

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. The data contained in this fact sheet comes from the *Summary: Estimates of HIV incidence, prevalence and proportion undiagnosed in Canada, 2014* 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 living with HIV in Canada (prevalence) is increasing.¹

According to 2014 national HIV estimates:

- An estimated 75,500 Canadians were living with HIV at the end of 2014.*
- This represents an increase of 6,700 people (9.7%) since 2011.
- The HIV prevalence rate is 212.0 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.

Just over one in five people living with HIV in Canada are unaware that they have HIV.¹

According to 2014 national HIV estimates:

- An estimated 16,020 people living with HIV remained undiagnosed in 2014.*
- This represents 21% of the estimated number of people living with HIV.*
- The percentage of people who were unaware of their HIV-positive status varied by exposure category: people exposed through heterosexual sex were most likely to be unaware of their HIV infection (28%), followed by people exposed through injection drug use (20%), and finally men exposed through male-to-male sex (18%).

**In December 2016, the Public Health Agency of Canada (PHAC) released revised estimates for prevalence (65,040 people) and the*

proportion of people unaware of their status (20% or 12,820 people).² When complete updated estimates are available from PHAC, this fact sheet will be updated.

Over 26,000 people living with HIV have died since the beginning of the epidemic.¹

According to national HIV estimates, 26,400 people with HIV had died due to an HIV-related illness or other cause by the end of 2014.

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

According to 2014 national HIV estimates, people living with HIV include an estimated:

- 39,630 gay men and other men who have sex with men (MSM). This represents 53% of all people living with HIV in Canada. The estimate includes 37,230 men whose HIV status was attributed to men having sex with men and 2,400 men whose HIV status could be attributed to either men having sex with men or injection drug use (MSM-IDU).
- 13,960 people who used injection drugs (IDU). This represents 19% of all people living with HIV in Canada. The estimate includes 11,560 people whose HIV status was attributed to injection drug use and 2,400 men whose HIV status could be attributed to either men having sex with men or injection drug use (please note that these 2,400 men are the same as those noted in the bullet point above).
- 23,700 people whose HIV status was attributed to heterosexual sex. This represents 31% of all people living with HIV in Canada. Of these, 11,360 people (15% of all people living with HIV) were from a country where HIV is endemic (primarily countries in sub-Saharan Africa and the Caribbean).
- 610 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 living with HIV in Canada.

- 6,850 Aboriginal people. This represents 9% of all people living with HIV in Canada.
- 16,880 females. This represents 22% of all people living with HIV in Canada.

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

The regional estimates are not yet available for 2014. Based on estimates from 2011:

- The HIV epidemic is concentrated mainly in men who have sex with men in British Columbia (45.5% of people living with HIV), Ontario (56.0%), the Atlantic Provinces (54.2%) and Quebec (54.3%). These estimates include men whose HIV status was attributed to men having sex with men and men whose HIV status could be attributed to either men having sex with men or injection drug use (MSM-IDU). The HIV epidemic is concentrated mainly in people who use or have used injection drugs in Saskatchewan (71.4% of people living with HIV).
- The HIV epidemic is concentrated mainly in people who engage in heterosexual sex in Alberta (42.8% of people living 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 2014 estimates, these regional estimates from 2011 cannot be directly compared to the 2014 national estimates.

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

The number of new HIV infections in Canada (incidence) has decreased slightly in the past several years but is not insubstantial.¹

According to 2014 national HIV estimates:

- An estimated 2,570 people became infected with HIV in Canada in 2014.
- This is only slightly lower than the estimated 2,800 new infections in 2011.
- The HIV incidence rate is 7.2 per 100,000 people living in Canada.

The number of new HIV infections (incidence) may be decreasing among people who inject drugs, people exposed to HIV through heterosexual sex, and Aboriginal people.¹

According to 2014 national HIV estimates:

- An estimated 270 new HIV infections (11% of new infections) were attributed to injection drug use compared to an estimated 384 new infections (14% of new infections) in 2011.
- An estimated 839 new HIV infections were attributed to heterosexual sex in 2014 (33%) compared to an estimated 927 new infections (33%) in 2011.
- An estimated 278 new HIV infections (11%) occurred in Aboriginal people compared to an estimated 349 new infections (13%) in 2011.

The number of new HIV infections (incidence) may be stable among MSM, MSM-IDU and females.¹

According to 2014 national HIV estimates:

- An estimated 1,396 new HIV infections (54% of new infections) were attributed to men having sex with men compared to an estimated 1,416 new infections (51%) in 2011.
- An estimated 65 new HIV infections (3%) were attributed to men whose HIV status could be attributed to either men having sex with men or injection drug use (MSM-IDU) compared to an estimated 73 new infections (3%) in 2011.

- An estimated 595 new HIV infections (23%) occurred in females compared to an estimated 663 new infections (24%) in 2011.

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

The regional estimates are not yet available for 2014. Based on estimates from 2011:

- New HIV infections are concentrated mainly in men who have sex with men in British Columbia (57.4% of people living with HIV), Ontario (51.8%), the Atlantic Provinces (68.6%) and Quebec (58.5%). These estimates include men whose HIV status was attributed to men having sex with men and men whose HIV status could be attributed to either men having sex with men or injection drug use (MSM-IDU).
- New HIV infections are concentrated mainly in people who use or have used injection drugs in Saskatchewan (76.1% of people living with HIV).
- New HIV infections are concentrated mainly in people who engage or have engaged in heterosexual sex in Alberta (44.8% of people living 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 2014 estimates, these regional estimates from 2011 cannot be directly compared to the 2014 national estimates.

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

Certain populations have higher rates of new HIV infections (incidence).^{1,4}

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 6.3 times higher than people of other ethnicities (living in Canada).
- Men who have sex with men 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 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.

Where do these numbers come from?

All epidemiological information is approximate, based on the best available data. Most of the data contained in this fact sheet comes from the 2014 HIV prevalence and incidence estimates published by the Public Health Agency of Canada (PHAC). Where not yet available, 2011 estimates are used.

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 living 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 2014. The next set of estimates will be available in 2018 and will pertain to the year 2017.

Acknowledgements

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

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Published: 2017



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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.

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Funding has been provided by the Public Health Agency of Canada.

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