

The epidemiology of HIV in Canada

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

All epidemiological information is approximate, based on the best available data. Most of the data contained in this fact sheet comes from 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.

The number of people with HIV in Canada (prevalence) is increasing.¹

According to 2016 national HIV estimates:

- There were an estimated 63,110 Canadians with HIV at the end of 2016.
- This represents an increase of 2,945 people (5%) since 2014.
- The HIV prevalence rate is 173 per 100,000 people living in Canada.
- HIV prevalence increased during the 1980s, slowed down in the mid-1990s, but began to rise again in the late 1990s. This increase is a result of both new HIV infections and fewer deaths due to effective treatment options.

An estimated 14% of people with HIV in Canada are unaware that they have HIV.¹

According to 2016 national HIV estimates:

- An estimated 9,090 people with HIV remained undiagnosed in 2016.
- This represents 14% of the estimated number of people with HIV.

FACT SHEET

Published
2018

CONTACT US

by telephone
1-800-263-1638
416-203-7122

by fax
416-203-8284

by e-mail
info@catie.ca

by mail
555 Richmond Street West
Suite 505, Box 1104
Toronto ON M5V 3B1

The HIV epidemic in Canada is concentrated in specific populations (prevalence).¹

According to 2016 national HIV estimates, people with HIV in Canada include:

- 32,762 gay, bisexual and other men who have sex with men (gbMSM). This represents 51.9% of all people with HIV in Canada. The estimate includes 30,980 men whose HIV status was attributed to having sex with men and 1,782 men whose HIV status could be attributed to either having sex with men or injection drug use.
- 10,986 people who used injection drugs (IDU). This represents 17.4% of all people with HIV in Canada. The estimate includes 9,204 people whose HIV status was attributed to injection drug use and 1,782 men whose HIV status could be attributed to either having sex with men or injection drug use (please note that these 1,782 men are the same as those noted in the bullet point above).
- 20,543 people whose HIV status was attributed to heterosexual sex. This represents 32.6% of all people with HIV in Canada. Of these, 9,438 people (15% of all people with HIV) were from a country where HIV is endemic (primarily countries in sub-Saharan Africa and the Caribbean).
- 601 people whose HIV status could not be attributed to sex or injection drug use. This includes people who likely contracted HIV through blood transfusions or clotting factors, transmission from mother to child, or needle-stick injuries in the workplace. This represents less than 1% of all people with HIV in Canada.
- 6,055 Indigenous people. This represents 9.6% of all people with HIV in Canada.
- 14,520 females. This represents 23% of all people with HIV in Canada.

The populations most impacted by HIV vary from region to region (prevalence).²

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

- The HIV epidemic is concentrated mainly in gbMSM in British Columbia (45.5% of people with HIV), Ontario (56.0%), the Atlantic Provinces (54.2%) and Quebec (54.2%). These estimates include men whose HIV status was attributed to having sex with men, and men whose HIV status could be attributed to either having sex with men or injection drug use.
- The HIV epidemic is concentrated mainly in people who use or have used injection drugs in Saskatchewan (71.4% of people with HIV).
- The HIV epidemic is concentrated mainly in people who engage in heterosexual sex in Alberta (42.8% of people with HIV) and Manitoba (56.7%). These estimates include people whose HIV status was attributed to any type of heterosexual sex including those who were born in an HIV endemic country.

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

An infographic is available which graphically displays HIV prevalence by region.

The number of new HIV infections in Canada (incidence) has increased slightly in the past several years.¹

According to 2016 national HIV estimates:

- There were an estimated 2,165 new HIV infections in Canada in 2016. This is slightly higher than the 1,960 new infections in 2014.
- The HIV incidence rate is 6.0 per 100,000 people in Canada.

The number of new HIV infections (incidence) may be increasing in all populations.¹

According to 2016 national HIV estimates:

- 1,136 new HIV infections (52.5% of new infections) were attributed to men having sex with men compared to 1,053 new infections in 2014.
- 66 new HIV infections (3%) were attributed to men whose HIV status could be attributed to either having sex with men or injection drug use compared to 47 new infections in 2014.
- 244 new HIV infections (11.3%) were attributed to injection drug use compared to 219 new infections in 2014.
- 719 new HIV infections were attributed to heterosexual sex (33.2%) compared to 641 new infections in 2014.
- 245 new HIV infections (11.3%) occurred in Indigenous people compared to 217 new infections in 2014.
- 507 new HIV infections (23.4%) occurred in females compared to 436 new infections in 2014

The populations most impacted by new HIV infections vary from region to region (incidence).²

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

- New HIV infections are concentrated mainly in gbMSM in British Columbia (57.4% of people with HIV), Ontario (51.8%), the Atlantic Provinces (68.6%) and Quebec (58.5%). These estimates include men whose HIV status was attributed to having sex with men, and men whose HIV status could be attributed to either having sex with men or injection drug use.
- New HIV infections are concentrated mainly in people who use or have used injection drugs in Saskatchewan (76.1% of people with HIV).

- New HIV infections are concentrated mainly in people who engage or have engaged in heterosexual sex in Alberta (44.8% of people with HIV) and Manitoba (61.7%). These estimates include people whose HIV status was attributed to any type of heterosexual sex including those who were born in an HIV endemic country.

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

An infographic is available which graphically displays HIV incidence by region.

Indigenous people and people from countries where HIV is endemic are over represented in the HIV epidemic in Canada.¹

According to 2016 national estimates:

- Indigenous people made up 4.9% of the total Canadian population in 2016 but represent 11.3% of new infections in 2016.
- People from countries where HIV is endemic made up 2.5% of the Canadian population in 2011 but represent 13.6% of new infections in 2016.

Certain populations have higher rates of new HIV infections (incidence).³

The most recent estimates available that compare HIV incidence rates among key populations are from 2014.

According to 2014 national estimates:

- Aboriginal populations have incidence rates 2.7 times higher than people of other ethnicities.
- People from HIV-endemic countries (living in Canada) have incidence rates 6.4 times higher than people of other ethnicities (living in Canada).
- gbMSM have incidence rates 131 times higher than other men.

- People who inject drugs have incidence rates 59 times higher than people who do not inject drugs.
- Males have incidence rates 3.4 times higher than females.

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. The data contained in this fact sheet comes from the 2011, 2014 and 2016 HIV estimates published by the Public Health Agency of Canada (PHAC).

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.

References

1. Public Health Agency of Canada. *Summary: Estimates of HIV Incidence, Prevalence and Canada's Progress on Meeting the 90-90-90 HIV targets, 2016*. Public Health Agency of Canada, 2018. Available at: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/summary-estimates-hiv-incidence-prevalence-canadas-progress-90-90-90.html>

2. Public Health Agency of Canada. *HIV/AIDS Epi Updates Chapter 1: National HIV Prevalence and Incidence Estimates for 2011*. Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2014. Available from: http://www.catie.ca/sites/default/files/64-02-1226-EPI_chapter1_EN05-web_0.pdf

3. Yang Q, Ogunnaike-Cooke S, Halverson J, et al. *Estimated national HIV incidence rates among key sub-populations in Canada, 2014*. Presented at 25th Annual Canadian Conference on HIV/AIDS Research (CAHR), 12–15 May 2016, Winnipeg, Canada. Abstract EPH3.5.

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-50177
(aussi disponible en français, ATI-50178)

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

CONTACT US

by telephone

1-800-263-1638
416-203-7122

by fax

416-203-8284

by e-mail

info@catie.ca

by mail

555 Richmond Street West
Suite 505, Box 1104
Toronto ON M5V 3B1

