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FACTSHEET

The epidemiology of HIV in youth

This fact sheet provides a summary of the HIV epidemic among youth 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. The data in this fact sheet come mainly from population-specific surveillance systems and routine surveillance. More information can be found in the section “Where do these numbers come from?” at the end of the fact sheet.

New HIV diagnoses among youth have declined since the beginning of the epidemic.[1]

According to national surveillance data, new HIV diagnoses among youth have declined over time. In 1985, 40% of new HIV diagnoses were among youth (aged 15 to 29). This decreased steadily to a low of 21% in 1999 and has since ranged between 21% and 25% each year.

Nearly one-quarter of all new HIV diagnoses in 2013 were in youth.[1]

According to 2013 national surveillance data:

- 504 youth (aged 15 to 29) were diagnosed with HIV in 2013.
- This comprised nearly one-quarter (24%) of all new HIV diagnoses in 2013.

The majority of new HIV diagnoses among youth were in males in 2013.[1]

According to 2013 national surveillance data:

- Of the 504 youth diagnosed in 2013, 77% were male.
- Among all HIV diagnoses in males in 2013, 24% were youth.
- Among all HIV diagnoses in females in 2013, 26% were youth.

Over half of all HIV diagnoses in youth in 2013 were attributed to men having sex with men.[1]

According to 2013 national surveillance data:

- Over half (59%) of new HIV diagnoses among youth (aged 15 to 29) were attributed to men having sex with men (MSM).
- One-quarter (24%) were attributed to heterosexual sex.

- 10% were attributed to injection drug use.
- 4% were attributed to a combined category of injection drug use and MSM since both behaviours were reported at testing.

One-quarter of all HIV diagnoses in Canada were in youth aged 15 to 29.[1]

According to national surveillance data collected between 1985 and 2013:

- 19,783 youth (aged 15 to 29) have ever been diagnosed with HIV in Canada.
- Just over one-quarter (26%) of all HIV diagnoses (of people whose age was known) were youth aged 15 to 29 years.
- Three-quarters (74%) of all HIV diagnoses among youth were male.

In Canada, HIV is prevalent among certain populations of youth.

According to national HIV estimates, the HIV prevalence rate in Canada is 0.2%. The prevalence rate among street youth, youth who inject drugs, and young MSM is much higher:

- According to a national surveillance system of street youth (aged 15 to 24) in Canada, conducted between 2009 and 2012 (E-SYS), the HIV prevalence rate among street-involved youth was 1%.[2]
- According to a national surveillance system of people who inject drugs in Canada, conducted between 2010 and 2012 (I-Track), the HIV prevalence rate among youth (aged 15 to 24) who use injection drugs was 3%.[3]
- According to a national surveillance system of men who have sex with men in Canada, conducted between 2005 to 2007 (M-Track), the HIV prevalence rate among young MSM (aged 29 or less) was 4%.[4]

Youth (aged 15 to 29) are at higher risk for sexually transmitted infections.

According to 2011 national STI surveillance data:

- 81% of new cases of chlamydia were among youth.[5]
- 66% of new cases of gonorrhea were among youth.[5]
- 31% of new cases of infectious syphilis were among youth.[5]

Key definitions

Street-involved youth—Street youth are as diverse as Canada's population. However, they all face unstable living conditions and have been subjected to complex social factors in their daily lives, such as poverty and family violence.

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. The data in this fact sheet come from population-specific surveillance systems and routine surveillance.

Routine HIV and AIDS surveillance
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 the Public Health Agency of Canada (PHAC). Additional information is also collected and sent to PHAC, such as information about age, sex, race/ethnicity, exposure category (the way the person may have acquired HIV), and date of diagnosis.

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 when it is reported to PHAC), under-reporting (no report is made to the local public health authority by

the healthcare provider), and incomplete reporting (where additional information such as age, gender and risk exposure category is missing).

Routine STI reporting

Healthcare providers are required to report new diagnoses of chlamydia, infectious syphilis and gonorrhea to their local public health authorities. Each province/territory then compiles this information and provides it to PHAC. Additional information is also collected and sent to PHAC, such as information about age and sex.

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 STIs because these statistics do not include all people who have an STI but have not been tested. Other limitations include reporting delays, under-reporting and incomplete reporting.

Estimates of HCV prevalence and incidence

Mathematical modelling techniques were used to provide an overall picture of the epidemic among both diagnosed and undiagnosed Canadians. These models combine statistics from a variety of sources, including but not limited to routine surveillance, data from Statistics Canada and population-based studies, and educated assumptions.

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 collected for HIV and hepatitis C antibody 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. Youth analyses included those participants aged 29 or less.

M-Track is a national surveillance system of gay, bisexual and other men who have sex with men (MSM). Through this surveillance system, MSM participants complete a questionnaire and are tested for antibodies against HIV, hepatitis C and syphilis. As of December 31, 2009, a total of six sites had participated in M-Track across Canada. M-Track was first implemented in Montreal in 2005 (via linkage with the Argus Survey). Between 2006 and 2007, four additional sites joined M-Track: Toronto and Ottawa (Lambda Survey), Winnipeg and Victoria. More than 4,500 men participated in M-Track between 2005 and 2007. Because the system only recruits voluntary participants from selected urban sites, the results do not represent all men who have sex with men across Canada. Youth analyses included those participants aged 29 or less.

Enhanced Surveillance of Canadian Street Youth (E-SYS) is the national surveillance system of street-involved youth. Through this surveillance system, street involved youth between the ages of 15 and 24 complete a questionnaire and are tested through urine and blood samples for STIs and blood-borne infections. Between 1999 and 2003 just under 5,000 youth participated from seven urban centres across Canada. Because the system only recruits voluntary participants from selected urban sites, the results do not represent all street-involved youth in Canada.

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