# MANITOBA HIV REPORT 2015

The Manitoba HIV Program provides information, specialized care, treatment, and support to approximately 1,250 people living with HIV across the province. The Program has two Winnipeg based sites: Nine Circles Community Health Centre and the Health Sciences Centre outpatient clinic. In the first quarter of each calendar year, chart audits are conducted for all clients who entered into care in the previous year.

### **HIGHLIGHTS**



### Transmission dynamics continue to change year to year

- For the first time since the start of the Manitoba HIV Program in 2007, same-sex sexual contact between men (i.e. MSM) was the most commonly reported exposure category among clients entering into care in 2015. 39% of new clients reported MSM as their primary exposure category.
- The consistently disproportionate representation of Indigenous populations (23%) and African/African-Canadian/Caribbean populations (23%) among new clients reinforces the need to closely examine and address broader social and structural factors that create and perpetuate these inequities. This should include ensuring that all the broader health needs of these populations are being met.
- Despite increases in rates of HIV infection attributed to injection drug use in neighbouring provinces,

  Manitoba has not experienced such an increase. This may be attributed in part to continued provincial, regional and community efforts to expand clean needle distribution across the province.



### Late diagnosis and presentation to care remain a concern

In 2015, 30% of people entered into care with CD4 counts below 200, meaning they were often very sick. Late diagnosis and delaying the start of HIV medications also increases the chance of a person transmitting HIV to sexual and injecting partners.



### Limited access to care outside Winnipeg creates challenges

More people living outside of the WRHA presented to HIV care with low CD4 counts (36% outside the WRHA vs. 29% inside the WRHA) and fewer had achieved viral suppression at the time of audit (55% outside the WRHA vs. 71% inside the WRHA).

### **FAST FACTS**

- people entered into care with the Manitoba HIV Program in 2015, up from 87 in 2014.
- 74% were newly diagnosed with HIV
- female clients entered into care in 2015.

  Manitoba continues to have one of the largest proportions of women living with HIV, compared to men, in Canada.

### **HIV RISK FACTORS**



39% MSM



21% HIV-endemic Country

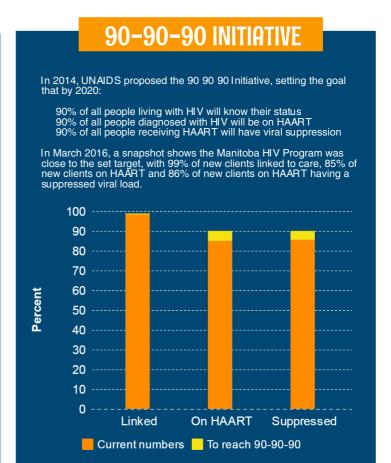


33% Heterosexual



8% Injection Drug Use

# ETHNIGITY 8 9 4 23 Caucasian (38%) Indigenous (23%) African/Caribbean/Black (23%) Asian (9%) Other\* (8%) \*The HIV Program will be strengthening its analysis in the "other" category for future reports. If you have questions, please contact the program for more information.



### **RECOMMENDATIONS**

The Manitoba HIV Program encourages routine HIV testing in all health care settings. We recommend that health care providers know the HIV status of all patients under their care, and that all individuals know their own HIV status by getting tested regularly.



People aged 18-70 years should be tested every 5 years.



People aged 18-70 years who belong to populations with a higher burden of HIV infection should be should be tested every year.



People older than 70 years of age should be tested once if HIV status is unknown.



People should also be tested whenever they: identify a risk for HIV acquisition, are pregnant, and are testing for or diagnosed with another STI, Hepatitis C/B, or tuberculosis.

The MB HIV Program endorses the 2014 recommendations in the HIV Testing Guidelines for the Province of BC: bit.ly/BCHIVGuide



May 2016



### **INTRODUCTION**

- The Manitoba HIV Program was established in 2007 with the purpose of providing relevant information, specialized care, treatment, and support to all adults living with HIV in the province.
- The Manitoba HIV Program strives to:
  - o Facilitate early HIV diagnosis through increased testing across the province.
  - o Improve access to high-quality health care for people living with HIV.
  - o Provide supports that enable clients to remain engaged in HIV care.
- In 2015, approximately 1,250 adult Manitobans are living with HIV and in care with the Manitoba HIV Program.
- In the first quarter of each calendar year, chart audits are conducted for all clients who entered into care during the previous year.
  - o In 2015, 102 people entered into care with the Manitoba HIV Program in either of its two Winnipeg-based sites: Nine Circles Community Health Centre and the Health Sciences Centre outpatient clinic.



| SOME KEY TERMS |   |   |
|----------------|---|---|
| Abbreviation   | Term                                    | Definition  |
| HAART          | Highly active<br>antiretroviral therapy | A combination of HIV medications (usually three or more) that comprise the treatment regimen for a person living with HIV.  |
|                |   | HAART "controls" HIV infection by reducing the number of virus particles in someone's blood.  |
| CD4            | 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 500-1,200 cells/mm³. A person living with HIV with a CD4 count greater than 350 cells/mm³ is typically quite healthy, but a very low CD4 count (e.g., less than 200 cells/mm³) is often used as an indication of the clinical progression to AIDS.  |
| MSM            | Men who have sex with<br>men            | MSM is a term often used to describe males who engage in sexual activity with other males, regardless of how they identify their own sexuality.   |
| VL             | Viral load                              | The number of copies of HIV in one millilitre of blood sample.  |
|                |   | A VL test is a useful indicator of how well someone's HAART regimen is working, and how active the virus is in the person's body. An undetectable VL indicates that there are so few copies of HIV in a blood sample that the laboratory test can no longer detect it. Achieving an undetectable VL is the ultimate goal of HAART as it significantly reduces the chance of transmitting HIV to sexual or injecting partners. |
|                |   | A VL greater than 200 copies/mL has been identified as a threshold indicating treatment failure, and the point at which a person may be more likely to transmit HIV to their partners.  |



### **SUMMARY & HIGHLIGHTS**

### Transmission dynamics continue to change in Manitoba

- For the first time since the inception of the Manitoba HIV Program in 2007, same-sex sexual contact between men (i.e., MSM) was the most commonly reported exposure category among clients entering into care in 2015.
  - o 38.6% of new clients to care reported MSM as their primary exposure category; an increase of nearly 10% since 2014, and 20% since 2012.
- These changing dynamics have implications for the kinds of resources and support services that the Manitoba HIV Program will need to make available for clients entering into care, and changes the way in which the Program, and the provincial public health system more broadly, conceptualizes the HIV epidemic in Manitoba.

### Late diagnosis and presentation to care remain a serious concerns

- People who are diagnosed late, or present late to HIV care, are often quite sick, with low CD4 counts and high viral loads.
- The Manitoba HIV Program continues to have an unacceptably high proportion of clients presenting to care with CD4 counts <350 cells/mm<sup>3</sup>.
  - o This can result in poorer long-term health outcomes, including increased risk of opportunistic infections (like tuberculosis or pneumonia) and early death.
  - O Late diagnosis and presentation to care also increases a person's chance of transmitting HIV to their sexual or injecting partners.
- Prioritizing routine HIV testing would ensure fewer people present late to care in Manitoba.

### Routine HIV testing must be expanded across Manitoba

- The World Health Organization's most recent treatment guidelines indicate that all people living with HIV should be started on antiretroviral therapy, regardless of CD4 count.
  - o Early treatment of HIV reduces mortality and morbidity and serves as an important prevention strategy by reducing probability of transmission.
- Recent research from Manitoba comparing people living with HIV to those who were HIV-negative found that people living with HIV were almost 12-times more likely to have tested positive for gonorrhoea than their HIV-negative counterparts. Understanding how people living with HIV interact with the healthcare system prior to diagnosis—including HIV testing patterns—could improve HIV prevention strategies.
- Any person requesting or warranting a test for chlamydia, gonorrhoea, syphilis, hepatitis B, or hepatitis C should also be offered HIV testing.
  - O To improve acceptability of HIV testing, health care providers, particularly in primary care settings, must be aware of all HIV testing options available in Manitoba and understand the importance of regularly offering HIV testing to clients.
- Manitobans are faced with a myriad of barriers to HIV testing. By fostering partnerships with primary care providers, other health care professionals, and health service organisations, the Manitoba HIV Program is committed to facilitating the development of safe and non-judgemental environments for all people seeking HIV testing, prevention, treatment, care, and support services.



### DEMOGRAPHICS OF CLIENTS ENTERING INTO HIV CARE

### **Patient Status**

- Of the 102 clients that entered into care with the Manitoba HIV Program in 2015, 75 (73.5%) were newly diagnosed with HIV (**Figure 1**).
  - o 5 (4.9%) clients transferred to Manitoba knowing their HIV status, but had not yet been started on HAART.
  - o 22 (21.6%) clients entered into the Manitoba HIV Program aware of their status and on HAART.
    - 19 (86.4%) of new clients on HAART entered into care with a suppressed viral load.

### Age

- The average age of clients entering into care in 2015 was 39 years, consistent with previous years.
  - o 10.8% of clients entering into care were 17 24 years.
  - o 38.2% of clients entering into care were 25 39 years.
  - o 49.0% of clients entering into care were 40 64 years.
  - o 2.0% of clients entering into care were  $\geq 65$  years.

### Sex

- In 2015, men made up the majority of clients entering the Manitoba HIV Program, but the
  province continues to have one of the largest proportions of women living with HIV,
  compared to men, in Canada.
  - o 32 female clients entered into care with the Manitoba HIV Program, comprising approximately one-third of all new clients to care.

### **Ethnicity**

- The ethnic profile of clients entering into HIV care in Manitoba changed in 2015, with a
  greater proportion of individuals self-identifying as Caucasian when compared to previous
  years.
  - o 38 (37.6%) new clients to care identified as Caucasian.
  - o 23 (22.8%) clients entering into care self-identified as Indigenous (First Nations, Métis, or Inuit).
    - 91.3% of Indigenous clients were covered by the First Nations and Inuit Health Branch of Health Canada (i.e., had "treaty" status).
  - o 23 (22.8%) identified as African/African-Canadian/Caribbean.
    - 95.2% reported originating from, and acquiring HIV in, an HIV-endemic country.
- The consistently disproportionate representation of Indigenous and African/African-Canadian/Caribbean populations among new clients in the Manitoba HIV Program reinforces the need to closely examine, and address, broader social and structural factors that create and perpetuate these inequities.



O As part of a coordinated, comprehensive response to HIV in Manitoba, the Program continues to develop partnerships with organizations that provide frontline services to disproportionately affected communities across the province.

### Geography

- In 2015, the vast majority (88.2%) of clients entering into care with the Manitoba HIV Program living in Winnipeg (**Figure 2**).
  - Only 12 (11.8%) new clients were living outside of the Winnipeg Regional Health Authority (WRHA), with most living in the Interlake-Eastern or Northern Health Regions.
- More people living outside of the WRHA presented to HIV care with low CD4 counts and fewer had achieved viral suppression at time of audit.
  - o 36.4% of new clients living outside of the WRHA (excluding those who transferred to care while on HAART) presented to care with CD4 <200 cells/mm<sup>3</sup>, compared to 29.4% of people living within the Winnipeg.
  - o 54.6% of clients living outside of WRHA had VL <200 copies/mL at time of audit, compared to 70.6% of patients living within Winnipeg.

### HIV EXPOSURE CATEGORIES

- 2015 was the first year, since the inception of the Manitoba HIV Program, that men reporting same-sex sexual contact (i.e., MSM) was the most commonly reported exposure category among clients entering into HIV care in Manitoba (**Figure 3**).
- Importantly, the proportion of new clients to care in Manitoba who report heterosexual
  contact as their primary transmission risk remains higher than what is seen, on average,
  across Canada.
  - o 39 (38.6%) reported MSM as primary risk for HIV.
  - o 33 (32.7%) new clients to the Manitoba HIV Program in 2014 self-reported heterosexual contact as primary risk for HIV.
  - o 21 (20.8%) reported originating from, and acquiring HIV, in an endemic country
  - o 8 (7.9%) reported injection drug use as their primary risk factor for HIV.
- Despite increases in rates of HIV infection attributed to injection drug use in neighbouring provinces, the Manitoba HIV Program has not experienced an increase in the proportion of clients entering into care who report injection drug use as their primary transmission risk for HIV.
  - o This may be attributed, in part, to continued provincial, regional, and community efforts to expand clean needle distribution across the province.



### HIV HEALTH INDICATORS AT PRESENTATION TO CARE

• In 2015, 80 clients (78.4%) were not on HAART upon entry into care with the Manitoba HIV Program, and 79 of those clients were successfully linked to care.

### CD4 count at entry into care (excluding transfers on HAART)

- In 2015, the median CD4 count at presentation among clients, not on HAART, entering into care was 373 cells/mm<sup>3</sup>.
- A substantial proportion of clients entering into care without being on treatment presented late, with CD4 count ≤350 cells/mm³, or very late, with CD4 count <200 cells/mm³ (Figure 4).
  - o 24 (30.4%) clients entered into care with CD4 counts <200 cells/mm<sup>3</sup>.
  - o 41 (51.9%) clients had CD4 counts  $\leq$ 350 cells/mm<sup>3</sup> upon entering into care.

### Viral load at entry into care (excluding transfers on HAART)

- In 2015, the median VL at presentation among clients, not on HAART, entering into care was 52,600 copies/mL.
  - o 78 clients (98.7%) who were not on HAART upon entry into care had VL >200 copies/mL.



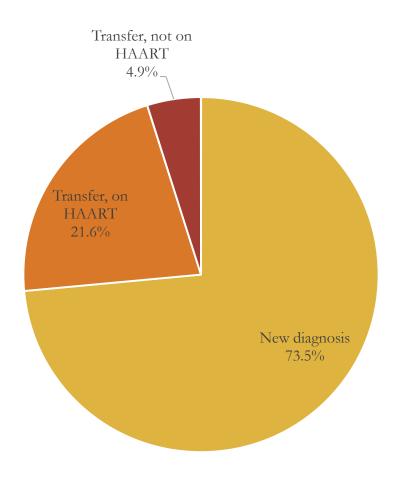
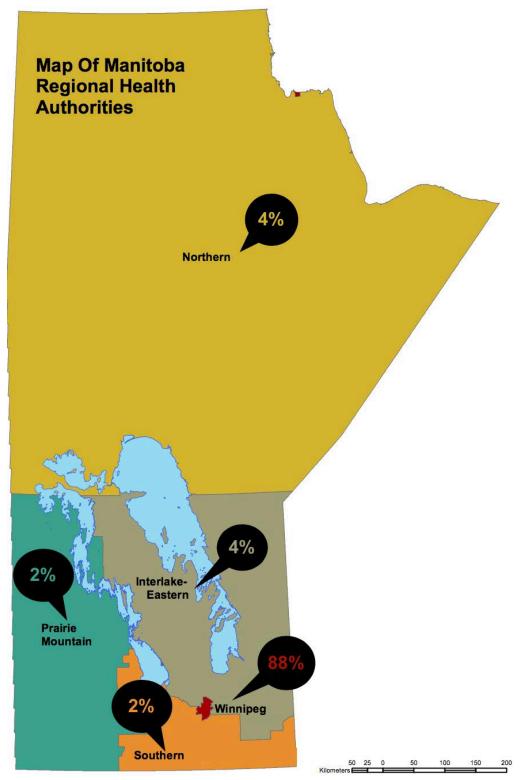


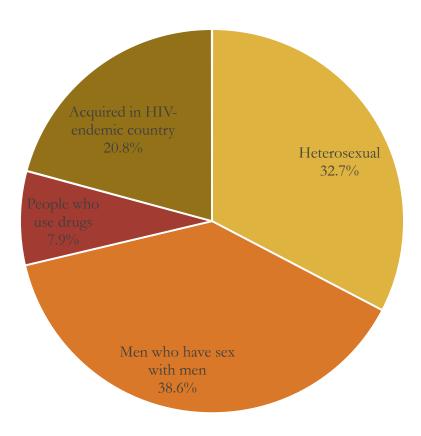
Figure 1. Status of clients entering into care with the Manitoba HIV Program, 2015 (n = 102)





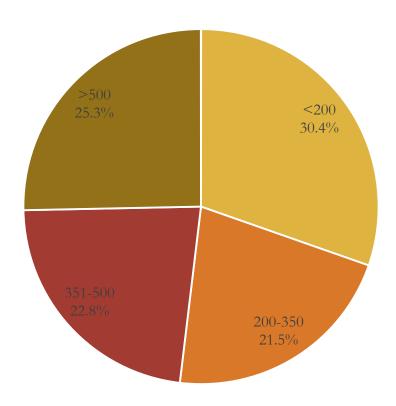
**Figure 2**. Geographic distribution of clients entering into care with the Manitoba HIV Program, (n = 102)





**Figure 3.** Self-reported exposure categories among clients entering into care with the Manitoba HIV Program, 2015 (n = 101)





**Figure 4.** CD4 count (cells/mm<sup>3</sup>) at presentation among clients entering into care with the Manitoba HIV Program, excluding those transferred to care on HAART, 2015 (n = 79)



### HIV CARE CASCADE AMONG NEW CLIENTS

- An HIV care cascade is a model that illustrates the sequential steps of HIV care through
  which people living with HIV progress, beginning with initial diagnosis extending, ideally, to
  viral suppression.
  - O The cascade presents the proportion of individuals living with HIV who are engaged in HIV care at each stage.
- **Figure 5** illustrates the HIV care cascade for all clients who entered into care with the Manitoba HIV Program, and who were not on HAART at Program entry.
  - o Data audit for developing the cascade was performed in March 2016.

### New to care

• In total, 80 clients entered into care with the Manitoba HIV Program in 2015 who had not initiated HAART.

### Linked to care

• Of the 80 new clients to care in 2015, 79 (98.8%) were successfully linked to the Manitoba HIV Program within two weeks.

### Retained in care

Retention is defined as  $\geq 2$  visits within 3 months, among those in care for at least 4 months at time of audit.

- Of the 79 clients linked to the care, 73 (92.4%) were retained in care at time of audit.
  - o 4 (5.1%) clients that were successfully linked with the Manitoba HIV Program had not attended ≥2 clinic visits at time of audit.
  - o 1 (1.3%) client had not yet been in care for 4 months at time of audit.
  - o 1 (1.3%) client had moved out of province soon after being linked to care.

### On HAART

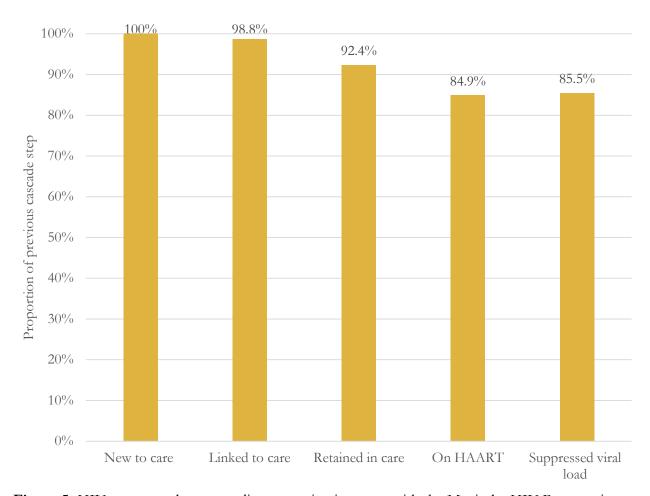
- Of the 73 clients retained in care, 61 (83.6%) had started HAART at time of audit.
  - O Among the 12 clients who had not yet initiated treatment, 2 clients (16.7%) had died before being able to start HAART and 1 client (8.3%) maintained a suppressed VL without treatment.

### Suppressed viral load

A suppressed VL is defined as <200 copies/mL

- Of the 61 clients who had started on HAART, 54 (88.5%) had suppressed VL at time of audit.
  - One additional client achieved viral suppression without being started on HAART.
    - This is an uncommon phenomenon in which the body's immune system is able to control HIV replication in the blood and maintain suppressed viral loads, without the use of antiretroviral medication.
      - Individuals who have this experience are called elite- or viremic controllers.





**Figure 5.** HIV care cascade among clients entering into care with the Manitoba HIV Program in 2015, excluding those transferred to care on HAART (n = 80 at "New to care" stage)

