

# **HIV IN MANITOBA 2022:** ANNUAL SURVEILLANCE UPDATE



## ***Epidemiology & Surveillance***

*Provincial Information Management and Analytics  
Performance and Oversight Division  
Department of Health, Seniors and Long-Term Care  
Government of Manitoba*

*Publication date: December 1, 2023*

This publication may be reproduced for personal or internal use without permission, provided the source is fully acknowledged.

**Suggested citation:** Government of Manitoba, Department of Health, Seniors and Long-Term Care, Performance and Oversight Division, Epidemiology and Surveillance. (2023). HIV in Manitoba 2022: Annual Surveillance Update.

*Cover image: Red Ribbon for World AIDS Day (photo by Trinn Suwannapha/World Bank via Flickr)*

## Table of Contents

List of Figures.....	4
List of Tables.....	4
Land Acknowledgement.....	5
Acknowledgements.....	5
Executive Summary.....	6
Introduction.....	7
Methods.....	7
Data Sources and Case Definitions.....	7
Inclusion/Exclusion Criteria.....	8
Variable Definitions.....	8
Statistical Methods.....	9
Limitations.....	9
Findings.....	11
HIV Testing.....	11
Surveillance.....	12
New HIV Diagnoses in Manitoba.....	12
Age and Sex Distribution.....	13
Geography.....	17
Primary Mode of Transmission.....	19
Summary.....	20
Data Tables.....	21
Appendix A – Introduced HIV Cases.....	24
Appendix B – Primary Mode of Transmission.....	25
Appendix C – Other HIV Reports.....	28
Manitoba HIV Program Updates.....	28
National HIV Surveillance Reports.....	28

## List of Figures

<b>Figure 1.</b> Number of people tested for HIV, processed by Cadham Provincial Laboratory and percent positivity of HIV Manitoba, 2018-2022.....	11
<b>Figure 2.</b> Number of people tested for HIV, processed by Cadham Provincial Laboratory, by sex and age group, Manitoba, 2018-2022.....	12
<b>Figure 3.</b> Number of newly diagnosed cases of HIV and age-standardized rate (per 100,000 population), Manitoba, 2013-2022.....	13
<b>Figure 4.</b> Age-standardized rate of newly diagnosed HIV cases by year and sex, Manitoba, 2013-2022.....	14
<b>Figure 5.</b> Number of newly diagnosed HIV cases by sex and age group, Manitoba, 2022.....	15
<b>Figure 6.</b> Age-specific rates of newly diagnosed HIV cases by age group and year, Manitoba, 2013-2022.....	16
<b>Figure 7.</b> Number of newly diagnosed HIV cases by Regional Health Authority, Manitoba, 2022....	17
<b>Figure 8.</b> Age-standardized rate of newly diagnosed HIV cases by Regional Health Authority and year, Manitoba, 2019-2022.....	18
<b>Figure 9.</b> Distribution of newly diagnosed HIV cases by risk exposure category and sex, Manitoba, 2022.....	19

## List of Tables

<b>Data Table 1.</b> Number of HIV antigen/antibody screen tests and number of people tested, processed by Cadham Provincial Laboratory, Manitoba, 2018-2022.....	21
<b>Data Table 2.</b> Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by year, Manitoba, 2013-2022.....	21
<b>Data Table 3.</b> Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by sex and year, Manitoba, 2013-2022 <sup>a</sup> .....	22
<b>Data Table 4.</b> Number and age-specific rates (per 100,000) of newly diagnosed HIV infections by age group and year, Manitoba, 2013-2022.....	23
<b>Data Table 5.</b> Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by Health Region and year, Manitoba, 2019-2022.....	23

## Land Acknowledgement

- We acknowledge that we are located on Treaty 1 Territory and that Manitoba is located on the Treaty Territories and ancestral lands of the Anishinaabeg, Anishinewuk, Dakota Oyate, Denesuline and Nehethowuk Nations.
- We acknowledge that Manitoba is located on the Homeland of the Red River Métis.
- We acknowledge that northern Manitoba includes lands that were and are the ancestral lands of the Inuit.
- We respect the spirit and intent of Treaties and Treaty Making and remain committed to working in partnership with First Nations, Inuit and Métis people in the spirit of truth, reconciliation and collaboration.

## Acknowledgements

- We acknowledge the important contribution and dedicated work of public health and health care practitioners across the province who are involved in the diagnosis, reporting, treatment, and respectful care of persons living with HIV.
- We acknowledge all persons in Manitoba who are living with HIV and AIDS. Each case reported on and described within this report is a valued and respected member of our community.

## Executive Summary

*HIV in Manitoba 2022: Annual Surveillance Update* describes epidemiological trends of HIV in Manitoba by geography, age at diagnosis, sex and primary mode of exposure over a ten-year period, January 1, 2013 through December 31, 2022, with added emphasis on the most current year of data, 2022.

Key highlights include:

- In 2022, 95,263 people were tested for HIV in Manitoba – an increase of 9.8% from 2021 when 86,753 people were screened. Test positivity increased from 0.40% in 2021 to 0.52% in 2022.
- In Manitoba, there were 196 newly diagnosed cases of HIV (102 females and 93 males) reported in 2022 (13.9 cases per 100,000 population) compared to 144 cases in 2021 (10.5 cases per 100,000). This represents a 36% increase in the number of new HIV diagnoses.
- The age-standardized rate of newly diagnosed HIV cases has been increasing dramatically each year since 2018, more than doubling in 2022.
- The rate of newly diagnosed HIV cases among females has been steadily increasing since 2017 and surpassed the rate of infection in males in 2022. In 2017, the proportion of HIV cases among females was roughly one-quarter as compared to more than half of all newly diagnosed cases in 2022.
- Individuals 20-39 years of age accounted for the highest proportion of newly diagnosed cases in 2022 for both males and females (27.8 per 100,000 population among 20-29 year old individuals; 43.1 per 100,000 population among individuals 30-39 years).
- The highest age-standardized rate in 2022 was reported in the Northern Health Region (20.3 cases per 100,000 population) followed by the Winnipeg Health Region (16.5 cases per 100,000 population).
- In 2022, persons who inject drugs (PWID) was the largest driver of transmission among males and females accounting for 55.1% and 84.1% of cases respectively.
- There were no cases of mother-to-child (perinatal) HIV transmission in 2022.

## Introduction

Human immunodeficiency virus (HIV) is a significant public health issue in Manitoba. Rates of infection have more than doubled since 2018 and structurally and socially disadvantaged populations are disproportionately impacted<sup>1</sup>. Second only to Saskatchewan, Manitoba's rate of newly diagnosed HIV in 2022 is the highest in Canada -- nearly three times the national rate.<sup>2</sup> Recent modelling has demonstrated that if the current trajectory remains without additional interventions, between 360-540 new cases may be reported in 2024<sup>3</sup>. In 2022, there were 196 newly diagnosed cases of HIV infection reported in Manitoba.

The objective of this report is to describe the epidemiology of newly diagnosed HIV cases among residents of Manitoba over a 10-year period, January 2013 to December 2022, with added emphasis on the current year, 2022. Surveillance data are presented by year of diagnosis, age and sex, geographic region (at time of diagnosis) and primary mode of transmission.

## Methods

### Data Sources and Case Definitions

In Manitoba, HIV is a notifiable infection under [The Public Health Act](#). Reporting requirements, case definitions and guidelines for the management of cases and contacts are outlined in the [provincial HIV protocol](#). Positive laboratory and clinical case reports are submitted to the Manitoba Health Surveillance Unit (MHSU) by laboratories and health care providers; and subsequently referred to Service Delivery Organizations (including First Nations and Inuit Health Branch, Indigenous Services Canada) for public health follow-up. Upon receipt of a referral, public health nurses collect [standardized patient and contact information](#) through client interviews, and by reviewing hospital and laboratory records and other relevant sources of information (e.g., eChart). Information collected on each client includes socio-demographic

---

<sup>1</sup>[Manitoba HIV Program Report 2018-2021](#). Manitoba HIV Program. Winnipeg, Manitoba. December 1, 2022.

<sup>2</sup>HIV in Canada: 2022 Surveillance Highlights, Public Health Agency of Canada. October 2022.

<sup>3</sup>Rueda Z, Arroyave L, Herrera M and Keynan Y. Historical trends of HIV in the Prairies 1985 – 2022. Presentation. October 2023.

information, such as address of residence, date of birth, sex; as well as clinical information, such as date of diagnosis and risk factors. Data are entered into and maintained in the province's Public Health Information Management System (PHIMS) – a Web-based application that facilitates recording and tracking of information on clients with notifiable communicable diseases. PHIMS was deployed in Manitoba in 2018 for all STBBIs. Prior to PHIMS, HIV case data were maintained in the Provincial HIV Surveillance System (Microsoft Access platform).

All newly diagnosed laboratory confirmed cases of HIV reported among residents of Manitoba between January 1, 2013 and December 31, 2022 (N=952) were included in this analysis. A laboratory confirmed case of HIV was defined as serological detection of HIV-1 and/or HIV-2 antibodies (IgM, IgA, IgG), and/or HIV p24 antigen, AND a reactive immunochromatographic confirmatory test, or detection of HIV nucleic acid by polymerase chain reaction, or isolation of HIV in culture.

HIV *testing* data reported on in this report are maintained by Cadham Provincial Laboratory Information Management System (LIMS) and were extracted in October 2023.

### Inclusion/Exclusion Criteria

All residents of Manitoba who met the case definition and who were tested with a specimen collection date between January 1, 2013, and December 31, 2022, were included in the analysis (n=952). Cases that had previously tested positive but who were newly reported to Manitoba (n=318) were excluded from the surveillance report. A summary of these “introduced” cases are included in Appendix A.

### Variable Definitions

Cases were considered to have occurred in the calendar year based on the earliest evidence (index date) of HIV infection (earliest of specimen collection date or date reported to public health) and were assigned to a health region using the client's postal code of residence at the time of investigation for cases maintained in PHIMS from 2019 to 2022. Cases for which clients had no fixed address or where postal code was missing were excluded (n=29). Similarly, clients residing in federal corrections facilities were excluded (n=4) from the geographic analyses. Clients in provincial corrections facilities at the time of investigation were mapped to health regions using postal codes, with the exception of some cases in Headingly Correctional Centre (n=14) and Winnipeg Remand Centre (n=1). In total, the geographic analysis was based on 478



newly diagnosed cases of HIV reported between 2019 and 2022 and reflects 90% of all newly diagnosed cases among residents of Manitoba during this time frame. Client's age at time of diagnosis was defined using birth date and index date; age groups were defined based on standard convention. Cases were assigned a primary mode of transmission based upon a provincially established hierarchy that reviews all reported risk factors and identifies the most likely mode of transmission (Appendix B).

## Statistical Methods

Crude rates and age-specific rates were calculated using population data from the Manitoba Health population registry as of June 1<sup>st</sup> of each year. Age-standardized rates were calculated based on direct standardization using the 2011 Canadian standard population (accessed from Statistics Canada, September 13, 2023). Direct standardization allows for comparison of rates among populations that may have different age distributions across time or geography. Data were validated and cleaned; and descriptive analyses were conducted using R version 4.1.3 (R Core Team, 2022).

## Limitations

There are a number of limitations to consider when interpreting findings from this report.

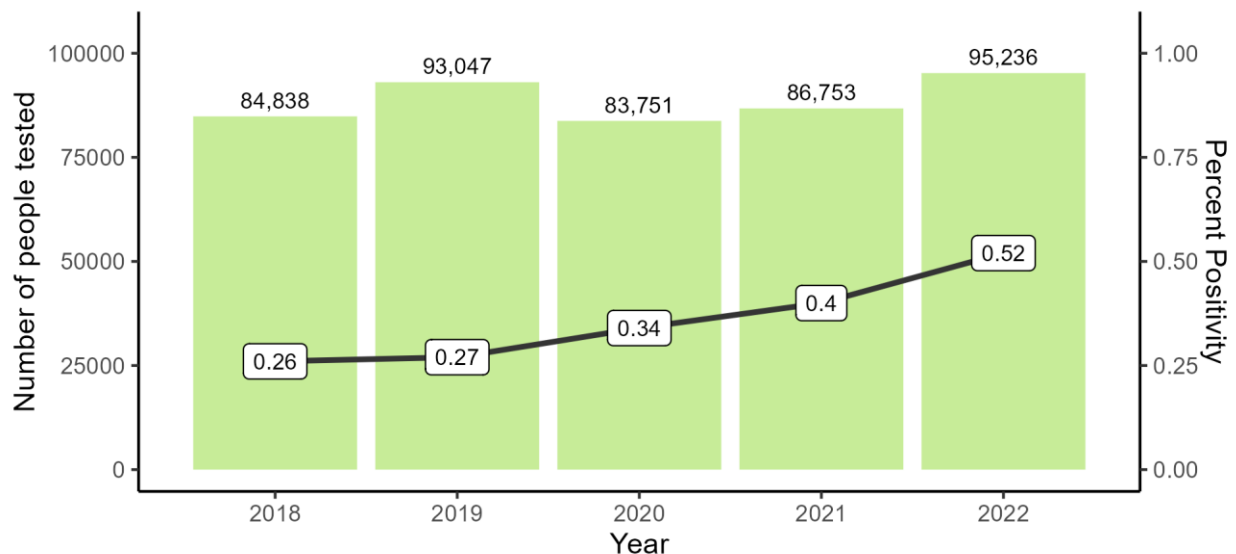
- HIV continues to be a stigmatizing infection and may be asymptomatic early in the infection. As a result, individuals may not seek medical attention, and may not submit specimens for testing. This may result in delayed diagnosis and reporting; and under-counting of cases in the province.
- The primary modes of exposure may be impacted by an individual's reason for testing (e.g., prenatal testing, contact to a known case etc.) and/or receptiveness to being tested leading to bias.
- The mechanism by which people are assigned/report their sex does not discern sex from gender for the cases included in this report. Sex, or sex at birth, can differ from a person's gender identity.
- While race, ethnicity and Indigenous identifiers are self-reported by the client at the time of public health follow-up and are documented in PHIMS, these data are known to be incomplete and are not included in this report.

- The surveillance case data used for this report and accompanying analyses did not permit exploration of populations defined by factors other than geography, age, and sex. As a result, analyses exploring other variables such as education, income, or social risk factors (e.g., homelessness) could not be readily undertaken.
- Due to different standardization methods and the choice of standard populations, age-adjusted rates may differ from other published reports.

## Findings

### HIV Testing

In Manitoba in 2022, there were 150,940 HIV antigen/antibody screen tests performed and 95,263 people tested for HIV (Figure 1; Data Table 1). This is a 9.8% increase in people tested compared to 2021 (when 86,753 people were tested) representing a return to pre-pandemic levels of screening (93,047 people were tested in 2019). The percentage of people who tested positive for HIV increased in 2022 (0.52%) compared to 2021 (0.40%). Test positivity is an important measure and should be considered alongside the number of tests performed. HIV test positivity may increase for two main reasons: 1) an increase in the incidence of the infection, or 2) screening programs are becoming more targeted to groups at increased risk of HIV infection and therefore, more cases are diagnosed with fewer tests.

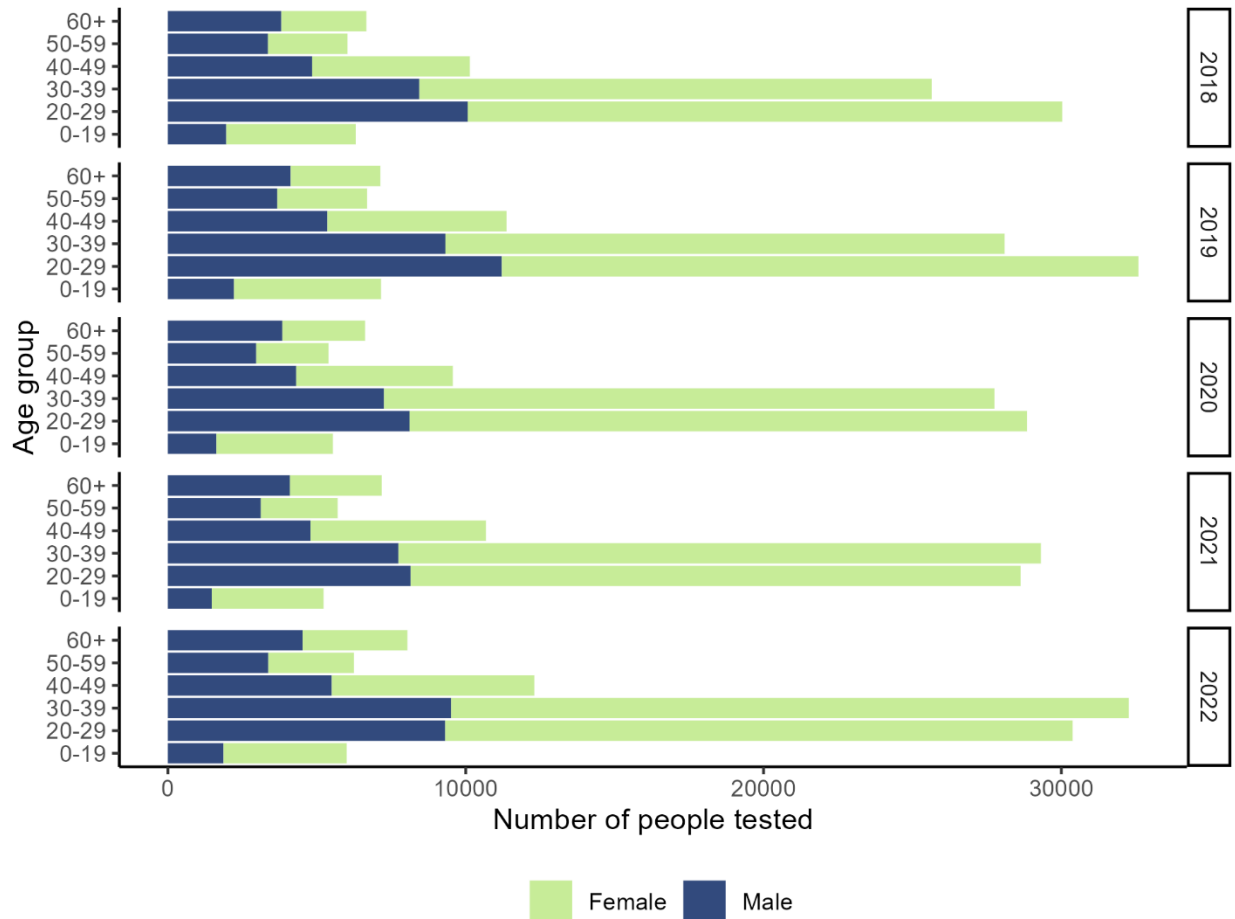


**Figure 1.** Number of people tested for HIV, processed by Cadham Provincial Laboratory and percent positivity of HIV Manitoba, 2018-2022.

*Note that data tables for figures are found at the end of this report.*

In recent years, females had twice as many HIV screen tests performed compared to males (Figure 2) and may be explained in part, by routine screening among women during pregnancy, regardless of risk status. There were 61,135 females tested in 2022 compared 34,098 males.

Among both males and females, the 20-29 year old age group had the highest number of people tested for HIV, followed by those 30-39 years of age.

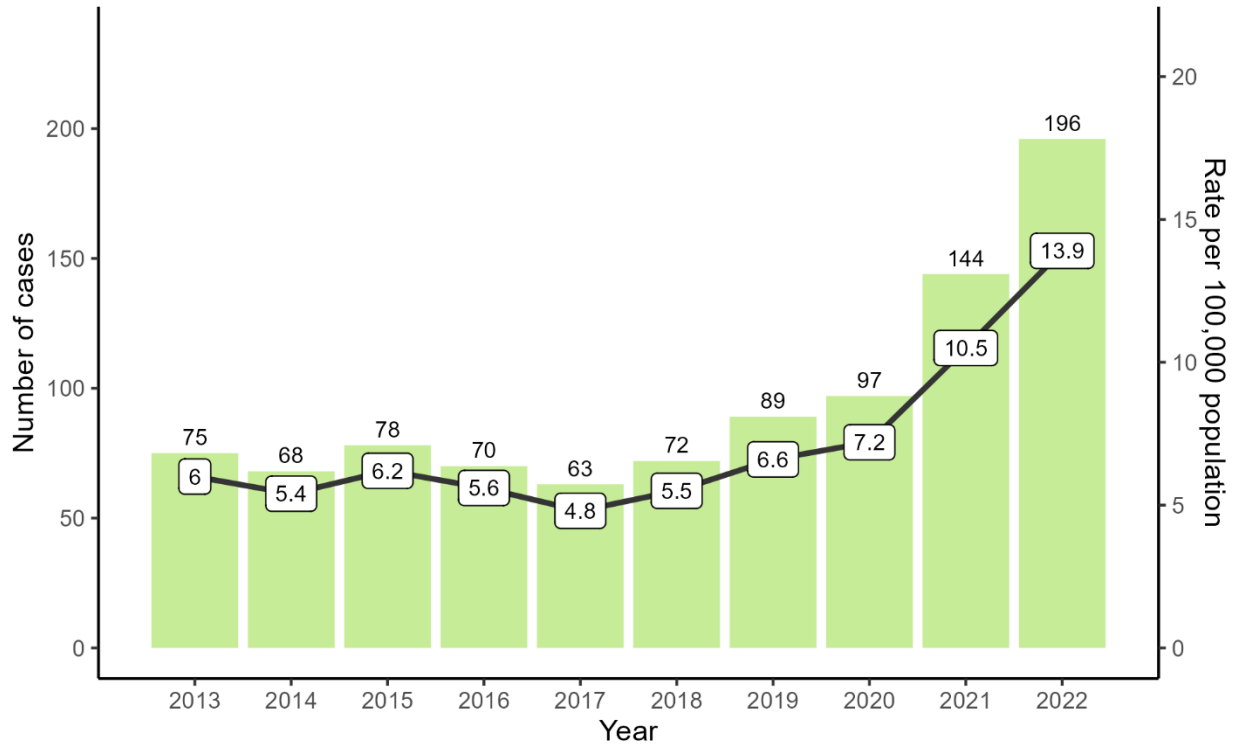


**Figure 2.** Number of people tested for HIV, processed by Cadham Provincial Laboratory, by sex and age group, Manitoba, 2018-2022.

## Surveillance

### New HIV Diagnoses in Manitoba

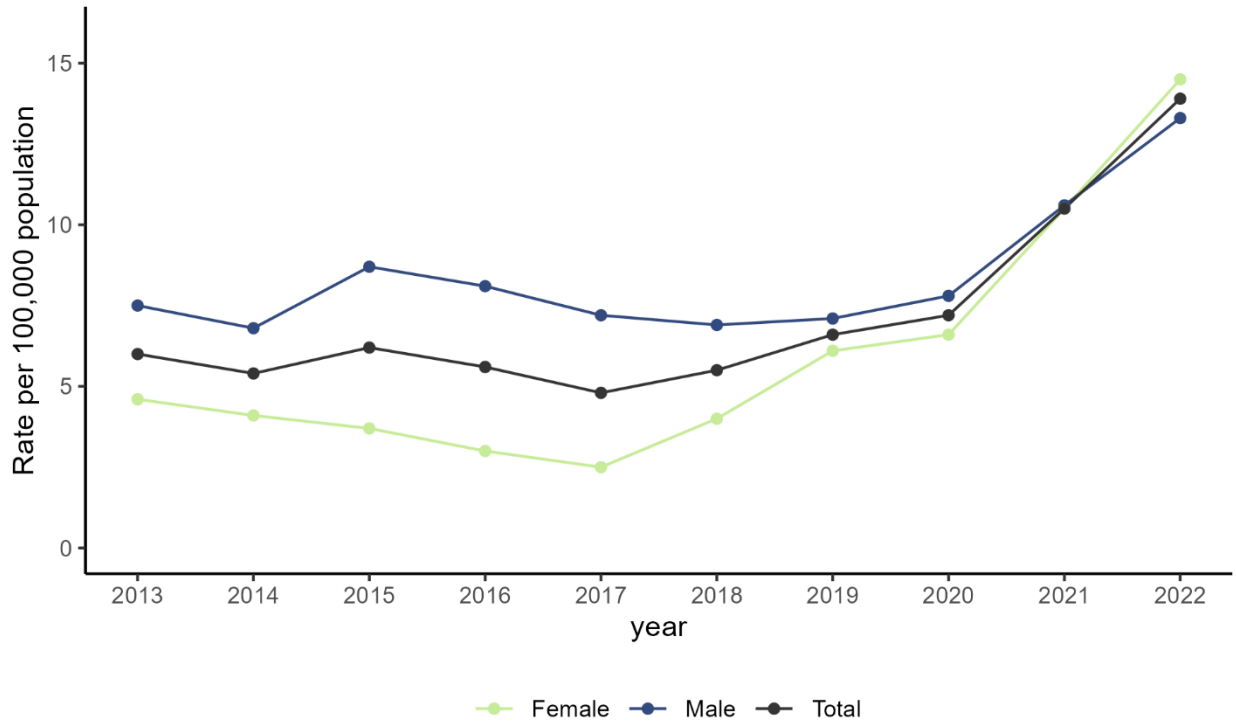
In Manitoba, there were 196 newly diagnosed cases of HIV (102 females and 93 males) reported in 2022 (13.9 cases per 100,000 population) compared to 144 cases in 2021 (10.5 cases per 100,000) (Figure 3; Data Table 2 and 3). This represents a 36% increase in the number of new HIV diagnoses from the previous year. Since 2018, the rate of new diagnoses has been dramatically increasing; and has more than doubled over the five-year period.



**Figure 3.** Number of newly diagnosed cases of HIV and age-standardized rate (per 100,000 population), Manitoba, 2013-2022.

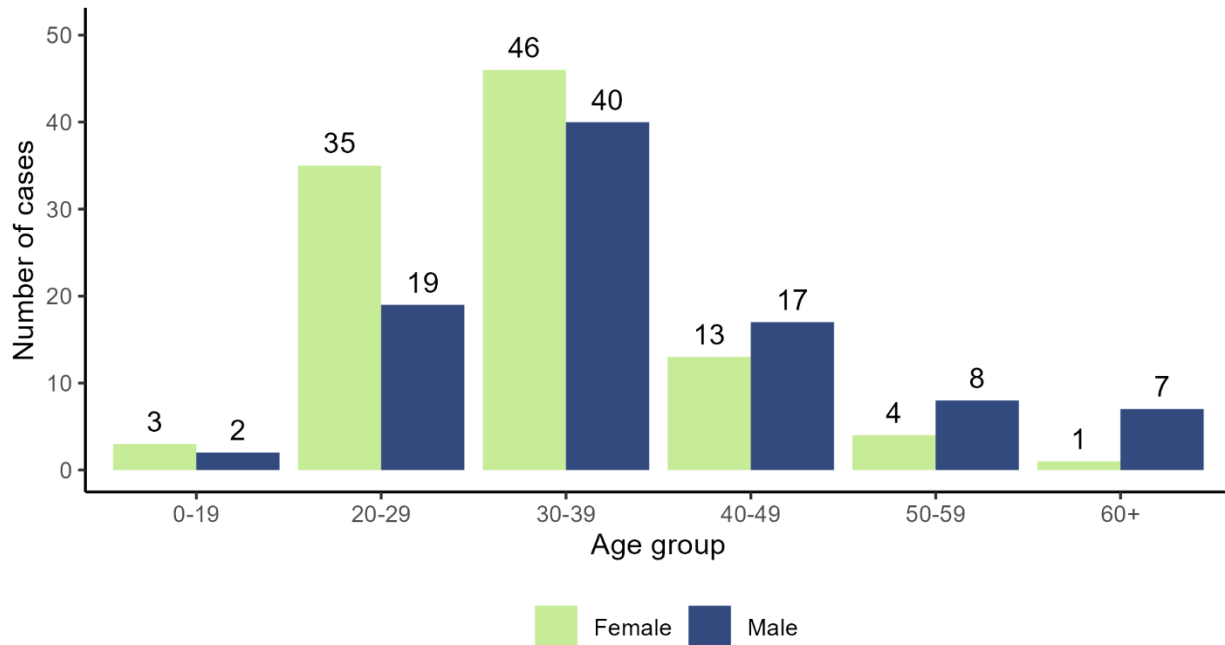
### Age and Sex Distribution

The rate of newly diagnosed cases of HIV among females has been steadily increasing from 2017 (2.5 cases per 100,000) to 2022 (14.5 cases per 100,000) (Figure 4; Data Table 3). The rate among females in 2022 surpassed the rate of infection in males (13.3 cases per 100,000).



**Figure 4.** Age-standardized rate of newly diagnosed HIV cases by year and sex, Manitoba, 2013-2022.

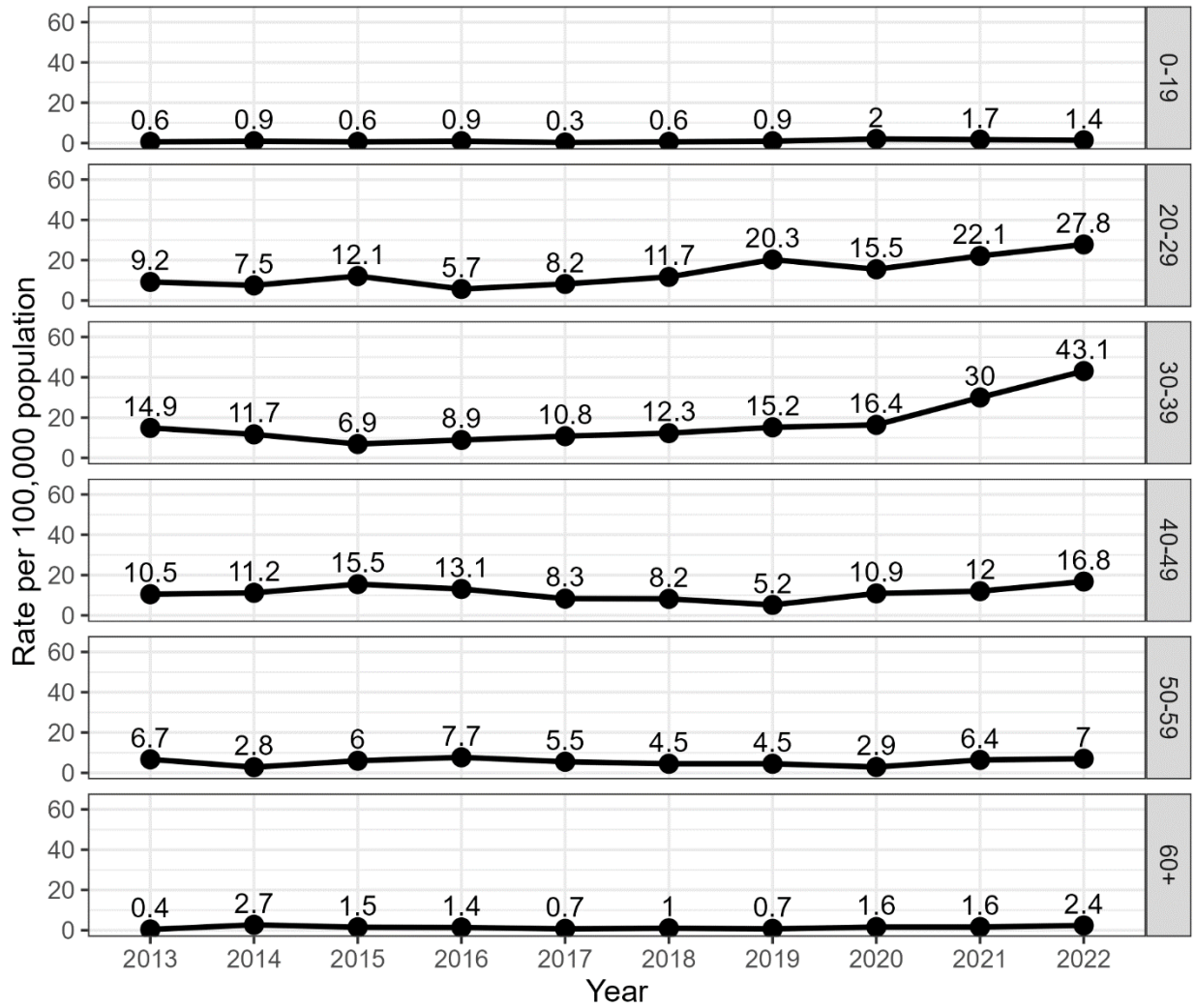
More than half of all newly diagnosed cases in 2022 were reported among females compared to one-quarter of all new cases in 2017 (Data Table 3). In 2022, the median age of males was 38.4 years, and for females, was 33.6 years.



**Figure 5.** Number of newly diagnosed HIV cases by sex and age group, Manitoba, 2022.

The distribution of cases by age group differed by sex (Figure 5). There were more cases among females in the younger age groups ( $\leq 29$  years old) while males had more cases in the older age groups ( $\geq 30$  years old). Individuals 20-39 years of age accounted for the highest proportion (and rate) of newly diagnosed cases in 2022 for both males and females (27.8 per 100,000 population among 20-29 year old individuals; 43.1 per 100,000 population among individuals 30-39 years) (Data Table 4).

Figure 6 (Data Table 4) illustrates age-specific rates of HIV by year of diagnosis. The age-specific rate of HIV has been steadily increasing among 20-29 and 30-39 year olds over the past five years. Among 20-29 year olds, the age-specific rate in 2022 increased 2.4 times compared to 2018 (11.7 vs. 27.8 cases per 100,000 cases in 2018 and 2022, respectively). Among 30-39 year olds, the age-specific rate increased 3.5 times compared to 2018 (12.3 vs. 43.1 case per 100,000 in 2018 and 2021, respectively).

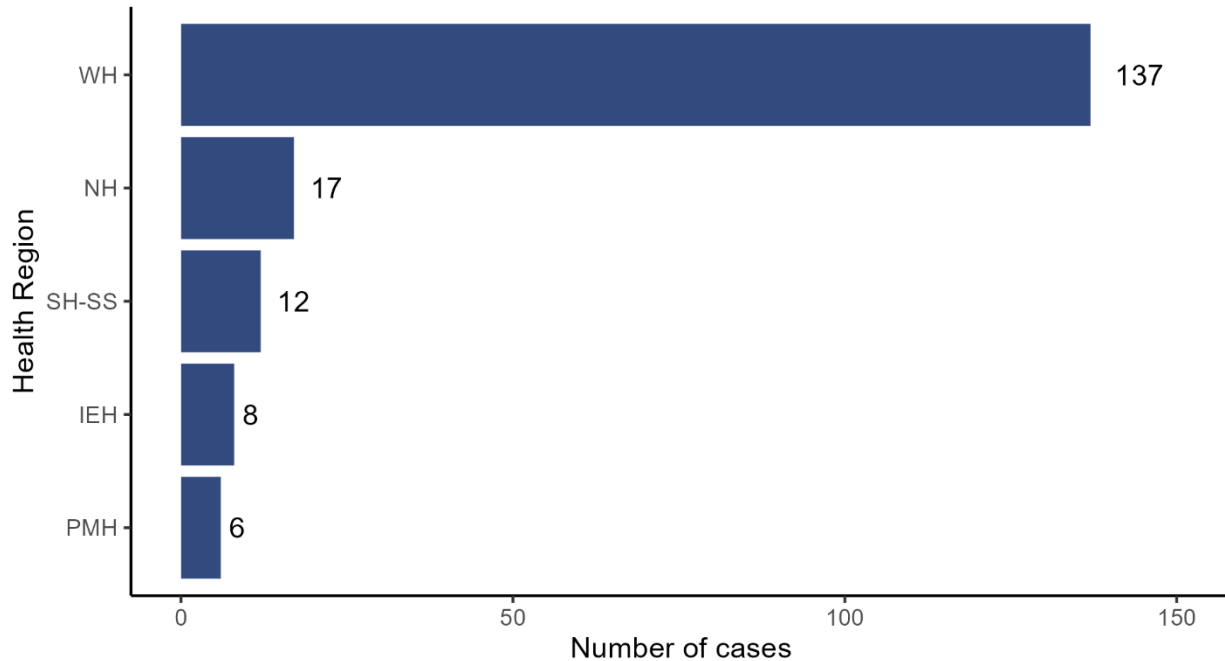


**Figure 6.** Age-specific rates of newly diagnosed HIV cases by age group and year, Manitoba, 2013-2022.



### Geography

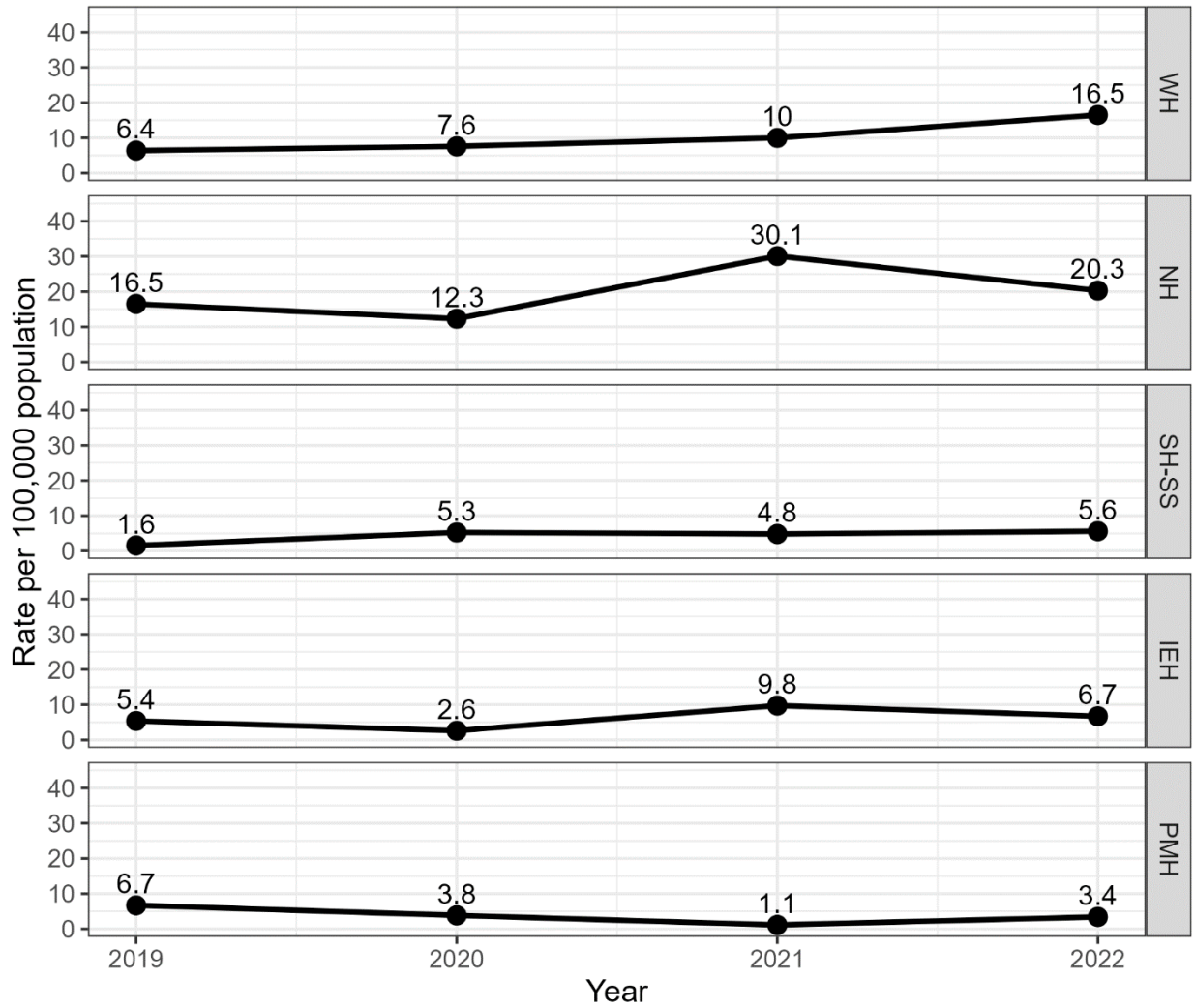
Most new HIV cases in 2022 were diagnosed and reported among residents of the Winnipeg Health Region (73.0%, Figure 7, Data Table 5). All other regions reported six or more new HIV cases in 2022.



**Figure 7.** Number of newly diagnosed HIV cases by Health Region, Manitoba, 2022

*Abbreviations: IEH (Interlake-Eastern Health), NH (Northern Health), PMH (Prairie Mountain Health), SH-SS (Southern Health – Santé Sud), WH (Winnipeg Health)*

Figure 8 (Data Table 5) depicts the change in age-standardized rates over time by Health Region. In 2022, Northern Health Region had the highest age-standardized rate of new HIV cases (20.3 cases per 100,000) followed by the Winnipeg Health Region (16.5 cases per 100,000). The rate in the Winnipeg Health Region increased 1.6 times from 10.0 cases per 100,000 population in 2021 to 16.5 cases per 100,000 in 2022; and more than doubled from 2019.

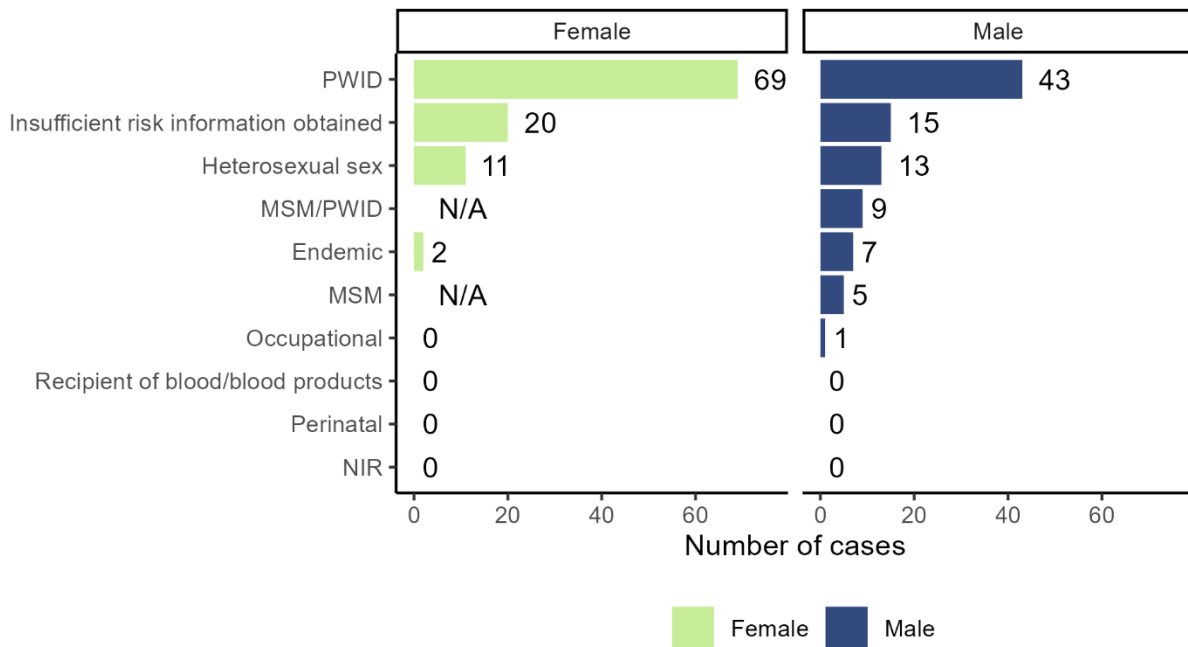


**Figure 8.** Age-standardized rate of newly diagnosed HIV cases by Health Region and year, Manitoba, 2019-2022.

Abbreviations: IEH (Interlake-Eastern Health), NH (Northern Health), PMH (Prairie Mountain Health), SH-SS (Southern Health – Santé Sud), WH (Winnipeg Health)

### Primary Mode of Transmission

Figure 9 illustrates the distribution of most likely mode of transmission by sex for newly diagnosed HIV cases in 2022. Among females (discounting individuals with insufficient risk information to assign a category), people who inject drugs (PWID) comprised the highest proportion of cases (n=69; 84.1%) followed by heterosexual sex (n=11; 13.4%). Among males, PWID comprised the greatest proportion of cases (n=43; 55.1%), followed by heterosexual sex (n=13; 16.7%). Since 2019 and every year through 2022, PWID is more commonly reported than MSM.



**Figure 9.** Distribution of newly diagnosed HIV cases by risk exposure category and sex, Manitoba, 2022.

*Abbreviations: NIR (no identifiable risk), MSM (men who have sex with men), PWID (people who inject drugs), MSM/PWID (men who have sex with men / people who inject drugs). Note: The MSM and MSM/PWID categories are not applicable (N/A) to females.*

## Summary

This report describes HIV testing trends and the epidemiology of newly diagnosed cases of HIV infection in Manitoba. The volume and number of people being tested for HIV increased in 2022, representing a return to pre-pandemic levels of screening (150,940 screen tests performed on 95,236 people). The test positivity for HIV has also been increasing over the past five years (0.26% in 2018 to 0.52% in 2022). The total number and rate of newly diagnosed HIV cases in Manitoba increased in 2022 (13.9 cases per 100,000) and more than doubled compared to the rate in 2018 (5.5 cases per 100,000). HIV continues to be an ongoing public health concern, with the greatest burden observed among the 20-39 year old age group and an increasing rate among females. The Northern Health Region had the highest rate of newly diagnosed HIV cases (20.3 cases per 100,000) followed by Winnipeg Health Region (16.5 cases per 100,000). Injection drug use was the most common primary risk exposure category reported among new HIV diagnoses in Manitoba in 2022 (84.1% among females; 55.1% among males).

## Data Tables

The following data tables provide information that accompany the figures and results presented in this report.

**Data Table 1.** Number of HIV antigen/antibody screen tests and number of people tested, processed by Cadham Provincial Laboratory, Manitoba, 2018-2022

Year	Number of screen tests	Number of people tested	Percent positivity
2018	112,496	84,838	0.26
2019	139,050	93,047	0.27
2020	128,602	83,751	0.34
2021	140,568	86,753	0.40
2022	150,940	95,236	0.52

**Data Table 2.** Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by year, Manitoba, 2013-2022

Year	Cases	Crude Rate	Age-Standardized Rate	95% CI
2013	75	5.8	6.0	4.7 – 7.6
2014	68	5.2	5.4	4.2 – 6.9
2015	78	5.9	6.2	4.9 – 7.8
2016	70	5.2	5.6	4.3 – 7.0
2017	63	4.6	4.8	3.7 – 6.2
2018	72	5.3	5.5	4.3 – 6.9
2019	89	6.5	6.6	5.3 – 8.1
2020	97	7.0	7.2	5.8 – 8.8
2021	144	10.3	10.5	8.6 – 12.4
2022	196	13.7	13.9	12.0 – 16.0

**Data Table 3.** Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by sex and year, Manitoba, 2013-2022<sup>a</sup>

Year	Cases	Crude Rate	Age-Standardized Rate	95% CI
Male				
2013	46	7.2	7.5	5.5 – 10.0
2014	42	6.5	6.8	4.9 – 9.2
2015	55	8.4	8.7	6.6 – 11.4
2016	51	7.7	8.1	6.0 – 10.7
2017	47	7.0	7.2	5.3 – 9.6
2018	45	6.7	6.9	5.0 – 9.2
2019	48	7.0	7.1	5.3 – 9.5
2020	52	7.6	7.8	5.8 – 10.2
2021	72	10.3	10.6	8.3 – 13.4
2022	93	13.1	13.3	10.8 – 16.4
Female				
2013	29	4.5	4.6	3.1 – 6.7
2014	26	4.0	4.1	2.7 – 6.0
2015	23	3.5	3.7	2.3 – 5.5
2016	19	2.8	3.0	1.8 – 4.7
2017	16	2.3	2.5	1.4 – 4.0
2018	27	3.9	4.0	2.7 - 5.9
2019	41	5.9	6.1	4.4 – 8.3
2020	45	6.5	6.6	4.8 - 8.9
2021	72	10.2	10.5	8.2 - 13.2
2022	102	14.2	14.5	11.8 – 17.6

<sup>a</sup> Excludes cases where sex was not reported.

**Data Table 4.** Number and age-specific rates (per 100,000) of newly diagnosed HIV infections by age group and year, Manitoba, 2013-2022

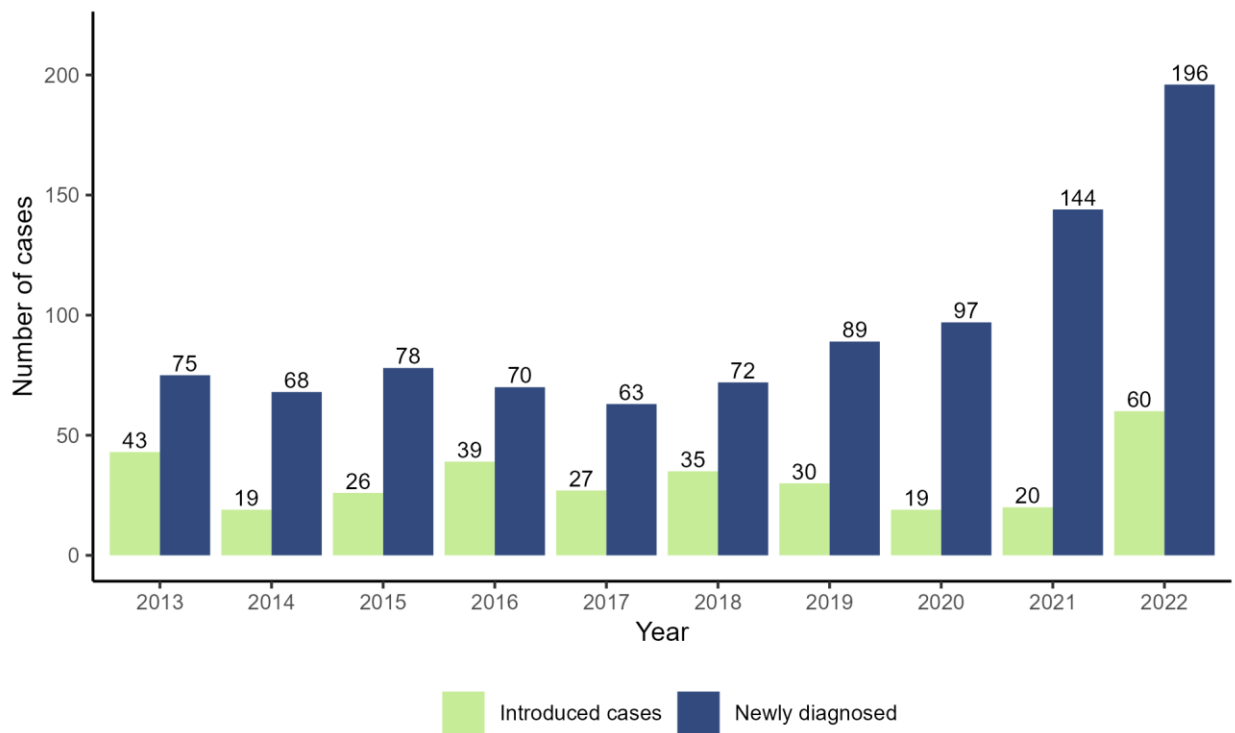
Year	Age Group											
	0-19		20-29		30-39		40-49		50-59		60+	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
2013	2	0.6	17	9.3	25	14.9	18	10.5	12	6.7	1	0.4
2014	3	0.9	14	7.5	20	11.7	19	11.2	5	2.8	7	2.7
2015	2	0.6	23	12.1	12	6.9	26	15.5	11	6.0	4	1.5
2016	3	0.9	11	5.7	16	8.9	22	13.1	14	7.7	4	1.4
2017	1	0.3	16	8.2	20	10.8	14	8.3	10	5.5	2	0.7
2018	2	0.6	22	11.7	23	12.3	14	8.2	8	4.5	3	1.0
2019	3	0.9	38	20.3	29	15.2	9	5.2	8	4.5	2	0.7
2020	7	2.0	29	15.5	32	16.4	19	10.9	5	2.9	5	1.6
2021	6	1.7	42	22.2	59	30.0	21	12.0	11	6.4	5	1.6
2022	5	1.4	54	27.8	87	43.1	30	16.8	12	7.0	8	2.4

**Data Table 5.** Number, crude and age-standardized rates (per 100,000) of newly diagnosed HIV infections by Health Region and year, Manitoba, 2019-2022

RHA	Cases	Crude Rate	Age-Standardized Rate	95% CI
2019				
WH	51	6.5	6.4	4.7 – 8.5
NH	13	16.9	16.5	8.7 – 28.5
SH-SS	3	1.4	1.6	0.3 – 4.6
IEH	6	4.5	5.4	2.0 – 11.7
PMH	11	6.4	6.7	3.3 – 12.0
2020				
WH	60	7.6	7.6	5.8 - 9.7
NH	9	11.7	12.3	5.6 – 23.5
SH-SS	10	4.7	5.3	2.5 – 9.7
IEH	3	2.2	2.6	0.5 – 7.6
PMH	6	3.5	3.8	1.4 – 8.4
2021				
WH	80	10.1	10.0	7.9 - 12.4
NH	23	29.8	30.1	19.0 - 45.5
SH-SS	10	4.6	8.5	2.3 - 8.9
IEH	11	8.1	9.8	4.9 – 17.5
PMH	2	1.2	4.2	0.1 – 4.0
2022				
WH	137	16.8	16.5	13.8 – 19.5
NH	17	21.8	20.3	11.8- 32.5
SH-SS	12	5.4	5.6	2.9 – 9.8
IEH	8	5.8	6.7	2.9 – 13.4
PMH	6	3.4	3.4	1.2 – 7.4

## Appendix A – Introduced HIV Cases

In Manitoba in 2022, there were 60 cases of HIV introduced into Manitoba. Introduced cases are those that have been previously diagnosed elsewhere but are new to the province. Although introduced cases are not incident cases and do not reflect local transmission in Manitoba, they are important to monitor as each case requires ongoing clinical care and antiretroviral therapy and may contribute to ongoing transmission.

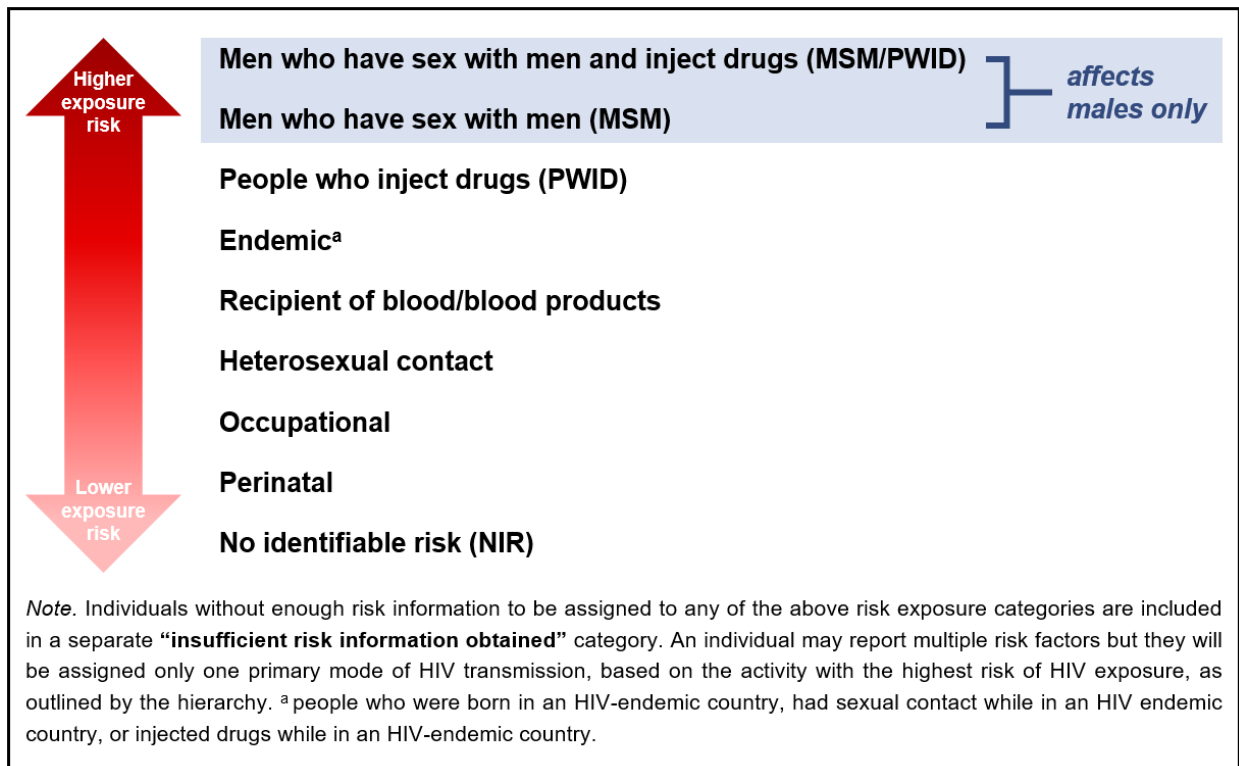


**Appendix A Figure 1:** Number of HIV cases by type of HIV case and year, Manitoba, 2013-2022



## Appendix B – Primary Mode of Transmission

Cases were assigned a primary mode of transmission based upon a provincially established hierarchy that reviews all reported risk factors for an individual and identifies the most likely mode of transmission (Appendix B Figure 1).



**Appendix B Figure 1.** Hierarchy used to assign the primary mode of HIV transmission based on client’s self reported risk factors, Manitoba.

### Definitions

#### **Men who have sex with men and inject drugs (MSM/PWID)**

Includes men who report having sex with other men (MSM) and who identify as persons who inject drugs (PWID).

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

Includes men who report having sex with other men.

**Persons who inject drugs (PWID)**

Includes persons who identify as injecting drugs.

**Endemic**

Includes persons who originated from, or resided in, an HIV-endemic country. Clients who report the following risk factors were included in this category:

- Born in an HIV-endemic country,
- Sexual contact while in an HIV endemic country, or
- Injection drug use while in 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 is 2:1 or less; or HIV prevalence is greater than or equal to 2% among women receiving prenatal care.<sup>4</sup>

**Recipient of blood/blood products**

Includes persons who indicate they have received blood or blood products as a possible mode of transmission. Canadian Blood Services has screened all blood/blood products for HIV since 1986.

**Heterosexual contact**

Includes persons who report heterosexual activity with a person(s) who is HIV positive or is at increased risk of HIV infection.

**Occupational**

Includes persons who report possible work-related HIV transmission. Examples of occupational transmission include: needle stick injury or exposure to blood and/or bodily fluids in an occupational environment.

---

<sup>4</sup>Government of Canada (2012). *Chapter 13: HIV/AIDS in Canada among people from countries where HIV is endemic.* <https://www.canada.ca/en/public-health/services/hiv-aids/publications/epi-updates/chapter-13-hiv-aids-canada-among-people-from-countries-hiv-endemic.html>

**Perinatal**

Includes persons who acquired HIV from their birthing parent during pregnancy, at the time of birth, or through breastmilk transmission.

**No identifiable risk (NIR)**

Includes persons who report they did not engage in any behaviours or activities that would allow HIV transmission.

**Insufficient risk information obtained**

This category is assigned to cases missing risk factor information required to assign a primary mode of transmission. This includes investigations with incomplete case investigation forms, investigations in progress, or cases who were lost to follow-up. Incomplete case investigation forms may be due to an inability to locate the individual or have them engage with the public health interview.

*The primary mode of transmission should be interpreted with some caution, particularly when making comparisons to previous years, due to the varying degrees of completeness as missing information creates challenges in monitoring changes over time. Beginning in 2020, cases for whom there was insufficient risk information to assign a primary mode of transmission are captured in a separate category “insufficient risk information obtained”. Prior to 2020, cases with insufficient risk information were included with cases classified as “no identifiable risk (NIR)”.*

## Appendix C – Other HIV Reports

### Manitoba HIV Program Updates

Variation in the number of cases reported in [Manitoba HIV Program Updates](#) and [provincial surveillance reports](#) may be explained by differences in case definitions and geographical boundaries. Specifically, the Manitoba HIV Program uses a case definition that requires presentation to a clinic for HIV care, whereas the annual surveillance report counts newly diagnosed cases of HIV based on laboratory confirmation. In addition, the Manitoba HIV Program provides care to HIV-positive individuals who live near and outside the provincial border. These people are included in the Manitoba HIV Program Updates. In surveillance updates, non-residents of Manitoba are excluded.

### National HIV Surveillance Reports

Manitoba provides non-nominal HIV case data to the Centre for Communicable Diseases and Infection Control at the Public Health Agency of Canada (PHAC) on an annual basis for inclusion in [national surveillance reports](#). If/where there are variations in case numbers reported in provincial and national reports, this is explained by continuous updating of information within PHIMS.