

## Annual Statistical Update: HIV and AIDS

### 2015

---

Data reported to December 31, 2015

Epidemiology & Surveillance

Public Health Branch

Public Health and Primary Health Care Division

**Manitoba Health, Seniors and Active Living**

Released: December 2016

## TABLE OF CONTENTS

|  |    |
|--|----|
| Executive Summary .....  | 4  |
| Abbreviations and Acronyms.....                                | 5  |
| Acknowledgements .....   | 6  |
| Introduction .....   | 7  |
| Surveillance of HIV and AIDS in Manitoba.....                  | 7  |
| Context within Canada .....                                    | 8  |
| Interpreting the HIV Statistics Presented in this Report ..... | 9  |
| Methods.....   | 10 |
| Case Definitions.....  | 10 |
| Data Sources.....  | 10 |
| Calculation of Annual Rate .....                               | 10 |
| Risk Exposure Categories.....                                  | 10 |
| Risk Exposure Category Definitions.....                        | 11 |
| Surveillance Data .....  | 13 |
| Number of New HIV Cases.....                                   | 13 |
| Previously Tested HIV Cases .....                              | 15 |
| Age-Sex Distribution of HIV Cases.....                         | 16 |
| HIV by Regional Health Authority .....                         | 19 |
| Self-Reported Ethnicity of HIV Cases .....                     | 21 |
| Self-Reported Ethnicity by Sex .....                           | 22 |
| Self-Reported Risk Exposure Categories of HIV Cases .....      | 24 |
| Self-Reported Risk Exposure Categories by Sex .....            | 25 |
| AIDS Cases Reported to December 31, 2015.....                  | 27 |
| Conclusion.....  | 28 |
| Appendix A: Reporting Forms.....                               | 30 |
| Appendix B: HIV Descriptive Data Tables .....                  | 31 |
| Appendix C: AIDS Descriptive Data Tables.....                  | 34 |

## LIST OF FIGURES

|   |    |
|---|----|
| <b>Figure 1:</b> Annual crude rate and number of newly diagnosed HIV cases in Manitoba, 2006-2015.....                                | 13 |
| <b>Figure 2:</b> Annual crude rate of newly diagnosed HIV cases in Manitoba and Canada, 2006-2015.....                                | 14 |
| <b>Figure 3:</b> Number of newly diagnosed HIV cases with and without history of a previous positive test in Manitoba, 2008-2015..... | 15 |
| <b>Figure 4:</b> Sex-specific rates (per 100,000 population) for newly diagnosed HIV cases in Manitoba, 2006-2015 .....               | 16 |

|                   |   |    |
|-------------------|---|----|
| <b>Figure 5:</b>  | Number of newly diagnosed HIV cases by age and sex in Manitoba, 2015 ..   | 17 |
| <b>Figure 6:</b>  | Age-specific rates (per 100,000 population) for newly diagnosed HIV cases in Manitoba, 2006-2015 .....                | 18 |
| <b>Figure 7:</b>  | Distribution of newly diagnosed HIV cases by regional health authority in Manitoba, 2015.....                         | 19 |
| <b>Figure 8:</b>  | Distribution of self-reported ethnicity categories among newly diagnosed HIV cases in Manitoba, 2015.....             | 21 |
| <b>Figure 9:</b>  | Distribution of self-reported ethnicity categories among newly diagnosed female HIV cases in Manitoba, 2011-2015..... | 22 |
| <b>Figure 10:</b> | Distribution of self-reported ethnicity categories among newly diagnosed male HIV cases in Manitoba, 2011-2015.....   | 23 |
| <b>Figure 11:</b> | Newly diagnosed HIV cases in Manitoba by risk exposure category, 2011-2015 .....                                      | 24 |
| <b>Figure 12:</b> | Newly diagnosed female HIV cases in Manitoba by risk exposure category, 2011-2015.....                                | 25 |
| <b>Figure 13:</b> | Newly diagnosed male HIV cases in Manitoba by risk exposure category, 2011-2015.....                                  | 26 |
| <b>Figure 14:</b> | Number of reported AIDS cases and deaths in Manitoba, 2006-2015 .....   | 27 |

## LIST OF TABLES

|                  |  |    |
|------------------|--|----|
| <b>Table 1:</b>  | Hierarchy of risk exposure categories of HIV in Manitoba .....   | 11 |
| <b>Table 2:</b>  | Crude Rate (per 100, 000 population) of newly diagnosed HIV cases in Manitoba by regional health authority and year of diagnosis, 2011-2015..... | 20 |
| <b>Table 3:</b>  | Number of newly diagnosed HIV Cases in Manitoba from 1985 to December 31, 2015.....  | 31 |
| <b>Table 4:</b>  | Number of newly diagnosed HIV cases in Manitoba by age group, sex and year of diagnosis .....  | 31 |
| <b>Table 5:</b>  | Number of newly diagnosed HIV cases in Manitoba by regional health authority, sex and year of diagnosis in Manitoba .....                        | 32 |
| <b>Table 6:</b>  | Number of newly diagnosed HIV cases in Manitoba by self-reported ethnicity and year of diagnosis .....   | 32 |
| <b>Table 7:</b>  | Number of newly diagnosed HIV cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis .....             | 33 |
| <b>Table 8:</b>  | Number of reported AIDS cases and deaths in Manitoba by year of diagnosis .....  | 34 |
| <b>Table 9:</b>  | Number of reported AIDS cases in Manitoba by age group, sex and year of diagnosis.....   | 35 |
| <b>Table 10:</b> | Number of reported AIDS cases in Manitoba by regional health authority, sex and year of diagnosis .....  | 35 |

**Table 11:** Number of reported female AIDS cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis .....36

**Table 12:** Number of reported male AIDS cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis .....36

## Executive Summary

Manitoba Health, Seniors and Active Living (MHSAL) is pleased to present the *Annual Statistical Update: HIV and AIDS (2015)*. 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 selected highlights on people living with HIV in Manitoba:

- A total of 105 newly diagnosed HIV cases were reported in 2015, an increase of 18 cases over the previous year.
- Of the 105 newly diagnosed cases, 27 (26%) were previously tested and diagnosed outside of Manitoba but, this was the first time they were identified as a case within the province.
- In 2015, 67% of all cases (n= 70 cases) were male and 33% were female (n= 35 cases); the mean (average) age of new cases was 40.1 years.
- The majority of individuals newly diagnosed with HIV (82%; 86 of 105 cases) reported their place of residence in Winnipeg Regional Health Authority (Winnipeg RHA).
- Of all newly diagnosed HIV cases which self-reported their ethnicity, Caucasians represented 29%, while people of First Nations (FN), Inuit or Métis ethnicity comprised 24%; this is a slight decline in representation of both ethnicities over that of the previous year. Additionally, 23% of cases self-reported African/African-Canadian ethnicity, a slight increase in representation over the previous year.
- The risk exposure category most reported were: men who have sex with men (MSM), reported by one-third (33%) of the newly diagnosed HIV cases, followed by heterosexual activity (25%) and endemic (21%). The number of people who acquired HIV infection through injection drug use decreased from 16% in 2014 to 8% in 2015.
- Four new AIDS cases were reported in 2015. Out of these four AIDS cases, two deaths were reported.

### How does Manitoba compare?

At the end of 2014, Manitoba had the fourth highest reported rate of adults (15 years of age and older) newly diagnosed with HIV among the provinces and territories, as compared to second highest reported rate in 2013. In terms of absolute numbers, cases from Manitoba accounted for 4.2% of newly diagnosed cases in Canada in 2014.

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

## **Abbreviations and Acronyms**

Abbreviations used in this report:

|                    |  |
|--------------------|--|
| AIDS               | Acquired Immunodeficiency Syndrome                 |
| HIV                | Human Immunodeficiency Virus                       |
| IDU                | Injection drug use                                 |
| MHSAL              | Manitoba Health, Seniors and Active Living         |
| 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 |
| RHA                | Regional Health Authority                          |

## **Citation**

Government of Manitoba, Manitoba Health, Seniors and Active Living, Public Health and Primary Health Care Division, Public Health Branch, Epidemiology and Surveillance. (2016). *Annual Statistical Update: HIV and AIDS 2015*.

***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: [outbreak@gov.mb.ca](mailto:outbreak@gov.mb.ca)

## **Acknowledgements**

Manitoba Health, Seniors and Active Living (MHSAL) 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

MHSAL is pleased to present the *Annual Statistical Update: HIV and AIDS (2015)* 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 MHSAL up to December 31, 2015.

The 2015 HIV data presented here includes an examination by:

- age and sex distribution,
- geographic region,
- self-reported ethnicity, and
- risk exposure category.

Historical data tables have been included in the appendices at the end of this report (Appendices B and C). 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.

## Surveillance of HIV and AIDS in Manitoba

All confirmatory HIV antibody testing in Manitoba is carried out at the Cadham Provincial Laboratory (CPL). All positive HIV antibody test results are reported to the Chief Provincial Public Health Officer (CPPHO) as required by the *Reporting of Diseases and Conditions Regulations, Public Health Act* and to the Public Health Surveillance Unit (at MHSAL). Upon receipt of a HIV positive lab report, the Public Health Surveillance Unit sends the *HIV Case Investigation Form for Nominal & Non-Nominal Positive Cases* (see Appendix A) to the healthcare provider who ordered the test, for completion and to verify whether this is a new or existing case. 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.

An 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>1</sup> option. More information describing the three testing options can be found on the Communicable Disease Management Protocol for HIV/AIDS (<http://www.gov.mb.ca/health/publichealth/cdc/protocol/index.html>).

---

<sup>1</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. 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).



Nominal testing has steadily increased since its introduction, with most HIV tests done under nominal testing in 2014. It should be noted that it is possible for individuals tested using a non-nominal code, to have subsequent tests performed using a different non-nominal code, anonymously, or by name. For this reason, the public health surveillance system has experienced challenges in identifying the clients who may have had repeat tests. 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.

New AIDS cases and deaths are also reported by physicians and health care professionals 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>2</sup>). It should be noted that this may not be the same as the year that the case was reported to the Public Health Surveillance System (at MHSAL).

Once a year, provincial HIV and AIDS case data is reported to the Centre for Communicable Disease and Infection Control, PHAC for inclusion within the national surveillance report, *HIV and AIDS in Canada*. The variations seen between 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 the continuous update of information in the MHSAL databases.

### Context within Canada

The number of newly diagnosed 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. As per PHAC's estimates at the end of 2014, 75,500 people were living with HIV in Canada, 21% of which were unaware of their HIV status.<sup>3</sup>

The World Health Organisation defined HIV targets they hope to achieve by 2020, known as "90-90-90". They aim to have

1. **90%** of all people living with HIV know their HIV status,
2. **90%** of all people with diagnosed HIV infection receive sustained antiretroviral therapy, and
3. **90%** of all people receiving antiretroviral therapy experience viral suppression.

---

<sup>2</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 - [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)

<sup>3</sup> Summary: *Estimates of HIV incidence, prevalence and proportion undiagnosed in Canada, 2014*. Public Health Agency of Canada. Centre for Communicable Disease and Infection Control. Published in November 2015

**How is Manitoba doing with regard to 90-90-90?**

PHAC requested MHSAL prepare and provide provincial estimates of the 90-90-90 targets. As per PHAC's estimates at the end of 2014 in Manitoba;

1. a total of 2,117 people were living with HIV, **79%** of which were aware of their HIV status.
2. **77%** of people knew their HIV status and were receiving treatment, while
3. **86%** of people on HIV treatment had a suppressed viral load that was unlikely to be transmitted to others.

Manitoba HIV estimates are likely to be included in the national measure. These estimates are considered "reasonable" but with limitations at this time and must be interpreted with extreme caution. MHSAL is committed to further refine the methodology and support the national and international initiative of achieving the 90-90-90 targets.

**Interpreting the 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. In this case, linkage of results can only be done when client consent is provided. In addition, cases that have tested positive in another province or country may be 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.

**Ethnicity and risk exposure categories are self-reported by the individual, so the responses may 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.

**The risk exposure categories presented in this report reflect the *most likely mode of transmission for a new HIV case.*** An individual may report more than one risk factor or exposure on their case investigation form, but will be assigned to a "primary mode of transmission" based upon an established hierarchy.

**In this report, the Winnipeg RHA covers the population and HIV counts of both Winnipeg and Churchill.**

## Methods

### Case Definitions

An **HIV case** is defined as an individual with a positive HIV antibody test reported for the *first time* to the Public Health Surveillance System, Epidemiology and Surveillance, MHSAL. Note: this includes individuals who may have been previously tested and diagnosed in another province or country. 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.

An **AIDS case** is defined as 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) ([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) and [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)).

### Data Sources

The **case data** used in this report was extracted in August 2015, from the MHSAL 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.

The **population data** (mid-year 2015) used for the calculation of rates was extracted from the Manitoba Health Population Registry and provided by Information Management and Analytics, MHSAL.

### 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 2015) used in the denominator was kindly provided by Information Management and Analytics, MHSAL.

### Risk Exposure Categories

The risk exposure categories presented in this report reflect the *most likely* mode of transmission for a new HIV case. An individual may report more than one risk factor or exposure on their case investigation form, but will be assigned to a “primary mode of transmission” based upon an established hierarchy which has been used in the production of this statistical report since 2002 (Table 1).

This hierarchy was designed to group cases with similar risk exposures. If more than one risk factor is reported, the hierarchy assigns the case to a risk exposure category based on which factor is *most likely* to have been the mode of transmission of the virus. The hierarchy used by MHSAL 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 terms used in Table 1 are defined below.

**Table 1:** Hierachy of risk exposure categories of HIV in Manitoba

| Males   | Females   |
|---|---|
| 1. Men who have sex with men/injection drug use (MSM/IDU)               | 1. Injection drug use (IDU)   |
| 2. Men who have sex with men (MSM)                                      | 2. Endemic  |
| 3. Injection drug use (IDU)   | 3. Recipient of blood/blood products prior to 1985 (Recp. B/B products) |
| 4. Endemic  | 4. Heterosexual contact   |
| 5. Recipient of blood/blood products prior to 1985 (Recp. B/B products) | 5. Occupational   |
| 6. Heterosexual contact   | 6. Perinatal  |
| 7. Occupational   | 7. No identifiable risk (NIR)   |
| 8. Perinatal  |   |
| 9. No identifiable risk (NIR)   |   |

Challenges in obtaining completed case investigation forms have been noted in past years. Therefore, the risk exposure category information presented should be interpreted with some caution particularly when making comparisons to previous years due to the varying degrees of incomplete risk factor information in each year. Missing information creates a data limitation and it is difficult to determine if the distribution of risk exposure categories (in terms of percentages of total number of cases) shown in the most recent dataset reflect true changes.

## Risk Exposure Category Definitions

### Endemic

The endemic risk exposure category includes those persons who originated from, or resided in, an HIV-endemic country. People who reported the following risk factors were included in this risk exposure category:

- born in an HIV-endemic country,
- sexual contact while in an HIV endemic country, or
- injection Drug Use (IDU) within an HIV-endemic country.

An HIV-endemic country is defined as a country where the adult (ages 15-49 years) prevalence of HIV is 1.0% or greater and one of the following is satisfied: 50% or more of HIV cases are attributed to heterosexual transmission; the male to female case ratio of 2:1 or less; or HIV prevalence is greater than or equal to 2% among women receiving prenatal care<sup>4</sup>.

<sup>4</sup> 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**

The heterosexual contact risk exposure category includes those individuals who reported heterosexual activity with a person(s) who is HIV positive or is at increased risk of HIV infection.

**Injection drug use (IDU)**

The injection drug use (IDU) risk exposure category includes those individuals who reported any IDU.

**Men who have sex with men (MSM)**

The men who have sex with men (MSM) risk exposure category includes those men who reported having sex with men (but did not report IDU).

**Men who have sex with men/injection drug use (MSM/IDU)**

The men who have sex with men/injection drug use category includes those men who reported *both* having sex with men (MSM) and IDU.

**No identifiable risk (NIR)**

No identifiable risk (NIR) risk exposure category is assigned to a case when either no risk factor information was identified or available from the case report form, or the case report form was not completed. This category includes those cases in the process of follow-up or that were lost-to-follow-up.

**Occupational**

The occupational risk exposure category includes individuals who reported possibly work-related HIV transmission. Examples of occupational transmission include: needle stick injury or exposure to blood or bodily fluids in an occupational environment.

**Perinatal**

The perinatal risk exposure category includes those cases for which the virus was transmitted from mother-to-child. 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 (Recp. B/B products)**

The Recp. B/B products risk exposure category includes those individuals who indicated they received blood or blood products prior to 1985.

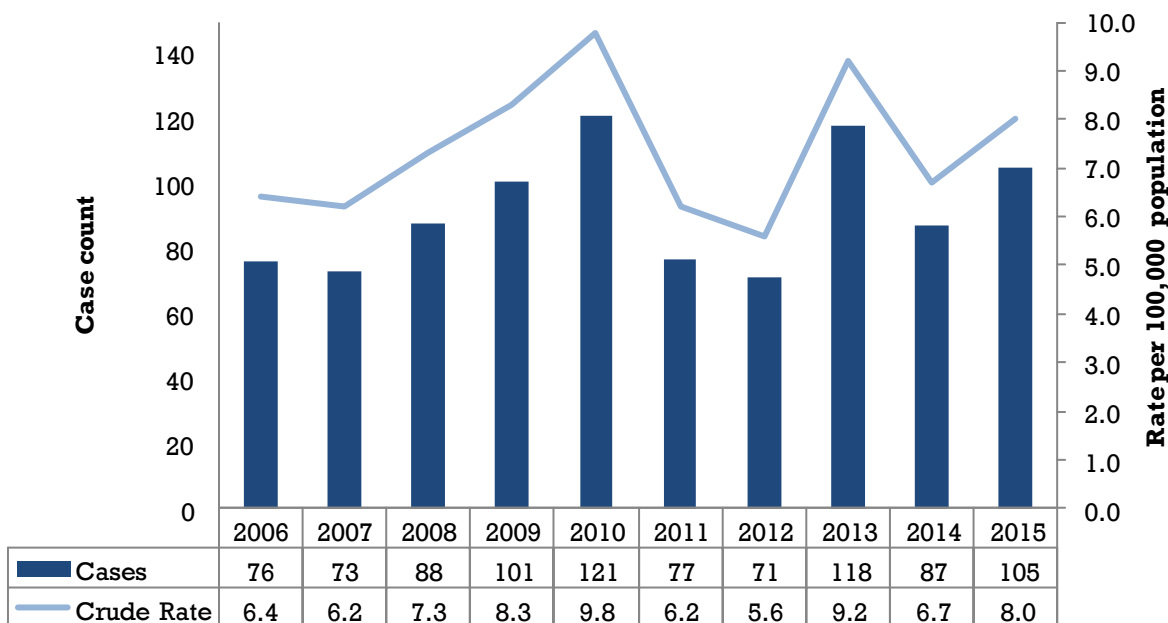
## Surveillance Data

### Number of New HIV Cases

All positive HIV antibody tests reported to MHSAL’s Public Health Surveillance System that could not be linked to a pre-existing record in the database<sup>5</sup> were included in the annual total. That is, the annual total includes the cases that were considered *new* to the Manitoba surveillance system in that year.

In Manitoba, a total of 105 new HIV cases were reported based on laboratory-positive HIV antibody tests between January 1<sup>st</sup> and December 31<sup>st</sup>, 2015. This represents a 21% increase over 2014 but a 13% decrease from the peak in 2010. A total of 2,189 laboratory confirmed HIV cases were reported from 1985 to 2015 with 42% (917 of 2,189 cases) of those cases diagnosed within the last 10 years.

The crude rate of 8.0 cases per 100,000 population in 2015 was slightly higher than the crude rate in the previous year (6.7 cases per 100,000 population) and the average annual crude rate for 2006-2014 (7.5 cases per 100,000 population). Over the last ten years (2006-2015), 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 population in 2010 (Figure 1).

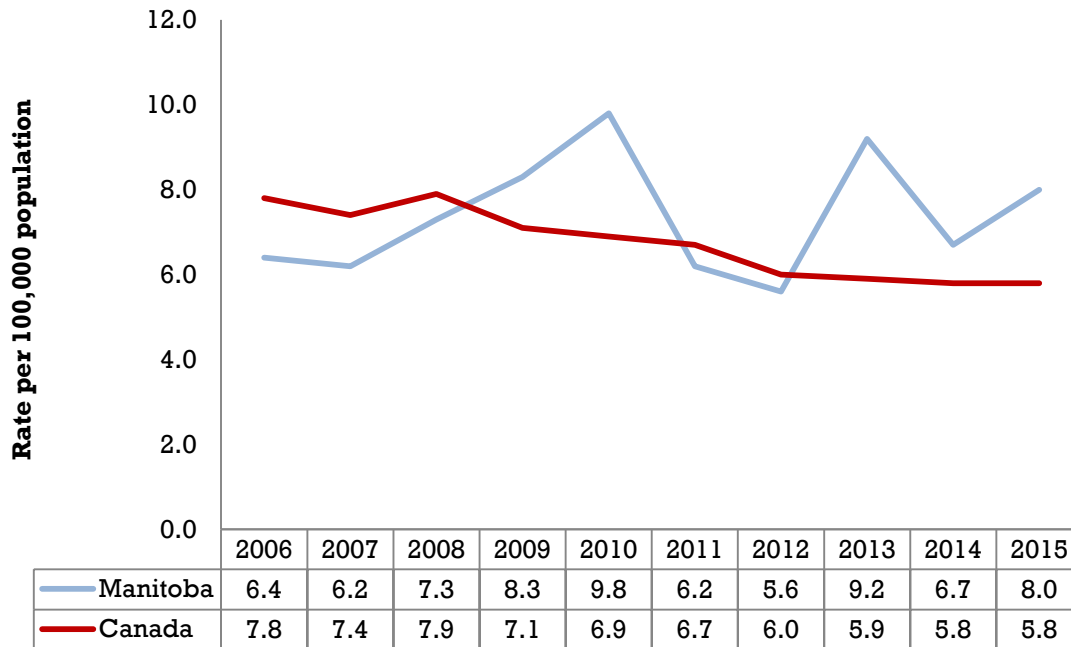


**Figure 1:** Annual crude rate and number of newly diagnosed HIV cases in Manitoba, 2006-2015

**105 new HIV cases** (8.0 cases per 100,000 population) were reported in 2015. This represents a 17% increase over 2014 but a 12% decrease from the peak in 2010.

<sup>5</sup> See the Introduction and Methods sections for further information about the surveillance activities and reporting of HIV in Manitoba.

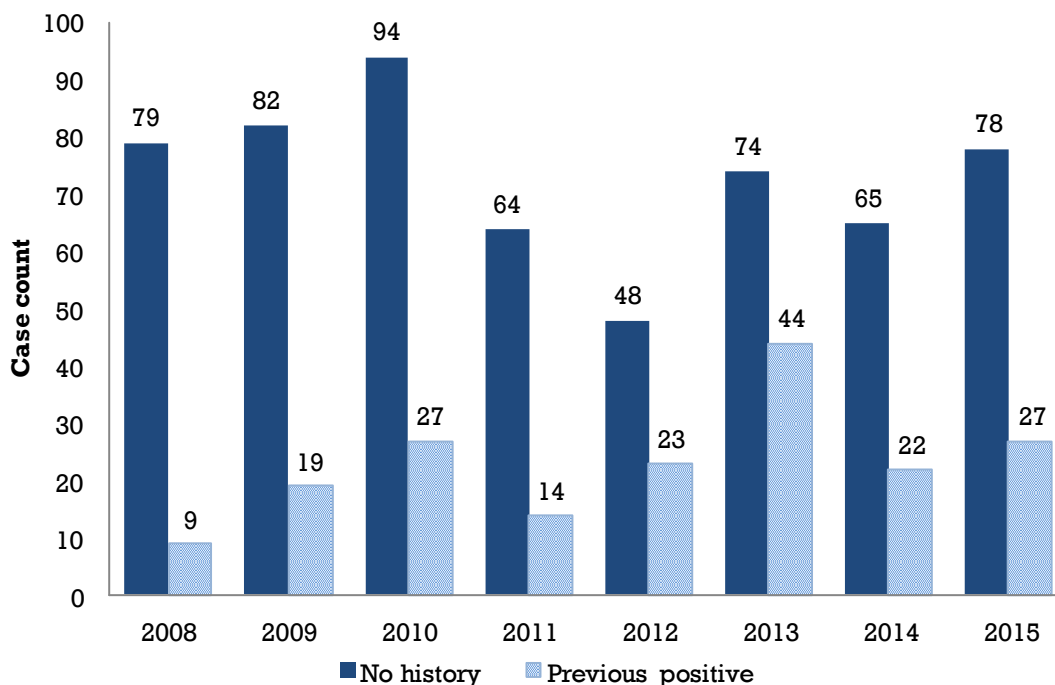
From 2006 to 2008, Manitoba’s HIV rate was lower than Canada’s national rate. However, there was steep increase in the provincial HIV rate, over the national rate, in 2010 which dropped to coincide with the national rate between 2011 and 2012 (Figure 2). In 2013, the provincial rate once again increased sharply to 9.2 new HIV cases per 100,000 population prior to decreasing to 6.7 new HIV cases per 100,000 population in 2014 and 8.0 per 100,000 in 2015.



**Figure 2:** Annual crude rate of newly diagnosed HIV cases in Manitoba and Canada, 2006-2015

### Previously Tested HIV Cases

Of the 105 new HIV cases reported in 2015, 27 (26%) had previously tested positive for HIV in another province or country (represented by the light blue bar in Figure 3). This indicates that not all newly reported HIV cases necessarily represent a new infection of the virus. However, these cases were included in the total case numbers for this report as there may be impacts on the use of public health programs and health care services within Manitoba. Of the 27 individuals, 19 (70%) were previously tested and diagnosed with HIV outside of Canada.



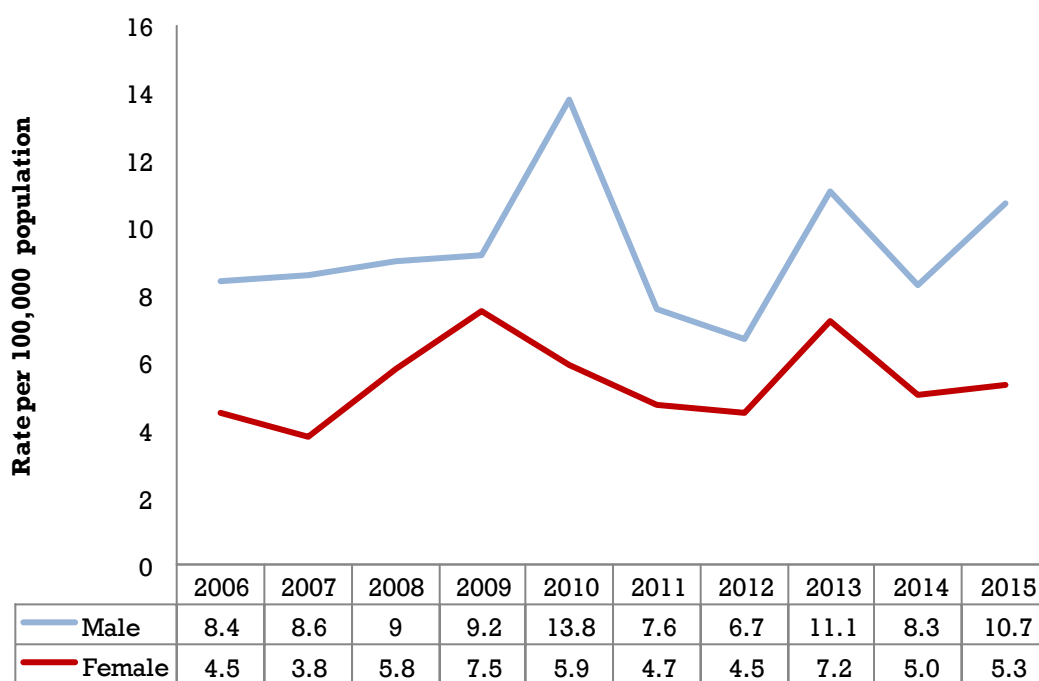
**Figure 3:** Number of newly diagnosed HIV cases with and without history of a previous positive test in Manitoba, 2008-2015

**26%** of the newly diagnosed HIV cases (27 of the 105 cases in 2015) reported they had **previously tested positive** for HIV in another province or country.



### Age-Sex Distribution of HIV Cases

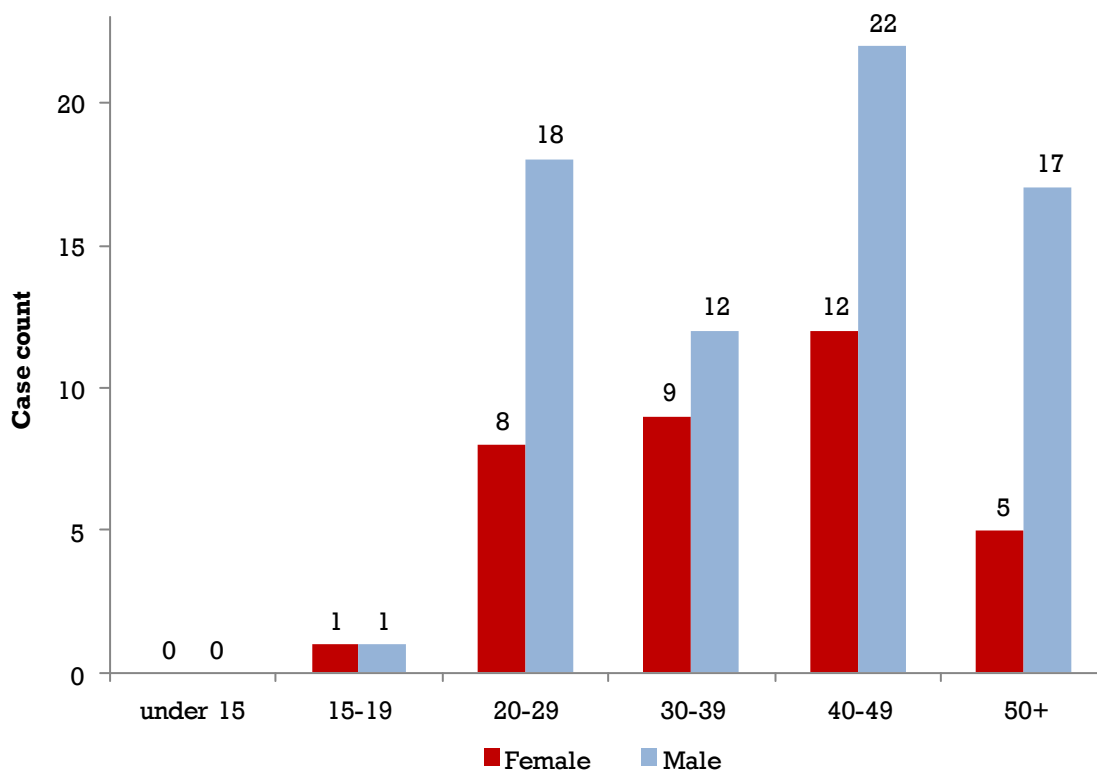
Over the last 10 years, males accounted for the majority of the newly reported HIV cases in Manitoba, as compared to females. The overall male and female trends showed a fluctuating pattern with the male rate being double that of females in 2015 (Figure 4). Starting in 2011, and into 2012, the rate of new HIV infections in both males and females dropped sharply but, rebounded to 11.1 and 7.2 new HIV cases per 100,000 population, respectively, in 2013. Then both male and female rates decreased to 8.3 and 5.0 new HIV cases per 100,000 population, respectively, in 2014 followed by slight increase to 10.7 and 5.3 new HIV cases per 100,000 population, respectively, in 2015. The fluctuation in both male and female cases could be related to a smaller or larger number of men and women presenting for testing.



**Figure 4:** Sex-specific rates (per 100,000 population) for newly diagnosed HIV cases in Manitoba, 2006-2015

Figure 5 depicts the age group distribution by sex among newly reported HIV cases (N=105) in 2015. No new HIV cases were reported in the <15 years age group in 2015, compared to one female case reported in this age group in both 2013 and 2014. The ages of males newly diagnosed with HIV ranged from 19 to 67 years, while the ages of females newly diagnosed with HIV ranged from 19 to 80 years. The mean (average) age of new cases was 40.1 years.

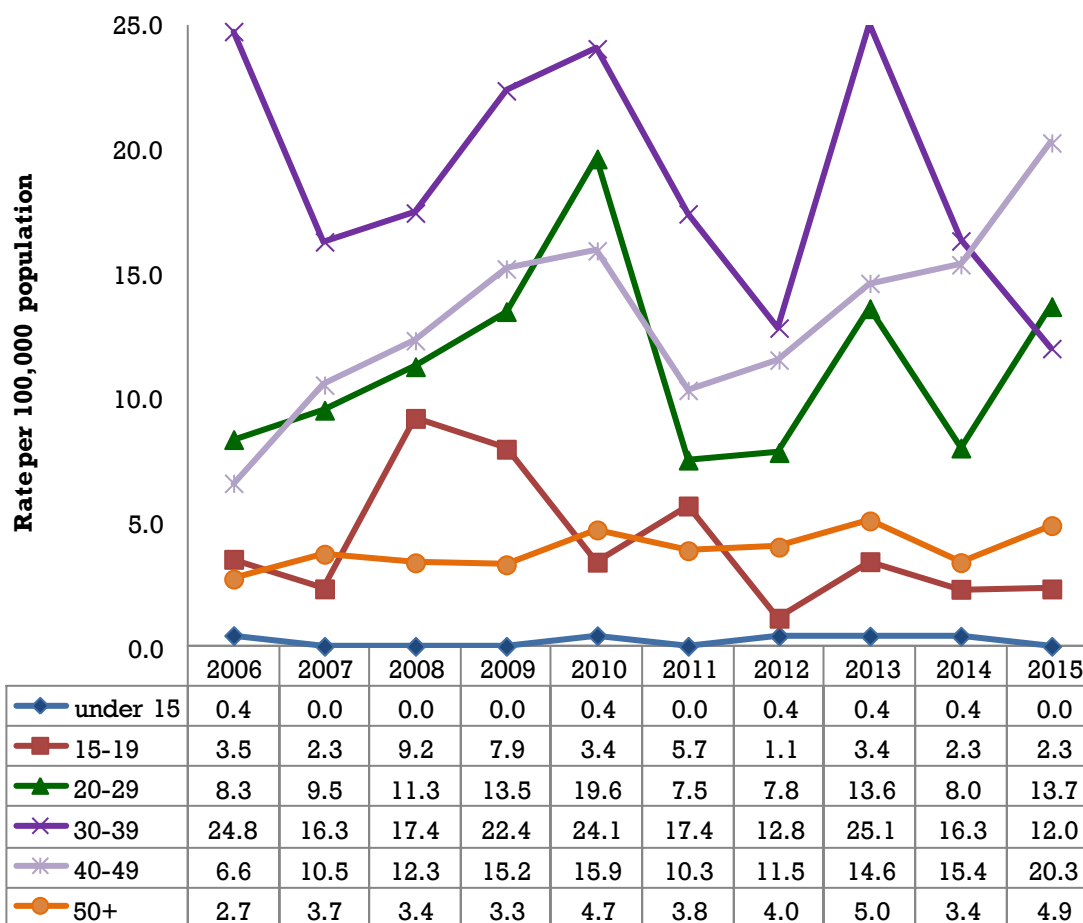
An increasing trend was noticed for the number of females newly diagnosed with HIV in 2015, starting with the 20-29 years age group and increasing to the 40-49 years age group. The trend for males newly diagnosed with HIV fluctuated across these age groups. Similar to 2014, males in the 40-49 years age group accounted for the largest number of new HIV cases in 2015. However, in 2013, males in the 30-39 years age group accounted for the highest number of new HIV cases. For females, the highest number of new HIV cases in 2015 was reported in the 40-49 years age group, but the 30-39 years age group had the highest number of newly reported HIV-positive female cases in 2014 and 2013 (Appendix B).



**Figure 5:** Number of newly diagnosed HIV cases by age and sex in Manitoba, 2015

Males and females in the **40-49 years age group** accounted for the largest number of new HIV cases in 2015.

Trends over time were examined by age-specific rates for the newly reported HIV cases (Figure 6). The highest rates of newly reported HIV cases occurred in the 30-39 years age group during the last 10 years, with the exception of 2015 when the highest rate was in the 40-49 years age group (20.3 new HIV cases per 100,000 population). In 2015, the second highest rates were noted in 20-29 years age group (13.7 new HIV cases per 100,000 population) followed by the 30-39 years age group (12.0 new HIV cases per 100,000 population). The rate of new HIV cases increased in the 15-19 years age group in 2008 and 2009, but appears to have stabilised in recent years. The 40-49 years age group experienced an increasing trend in the number of new HIV positive cases from 2011-2015.

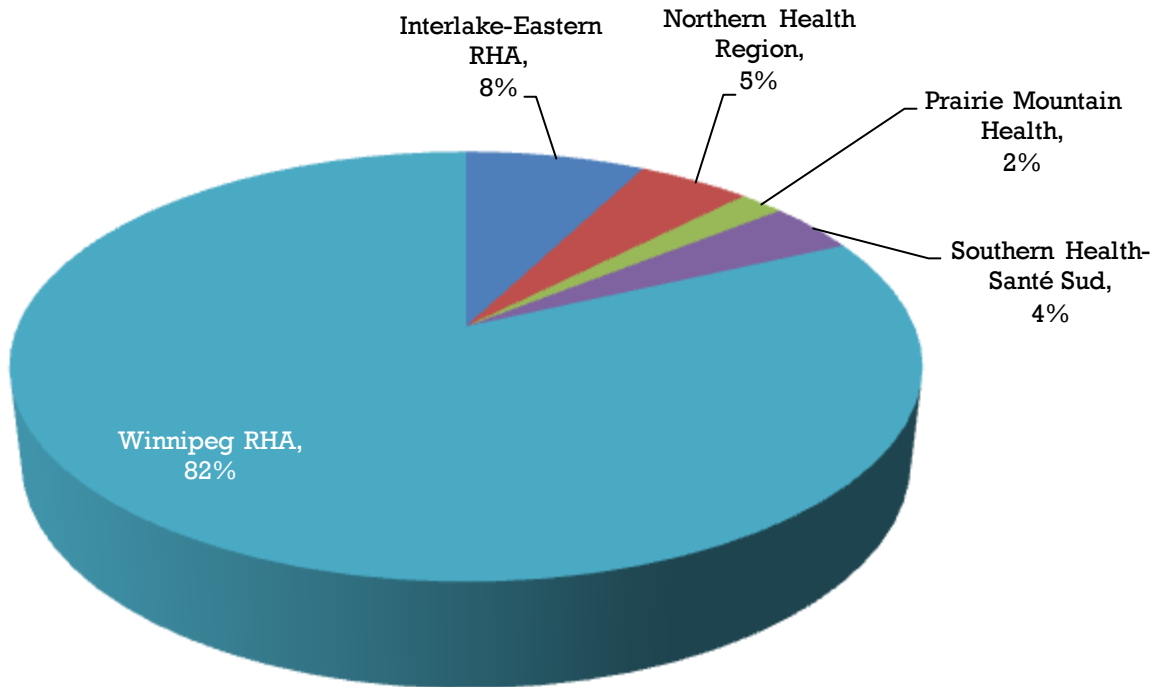


**Figure 6:** Age-specific rates (per 100,000 population) for newly diagnosed HIV cases in Manitoba, 2006-2015

Over the past 10 years the highest rates of newly reported HIV cases occurred in the 30-39 years age group with the exception of 2015 when the highest rate occurred in the 40-49 years age group.

### HIV by Regional Health Authority

The majority of new HIV cases were reported among the population of Winnipeg Regional Health Authority (Winnipeg RHA) in 2015. This geographic distribution of HIV cases was also noted from 1985 to 2014 in the province. In 2015, the highest proportion of new HIV cases (82%, 86 of 105) was reported in Winnipeg RHA, followed by 8% (8 of 105) in Interlake – Eastern RHA, 5% (5 of 105) in Northern Health Region, 2% (4 of 105) in Prairie Mountain Health and 4% (4 of 105) in Southern Health – Santé Sud (Figure 7).



\*Note the figure sums to 101% due to rounding error.

**Figure 7:** Distribution of newly diagnosed HIV cases by regional health authority in Manitoba, 2015

In 2015, the highest proportion of new HIV cases (82%, 86 of 105) was reported in **Winnipeg RHA**. This geographic distribution of HIV cases was also noted from 1985 to 2014 in the province

Table 2 presents HIV rates in the RHAs between 2011 and 2015. Winnipeg RHA experienced an increase in HIV rates from 7.9 new cases per 100,000 population in 2014 to 11.6 new cases per 100,000 population in 2015. Northern Health Region experienced an almost three-fold increase in HIV rates from 2.7 new cases per 100,000 population in 2014 to 6.6 new cases per 100,000 population in 2015. Meanwhile, HIV rates decreased in Southern Health – Santé Sud and Prairie Mountain Health, while remaining steady in Interlake–Eastern RHA during 2014 and 2015.

**Table 2:** Crude Rate (per 100, 000 population) of newly diagnosed HIV cases in Manitoba by regional health authority and year of diagnosis, 2011-2015

| RHA                         | 2011       | 2012       | 2013       | 2014       | 2015       |
|-----------------------------|------------|------------|------------|------------|------------|
| Winnipeg RHA*               | 8.2        | 7.6        | 10.6       | 7.9        | 11.6       |
| Southern Health – Santé Sud | 1.7        | 3.3        | 3.8        | 4.2        | 2.1        |
| Prairie Mountain Health     | 4.9        | 2.4        | 10.3       | 6.6        | 1.2        |
| Interlake – Eastern RHA     | 4.1        | 1.6        | 4.8        | 5.5        | 6.3        |
| Northern Health Region      | 4.1        | 5.4        | 14.8       | 2.7        | 6.6        |
| <b>Manitoba (Total)</b>     | <b>6.2</b> | <b>5.6</b> | <b>9.2</b> | <b>6.7</b> | <b>8.0</b> |

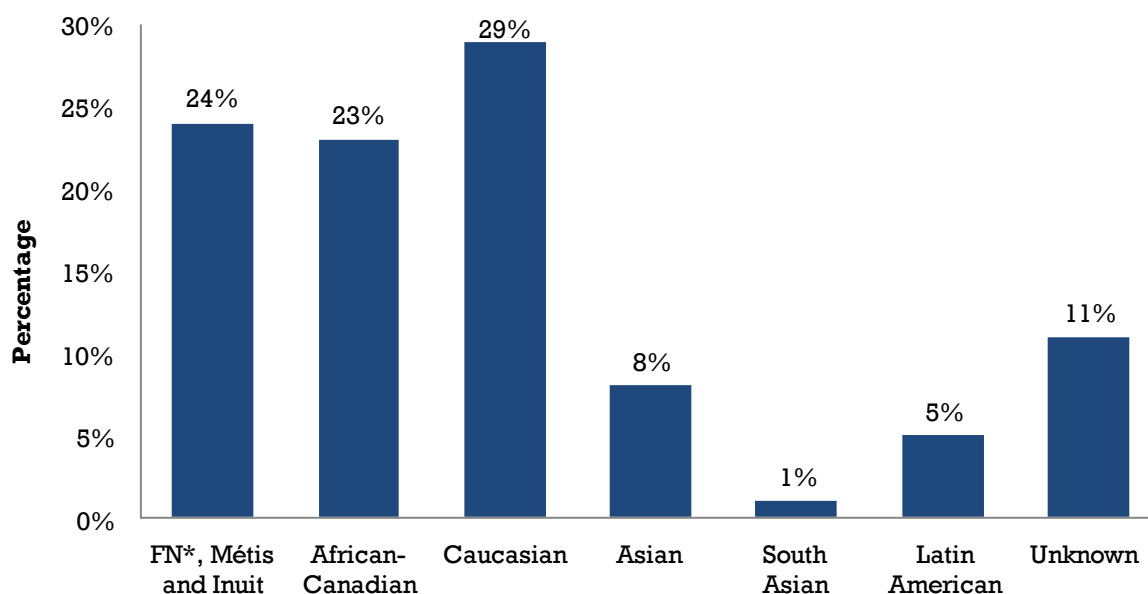
\* Winnipeg RHA includes one case reported from Churchill in 2012.

## Self-Reported Ethnicity of HIV Cases

From 2014 to 2015, a 7% decrease was observed in the proportion of people newly diagnosed with HIV who self-reported their ethnicity as First Nations (FN), Métis, or Inuit. Additionally, a 7% increase was noted in those who self-reported their ethnicity as African/African-Canadian. Among all new HIV cases, while Caucasian remained the highest self-reported ethnicity (with a 3% increase in 2015 over the previous year).

In 2015, Caucasian ethnicity was self-reported by 29% of new HIV cases, while 23% self-reported African/African-Canadian ethnicity, followed by 24% First Nations (FN), Métis, or Inuit ethnicity, 8% Asians, 5% Latin Americans and 1% South Asian (Figure 8).

In 2015, 11% of new HIV cases did not report ethnicity on the case report form compared to 18% in 2014. Non-response to questions about ethnicity can vary from year-to-year; therefore this data should be interpreted with caution.



\*Note: FN = First Nation

**Figure 8:** Distribution of self-reported ethnicity categories among newly diagnosed HIV cases in Manitoba, 2015

Among all new HIV cases, **Caucasian** remained the highest self-reported ethnicity (with a 3% increase in 2015 over the previous year).

A **7% decrease** in the proportion of people who self-reported their ethnicity as First Nations, Métis, or Inuit.

A **7% increase** in the proportion of people who self-reported their ethnicity as African/African-Canadian.

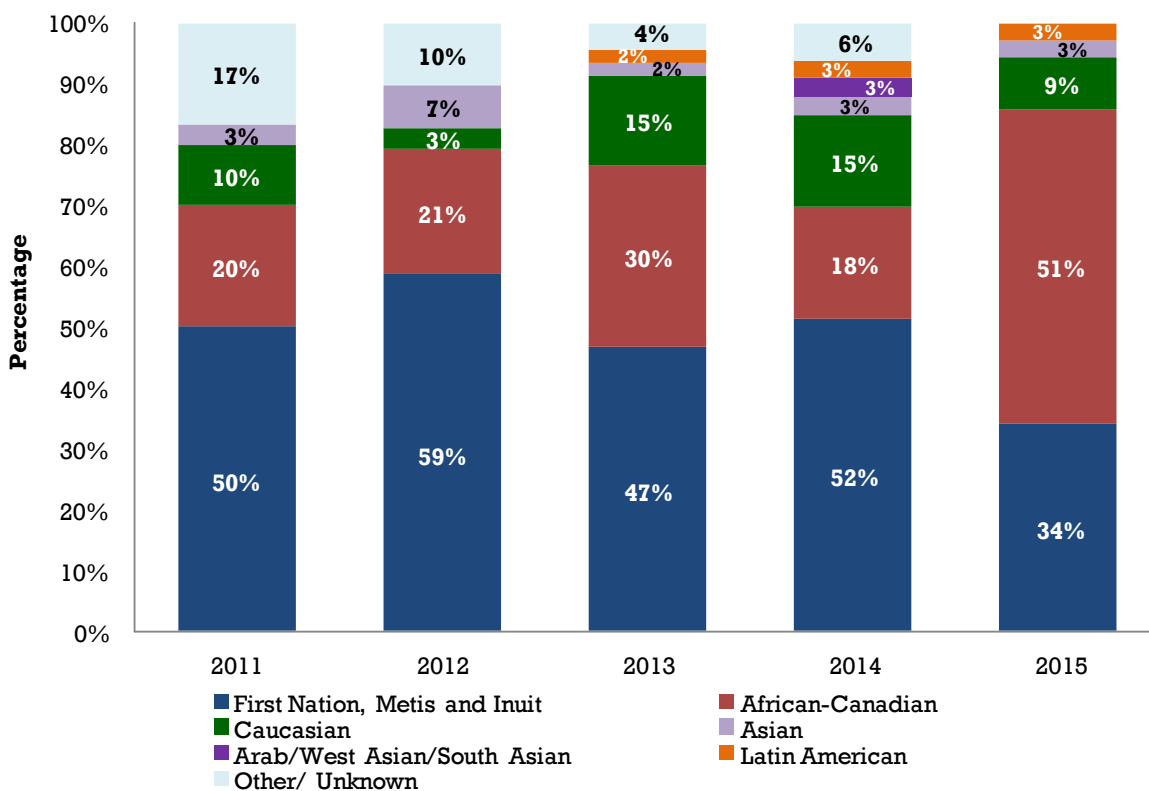
**Remember: self-reported information should be interpreted with caution.**

### Self-Reported Ethnicity by Sex

In 2015, 34% of females newly diagnosed with HIV self-reported their ethnicity as FN, Métis, or Inuit compared to 19% of newly diagnosed males (Figures 9 and 10). Those females who self-reported African/African-Canadian ethnicity constituted 51% of the 35 female cases in 2015 (Figure 9), while their male counterparts comprised only 9% of the 70 male cases (Figure 10). In contrast, males who self-reported Caucasian ethnicity represented 39% of the 70 male cases in 2015 (Figure 10), while their female counterparts comprised only 9% of the 35 female cases (Figure 9).

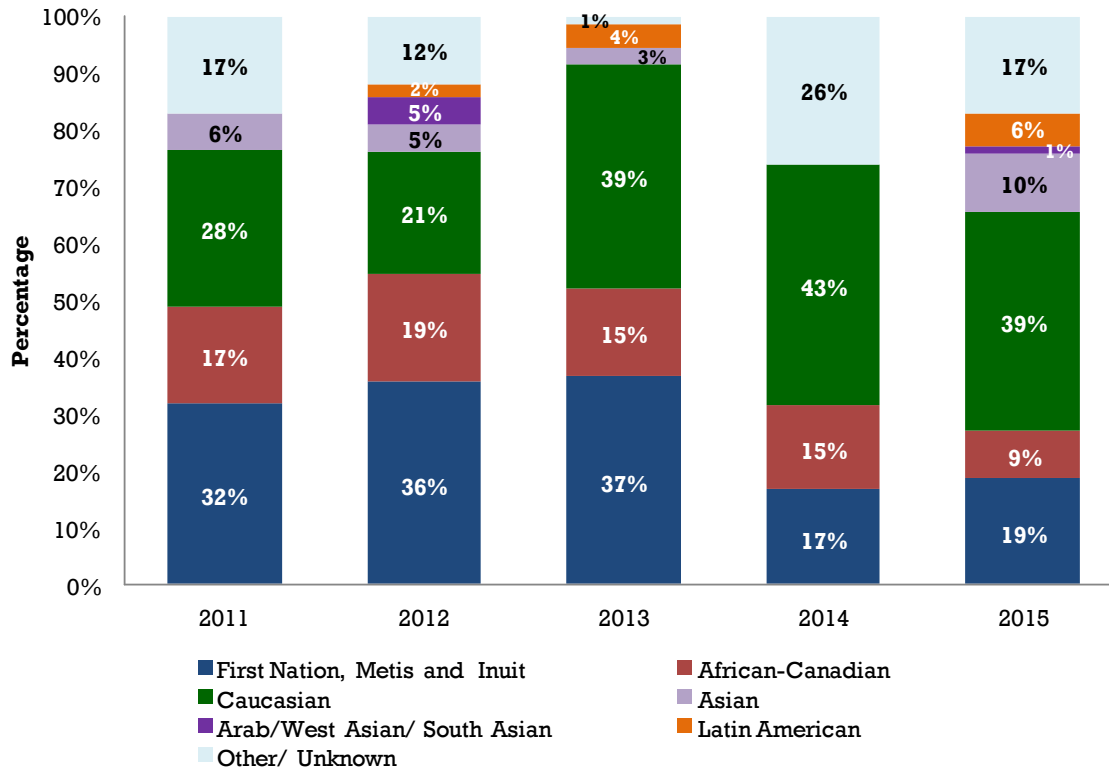
The proportion of females newly diagnosed with HIV who self-reported their ethnicity as FN, Métis, or Inuit notably decreased from 52% in 2014 to 34% in 2015 (Figure 9). In contrast, the proportion of females who self-reported their ethnicity as African/African-Canadian notably *increased* from 18% in 2014 to 51% in 2015 (Figure 9).

Additional data tables for self-reported ethnicity can be found in Appendix B.



**Figure 9:** Distribution of self-reported ethnicity categories among newly diagnosed female HIV cases in Manitoba, 2011-2015

The majority (51%) of **females** self-reported their ethnicity as **African-Canadian** in 2015.



**Figure 10:** Distribution of self-reported ethnicity categories among newly diagnosed male HIV cases in Manitoba, 2011-2015

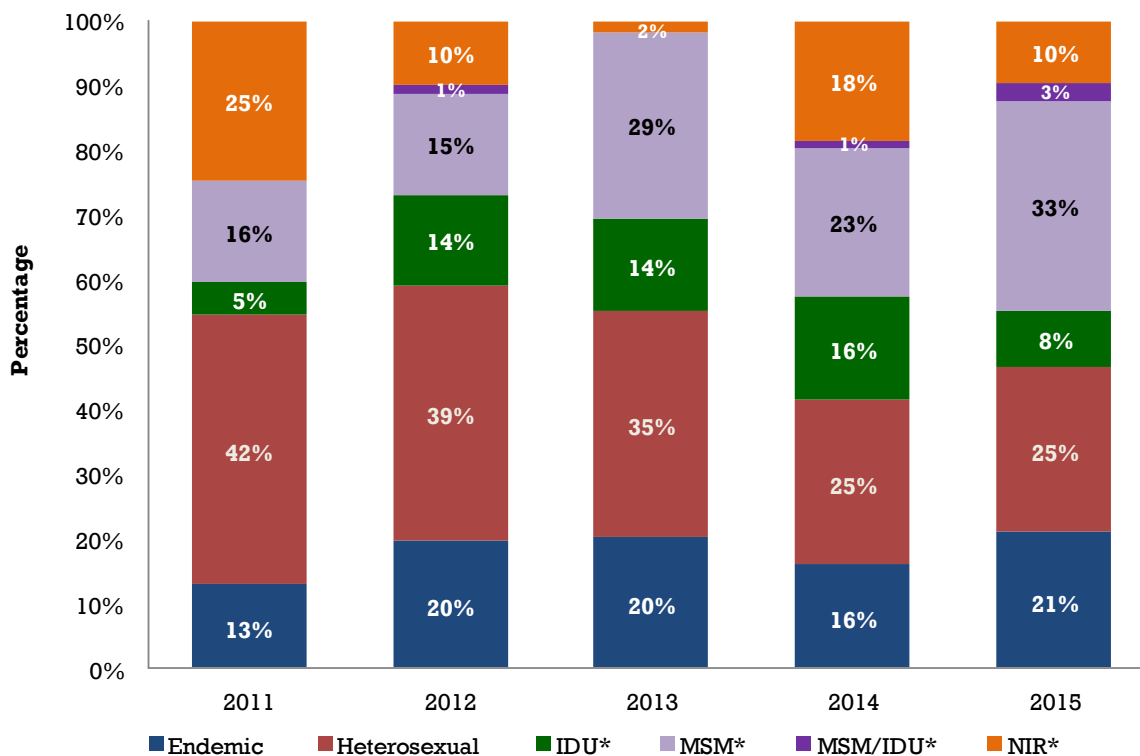
The majority (39%) of **males** self-reported their ethnicity as **Caucasian** in 2015.



### Self-Reported Risk Exposure Categories of HIV Cases

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” based upon a pre-determined hierarchy. The Methods section further describes these risk exposure categories, methodology and definition.

Men having sex with men (MSM) was the highest reported risk exposure category in 2015 with an increase of 10% over the previous year (23% in 2014 versus 33% in 2015). In contrast, the proportion of people who acquired HIV through IDU in 2015 was one-half that of the previous year (16% in 2014 versus 8% in 2015) (Figure 11). The proportion of people who reported acquiring HIV infection through heterosexual activity remained stable (25%) from 2014 to 2015. The proportion of people who reported endemic exposure increased from 16% in 2014 to 21% in 2015. In 2015, 10% of new cases did not report risk factor information (the no identifiable risk [NIR] category). Please note that the endemic exposure category indicates a case was born in a country where HIV is endemic — see the Methods section for the complete definition.



\* Note: IDU = injection drug use, MSM = men who have sex with men, MSM/IDU = men who have sex with men and indicate injection drug use, NIR = no identifiable risk

**Figure 11:** Newly diagnosed HIV cases in Manitoba by risk exposure category, 2011-2015

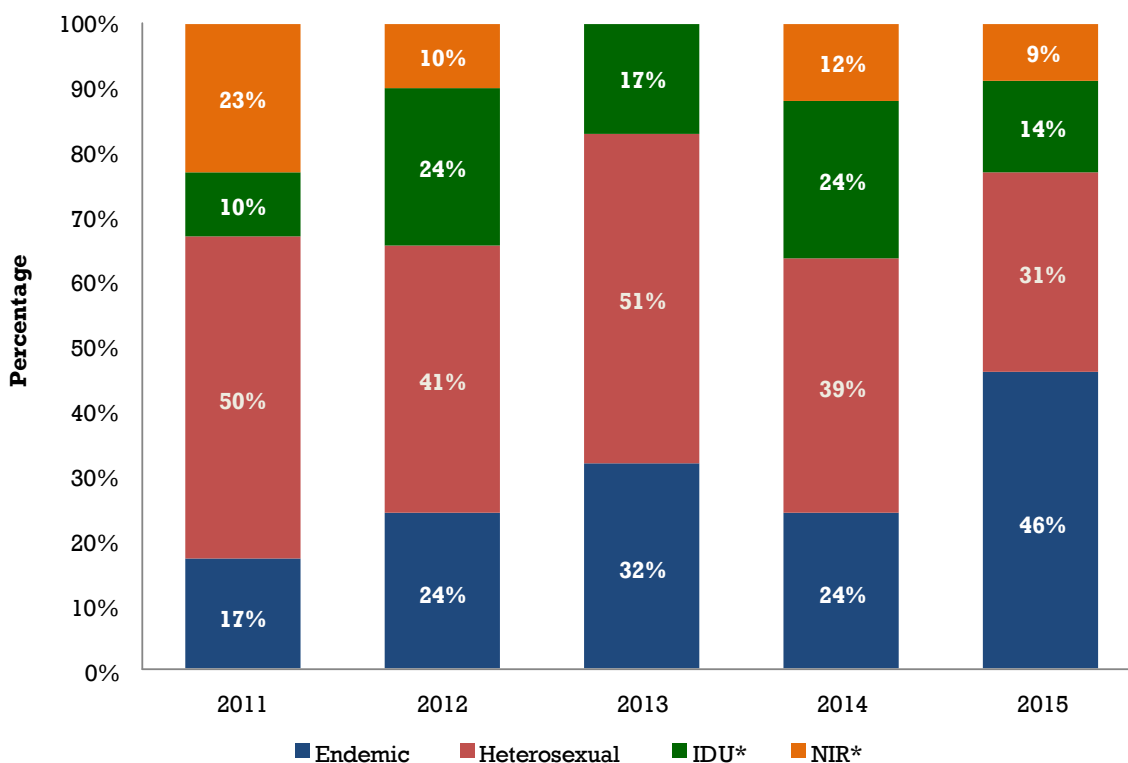
The most self-reported risk exposure category was **men who have sex with men** (33%) followed by **heterosexual sex** (25%).

**Remember: self-reported information should be interpreted with caution.**

### Self-Reported Risk Exposure Categories by Sex

#### Females

A comparison of reported risk exposure categories among females newly diagnosed with HIV in the years from 2011 to 2015 is presented in Figure 12. In 2015, endemic exposure was the most self-reported risk exposure category (46%), a considerable increase from 24% in 2014. Heterosexual activity, which was the most self-reported risk exposure category (39%) in 2014, decreased to 31% in 2015. The proportion of female cases who reported acquiring HIV infection through injection drug use decreased from 24% in 2014 to 14% in 2015. This may be related to enhanced case finding. In 2015, 9% of female cases did not report a risk exposure category (no identifiable risk [NIR] category) in comparison to 12% in 2014.



\* Note: IDU = injection drug use, NIR = no identifiable risk

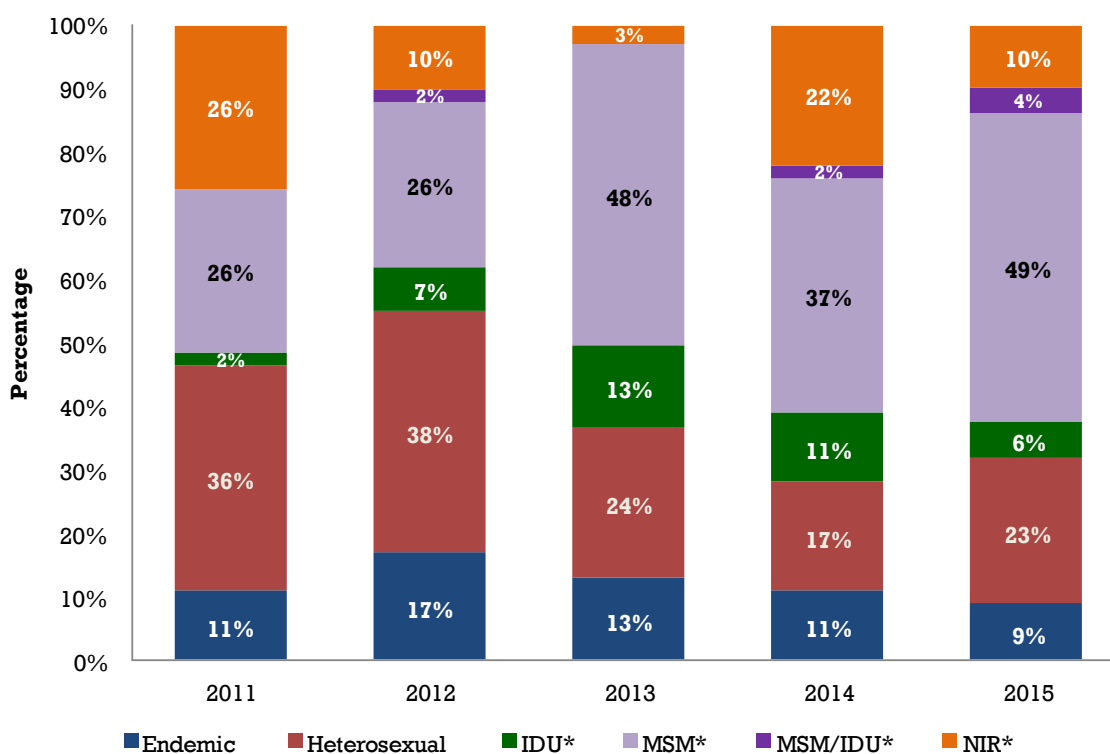
**Figure 12:** Newly diagnosed female HIV cases in Manitoba by risk exposure category, 2011-2015

In 2015, **endemic exposure** (46%) was the most self-reported risk exposure category in **females**, followed by **heterosexual sex** (31%).

**Males**

A comparison of reported risk exposure categories among males newly diagnosed with HIV in the years from 2011 to 2015 is presented in Figure 13. In 2015, men having sex with men (MSM) was the highest self-reported risk exposure category (49%) among newly diagnosed HIV males, an increase of 12% over the previous year.

Heterosexual activity (23%) was the second most self-reported exposure activity for new male HIV cases in 2015, a slight increase from 17% in 2014. The proportion of male cases who reported acquiring HIV infection through IDU continued to decrease in recent years from 13% in 2013 to 11% in 2014, and finally to 6% in 2015. Similarly, the proportion of male cases who self-reported endemic exposure decreased each year from 17% in 2012, 13% in 2013, and 11% in 2014, to 9% in 2015. In 2015, 10% of male cases did not report a risk exposure category (NIR) in comparison to 12% in 2014.



\* Note: IDU = injection drug use, MSM = men who have sex with men, MSM/IDU = men who have sex with men and indicate injection drug use, NIR = no identifiable risk

**Figure 13:** Newly diagnosed male HIV cases in Manitoba by risk exposure category, 2011-2015

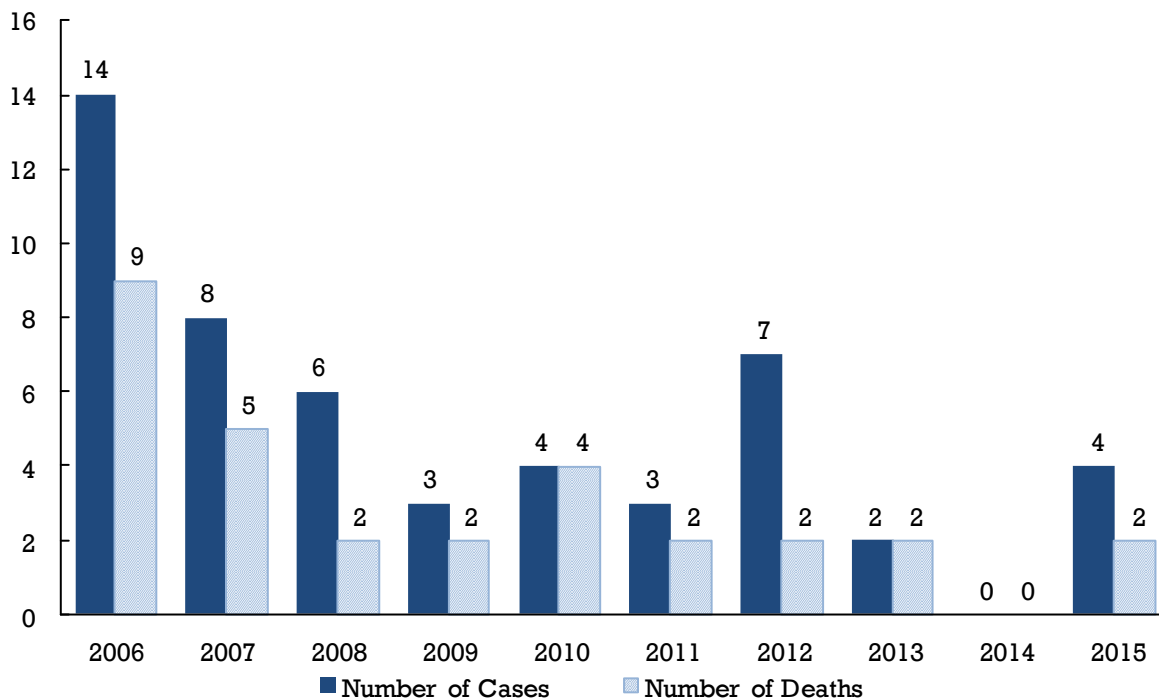
In 2015, **men who have sex with men (49%)** was the most self-reported risk exposure category in **males**, followed by **heterosexual sex (23%)**.

## AIDS Cases Reported to December 31, 2015

In 2015, four AIDS cases were reported to MHSAL; all were males. This is in contrast to 2014, when zero (0) AIDS cases were reported. The sum of these case reports brings the total number of AIDS cases to 299 since 1985; 71% of these individuals 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 MHSAL please see:

[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)

There is variability in the number of AIDS cases reported over the previous ten years. The largest number of cases (14) was reported in 2006. Since 2007, there has been an overall decrease in the number of reported cases (Figure 14). 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 MHSAL.



**Figure 14:** Number of reported AIDS cases and deaths in Manitoba, 2006-2015

In 2015, **four** AIDS cases were reported in Manitoba (all were males) compared to zero cases reported in 2014.

**299** AIDS cases have been reported since 1985, 71% of which have died.

## Conclusion

The annual number of newly diagnosed HIV infections fluctuated in Manitoba over the last 10 years. The number of HIV cases reported to MHSAL in 2015 was 21% higher than the previous year but 13% lower than the largest number reported in 2010. The crude rate of 8.0 new HIV cases per 100,000 population in 2015 was the third highest rate in the last 10 years; the highest rate occurred in 2010 with 9.8 new HIV cases per 100,000 population. MHSAL will monitor the provincial HIV surveillance data to determine whether this increase continues.

The number of newly diagnosed HIV cases varied between the sexes and age groups. Males accounted for the majority of newly diagnosed HIV cases with a crude rate (10.7 cases per 100,000 population) double that of females (5.7 cases per 100,000 population) in 2015. This trend held across all age groups. In terms of age at HIV diagnosis, the largest number of both males and females were diagnosed in the 40-49 years age group in 2015. The annual rate of HIV diagnosis among this age group has increased over the last 10 years.

In 2015, just under one-third (29%) of all newly diagnosed HIV cases self-identified as Caucasians, and one-quarter each self-identified as Aboriginal (FN, Métis, or Inuit) (24%) and African/African-Canadian (23%). There was a slight decline in the representation of both Caucasian and FN, Métis, or Inuit ethnicities in 2015, but a slight increase in representation of the African/African-Canadian ethnicity over the previous year.

In 2015, MSM remained the main exposure category in Manitoba, followed by heterosexual activity, endemic origin, and IDU in decreasing order. The transmission of HIV infection through IDU decreased by 50% in 2015 over the previous year. Endemic exposure was the most self-reported risk category in females, while MSM was the most self-reported risk exposure category in males. Heterosexual activity remained the second most self-reported risk category among both sexes.

The data presented in this report highlight the need for population-specific interventions. The incidence of HIV infections in Manitoba continues to be a serious public health concern particularly among men who have sex with men, people who inject drugs, Caucasians, FN, Métis, or Inuit people and people from countries where HIV/AIDS is endemic. These findings highlight the continued need for specific measures to address the HIV epidemic in key populations. Effective HIV strategies suitable for these populations must be developed for the successful control of HIV incidence in Manitoba. Real-time and good quality HIV surveillance data is one of the essential factors required to monitor HIV incidence in Manitoba; an interdisciplinary HIV strategy should be designed at provincial level to implement and achieve the goals of the HIV 90-90-90 initiative.

## **Appendices**

## **Appendix A: Reporting Forms**

Links to MHSAL 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/surveillance/docs/hivcaseinvestigation.pdf>

HIV Contact Notification Form (implemented 2006)

<http://www.gov.mb.ca/health/publichealth/surveillance/docs/hivcontactnotification.pdf>

AIDS Case Report Form (note this is a Public Health Agency of Canada Form)

<http://www.gov.mb.ca/health/publichealth/cdc/protocol/form5.pdf>

## Appendix B: HIV Descriptive Data Tables

**Table 3:** Number of newly diagnosed HIV Cases in Manitoba from 1985 to December 31, 2015

| Years     | Females | Males | Total |
|-----------|---------|-------|-------|
| 1985-2005 | 298     | 974   | 1,272 |
| 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    |
| 2015      | 34      | 69    | 105   |

**Table 4:** Number of newly diagnosed HIV cases in Manitoba by age group, sex and year of diagnosis

| Age Group    | Sex           | 1985 - 2012 | 2013      | 2014      | 2015      |
|--------------|---------------|-------------|-----------|-----------|-----------|
| <15 years    | Male          | 7           | 0         | 0         | 0         |
|              | Female        | 12          | 1         | 1         | 0         |
| 15-19 years  | Male          | 21          | 0         | 0         | 1         |
|              | Female        | 38          | 2         | 2         | 1         |
| 20-29 years  | Male          | 360         | 10        | 7         | 18        |
|              | Female        | 178         | 13        | 8         | 8         |
| 30-39 years  | Male          | 508         | 26        | 16        | 12        |
|              | Female        | 184         | 17        | 12        | 9         |
| 40-49 years  | Male          | 288         | 16        | 19        | 22        |
|              | Female        | 68          | 10        | 7         | 12        |
| 50+ years    | Male          | 170         | 19        | 12        | 17        |
|              | Female        | 45          | 4         | 3         | 5         |
| <b>Total</b> | <b>Male</b>   | <b>1354</b> | <b>71</b> | <b>54</b> | <b>70</b> |
|              | <b>Female</b> | <b>525</b>  | <b>47</b> | <b>33</b> | <b>35</b> |



**Table 5:** Number of newly diagnosed HIV cases in Manitoba by regional health authority, sex and year of diagnosis in Manitoba

| RHA                         | 1985-2012  |             | 2013      |           | 2014      |           | 2015      |           |
|-----------------------------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                             | Female     | Male        | Female    | Male      | Female    | Male      | Female    | Male      |
| Winnipeg RHA*               | 438        | 1147        | 30        | 48        | 22        | 37        | 30        | 56        |
| Southern Health – Santé Sud | 26         | 59          | 3         | 3         | 2         | 6         | 1         | 3         |
| Interlake – Eastern RHA     | 19         | 65          | 3         | 3         | 3         | 4         | 2         | 6         |
| Prairie Mountain Health     | 20         | 42          | 6         | 11        | 4         | 7         | 0         | 2         |
| Northern Health Region      | 18         | 28          | 5         | 6         | 2         | 0         | 2         | 3         |
| Unassigned RHA**            | 4          | 13          | 0         | 0         | 0         | 0         | 0         | 0         |
| <b>Manitoba (Total)</b>     | <b>525</b> | <b>1354</b> | <b>47</b> | <b>71</b> | <b>33</b> | <b>54</b> | <b>35</b> | <b>70</b> |

\*Winnipeg RHA includes one case reported from Churchill in 2012.

\*\*17 cases from the period 1985-2000 could not be assigned to current RHA geographic areas, or did not have a region of residence identified. These are indicated as “Unassigned RHA”.

**Table 6:** Number of newly diagnosed HIV cases in Manitoba by self-reported ethnicity and year of diagnosis

| Ethnicity Category             | 1999-2012 | 2013 | 2014 | 2015 |
|--------------------------------|-----------|------|------|------|
| First Nations, Métis and Inuit | 419       | 48   | 26   | 25   |
| Caucasian                      | 318       | 35   | 28   | 30   |
| African/African-Canadian       | 244       | 25   | 14   | 24   |
| Asian                          | 35        | 3    | 1    | 8    |
| South Asian/Arab/West Asian    | 15        | 0    | 1    | 1    |
| Latin American                 | 12        | 4    | 1    | 5    |
| Other                          | 8         | 0    | 1    | 0    |
| Unknown/Missing/Refused        | 828       | 3    | 15   | 12   |
| Total                          | 1879      | 118  | 87   | 105  |

Collection of ethnicity data began in 1999. The ethnicity data presented in Table 6 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.

**Table 7:** Number of newly diagnosed HIV cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis

| Risk Exposure Category   | Sex    | 1985 - 2012 | 2013 | 2014 | 2015 |
|--|--------|-------------|------|------|------|
| Endemic  | Male   | 118         | 9    | 6    | 6    |
|  | Female | 135         | 15   | 8    | 16   |
| Heterosexual   | Male   | 280         | 17   | 9    | 16   |
|  | Female | 202         | 24   | 13   | 11   |
| Injection drug use (IDU)   | Male   | 162         | 9    | 6    | 4    |
|  | Female | 109         | 8    | 8    | 5    |
| Men who have sex with men (MSM)                                      | Male   | 577         | 34   | 20   | 34   |
| MSM/IDU  | Male   | 61          | 0    | 1    | 3    |
| No identifiable risk (NIR)   | Male   | 121         | 2    | 12   | 7    |
|  | Female | 163         | 0    | 4    | 3    |
| Occupational   | Male   | 2           | 0    | 0    | 0    |
|  | Female | 0           | 0    | 0    | 0    |
| Perinatal  | Male   | 2           | 0    | 0    | 0    |
|  | Female | 2           | 0    | 0    | 0    |
| Recipient of blood/blood products prior to 1985 (Recp. B/B products) | Male   | 31          | 0    | 0    | 0    |
|  | Female | 14          | 0    | 0    | 0    |
| Total  | Male   | 1354        | 71   | 54   | 70   |
|  | Female | 525         | 47   | 33   | 35   |

Challenges in obtaining completed case reports have been noted in some years. Therefore, risk exposure category information presented in Table 7 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. Risk exposure categories and their abbreviations are listed and defined in the Methods section.

## Appendix C: AIDS Descriptive Data Tables

In Tables 8 to 12, the 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 MHSAL. It is also possible to have a death reported for cases that were diagnosed with AIDS in previous years.

Tables 9, 10, 11, and 12 have been aggregated into five-year groups due to small annual case counts in the past ten years.

**Table 8:** Number of reported AIDS cases and deaths in Manitoba by year of diagnosis

| Year         | Number of Cases | Number of Deaths |
|--------------|-----------------|------------------|
| 1985-2005    | 248             | 182              |
| 2006         | 14              | 9                |
| 2007         | 8               | 5                |
| 2008         | 6               | 2                |
| 2009         | 3               | 2                |
| 2010         | 4               | 4                |
| 2011         | 3               | 2                |
| 2012         | 7               | 2                |
| 2013         | 2               | 2                |
| 2014         | 0               | 0                |
| 2015         | 4               | 2                |
| <b>Total</b> | <b>299</b>      | <b>212</b>       |

Table 8 includes only those AIDS cases and deaths of AIDS cases that have been reported to MHSAL. Delays in reporting may occur, and not all deaths may be reported. Please see the Introduction and Methods sections of this report for further reporting detail.

**Table 9:** Number of reported AIDS cases in Manitoba by age group, sex and year of diagnosis

| Age Group    | 1985-2005 |            | 2006-2010 |           | 2011-2015 |           |
|--------------|-----------|------------|-----------|-----------|-----------|-----------|
|              | Female    | Male       | Female    | Male      | Female    | Male      |
| <15 year     | 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         | 27         | 2         | 1         | 0         | 1         |
| 30-39 years  | 12        | 102        | 8         | 6         | 1         | 3         |
| 40-49 years  | 9         | 48         | 3         | 8         | 1         | 3         |
| 50+ years    | 3         | 31         | 1         | 4         | 1         | 6         |
| <b>Total</b> | <b>31</b> | <b>217</b> | <b>16</b> | <b>19</b> | <b>3</b>  | <b>13</b> |

**Table 10:** Number of reported AIDS cases in Manitoba by regional health authority, sex and year of diagnosis

| RHA                         | 1985-2005 |            | 2006-2010 |           | 2011-2015 |           |
|-----------------------------|-----------|------------|-----------|-----------|-----------|-----------|
|                             | Female    | Male       | Female    | Male      | Female    | Male      |
| Winnipeg RHA                | 27        | 196        | 15        | 17        | 2         | 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         | 1         | 1         | 0         | 2         |
| Northern Health Region      | 2         | 3          | 0         | 0         | 1         | 1         |
| Out-of-Province             | 0         | 3          | 0         | 0         | 0         | 0         |
| Unknown                     | 0         | 0          | 0         | 0         | 0         | 1         |
| <b>Total</b>                | <b>31</b> | <b>217</b> | <b>16</b> | <b>19</b> | <b>3</b>  | <b>13</b> |

**Table 11:** Number of reported female AIDS cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis

| Risk Exposure Category | 1985-2005 | 2006-2010 | 2011-2015 | Total     |
|------------------------|-----------|-----------|-----------|-----------|
| Endemic                | 6         | 4         | 0         | 10        |
| Heterosexual           | 14        | 5         | 4         | 23        |
| IDU                    | 8         | 6         | 0         | 14        |
| Perinatal              | 1         | 0         | 0         | 1         |
| Recp B/B products      | 2         | 0         | 0         | 2         |
| <b>Total</b>           | <b>31</b> | <b>15</b> | <b>4</b>  | <b>50</b> |

**Table 12:** Number of reported male AIDS cases in Manitoba by risk exposure category (primary mode of transmission) and year of diagnosis

| Risk Exposure Category | 1985-2005  | 2006-2010 | 2011-2015 | Total      |
|------------------------|------------|-----------|-----------|------------|
| Endemic                | 3          | 1         | 0         | 4          |
| Heterosexual           | 29         | 5         | 5         | 39         |
| IDU                    | 18         | 3         | 0         | 21         |
| MSM                    | 138        | 8         | 5         | 151        |
| MSM/IDU                | 10         | 0         | 0         | 10         |
| Perinatal              | 1          | 0         | 0         | 1          |
| Recp B/B products      | 14         | 0         | 0         | 14         |
| NIR                    | 3          | 3         | 3         | 9          |
| <b>Total</b>           | <b>216</b> | <b>20</b> | <b>13</b> | <b>249</b> |