

Saskatchewan progress towards reaching the UNAIDS 90-90-90 targets

August 2022

The Joint United Nations Programme on HIV/AIDS (UNAIDS) has set a global goal to end the AIDS epidemic as a public health threat by 2030. To monitor progress towards this goal, UNAIDS established “90-90-90” treatment targets for 2020:

- 90% of people with HIV are diagnosed;
- 90% of those diagnosed are on treatment; and
- 90% of those on treatment are virally suppressed.

To guide the global AIDS response from 2021-2030 and to monitor progress towards the 2030 goals; UNAIDS updated the treatment targets from “90-90-90” by 2020 to “95-95-95” by 2025.

- 95% of people with HIV within all sub-populations and age groups are diagnosed;
- 95% of those diagnosed within all sub-populations and age groups are on treatment; and
- 95% of those on treatment within all sub-populations and age groups are virally suppressed.

Progress to reach the UNAIDS targets

Provinces and territories, including Saskatchewan, contributed data to the Public Health Agency of Canada’s (PHAC) initiative to monitor Canada’s progress in achieving the UNAIDS global goal. PHAC released a public report in December 2016, which provided national results of the 2014 90-90-90 targets. The methodology was further refined in the 2016 and 2018 estimates and past estimates have been recalculated where appropriate. The use of IQVIA Canada pharmaceutical data was introduced in the methodology for the 2018 estimates and continues to be used. On **July 25, 2022**, PHAC released the national 2020 results, including a provincial and territorial breakdown, as well as the revised 2018 results.

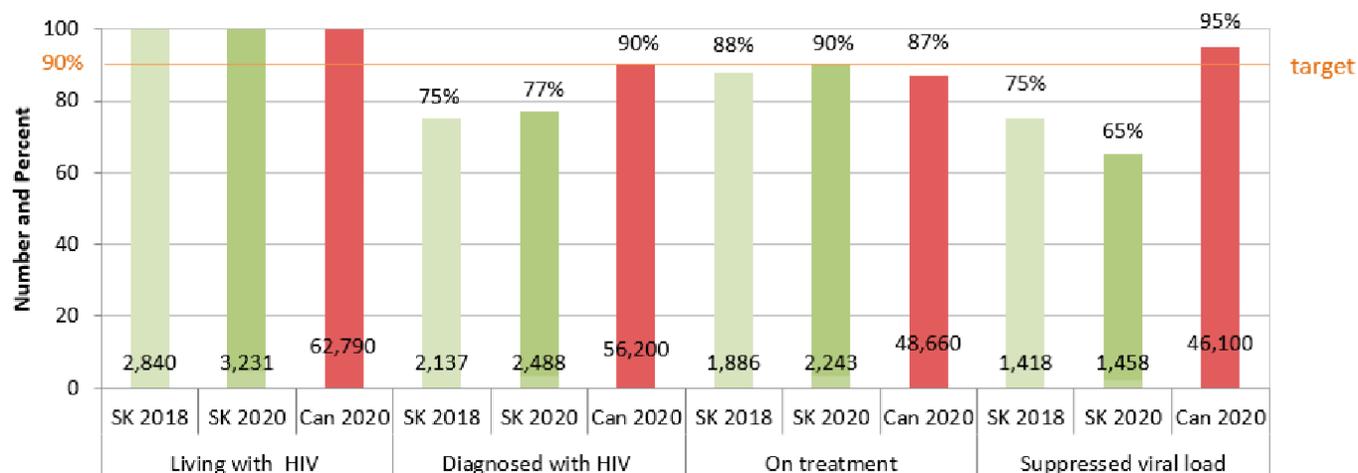
The full report is available at <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/estimates-hiv-incidence-prevalence-canada-meeting-90-90-90-targets-2020.html>

Figure 1 provides the revised 2018 and 2020 90-90-90 indicators for Saskatchewan and the 2020 results for Canada.

Table 1 provides the 90-90-90 indicators for Saskatchewan and Canada for 2020.

Table 2 provides the revised 2018 indicators for Saskatchewan and Canada.

Figure 1: Provincial and National 90-90-90 Indicators, 2020 and Revised Provincial Indicators, 2018



*Please see Tables 1 and 2 for calculations.

Table 1: Provincial and National 90-90-90 Indicators – 2020

	Saskatchewan Estimates	National Estimates ¹
Number of people living with HIV ²	3,231	62,790
Number of people living with HIV who are diagnosed ²	2,488	56,200
First 90: Proportion of people living with HIV who are diagnosed³	77%	90%
Number of people diagnosed with HIV who are on treatment ⁴	2,243	48,600
Second 90: Proportion of people diagnosed with HIV who are on treatment⁵	90%	87%
Number of people on treatment with a suppressed viral load ⁶	1,458	46,100
Third 90: Proportion of people on treatment who have suppressed viral load⁷	65%	95%

¹ <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/estimates-hiv-incidence-prevalence-canada-meeting-90-90-90-targets-2020.html>

² Calculations are based on PHAC modeling for the period ending December 31, 2020

³ Calculation: $\frac{\text{Number of people living with HIV who are diagnosed}}{\text{Number of people living with HIV}} \times 100$

⁴ Number of people with at least one prescription filled for HIV medication in 2019 for SK and in 2020 for Canada (IQVIA data extract)

⁵ Calculation: $\frac{\text{Number of people diagnosed with HIV on treatment}}{\text{Number of people living with HIV who are diagnosed}} \times 100$

⁶ Number of people with viral load considered to be suppressed (no longer or unlikely to transmit HIV) in 2020 (Row Romanow Provincial Laboratory data)

⁷ Calculation: $\frac{\text{Number of people with a suppressed HIV viral load}}{\text{Number of people on treatment}} \times 100$

Table 2: Provincial and National 90-90-90 Indicator – 2018

	Saskatchewan Estimates	National Estimates ¹
Number of people living with HIV ²	2,840	60,600
Number of people living with HIV who are diagnosed ²	2,137	53,910
First 90: Proportion of people living with HIV who are diagnosed³	75%	89%
Number of people diagnosed with HIV who are on treatment ⁴	1,886	45,880
Second 90: Proportion of people diagnosed with HIV who are on treatment⁵	88%	85%
Number of people on treatment with a suppressed viral load ⁶	1,418	43,320
Third 90: Proportion of people on treatment who have suppressed viral load⁷	75%	94%

¹ <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/estimates-hiv-incidence-prevalence-canada-meeting-90-90-90-targets-2020.html>

² Calculations are based on PHAC modeling for the period ending December 31, 2018

³ Calculation: $\frac{\text{Number of people living with HIV who are diagnosed}}{\text{Number of people living with HIV}} \times 100$

⁴ Number of people with at least one prescription filled for HIV medication in 2018 (*IQVIA data extract*)

⁵ Calculation: $\frac{\text{Number of people diagnosed with HIV on treatment}}{\text{Number of people living with HIV who are diagnosed}} \times 100$

⁶ Number of people with viral load considered to be suppressed (no longer or unlikely to transmit HIV) in 2018 (*Row Romanow Provincial Laboratory data*)

⁷ Calculation: $\frac{\text{Number of people with a suppressed HIV viral load}}{\text{Number of people diagnosed with HIV on treatment}} \times 100$

A comparison of the Saskatchewan revised 2018 and 2020 90-90-90 indicator estimates show:

- two percentage point increase (75% vs 77%) in the percent of HIV positive people diagnosed;
- two percentage point increase (88% vs 90%) in the percent of diagnosed HIV positive people on treatment; and
- a ten percentage point decrease (75% to 65%) in the percent of people on treatment who have achieved viral suppression.

These indicators were developed using modeling and data with limitations. When comparing results, they should be interpreted with caution and within the context of the methodology limitations. Some of the limitations include the use of unlinked data, potentially incomplete data and variations in data quality across the data sources.

Compared to the national indicators for 2020, Saskatchewan had a lower percentage of people living with HIV who are diagnosed and, for those who are on treatment, achieving viral suppression. However, Saskatchewan is higher than the national estimate in getting those who are HIV positive on treatment.

The national results should also be interpreted with caution as data completeness, data sources, methods and definitions differ from province to province, as well as from country to country. Both the national and provincial indicators are point estimates to monitor progress, recognizing that the data and methods used to calculate the indicators will be refined and improved in the future.

There are risk factors which create barriers for individuals to access HIV testing, care and treatment. These include:

- high rates of HIV transmission amongst those who self-report Indigenous ethnicity and the stigma and discrimination that prevent them from accessing services can result in being diagnosed late in the progression of the disease;
- high rates of problematic substance use which contribute to transmission through injection drug use;
- geographical challenges for rural and remote residents to access services; and
- transiency, which leads to individuals being “lost to follow up”.

The COVID-19 pandemic also created barriers and exacerbated barriers noted above. For example, access testing and care was more difficult during the pandemic.

Provincial Efforts to Reach the 90-90-90 Targets

Initiatives to increase awareness of HIV and to increase testing will continue to be key interventions to improving our provincial indicators. It is important for individuals to know their HIV status in order to make informed choices about what is best for their health. Injection drug use is a primary driver of HIV transmission in Saskatchewan. The complex issues faced by many individuals who inject drugs means that it is more challenging for these individuals to access and remain on HIV treatment.

Harm reduction programs reduce transmission of blood-borne infections and other harms by providing supplies for drug use. Evidence shows these programs minimize the harmful effects for individuals, families and communities and provide clients with return and disposal options to reduce discarded needles in the community.

From 2018-19 to 2020-21, harm reduction funding increased by \$950K to \$1.617M. These investments include funding for:

- Saskatoon Tribal Council’s harm reduction program;
- A mobile harm reduction van for Yorkton and area;
- Two new harm reduction sites in Swift Current and Cumberland House; and
- Inhalation and injection supplies to meet increased demand.

Two additional harm reduction case workers were also funded at Prairie Harm Reduction.

The **Saskatchewan HIV Collaborative** is a provincial committee providing advice and input on prevention, diagnosis, and care of those living with HIV/AIDS. Membership included representatives from the Ministry, federal government, Northern Inter-Tribal Health Authority, Public Health Agency of Canada (PHAC), Provincial Laboratory, SHA and people living with HIV. The Collaborative developed a three-year work plan (2017-2020) and adopted the 90-90-90 targets, along with two additional goals of Optimizing the HIV Care Environment and Improving Surveillance, Program Monitoring and Evaluation. Key areas of focus include engaging communities to support HIV strategies, increasing public and provider education, strengthening linkages between clinical and community services, promoting collaboration between provincial and federal health systems and addressing barriers to accessing HIV testing and treatment.

The Saskatchewan HIV Collaborative identified a goal to increase annual HIV testing by 15% by December 31, 2019. The total number of HIV tests in 2016 (76,675) was used as the baseline. A number of strategies were implemented by partners to increase routine and targeted HIV testing; including adoption of an annual HIV Testing Day on June 27 to promote HIV testing in an effort to educate, reduce stigma and normalize HIV testing. The number of total tests from 2016 to 2019 increased by 22%, surpassing the 15% goal.

For detailed progress made by the Collaborative, go to <https://skhiv.ca/2017-sk-hiv-collaborative-annual-summary/>

Efforts continue in conjunction with federal, provincial, community and Indigenous partners to improve access to testing and clinical interventions in alignment with best practice strategies and the UNAIDS 95-95-95 targets. In addition, with our partners, we continue our efforts to engage, educate and support individuals and communities to prevent transmission of HIV and explore opportunities for integrated approaches to address Sexually Transmitted and Blood Borne Infections.