The epidemiology of HIV in people who inject drugs in Canada

This fact sheet provides a snapshot of the HIV epidemic among people who inject drugs in Canada. It is one of a series of fact sheets on the epidemiology of HIV and hepatitis C.

All epidemiological information is approximate, based on the best available data. Most of the data in this fact sheet come from a population-specific surveillance system (I-Track), the Summary: Estimates of HIV incidence, prevalence and Canada’s Progress on Meeting the 90-90-90 HIV target, 2016, and the HIV/AIDS Epi Updates Chapter 1: Estimates of HIV prevalence and incidence in Canada, 2011 published by the Public Health Agency of Canada (PHAC). More information can be found in the section “Where do these numbers come from?” at the end of the fact sheet.

People who inject drugs represent 0.3% of the Canadian population.¹

The most recent population estimates for the number of people who inject drugs in Canada is from 2014.

According to 2014 national HIV estimates, there are 89,855 people who inject drugs in Canada. This represents 0.3% of the Canadian population aged 15 years and older.
People who inject drugs are 59 times more likely to get HIV than people who do not inject drugs.¹

The most recent estimates available that compare HIV incidence rates among key populations is from 2014. According to 2014 national estimates:

- The HIV incidence rate was 439 per 100,000 people who inject drugs.
- The HIV incidence rate was 7.5 per 100,000 people who do not inject drugs.
- People who inject drugs are 59 times more likely to get HIV than people who do not inject drugs.

Note: Because different methods were used to create the 2016 estimates, these 2014 estimates cannot be directly compared to the 2016 estimates.

14.3% of all new HIV infections in Canada may have been acquired through injection drug use (incidence).² This varies considerably across Canada.³

According to 2016 national HIV estimates:

- 14.3% of all new HIV infections in Canada may have been acquired through injection drug use. This means there were 310 new HIV infections in people who inject drugs in Canada. This includes:
  - 11.3% of new HIV infections attributed to injection drug use (244 new infections); and
  - 3% of new HIV infections attributed to the combined category of injection drug use or sex between men since both behaviours were reported at testing (66 new infections).

The most recent estimates available by region are for 2011. Based on estimates from 2011:

- The proportion of new HIV infections attributable to injection drug use varies across Canada:
  - 19% of new infections in British Columbia (72 new infections);
  - 17% in Alberta (42);
  - 79% in Saskatchewan (181);
  - 14% in Manitoba (16);
  - 9% in Ontario (120);
  - 11% in Quebec (80); and
  - 9% in the Atlantic provinces (3).

Note: Because different methods were used to create the 2016 estimates, these regional estimates from 2011 cannot be directly compared to the 2016 estimates.

A high proportion of new HIV infections (incidence) among women were likely due to injection drug use.²

According to 2016 national HIV estimates:

- 22% of the estimated new HIV infections in women were attributable to injection drug use. This compares to an estimated 11% of new infections among all Canadians attributable to injection drug use.

The number of new HIV infections (incidence) in people who inject drugs may have increased since 2014.²

According to 2016 national HIV estimates:

- The number of new HIV infections attributable to injection drug use in 2016 (244 new infections) is slightly higher than the number in 2014 (219 new infections).
- The number of new HIV infections attributable to the combined category of sex between men or injection drug use in 2016 (66 infections) is higher than in 2014 (47 new infections).
17.4% of people with HIV in Canada may have acquired their HIV infection through injection drug use (prevalence). This varies considerably across Canada. According to 2016 national HIV estimates:

- 17.4% of people with HIV in Canada may have acquired their HIV infection through injection drug use (10,986 people). This includes:
  - 14.6% of people whose HIV status was attributed to injection drug use (9,204 people); and
  - 2.8% of people whose HIV status was attributed to the combined category of injection drug use or sex between men since both behaviours were reported at testing (1,782 people).

The most recent estimates available by region are for 2011. Based on estimates from 2011:

- The proportion of people with HIV who may have acquired their HIV infection through injection drug use varies across Canada:
  - 34% in British Columbia (4,010 people)
  - 26% in Alberta (1,310 people)
  - 74% in Saskatchewan (1,550 people)
  - 19% in Manitoba (400 people)
  - 10% in Ontario (2,920 people)
  - 20% in Quebec (3,790 people)
  - 18% in the Atlantic provinces (180 people)

Note: Because different methods were used to create the 2016 estimates, these regional estimates from 2011 cannot be directly compared to the 2016 estimates.

Key definitions

HIV prevalence—The number of people 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.

Where do these numbers come from?

All epidemiological information is approximate, based on the best available data. Most of the data in this fact sheet come from a population-specific surveillance system (I-Track) or 2011, 2014, or 2016 HIV estimates published by the Public Health Agency of Canada (PHAC)

Population-specific surveillance statistics

As part of the Federal Initiative to Address HIV/AIDS in Canada, PHAC monitors trends in HIV prevalence and associated risk behaviours 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. For this surveillance system, information is collected directly from people who inject drugs through a questionnaire and a biological specimen sample collected for HIV and hepatitis C testing. The statistics provided in this fact sheet are for the years 2010 to 2012 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.

Limitation—people from selected urban sites participated on a volunteer basis; therefore, the information presented does not represent all people who inject drugs in Canada.

National estimates of HIV prevalence and incidence

National HIV estimates are produced by PHAC and published every three years. Estimates of HIV prevalence and incidence are produced by PHAC using statistical methods which take into account some of the limitations of surveillance data (number of HIV diagnoses reported to PHAC), and also account for the number of people with HIV who do not yet know they have it. Statistical modelling, using surveillance data and additional sources of information, allows PHAC to produce HIV estimates among those diagnosed and undiagnosed. The most recent estimates available are for 2016.

Acknowledgements

We would like to thank the Surveillance and Risk Assessment Division of the Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, for their helpful comments and expert review of CATIE epidemiology fact sheets.

References


Author(s): Challacombe L
Disclaimer

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

CATIE provides information resources to help people living with HIV and/or hepatitis C 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.

CATIE endeavours to provide the most up-to-date and accurate information at the time of publication. However, information changes and users are encouraged to consult as broad a range of sources as possible. Users relying on this information do so entirely at their own risk. Neither CATIE, nor any of its partners, funders, 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 do not necessarily reflect the policies or opinions of CATIE nor the views of its partners and funders.

Permission to reproduce

This document is copyrighted. It may be reprinted and distributed in its entirety for non-commercial purposes without prior permission, but permission must be obtained to edit its content. The following credit must appear on any reprint: This information was provided by the Canadian AIDS Treatment Information Exchange (CATIE). For more information, contact CATIE at 1-800-263-1638.

Production of this document has been made possible through a financial contribution from the Public Health Agency of Canada. The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.

CATIE Ordering Centre No: ATI-50155
(aussi disponible en français, ATI-50156)

CATIE fact sheets are available for free at www.catie.ca