or injecting equipment in the 6 months prior to interview



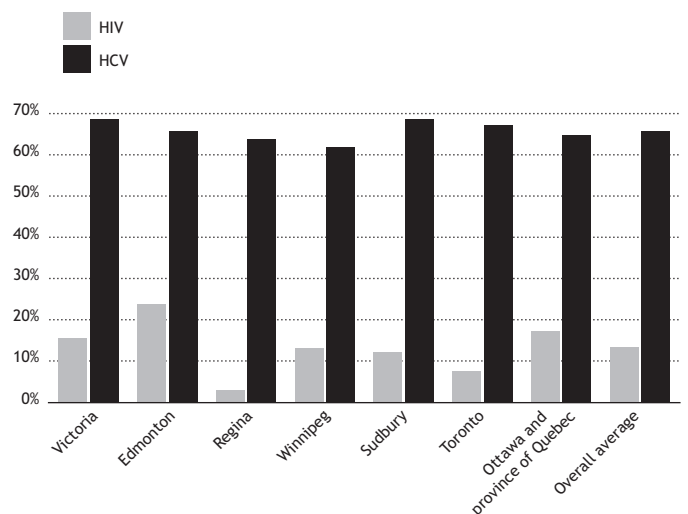
Based on population-specific surveillance, 13% of people who inject drugs were HIV-positive and 66% had evidence of a present or past infection with hepatitis C (prevalence).²

In the I-Track study, people who inject drugs are tested for HIV and hepatitis C. The HIV test indicates current infection with HIV. The hepatitis C test indicates current infection with hepatitis C or past infection with hepatitis C that cleared spontaneously or through treatment.

According to I-Track:

- 13% of people who inject drugs are HIV-positive (prevalence). Prevalence at the I-Track sites ranged from 2% to 22% (Figure 2).
- 66% of people who inject drugs have evidence of present or past infection with hepatitis C (prevalence). The prevalence of hepatitis C at the I-Track sites ranged from 62% to 69% (Figure 2).
- up to 12% of people who inject drugs are co-infected with HIV and HCV.
- among HIV-positive people who inject drugs, 88% have evidence of a current or past infection with hepatitis C.

Figure 2. Prevalence of HIV and hepatitis C in people who inject drugs



Based on national HIV estimates, up until the end of 2008, an estimated 13,210 people may have become infected with HIV as a result of using injection drugs (prevalence).³

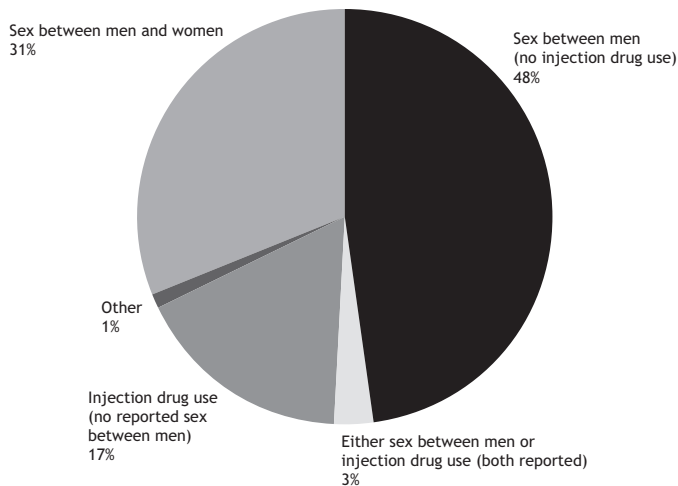
According to 2008 national HIV estimates:

- an estimated 13,210 people may have been infected with HIV while using injection drugs. This estimate includes 11,180 people (17% of people living with HIV) who were likely infected when injecting drugs and an additional 2,030 people (3% of people living

with HIV) whose HIV infection may have been due to either injection drug use or sex between men, since they reported both behaviours at testing.

- 20% of all people living with HIV may have been infected with HIV when injecting drugs (Figure 3).

Figure 3. Estimated percentage of people living with HIV in Canada in 2008 by type of exposure to HIV



Based on population-specific surveillance, 23% of HIV-positive people who inject drugs considered themselves to be HIV-negative.²

In the I-Track study, people who inject drugs were asked about their HIV status and also tested for HIV. By comparing what participants believed their status to be with the HIV test result, we can tell how many people considered themselves to be HIV-negative when they were actually HIV-positive.

- In the I-Track study, approximately 23% of HIV-positive people who inject drugs thought that they were HIV-negative—this ranged from 9% in Edmonton to 43% in Regina.

Based on national HIV estimates, an estimated 20% of all new cases of HIV in Canada in 2008 were in people who inject drugs (incidence).³

According to national HIV estimates, in 2008 there were:

- 390 to 750 new HIV infections attributable to injection drug use (17% of all new infections). This estimate represents a slight increase from the estimated 360 to 680 new infections attributed to injection drug use in 2005.
- 50 to 130 additional new HIV infections attributable to either injection drug use or male-to-male sex (3% of all new infections). This estimate is similar to the estimated 40 to 130 new infections attributed to either injection drug use or male-to-male sex in 2005.

According to national HIV estimates, a high proportion of new HIV infections among women and Aboriginal people were likely due to injection drug use.³

According to national HIV estimates:

- 66% of new HIV infections in Aboriginal people in 2008 may be attributed to injection drug use. This compares to an estimated 17% of all new infections attributed to injection drug use among all Canadians.
- 29% of the new HIV infections in women in 2008 may be attributed to injection drug use. This compares to an estimated 17% of all new infections attributed to injection drug use among all Canadians.

Key definitions

HIV prevalence—The total number of people who are living with HIV at a point in time. Prevalence tells us how many people have HIV.

HIV incidence—The number of new HIV infections in a defined period of time (usually one year). Incidence tells us how many people are getting HIV.

AIDS cases—The number of people diagnosed with HIV who have been diagnosed with one or more defined clinical diseases that characterize a weakened immune system [e.g. Pneumocystis pneumonia (PCP)].

AIDS deaths—The number of deaths among people who have been previously diagnosed with AIDS.

Where do these numbers come from?

National HIV epidemiology statistics are compiled by the Public Health Agency of Canada (PHAC).

Population-specific surveillance

As part of the Federal Initiative to Address HIV/AIDS in Canada, PHAC monitors trends in HIV prevalence and associated risk behaviour indicators among key vulnerable populations identified in Canada through population-specific surveillance systems. These surveillance systems, also known as the “Track” systems, are comprised of periodic cross-sectional surveys conducted at selected sites within Canada.

I-Track is the national surveillance system of people who inject drugs. Through this surveillance system, information is collected directly from people who inject drugs through a questionnaire and a biological specimen sample for HIV and hepatitis C testing. The statistics provided in this fact sheet are for the years 2003 to 2005 from participating I-Track sites. Because the system only recruits voluntary participants from selected urban sites, the results do not represent all people who inject drugs across Canada.

Routine HIV and AIDS case reporting

Healthcare providers are required to report HIV and AIDS diagnoses to their local public health authorities and they are also asked to report deaths among AIDS cases. Each province/territory then compiles this information and provides it to PHAC. Sometimes additional information is also collected and sent to PHAC, such as information about age, gender, ethnicity, exposure category (the way the person may have acquired HIV), and laboratory data such as the date of the HIV test.

These statistics are compiled by PHAC and published in annual HIV/AIDS Surveillance Reports. These reports provide information on HIV-positive tests, AIDS diagnoses, and deaths (among people previously diagnosed with AIDS) in Canada. The most recent data (up to December 31, 2008) can be viewed at

www.phac-aspc.gc.ca/aids-sida/publication/survreport/2008/dec/index-eng.php

Limitations—These data represent the number of cases reported to PHAC by each province. Reported cases do not truly represent the prevalence or incidence of HIV because these statistics do not include HIV-positive individuals who

have not been tested for HIV. Other limitations include reporting delays (the time between the diagnosis of HIV or AIDS and the time it is reported to PHAC) and under-reporting (no report is made to the local public health authority by the healthcare provider).

Estimates of HIV prevalence and incidence

PHAC uses mathematical modeling techniques to provide an overall picture of the epidemic among both diagnosed and undiagnosed Canadians. These models combine statistics from many sources, including routine surveillance, population-specific surveillance, HIV-testing behaviour information, treatment program data, and educated assumptions. PHAC produces estimates of national HIV prevalence and incidence every three years. This fact sheet cites estimates for the year 2008. A summary of the 2008 estimates is currently available at www.phac-aspc.gc.ca/aids-sida/publication/survreport/estim08-eng.php. In 2010 these will be available in a report entitled *HIV/AIDS Epi Update*, available at www.phac-aspc.gc.ca/aids-sida/publication/index-eng.php#surveillance

Credits

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Additional resources

BC Centre for Disease Control

www.bccdc.ca/util/about/annreport/default.htm#heading4

Government of Alberta

www.health.alberta.ca/newsroom/health-trends.html

Government of Saskatchewan

www.health.gov.sk.ca/hiv-aids-reports

Government of Manitoba

www.gov.mb.ca/health/publichealth/cdc/surveillance/index.html#hiv

Ontario HIV Epidemiologic Monitoring Unit

www.phs.utoronto.ca/ohemu/tech%20reports.html

Gouvernement du Québec

www.msss.gouv.qc.ca/sujets/prob_sante/itss/index.php?statistiques_au_quebec

Government of New Brunswick

www.gnb.ca/0053/hiv_aids/index-e.asp

Government of Nunavut

www.gov.nu.ca/health/hir.shtml



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Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV-related illness and the treatments in question.

CATIE (Canadian AIDS Treatment Information Exchange) in good faith provides information resources to help people living with HIV/AIDS who wish to manage their own health care in partnership with their care providers. Information accessed through or published or provided by CATIE, however, is not to be considered medical advice.

We do not recommend or advocate particular treatments and we urge users to consult as broad a range of sources as possible. We strongly urge users to consult with a qualified medical practitioner prior to undertaking any decision, use or action of a medical nature. We do not guarantee the accuracy or completeness of any information accessed through or published or provided by CATIE. Users relying on this information do so entirely at their own risk. Neither CATIE nor the Public Health Agency of Canada nor any of their employees, directors, officers or volunteers may be held liable for damages of any kind that may result from the use or misuse of any such information. The views expressed herein or in any article or publication accessed or published or provided by CATIE are solely those of the authors and do not reflect the policies or opinions of CATIE or the official policy of the Minister of Health Canada.

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