2010 Manitoba HIV Program Update

HIV is a **Manitoba** reality.

Know the risks. Ask to get tested.

Manitoba
HIV Program
find. link. retain.

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The Manitoba HIV Program was created in 2007, with support through Manitoba Health & Healthy Living, in order ***to provide information, specialized care, treatment, and support for Manitobans living with HIV***. The Manitoba HIV Program fosters best practice and ensures that everyone who tests positive has the same standard of care and treatment, regardless of where they live. The connection of a community health centre (Nine Circles Community Health Centre) with the specialist care offered at the Health Sciences Centre hospital facilitates seamless, effective client care. The inclusion of the extensive support services offered at Nine Circles results in more effective healthcare delivery that decreases stressors on clients' lives, helps retain clients in care, and results in better health outcomes. Community healthcare that offers these supports has been shown to improve health outcomes most dramatically for clients from marginalized groups.

In addition to the provision of health and social care, the Manitoba HIV Program supports the development of effective prevention strategies. Our education and prevention programs offer prevention, education and testing through partnerships with community agencies. Outreach testing will connect those already infected with HIV but unaware of their status to testing and care, improving their health outcomes and slowing the progression of HIV in Manitoba.

Manitoba HIV Program Structure

When a patient receives a positive HIV diagnosis, no matter where they live in Manitoba, their health care provider can seek the expertise and guidance of the Manitoba HIV Program team. The Manitoba HIV Program provides primary and specialist care for those living with HIV in Manitoba. Currently, there are over 1000 people living with HIV being followed by either of the two sites. The program works to connect Manitobans to care, support, treatment and testing specific to HIV.

The Manitoba HIV Program works with all Manitobans living with HIV. Clients do not have to move to Winnipeg in order to receive healthcare and treatment. Challenges to implementing this model remain and regional partnerships and support are pivotal in the ongoing success of rural service delivery. People living in Winnipeg can choose to remain with their current doctor or transfer to receive their entire healthcare from the HIV Program.

The Health Sciences Hospital site provides infectious disease care to those who have a primary care physician. Social work, pharmacy, and dietician services are also available to clients of the Health Sciences Centre. As a primary health care centre for those living with HIV, Nine Circles works hard to provide integrated care while meeting clients "where they are at" when

connecting them to care and treatment. Outreach workers, social workers, health promotion and education staff all support clients to "live well with HIV" and maintain a connection to HIV care. Many of Nine Circles programs and services, including Health Promotion programming, Outreach, and food bank are available to **all** Manitobans living with HIV.

A QUICK GLANCE AT HIV IN MANITOBA IN 2010

- In total, **136 patients** presented for care in 2010 to the Manitoba HIV Program**.**
    - Of these, **102 were new adult patients to care in 2010**, up from 99 in 2009. This continues a trend of the Manitoba HIV Program seeing an ever increasing number of patients.
    - **Two cases are pediatric HIV cases**
    - A further **22 patients living with HIV transferred into Manitoba in 2010**
    - 10 cases are currently not in care with the Manitoba HIV Program
- New patients were not limited to the Winnipeg region but reported across the province including rural, remote and reserve communities.
- 75% (n=76) of the 102 were men.
- 56% (n=57) of the patients in care were less than 40 years old. For males, 54% (n=41) were under the age of 40, while for females, this percentage was 62% (n=16).
- 38% (n=38) of new patients identified as Aboriginal (including Inuit, First Nations or Métis).
- As in previous years, heterosexual contact was the leading mode of transmission accounting for 63% (n=64) of all new infections. Men having sex with Men (MSM) accounted for 22% (n=22) of new infections and Intravenous Drug Use (IVDU) for 16% (n=16).
- Late presentation continued to be a major concern amongst newly diagnosed patients. In 2010, 54% (n=54) of new cases presented for care with CD4 counts under 350 cells/mm^3.

Figure 1: Types of Patients, Manitoba HIV Program (2010)

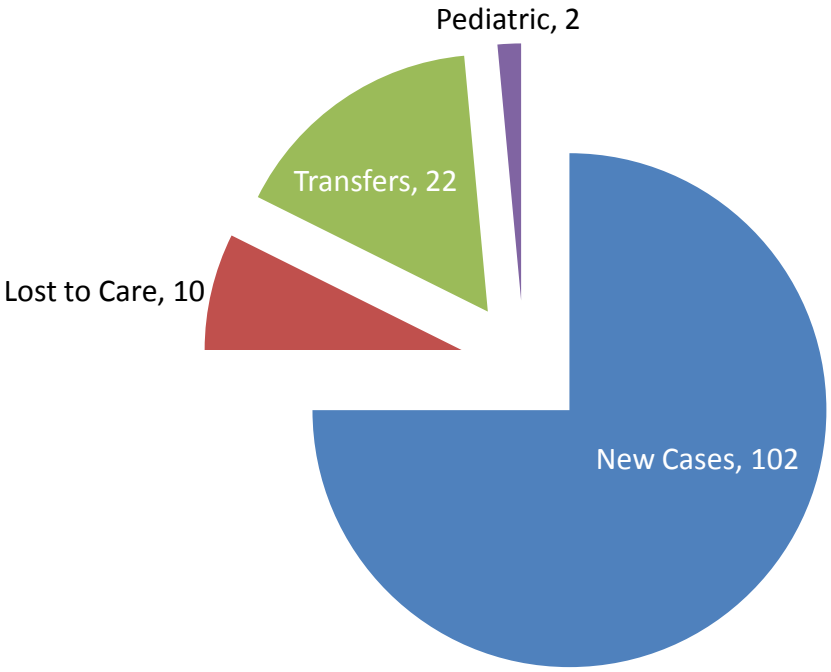
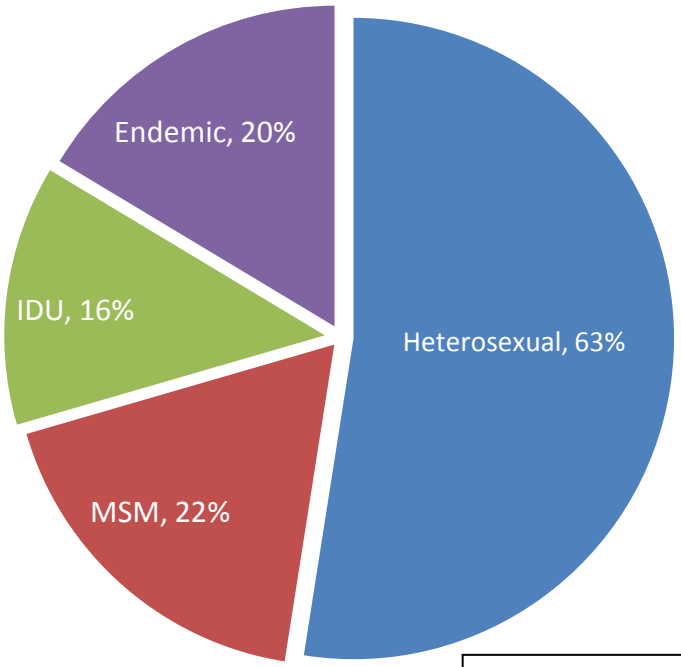


Figure 2: Modes of HIV Transmission, New Patients to Care, Manitoba HIV Program (2010)



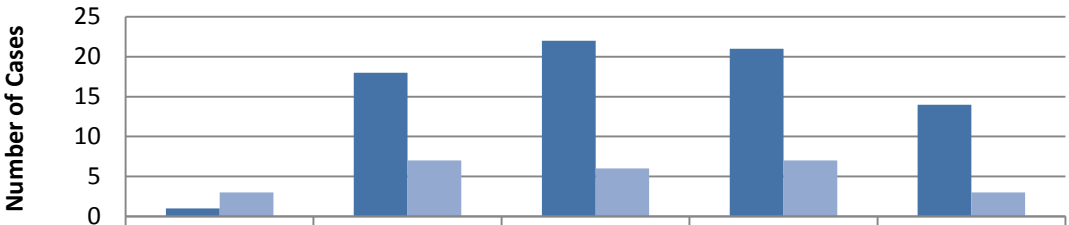
*Multiple responses = >100%

2010 MANITOBA TRENDS

1. **In 2010, more males presented to care, compared to 2009**

- In 2010, there were 102 people living with HIV new to care. Of these, 75% were male and 25% female. This is a reversal in trends from 2009, where 45% of new cases were women.
- 54% (n=41) of men were under the age of 40, while 60% of females were under 40 (n=16). Of the 26 new female patients in care, 10 (38%) were younger than 30 years and 6 were between the ages of 30-39 (23%).

Figure 3: Age Distribution by Sex, New Patients to Care, Manitoba HIV Program (2010)

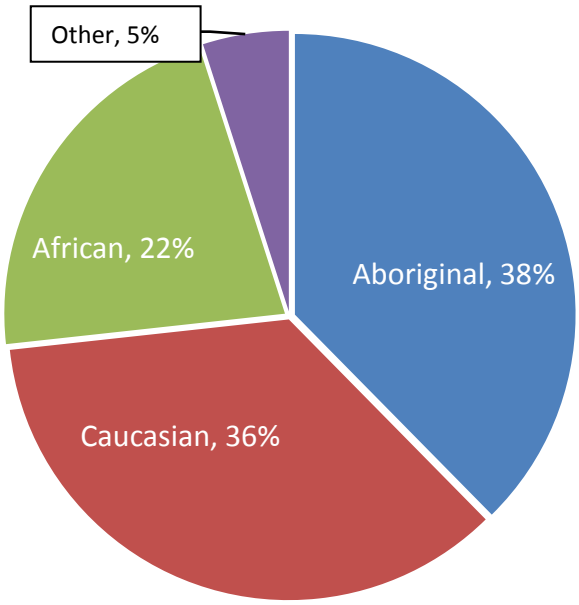


	<21	21-29	30-39	40-49	50+
Male	1	18	22	21	14
Female	3	7	6	7	3

2. **Continued over-representation of Aboriginal persons in new HIV cases**

- 38% (n=38) of new patients in 2010 were of Aboriginal descent, continuing a trend of Aboriginal persons being over-represented in new HIV infections in Manitoba. This was a slight decrease from 43% in 2009.
- In Canada, although Aboriginal people represent only 3.8% of the Canadian population, they account for 8% of Canadians living with HIV.[1] The Public Health Agency of Canada (PHAC) estimates in 2008, the overall new infection rate among Aboriginal persons was about 3.6 times higher than among non-Aboriginal persons.[1]
- The over-representation of persons of Aboriginal descent in HIV is especially important in the Prairie Provinces. In Saskatchewan, 80% of new HIV cases in 2009 were of Aboriginal ancestry.[2] According to PHAC, although HIV rates in 2009 have stabilized or decreased in most populations, increases in HIV rates among those of Aboriginal ethnicity have been observed[3], consistent with evidence that the fastest growing group of new HIV cases in Canada are Aboriginal injection drug users.[4]
- Because of adverse socio-economic conditions, some individuals of Aboriginal descent are marginalized and made vulnerable to HIV and other poor health outcomes.[5-7] Marginalization of these individuals leads to difficulties in access to testing, which translate into a higher risk of late presentation and barriers to proper adherence to care.[8]

Figure 4: Distribution by Ethnicity, New Patients to Care, Manitoba HIV Program (2010)



3. Continued late presentation of HIV patients in Manitoba

- A continuing, and worrisome trend in late presentation was observed among new cases presenting to care in 2010. Late presentation, wherein people have been diagnosed with HIV after the virus has already significantly impacted their immune system, is troubling because it indicates that many Manitobans have been unknowingly living with HIV for some time. As a result of being unaware of their HIV status, they may not have had the information or medication required to keep themselves healthy and others protected from the transmission of HIV.
- 54% (n=54) of patients new to care presented with CD4 counts below 350 cells/mm^3. The World Health Organization (WHO) recommends initiation of antiretroviral therapy (ART) for people living with HIV at a CD4 count of 350 cells/mm^3[39]. Although this is an improvement from 2009 (where the percentage was 64%), the missed opportunity for earlier diagnosis and treatment remains a concern. Almost half (48%; n=26) of those presenting with CD4 counts below 350 cells/mm^3 were of Aboriginal descent.
- Of the highest concern, of the patients who had CD4 counts below 350 cells/mm^3, 65% (or 35 patients) presented with CD4 counts below 200 cells/mm^3, which is the definition for AIDS.

CHALLENGES AND OPPORTUNITIES

Late Presentation

Despite the Manitoba HIV Program celebrating many successes since its inception, challenges in the provision of prevention, care and treatment remain. One of these challenges is the continued trend of delayed diagnosis of HIV, or "late presentation" in those patients newly referred to care. In 2010, over half of our patients (54%) presented to the Manitoba HIV Program with CD4 levels less than 350 cells/mm^3, which is the recommended starting point of antiretroviral therapy, according to the World Health Organization.[9] Although this is an improvement over 2009, where almost two-thirds of patients were late presenters, the fact that 1 out of every 2 patients in 2010 were late presenters is of some concern.

Late presentation is important from the public health point of view for several reasons. First and foremost, research has shown that overall health of late presenters, in terms of death and complications, is much worse than those who present earlier.[10-11] Secondly, the costs to treat late presenters are much higher[12-13]. It has been estimated that the annual cost to treat late presenters is over double that of those who come into treatment with higher CD4 counts, with late presenters costing, on average $9,723 more in annual costs (in 2004 dollars).[12] Finally, late presenters may pose a risk to others, as they may transmit HIV to others without knowing their HIV status.[11, 14] In the U.S., it has been estimated that 50%-70% of new HIV infections could be attributed to individuals who were unaware of their HIV status.[5]

The reasons why some individuals present late are complex, and include reasons such as perceptions of low risk, lack of access to testing, and being a member of vulnerable and marginalized populations.[11] Furthermore, it has been suggested that factors related to the provision of care are also important, as studies have demonstrated that late presenters often use health care services as much as, if not more than HIV positive persons diagnosed earlier.[15-17] Thus, researchers have suggested that increasing knowledge of HIV status, through an expanded testing strategy, targeting marginalized and vulnerable populations, and those not traditionally offered testing as important means to detect HIV earlier in individuals.[18] However, it should be recognized that new strategies should not come at the cost of provision of routine testing in traditional settings, such as settings where antenatal screening and sexually transmitted infections (STI) services are provided.

Persons Lost to Care

Another challenge for the Manitoba HIV Program is the number of patients who are lost to care, those who are HIV-diagnosed but have not accessed follow-up services. In 2010, 10

patients from the Manitoba HIV Program were lost to care. Patients lost to care are at higher risk of poor health outcomes; one European study demonstrated that patients lost to care were at five times the risk of death, compared to those receiving regular care.[19] A recent Canadian study found that patients lost to care (and who subsequently returned to care) had dramatically lower CD4 counts, and as a proportion, more AIDS-defining illnesses, compared to patients who received continuous care during the same time period.[20] Similar to late presentation, the reasons why persons are lost to care are numerous, and are related to both the individual and providers of care. Younger age, injection drug use, lack of a primary care physician, lower CD4 counts at last visit, recent immigrant status, and lack of adherence to antiretroviral therapy have been suggested as factors related to loss to care.[21-24] Identification of those at highest risk of being lost to care, and a greater emphasis on keeping these individuals in care, earlier in their presentation have been suggested as strategies for retaining patients in care.[24]

Mother to Child Transmission

In 2010, the first mother to child transmission (i.e., "vertical transmission") of HIV in over five years was documented in Manitoba. Nationally, although the proportion of infants *exposed* to HIV has increased over the last decade, the number of infants actually *infected* with HIV in Canada has dramatically dropped since the availability of antiretroviral therapy.[25] According to the Public Health Agency of Canada (PHAC), in 2001 10% (n=17) of infants perinatally exposed to HIV were confirmed to be infected with the virus. In comparison, 2% (n=4) of exposed infants were infected in 2008.[25] As antiretroviral therapy has been shown to dramatically reduce the chances of vertical transmission[26], a concerted effort to identify, test and treat females at risk of transmitting HIV to their infants remains a priority for the Manitoba HIV Program. Rapid HIV tests, a multidisciplinary team approach and repeated testing late in pregnancy have been shown to be conducive to reducing vertical transmission.[27]

Opportunities

Although substantial challenges remain in the delivery of HIV care to the province of Manitoba, we feel that these challenges are not insurmountable. The integrated and standardised care and treatment model of the Manitoba HIV Program provides an important first step towards addressing challenges such as late presentation, patients lost to care and vertical transmission of HIV. Moreover, the availability of community health services linked with specialist care allows for a "package of services", tailored to the needs of patients in care. Thus, this comprehensive approach towards both HIV prevention[26, 28-29] and treatment[30] will be especially important as HIV continues to spread in Manitoba, while at the same time, requiring sustained patient-centred care and support for those already HIV-positive.

IMPLICATIONS AND CONCLUSIONS

Over 100 new patients presented themselves for care to the Manitoba HIV Program in 2010, suggesting that the epidemiology of HIV in Manitoba remains a public health priority. Although the Manitoba HIV Program prides itself on providing a comprehensive care model, the need to find new HIV cases earlier in the course of infection is urgently highlighted in the continued trend of cases presenting late to care. Understanding and examination of the reasons behind missed opportunities for early diagnosis is required. Given the documented vertical transmission occurring in Manitoba in 2010, gaps in service delivery, both within existing health services, and outside the health services realm will be examined in the upcoming year. Inequities in society have led to the continued over-representation of persons of Aboriginal descent presenting to care. However, the primary care model and multidisciplinary approach offered by the Manitoba HIV Program offers an opportunity for individuals to receive respectful, comprehensive and compassionate care.

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