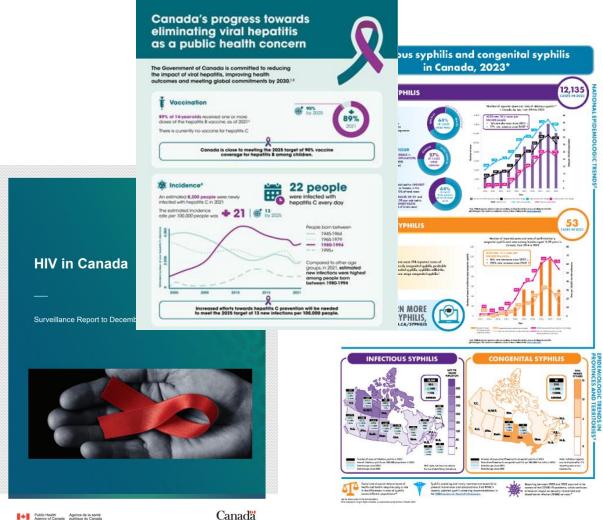
STBBI Epidemiology Update

Prepared by: Centre for Communicable Diseases and Infection Control October 2025





Outline



- How PHAC monitors STBBI in Canada
- Recent epidemiologic trends in STBBI: diagnoses, estimates of incidence and prevalence, prevention and care indicators
- Latest publications

Epidemiologic monitoring and surveillance

- Purpose: to understand trends, epidemic drivers, risk factors, identify priorities for action, and track progress toward elimination targets
- Variety of methods used, including:
 - Routine surveillance of nationally notifiable STBBI
 - Enhanced and biobehavioural surveillance (e.g. Tracks)
 - Mathematical modelling and estimates of incidence, prevalence, and care cascade indicators

HIV in Canada: Prevalence, new diagnoses, progress toward global targets

Prevalence

The number of people living with HIV in Canada continues to increase due to ongoing new infections and reduced mortality.

 In 2022, an estimated 65,270 people were living with HIV in Canada

Reported diagnoses

There continues to be new reported HIV diagnoses in Canada.

- A total of 2,434 new HIV diagnoses were reported in 2023, an increase of 35.2% compared with 2022
- The diagnosis rate increased from 4.7 per 100,000 in 2022 to 6.1 per 100,000 in 2023

Canada's progress towards meeting the 95-95-95 targets in 20226:

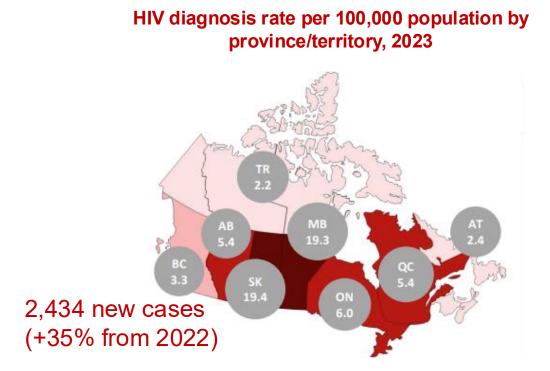
89% of PLHIV were diagnosed

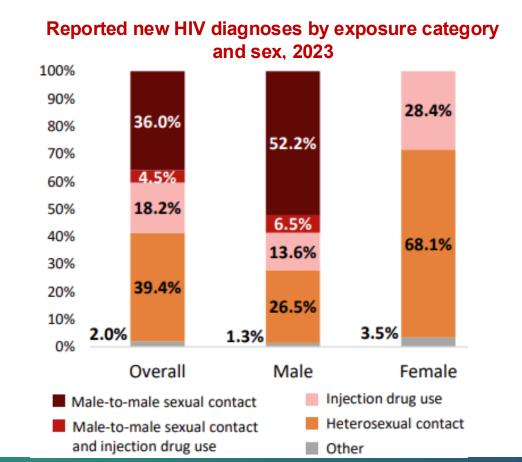
85%
of people diagnosed with
HIV were on treatment

95% of people on HIV treatment had a suppressed viral load

HIV in Canada: Regional Variation and Exposure Category

- Variation in HIV rates across Canada: highest in SK and MB
- Most prominent exposures among males: male to male sexual contact, injection drug use.
- Most prominent exposures among females: heterosexual sex, injection drug use.





The Epidemiology of hepatitis C in Canada: Prevalence and Incidence

People living with hepatitis C

At the end of 2021, an estimated **214,000** people in Canada were living with chronic **hepatitis C** infection (0.56% of the population).

- An estimated 59% were diagnosed (2025 target: 60%).
- By key population:
 - People who inject drugs: 37,000 (36.9%)
 - First Nations Peoples: 34,300 (3.3%)
 - People incarcerated in federal prisons:400 (3.2%)
 - Immigrants from countries where hepatitis C is common: 28,100 (2.2%)
 - 1945-1975 birth cohort: 157,000 (1.1%)
 - GBMSM: 6,300 (0.9%)

New hepatitis C infections

An estimated 8,200 people were newly infected with hepatitis C in 2021 (21 per 100,000 people).

- 22 people were infected with hepatitis C every day
- Compared to other age groups, in 2021, estimated new infections were highest among people born between 1980-1994.
- Increased efforts towards hepatitis C prevention will be needed to meet the 2025 target of 13 new infections per 100,000 people.

The Epidemiology of hepatitis B in Canada: Prevalence and vaccination coverage

People living with hepatitis B

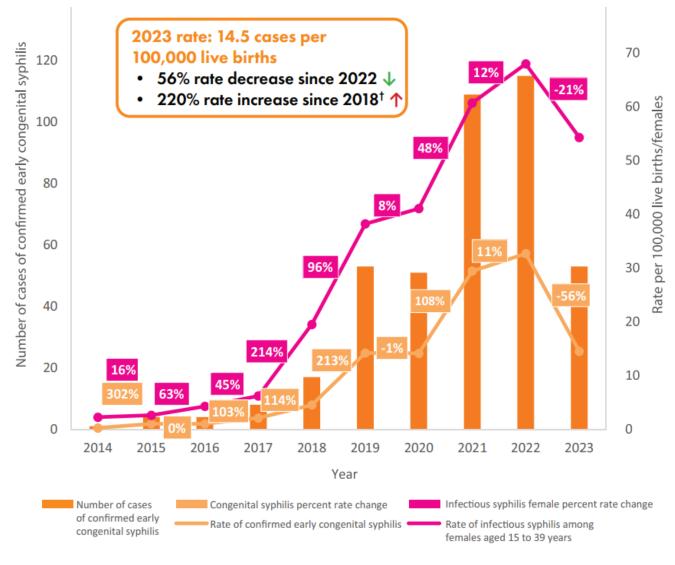
At the end of 2021, an estimated **262,000** people in Canada were living with chronic **hepatitis B** infection (0.68% of the population).

- An estimated 58% were diagnosed (2025 target: 60%).
- By key population:
 - Immigrants from countries where hepatitis B is common: 237,000 (4.2%)
 - GBMSM: 9,300 (1.4%)
 - People incarcerated in federal prisons: <100 (0.3%)

Hepatitis B vaccine coverage

- 89% of 14-year-olds received one or more doses of the hepatitis B vaccine, as of 2021
- Canada is close to meeting the 2025 target of 90% vaccine coverage for hepatitis B among children.
- 61% of respondents in the 2024
 Tracks survey among 2S/GBTQ+
 people reported having been
 immunized against HBV

Infectious and Congenital Syphilis in Canada



- While the annual incidences of all bacterial STI continue to rise, infectious syphilis has a disproportionate impact in Canada.
- Sharply increasing rates of infectious syphilis among females of reproductive age starting in 2018 have driven a re-emergence of congenital syphilis in Canada.
- It is too soon to tell if this downward trend will continue.
- Screening for syphilis among pregnant people and timely treatment are essential to prevent congenital syphilis.

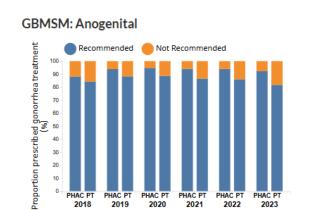
Tracks biobehavioural surveillance in key populations

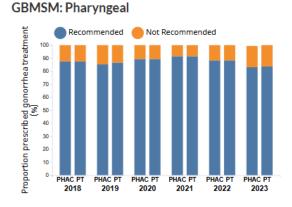
- Behavioural and biological surveillance system that monitors STBBI and associated risk behaviours among key populations in Canada that are disproportionately affected
- Recent data collection among 2SGBTQ+ (2024), PWID (2023-25)
- Tracks survey among Black people in Canada in progress in Alberta

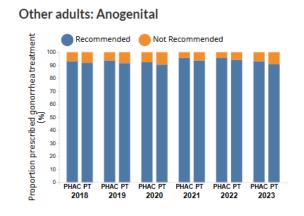
Antimicrobial resistance in Neisseria gonorrhoeae

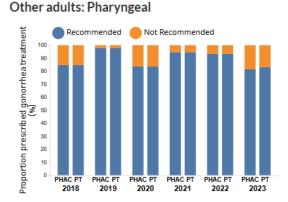
- Monitored through the lab-based Gonococcal Antimicrobial Surveillance Program-Canada (GASP-Canada) and the case-based Enhanced Surveillance of Antimicrobial-resistant Gonorrhea system (ESAG).
- ESAG links a subset of GASP-Canada AMR-GC data to epidemiologic and clinical data for an improved understanding of AMR-GC trends across Canada.
- 4,946 cases (each having a gonococcal sample that was cultured) were submitted to ESAG between 2018 and 2023 (4 jurisdictions 2018-22, 5 for 2023).

Figure 1. Proportion of ESAG cases prescribed a recommended vs non-recommended gonorrhea treatment regimen (among all ESAG cases who were prescribed treatment), by GBMSM and Other adults, 2018 to 2023









Mpox in Canada (2022–2025)

Figure 1. Total number of confirmed mpox cases between 2022-2025 by month in Canada (Last data update September 26, 2025, 12 pm Eastern)

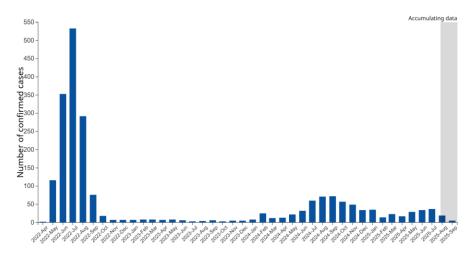
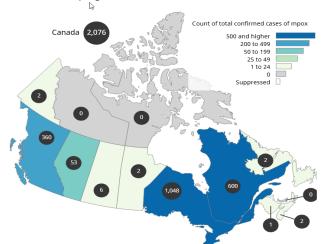


Figure 2. Total number of confirmed or probable mpox cases by province or territory for all years v (Last data update April 25, 2025, 12 pm Eastern)

1 Hover over or tap regions to see cases, in Canada over time.



Total reported mpox cases (as of Sept 17, 2025):

Confirmed: **2,142** Probable: **94**

Hospitalizations: 53 Deaths: 0

Cases mostly concentrated in urban centers, notably ON, QC, and BC

Clade Distribution:

The majority of mpox cases reported in Canada have been caused by clade IIb

Case demographics (2022-2025)

- Most cases were among men (98%) 18-49 years of age (85%)
- GBMSM (98%) and PLHIV (27%) have been disproportionately affected by mpox in Canada

Recent Trends:

- 222 cases in 2025 to date
- Termination of the WHO public health emergency of international concern; however, standing recommendations remain in effect until August 20, 2026.

Recent publications in STBBI

HIV in Canada, Surveillance Report to December 31, 2023: Executive summary

Estimated prevalence of hepatitis B and C among immigrants in Canada

National hepatitis B and C estimates for 2021: Measuring Canada's progress towards eliminating viral hepatitis as a public health concern

Prevalence and awareness of hepatitis B and hepatitis C and vaccine-induced immunity to hepatitis B: Findings from the Canadian Health Measure Survey, 2016–2019

Infectious syphilis and congenital syphilis in Canada, 2023, CCDR 51(2/3) - Canada.ca

ESAG data dashboard

Mpox epidemiology update

Hepatitis C treatment trends in Canada (data blog)

Stigma and discrimination experienced by people who inject drugs

Estimating the population size of people who inject drugs in Canada, 2021