



FACTSHEET

The Epidemiology of HIV in Canada

Summary

This fact sheet provides a summary of the HIV/AIDS epidemic 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 data. The latest estimates on HIV among specific populations in Canada were published in 2009 (for the year 2008) by the Public Health Agency of Canada (PHAC).

An estimated 65,000 Canadians were living with HIV (prevalence) in 2008 and the number of new infections (incidence) has not decreased since 2005.

- At the end of 2008, an estimated 65,000 Canadians were living with HIV—this represents an increase of 8,000 persons (14%) since 2005.
- An estimated 2,300 to 4,300 new HIV infections occurred in Canada in 2008 compared to an estimated 2,200 to 4,200 in 2005.

Approximately one quarter of people living with HIV in Canada are unaware that they have HIV.

- At the end of 2008, an estimated 16,900 or 26% of the estimated 65,000 people living with HIV remained undiagnosed.

AIDS diagnoses and deaths among AIDS cases have decreased over time.

- Reported AIDS cases peaked in 1993 and have declined since that time.
- Reported deaths among AIDS cases peaked in 1995 and have declined since that time.

- At the end of 2008, an estimated 22,300 people in Canada had died with an HIV/AIDS infection since the beginning of the HIV epidemic.

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

People who were living with HIV in 2008 include an estimated*:

- 33,360 gay men and other men who have sex with men (MSM). This represents 51% of all people living with HIV. The estimate includes 31,330 men whose HIV status was attributed to sex between men and 2,030 men whose HIV status could either be attributed to sex between men or injection drug use (MSM-IDU).
- 13,210 people who use injection drugs (IDU). This represents 20% of all people living with HIV. The estimate includes 11,180 people whose HIV status was attributed to injection drug use and 2,030 MSM-IDU (please note that these 2,030 men are the same as those noted in the bullet above).

- 14,300 women. This represents 22% of all people living with HIV.
- 19,960 people whose HIV status was attributed to heterosexual sex. This represents 31% of all people living with HIV. Of these, 9,250 people (14% of people living with HIV) were from a country where HIV is endemic (primarily countries in sub-Saharan Africa and the Caribbean).
- 4,300 to 6,100 Aboriginal people. This represents 8% of all people living with HIV.
- 500 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.

* Please note: the percentages above do not add up to 100%. People can be counted more than once in these statistics (for example, a woman whose HIV status is attributed to exposure through heterosexual sex will be counted in each of these categories).

The number of new HIV infections (incidence) may be increasing among Aboriginal people and in people who inject drugs.

- An estimated 300 to 520 new HIV infections occurred in Aboriginal people in 2008 (13% of all estimated new infections) compared to an estimated 240 to 430 new infections in 2005.
- An estimated 390 to 750 new HIV infections were attributed to injection drug use in 2008 (17% of all estimated new infections) compared to an estimated 360 to 680 new HIV infections in 2005. This does not include MSM-IDU.

The number of new HIV infections (incidence) may be stable among gay men and other men who have sex with men (MSM), people exposed through heterosexual sex, MSM-IDU and women.

- An estimated 1,000 to 1,900 new HIV infections were attributed to sex between men in 2008 (44% of all estimated new infections) compared

to an estimated 1,000 to 1,900 new HIV infections in 2005. This does not include MSM-IDU.

- An estimated 370 to 690 new HIV infections were attributed to heterosexual sex in people from a country where HIV is endemic in 2008 (16% of all estimated new infections) compared to an estimated 360 to 670 new HIV infections in 2005.
- An estimated 450 to 860 new infections were attributed to heterosexual sex in people born in a country where HIV is not endemic (including Canada) in 2008 (20% of all estimated new infections) compared to an estimated 440 to 820 new HIV infections in 2005.
- An estimated 600 to 1,120 new infections occurred in women in 2008 (26% of all estimated new infections) compared to an estimated 590 to 1,100 new HIV infections in 2005.
- An estimated 50 to 130 new HIV infections occurred in MSM-IDU in 2008 (3% of all estimated new infections) compared to an estimated 40 to 130 new HIV infections in 2005. Infection with HIV may have been caused by either of these behaviours.

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.

endemic—An endemic country is one where 1% or more of the adult population is living with HIV and where HIV is predominately spread through heterosexual contact.

Where do these numbers come from?

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

Routine HIV and AIDS case reporting

Health care 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: age, gender, ethnicity, exposure category (the way the person may have acquired HIV), and laboratory data such as the date of the HIV test.

From this and other information, PHAC produces two different types of reports:

1. HIV and AIDS surveillance reports

National HIV surveillance data on reported HIV and AIDS cases are compiled by PHAC and published in annual reports entitled *HIV and AIDS in Canada*. These reports provide information on HIV-positive tests, AIDS diagnoses and deaths (among people previously diagnosed with AIDS) in Canada.

The most recent surveillance data available are for 2008. Surveillance data underreports the state of HIV/AIDS in Canada. This is because of issues such as reporting delays (the time between the diagnosis of HIV or AIDS and the time it is reported to PHAC) and underreporting (no report is made to the local public health authority by the health care provider). Furthermore, there are many people in Canada who have HIV but don't know it—these people are not included because they have not yet been tested for HIV.

2. Estimates of HIV prevalence and incidence

National HIV estimates are produced by PHAC and published every three years in the Canada Communicable Disease Report and summaries are also included in the report entitled *HIV/AIDS Epi Updates*. Estimates of HIV prevalence and incidence are produced by PHAC using statistical methods which take into account some of the limitations of surveillance data and also account for the number of people living with HIV who do not yet know they have it. The most recent estimates available are for 2008. The next set of estimates will be available in 2012 and will pertain to the year 2011.

Estimates were used where available in the creation of this fact sheet—where unavailable, surveillance data were used.

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References

Public Health Agency of Canada. *Summary: Estimates of HIV Prevalence and Incidence in Canada, 2008*. Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, 2009. www.phac-aspc.gc.ca/aids-sida/publication/survreport/estimat08-eng.php

Public Health Agency of Canada. *HIV and AIDS in Canada. Surveillance Report to December 31, 2008*. Surveillance and Risk Assessment Division, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2009. www.phac-aspc.gc.ca/aids-sida/publication/survreport/2008/dec/index-eng.php

Additional Resources

BC Centre for Disease Control

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

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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