

HIV in Canada: One Nation, Two Stories

Siddharth Kogilwaimath MD, Division of Infectious Diseases,
University of Saskatchewan, Canada.

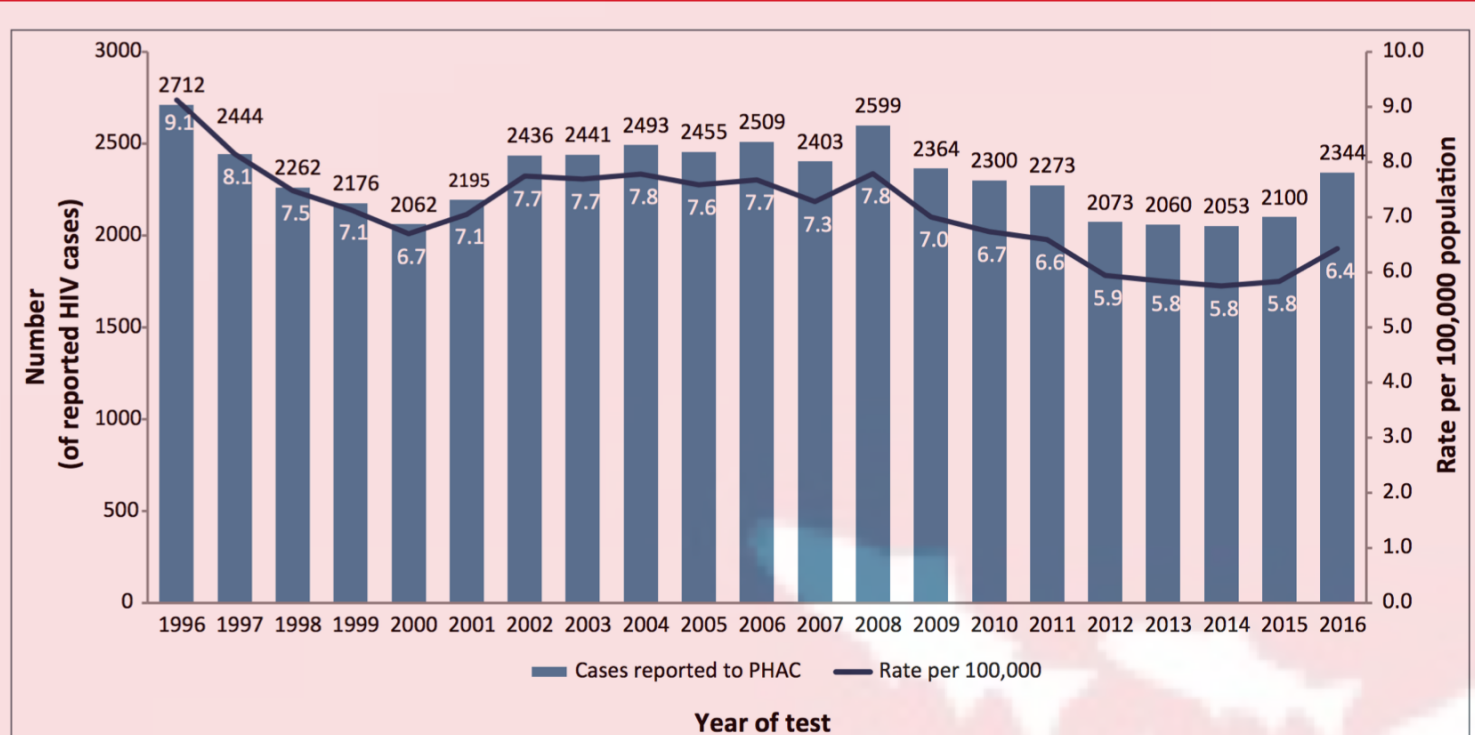
Canada: Introduction

- Canada is the world's second largest country with an area of 9,984,670 sq. km, divided into 10 provinces and 3 territories
- Population: 35,151,728 people
- Health-care in Canada is accessible to all Canadians
- First case of HIV in Canada dates back to March 1982
- In 2016, there were an estimated 75,000 Canadians living with HIV

HIV in Canada: Epidemiology

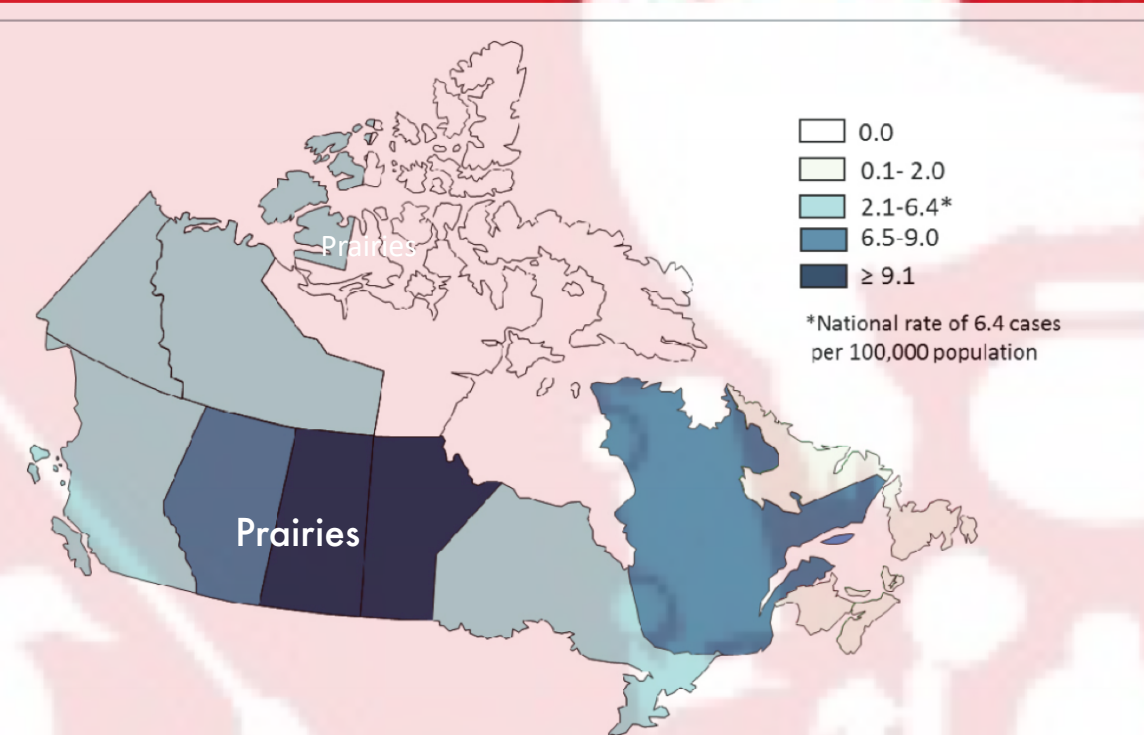
- 2,344 new cases reported in 2016; 11.6% increase over 2015
- Rate of 6.4 new cases/100,000 in 2016
- Indigenous and Black people each represent <5% of Canadian population, yet >20% of new infections

Number of reported HIV cases, including rate, by year of test- Canada 1996-2016



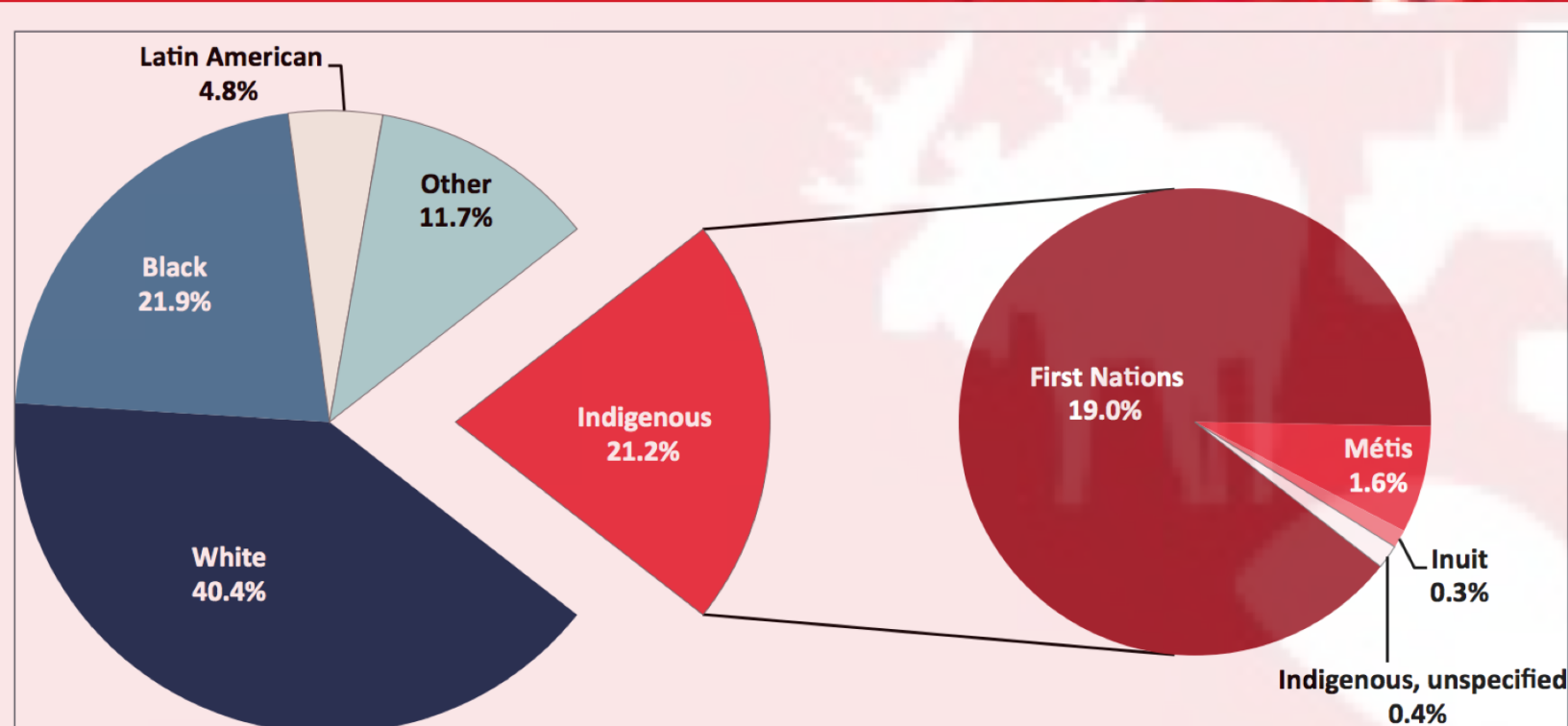
Abbreviation: PHAC, Public Health Agency of Canada
Disaggregated data by year are not available before 1995 for some jurisdictions

Rate of new cases by province and territory- Canada, 2016



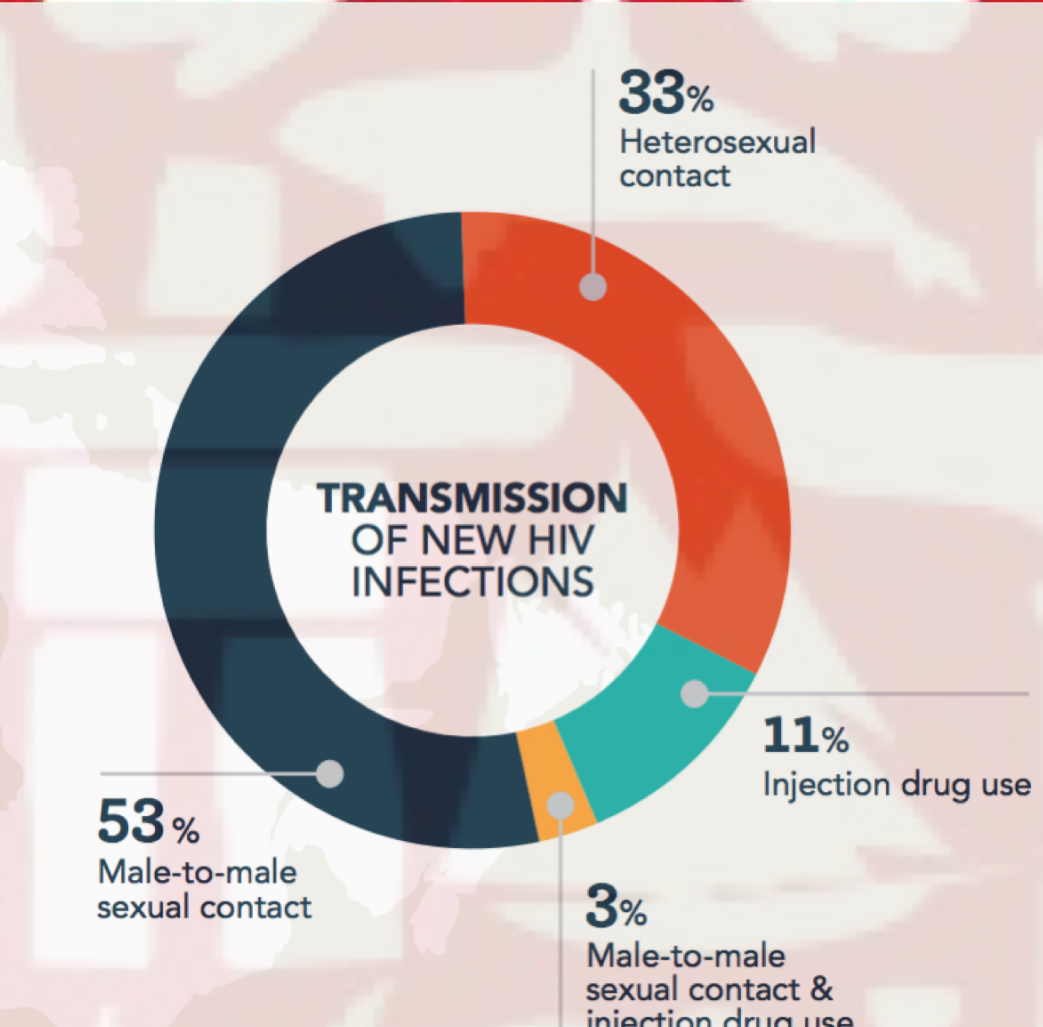
Population data source: Annual Demographic Statistics, Demography Division, Statistics Canada, October 2016

Proportion of reported HIV cases (all ages) by race/ethnicity (including the Indigenous subgroups)— Canada, 2016



¹ Race/ethnicity information was not available for Quebec and British Columbia
² Excludes cases where race/ethnicity was not reported
³ Latin American includes, for example, Mexican, Central American and South American
⁴ Other includes, for example, Pakistani, Sri Lankan, Bangladeshi, Armenian, Egyptian, Iranian, Lebanese, Moroccan, Chinese, Japanese, Vietnamese, Cambodian, Indonesian, Laotian, Korean, Filipino, Somali, Haitian and Jamaican

Transmission modalities by proportion of new HIV infections in 2016



Saskatchewan: Introduction

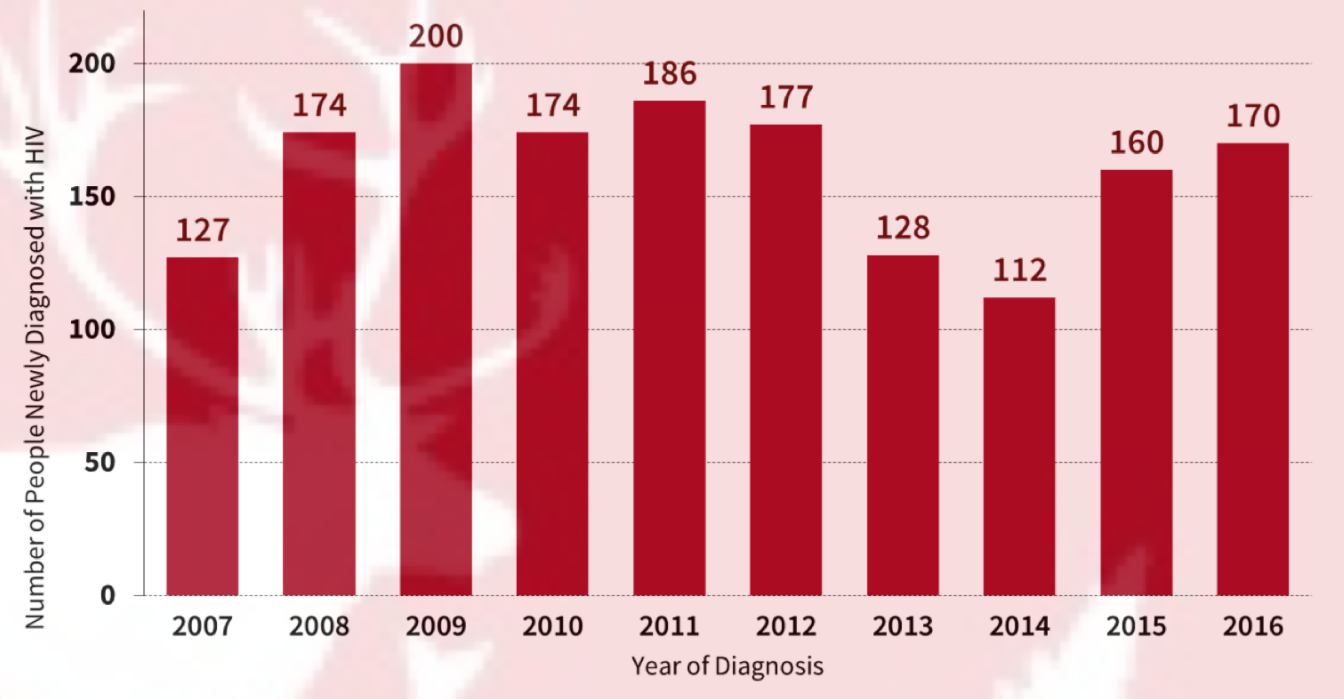
- Saskatchewan is located in the Prairies and is the 7th largest province of Canada
- Area: 651,900 sq. km
- Population: 1,098,352 people



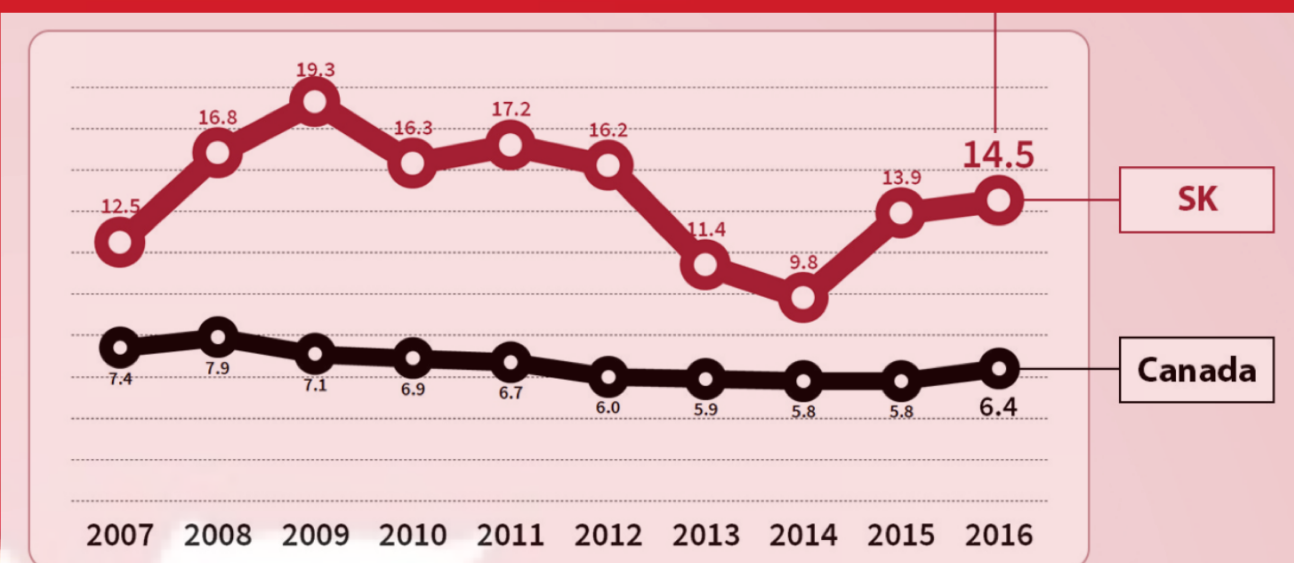
HIV in Saskatchewan: Epidemiology

- 170 new cases of HIV in 2016
- Rate of 14.5 cases/100,000; highest rate in Canada
- 79% of new cases self-identified as Indigenous

Number of new cases of HIV per year in Saskatchewan from 2007-2016



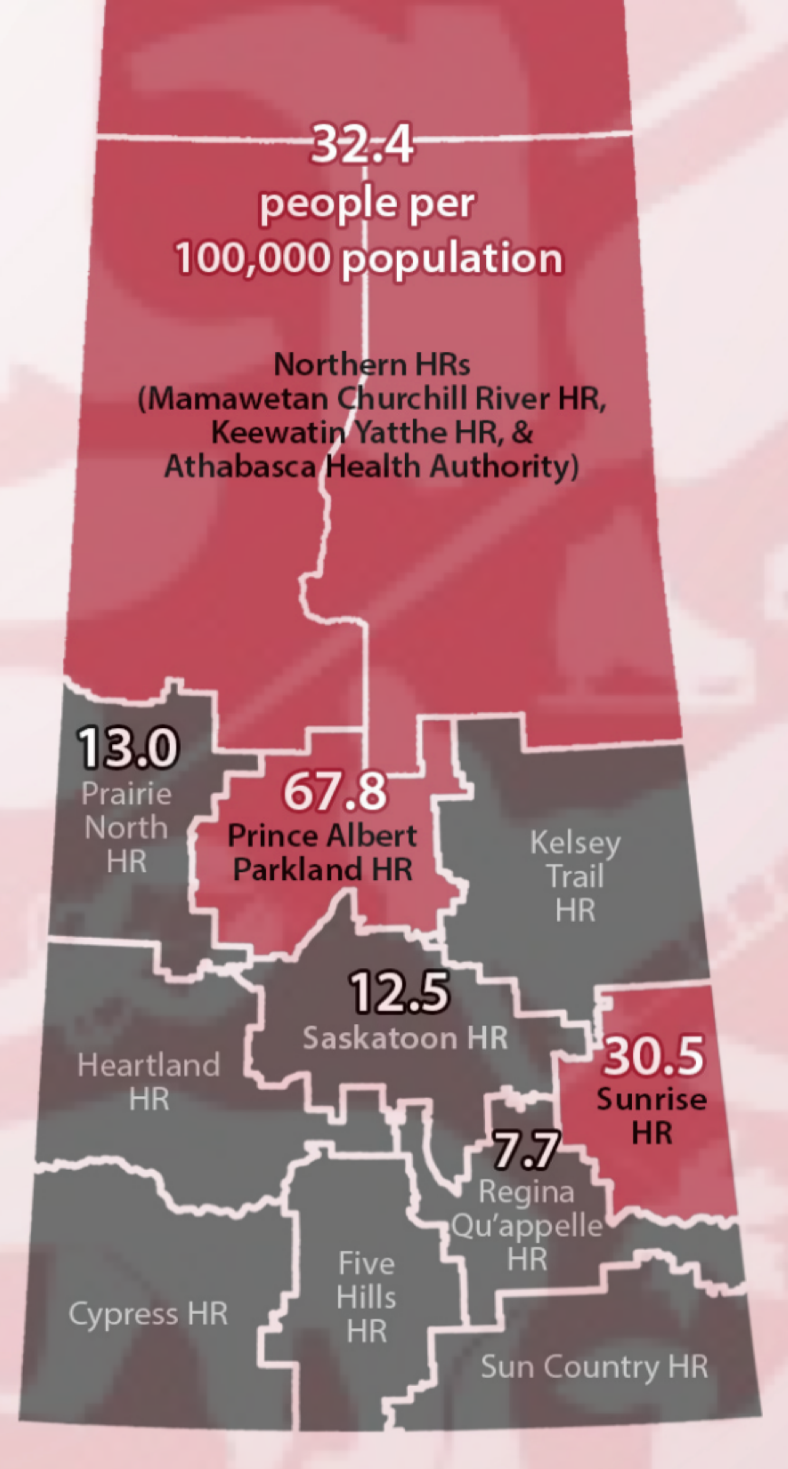
Rate of new cases/100,000 in Saskatchewan compared to the national average from 2007-2016



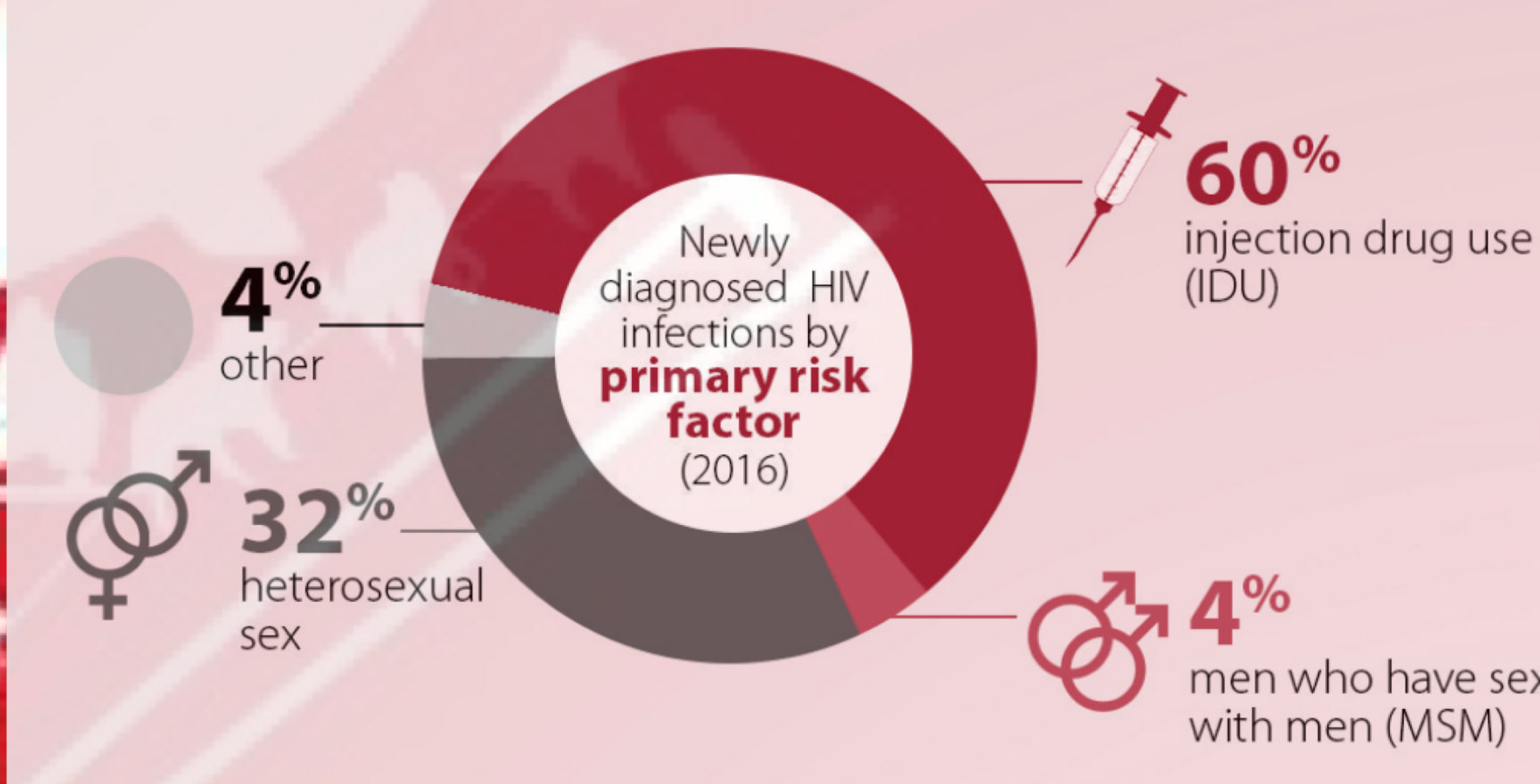
► SK's HIV diagnosis rate was **2.3x** higher than the national rate in 2016

Regional variation of HIV rates within the province of Saskatchewan in 2016

■ higher than provincial rate
■ lower than provincial rate or reported no new infections



Modes of transmission among new cases in Saskatchewan in 2016



HIV in Canada: Progress towards 90:90:90

Canada's progress to meet **HIV 90-90-90 targets** by 2020:

In 2016

86%

of Canadians living with HIV were diagnosed

81%

of Canadians diagnosed with HIV were on treatment

91%

of HIV positive Canadians on treatment had achieved viral suppression

HIV in Canada: The Challenges

- Barriers to accessing ARVs: Each province has its own formulary of drugs that it covers. Some people are covered by Federal Insurance programs while Indigenous people come under specific Federally administered insurance programs. Each program has their own list of ARVs that would be covered. Most programs do not cover new ARVs.
- Barriers to accessing prevention programs: Pre-exposure prophylaxis, for example, is not covered in all provinces.
- Criminalization of non-disclosure: Concerns regarding broad use of Criminal Law in non-disclosure cases regardless of the actual risk of HIV transmission. The most common charge is aggravated sexual assault that carries with it maximum penalty of life-imprisonment and mandatory designation as a sex offender.
- Fear, stigma and discrimination remain major barriers in testing and accessing care especially in key populations such as Indigenous women

HIV in Saskatchewan: Stumble towards 90:90:90

- Data from 2014:

69% diagnosed

78% On treatment

79% Virally suppressed

- The good news: All antiretroviral drugs fully covered by the provincial drug plan regardless of the indication (April 2018)

HIV in Saskatchewan: The Challenges

- Mutations unique to the circulating HIV strains identified in Saskatchewan; hypothesized to explain rapid progression from infection to AIDS
- Fear, stigma and discrimination in our key populations such as Indigenous people and injection drug users compounding health inequity
- Lack of adequately resourced addiction services.
- Remote and small rural communities where patients live with the fear of community members finding out diagnosis.
- Care provided through 3 major centers (Regina, Saskatoon and Prince Albert) with no shared electronic records. It is an issue given that there is mobility of patients within the province.
- Lack of resolve by the Provincial Government to expand needle exchange and to open safe-injection sites
- Lack of HIV care providers and lack of comfort among Primary Care Providers in dealing with HIV