

As physicians who work directly with HIV positive patients and their families, we are calling on the Government of Saskatchewan to declare a public health state of emergency regarding HIV and AIDS in our province.

For the last decade, Saskatchewan has had the highest rate of new cases of HIV in the country, at times double or even triple the national average. Recent years have seen a relative decrease in new cases, but 2015 saw another spike with 158 new cases in the province, up from 112 in 2014(1). The 2015 provincial rate was 13.8 cases per 100,000 people(2), almost double the 2014 Canada-wide rate of 5.8 per 100,000 per year.

Spread across the entire province, 158 new cases may not seem like a lot. However, certain communities – urban, rural and reserve – have been hit particularly hard, with local epidemics that rival some of the hardest hit regions of the world. Taken all together, 1515 people in Saskatchewan have been diagnosed with HIV in the last decade. Indigenous communities have been the most impacted, with 1075 cases among First Nations and Métis people, an inordinately high proportion (71%) given that less than 20% of the province’s population identifies as Indigenous(3).

HIV leads to diminished function of the immune system and, if untreated, to illness and death. However, treatments available today can suppress the virus below the level that can be detected by lab tests. For patients who achieve “undetectable” viral loads, damage to the immune system reverses, stopping the progress of the disease; individuals who achieve this response are also extremely unlikely to pass the virus on to others(4).

With timely diagnosis and using the tools we now have available for managing HIV, hospitalization and death due to HIV complications should be rare events. Unfortunately, as physicians, we are regularly seeing patients who are very sick from the effects of HIV, many of whom did not know that they were HIV-positive. In part due to being diagnosed with the infection late in the disease process, patients in Saskatchewan die at higher rates than people living with HIV in other parts of Canada(5). A recent Saskatoon-based study found a high in-hospital mortality rate for patients admitted for HIV/AIDS (30%). The number and range of opportunistic infections we are seeing is on par with the pre-treatment era and imposes a large cost on the health system(5). By 2014, over 200 of the individuals diagnosed with HIV between 2005 and 2014 in Saskatchewan have died(1).

At least nine Saskatchewan infants have been born HIV positive in the last decade - three in 2015 alone - accounting for nearly 20% of cases in Canada in that period(6). Mother-to-child transmission is entirely preventable with adequate access to prenatal care(7).

The human cost of this epidemic is obvious and tragic. The financial cost to the province is substantial. Each new case of HIV is estimated to cost \$450,000 in medication and, when indirect costs and complications are factored in, each new case costs over \$1.4 million through the lifetime of the patient(8). Saskatchewan's HIV Strategy estimated that the province spent over \$40 million per year in acute care costs alone(3).

UNAIDS, the World Health Organization body leading the charge against this virus worldwide, has called for the world to achieve the 90-90-90 goal by the year 2020(9). This goal would see:

- 90% of those who are HIV-positive know their status

- 90% of those diagnosed on antiretroviral treatment
- 90% of those on treatment with a level of the virus low enough to prevent transmission to others.

Meeting 90-90-90 would bring an end to AIDS in our province. Although achieving this goal could be hard because of our geography and the challenging social situations faced by many of our patients, we are convinced that, with proper resources, it can be done. Countries around the world have committed to 90-90-90, as have several Canadian provinces and the federal government. The recent World AIDS conference in Durban, South Africa, saw considerable attention paid to the epidemic in Saskatchewan, with particular focus on the challenges faced by Indigenous communities.

Despite the urging of experts from within the province and across Canada, the Government of Saskatchewan has refused to adopt the 90-90-90 goals. At a meeting of health care providers and community leaders in 2015, a plan with clear steps to achieve the goal - from increased public education and testing to coordinated treatment and support - was endorsed (10). This document has been shared with the provincial Ministry of Health and discussed on numerous occasions. However, there has been no indication of any action or even a plan; the provincial HIV strategy expired in 2014.

It is in this context of this serious problem - which is affecting communities all across Saskatchewan, costing numerous lives and many millions of dollars - that we realize we can no longer pursue action through regular channels. Whether the Provincial Government chooses to recognize it or not, we are in a state of emergency with a deadly infectious disease. We call on the Government of Saskatchewan to work with the Federal Government and Indigenous leadership to take meaningful action immediately to bring this problem under control.

Signed by the following 31 physicians in Family Medicine, Internal Medicine, Infectious Diseases, Obstetrics and Gynecology and Pediatric Infectious Diseases, Addictions Medicine and Psychiatry who serve HIV positive patients Saskatoon, Regina, Prince Albert, La Ronge, North Battleford and multiple smaller communities throughout Saskatchewan.

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References

1. Population Health Branch. [HIV and AIDS in Saskatchewan 2014: Annual Report](#). 2015.
2. Fraser DC. [Sask. HIV rate goes up as harm-reduction expansion remains on hold](#). Regina Leader-Post. Regina; 2016 Jun 16.
3. Saskatchewan Ministry of Health. [HIV Strategy 2010 – 2014](#). Regina; 2009.
4. Easton R. [Let's talk about sex](#). The Positive Side. CATIE: 2016.
5. Karsten Hammond, Michelle Persaud, Oscar Larios, Karen McClean, Athena McConnell, Stephen Sanche, Satchan Takaya, Ben Tan, Kurt Williams SS. Increasing Burden of HIV/AIDS on Hospitals in Saskatoon, Saskatchewan, Canada. Infectious Diseases Society of America Annual Meeting. Saskatoon; 2011.
6. Warick J. [Two HIV-positive babies born in Sask: third case under investigation](#). The Star Phoenix. Saskatoon; 2015 Dec 21.
7. CATIE. [Reducing mother-to-child HIV transmission in Canada](#). CATIE News. 2012.
8. Estelle Ouellet, Madeleine Durand JRG, Jacques LeLorier CLT. Cost effectiveness of “on demand” HIV pre-exposure prophylaxis for non-injection drug-using men who have sex with men in Canada. Can J Infect Dis Med Microbiol . 2015;26(1):29.
9. UNAIDS. [90-90-90 An ambitious treatment target to help end the AIDS epidemic](#).
10. SHARE. [Getting to 90-90-90: 10 Key elements of a successful plan for HIV in Saskatchewan](#). HIV and HCV Benchmark meeting, Regina, SK, March 7th, 2015. Regina; 2015.