2017 MANITOBA HIV PROGRAM UPDATE

September 2018

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 2017, 1,318 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 95 individuals who entered into HIV care in 2017 and identifies key areas for improving health outcomes for people living with HIV in Manitoba. This document also highlights important policy and funding recommendations that would help to support the Program in providing high quality care to Manitobans living with HIV.

Land acknowledgement

The Manitoba HIV Program operates on Treaty 1 and Treaty 2 territories, 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 respect the Treaties that were made on these territories, 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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Table of Contents

Demographics

95 individuals entered into care with the MB HIV program in 2017. Of those, sixty-four (*n*=64; 67.4%) were newly diagnosed. The remaining thirty-one (*n*=31) clients that were new to care in 2017, presented with a past medical history of HIV, seven (7) of whom required initiation of Anti-Retroviral Therapy (ART). (**Figure 1**).

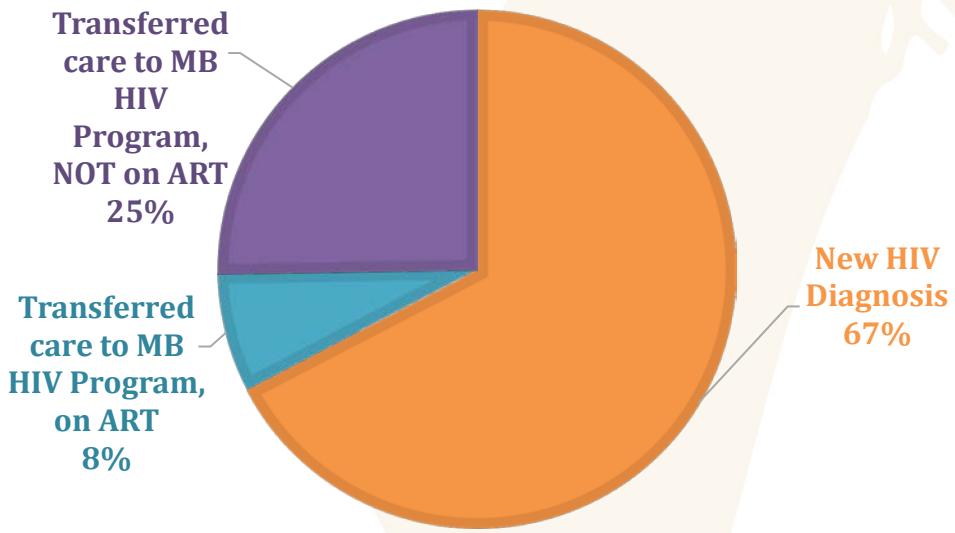


Figure 1. *Status of clients upon entering care with the Manitoba HIV Program in 2017 (n=95).*

Age and sex

One-third (*n*=32) of clients who entered HIV care in 2017 were female. The average age of clients entering care in 2017 was 39.6 years, ranging from 6 to 64 years (**Figure 2**).

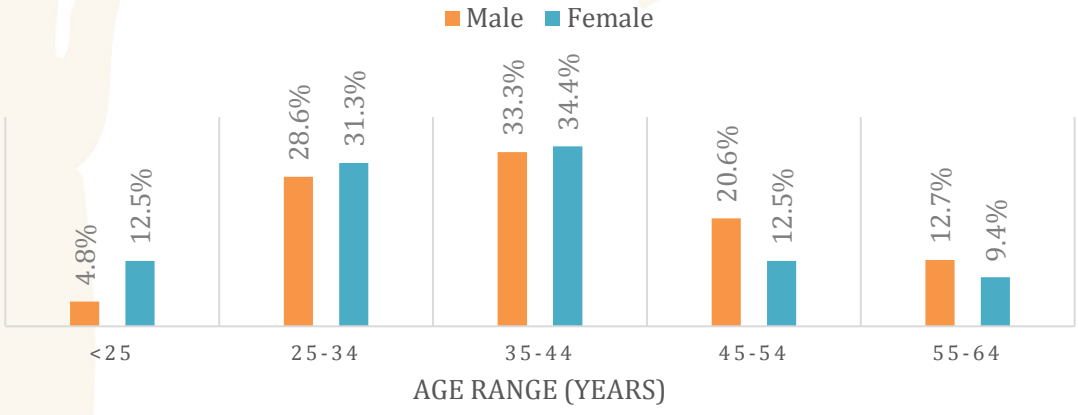


Figure 2. *Age range of clients who entered HIV care in 2017 (n=95).*

Self-identified ethnicity

Forty percent (*n*=38; 40.0%) of new clients self-identified as Indigenous (First Nations, Métis, Inuit), while twenty-six percent (*n*=25; 26.3%) identified as White (non-Indigenous/non-Hispanic) and twenty-five percent (*n*= 24, 25.3%) as African/Caribbean/Black (ACB). Remaining ethnic groups included clients from Southeast Asia and Latin America. Two percent (*n*=2, 2.1%) chose not to disclose. (**Figure 3**).

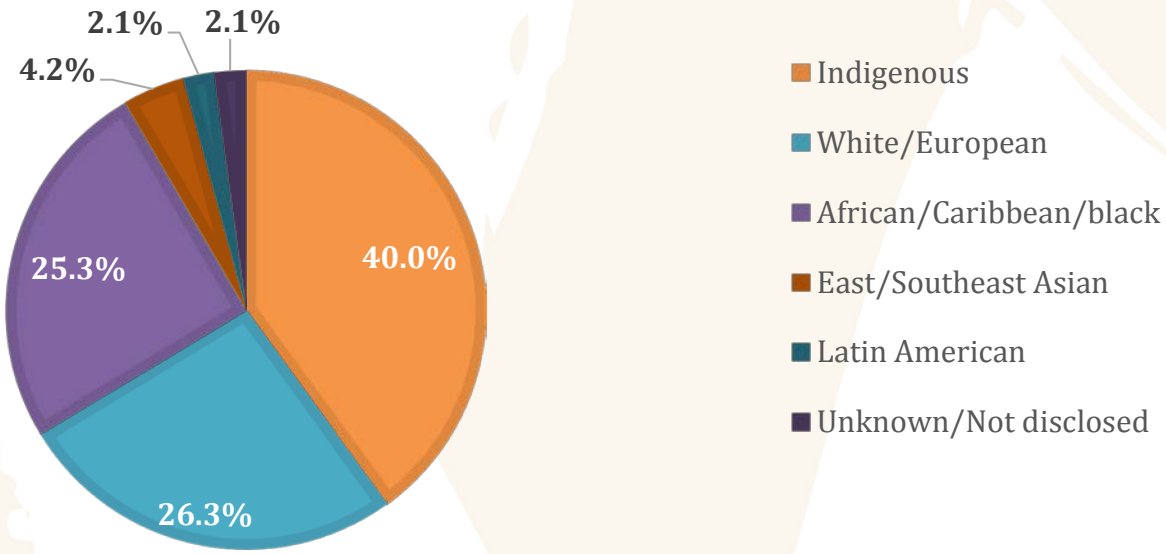


Figure 3. *Self-identified ethnicity among clients who entered HIV care in 2017 (n=95).*

Key Subpopulations

Year over year comparisons show that 2017 was fairly consistent with regards to age and to self-identified gender and ethnicity categories.

When compared to the general population, both the ACB and Indigenous communities remain over-represented among clients new to care with the Manitoba HIV program.

African/Caribbean/Black (ACB) Community

The majority of clients from the ACB community tested positive for HIV outside of Manitoba (*n*= 18; 75 %- **Figure 4**) and transferred into the program already taking medication (*n* = 14; 58%- **Figure 5**).

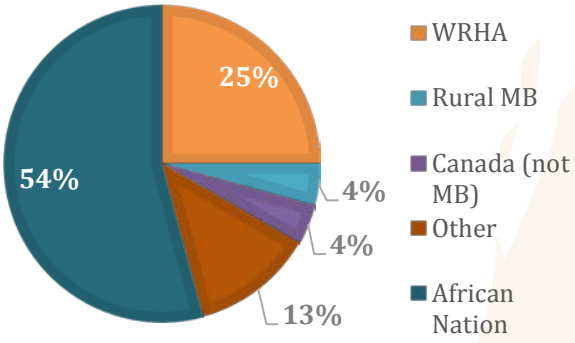


***Figure 4**. ACB community: location of first positive HIV test, clients new to care 2017 (n=24).*

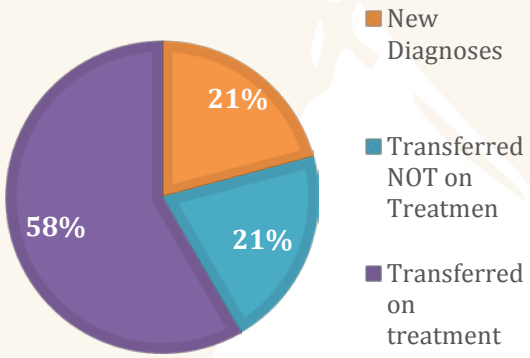


***Figure 5.** ACB community: status at program entry, clients new to care 2017 (n=24).*

Indigenous (First Nation, Inuit and Métis) Community

Clients who self-identified as Indigenous and entered into HIV care in 2017 were more likely to have had their first positive HIV test in Manitoba (*n*= 33; 86.8%- **Figure 6)**. Four clients (11%) transferred into the program, already taking medication (**Figure 7)**.

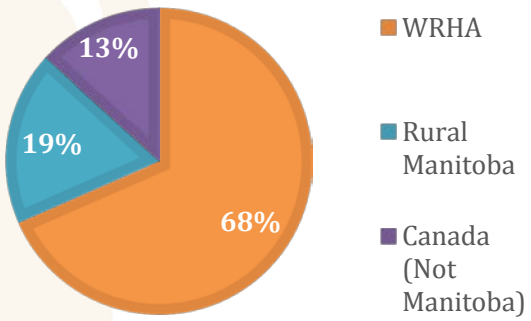


***Figure 6**. Indigenous community: location of first positive HIV test, clients new to care 2017 (n=38).*

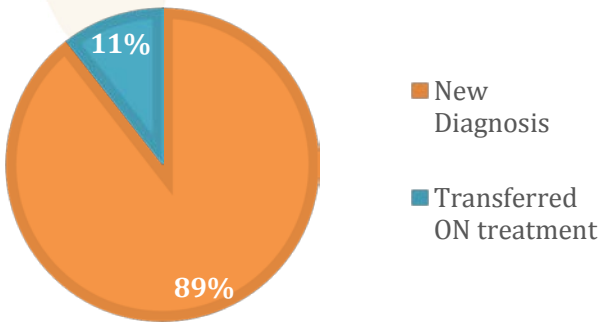


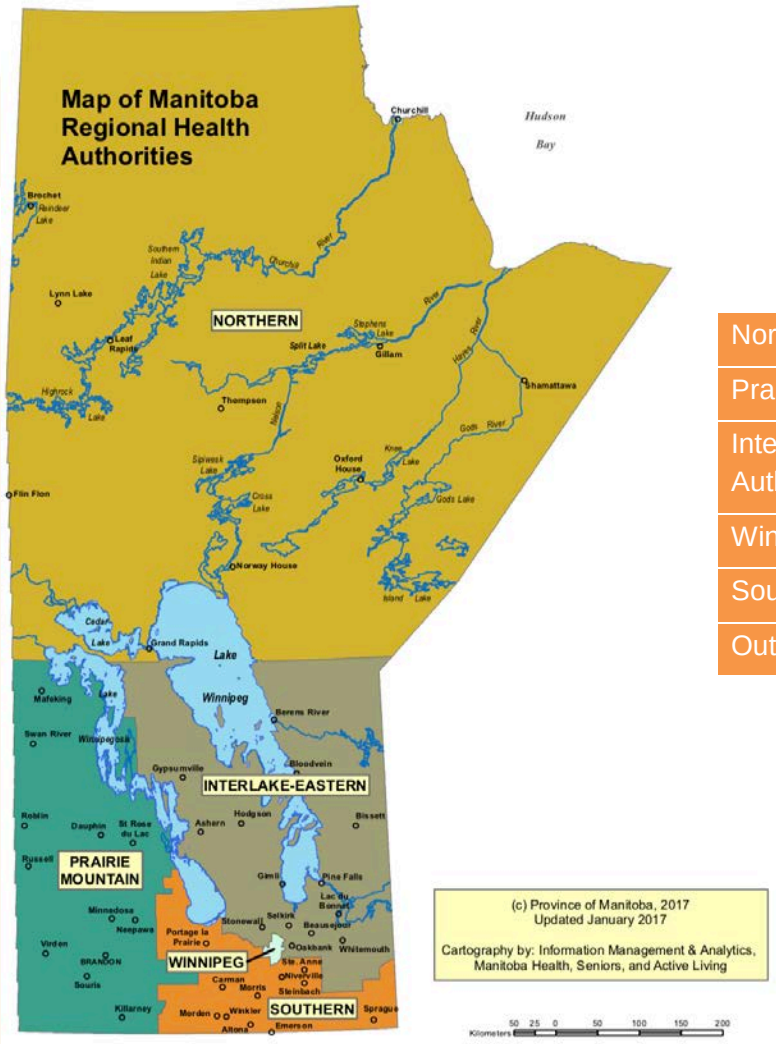
***Figure 7**. Indigenous community: location of first reactive HIV test, clients new to care 2017 (n=38).*

Geography

The majority (78.9%) of the 95 individuals who entered into HIV care in Manitoba in 2017 were living in Winnipeg, with 12.5% living in other health regions. In 2017, the Manitoba HIV program assumed care for six (*n*=6, 6.3%) individuals residing in out of province. (**Figure 8**).

As in previous years, Manitoban clients residing outside of the Winnipeg Regional Health Authority (WRHA), presented much later to care than their urban counter parts. With 41.6% presenting "very late" to care with CD4 counts < 200 cells/mm^3 as compared to 18.7% living within the WRHA. Rural clients accounted for nearly one third (27.8%) of all clients presenting "very late" to care in 2017.

However, most rural Manitoban clients (83.3%) remained engaged in their care at the time of the audit; and among those engaged in care for greater than four months- 100% had achieved a suppressed Viral Load (VL).



Northern Health Region	3.2%
Prairie Mountain Health	2.1%
Interlake-Eastern Regional Health Authority	4.2%
Winnipeg Regional Health Authority	78.9%
Southern Health – Santé Sud	3.2%
Out of province	6.3%

Figure 8. *Geographic distribution of new clients at time of chart audit, by regional health authority (n=95).*

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 (53.1%) recalled more than one potential HIV exposure category (**Figure 9**).

Nearly half (*n*=44; 46.3%) of clients who entered care in 2017 self-reported condomless heterosexual sex as the most likely primary HIV risk exposure category. This is consistent with year of year transmission-risk dynamics in Manitoba. Over one-quarter (*n*=26, 27.4%) of men entering care reported condomless sex with other men as their most likely primary risk exposure category.

Six of the 63 new male clients (9.5%) reported both condomless sex with other men and injection drug use as their most likely HIV exposures.

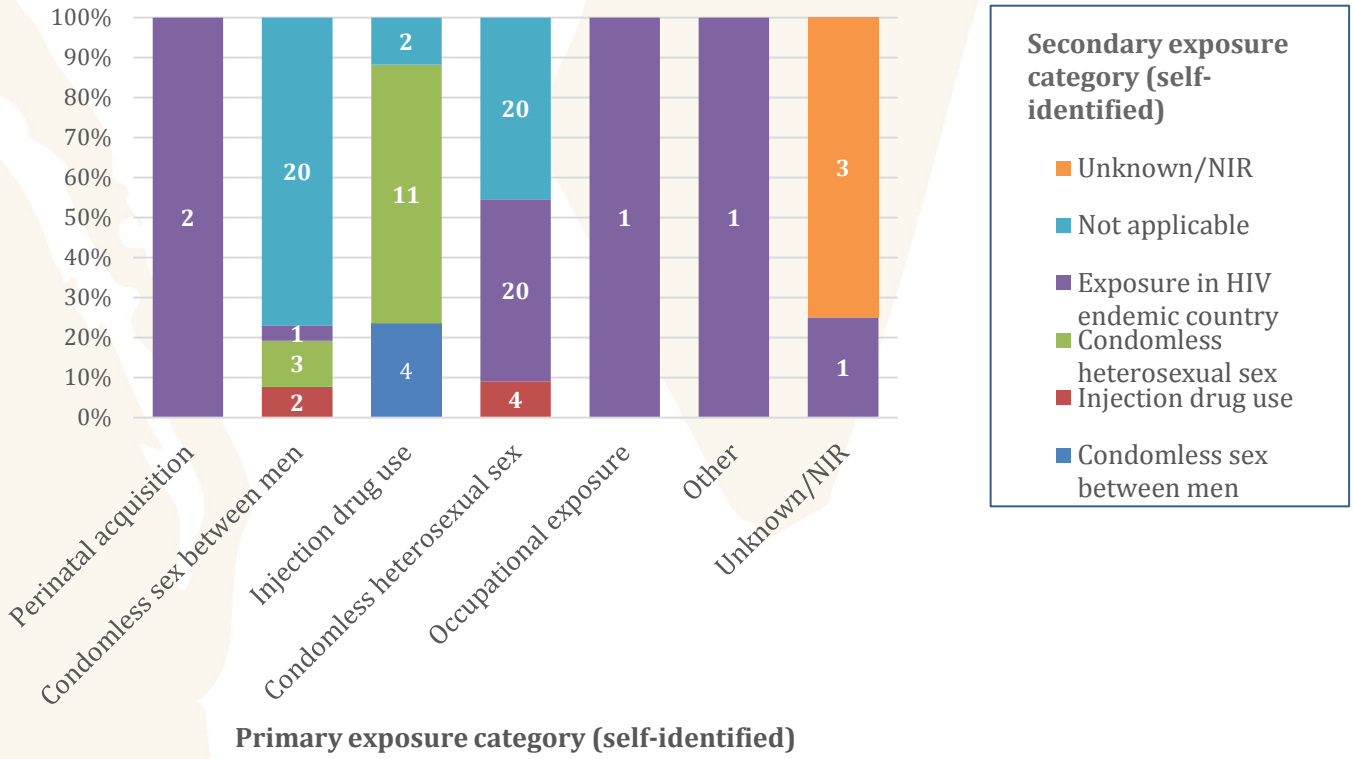


Figure 9. *Most likely modes of HIV acquisition, as reported by clients who entered HIV care in 2017 (n=95). NIR, No Identified Risk.*

Clinical Indicators

CD4 cell count

CD4 counts were collected from 97.9% (*n* = 93) of individuals who entered care with the Manitoba HIV Program in 2017 (**Figure 10**). The median CD4 count at entry into care was 382 cells/mm^3 (Interquartile range, IQR = 235-541). Nearly one-fifth (*n*=18, 19.4%) of clients presented "very late" to care, with CD4 counts below 200 cells/mm^3 and 44.1% (*n*=41) presented "late" to care with CD4 counts of below 350 cells/mm^3.

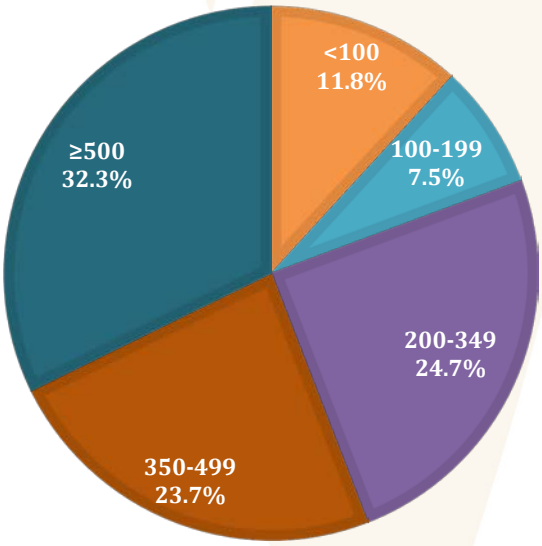


Figure 10. *First CD4 cell count (cells/mm^3) in Manitoba among clients who entered HIV care in 2017 (n=93).*

Acute HIV infections

Among those who entered into care, newly diagnosed with HIV in 2017 (*n* =64), twenty (n=20; 31.2 %), were diagnosed with an acute HIV infection[1]. Fifteen of which (n= 15, 75.0%) occurred in men, and three-quarters (*n*=15, 75%) of acute infections occurred in new clients aged 25-44 years (**Figure 10**).

Acute HIV infections were detected in individuals who reported condomless heterosexual sex (*n*=8, 40.0%), condomless sex between men (*n*=6, 30.0%), and injection drug use (*n*=6, 30.0%) as their primary HIV exposure category.

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

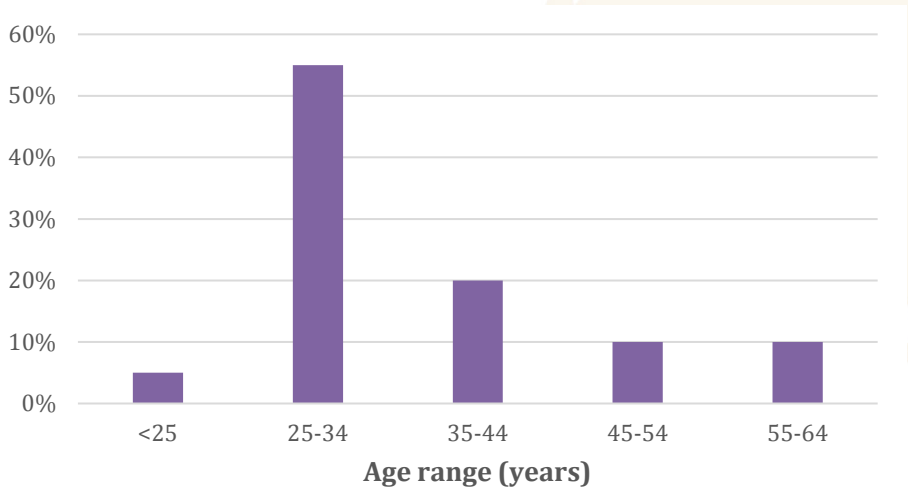


Figure 10. *Age distribution among new clients presenting to care with acute HIV infections in 2017 (n=20).*

Viral load

Among all clients who entered HIV care in Manitoba in 2017, median viral load decreased from 28,3000 copies/mL to 12,894.4 copies/mL between presentation to care to time of audit. Approximately one-quarter of new clients (*n*=25, 26.6%) presented to care with a suppressed viral load (i.e. <200 copies/mL) and 74.7% (*n*=68) were virally suppressed at time of audit (**Figure 9**).

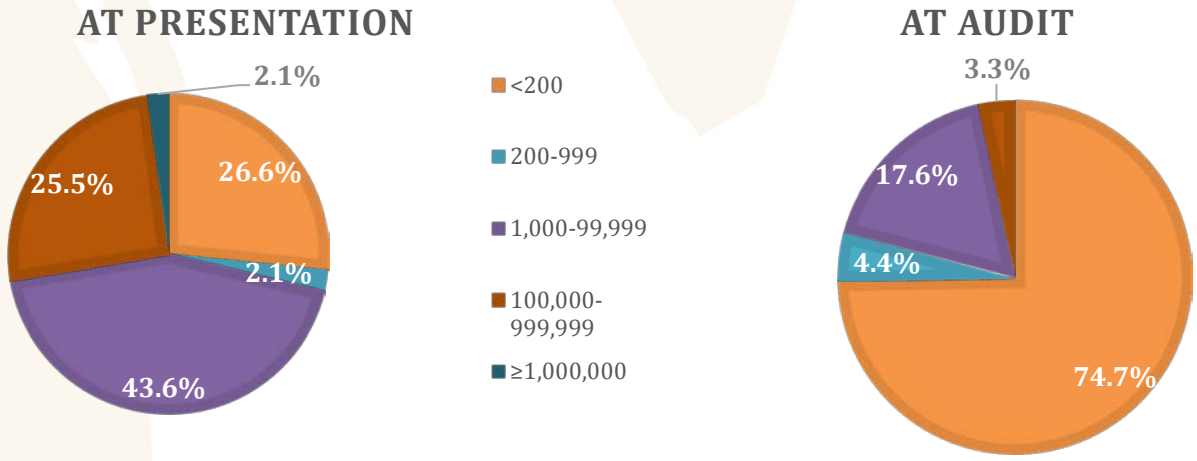


Figure 11. *Viral load (copies/mL) at presentation to care (n=94) and at time of audit (n=91) among clients who entered HIV care in 2017.*

Undetectable = Un-transmittable (U=U)

The importance of viral load suppression (or an “undetectable” viral load) for prevention of HIV transmission is well evidenced.

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.

Many clients were able to achieve an undetectable VL during their first year in care. Of the clients who entered into care in 2017, not on ART (*n*= 71); sixty-seven (67) of those clients had a viral load available for audit. Of those, 67.1% (*n*=45) had a VL less than 200 copies/ml at time of audit (**Figure 12**).

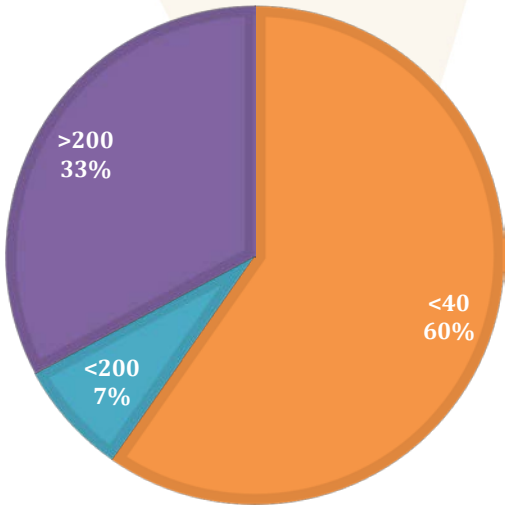


Figure 12. *Viral load (copies/mL) at time of audit of clients who presented to care off ART, with a documented VL in 2017 (n= 67).*

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*=83, 87.3%) of new clients did not present to HIV care with opportunistic infections, among the 12 (12.6%) individuals that did, oropharyngeal candidiasis (thrush) and *Pneumocystis jirovecii* pneumonia (PJP) was most common (**Figure 13**). Over half (*n*=7, 58.3%) of co-infections occurred in individuals who presented to care with a CD4 count below 200 copies/mm$^{3.}$

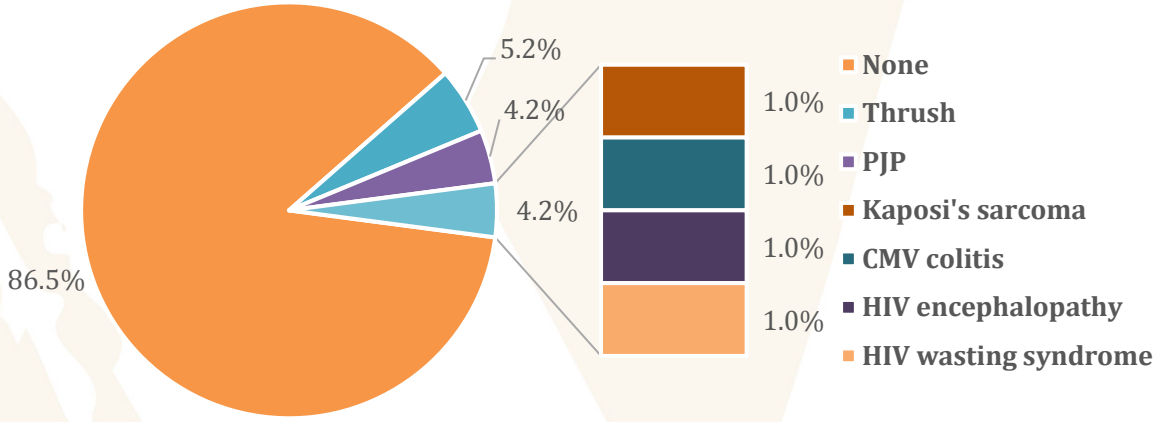


Figure 13. *Prevalence of opportunistic infections and other HIV-specific comorbidities among clients who entered care in 2017 (n=96).*

Sexually transmitted and blood-borne infections

Rates of Chlamydia, Gonorrhea and Syphilis remain on the rise in Manitoba. Manitoba Health and the Manitoba HIV Program both stress the importance of health care providers offering testing for all sexually transmitted and blood-borne infections (STBBIs), when a client requests testing, or tests positive for another STBBI. 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 2017, one-fifth (*n*=19, 20.0%) of new clients presented to HIV care with another sexually transmitted or blood-borne infection (STBBI). One individual (n=1) presented to HIV care co-infected with both chlamydia and gonorrhoea. Syphilis and active hepatitis C virus (HCV) were the most common STBBIs with prevalence of 10.5% (*n*=10) and 4.2% (*n*=4), respectively (**Figure 14**).

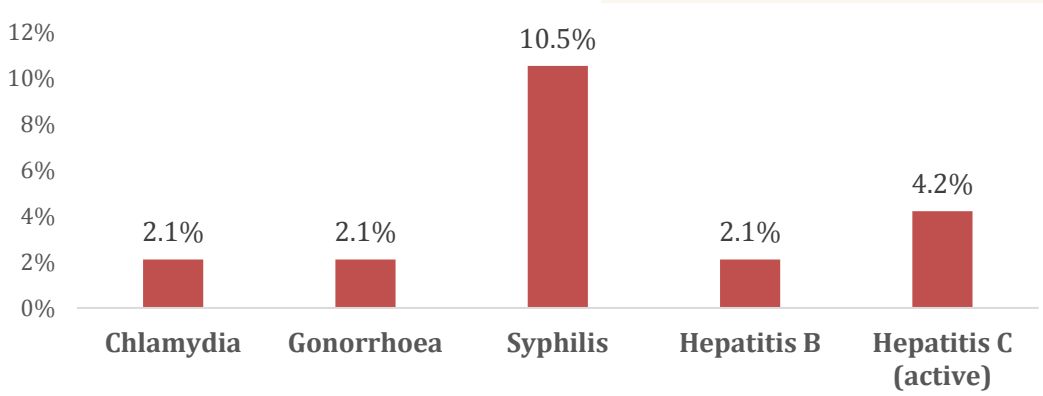


Figure 14. *Prevalence of sexually transmitted and blood-borne infections among clients who entered care in 2017 (n=95).*

Hepatitis C

In addition to four (4) active Hepatitis C (HCV) infections, six new clients (*n*=6) presented to care with evidence of a past HCV infection that had either spontaneously cleared or had been previously treated (i.e. no detectable HCV in blood, but HCV-specific antibodies were present). Most HCV infections were identified among new clients between 25 and 44 years (**Figure 13**).

Among the 10 individuals (10.5% of all new clients) who presented to HIV care with active or cleared HCV, 90.0% (n=9) reported injection drug use as their primary or secondary HIV exposure category.

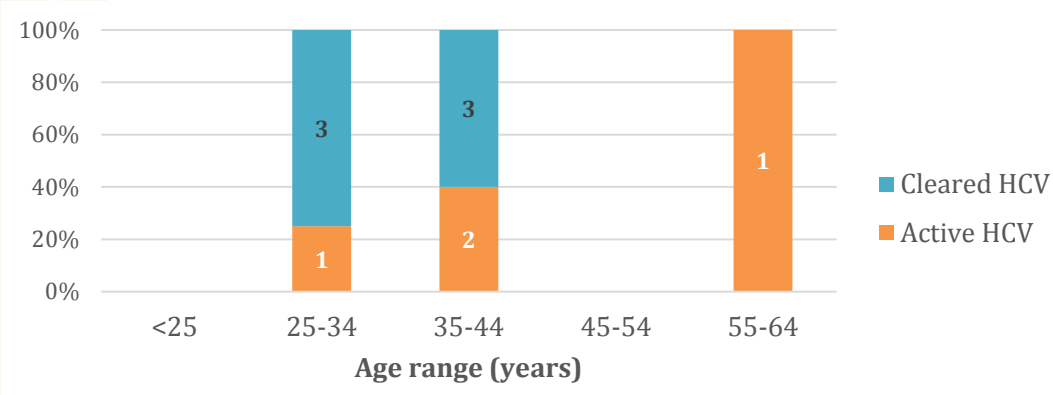


Figure 13. *Age range of clients who entered care in 2017 with active or cleared hepatitis C virus infections (n=10).*

Medication Access

In 2017, One-quarter (*n*=24, 25.3%) of the 95 clients who entered into care with the Manitoba HIV Program in 2017 were already on ART (**Figure 1**), and this proportion increased to 83.2% (*n*=79) by the end of the audit period.

The majority (*n*=88, 92.6%) of new clients had access to at least one type of insurance to offset the costs of their HIV medications (**Figure 14**).

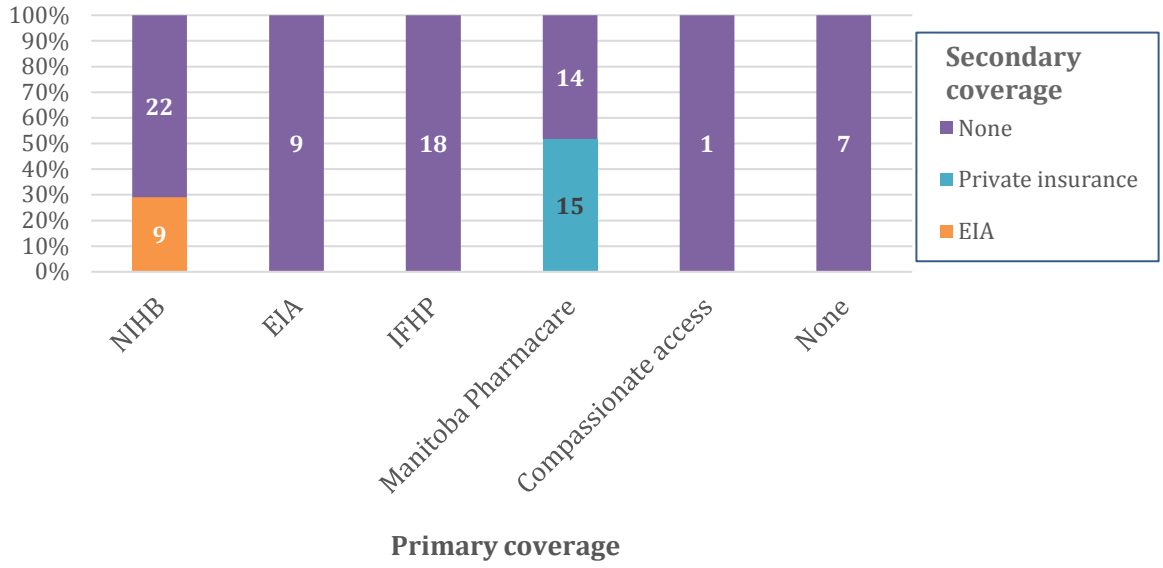


Figure 14. *Type of medication coverage among clients who entered HIV care in 2017 (n=95). NIHB, Non-Insured Health Benefits program; EIA, Employment and Income Assistance program; IFHP, Interim Federal Health Program.*

Fifty-eight clients (*n*=58, 61.1%) who entered HIV care in 2017 had insurance coverage that requires no deductible payment—the Interim Federal Health Program (IFHP); Non-Insured Health Benefits Program (NIHB)) and Employment and Income Assistance (EIA).

Among clients with partial insurance coverage, twenty-nine (*n*=29, 30.5%) were covered under the Manitoba Pharmacare program. Among those on Pharmacare, fifteen (*n*=15, 51.7%) had access to third-party private insurance that reduced or removed deductible payments.

Seven new clients lacked any form of medication coverage. Of which, five had not initiated ART at the time of the audit. **(Figure 15).**

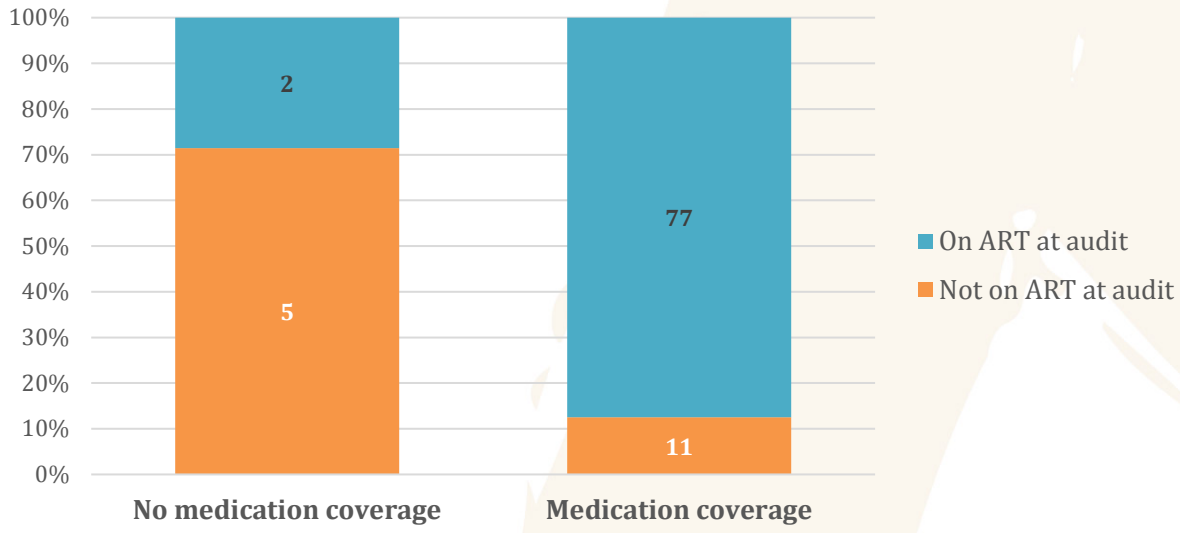


Figure 15. *Relationship between medication coverage and initiation of combination antiretroviral therapy at time of audit among clients who entered HIV care in 2017 (n=95).*

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 16 presents the continuum of HIV care for all clients who entered into care with the Manitoba HIV Program in 2017. The denominator for each step of the continuum is the numerator of the previous step.

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.

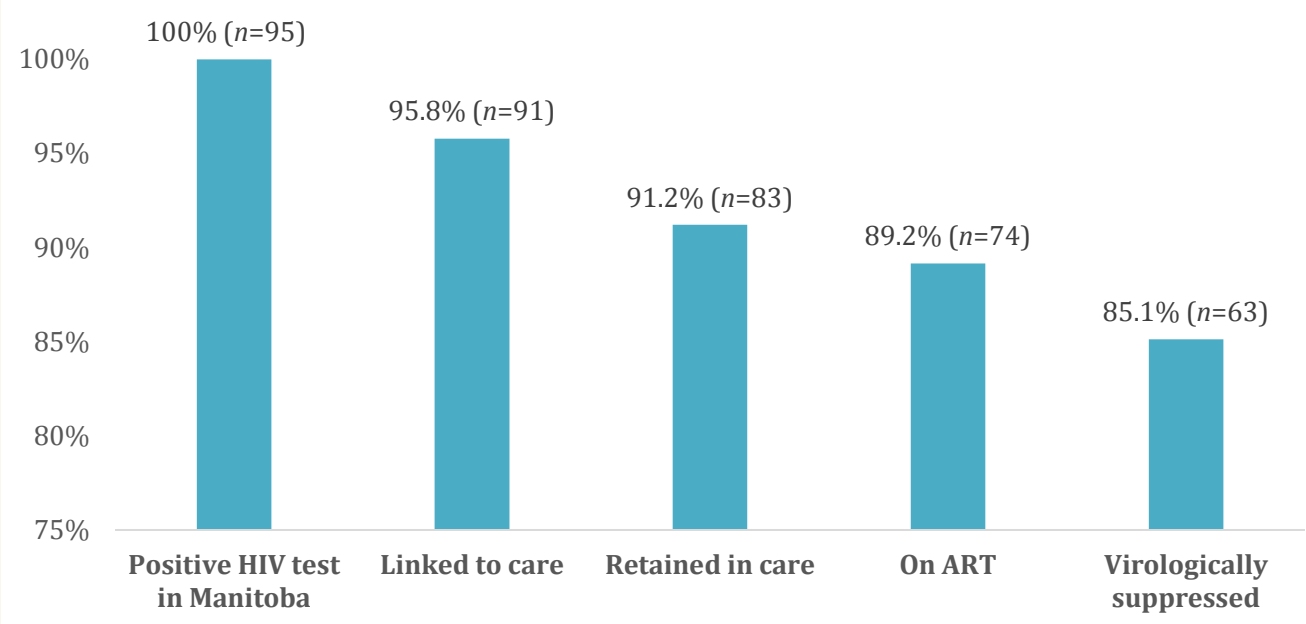


Figure 16. *Continuum of care, clients new to care 2017.*

Recommendations and Summary of Key Findings

High rates of success among people entering care with the Manitoba HIV Program

Although delayed diagnosis and late presentation to care continue to be areas of concern for the Manitoba HIV Program, overall, once diagnosed and linked to the Program, Manitobans are doing well. Figure 16 illustrates that most individuals remained engaged in care for their first year and a large majority of new clients in 2017 had a suppressed viral load by the time of audit, regardless of their treatment status at entry into the program.

The Manitoba HIV Program employs a variety of strategies, carried out by a highly-competent, inter-disciplinary, professional care team to help our clients achieve positive health outcomes.

Care team members include: infectious disease physicians; primary care providers; pharmacists; nurses; social workers; occupational therapists; mental health therapists; health educators; harm reduction supply distributers; outreach support workers; administrative and support staff; and a dedicated team of volunteers. Services outside of a standard health care approach include: health promotion and support groups; foodbank; and community events.

Medication coverage is crucial to ensure equitable care for all people living with HIV in Manitoba

Gaps in medication coverage for people living with HIV across Canada are associated with delays in treatment initiation and/or interruptions in treatment regimens and may contribute to poorer short- and long-term individual and public health outcomes.

Multiple studies have shown that when treatment adherence leads to an undetectable viral load, the risk of HIV transmission becomes negligible.

Approximately one-half of the individuals who entered HIV care in 2017 either had no insurance coverage at all, had co-pays to consider, or were on insurance plans with finite terms. Furthermore, 15 of the 30 people relying on Pharmacare did not have access to private insurance to offset the cost of their deductible.

Manitoba remains the only province in Western Canada that does not provide 100% coverage for ARV therapy. The Manitoba HIV Program believes that HIV treatment should be made unconditionally available to all people living with HIV in the province.

Experiences of stigma and discrimination continue for people living with HIV in Manitoba

People living with HIV in Manitoba continue to experience stigma and discrimination because of their HIV status. In partnership with the University of Manitoba, Nine Circles Community Health Centre and the Manitoba HIV program are conducting a research project, *HIV Stigma and Discrimination in Manitoba*, that is asking people living with HIV about their stigma and discrimination experiences.

Preliminary findings show that exclusion from family and social activities, verbal and physical harassment or assault, and denial of work opportunities and health services continue to be a reality for people living with HIV in Manitoba.

Through forums with people living with HIV, service providers, researchers and policy makers, more education of health and social care providers, as well as the general population, were strongly recommended in order to dispel myths and misinformation about HIV and promote compassion and equitable health care.

We acknowledge that stigma and discrimination may be experienced differently in diverse Manitoba communities, and we encourage action on the multiple social, economic, and political determinants that put people at risk of infection and influence intersecting forms of stigma and discrimination experienced by people living with HIV.

HIV testing must be normalized and offered routinely in Manitoba

Late presentation to care is associated with poorer long- and short-terms health outcomes for people living with HIV and is significantly associated with increased costs to the health care system.

Routine offer of HIV testing by healthcare providers is one step that can be taken to reduce the burden of late HIV diagnosis and late presentation to HIV care by reducing stigma associated with HIV testing and infection, as well as, increasing the proportion of HIV diagnosed during its acute phase.

Early diagnosis and early treatment initiation are important public health strategies that can drastically reduce HIV transmission. The Manitoba HIV Program endorses the British Columbia Centre for Disease Control[2] testing guidelines.

HIV testing should be offered routinely:

- Every 5 years to all individuals aged 18-70 years

- Every year to anyone who may be at higher risk of HIV acquisition—including gay, bisexual and other men who have sex with men; people who inject drugs; people involved in sex work; people who have presented with another sexually-transmitted, blood-borne infection; or tuberculosis; and any other individual who requests an HIV test

To improve accessibility and acceptability of HIV testing, the Manitoba HIV Program supports the implementation of alternative testing strategies (HIV self-testing, events-based testing, or testing by trained lay providers) and technologies (e.g., dried blood spot [DBS] tests, multiplex point-of-care tests) currently being piloted nationally as well as in Manitoba.
2017 was the first year where HIV point of care HIV testing was offered at Winnipeg's PRIDE festival, with the Manitoba HIV Program supporting timely linkage to care and treatment services for persons testing positive.

[2] Review British Columbia's HIV testing guidelines here.

HIV remains a disease of social exclusion in Manitoba

In 2017, as in previous years, the Manitoba HIV Program has seen a disproportionate number of Indigenous and African/Caribbean/black (ACB)-identifying individuals enter into HIV care. Arguably, these disparities are intrinsically liked with a variety of determinants of health that increase vulnerability for poor health outcomes.

As part of a coordinated, comprehensive response, the MB HIV Program as a member of the Manitoba HIV/STBBI Collective Impact Network[3], continues to foster relationships to address these complex issues.

Through a coordinated effort of targeted discussions; programming; and community-based research initiatives, the Manitoba HIV Program, along with Indigenous-led community and political organizations; the First Nations and Inuit Health Branch; newcomer agencies; and other affected stakeholders from each of the five health regions in Manitoba, is better abled to provide appropriate care to people living with HIV and support HIV prevention efforts within affected communities throughout the province.

[3] The Manitoba HIV/STBBI Collective Impact Network brings together a diverse array of individuals, agencies, and leaders across Manitoba to understand and develop solutions to address HIV/STBBI complex system issues. The Network works to identify and act upon opportunities for HIV prevention and testing within the province and to strengthen anti-stigma contributions within across the province.

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).