# epiREPORT

Annual Statistical Update: HIV and AIDS

2014

Data reported to December 31, 2014

Epidemiology & Surveillance
Public Health Branch
Public Health and Primary Health Care Division
Manitoba Health, Healthy Living and Seniors

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#### **Executive Summary**

Manitoba Health Healthy Living and Seniors (MHHLS) is pleased to present the *Annual Statistical Update: HIV and AIDS, 2014*. This report is intended to provide Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) surveillance information collected as part of on-going public health efforts in Manitoba. Below are a few selected highlights from the report:

- There were 87 newly positive HIV cases reported in 2014, compared to 118 new HIV
  cases in 2013. In absolute numbers, this is a decrease by 31 cases compared to the
  previous year.
- It should be noted that 22 cases of the 87 (25%) reported they were previously tested and diagnosed outside of Manitoba; however, this was the first time identified as a case within Manitoba.
- In 2014, 62% of all cases (n= 54 cases) were male and 38% were female (n= 33 cases); the mean (average) age of new cases was 39.6 years at time of report.
- The majority of new HIV cases reported residence in the Winnipeg RHA at the time of testing and diagnosis (68% or 59 cases). The remainder reported residence in health regions outside of Winnipeg RHA.
- The three main ethnicity categories reported were: Caucasian (which accounted for 32% of all new cases); First Nations (FN), Inuit and Métis (30%); and African-African-
  - Canadian (16%). It should be noted that 18% of new cases did not report an ethnicity in 2014.
- The three main Risk Exposure Categories (Primary Mode of Transmission) reported were: heterosexual contact (which accounted for 25% of all new cases), men who have sex with men (MSM) (23%), injection drug use (IDU) (16%) and endemic (16%). It should be noted that 18% of cases did not report a risk factor or exposure.
- There were zero (0) new AIDS cases reported in 2014 and zero (0) deaths among AIDS cases reported.

#### How does Manitoba compare?

At the end of 2013, Manitoba had the second highest reported rate of newly positive HIV adults (15 years of age and older) among the provinces and territories. However in terms of absolute numbers, cases from Manitoba accounted for 5.6% of newly positive cases in Canada that year.

Source: Public Health Agency of Canada. HIV and AIDS in Canada. Surveillance Report to December 31, 2013 Surveillance and Risk Assessment Division, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2014.

#### <u>Abbreviations and Acronyms</u>

Abbreviations used in this report:

AIDS Acquired Immunodeficiency Syndrome

HIV Human Immunodeficiency Virus

IDU Injection drug use

MHHLS Manitoba Health, Healthy Living and Seniors

MSM Men who have sex with men

NIR No identifiable risk

PHAC Public Health Agency of Canada

Recp B/B products Recipient of blood or blood products prior to 1985

#### Citation

Government of Manitoba, Manitoba Health, Healthy Living and Seniors, Public Health and Primary Health Care Division, Public Health Branch, Epidemiology and Surveillance. (2015). Annual Statistical Update: HIV and AIDS 2014.

Let us know what you think. We appreciate your feedback! If you would like to comment on any aspect of this report please send an email to: <a href="mailto:outbreak@gov.mb.ca">outbreak@gov.mb.ca</a>

# **Acknowledgements**

Manitoba Health, Healthy Living and Seniors (MHHLS) would like to acknowledge the important efforts of public health professionals and health care providers across the province involved in the interview of new cases and reporting case-based surveillance information to the provincial surveillance system. Without these continued efforts this report would not be possible.

#### **Introduction**

MHHLS is pleased to present the *Annual Statistical Update: HIV and AIDS 2014* report. This report is intended to provide Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) surveillance information in Manitoba for new cases reported to the Public Health Surveillance Unit within MHHLS up to December 31, 2014. The 2014 HIV data presented here includes an examination by:

- age and sex distribution,
- geographic region,
- · ethnicity, and
- Risk Exposure Category (Primary Mode of Transmission).

Historical data tables have been included in the appendices at the end of this report (Appendix C and Appendix D). The tables include data collected since 1985 about reported HIV cases. The analysis of AIDS data is limited due to the small number of cases reported in recent years; however aggregate data tables are presented.

#### **Methods**

#### **Case definitions**

**HIV case:** an individual with a positive HIV antibody test reported for the first time to the Public Health Surveillance System, Epidemiology and Surveillance, MHHLS. Note: This includes individuals who may have been previously tested and diagnosed in another province or country outside of Manitoba. These cases are considered "new to Manitoba" and are monitored as there may be impacts on the use of health programs and services within Manitoba.

**AIDS case:** an individual reported by clinical report of an AIDS-defining illness and meeting the case definition for HIV (above).

The case definitions used by Manitoba for HIV and AIDS are based on those published by the Public Health Agency of Canada (PHAC) (<a href="http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/HIV\_VIH-eng.php">http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/HIV\_VIH-eng.php</a> and <a href="http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/AIDS\_SIDA-eng.php">http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/AIDS\_SIDA-eng.php</a>).

#### **Data Sources**

Case data: The dataset used in this report was extracted in September, 2015, from the MHHLS Public Health Surveillance System databases. It is important to note that information is continuously reported and entered into the system, so slight differences may occur from reports generated in the past.

**Population data**: Population registry data (mid-year 2014) used for the calculation of rates was kindly provided by Information Management and Analytics, MHHLS.

# Notes Regarding the Interpretation of HIV Statistics Presented in this Report

- The number of new HIV cases reported may not be a reflection of the true number of new HIV infections per year (i.e. incidence) in the Manitoba population. It is possible for an individual to be tested with a non-nominal identifier and use nominal testing for a subsequent test<sup>1</sup>. In this case, linkage of results can only be done when client consent is provided. In addition, as noted above, cases that have tested positive in another province or country may also reported to the Public Health Surveillance System as new cases.
- Changes in the number of HIV positive individuals as well as observed trends must be interpreted with caution. There are a number of factors which may contribute to these changes, for example, changes in testing or reporting patterns among care providers.

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<sup>&</sup>lt;sup>1</sup> More information about nominal and non-nominal testing for HIV can be found in Appendix A: Technical Notes .

- Information about ethnicity and risk exposure categories are self-reported by the individual during a follow-up interview performed by the health care provider or public health nurse. The responses can be subject to a degree of bias leading to possible under-reporting (or alternatively, over-reporting) of factors which may differ from year-to-year. There have also been challenges in obtaining completed case investigation reports in recent years.
- The categories of risk exposures presented in this report reflect the most likely mode of transmission of HIV for a new HIV case. Although more than one risk factor or exposure may be reported through the case investigation form, individuals are assigned to a "Primary Mode of Transmission" category based upon a predetermined hierarchy. For simplicity, the term "Risk Exposure Category" is equivalent to "Primary Mode of Transmission" in this report. Further information can be found in the Technical Notes (Appendix A).

#### **Surveillance Data**

#### 1. Number of New HIV Cases

Between January 1, and December 31, 2014, there were 87 new cases of HIV reported in Manitoba based on laboratory-positive HIV antibody tests; there were 54 male cases and 33 female cases. All positive HIV antibody tests that were reported to MHHLS' Public Health Surveillance System as new cases (i.e. not found in the system previously<sup>2</sup>) were included in this annual total. Therefore, these cases were considered *new* to the Manitoba surveillance system, in 2014.

With 6.7 new HIV cases per 100,000 population, the crude rate for 2014 was lower than the previous year's reported rate (9.2 new HIV cases per 100,000 population in 2013) and also lower than the ten-year average annual crude rate recorded for 2004-2013 (7.7 new HIV cases per 100,000 population). Over the previous ten years, the crude rates fluctuated and ranged from a low of 5.6 new HIV cases per 100,000 population in 2012 to a high of 9.8 new HIV cases per 100,000 in 2010 (Figure 1).

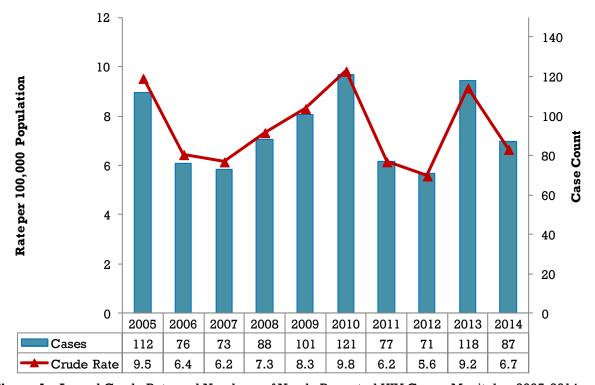


Figure 1: Annual Crude Rate and Numbers of Newly Reported HIV Cases, Manitoba, 2005-2014

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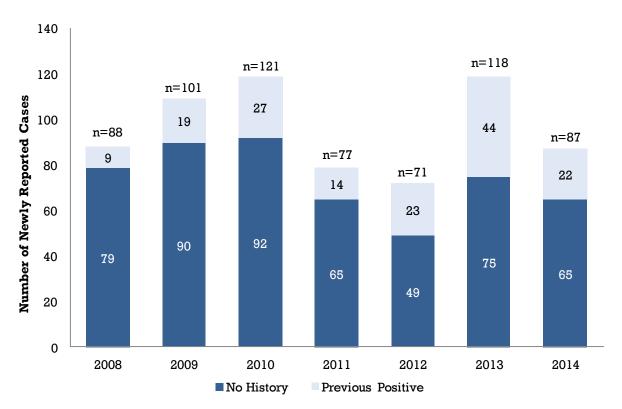
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<sup>&</sup>lt;sup>2</sup> See Appendix A for further information about the surveillance activities and reporting of HIV in Manitoba.

#### 1.1 Previously Tested HIV Cases

For 22 of the 87 (25%) newly reported HIV cases in 2014, there was an indication that the individual had tested positive for HIV previously in another province, or country, outside of Manitoba (represented by the light-blue shaded portion of the bar, Figure 2). This shows that among the newly *reported* cases, not all necessarily represent a new *infection* of the virus. These cases are included in total case numbers for this report as there may be impacts on use of health programs and services within Manitoba.

It is important to note that case investigation forms had a high-level of completeness for the majority (82%) of the "previous testers" in 2014, particularly for risk factor, and ethnicity data. Also approximately 59% of this group (or n=13 cases) reported that they were previously tested and diagnosed with HIV outside of Canada.



**Figure 2:** Number of Individuals Reported as Newly HIV Positive With and Without History of Previous Positive Test, Manitoba, 2008-2014

#### 2. Age-Sex Distribution of HIV Cases

The following figure (Figure 3) presents the age group distribution by sex for newly reported HIV cases in 2014 (n=87 cases). Males, 40-49 years of age accounted for the highest proportion of new HIV cases. In the previous year (2013), males 30-39 years of age group accounted for the highest proportion of new HIV cases.

For female cases, the 30-39 years age group had the highest proportion of newly reported HIV cases, in both 2014 (Figure 3), and 2013 (Appendix C).

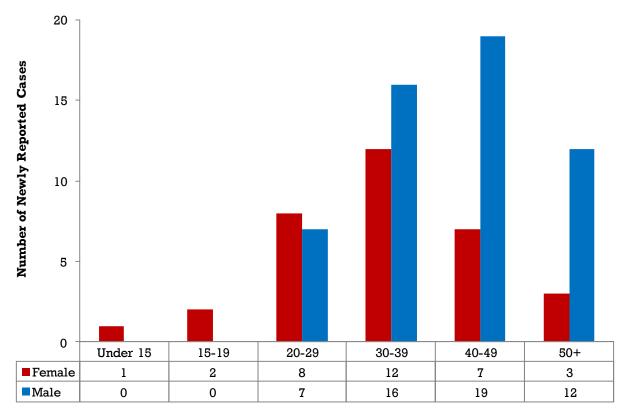


Figure 3: Number of Newly Reported HIV Cases by Age and Sex, Manitoba, 2014

Trends over time were examined by age-specific rates of reported cases in Figure 4. Although prone to a degree of fluctuation, historically, the highest rate of newly reported HIV cases were found in the 30-39 years age group, followed by the 20-29 and 40-49 years age groups. Of note, is the rate increase for the 15-19 years age group in 2008 but, by 2010 the rate in this group appears to have stabilized. Rates in the 50+ age group also stabilized.

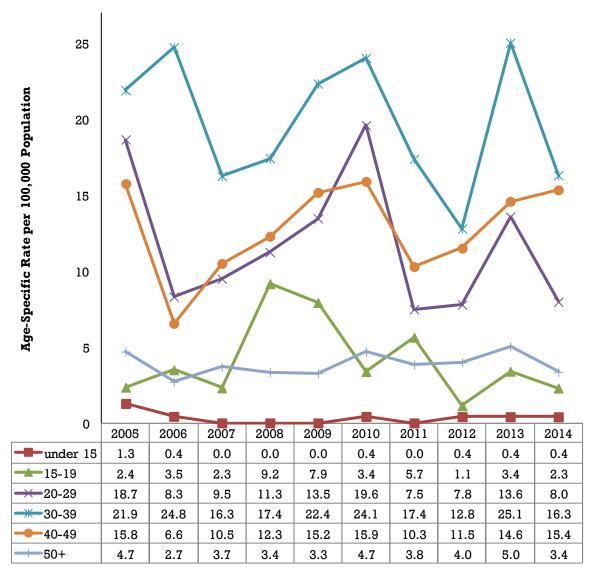
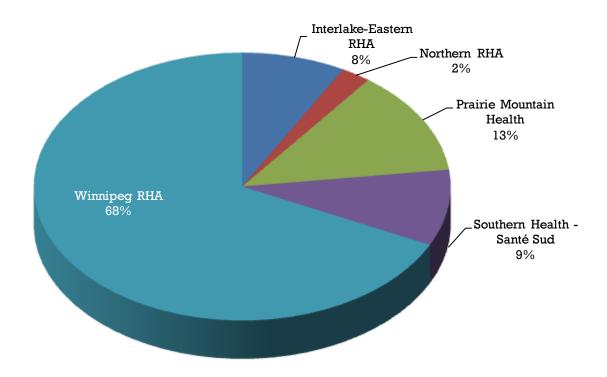


Figure 4: Age-specific Rates (per 100,000 Population) for Newly Reported HIV Cases, Manitoba, 2005-2014

#### 3. Geographic Region of Residence

In 2014, as in previous years, the majority of new HIV cases (68%, or 59 of the 87 cases) were residents of the Winnipeg RHA at the time of testing (Figure 5). As in 2013 the previous year, there was an apparent shift in the reporting of rural cases; more cases were identified from areas outside of Winnipeg than in previous years. Also see data tables in Appendix C.



**Figure 5:** Distribution of New HIV Cases by Case Residence (Regional Health Authority) Manitoba, 2014

A detailed data table with RHA-specific information (based on the amalgamation of regional health authorities in Manitoba in June 2012) is provided in Appendix C. A map of the current health regions can be found on the MHHLS website at: <a href="http://www.gov.mb.ca/health/rha/index.html">http://www.gov.mb.ca/health/rha/index.html</a>

#### 4. Self-Reported Ethnicity

In 2014, 32% of new HIV cases self-reported Caucasian ethnicity, 30% self-reported as First Nations (FN), Métis, or Inuit ethnicity, and 16% reported African/African-Canadian ethnicity (this also includes Haitian and other Caribbean ethnicities). Please note that 18.4% of new cases did not report ethnicity on the case report form. Non-response to questions about ethnicity can vary from year-to-year; therefore this data should be interpreted with caution.

#### 4.1 Self-Reported Ethnicity by Sex

Of note in 2014, was that more than one-half (52%) of new female HIV cases reported FN, Métis, or Inuit ethnicity compared to 17% of new male HIV cases (Figures 6 and 7). Among male cases, Caucasian ethnicity is most commonly reported (43%) (Figure 7). Additional data tables can be found in Appendix C.

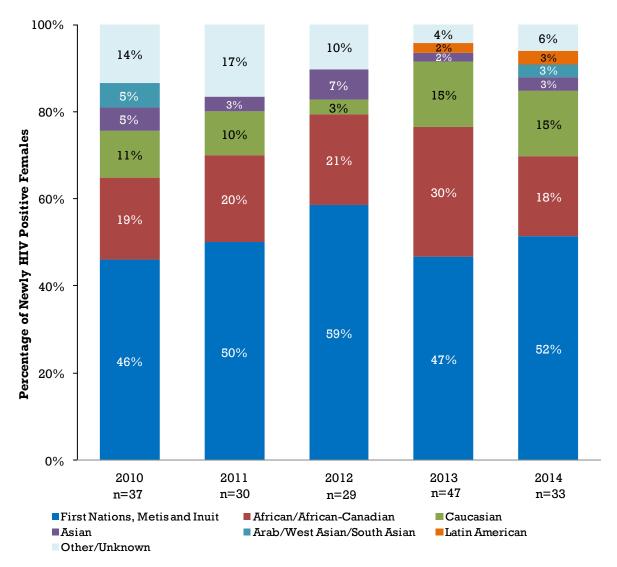


Figure 6: Distribution of Self-Reported Ethnicity Categories among Female Cases, Manitoba, 2010-2014

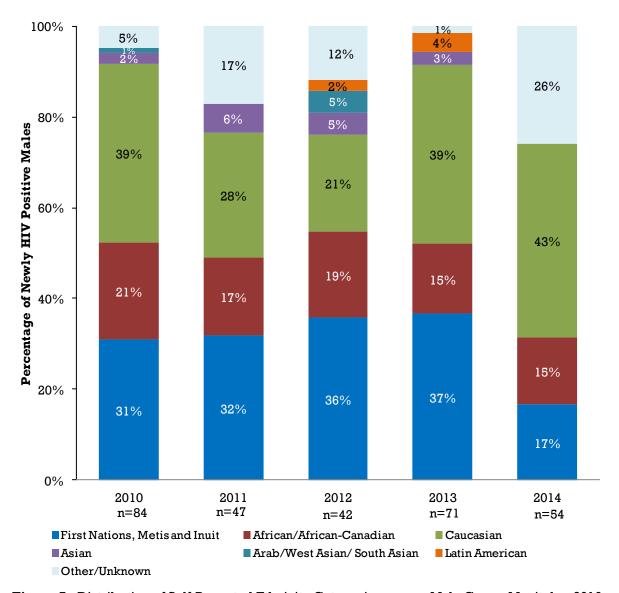


Figure 7: Distribution of Self-Reported Ethnicity Categories among Male Cases, Manitoba, 2010-2014

#### 5. Risk Exposure Categories

The categories of risk exposure presented in this report reflect the most likely mode of HIV transmission for a new HIV case. Although more than one risk factor or exposure may be indicated on the case investigation form, individuals are assigned to a "Primary Mode of Transmission" or "Risk Exposure Category" based upon a pre-determined hierarchy. Appendix A further describes these risk exposure categories and methodology.

#### 5.1 Risk Exposure Categories: Female HIV Cases

In 2014, heterosexual contact was the predominant Primary Mode of Transmission (or Risk Exposure Category), reported by 39% of new female HIV cases (i.e. 13 of 33 female cases). This was followed by the endemic and IDU categories, each with 24% of new female HIV cases. Note the endemic category indicates a case was born in a country where HIV is endemic — see Appendix A for the complete definition.

A comparison of reported risk exposure categories among female HIV cases between 2010 and 2014 is presented in Figure 8. As non-response to questions about risk exposure categories can vary from year-to-year, this data should be interpreted with caution. In 2014, 12% of cases did not report risk factor information (the no identifiable risk [NIR] category, Figure 8).

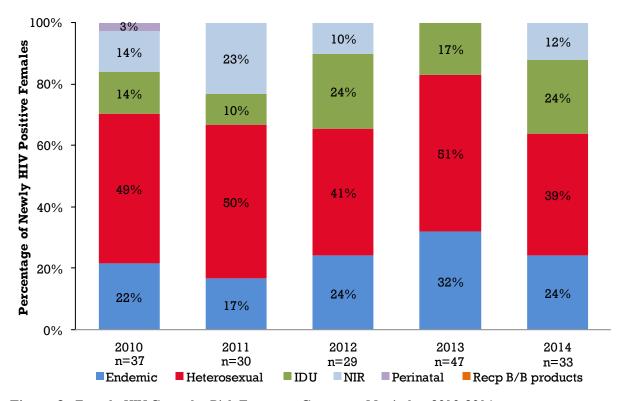


Figure 8: Female HIV Cases by Risk Exposure Category, Manitoba, 2010-2014

#### 5.2 Risk Exposure Categories: Male HIV Cases

In 2014, men who have sex with men (MSM) was the predominant Primary Mode of Transmission (or Risk Exposure Category) reported by 37% of new male HIV cases (i.e. 20 of 54 male cases). This was followed by heterosexual contact, with 17% of new male cases (i.e. 9 of 54 male cases), and IDU and endemic each with 11% of new male cases (i.e. 6 of 54 male cases), (Figure 9).

The proportion of male cases who did not report an identifiable risk factor (NIR) was 22% (i.e. 12 of 54 cases), in 2014. The non-response rate to questions about risk exposure categories can vary from year-to-year. Missing information creates a data limitation in the monitoring of risk factors for the transmission and acquisition of HIV; as such, these data should be interpreted with caution.

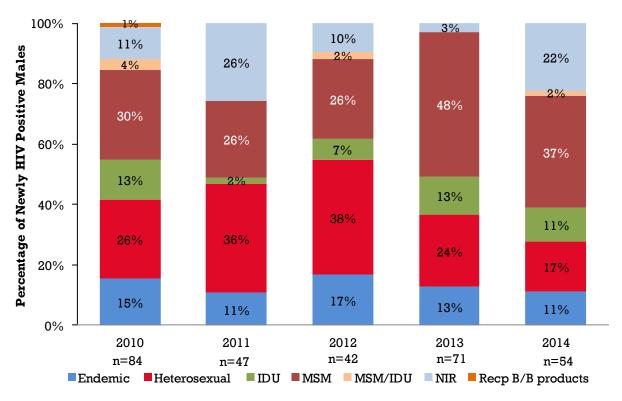


Figure 9: Male HIV Cases by Risk Exposure Category, Manitoba, 2010-2014

#### 6. AIDS Cases Reported To December 31, 2014

In 2014, **zero (0)** AIDS cases or deaths were reported to MHHLS. This is in contrast to 2013, when five **(5)** cases with AIDS diagnosis were reported; four male and one female. The sum of these case reports brings the total number of AIDS cases to **295** since 1985; 72% of these individuals, reported with AIDS, have died. However, delays and/or incomplete reporting of both cases and deaths make it difficult to determine the actual mortality rates. Note that only those cases meeting the PHAC national case definition (with an AIDS-defining illness) would typically be reported to the Public Health Surveillance Unit at MHHLS, please see:

(http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/AIDS SIDA-eng.php).

There is variability in the number of reported AIDS cases over the previous ten years. The largest number of cases was reported in 2006, with 14 cases. Since 2007, there has been an overall decrease in the number of reported cases (Figure 10). The data shows the number of reported cases based on the year of diagnosis of the *first* AIDS-defining illness, following the convention used in national surveillance reports. This date may differ from when the report is received by the Public Health Surveillance Unit at MHHLS.

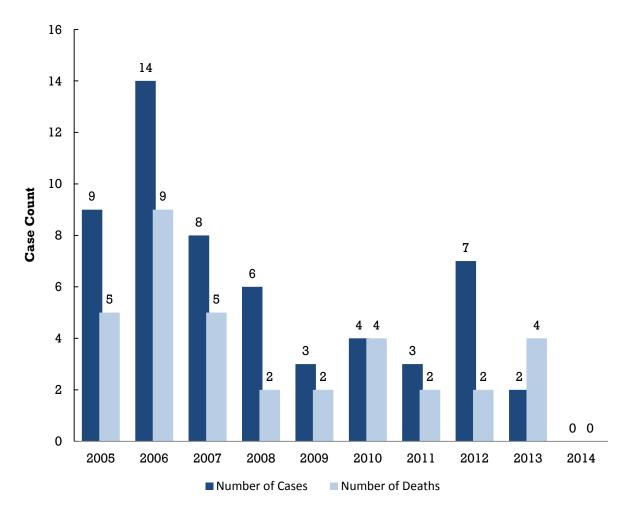


Figure 10: Number of Reported AIDS Cases, and Deaths, Manitoba, 2005-2014

**Appendices** 

#### **Appendix A: Technical Notes**

#### Surveillance of HIV and AIDS in Manitoba

All confirmatory HIV antibody testing in Manitoba is carried out at Cadham Provincial Laboratory (CPL). Positive HIV antibody test results are subsequently reported to the Chief Provincial Public Health Officer (CPPHO) as required by the Reporting of Diseases and Conditions Regulations, Public Health Act. Upon receipt of this lab report, the Public Health Surveillance Unit (at MHHLS) will send the HIV Case Investigation Form for Nominal & Non-Nominal Positive Cases (see Appendix B) to the healthcare provider who ordered the test for completion and verification of a new or existing case. However, there have been delays in the completion and return of this form. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional or through public health follow-up.

The expansion of HIV antibody testing occurred on January 1, 2007 and November 1, 2007 with the introduction of nominal (the option of testing under name) and anonymous testing, respectively, in addition to the existing non-nominal testing<sup>3</sup> option. More information describing the three testing options can be found in the Communicable Disease Management Protocol for HIV/AIDS (http://www.gov.mb.ca/health/publichealth/cdc/protocol/index.html).

It should be noted that nominal testing has steadily increased since its introduction and in 2014 most HIV tests were done under nominal testing. However, it is also possible for individuals tested in the past using a non-nominal code, to have a subsequent test using different codes or by name. The public health surveillance system has experienced challenges in identifying clients who have had repeat tests in past years. As a result, there are concerns that duplicate cases may be included in the system. Improved processes are in place to address this issue for the current reporting year.

AIDS cases and deaths are also reportable by physicians and health care professionals. New AIDS cases and deaths are reported to the CPPHO as required by the *Reporting of Diseases and Conditions Regulations, Public Health Act*. The national *HIV/AIDS Case Report Form* is used in Manitoba for this purpose. This report describes AIDS cases based on year of diagnosis of the first clinical AIDS defining illness (as defined by the national case definitions published by the Public Health Agency of Canada<sup>4</sup>). It should be noted that

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 $<sup>^3</sup>$  Under non-nominal testing, only the person ordering the test knows the identity of the person tested and is able to link the result to that person's health care record. So name, address and other personal identifiers are not provided to the laboratory or the public health surveillance system unless consent to share this information is provided (also see Public Health Act (Section 9(4)) for reporting of HIV cases tested under code.)

<sup>&</sup>lt;sup>4</sup> Source: Public Health Agency of Canada. Case Definitions for Communicable Diseases Under National Surveillance -2009. Canada Communicable Disease Report. Vol35-S2. Nationally Notifiable Diseases - <a href="http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/AIDS\_SIDA-eng.php">http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/AIDS\_SIDA-eng.php</a>

this may not be the same as the year that the case was reported to the Public Health Surveillance System (at MHHLS).

Once a year, provincial HIV and AIDS case data is reported to the Centre for Communicable Disease and Infection Control, Public Health Agency of Canada for inclusion within the national surveillance report, HIV and AIDS in Canada. The variations seen from previous provincial and national reports with respect to the number of HIV and AIDS cases and deaths may be accounted for by delays in reporting as well as continuous update of information in the MHHLS databases. The dataset used in this report was originally reported to PHAC in March, 2015, however further case confirmation may have occurred since then, thus slightly changing the number of cases.

#### **Calculation of Annual Rate**

The annual rate of newly reported HIV Cases per 100,000 population was calculated with a numerator of the number of newly reported cases in a one year period, and a denominator of the Manitoba population of that year, this was then multiplied by 100,000 to get the rate per 100,000 population. Population registry data (mid-year 2014) used for calculation of rates was kindly provided by Information Management and Analytics, MHHLS.

#### **Context within Canada**

The number of new HIV cases may not be a reflection of the true number of new HIV infections per year (i.e. incidence) in the Manitoba population. Many persons are unaware of their HIV status and therefore go undetected and unreported. PHAC estimates that in 2011, approximately, 71,300 persons were living with HIV in Canada; approximately 25% of persons are unaware of their HIV status.<sup>5</sup>

At the end of 2011, it was estimated that 2,100 persons in Manitoba were living with HIV (note this is an estimate of HIV prevalence). New estimates for 2013 are expected to be released by PHAC later this year.

#### **Risk Exposure Categories (Primary Mode of Transmission)**

The categories of risk exposures presented in this report reflect the most likely mode of transmission of HIV for a new HIV case. Although more than one risk factor or exposure may be reported through the case investigation form, individuals are assigned to a "Primary Mode of Transmission" category based upon a hierarchy, which has been used in production of this statistical report since 2002 (Figure 8). This hierarchy groups cases with similar risk exposures; however, if more than one risk factor is reported, the hierarchy assigns cases based on which factor is most likely to have been the mode of

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<sup>&</sup>lt;sup>5</sup> Public Health Agency of Canada. Centre for Communicable Disease and Infection Control. Summary: Estimates of HIV Prevalence and Incidence in Canada, 2011. Released: November 21, 2012.

<sup>&</sup>lt;sup>6</sup> HIV Prevalence estimates for Manitoba provided by the Public Health Agency of Canada. Centre for Communicable Disease and Infection Control, November, 2012.

transmission of the virus. The hierarchy used by MHHLS is similar (but not identical) to that used by PHAC. For simplicity, the term Risk Exposure Category is equivalent to "Primary Mode of Transmission" in this report. Note that the abbreviations used are defined in Table A3

**Table A1:** Manitoba Primary Mode of Transmission Hierarchy<sup>7</sup>

Males	Females
1. MSM/IDU	1. IDU
2. MSM	2. Endemic
3. IDU	3. Recipient of Blood/ Blood Products prior to 1985
4. Endemic	4. Heterosexual Contact
5. Recipient of Blood/ Blood Products prior to 1985	5. Occupational
6. Heterosexual Contact	6. Perinatal
7. Occupational	7. No Identifiable Risk (NIR)
8. Perinatal	
9. No Identifiable Risk (NIR)	

It should be noted that: MSM/IDU includes cases with risk factors reported as men who have had sex with men (MSM) and injection drug use (IDU). The endemic category includes the following risk factors: born in an HIV-endemic country, sexual contact while in an HIV endemic country, and Injection Drug Use (IDU) within an HIV-endemic country. No identifiable risk (NIR) is the category assigned to a case when no risk factor information is available from the case report form (including when the case report form was not completed).

Challenges in obtaining completed case reports have been noted in past years. Therefore, risk exposure category information presented should be interpreted with some caution particularly with comparisons to previous years due to the varying degrees of incomplete risk factor information for this period. Missing information creates a data limitation and it is difficult to determine if the distribution of risk exposure categories (in

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<sup>&</sup>lt;sup>7</sup> Definitions of Primary Mode of Transmission categories and list of abbreviations are provided on page 5.

terms of percentages of total number of cases) shown in the most recent dataset reflect true changes.

Table A2: Definitions Related to Risk Exposure Categories

Term	Definitions
Endemic	Includes persons originating from or resided in an HIV-endemic country. Includes these risk factors if reported: born in an HIV-endemic country, sexual contact while in an HIV endemic country, Injection Drug Use (IDU) within an HIV-endemic country.
	An HIV-Endemic country is defined as a country with "an adult prevalence (ages 15-49 years) of HIV is 1.0% or greater and one of the following: 50% or more of HIV cases attributed to heterosexual transmission; a male to female ratio of 2:1 or less; or HIV prevalence greater than or equal to 2% among women receiving prenatal care."
	The HIV-endemic country list followed is provided from PHAC.
	Source: Public Health Agency Canada. HIV and AIDS in Canada. Surveillance Report to December 31, 2010. Surveillance and Risk Assessment Division, Centre for Communicable Diseases and infection Control, Public Health Agency of Canada, 2012.
Heterosexual Contact	Includes individuals reporting heterosexual activity with person(s) who is HIV positive or is at increased risk of HIV infection.
IDU	Individuals who report any Injection Drug Use.
MSM/IDU	Men who have sex with men AND indicate injection drug use (IDU).
MSM	Men who have sex with men (without report of IDU).
No Identifiable Risk	No identifiable risk (NIR) is the category assigned to a case when either no risk factor information is identified or available from the case report form, or the case report form was not completed. Includes those in the process of follow-up or lost-to-follow-up.
Perinatal	Mother-to-child transmission. Typically, this information is reported by specialist physicians directly to PHAC through the sentinel surveillance system: Canadian Perinatal Surveillance System.

Recipient of Blood/ Blood Products prior to 1985	Individual indicates that he/she received blood or blood products prior to 1985.
Occupational	Examples of occupational include: needle stick injury, exposure to blood or bodily fluids in an occupational environment.

# **Appendix B: Reporting Forms**

Links to MHHLS Public Health Forms used in routine surveillance of HIV and AIDS:

HIV Case Investigation Form for Nominal & Non-Nominal Positive Cases (implemented 2008)

http://www.gov.mb.ca/health/publichealth/cdc/protocol/hivcaseinvestigation.pdf

HIV Contact Notification Form (implemented 2006)

http://www.gov.mb.ca/health/publichealth/cdc/protocol/hivcontactnotification.pdf

AIDS Case Report Form (Note this is also a Public Health Agency of Canada Form) <a href="http://www.gov.mb.ca/health/publichealth/cdc/protocol/form5.pdf">http://www.gov.mb.ca/health/publichealth/cdc/protocol/form5.pdf</a>

# **Appendix C: HIV Descriptive Data Tables**

Table 1: Number of HIV Positive Cases in Manitoba, from 1985 to December 31, 2014

Years	Number of Female Cases	Number of Male Cases	Total Number of Cases
1985-2004	259	901	1160
2005	39	73	112
2006	27	49	76
2007	23	50	73
2008	35	53	88
2009	46	55	101
2010	37	84	121
2011	30	47	77
2012	29	42	71
2013	47	71	118
2014	33	54	87
Total	605	1479	2084

Table 2: Number of HIV Positive Cases in Manitoba, By Age Category, Sex, and Year

Age Group	Sex	1985-2011	2012	2013	2014
<15 **** ora	M	7	0	0	0
<15 years	F	11	1	1	1
15 10 moora	M	21	0	0	0
15-19 years	F	37	1	2	2
20, 20, 220,020	M	351	9	10	7
20-29 years	F	173	5	13	8
20, 20,	M	499	9	26	16
30-39 years	F	173	11	17	12
40.40	M	275	13	16	19
40-49 years	F	62	6	10	7
E0   owe	M	159	11	19	12
50+ years	F	40	5	4	3
Mata1	M	1312	42	71	54
Total	F	496	29	47	33

**Table 3a:** Number of HIV Positive Cases in Manitoba, By Geographic Residence, Sex, and Year of Diagnosis

Health Region	1985-2011		2012		2013		2014	
	F	M	F	M	F	M	F	M
Winnipeg RHA*	417	1,113	21	34	30	48	22	37
Southern Health - Santé Sud	23	56	3	3	3	3	2	6
Interlake-Eastern RHA	19	63	0	2	3	3	3	4
Prairie Mountain Health	17	41	3	1	6	11	4	7
Northern RHA	16	26	2	2	5	6	2	0
RHA -Unassigned	4	13	0	0	0	0	0	0
Manitoba (Total)	494	1,310	29	42	47	71	33	54

**Table 3b:** Crude Rate (per 100, 000 population) of HIV Positive Cases in Manitoba, By Geographic Residence, and Year of Diagnosis, 2010-2014

Health Region	2010	2011	2012	2013	2014
Winnipeg RHA*	14.5	8.2	7.6	10.6	7.9
Southern Health -					
Santé Sud	2.8	1.7	3.3	3.8	4.2
Prairie Mountain					
Health	3.1	4.9	2.4	10.3	6.6
Interlake-Eastern	6.6	4.1	1.6	4.8	5.5
Northern RHA	2.8	4.1	5.4	14.8	2.7
Manitoba (Total)	9.8	6.2	5.6	9.2	6.7

\*Note 1: Included in the cases for Winnipeg RHA are two cases from the former Churchill RHA: 1 case reported in 2010 and 1 case in 2012.

Note 2: There were 17 cases from the period 1985-2000 that could not be assigned to current RHA geographic areas, or did not have a region of residence identified these are indicated as "RHA -unassigned".

Geographies based on the new health regions, as of June, 2012. A map of the regional health authorities can be found on the MHHLS website: http://www.gov.mb.ca/health/rha/index.html

**Table 4:** Number of HIV Positive Cases in Manitoba, By Self-Reported Ethnicity and Year of Diagnosis

Ethnicity Category	1999-2011	2012	2013	2014
First Nations, Métis and Inuit	387	32	48	26
Caucasian	308	10	35	28
African/African-Canadian	230	14	25	14
Asian	31	4	3	1
Latin American	11	1	4	1
South Asian/Arab/West Asian	13	2	0	1
Other	6	2	0	1
Unknown/Missing/Refused	822	6	3	15
Total	1808	71	118	87

Note: Collection of ethnicity data began in 1999. Ethnicity data should be interpreted with caution particularly with comparisons to previous years due to changes in the proportion of unknown or missing ethnicity information. Missing information creates a data limitation and makes it difficult to interpret trends or changes in ethnicity data. Also please note that Aboriginal category includes Indigenous First Nations, Inuit, and Métis, as self-reported by cases.

**Table 5:** Number of HIV Positive Cases in Manitoba by Risk Exposure Category (Primary Mode of Transmission) and Year of Diagnosis

Risk Exposure Category	Sex	1985- 2011	2012	2013	2014
Endemic	M	111	7	9	6
Litaeitic	F	128	7	15	8
Hotorogovanol	M	264	16	17	9
Heterosexual	F	190	12	24	13
IDU	M	159	3	9	6
1100	F	102	7	8	8
MSM	M	566	11	34	20
MSM/IDU	M	60	1	0	1
NIR	M	117	4	2	12
MIK	F	60	3	0	4
Occupational	M	2	0	0	0
Occupational	F	0	0	0	0
Perinatal	M	2	0	0	0
Permatai	F	2	0	0	0
Poen B/B products	M	31	0	0	0
Recp B/B products	F	14	0	0	0
Total	M	1312	42	71	54
IUIAI	F	496	29	47	33

Note: Challenges in obtaining completed case reports have been noted in some years. Therefore, risk exposure category information presented should be interpreted with some caution particularly with comparisons to previous years due to the varying degrees of incomplete risk factor information. Missing information creates a data limitation and it is difficult to determine if the distribution of risk exposure categories shown in the most recent dataset reflect true changes. Abbreviations are listed in Appendix A.

#### **Appendix D: AIDS Descriptive Tables**

Table 6: Number of Reported AIDS Cases and Deaths in Manitoba by Year of Diagnosis

Year	Number of Cases	Number of Deaths
1985-2004	239	177
2005	9	5
2006	14	9
2007	8	5
2008	6	2
2009	3	2
2010	4	4
2011	3	2
2012	7	2
2013	2	4
2014	0	0
Total	295	212

<u>Note 1:</u> This data includes only those AIDS cases and deaths of AIDS cases that have been reported to MHHLS. Delays in reporting may occur, and not all deaths may be reported. Please see Appendix A of this report for further reporting detail.

Note 2: Year of diagnosis is based on date of diagnosis of first AIDS-defining illness (according to the national case definition for AIDS) and may differ from date of report to MHHLS. It is also possible to have a death reported for cases that were diagnosed with AIDS in previous years.

**Table 7:** Number of Reported AIDS Cases in Manitoba, By Age-Gender Category and Year of Diagnosis

Age Group	1985-2004		2005-2009		2010-2014	
	F	M	F	M	F	M
<15 years	1	2	1	0	0	0
15-19 years	0	1	0	0	0	0
20-24 years	2	6	1	0	0	0
25-29 years	4	26	2	2	0	1
30-39 years	11	101	8	6	2	4
40-49 years	8	45	3	10	2	2
50+ years	3	29	1	6	1	4
Total	29	210	16	24	5	11

**Table 8:** Number of Reported AIDS Cases in Manitoba by RHA of Residence and Year of Diagnosis

Health Region	1985-2004		2005-2009		2010-2014	
neattii Kegioii	F	M	F	M	F	M
Winnipeg RHA	26	189	15	22	3	9
Southern Health - Santé Sud	0	1	0	0	0	0
Interlake-Eastern RHA	1	4	0	1	0	0
Prairie Mountain Health	1	10	0	1	1	1
Northern RHA	1	3	1	0	1	1
Out-of-Province	0	3	0	0	0	0
Total	29	210	16	24	5	11

Note 1: Tables 2 through 5 have been aggregated into five-year groups due to small annual case counts in the past ten years.

Note 2: Geographies based on the new health region boundaries, as of June, 2012. A map of the regional health authorities can be found on the MHHLS website: <a href="http://www.gov.mb.ca/health/rha/index.html">http://www.gov.mb.ca/health/rha/index.html</a>

**Table 9:** Number of Reported AIDS Cases in Manitoba by Risk Exposure Category (Primary Mode of Transmission) Among Female Cases

Females: Exposure Category	1985-2004	2005-2009	2010-2014	Total
Endemic	6	4	0	10
Heterosexual	12	6	5	23
IDU	8	6	0	14
Perinatal	1	0	0	1
Recp B/B products	2	0	0	0
Total	29	16	5	50

**Table 10:** Number of Reported AIDS Cases in Manitoba by Risk Exposure Category (Primary Mode of Transmission) Among Male Cases

Males: Exposure Category	1985-2004	2005-2009	2010-2014	Total
Endemic	3	1	0	4
Heterosexual	26	8	5	39
IDU	18	2	1	21
MSM	135	10	4	149
MSM/IDU	10	0	0	10
Perinatal	1	0	0	1
Recp B/B products	14	0	0	14
NIR	3	3	1	7
Total	210	24	11	245