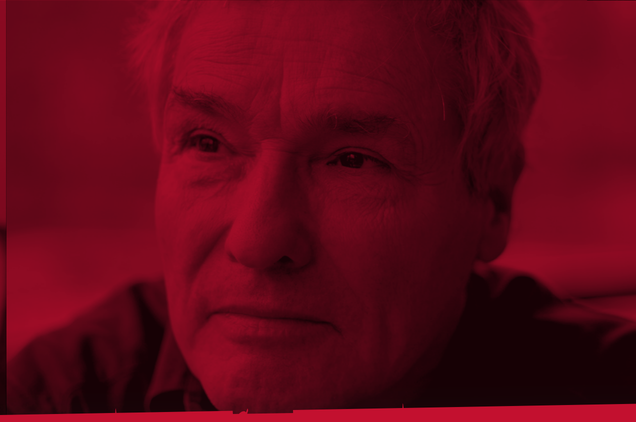


2011 PROGRAM UPDATE

Know the risks. Ask to get tested.

Manitoba HIV Program

find. link. retain.

About the Manitoba HIV Program:

The Manitoba HIV Program is a dual site initiative established in 2007, which provides information, specialised care, treatment, and support for Manitobans living with HIV. We aim to ensure that everyone who tests positive has the same standard of care and treatment, regardless of where they live in the province. When an individual receives a positive HIV diagnosis, their health care provider can seek the expertise and guidance of the Manitoba HIV Program Team. There are two sites for the Program; a community site, Nine Circles Community Health Centre, and a hospital site at Health Sciences Centre. The connection between a community health centre with the specialised care offered at the hospital site facilitates seamless, effective client care to more than 1100 Manitobans living with HIV.

The Manitoba HIV Program offers the following services:

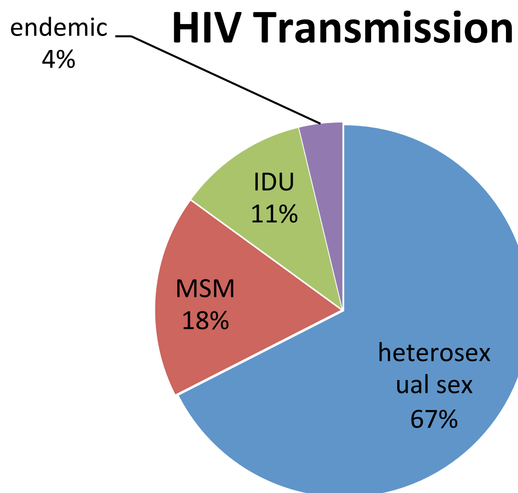
- HIV Primary care nurses with specialisation in HIV care
- HIV primary care physicians
- HIV infectious disease specialists
- HIV pharmacist
- Dietician
- Counselling services
- Occupational Therapy
- Access to Clinical Trials
- Health Promotion Program
- Support for people living with HIV
- Food Bank for those living with HIV
- Advocacy and social support
- Testing
- Harm reduction services

This report describes trends amongst patients new to care within the Manitoba HIV Program. The report acts as an important component of quality review for the HIV Program by illustrating emerging trends and illuminating important priorities to be taken into account in program development and service delivery. 2011 data from the Winnipeg Region was prepared collaboratively with the Winnipeg Regional Health Authority Population and Public Health Program.

Introduction:

In 2011, the Manitoba HIV Program welcomed **95 new individuals to care**. Of these, **80 patients were new to HIV care** and **15 patients were transfers** to Manitoba from other provinces or countries. The HIV Program works collaboratively with Public Health partners in the province to find and link those newly diagnosed with HIV to care.

- Within the Winnipeg region, there were **65 patients new to HIV care** and **49 new HIV diagnoses.**
- 19% of new cases (N=15) were referred by other Manitoba Regional Health Authorities: 5 from Burntwood/NOR-MAN; 2 from Interlake & Northeastman; 7 from Brandon, Parkland, & Assiniboine; and 1 from Central and South Eastman.
- **25% of new cases currently reside outside of Winnipeg.**



HIV Transmission:

- In Manitoba, **heterosexual sex continues to be the leading risk factor, accounting for 67% (N=53) of cases new to care in 2011.**
- **18% (N=14) of those new to care in 2011 were men having sex with men (MSM).** This rate has been stable around 20% since 2008.
- **Those coming from countries where HIV is endemic represent 4% (N=3) of cases new to care**. This number is down from 20% in 2010; however, this difference is primarily attributed to improved data collection and reporting.
- **Injection drug use (IDU) is documented as a risk factor for 11% (N=9) of those new to care in Manitoba.** This rate is down from past years.

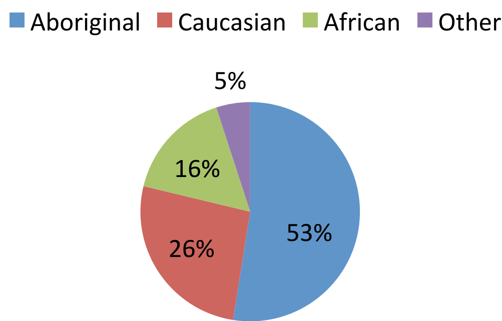
Comparative Analysis of New to care cases, 2009-2011

	2009 (N=99)	**2010 (N=102)**	**2011 (N=80)**
	%	**%**	**%**
Male	55	75	56
Female	45	25	44
heterosexual	42	63	67
endemic	21	20	4
MSM	23	22	18
IDU	13	16	11
Aboriginal	43	38	53
Caucasian	31	36	26
African	21	21	16
Other	5	5	5
CD4 <200	36	35	38

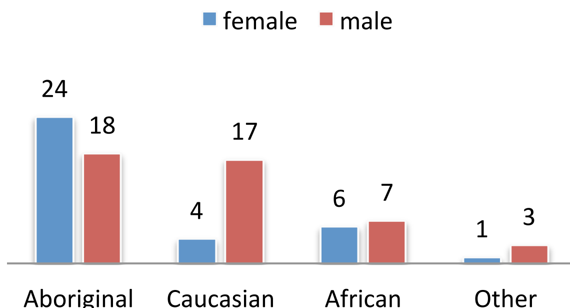
***Multiple risk factors recorded; sum total greater than 100.**

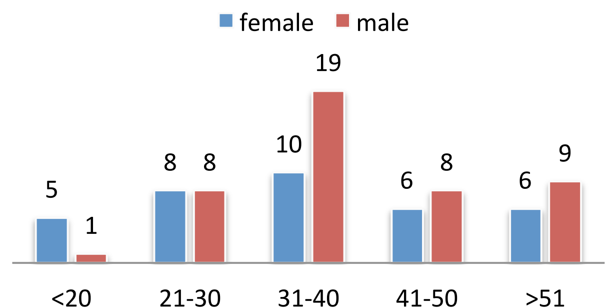
Demographic Profile: Ethnicity

- In 2011 **53% (N=42) of those new to care identified as Aboriginal (First Nations, Inuit and Métis), 26% (N= 21) identified as Caucasian, 16% (N=13) as African, and 5% (N=4) were in a varied group.**
- The percentage of new Aboriginal patients increased from 38% in 2010 to 53%. Other ethnic groups experienced noticeable decreases; 26% identified as Caucasian, a decrease from 36% in 2010 and 16% identified as African, a decrease from 22% in 2010.
- Aboriginal people continue to be over-represented in new HIV diagnoses in Manitoba and Canada in general.

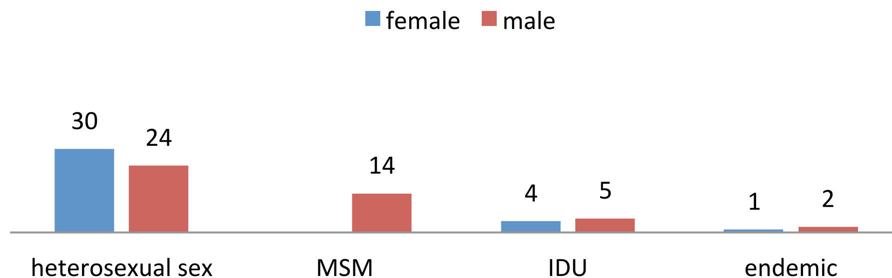


- Manitoba continues to see an increase in the number of female patients newly diagnosed with HIV and in particular in Aboriginal females. Of the 42 new Aboriginal patients, 24 (57%) were female and 18 were male.
- Attention must also be paid to the increase in the number of Aboriginal women newly diagnosed with HIV and potential contributing factors that may have facilitated this increase, such as marginalization and ongoing discrimination. Studies show that these factors adversely affect the socio-economic status of Aboriginal women, increasing their likelihood of engaging in higher risk behaviours.[1]
- Male cases have accounted for a higher proportion of HIV cases in Manitoba consistently since 2008, with the greatest discrepancy in 2010 – when males comprised 75% of new cases.
- The largest proportion of cases overall occurred within the 21-30 and 31-40 age groups. Together, these age ranges comprised 56% of new cases (20% and 36% respectively).
- In 2011, the average age for females new to care was 37 years and the average age for males was 40 years.
- **In 2011, 41% (N=13) of females were 30 years or younger. Ten of these 13 females (77%) were Aboriginal.**
- In 2011, 80% (N=36) of males new to care were 31 and older.
- **For women, heterosexual sex is the predominant risk factor, representing 86% of new cases**.
- For males, heterosexual sex was also the leading risk factor (53%) and MSM accounted for 31% of new cases, IDU for 11% and endemic infections for 4%.





Mode of HIV Transmission & Gender



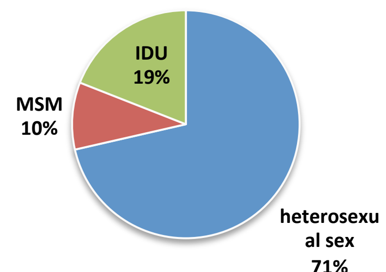
*In 2011 **56% of new diagnoses were male and 44% were female.**

Key Manitoba Issues

Over-representation of Aboriginal People

- Of the 80 individuals new to care with the Manitoba HIV Program in 2011, 53% (N=42) identified as Aboriginal (including Métis, Inuit & First Nations).
- This marked an increase from 2010 where 38% of individuals new to care identified as Aboriginal.
- Aboriginal People continue to be over-represented amongst newly diagnosed in Canada. Although Aboriginal people comprise 3.8% of the Canadian population, in 2008 they accounted for 8% of people living with HIV and 12.5% of new infections.[2] The HIV infection rate for an Aboriginal person in Canada is 3.6 times higher than that of non-Aboriginal Canadians. This mirrors epidemics in other parts of the world. Studies show that Indigenous populations are disproportionately represented in the HIV epidemic worldwide.[3]
- Heterosexual contact continued to be the leading exposure category for newly diagnosed Aboriginal people in Manitoba. In 2011 71% (N=30) of new infections amongst Aboriginal people were attributed to heterosexual exposure. MSM accounted for 10% (N=4) of all new infections and IDU accounted for 19% (N=8).

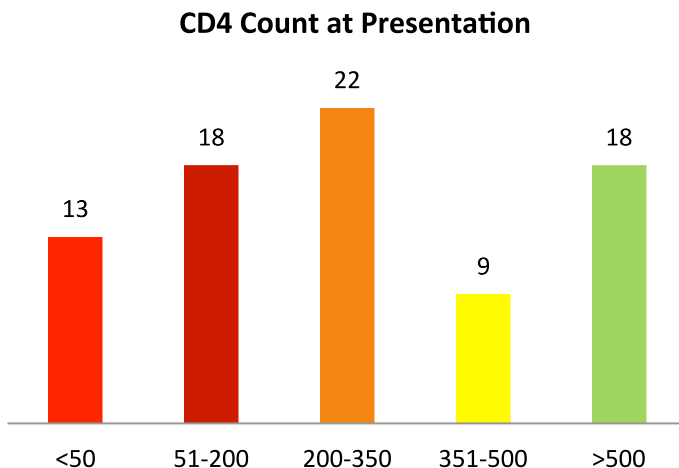
Mode of Transmission, Aboriginals (N=42)



Late Presentation:

The term "late presentation" is used to describe a person who initiates HIV care at a "late" stage of HIV, or with a lower CD4 count. Recent debates within the literature further differentiate "late presenters", those who present to care with CD4 counts <350 cells/mm^3, and those who present with "advanced HIV disease" or those who are presenting to care with CD4 counts less than 200 cells/mm^3.[4,5] These numbers are important for several reasons: 1) when CD4 counts decrease, the risk for other infections increases and 2) current clinical guidelines recommend HIV medication treatment begin when an individual's CD4 counts are less than 500 cells/mm^3.[6] Patients who begin treatment at this stage have better outcomes and are likely to experience less complications. Within this report, we will use the definition of "late presenters" as those patients who initiate HIV care with a CD4 count less than 350 cells/mm^3 and will further subdivide this group for purposes of comparison.

- Early diagnosis of HIV infection has important outcomes for individuals: with earlier treatment and care, rates or HIV-related mortality and morbidity are decreased.[7] At the population level, early diagnosis and treatment can decrease the risk of transmission by reducing individuals' viral load and infectivity.[8 9]
- In Manitoba, late presentation continues to be a concern, with **64% (N=51) of patients new to care presenting with CD4 counts less than 350 cells/mm^3 and 38% (N=30) presenting with CD4 counts less than 200 cells/mm^3.**



Of those presenting late, with CD4 less than 350/ mm^3 (N=51):

- 59% are male
- 65% report heterosexual sex as their primary risk factor, with the remaining reporting the following as their primary risk factor: MSM 16%, IDU 14%, endemic 6%
- 27% reside outside of Winnipeg
- 45% are Aboriginal

- To address this trend of late presentation, the HIV Program is currently undertaking research to document missed opportunities for HIV diagnosis and to help identify opportunities for earlier diagnosis and linkage to care.

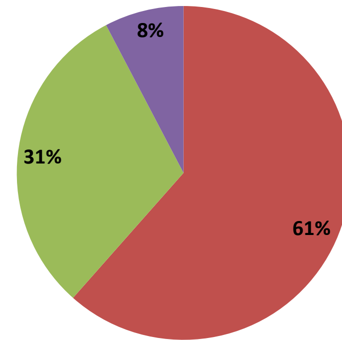
Discussion

The Need for Testing:

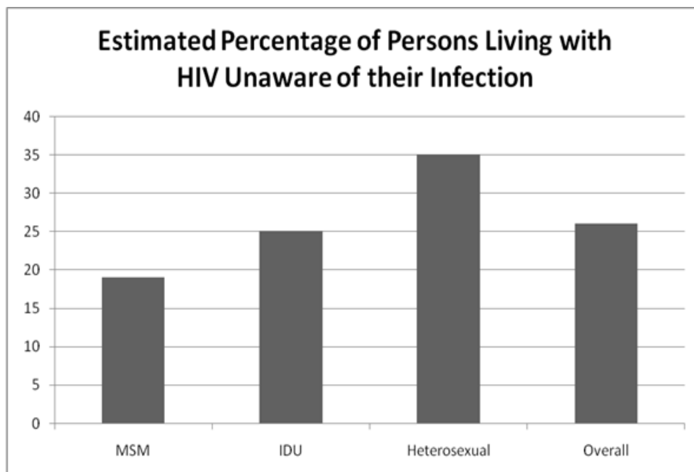
Manitoba has documented some of the highest per-capita rates of HIV in Canada. A recent study implementing point of care HIV tests in the Health Sciences Centre hospital documented an HIV prevalence rate of 1.4%.[10] Similarly, HIV screening at Nine Circles Community Health Centre has documented 0.932% prevalence.[11]

While it is paramount to understand local HIV epidemiology, it is also critical to note that many people have acquired HIV unknowingly and are unaware of their HIV infection. HIV surveillance data may underestimate the magnitude of the local HIV epidemic because these statistics only represent those who have presented for testing and diagnosis. Public Health Agency of Canada documents that an estimated 28% of HIV infections in Canada remain undiagnosed. At a national level, this means that between 12,800 and 21,000 Canadians are living with HIV and are unaware of their infection. Further to this, these estimates vary by exposure category, ranging from 19% unaware (MSM) to 35% (heterosexual).[12] Studies have documented that knowing one's HIV status is beneficial to prevention. People who are aware of their HIV status can initiate treatment earlier and practice a range of prevention tactics.[13] Increased testing is crucial in achieving this goal.

In the United States, the CDC and American College of Physicians encourage routine HIV screening for all patients 13 to 64 years in any health care setting.[14-15] The number of Manitobans screened for HIV-infection remains low. **In 2011, only 6% of Manitobans aged 16 and older were screened for HIV.** Furthermore, the number of HIV tests performed in Manitoba is noticeably lower than the number of other STI tests performed**.** In 2011, there were **40% less HIV tests than Gonorrhea tests.[16]** Manitoba has the highest rates of Chlamydia and Gonorrhea in Canada amongst 15-24 year olds, [17] a statistic indicative of the need for HIV testing. HIV testing could be increased by pairing it with other STI testing. Not only are testing opportunities being missed in our province but the presence of STIs can significantly increase the risk of acquiring HIV.



Estimated percentage of persons living with HIV who are unaware of their infection, by exposure category, Canada, 2008 (PHAC)



Critical Late Presentation

This year, 16% (N=13) of individuals new to care presented with CD4 <50 cells/mm^3. This trend has not been defined in the late presentation literature but is being referred to by the Manitoba HIV Program as “critical late presentation”. For the 13 “critical late presenters”, the average CD4 count was 12 cells/mm^3 and mean viral load of 484, 724 copies. Eleven individuals (85%) had opportunistic infections upon presentation, including PCP pneumonia, esophageal candidiasis, and CMV colitis. Further, these 13 individuals accounted for 321 days of hospitalization at or following their HIV diagnosis.

Cost of Late Presentation:

Delayed presentation for HIV care carries both health and economic implications. Research by Krentz and Gill (2011) documents that those presenting with CD4 <200 cells/mm^3 have an average monthly cost that is 2.3 times higher than that of those with CD4 >350 cells/mm^3 ($1568/month vs. $682/month, respectively).[18] Utilizing these estimates we estimate that **patients new to HIV care in Manitoba have an approximate annual cost of $1,076,712.[19] 80% of these costs ($863,928) is dedicated to the care of those who have presented with CD4 <350 cells/mm^3**. Research studies have identified that the costs for late presenters remained substantially higher each year, despite recoveries in health after linkage to treatment and care.[20]

Risk Perception:

Although MSM continues to be the leading exposure category in Canada, the majority of new infections in Manitoba occur through heterosexual contact. In 2009, heterosexual contact accounted for 42% of all new infections. This figure increased to 67% of all new infections in 2011. This shift has important implications in understanding public perceptions of HIV and risk, and for informing HIV prevention programming. Despite the general increase of heterosexual contact as a risk factor, many people who engage in heterosexual contact perceive their risk to be low. Evidence shows that Canadian individuals who fall into categories that have traditionally been classified as high risk such as MSM, people who use injection drugs and people who have high risk partner(s) are more likely to seek regular testing and utilise prevention techniques than people who do not have these factors. [21] Perceived low risk continues to be problematic, as it translates into low testing rates and failure to effectively utilise prevention tools. Increasing knowledge and understanding of HIV in Manitoba will be important in transforming this dynamic.

HIV in the Prairies

The overall number of new HIV infections in Canada has stabilised noticeably since 2002. However Manitoba & Saskatchewan continue to experience increases in new HIV cases. In 2010, the rate of positive HIV tests in Manitoba was 12.3 per 100,000 people; a rate noticeably higher than the national average of 8.2 per 100, 000. Saskatchewan's rate was 19.1 per 100,000, double the national average.[22] In addition to increasing new infections the development of the epidemic in the prairie provinces also carries distinct features from the epidemic across the rest of the country. Whilst MSM continues to be the leading exposure category across the country, the Manitoba epidemic is driven primarily by heterosexual contact and Saskatchewan's epidemic is IDU driven. In 2010 IDU accounted for 79% of new HIV cases in Saskatchewan.[23] The distinct nature of the epidemic in the prairie provinces requires interventions that both acknowledge the unique situation developing in the prairies and take these factors into account in the development of responses.

Over-representation of Aboriginal People:

In order to talk about the over-representation of Aboriginal people in new HIV infections, we must talk about the various societal factors that have facilitated the development of this dynamic. We cannot understand the impact of HIV on Aboriginal communities without understanding the contexts that have shaped the present. Across the country, Aboriginal people experience lower health outcomes than other Canadians. They have higher rates of unemployment, experience greater poverty, have less access to resources and establish poorer links to health care systems.[24] Studies have shown that there is a link between socio-economic status and health. A lower socio-economic status is more likely to result in poor health outcomes.[25] Additionally, the degree to which people navigate risk exposure and HIV prevention is impacted by these issues. Marginalization and low-socio-economic status elevate risk.

Our understanding of the disproportionate effect of HIV on Aboriginal people in Manitoba must begin at the point where all these issues intersect. Effective responses in Manitoba must begin with a comprehensive understanding of contextual factors and must involve multiple contributing voices.

Implications and Conclusions:

- **It is time to test.** Manitoba has high rates of sexually transmitted infections and not enough HIV testing. **More Manitobans need to be screened for HIV infection.**
- **Delayed diagnosis of HIV is costly and avoidable.** The 80 patients new to care in Manitoba carry an approximate annual cost of $1,076,712; 80% of these costs ($863,928) are attributed to late presentation (CD4 $<350/ mm^3$).
- **Early diagnosis of HIV prevents HIV from spreading through our communities.** When people are aware of their HIV status, they can stay healthy and take precautions to protect their partners.
- **Growing gaps of income are associated with inequities in health and create vulnerabilities for HIV infection.** The data collected in the 2011 report is telling a specific story about inequalities exacerbating HIV prevalence in Manitoba.
- HIV is a Manitoba reality; a quarter (25%) of those new to HIV care in Manitoba live outside of Winnipeg. **A coordinated, provincial effort is required to address HIV in Manitoba.**

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