2018 MANITOBA HIV PROGRAM UPDATE

July 2019

MANITOBA
HIV PROGRAM

About the Manitoba HIV Program

Since 2007, the Manitoba HIV Program has been the primary provider of specialized, evidence-informed HIV care and treatment for people living in Manitoba. The Manitoba HIV Program works with primary care providers and other specialists across the province to:

- ◊ Encourage, support, and expand HIV testing in Manitoba
- ◊ Link individuals requiring care and/or support to the appropriate services
- ◊ Support access to comprehensive HIV care and support services for people living with HIV in Manitoba
- ◊ Provide and/or link individuals to health and social services that enable Manitobans to live well with HIV
- ◊ Provide consultation, education, and resources on HIV care to primary care providers in Manitoba

At the end of 2018, approximately 1400 people living with HIV were receiving care at one of the Manitoba HIV Program's three clinic sites: Nine Circles Community Health Centre and an ambulatory clinic at the Health Sciences Centre in Winnipeg, and the 7th Street Health Access Centre in Brandon.

This report provides a brief overview of the sociodemographic and clinical characteristics of the 115 individuals who entered into HIV care in 2018 and identifies key areas for improving health outcomes for people living with HIV in Manitoba. We also have the pleasure this year of outlining key accomplishments that are helping our program to meet our mandate of supporting Manitobans living with HIV to live well. This includes supporting short and long-term initiatives to advance HIV testing and linkage to care, as well as efforts that help keep care close to home.

Land acknowledgement

The Manitoba HIV Program operates on the original lands of the Anishinaabe, Cree, Oji-Cree, Assiniboine, Dakota, and Dene peoples, and the homeland of the Métis Nation. As a non-Indigenous organization, we are moving towards honouring the Treaties that were made on these territories, from within the confines of a racist and colonial healthcare system. We acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

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Manitoba HIV Program Website

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Acknowledgements:

The Manitoba HIV Program would like to thank all of our government, academic and community partners that help support HIV Program activities and clients.

Program Partners include:

- The Public Health Agency of Canada
- Indigenous Services Canada
- Manitoba Health
- Winnipeg, Prairie Mountain, Interlake-Eastern, Southern and Northern Health Region- Public Health and Primary Care teams
- Manitoba Association of Community Health
- Manitoba HIV/STBBI Collective Impact Network
- Manitoba First Nations AIDS Working Group (MFNAG)
- 2 Spirit People of Manitoba
- Ka Ni Kanichihk
- Manitoba Harm Reduction Network (MHRN)

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Demographics

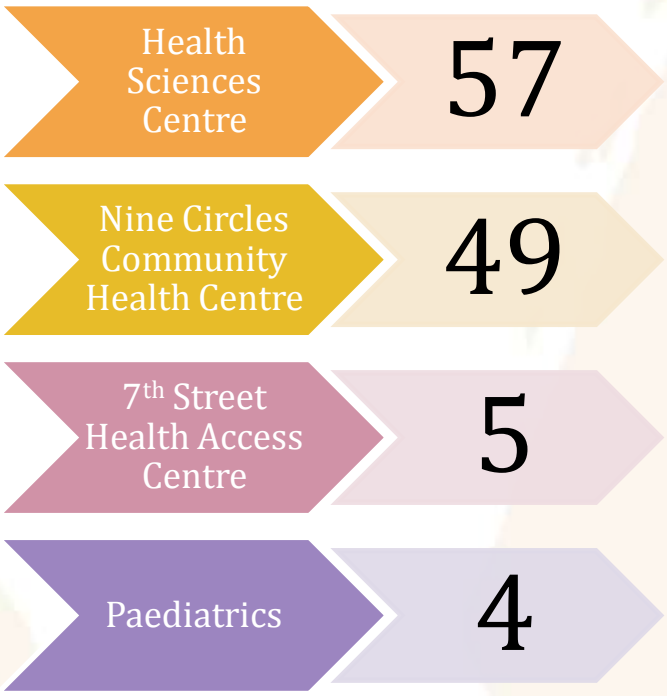

Figure 1. *HIV Care location of clients entering care with the Manitoba HIV Program in 2018 (n=115).*

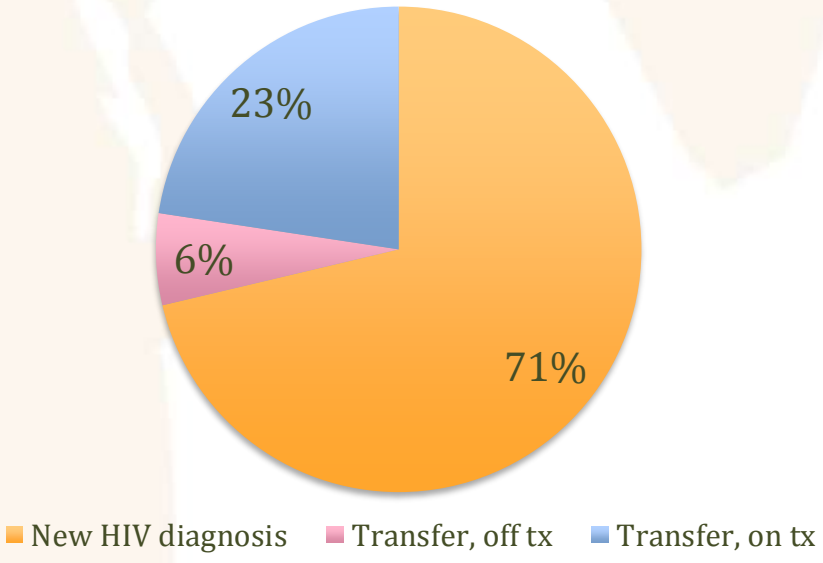

Figure 2. *Status of clients upon entering care with the Manitoba HIV Program in 2018 (n=115)*

115 individuals entered into care with the MB HIV program in 2018. HIV care sites in Manitoba include: Health Sciences Centre and Nine Circles Community Health Centre in Winnipeg, and 7th Street Access Centre in Brandon. (**Figure 1**)

In Total, eighty-two clients (*n*=82; 71.3%) entering into care were newly diagnosed with HIV in Manitoba in 2018.

The remaining clients (*n*=33) that were new to care, presented with a past medical history of HIV. Seven (7) of these clients required initiation of Anti-Retroviral Therapy (ART). (**Figure 2**).

In 2018, Manitoba had one (1) case of Mother-to-Child transmission and an additional three (3) pediatric clients transferred on treatment into care with a Pediatric Infectious Disease Specialist. (**Figure 1**)

Age

The average age of clients entering care in 2018 was **38.1 years**, ranging from newborn to 76 years of age (**Figure 3**).

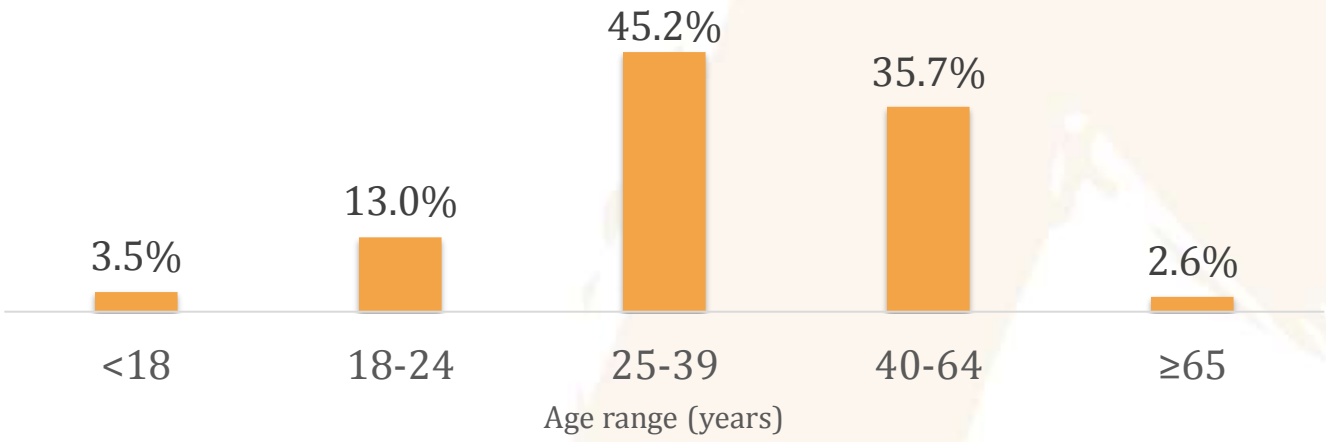

Figure 3. *Age range of clients who entered HIV care with the MB HIV Program in 2018 (n=115).*

Sex and Gender

Forty percent (*n*=46) of clients who entered HIV care in 2018 were female, this figure nearly doubles the national average for Canada, where approximately 23.4% of new HIV infections occurred in females in 2016. (**Figure 4**).

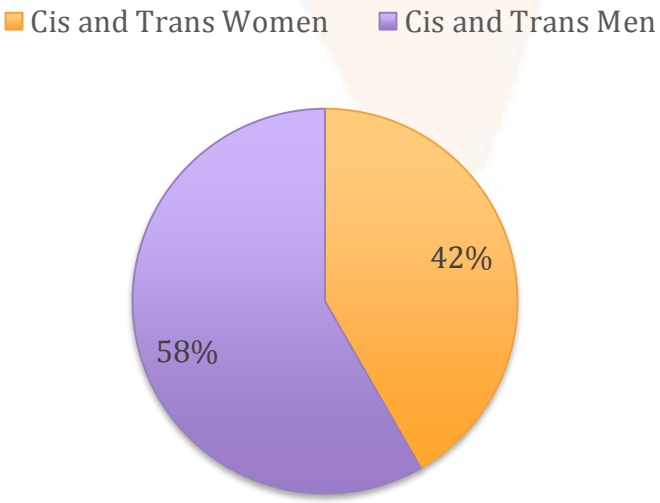

Figure 4. *Sex and Gender of all clients who entered into care with the MB HIV Program in 2018 (n=115)*

Self-identified ethnicity

Over fifty percent (*n*=59; 51.3%) of new clients self-identified as Indigenous (First Nations, Métis, Inuit), while eighteen percent (*n*=21; 18.3%) identified as White (non-Indigenous/non-Hispanic) and twenty-two percent (*n*= 25, 21.7%) as African/Caribbean/Black (ACB). Remaining ethnic groups included clients from Southeast Asia and Latin America (**Figure 5**).

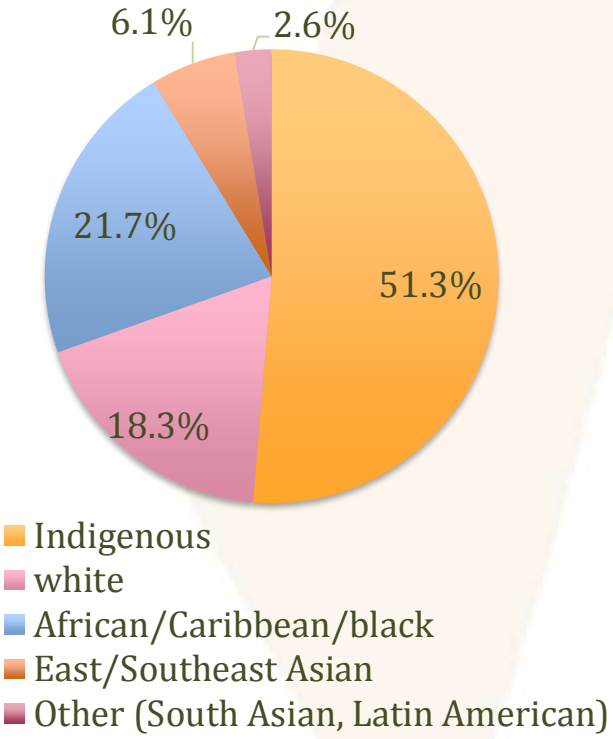

Figure 5. *Self-identified ethnicity among clients who entered HIV care with the MB HIV Program in 2018 (n=115).*

Key Subpopulations

Year over year comparisons show that 2018 was fairly consistent with regards to age and sex/gender categories. However, a marked increase was noted for clients who self-identified as Indigenous (First Nations, Inuit and Metis)- *at over fifty percent of all client new to care*. This is significantly higher compared to the proportion of those who identify as Indigenous in the general population, representing only 17% of all ethnicities in Manitoba in 2016.

Similarly, members of the African, Caribbean and Black (ACB) community remain over-represented for clients who are new to care with the Manitoba HIV Program. Key differences between the two populations are the way in which they enter into care. The majority of clients from the ACB community, transfer into care already diagnosed with HIV and already taking medication. The majority of clients who self-identify as Indigenous are newly diagnosed and new to care in Manitoba.

AFRICAN/CARIBBEAN/BLACK (ACB) COMMUNITY

The majority of clients from the ACB community tested positive for HIV outside of Manitoba and transferred into the program already taking medication (*n* = 13; 52%- **Figure 6)**.

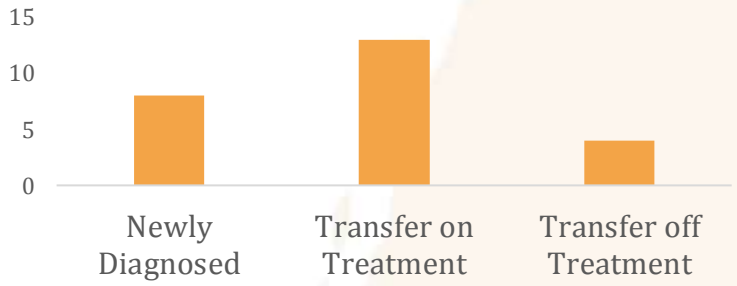

Figure 6. *Status at Care Entry: African, Caribbean and Black Clients new to care in 2018 (n=25).*

INDIGENOUS (FIRST NATION, INUIT AND MÉTIS) COMMUNITY

Clients who self-identified as Indigenous and entered into HIV care in 2018 were more likely to have had their first positive HIV test in Manitoba (*n*= 33; 86.8%- **Figure 7**). If we remove all clients who transferred into care and only analyze new diagnoses, Indigenous people account for a total of 66% (n= 59, **Figure 8**) of all clients diagnosed in Manitoba in 2018. Indigenous women accounted for **81.4% of all women** diagnosed with HIV in 2018, emphasizing the need for robust, culturally inclusive prevention and testing programming throughout the province.

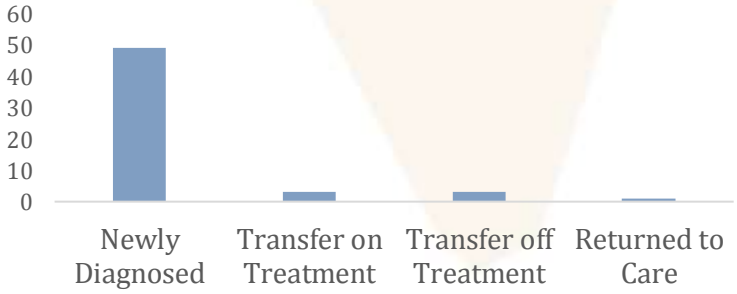

Figure 7. *Status at Care Entry: Indigenous new to care in 2018 (n=56).*

Figure 8. *Self-Identified Ethnicity- New HIV Diagnosis in Manitoba, 2018 (n=89).*

Geography

Over three quarters (n=89; 77.4%) of clients who entered care in 2018 live in Winnipeg, twenty percent (n=23) live outside of Winnipeg and 2.6% (n=3) have an unknown address (**Figure 9**).

Unlike in previous years, Manitoban clients residing outside of the Winnipeg Regional Health Authority (WRHA) are closing the gap when it comes to late presentation to care. Only 15.6% of rural clients presented "very late" (with CD4 counts <200 cells/mm^3) to care in 2018, down from 41% in 2017. Public Health efforts as well as Community-Based Organizations (CBOs) participation in targeted testing events, such as *National HIV/STBBI Testing Day* has decreased the disparity of clients presenting "very late" to care as compared to those living in Winnipeg.

Northern Health Region	1.7%
Prairie Mountain Health	9.5%
Interlake-Eastern Regional Health Authority	3.5%
Winnipeg Regional Health Authority	77.3%
Southern Health – Santé Sud	0.8%
Out of province	4.3%
Unknown	2.6%

Figure 9. *Geographic distribution of new clients at time of chart audit, by regional health authority (n=115).*

Transmission Dynamics

After initial clinical visits, clients are asked to provide information about the most likely mode in which they believed to have acquired HIV. Most clients recalled more than one transmission risk, however for simplicity's sake, primary risk exposure, based on risk hierarchy is included in the report (**Figure 10**).

Transmission risks for all clients who entered into care in 2018 were then analyzed for risk hierarchy (**Figure 11**) and primary exposure categories were assigned.

Most notably, 2018 marked the first year where injection drug use (IDU) surpassed heterosexual contact as the most likely exposure category, where 35.6% (n=41) of all clients entering into care cited injection drug use as a possible transmission risk (**Figure 12**).

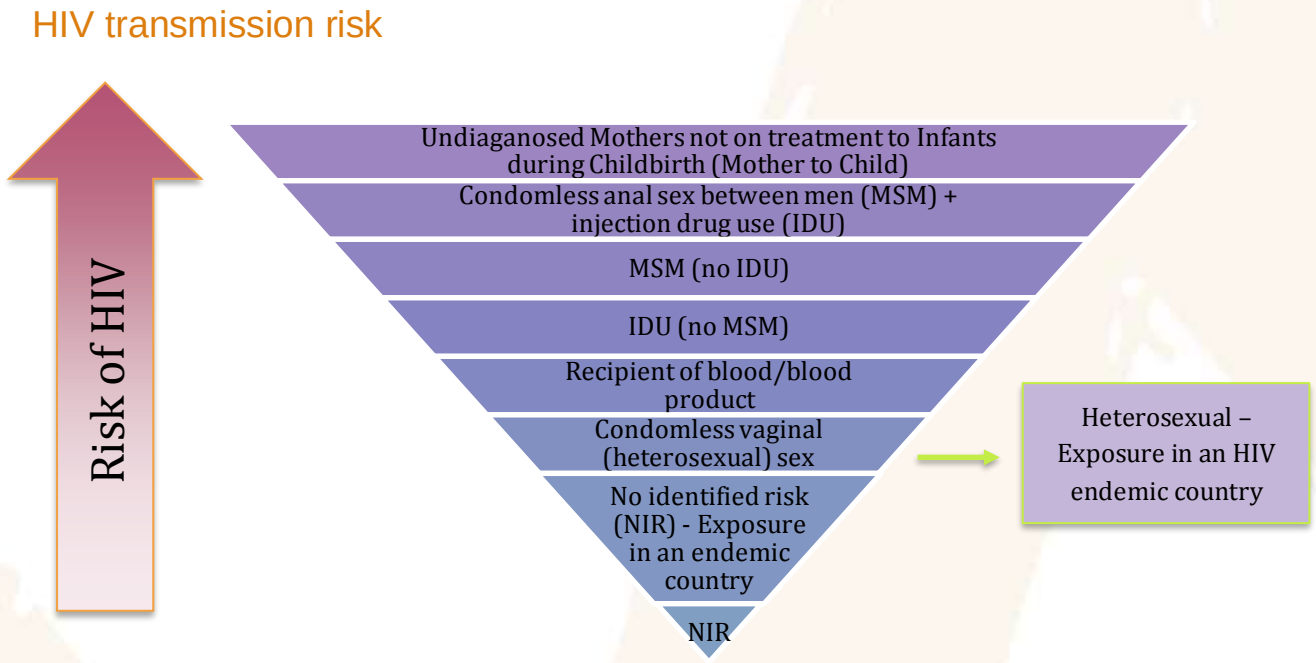

Figure 10. *Risk hierarchy used to determine most likely mode of HIV transmission. NIR, No Identified Risk.*

Primary Exposure Category	*n*	%
Mother to Child Transmission	4	3.5
MSM & IDU	2	1.7
MSM (no IDU)	28	24.4
IDU (no MSM)	39	33.9
Recipient of blood/blood product (outside Canada)	2	1.7
Heterosexual	24	20.9
Heterosexual-Endemic	11	9.6
No identified risk-Endemic	3	2.6
No identified risk	2	1.7

Figure 11. *Most likely modes of HIV acquisition, as reported by clients who entered HIV care in 2018 (n=115).*

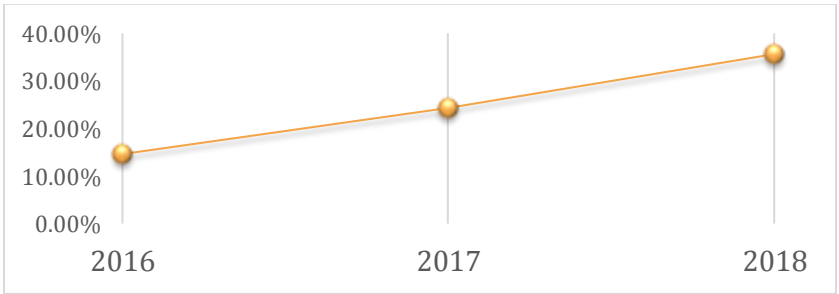

Figure 12. *Proportion of clients who cited Injection Drug Use as a possible risk factor for HIV transmission 2016-2018.*

Clinical Indicators

CD4 cell count

CD4 counts were collected from 97.4% (*n* = 112) of individuals who entered care with the Manitoba HIV Program in 2018 (**Figure 13**). The median CD4 count at entry into care was 374 cells/mm^3. Only (*n*=15, 13.7%) of clients presented "very late" to care, with CD4 counts below 200 cells/mm^3 showing a steady decrease from years previous, indicating that people may be getting tested and connected to care earlier.

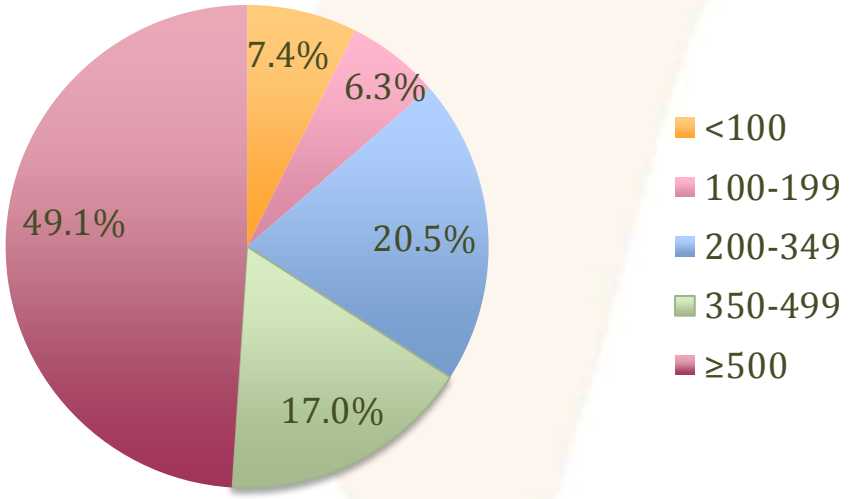

Figure 13. *First CD4 cell count (cells/mm^3) in Manitoba among clients who entered HIV care in 2018 (n=112).*

Acute HIV infections

Among those who entered into care, newly diagnosed with HIV in 2018 (*n* =82), eighteen (n=18; 22.0 %), were diagnosed with an acute HIV infection[1].

Acute HIV infections were detected in individuals who reported condomless heterosexual sex (*n*=3), condomless sex between men (*n*=5), and injection drug use (*n*=10) as their primary HIV exposure category.

[1] Definition of Key Terms for description of acute HIV infection.

Co-infections

Opportunistic infections

An opportunistic infection (OI) is the name given to an HIV-related illness. These are often infections that without HIV, the body would be able to control. The lower the CD4 count, the higher the risk of OIs. This is why HIV treatment (ART) is especially important with a low CD4 count.

While the majority (*n*=101, 87.8%) of new clients did not present to HIV care with opportunistic infections, among individuals that did, *Oropharyngeal Candidiasis* (thrush) and *Tuberculosis* (TB) were most common (**Figure 14**).

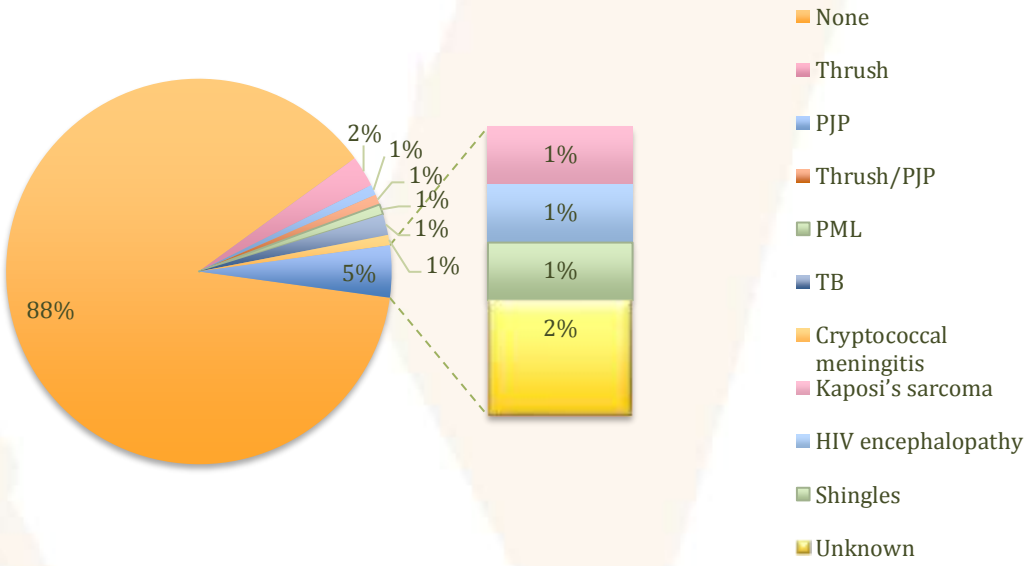

Figure 14. *Prevalence of opportunistic infections and other HIV-specific comorbidities among clients who entered care in 2018 (n=121).*

Sexually transmitted and blood-borne infections

2018 saw outbreak numbers of *Chlamydia, Gonorrhea* and *Syphilis* in Manitoba. Manitoba Health and the Manitoba HIV Program both stress the importance of healthcare providers offering testing for all sexually transmitted and blood-borne infections (STBBIs), when a client requests testing, or tests positive for another STBBI, in other words, *"Test for One, Test for All".* The Manitoba HIV Program also encourages condom use for all persons living with HIV to prevent infection with other STBBIs.

"Test for One, Test for All".

In 2018, over one quarter (*n*=31, 27.0%) of new clients presented to HIV care with another sexually transmitted or blood-borne infection (STBBI). Year over year prevalence from 2014-2018 shows that co-infection rates have increased dramatically for *Hepatitis C, Chlamydia* and *Gonorrhea* in 2018 (**Figure 15**).

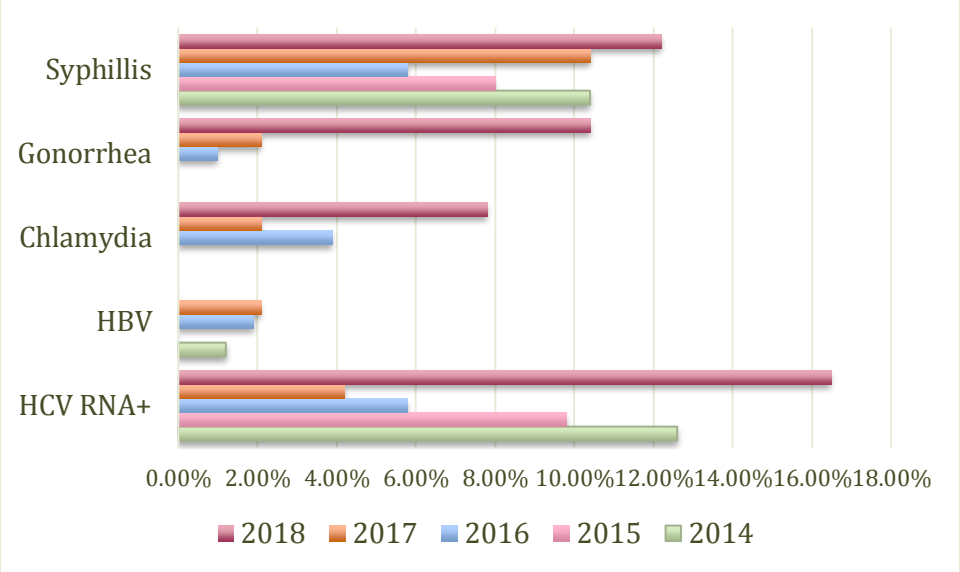

Figure 15. *Year over Year Prevalence of sexually transmitted and blood-borne infections among within 6 months of Program entry 2014-2018.*

National HIV/STBBI Testing Day 2018

June 27th, 2018 marked the inaugural year of *National HIV/STBBI* testing day and the MB HIV Program helped lead the charge by participating as members of the *Manitoba HIV/STBBI Collective Impact Network- Testing and Linkage Working Group*. Results of the testing day were assessed by looking at the average number of HIV tests/day the month preceding and the month following the testing blitz and comparing those to the numbers sent on National Testing Day.

150% Increase in testing uptake was noted as a result of National HIV/STBBI Testing Day efforts in Manitoba (**Figure 16**).

	Average # of Tests/Day
May 26 to June 26	307
National HIV/STBBI Testing Day (June 27)	449
June 28 to July 28	314

Figure 16. *Results from National STBBI/HIV Testing Day, June 27, 2018 (source: Cad ham Provincial Laboratory).*

Client Outcomes

Both Viral Load and the HIV Continuum of Care (or Care Cascade) are ways in which the HIV Program can measure how clients are fairing clinically after entering into care. The importance of viral load suppression (or an "undetectable" viral load) for prevention of HIV transmission is well evidenced.

Viral load

Among all clients who entered HIV care in Manitoba in 2018, median viral load decreased from 102,213 copies/mL to 40.5 copies/ml between presentation to care to time of audit. Approximately one-quarter of new clients (*n*=27, 24.1%) presented to care with a suppressed viral load (i.e. <200 copies/mL) and 85.4% (*n*=82) of clients who remained engaged in care were virally suppressed at time of audit (**Figure 17**).

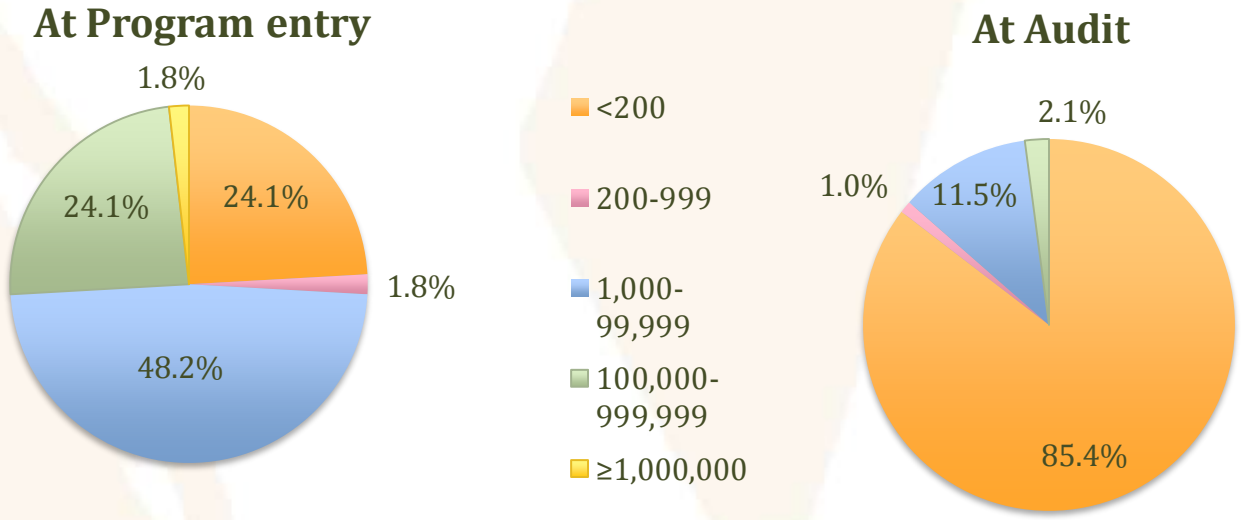

Figure 17. *Viral load (copies/mL) at presentation to care (n=112) and at time of audit (n=96) among clients who entered HIV care in 2017.*

Undetectable = Untransmittable (U=U)

Many clients were able to achieve an undetectable viral load (VL) during their first year in care. Of the clients who entered into care in 2018, not on ART (*n*= 86); seventy-six (n=76) of those clients had a viral load available for audit. Of those, 80.8% (*n*=70) had a VL less than 200 copies/ml at time of audit (**Figure 18**). There are many reasons why some clients have a difficult time achieving and maintaining an undetectable viral load. For most, these are rooted in other social determinants of health, but also for some, differences in biological make-up, make achieving and undetectable viral load impossible.

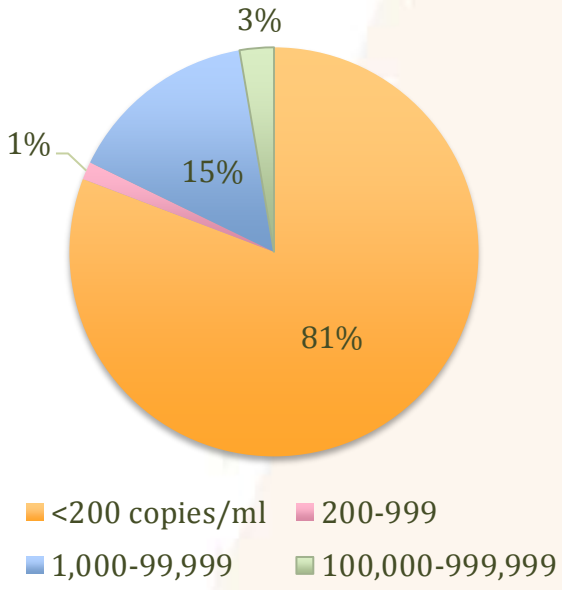

Figure 18. *Viral load (copies/mL) at time of audit of clients who presented to care off ART, with a documented VL (n=76)*

The evidence is in: If you are HIV+, take treatment and maintain an undetectable viral load, you can have sex knowing that you won't pass HIV to your sex partner.
In short, when HIV is undetectable, it's untransmittable.

HIV Continuum of Care

A continuum of HIV care illustrates an ideal set of sequential steps through which people living with HIV progress. The continuum also depicts the proportion of individuals at each step of the continuum.

Figure 19 presents the continuum of HIV care for all clients who entered into care with the Manitoba HIV Program in 2018. The denominator for each step of the continuum is the numerator of the previous step.

Figure 20 presents the continuum of HIV care for all clients who entered into care *OFF Treatment* in 2018.

Limitations of the continuum of HIV care model

There are a few important caveats to the continuum models presented below. First, these are simple snapshots of the care status of clients who entered care with the Manitoba HIV Program in 2017, and they are not necessarily representative of the entire population of people in HIV care in Manitoba.

Second, given the limited time period considered in this report, the proportion of clients who were virally suppressed by time of audit is likely an underestimate of those who will ultimately reach viral suppression. The definitions used by the Manitoba HIV Program for each step of the care are outlined in the *Definition of Key Terms* section.

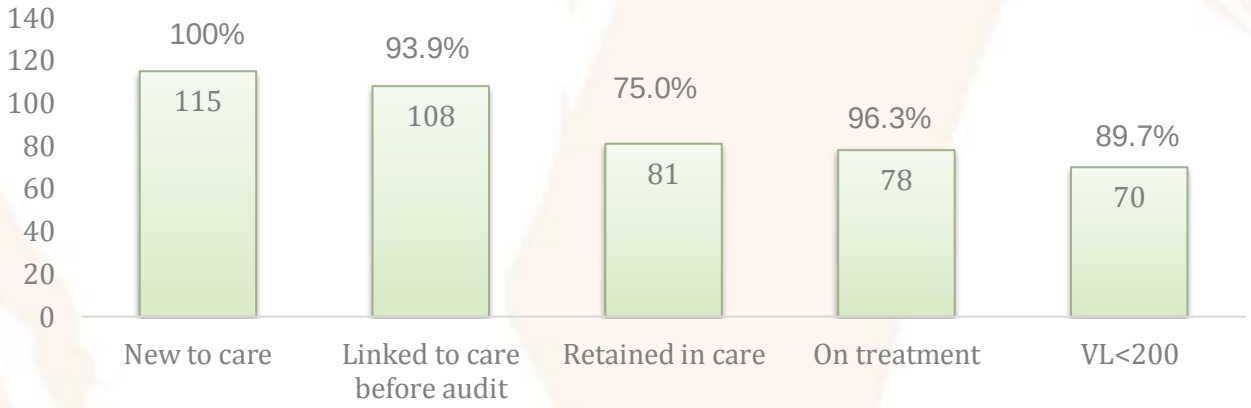

Figure 19. *Continuum of care, clients new to care 2018 (n=115 at first step).*

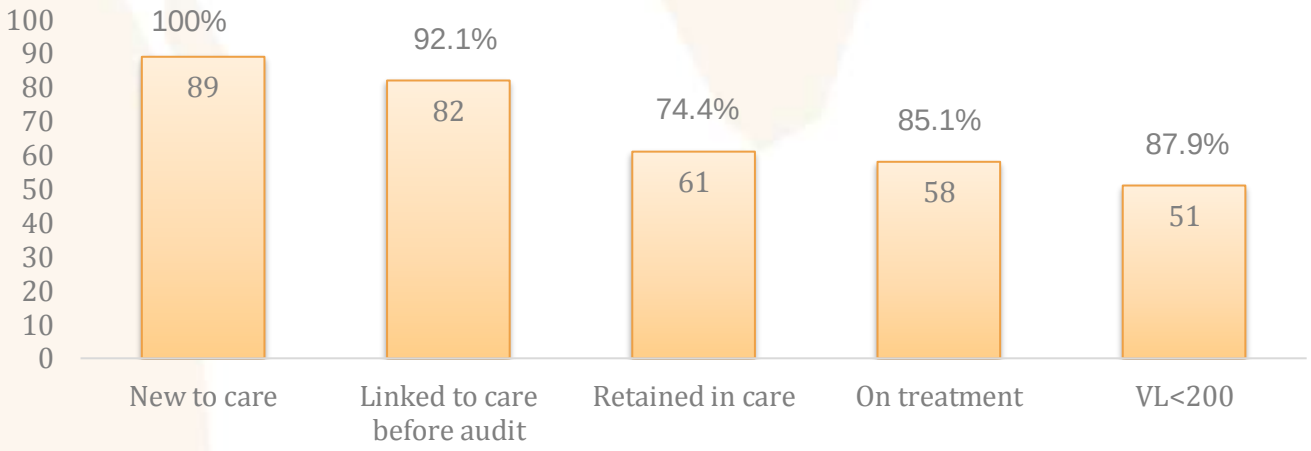

Figure 20. *Continuum of care, clients new to care AND off treatment 2018 (n=89 at first step).*

Recommendations and Summary of Key Findings

Overrepresentation of Indigenous People reflects long-standing systemic racism in Manitoba's healthcare system.

The Manitoba HIV Program acknowledges to advance health opportunities for Indigenous people in Manitoba requires healthcare leaders to remedy barriers faced by Indigenous people in their day to day lives. This includes health delivery barriers rooted in provider-patient relations, along with institutional and systemic, colonial structures.

Systemic racism has been defined as the, requirements, conditions, practices, polices or processes that maintain and reproduce avoidable and unfair inequities across ethnic and racial groups. Systemic racism related to HIV care and treatment in Manitoba includes: lack of HIV and STBBI awareness campaigns for Indigenous Manitobans, inequitable access to culturally safe testing and treatment services; lack of public information available about Pre-Exposure Prophylaxis (PrEP) being available free of charge for persons covered under the Non-Insured Health Benefit.

The Manitoba HIV Program proudly supports the work of First Nations communities, Tribal Councils and Indigenous led organizations to help remove these barriers and improve health outcomes for our HIV positive, Indigenous clients.

Success of testing initiatives decrease late presentation to care

June 27th, 2018 marked Manitoba's inaugural year of National HIV/STBBI Testing day. This health awareness and promotional event, led by the *Manitoba HIV/STBBI Collective Impact Testing and Linkage Working Group* supported clinics, public health teams and community-led targeted testing efforts to increase testing by nearly 150%, many of whom were first time testers, or deemed to be at high-risk for HIV and other STBBIs.

Primary care and community partners used traditional testing services as well as alternative testing technologies such as point-of-care testing and dried blood spot to host events-based testing initiatives in Manitoba in 2018.

All of these efforts helped the Manitoba HIV Program achieve a long-standing goal of having less than 15% of all clients present "very late to care" with CD4 counts below 200 cells/mm^3 – a first in HIV Program history!

A harm reduction approach, including increased access to harm reduction equipment is needed to address the increase in injection drug use among clients new to care.

In 2018, Injection Drug use for the first time surpassed Heterosexual Sex as the most-likely mode of HIV transmission in the province.

The Manitoba HIV Program employs a variety of strategies, carried out by a highly-competent, inter-disciplinary, professional care team to help our clients who are injecting drugs achieve positive health outcomes. This includes not only access to addictions and mental health therapies, but also to prevention measures such as supporting family care doctors to prescribe Pre-exposure Prophylaxis (PreP) to non-HIV positive Manitobans at-risk of HIV. In addition, both community care sites provide new needle and safer drug use supply equipment free of charge to all members of the community requiring harm reduction equipment.

Access to medication is a crucial step to preventing onward transmission of HIV in Manitoba.

Manitoba remains one of the last provinces in Canada that does not provide comprehensive treatment and preventative medication coverage for HIV. Given the unique public health benefit that providing unrestricted access to HIV medication can have, the Manitoba HIV Program is advocating for universal access for HIV medication at no-cost to Manitobans, *including Pharmacare co-pays.*

Current criteria for clients accessing the provincial drug program results in the delay of treatment initiation, treatment interruption, or at times results in a lack of treatment all together. This leads to significantly poorer health outcomes for the individual, additional costs to the healthcare system and onward transmission of the HIV virus. The bottom line is that for every HIV transmission prevented due to an undetectable viral load because of adherence to HIV medication, there is a minimum cost savings of 1.3 million dollars per case adverted.

The Manitoba HIV Program strongly recommends that the Province of Manitoba consider funding *Treatment as Prevention* programming for HIV positive Manitobans by providing HIV treatment for all Manitoba residents who are living with HIV **AND** do not qualify for any other medication cost coverage program.

Definition of Key Terms

Term	Definition
Acute HIV infection	The period of time (typically ranging from 1 to 4 weeks) immediately after initial HIV infection, during which individuals may experience flu-like symptoms. Throughout the acute infection phase, the virus is replicating rapidly and is especially infectious, but the immune system has not yet produced enough antibodies to be detected on a standard HIV antibody test.
Antiretroviral therapy (ART)	A combination of HIV medications that comprise the treatment regimen for a person living with HIV. ART "controls" HIV infection by reducing the number of virus particles in someone's blood.
CD4 cell count	The number of CD4 cells per millilitre of blood sample. CD4 cells are white blood cells that play an important role in our body's immune system. When someone becomes infected with HIV, the virus targets and begins to destroy CD4 cells. The CD4 count of an HIV-negative person usually ranges from 500-1,700 cells/mm^3. A person living with HIV with a CD4 count greater than 350 cells/mm^3 is typically quite healthy, but a very low CD4 count (e.g., less than 200 cells/mm^3) is often used as an indication of the clinical progression to AIDS.
Compassionate access	Compassionate access refers to the provision of antiretroviral medications, at no cost, to clients who do not have any medication insurance coverage, lack adequate coverage, or are unable to meet their Manitoba Pharmacare deductible. Additionally, when individuals experience gaps in their insurance coverage (for example, while they wait to be registered with a federal or provincial insurance plan), the Manitoba HIV Program may be able to provide compassionate access antiretroviral medications on a temporary basis. Typically, the costs of compassionate medications are absorbed by pharmaceutical companies.

Men who have sex with men (MSM)	A term often used in the context of HIV exposure categories to describe condomless sex between men, regardless of how individuals identify their own sexuality.
HIV viral load (VL)	The number of copies of HIV in one millilitre of blood sample. A viral load test is a useful indicator of how well someone's ART regimen is working, and how active the virus is in the person's body. An undetectable viral load indicates that there are so few copies of HIV in a blood sample that the laboratory test can no longer detect it. In Canada, a viral load is considered **undetectable** if there are fewer than 40 copies per millilitre of blood, whereas a **suppressed** viral load is less than 200 copies per millilitre of blood. Achieving a suppressed or undetectable viral load is the goal of ART as it significantly reduces the chance of transmitting HIV to sexual or injecting partners.

Continuum of Care- *Definition of Terms*

Term	Definition
Linked to care	Client has had ≥1 clinic visit (with nurse or physician) between time of referral to Manitoba HIV Program to time of audit.
Retained in care	For clients in care with Manitoba HIV Program for ≥4 months at time of audit, ≥2 clinic visits (with nurse or physician) ≥90 days apart. For clients in care for <4 months at time of audit, ≥1 clinic visit (with nurse or physician).
On combination antiretroviral therapy	Client has an active prescription for ART at time of audit.
Suppressed viral load	Client had a viral load of <200 copies/mL at their most recent bloodwork at time of audit.

Frequently Asked Questions

How is data collected for the annual report?

In the first quarter of every calendar year, chart audits are conducted at all three sites of the Manitoba HIV Program, for all clients who entered into care with the Manitoba HIV Program during the previous year. For each individual who enters care in a year, the Program collects routine sociodemographic data (e.g. age, sex, ethnicity, geography); HIV-specific behavioural data (e.g. HIV exposure category); and relevant clinical data (e.g. CD4 counts and viral loads, sexually transmitted and blood-borne co-infections).

Data are extracted and entered into an Excel spreadsheet by clinical leads at each site. Descriptive analyses are then performed using statistical analysis software.

How does the Manitoba HIV Program report on HIV exposure categories?

The Manitoba HIV Program reports on self-identified exposure categories. After initial clinical encounters, Program clinicians ask clients about their potential exposures to HIV, and the primary and secondary (if applicable) exposure categories mentioned are collected during chart audits for the Program Update. Programmatically, it is useful for the Manitoba HIV Program to understand clients' own perceptions of HIV risk in order to contextualize individuals' lived experiences and provide appropriate care and prevention services and resources for the individuals and their sexual and/or injecting partners.

What HIV testing options are available in Manitoba?

Individuals wishing to be tested for HIV can ask for a test at all physician clinics, community clinics, and hospitals in the province. Furthermore, Manitobans have a few options for how they want to be tested – either by venous blood sample (i.e. standard "blood work") or by finger poke. A finger poke is used for rapid, point of care (POC) tests. Results of rapid HIV tests are available to individuals within minutes.

When someone is tested by blood draw, they may choose to be tested using an anonymous sample (no name or code is assigned to the blood sample or test result), a de-identified sample (no names are used, but a numerical code is assigned to the sample and test result), or a nominal sample (individual's name is linked to the sample and test result).