

New HIV diagnoses in Ontario, 2017



About OHESI

The Ontario HIV Epidemiology and Surveillance Initiative (OHESI) is a collaboration involving the AIDS Bureau of the Ontario Ministry of Health and Long-Term Care (MOHLTC), Public Health Ontario (PHO), the Public Health Agency of Canada (PHAC), and the Ontario HIV Treatment Network (OHTN) Applied Epidemiology Unit (AEU). The objectives of OHESI are to analyze, monitor and disseminate knowledge products on the epidemiology of HIV in Ontario. OHESI is a vital partnership that supports Ontario's ongoing ability to assess the impact of policy directions and program initiatives in the provincial "HIV/AIDS Strategy to 2026: Focusing Our Efforts - Changing the Course of the HIV Prevention, Engagement and Care Cascade in Ontario."

The success of the partnership would not be possible without the strategic, technical and resource contributions of all the partners. OHESI also receives ongoing advice from a community advisory committee: people working in the community-based HIV service sector and HIV clinics whose input helps ensure that OHESI reports and other products support collective efforts and impact in neighborhoods, communities and organizations across the province.

Background

In 2013-2014, the OHTN set up the OHTN Applied Epidemiology Unit (AEU), under a funding agreement with the MOHLTC, to support ongoing production of epidemiological information to support Ontario's response to HIV.

In 2014-2015, the OHTN AEU initiated the Ontario HIV Epidemiology and Surveillance Initiative (OHESI) and continues to provide administrative and technical support for the partnership.

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Summary

The Ontario HIV Epidemiology and Surveillance Initiative (OHESI) is pleased to announce the release of a new report titled “New HIV diagnoses in Ontario, 2017”.

This report describes, updates and expands on the trends in HIV diagnoses in Ontario over the past decade (2008-2017) with a focus on new HIV diagnoses in 2017. It presents analyses by sex, age, race/ethnicity, geographic location and priority populations (i.e. subgroups of Ontarians who experience a higher risk of HIV).

This report is the first to use data from the Laboratory Enhancement Program (LEP) to better understand trends in new HIV diagnoses in Ontario. This new information allowed us to:

- reduce double counting by removing HIV diagnoses with a documented history of a previous HIV-positive test result *within* Ontario
- Identify HIV diagnoses with a documented history of a previous HIV-positive test result *outside* of Ontario (‘out-of-province’ diagnoses). These individuals were initially diagnosed (and likely infected) outside of the province, and then moved to Ontario and were tested again. To help target prevention programs, it is important to exclude these diagnoses for some analyses. At the same time, it is important to report on all new HIV diagnoses so the health system can plan services for all people living with HIV in the province.

A few key findings of the report include:

- The number of new HIV diagnoses has increased each year since 2014. In 2017, there were a total of 916 new HIV diagnoses. When ‘out-of-province’ diagnoses were removed, there were 797 new HIV diagnoses.
- Gay, bisexual and other men who have sex with men still account for the largest proportion of HIV diagnoses while women account for approximately 1 of 5 new HIV diagnoses.
- Between 2012 to 2017, the proportion of new HIV diagnoses has decreased among White men and increased among Black men while, over the same period, the proportion of new diagnoses has increased among White women and decreased among Black women.
- Toronto has the highest number and rate of new HIV diagnoses in Ontario, almost twice the rate of the next highest health region (Ottawa).

Table of Contents

Summary	3
Table of Contents.....	4
Figure Table.....	5
Introduction.....	7
Key Findings.....	9
About the Data	12
Data and Figures	14
1. Overall.....	14
2. By Sex.....	16
3. By age	19
4. By priority population.....	22
5. By race/ethnicity	26
6. By health region.....	28
7. By health region and priority population	32
Definitions.....	37
Abbreviations	39
Appendices	40
1. Technical Notes.....	40
2. Priority Populations.....	41
3. Statistical Methods.....	41
4. iPHIS vs. PHOL Data.....	42
5. Geographic Regions	43
6. Tables	46

Figure Table

1. Overall

Figure 1.1 Number of new HIV diagnoses, Ontario, 2008 to 2017	14
Figure 1.2 Rate of new HIV diagnoses per 100,000 people, Ontario, 2008 to 2017	15

2. By sex

Figure 2.1 Number of new HIV diagnoses by sex, Ontario, 2008 to 2017	16
Figure 2.2 Rate of new HIV diagnoses per 100,000 people by sex, Ontario, 2008 to 2017	17
Figure 2.3 Percent of new HIV diagnoses by sex, Ontario, 2008 to 2017	18

3. By age

Figure 3.1 Percent of new HIV diagnoses by age, Ontario, 2017	19
Figure 3.2 Rate of new HIV diagnoses per 100,000 people by age, Ontario, 2017.....	19
Figure 3.3 Median age of new HIV diagnoses, by sex, Ontario, 2008 to 2017	20
Figure 3.4 Percent of new HIV diagnoses by age and sex, Ontario, 2017.....	21
Figure 3.5 Rate of new HIV diagnoses per 100,000 people by age and sex, Ontario, 2017.....	21

4. By priority population

Figure 4.1 Percent of new HIV diagnoses by priority population (where known), Ontario, 2017	22
Figure 4.2 Percent of new HIV diagnoses by priority population (where known), males, Ontario, 2017	23
Figure 4.3 Percent of new HIV diagnoses by priority population (where known), females, Ontario, 2017	23
Figure 4.4 Percent of new HIV diagnoses by priority population (where known), Ontario, 2012 to 2017	24
Figure 4.5 Percent of new HIV diagnoses by priority population (where known), males, Ontario, 2012 to 2017	25
Figure 4.6 Percent of new HIV diagnoses by priority population (where known), females, Ontario, 2012 to 2017.....	25

5. By race/ethnicity

Figure 5.1 Percent of new HIV diagnoses by race/ethnicity (where known), Ontario, 2012 to 2017.....	26
Figure 5.2 Percent of new HIV diagnoses by race/ethnicity (where known), males, Ontario, 2012 to 2017	27
Figure 5.3 Percent of new HIV diagnoses by race/ethnicity (where known), females, Ontario, 2012 to 2017	27

6. By health region

Figure 6.1 Number of new HIV diagnoses by health region, Ontario, 2017.....	28
Figure 6.2 Rate of new HIV diagnoses per 100,000 people by health region, Ontario, 2017	28
Figure 6.3 Number of new HIV diagnoses, by health region and sex, Ontario, 2017	29
Figure 6.4 Rate of new HIV diagnoses per 100,000 people by health region and sex, Ontario, 2017.....	29
Figure 6.5 Rate of new HIV diagnoses per 100,000 people by health region, Ontario, 2012 to 2017	30
Figure 6.6 Rate of new HIV diagnoses per 100,000 people by health region, males, Ontario, 2012 to 2017.....	31
Figure 6.7 Rate of new HIV diagnoses per 100,000 people by health region, females, Ontario, 2012 to 2017.....	31

7. By health region and priority population

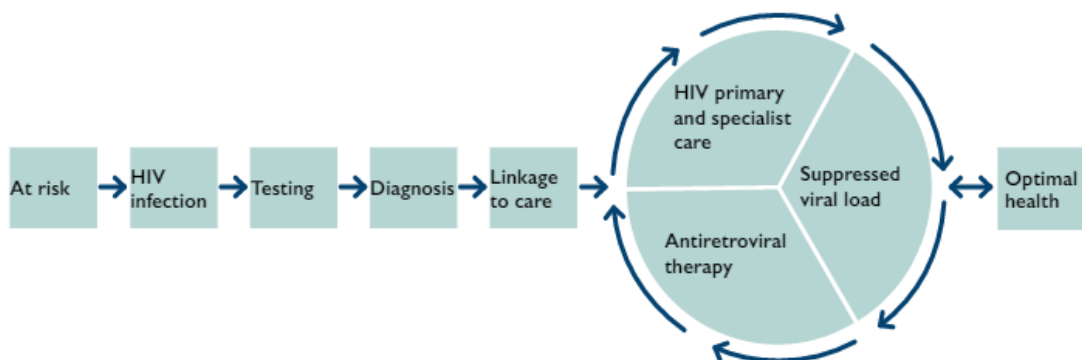
Figure 7.1 Percent new HIV diagnoses in gay, bisexual or other men who have sex with men (GBMSM) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined).....	32
Figure 7.2 Percent new HIV diagnoses in African, Caribbean and Black (ACB) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)	33
Figure 7.3 Percent new HIV diagnoses in persons who use injection drugs (PWID) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)	34
Figure 7.4 Percent new HIV diagnoses in Indigenous of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)	35
Figure 7.5 Percent new HIV diagnoses in women* of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)	36

Introduction

Why look at patterns in new HIV diagnoses?

HIV diagnosis is an early step in the HIV prevention, engagement and care cascade (Figure i) and is critical in order for people living with HIV to be linked to care.

Figure i. The HIV prevention, engagement, and care cascade



Ontario needs timely, accurate data on new HIV diagnoses to understand:

- 1) the total number of people living with HIV who will need care to guide the planning and delivery of appropriate services
- 2) trends in new diagnoses (i.e. people likely infected in the province) to help target prevention initiatives to those most at risk and evaluate their impact.

It is important to note that **a new HIV diagnosis is not the same as a new HIV infection**. Many people living with HIV are not diagnosed in the same year they became infected. Trends in new diagnoses can be influenced by factors other than infections, such as frequency of HIV testing and migration patterns, and it is difficult to disentangle these different effects.

What's new in this report?

This report is the first to use data from the Laboratory Enhancement Program (LEP) as well as information collected during diagnostic testing to more accurately reflect trends in new HIV diagnoses in Ontario.

LEP data has been used to:

- 1) update new HIV diagnoses counts and reduce double counting by removing HIV diagnoses with a documented history of a previous HIV-positive diagnosis *within* Ontario. For example, in the past an individual who initially tested HIV-positive through anonymous or non-nominal testing, and then later received a nominal HIV-positive test, would be counted twice. Using testing history information collected on the LEP can identify that an individual was previously known to be positive and reduce double-counting.¹

¹ For this reason, historic counts and rates in this report will differ from previous reports.

2) identify HIV diagnoses with a documented history of a previous HIV-positive diagnosis *outside* Ontario (i.e. ‘out-of-province’ diagnoses). These individuals were initially diagnosed (and likely infected) outside of the province, and then moved to Ontario and were tested again. It is important to report on all new HIV diagnoses so the health system can plan services to meet the needs of all people living with HIV in Ontario². However, in some analyses, it is also important to exclude these individuals in order to understand where new HIV infections are occurring in the province and target prevention programs more effectively. (For information on the use of the LEP to remove duplicates and ‘out-of-province diagnoses’, please see the [‘Technical Notes’](#) section of this report.)

² Note: New HIV diagnoses includes individuals who have been previously diagnosed outside of Ontario (“out-of-province”) as well as those who are diagnosed for the first time in Ontario. See ‘Definitions’.

Key Findings

Overall

- There were a total of 916 new HIV diagnoses in Ontario in 2017, down from 1,066 in 2008 but up from 784 in 2013.
- Over the same 10-year period, the rate of new HIV diagnoses (i.e. number of new diagnoses per 100,000 people³) dropped from 8.3 in 2008 to 5.8 in 2013 (-30.1%) and then increased to 6.5 (+12.1%) in 2017.
- The increase in the number and rate of new HIV diagnoses in Ontario from 2016 to 2017 appears to be due to an increase in 'out-of-province' diagnoses.
- When 'out-of-province' diagnoses are removed from the analysis: there were 797 new HIV diagnoses in Ontario in 2017, down from 1,038 in 2008 but up from 747 in 2013; and the rate of new HIV diagnoses per 100,000 people dropped from 8.1 in 2008 to 5.5 in 2013 (-32.1%) and then increased to 5.6 (+1.8%) in 2017.

By sex

- In 2017, there were 717 new HIV diagnoses among males and 195 among females – equivalent to a diagnosis rate per 100,000 people of 10.3 for males and 2.7 for females.
- From 2008 to 2017, the new HIV diagnosis rate has consistently been three to four times higher among males compared to females.
- Females accounted for approximately 1 in 4 new diagnoses in 2008, 1 in 6 in 2013, and 1 in 5 in 2017.
- When 'out-of-province' diagnoses were excluded: in 2017, there were 641 new HIV diagnoses among males and 152 among females – equivalent to a diagnosis rate per 100,000 people of 9.2 for males and 2.1 for females.
- From 2013 to 2017, the rate of new HIV diagnoses remained stable among males but increased among females. However, when 'out-of-province' diagnoses were excluded, the HIV diagnosis rate remained stable among both males and females.
- From 2016 to 2017, the rate of new HIV diagnoses in males and females increased, but when 'out-of-province' diagnoses were excluded, the HIV diagnoses rate decreased in both males and females.

By age

- In 2017, the most common age category at HIV diagnosis was older for females (35 to 39 years) than males (25 to 29 years).
- Between 2008 to 2017, the median age for new HIV diagnoses decreased for males and increased for females. In 2017, the median age at HIV diagnosis was 37 for females and 36 years for males.
- There were no consistent differences in age trends when excluding 'out-of-province' diagnoses.

By priority population

- The majority of new HIV diagnoses between 2012 to 2017 were among gay, bisexual and other men who have sex with men (GBMSM) who accounted for about 60% of new HIV diagnoses each

³ Rates of new diagnoses are a more accurate reflection of trends because they take into account any changes in the size of the population. All rates reported are per 100,000 people.

year; followed by African, Caribbean and Black (ACB), women*⁴, people who use injection drugs (PWID) and Indigenous people.

- From 2012 to 2017, GBMSM accounted for three quarters of new HIV diagnoses among males but, since 2012/13, the proportion of new HIV diagnoses steadily increased among the ACB male population.
- From 2012 to 2017, the ACB female population accounted for the majority of new HIV diagnoses among all females but that proportion decreased between 2014/15 and 2016/17 while, between 2012/13 and 2016/17, the proportion of new HIV diagnoses increased among females who use injection drugs and Indigenous females.
- When 'out-of-province' diagnoses were excluded, the proportion of new HIV diagnoses in 2017 decreased among the ACB population, and increased in the PWID and Indigenous populations.

By race/ethnicity

- From 2012 to 2017, about half of new HIV diagnoses each year were among individuals with White race/ethnicity and a quarter were among people with Black race/ethnicity.
- Half (49.8%) of males with a new HIV diagnosis in 2016/17 were of White race/ethnicity and over half (54.3%) of females with a new HIV diagnoses in 2016/17 were of Black race/ethnicity.
- In 2016/17 compared to 2012/13, the proportion of new HIV diagnoses decreased among White males while increasing among Black males and increased among White females while decreasing among Black females.
- Between 2012 to 2017, there was an increase in the proportion of new HIV diagnoses where the individuals were Black males, East/Southeast Asian males, Arab/West Asian males, Latin American males and White females. There was a decrease in the proportion of new HIV diagnoses where the individuals were White males, Indigenous males and Black females. Note: not all data was reported due to low two-year combined diagnoses counts.

By health region

- In 2017, the number of new HIV diagnoses was more than four times higher and the HIV diagnosis rate was almost three times higher in Toronto than in other health regions. The next highest HIV diagnosis rates were in Ottawa followed by the South West health region.
- New diagnosis rates were two to five times higher in males than in females across all health regions, with the greatest difference in sex in Toronto and the smallest difference in sex in Ottawa.
- In 2016/17 compared to 2012/13, the new HIV diagnosis rate increased among males in all regions except Ottawa where there was a decrease; and it increased among females in all regions except Toronto where there was a decrease.
- When 'out-of-province' diagnoses were excluded, the number and rate of new HIV diagnoses in 2017 were proportionally lower across all health regions.

By health region and priority population

- Compared to other health regions, among all new diagnoses within each health region, the proportion of new HIV diagnoses who were GBMSM was highest in Toronto (followed by Eastern), the proportion of new HIV diagnoses who were ACB was highest in Ottawa (followed by Central East), the proportion of new HIV diagnoses who were PWID was the highest in

⁴ Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

Northern (followed by South West), the proportion of new HIV diagnoses who were Indigenous was highest in Northern (followed by South West) and the proportion of new diagnoses who were women^s was highest in Northern (followed by Ottawa).

By public health unit

- For data by public health unit, please see the OHESI report titled '[HIV in Ontario by public health unit: Testing, new diagnoses and care cascade](#)'.

^s Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

About the Data

Where do these data come from?

- Data on new HIV diagnoses in this report come from the Public Health Ontario Laboratory (PHOL), which conducts all HIV diagnostic testing requested by health care providers in Ontario.
- When someone gets an HIV test in Ontario, the health care provider ordering the test (e.g. a physician or HIV counselor) fills out a form that is sent to PHOL. This form, known as an HIV test requisition, collects information on the individual being tested, including their sex, age and HIV risk factors.
- If the person tests positive, the Laboratory Enhancement Program (LEP) sends a second form to the provider who ordered the test to collect information that may have been missed on the first form. Since 2009, the LEP form has collected information on race/ethnicity, country of birth, and test history (data not historically collected on the HIV test requisition).⁶
- For this report, data from both the requisition and LEP forms were combined to describe trends in new HIV diagnoses in Ontario.

What are some of the strengths of these data and our approach to presenting it?

- New HIV diagnoses are broken down by priority populations, groups of people identified as high risk of HIV transmission or experiencing a greater need for HIV related services in Ontario. Information on HIV risk factors, race/ethnicity and country of birth are used to assign an individual with a new HIV diagnosis to one (or more) priority populations. Unlike the categories traditionally used to describe new HIV diagnoses (known as exposure categories), these priority populations are not mutually exclusive. This means that an individual with a new HIV diagnosis can be assigned to more than one priority population (if applicable) – an approach which better represents Ontario’s HIV epidemic. Please see the ‘[Definitions](#)’ and ‘[Technical Notes](#)’ sections of this report for more details on priority populations.
- Trends in new HIV diagnoses are presented as numbers as well as rates per 100,000 people, where possible. While numbers of diagnoses are influenced by the size of the underlying population, rates take this into account and remove population size as a possible explanation for any observed differences.
- Diagnoses are combined over two-year periods (2012/13, 2014/15 and 2016/17) to describe trends by priority population, race/ethnicity and health regions. This is done to reduce the effects of year-to-year variation (which can be particularly influential for populations with a small number of diagnoses) and more clearly present trends over time.

What are some of the limitations of this report?

- Information on race/ethnicity and priority population is missing for about a third of new HIV diagnoses so the number of HIV diagnoses attributed to a specific race/ethnicity or priority population is likely an underestimate of the actual number. If a specific priority population is more likely to be missing information on HIV risk factors or race/ethnicity, that population may be underrepresented in the data.
- Only about 50% of LEP forms provide information on previous testing history so the data may overstate the number of new diagnoses within Ontario and understate the number of out-of-province diagnoses.

⁶ Race/ethnicity, country of birth, transgender identity and more options within the HIV testing history section were added to the HIV test requisition in 2018. Therefore, this information is not available for this report.

- Documentation of information on the requisition/LEP forms may vary from provider to provider. For example, some providers may ask the person getting tested about their HIV risk factors and race/ethnicity, while other providers may gather this information from a previous medical chart or use clinical intuition.

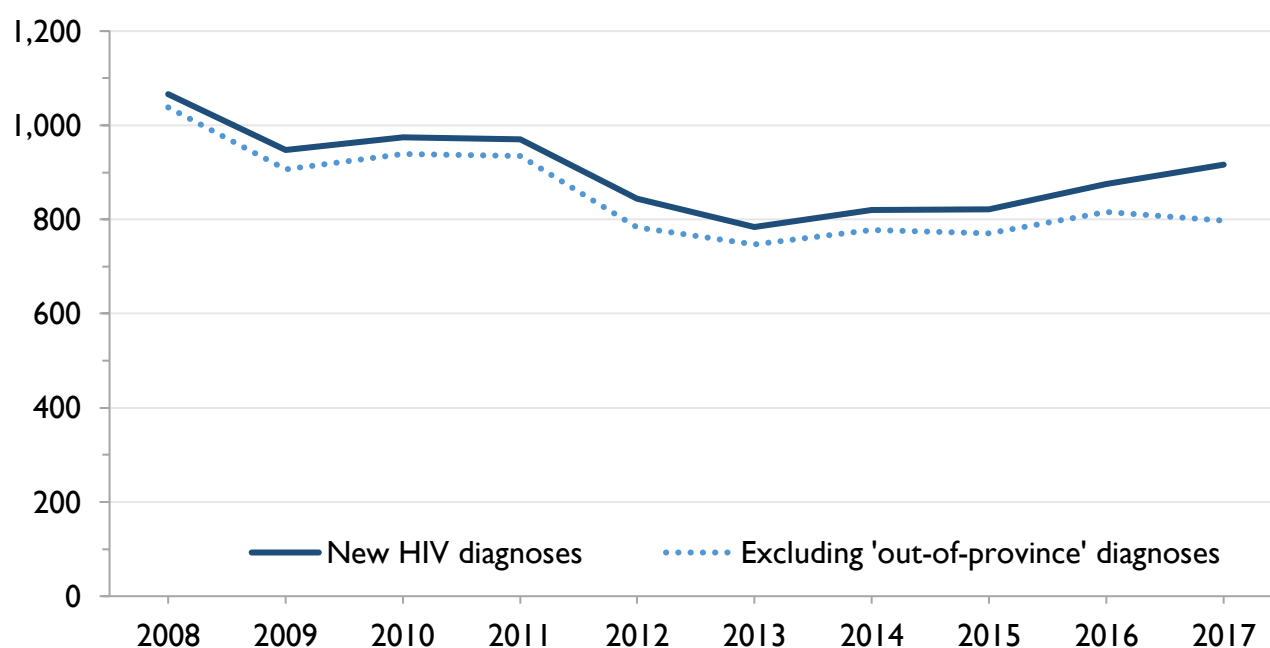
Data and Figures

The figures in this section describe trends in new HIV diagnoses over the past decade (2008 to 2017). In general, each page contains one to two figures and each figure is accompanied by a brief description (snapshot), as well, if appropriate, a table displaying data over time. In some figures, data is also shown for HIV diagnoses in which 'out-of-province' diagnoses were excluded.

See the '[Technical notes](#)' section for more information on the data source and how these numbers were calculated, and the '[Tables](#)' section for all the numbers underlying the figures. Tables containing more historical data than presented in the figures are available at www.OHESI.ca

I. Overall

Figure I.1 Number of new HIV diagnoses, Ontario, 2008 to 2017



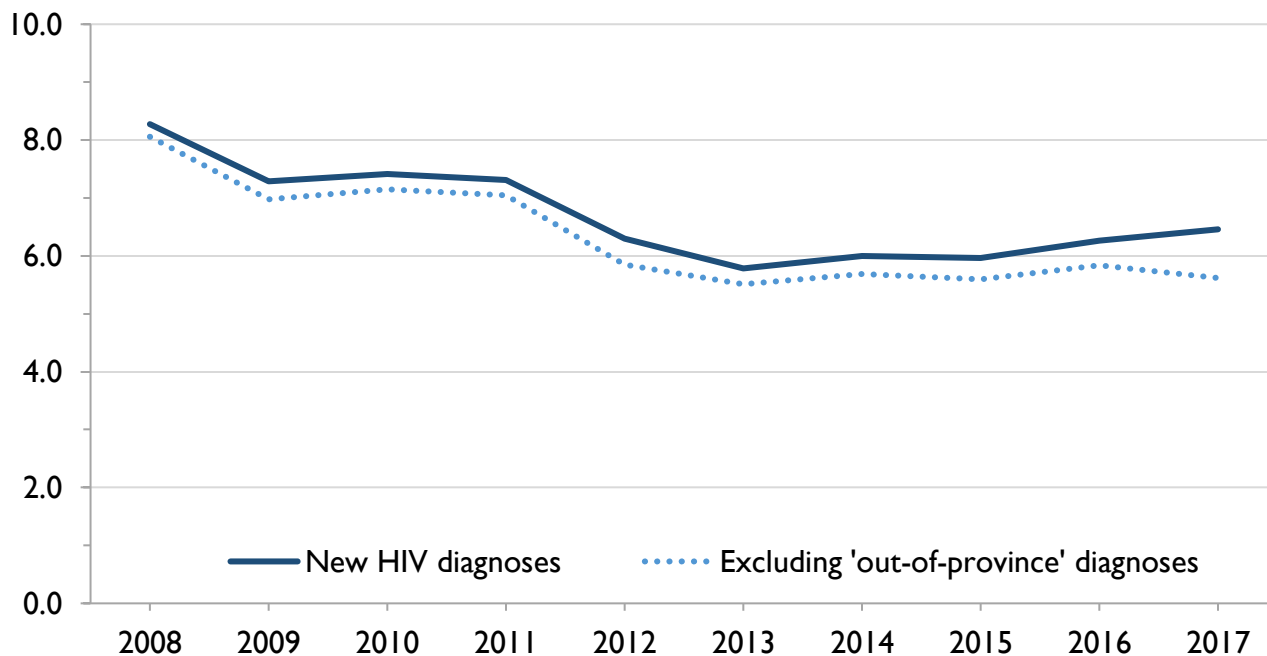
	2008	2013	2017
New HIV diagnoses	1,066	784	916
Excluding out-of-province diagnoses	1,038	747	797

Snapshot

The number of new HIV diagnoses has increased since a low in 2013 when there were 784 new HIV diagnoses and 747 excluding 'out-of-province' diagnoses.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. See [Table I.1](#) for underlying data.

Figure I.2 Rate of new HIV diagnoses per 100,000 people, Ontario, 2008 to 2017



	2008	2013	2017
New HIV diagnoses	8.3	5.8	6.5
Excluding out-of-province diagnoses	8.1	5.5	5.6

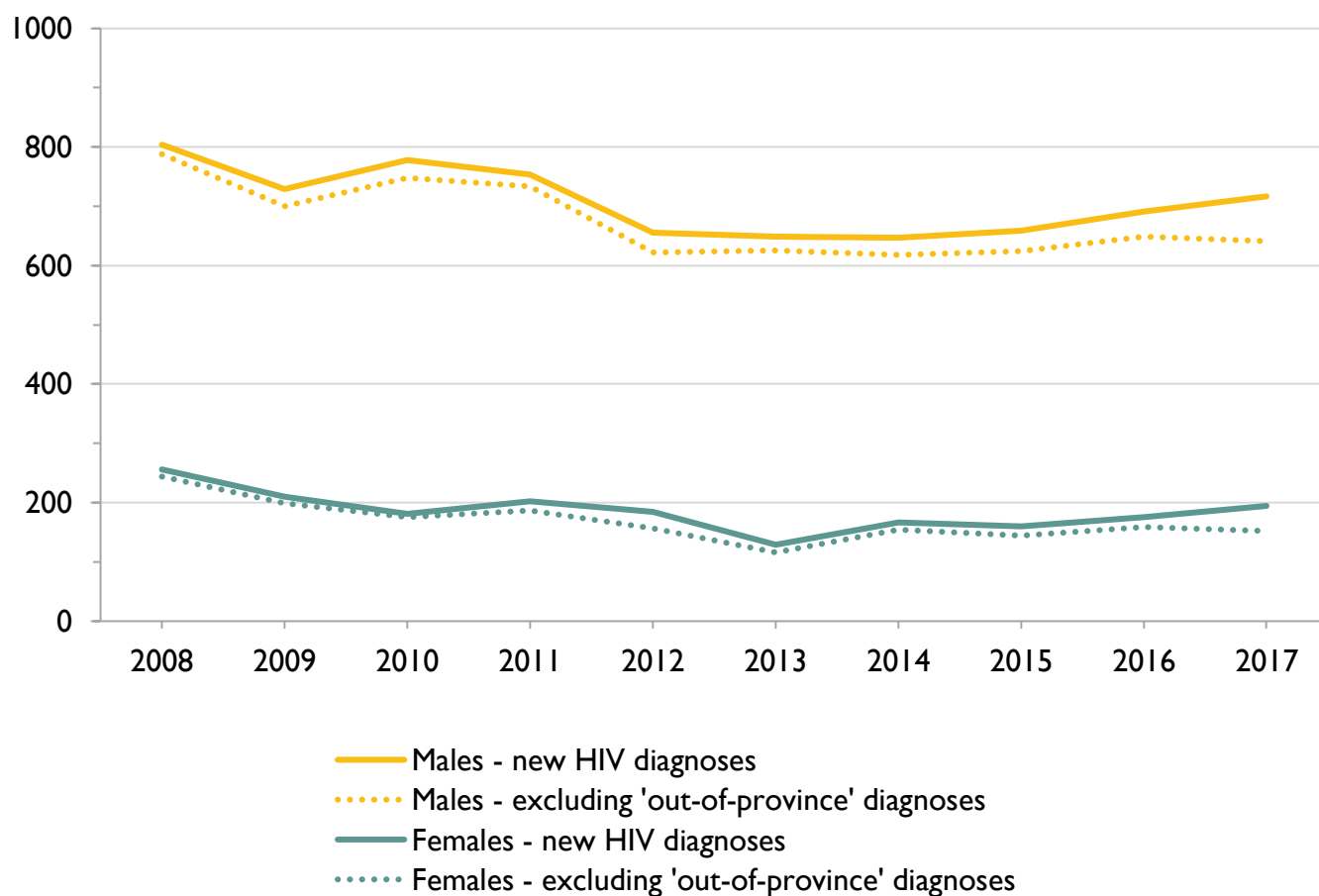
Snapshot

The new HIV diagnosis rate has increased since a low in 2013 when the rate was 5.8 per 100,000 people for new diagnoses and 5.5 per 100,000 people when excluding 'out-of-province' diagnoses.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. See [Table I.1](#) for underlying data.

2. By Sex

Figure 2.1 Number of new HIV diagnoses by sex, Ontario, 2008 to 2017



	2008	2013	2017
New HIV diagnoses			
Male	804	649	717
Female	256	129	195
Excluding out-of-province diagnoses			
Male	788	625	641
Female	244	116	152

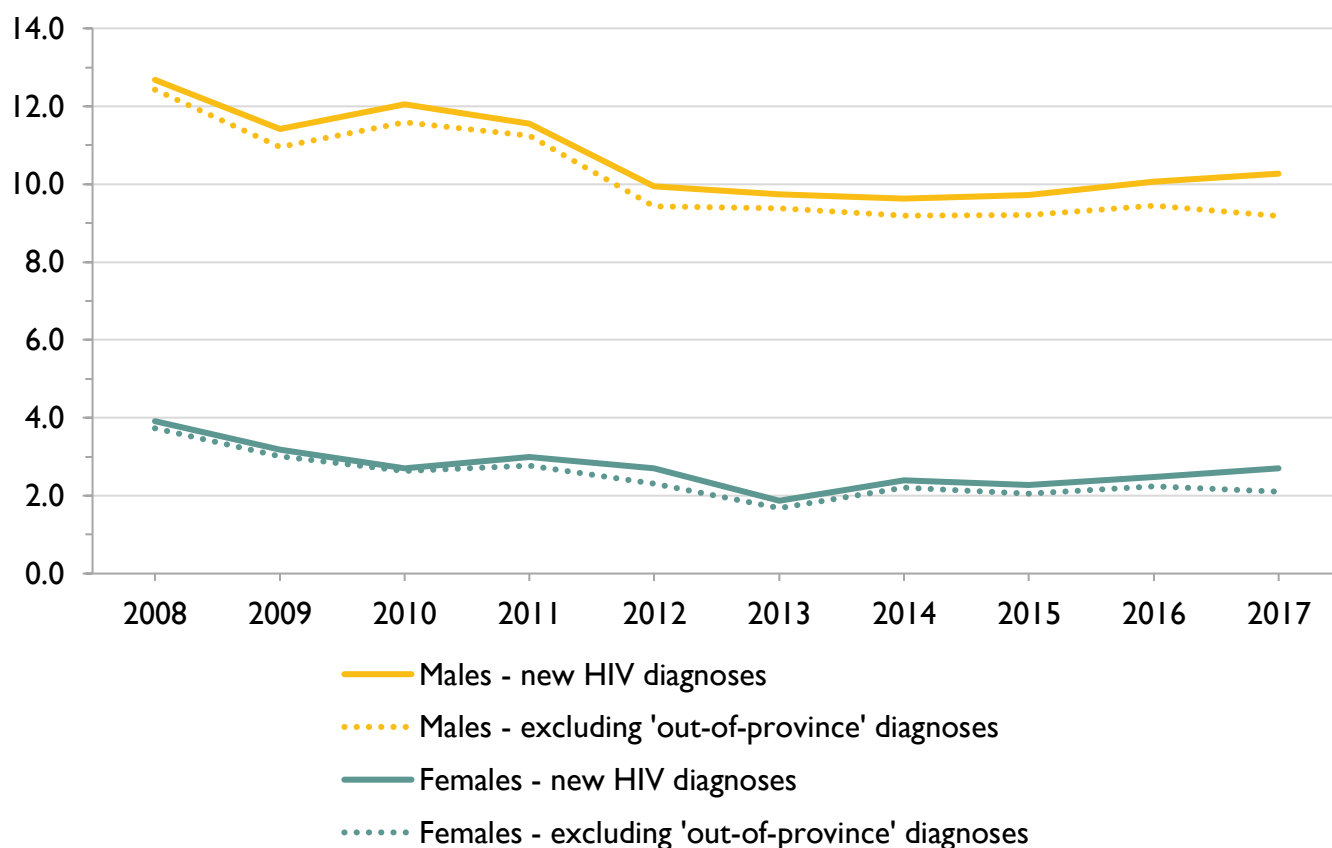
Snapshot

The number of new HIV diagnoses among males has increased since a low in 2014 when there were 647 new HIV diagnoses and 618 excluding 'out-of-province' diagnoses.

The number of new HIV diagnoses among females has increased since a low in 2013 when there were 129 new HIV diagnoses and 116 excluding 'out-of-province' diagnoses.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Diagnoses with unknown sex excluded (less than 1% of diagnoses). See [Table 2.1](#) and [Table 2.2](#) for underlying data.

Figure 2.2 Rate of new HIV diagnoses per 100,000 people by sex, Ontario, 2008 to 2017



	2008	2013	2017
New HIV diagnoses			
Male	12.7	9.7	10.3
Female	3.9	1.9	2.7
Excluding out-of-province diagnoses			
Male	12.4	9.4	9.2
Female	3.7	1.7	2.1

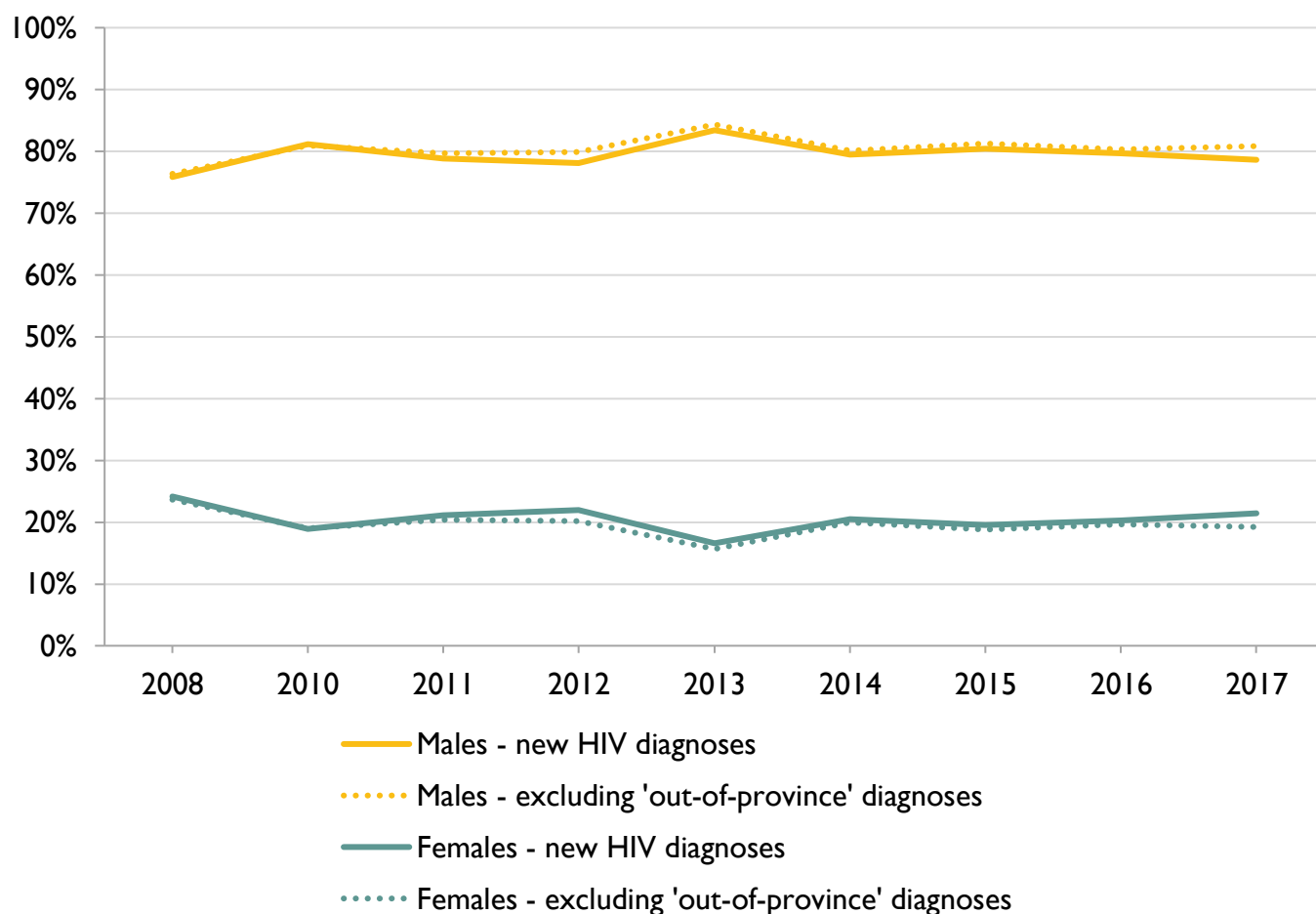
Snapshot

The rate of new HIV diagnoses among males remained stable since a low in 2013 when the rate was 9.7 per 100,000 people. When 'out-of-province' diagnoses were excluded, the rate among males remained stable since a low in 2013 when the rate was 9.4 per 100,000 people.

The rate of new HIV diagnoses among females has increased since a low in 2013 when the rate was 1.9 per 100,000 people. When 'out-of-province' diagnoses were excluded, the rate among females remained stable since a low in 2013 when the rate was 1.7 per 100,000 people.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. Diagnoses with unknown sex excluded (less than 1% of diagnoses). See [Table 2.1](#) and [Table 2.2](#) for underlying data.

Figure 2.3 Percent of new HIV diagnoses by sex, Ontario, 2008 to 2017



	2008	2013	2017
New HIV diagnoses			
Male	75.8	83.4	78.6
Female	24.2	16.6	21.4
Excluding out-of-province diagnoses			
Male	76.4	84.3	80.8
Female	23.6	15.7	19.2

Snapshot

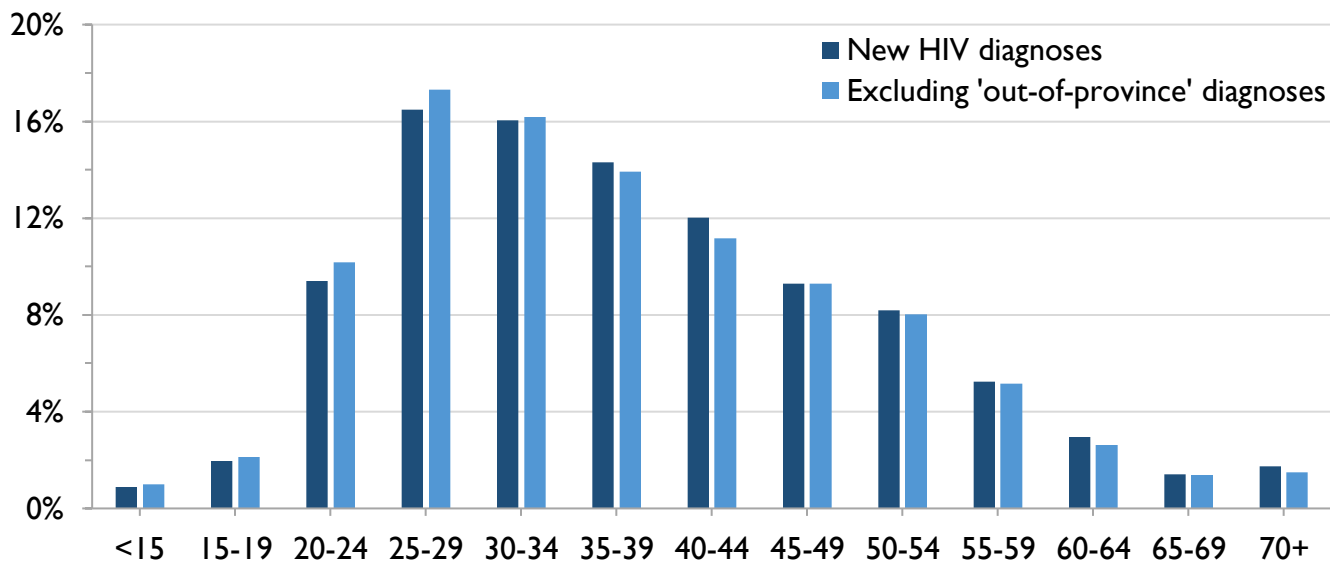
The percent of new HIV diagnoses among males ranged from a low of 75.8% in 2008 to a high of 83.4% in 2013. There were no significant differences when 'out-of-province' diagnoses were excluded.

The percent of new HIV diagnoses among females ranged from a high of 24.2% in 2008 to a low of 16.6% in 2013. There were no significant differences when 'out-of-province' diagnoses were excluded.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Diagnoses with unknown sex excluded (less than 1% of diagnoses). See [Table 2.1](#) and [Table 2.2](#) for underlying data.

3. By age

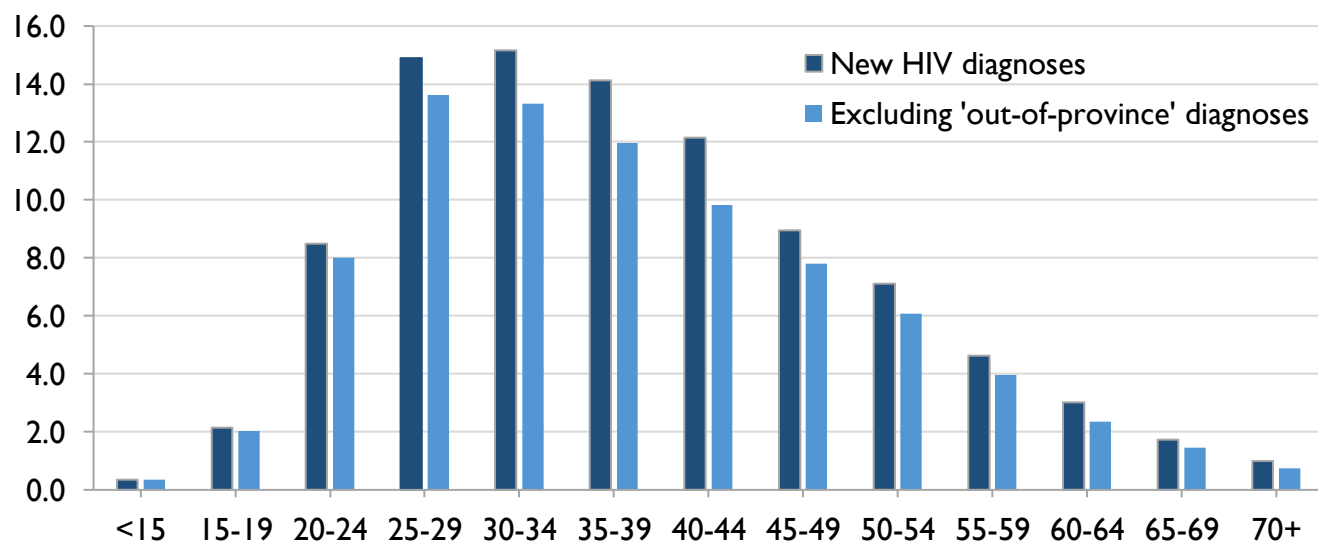
Figure 3.1 Percent of new HIV diagnoses by age, Ontario, 2017



Snapshot

In 2017, the most common age category at HIV diagnosis was 25 to 29 for both new diagnoses (16.5%) and when excluding 'out-of-province' diagnoses (17.3%).

Figure 3.2 Rate of new HIV diagnoses per 100,000 people by age, Ontario, 2017

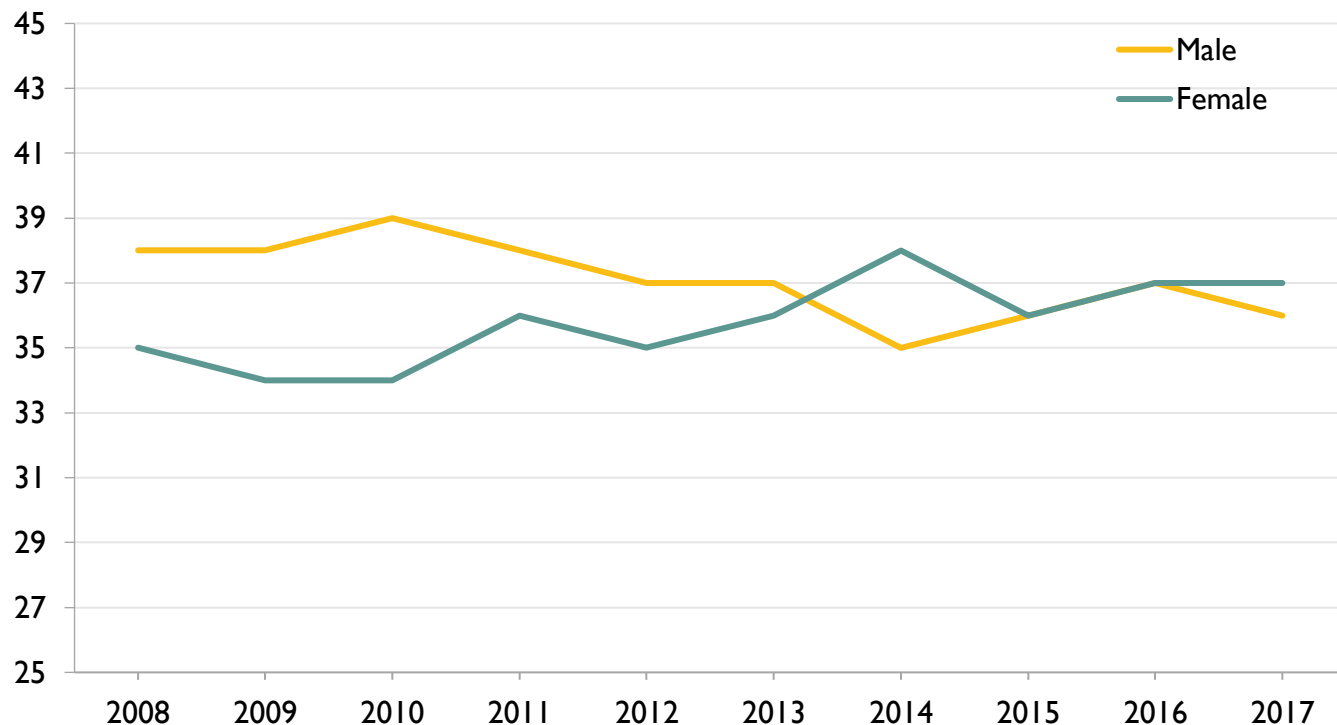


Snapshot

In 2017, the highest HIV diagnosis rate was in the 30 to 34 age category for new diagnoses (15.2) and in the 25 to 29 age category when excluding 'out-of-province' diagnoses (13.6).

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown age excluded (less than 1% of diagnoses). See technical notes for definitions. Rates calculated using Statistics Canada population estimates, accessed 04/09/2018. See [Table 3.1](#) for underlying data.

Figure 3.3 Median age of new HIV diagnoses, by sex, Ontario, 2008 to 2017



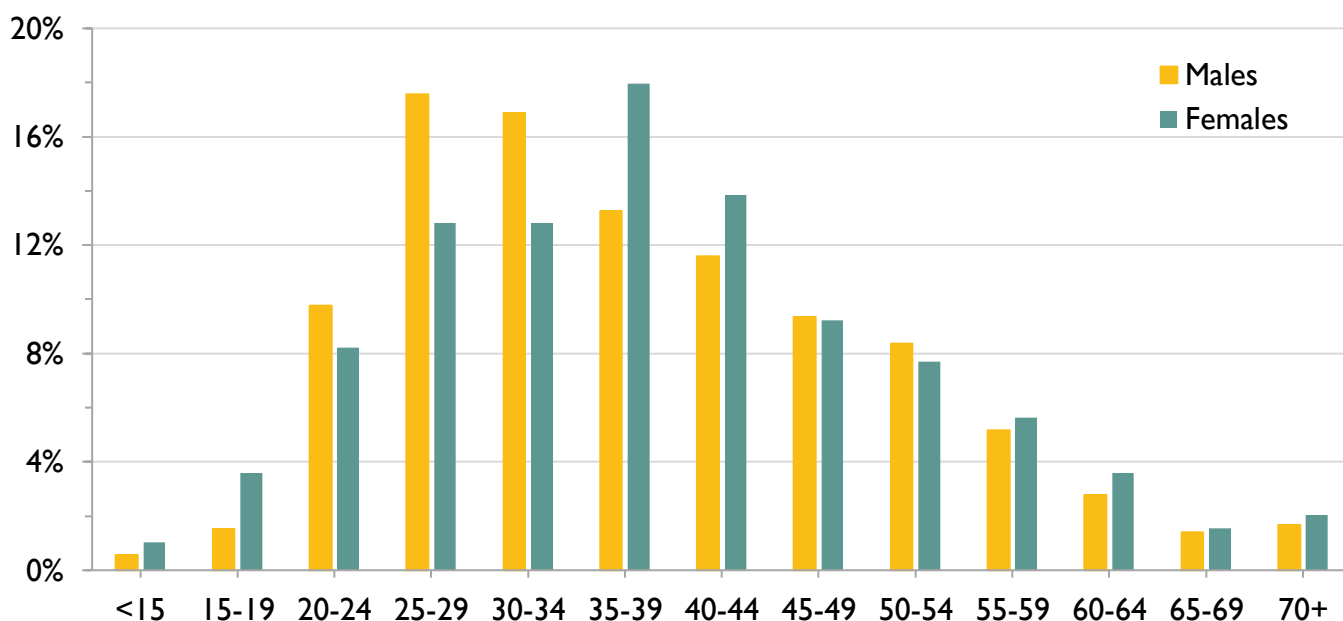
	2008	2013	2017
Male	38	37	36
Female	35	36	37

Snapshot

There are opposing trends among the median age of new diagnoses by sex. In 2008, median age of new HIV diagnoses was three years older in males (38 years) compared to females (35 years), In 2017, median age of new HIV diagnoses was one year older in females (37 years) compared to males (36 years). Trends did not significantly differ when excluding ‘out-of-province’ diagnoses and are not shown on this figure.

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown sex and age excluded (less than 1% of diagnoses). See [Table 3.4](#) for underlying data.

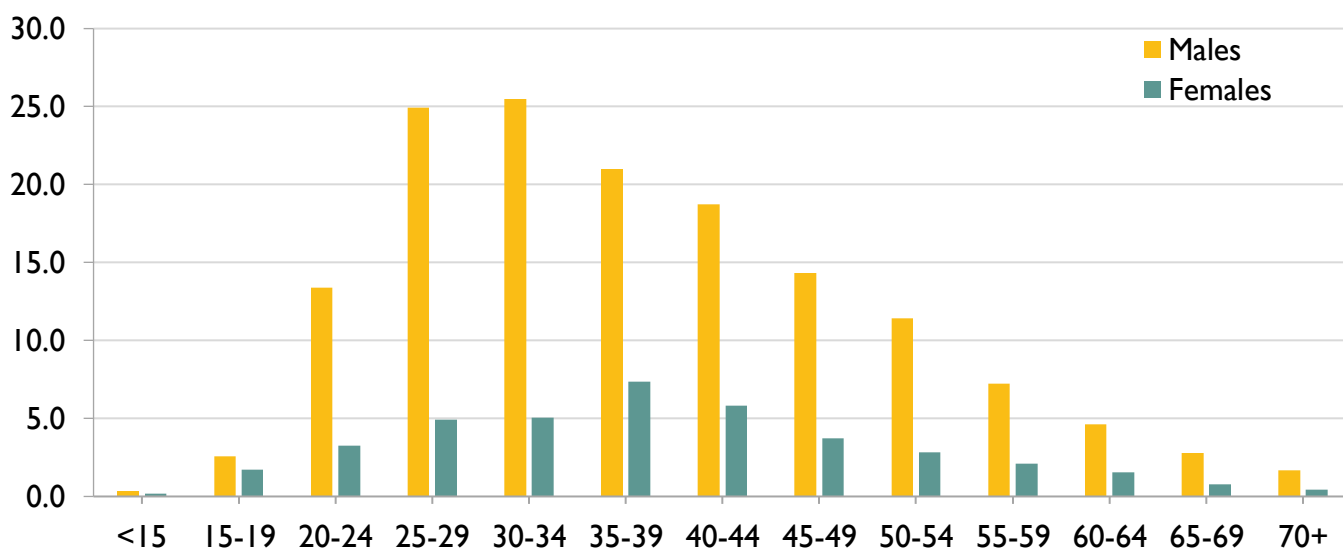
Figure 3.4 Percent of new HIV diagnoses by age and sex, Ontario, 2017



Snapshot

In 2017, the most common age category at HIV diagnosis was 25 to 29 years for males (17.6%) and 35 to 39 years for females (17.9%).

Figure 3.5 Rate of new HIV diagnoses per 100,000 people by age and sex, Ontario, 2017



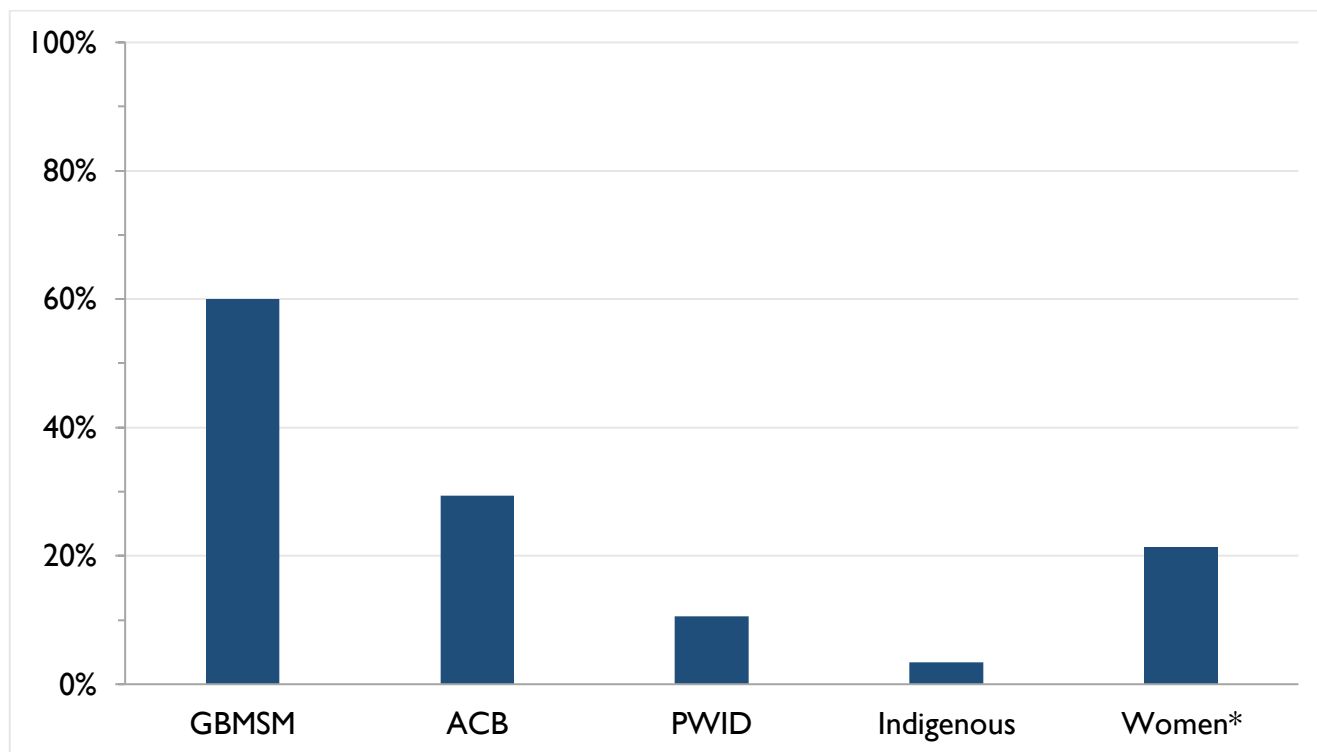
Snapshot

In 2017, the new HIV diagnosis rate was highest in the 30 to 34 category for males (25.5 per 100,000 people) and the 35 to 39 age category for females (7.4 per 100,000 people). The rate was higher for males compared to females in all age categories.

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown sex and age excluded (less than 1% of diagnoses.) Rates calculated using Statistics Canada population estimates, accessed 04/09/2018. See [Table 3.2](#) and [Table 3.3](#) for underlying data.

4. By priority population

Figure 4.1 Percent of new HIV diagnoses by priority population (where known), Ontario, 2017

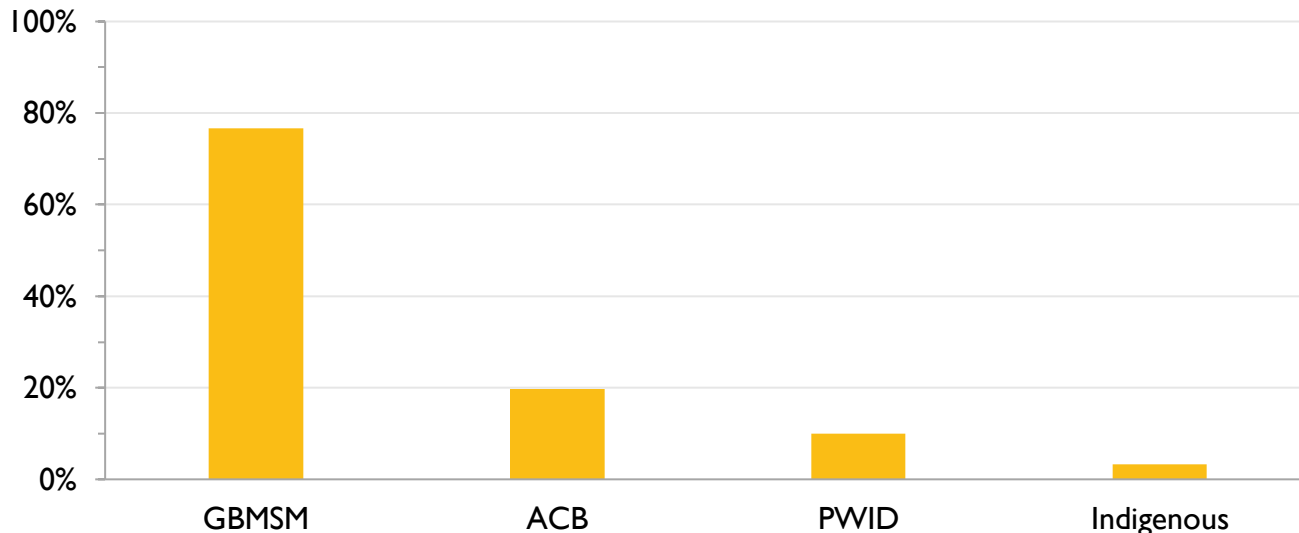


Snapshot

In 2017, the majority of new HIV diagnoses were among the GBMSM priority population, followed by the ACB, women*, PWID and Indigenous priority populations. When 'out-of-province' diagnoses were excluded, the percent ACB and the percent women* priority populations were lower.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. GBMSM=gay, bisexual and other men who have sex with men; ACB=African, Caribbean and Black; PWID=people who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). See [Table 4.1](#) for underlying data. Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

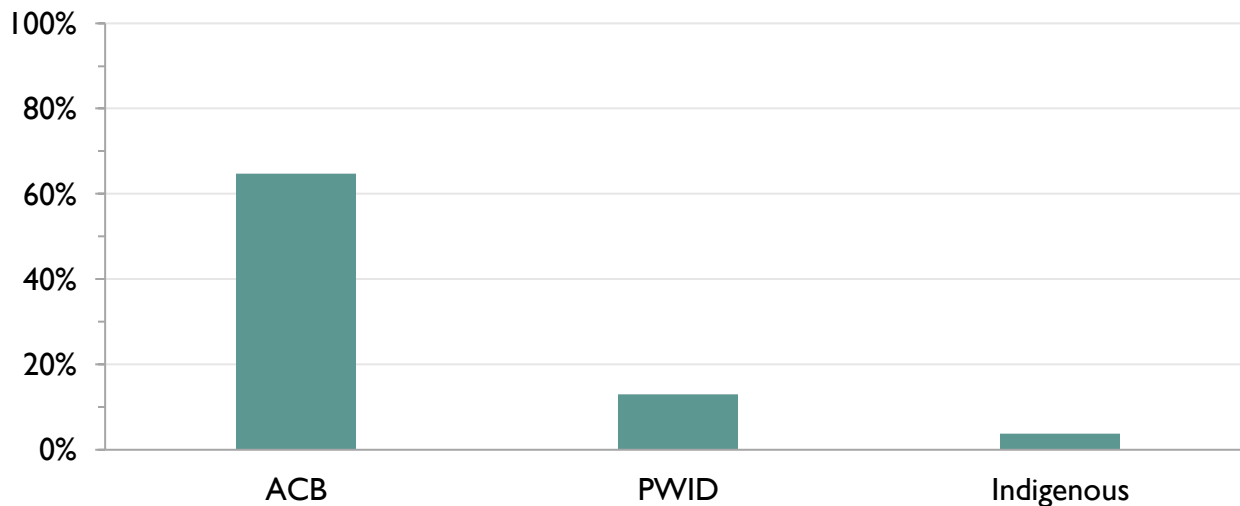
Figure 4.2 Percent of new HIV diagnoses by priority population (where known), males, Ontario, 2017



Snapshot

In 2017, the majority of new HIV diagnoses among males were from the GBMSM priority population, followed by ACB, PWID and Indigenous priority populations. When ‘out-of-province’ diagnoses were excluded, the percent ACB priority population was slightly lower.

Figure 4.3 Percent of new HIV diagnoses by priority population (where known), females, Ontario, 2017

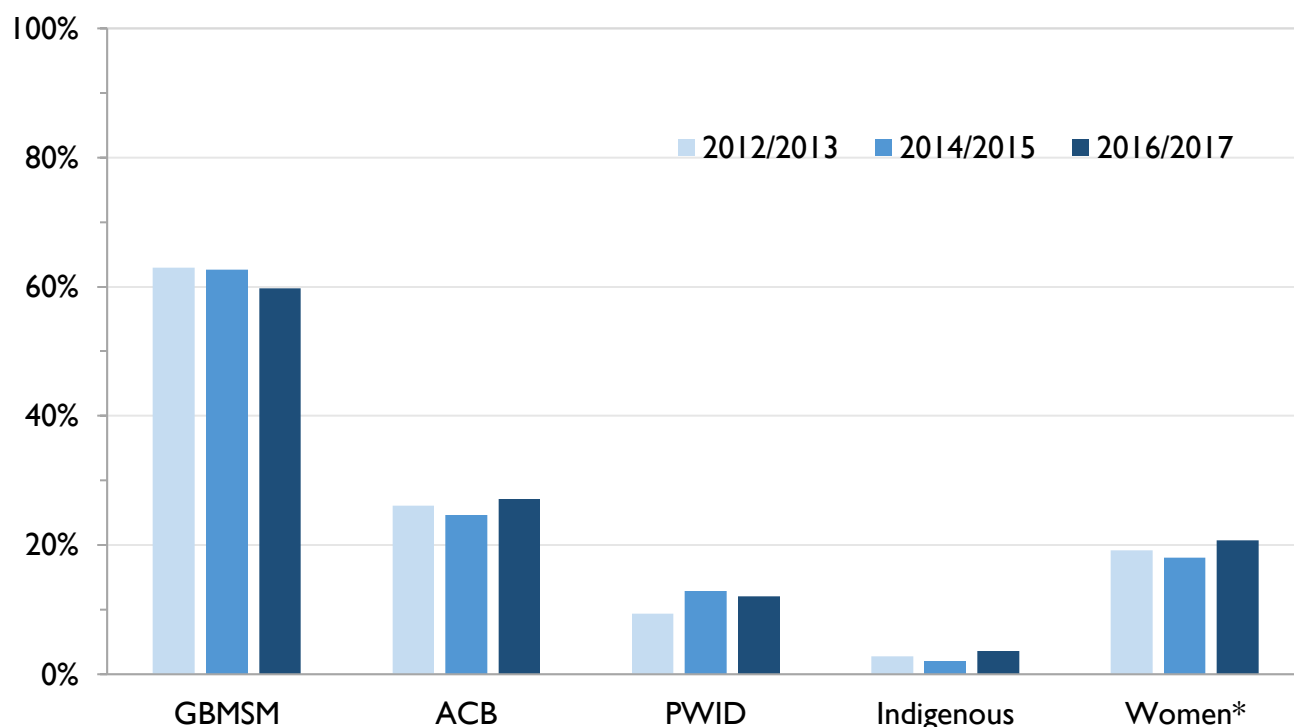


Snapshot

In 2017, the majority of new HIV diagnoses among females were from the ACB priority population, followed by PWID and Indigenous priority populations. When ‘out-of-province’ diagnoses were excluded, the percent ACB was lower and the percent PWID and Indigenous priority populations were higher.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. GBMSM=gay, bisexual and other men who have sex with men; ACB=African, Caribbean and Black; PWID=people who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). See [Table 4.1](#) for underlying data.

Figure 4.4 Percent of new HIV diagnoses by priority population (where known), Ontario, 2012 to 2017

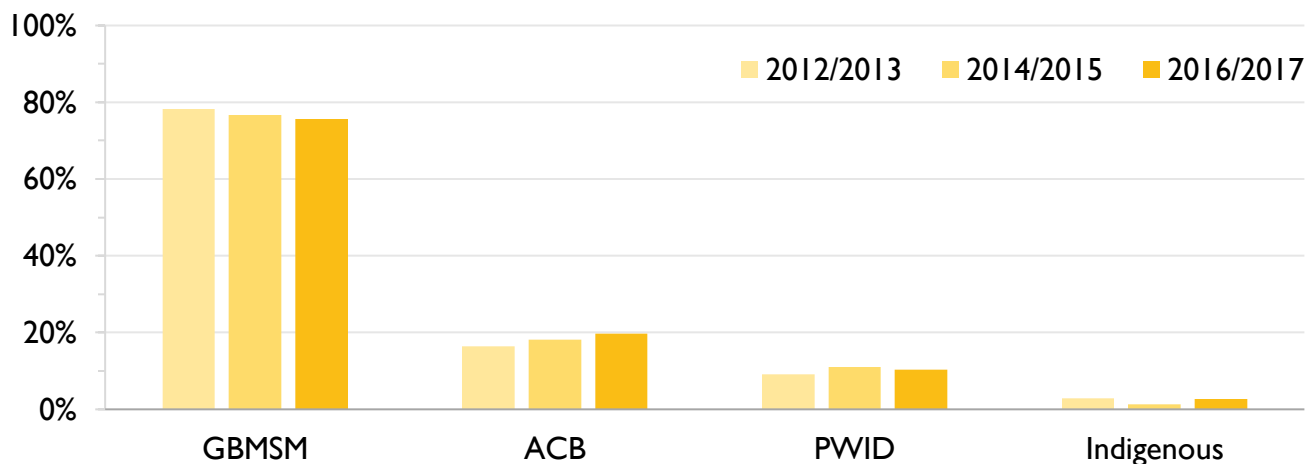


Snapshot

The percent of new HIV diagnoses has consistently been highest among the GBMSM priority population, followed by ACB, women*, PWID and Indigenous priority populations. The percent of new HIV diagnoses decreased in 2016/2017 among GBMSM and increased in all other priority populations compared to 2012/2013.

Notes: Data provided by Public Health Ontario Laboratory. GBMSM=gay, bisexual and other men who have sex with men; ACB= African, Caribbean and Black; PWID=people who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). See [Table 4.2](#) for underlying data. Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

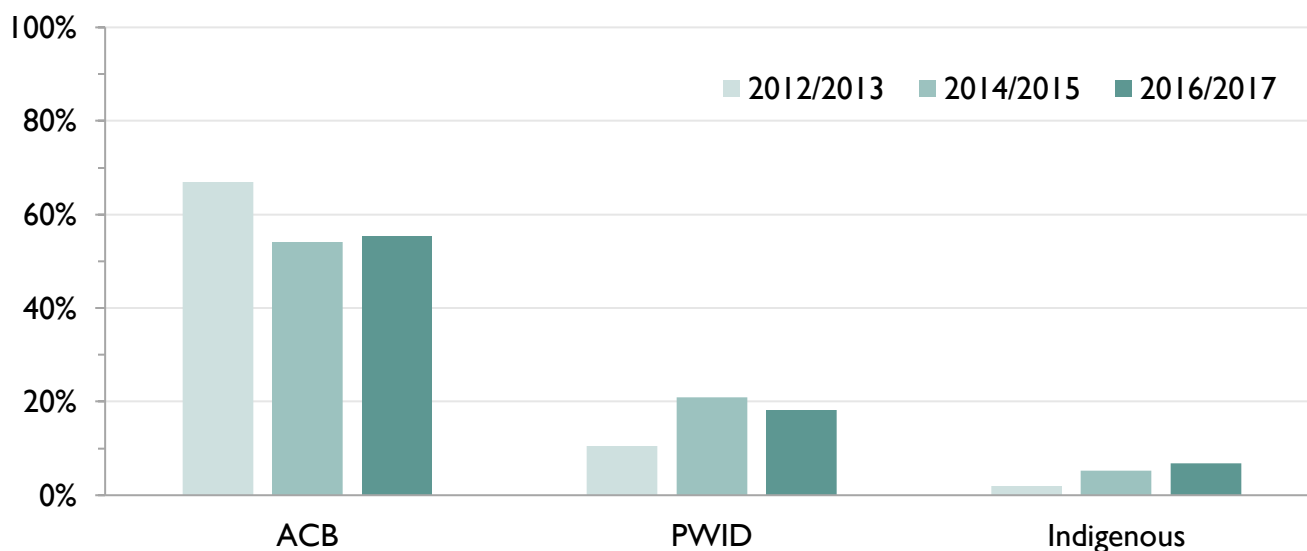
Figure 4.5 Percent of new HIV diagnoses by priority population (where known), males, Ontario, 2012 to 2017



Snapshot

The percent of new HIV diagnoses among males has consistently been highest among GBMSM, followed by ACB, PWID and Indigenous priority populations. The percent of new HIV diagnoses decreased in 2016/2017 among GBMSM and increased in the ACB and PWID priority populations compared to 2012/2013.

Figure 4.6 Percent of new HIV diagnoses by priority population (where known), females, Ontario, 2012 to 2017



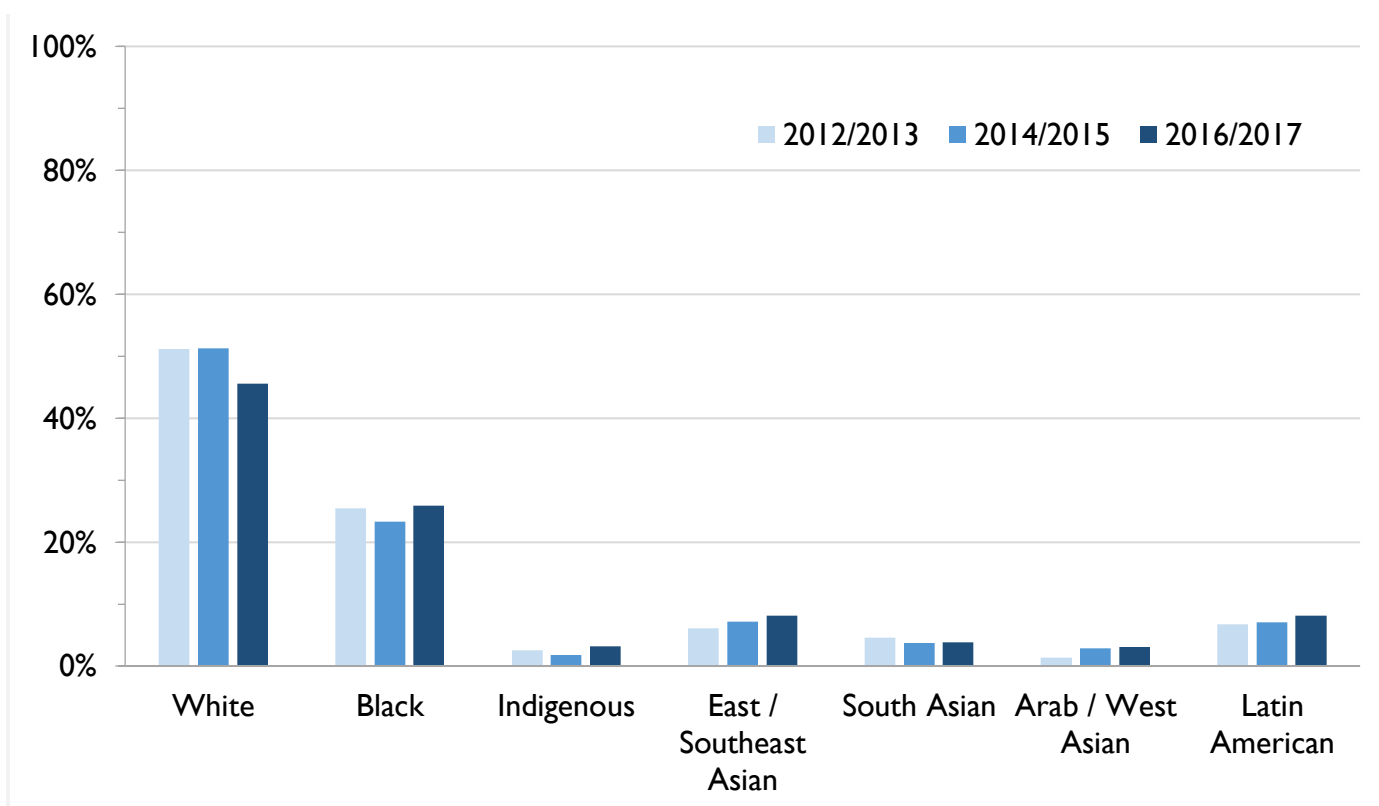
Snapshot

The percent of new HIV diagnoses among females has consistently been highest among ACB, followed by PWID and Indigenous priority populations. The percent of new HIV diagnoses decreased in 2016/2017 among ACB and increased in all other priority populations compared to 2012/2013.

Notes: Data provided by Public Health Ontario Laboratory. GBMSM=gay, bisexual and other men who have sex with men; ACB=African, Caribbean and Black; PWID=people who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). See [Table 4.2](#) for underlying data.

5. By race/ethnicity

Figure 5.1 Percent of new HIV diagnoses by race/ethnicity (where known), Ontario, 2012 to 2017

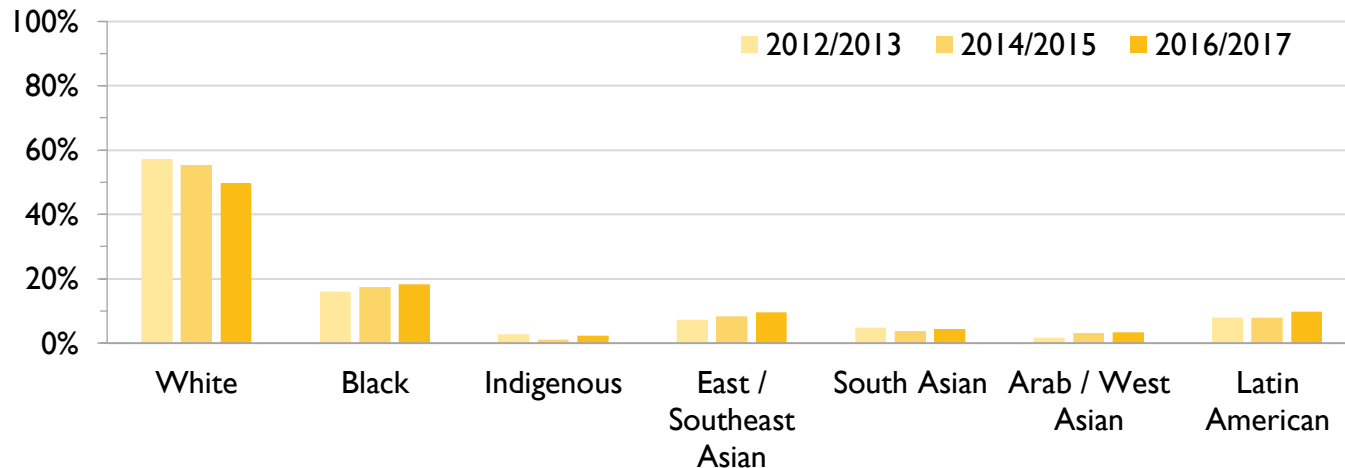


Snapshot

The percent of new HIV diagnoses has consistently been highest among White people followed by Black people. There was a decrease in the percent of new HIV diagnoses among White (11.1%) and South Asian (15.2%) people between 2012/2013 to 2016/2017. There was an increase in the percent of new HIV diagnoses among Black (1.6%), Indigenous (23.1%), East/Southeast Asian (34.4%), Arab/West Asian (121.4%) and Latin American (20.9%) people between 2012/2013 to 2016/2017. Any interpretation of race/ethnicity combined data (Figure 5.1) should be mindful that some trends stratified by sex (Figures 5.2 and 5.3) differ and could vary the interpretation of findings.

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses where race/ethnicity was unknown were excluded (approximately 34% of diagnoses). See [Table 5.1](#) for underlying data.

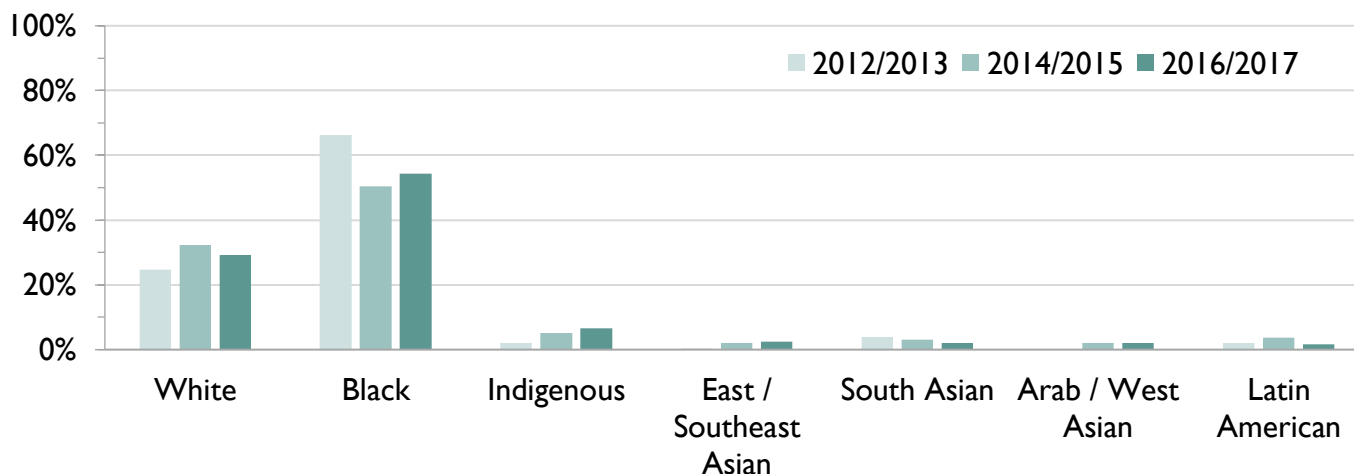
Figure 5.2 Percent of new HIV diagnoses by race/ethnicity (where known), males, Ontario, 2012 to 2017



Snapshot

The percent of new HIV diagnoses among males has consistently been highest among White males followed by Black males. There was a decrease in the percent of new HIV diagnoses among White (13.1%), Indigenous (14.8%) and South Asian males (8.3%) between 2012/2013 to 2016/2017. There was an increase in the percent of new HIV diagnoses among Black (15.0%), East/Southeast Asian (31.1%) and Latin American (25.6%) males between 2012/2013 to 2016/2017. Trends over time for Arab/West Asian male race/ethnicity are not reported due to low (<20) two-year combined diagnoses counts.

Figure 5.3 Percent of new HIV diagnoses by race/ethnicity (where known), females, Ontario, 2012 to 2017



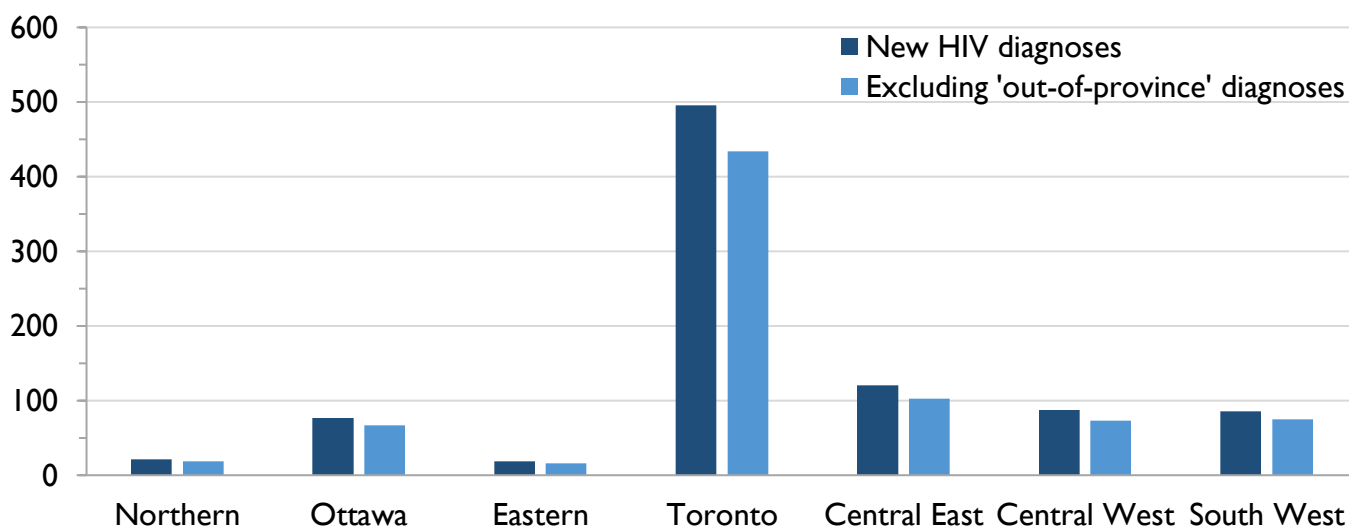
Snapshot

The percent of new HIV diagnoses among females has consistently been highest among Black females followed by White females. There was a decrease in the percent of new HIV diagnoses among Black (18.1%) females between 2012/2013 to 2016/2017. There was an increase in the percent of new HIV diagnoses among White (17.3%) females between 2012/2013 to 2016/2017. Trends over time for all other race/ethnicities are not reported due to low (<20) two-year combined diagnoses counts.

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses where race/ethnicity was unknown were excluded (approximately 34% of diagnoses). See [Table 5.1](#) for underlying data.

6. By health region

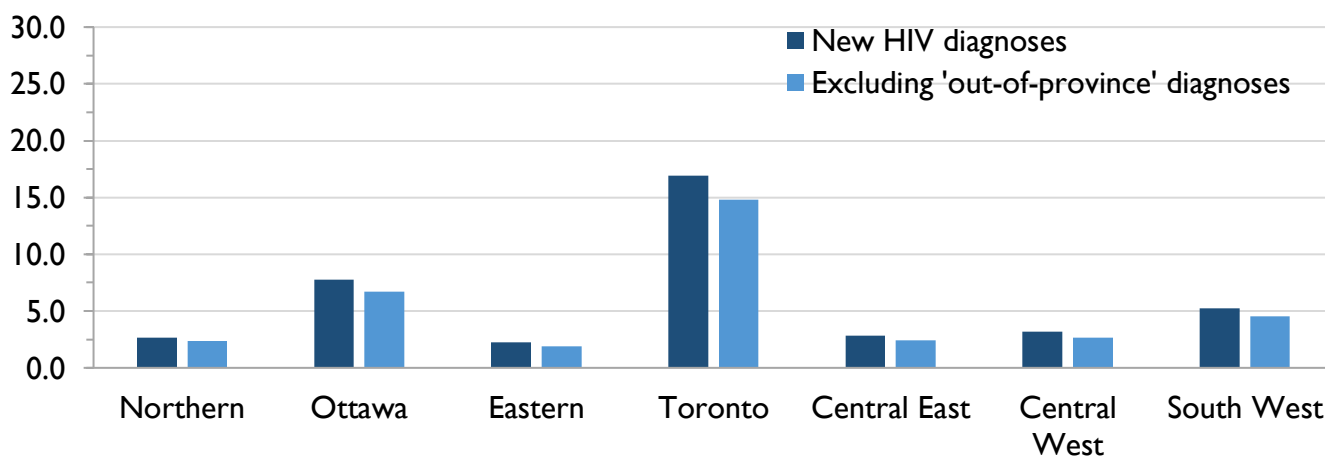
Figure 6.1 Number of new HIV diagnoses by health region, Ontario, 2017



Snapshot

In 2017, the number of new HIV diagnoses was highest in Toronto and lowest in the Northern and Eastern regions. When 'out-of-province' diagnoses were excluded, the number of new HIV diagnoses was lower in all regions.

Figure 6.2 Rate of new HIV diagnoses per 100,000 people by health region, Ontario, 2017

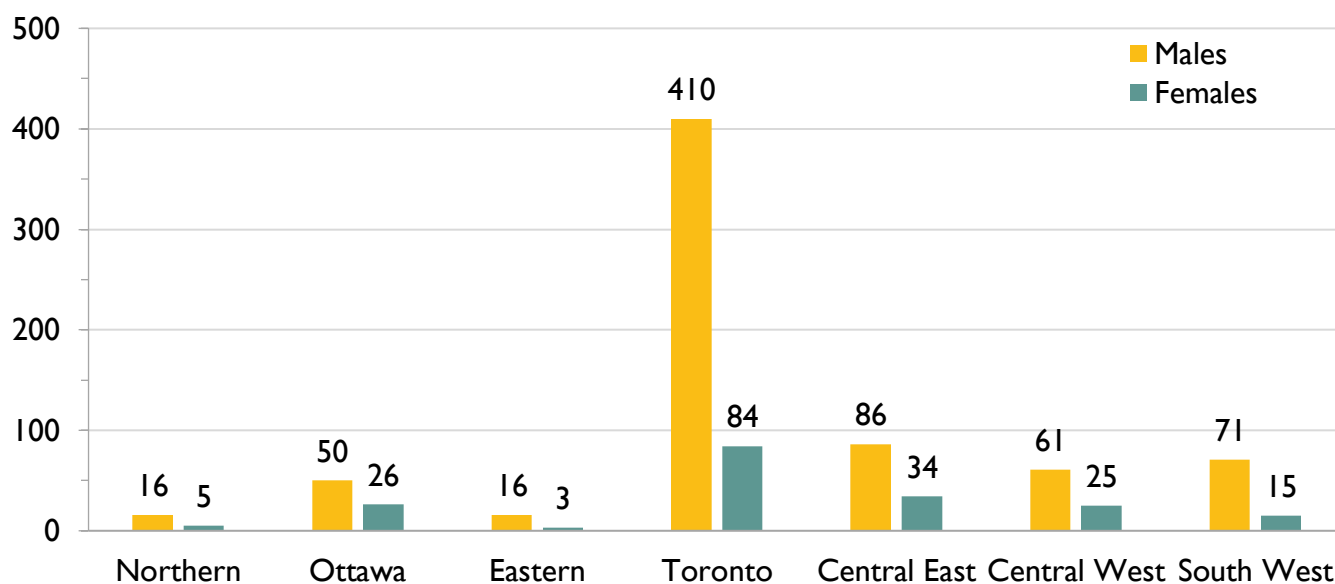


Snapshot

In 2017, the new HIV diagnosis rate was highest in Toronto and lowest in the Eastern region. When 'out-of-province' diagnoses were excluded, the new HIV diagnoses rate was lower in all regions.

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. See [Table 6.1](#) for underlying data.

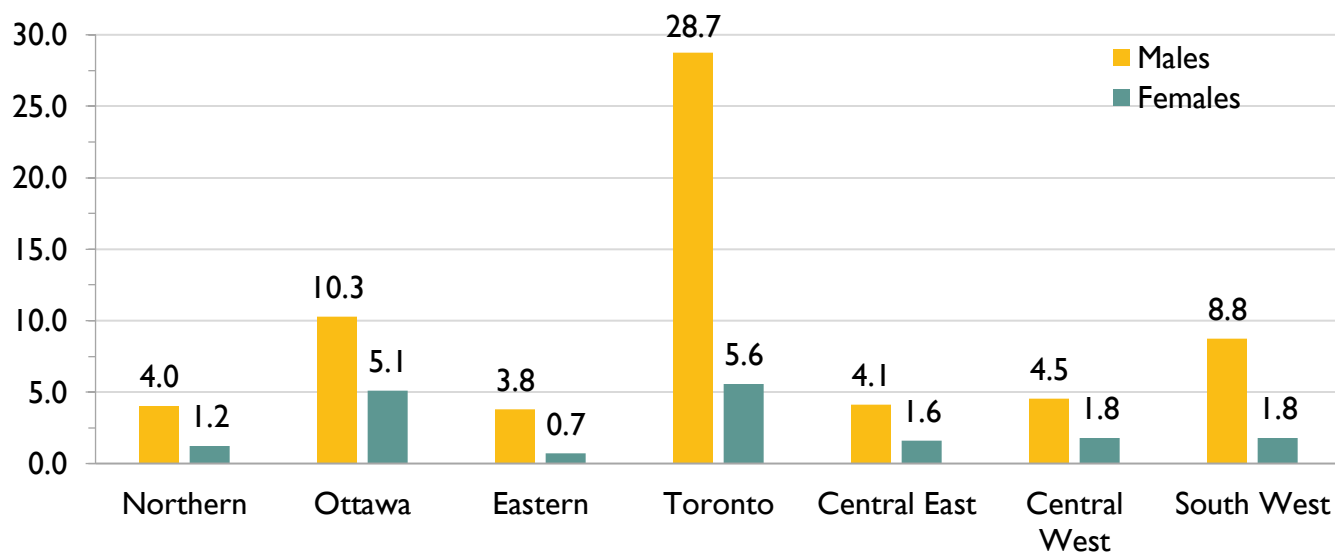
Figure 6.3 Number of new HIV diagnoses, by health region and sex, Ontario, 2017



Snapshot

In 2017, the number of male and female new HIV diagnoses was highest in Toronto and lowest in the Northern and Eastern regions.

Figure 6.4 Rate of new HIV diagnoses per 100,000 people by health region and sex, Ontario, 2017

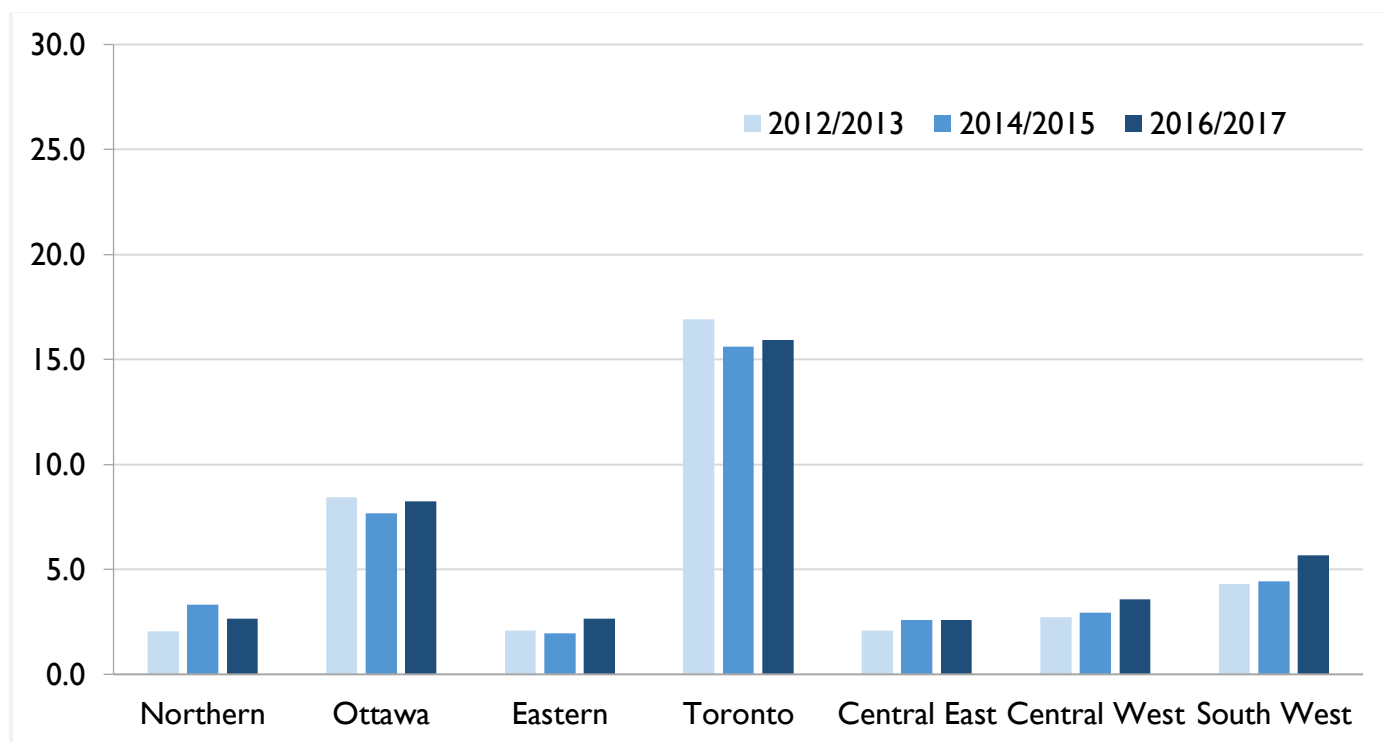


Snapshot

In 2017, the rate of male and female new HIV diagnoses was highest in Toronto and lowest in the Eastern region.

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. See [Table 6.1](#) for underlying data.

Figure 6.5 Rate of new HIV diagnoses per 100,000 people by health region, Ontario, 2012 to 2017

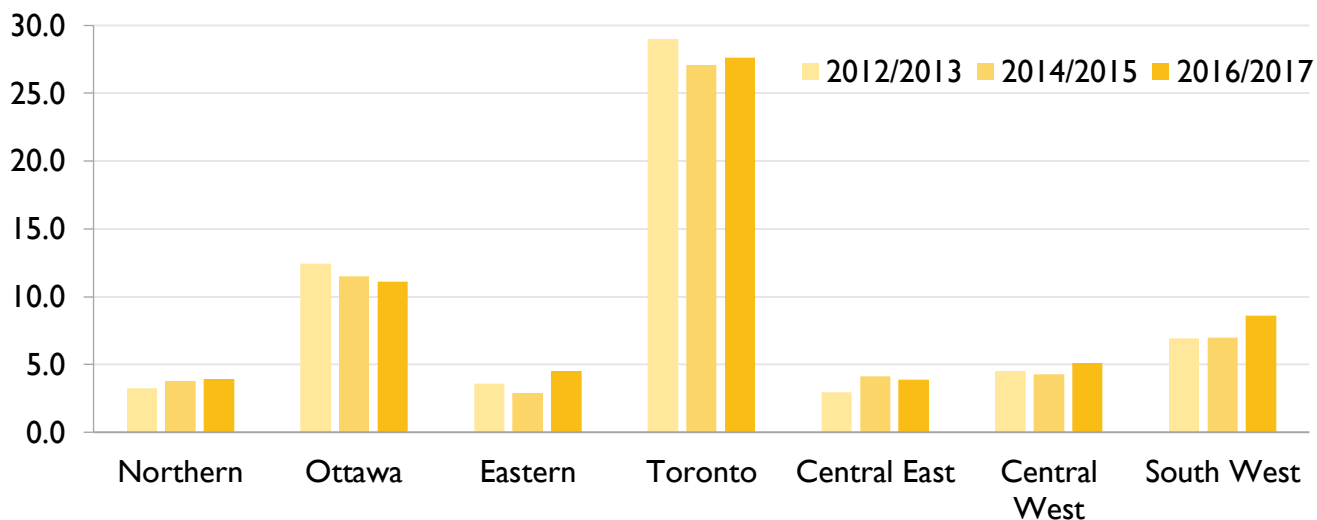


Snapshot

The rate of new HIV diagnoses has consistently been highest in the Toronto region, followed by the Ottawa region. The rate of new HIV diagnoses decreased in 2016/2017 in the Toronto and Ottawa regions and increased in all other regions compared to 2012/2013.

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. See [Table 6.2](#) for underlying data.

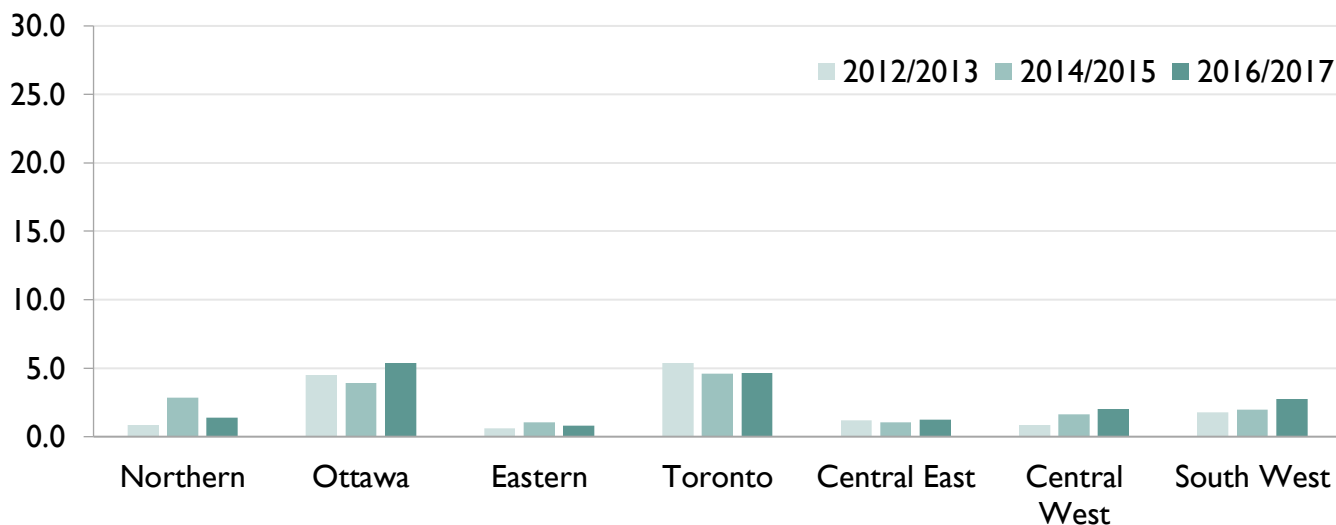
Figure 6.6 Rate of new HIV diagnoses per 100,000 people by health region, males, Ontario, 2012 to 2017



Snapshot

The rate of new HIV diagnoses among males has consistently been highest in the Toronto region, followed by the Ottawa region. The rate of new HIV diagnoses among males decreased in 2016/2017 in the Toronto and Ottawa regions and increased in all other regions compared to 2012/2013.

Figure 6.7 Rate of new HIV diagnoses per 100,000 people by health region, females, Ontario, 2012 to 2017



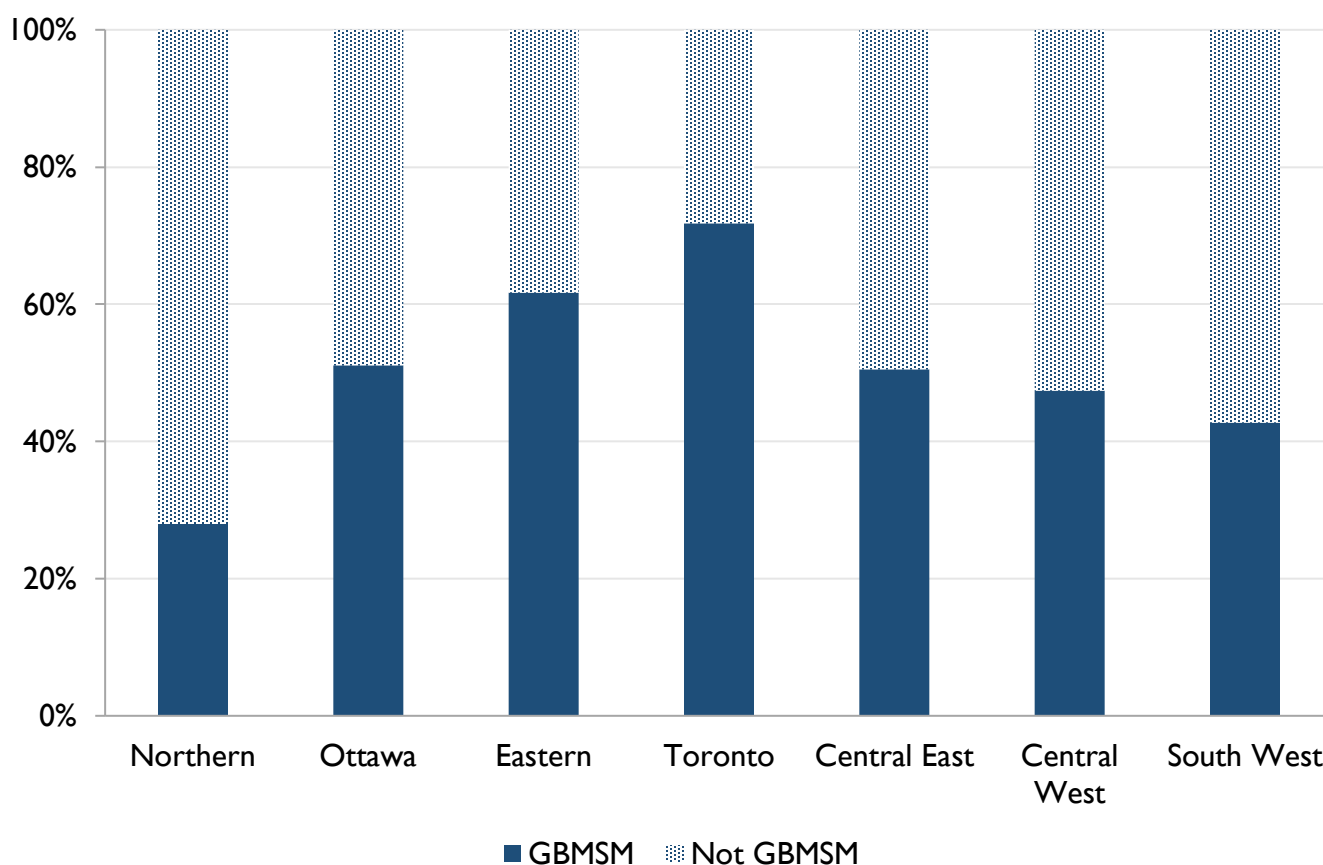
Snapshot

The rate of new HIV diagnoses among females was highest in Toronto in 2012/2013 and highest in Ottawa in 2016/2017. The rate of new HIV diagnoses among females decrease in 2016/2017 in the Toronto region and increased (although not always linearly) in all other regions compared to 2012/2013.

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. See [Table 6.2](#) for underlying data.

7. By health region and priority population

Figure 7.1 Percent new HIV diagnoses in gay, bisexual or other men who have sex with men (GBMSM) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)

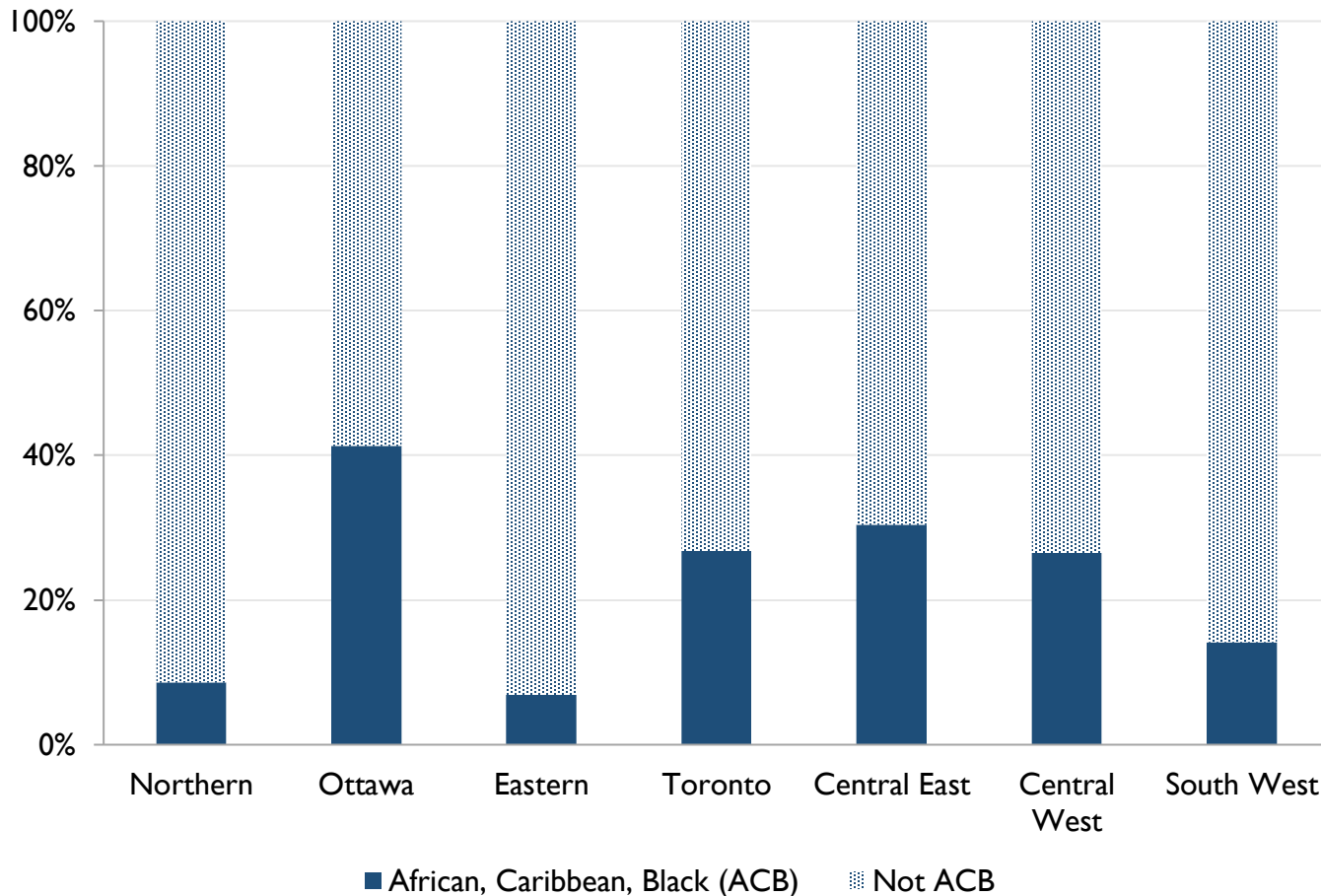


Snapshot

The percent of new HIV diagnoses in GBMSM of all new HIV diagnoses within each health region ranged from 71.8% in Toronto to 28.0% in the Northern health region.

Notes: Data provided by Public Health Ontario Laboratory. GBMSM= Gay, bisexual or other men who have sex with men. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses) and where individuals could be assigned to at least one priority population. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. See [Table 7.1](#) for underlying data.

Figure 7.2 Percent new HIV diagnoses in African, Caribbean and Black (ACB) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)

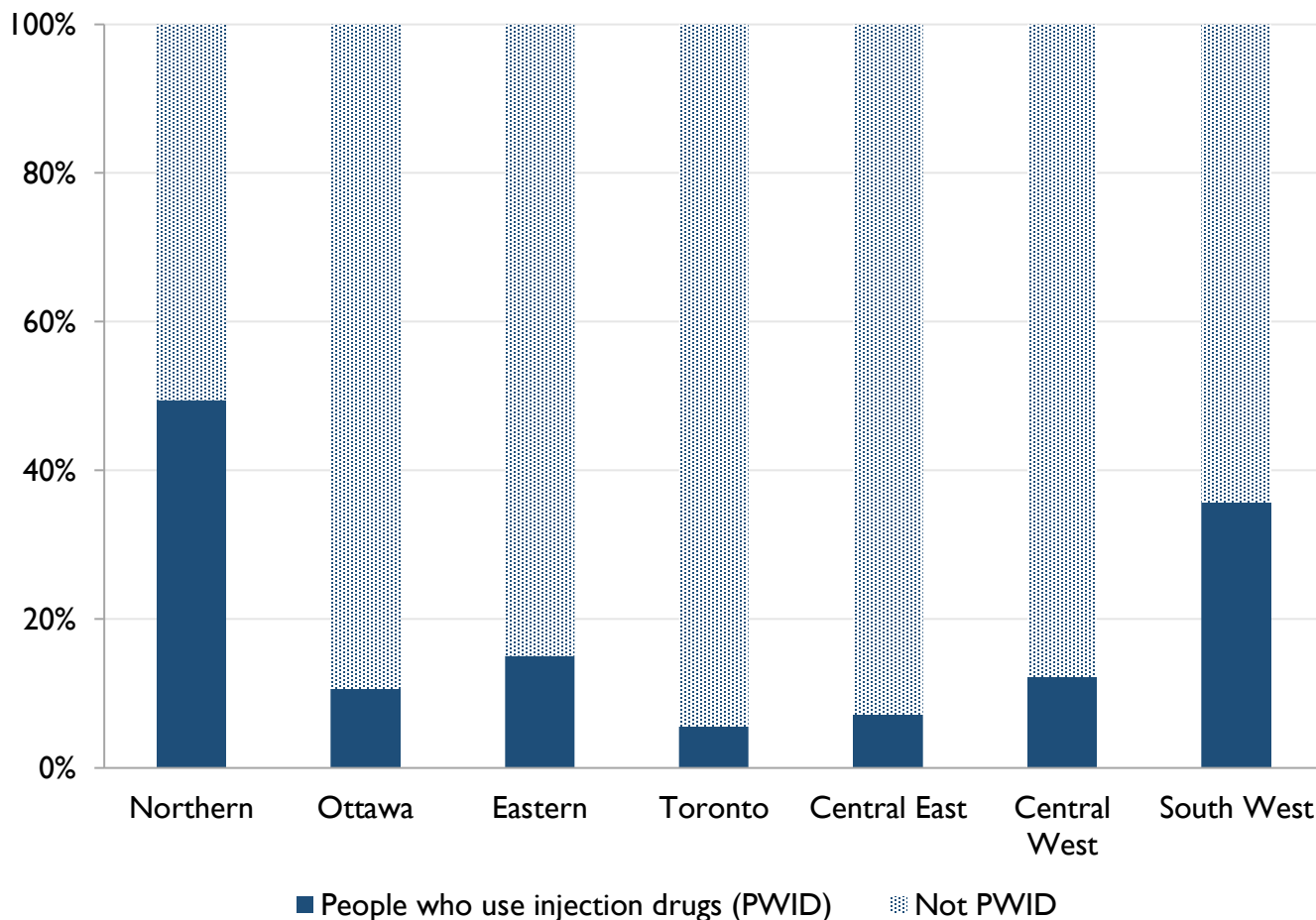


Snapshot

The percent of new HIV diagnoses who were ACB of all new HIV diagnoses within each health region ranged from 41.3% in Ottawa to 6.8% in the Eastern health region.

Notes: Data provided by Public Health Ontario Laboratory. ACB= African, Caribbean and Black. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses) and where individuals could be assigned to at least one priority population.. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. See [Table 7.1](#) for underlying data.

Figure 7.3 Percent new HIV diagnoses in persons who use injection drugs (PWID) of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)

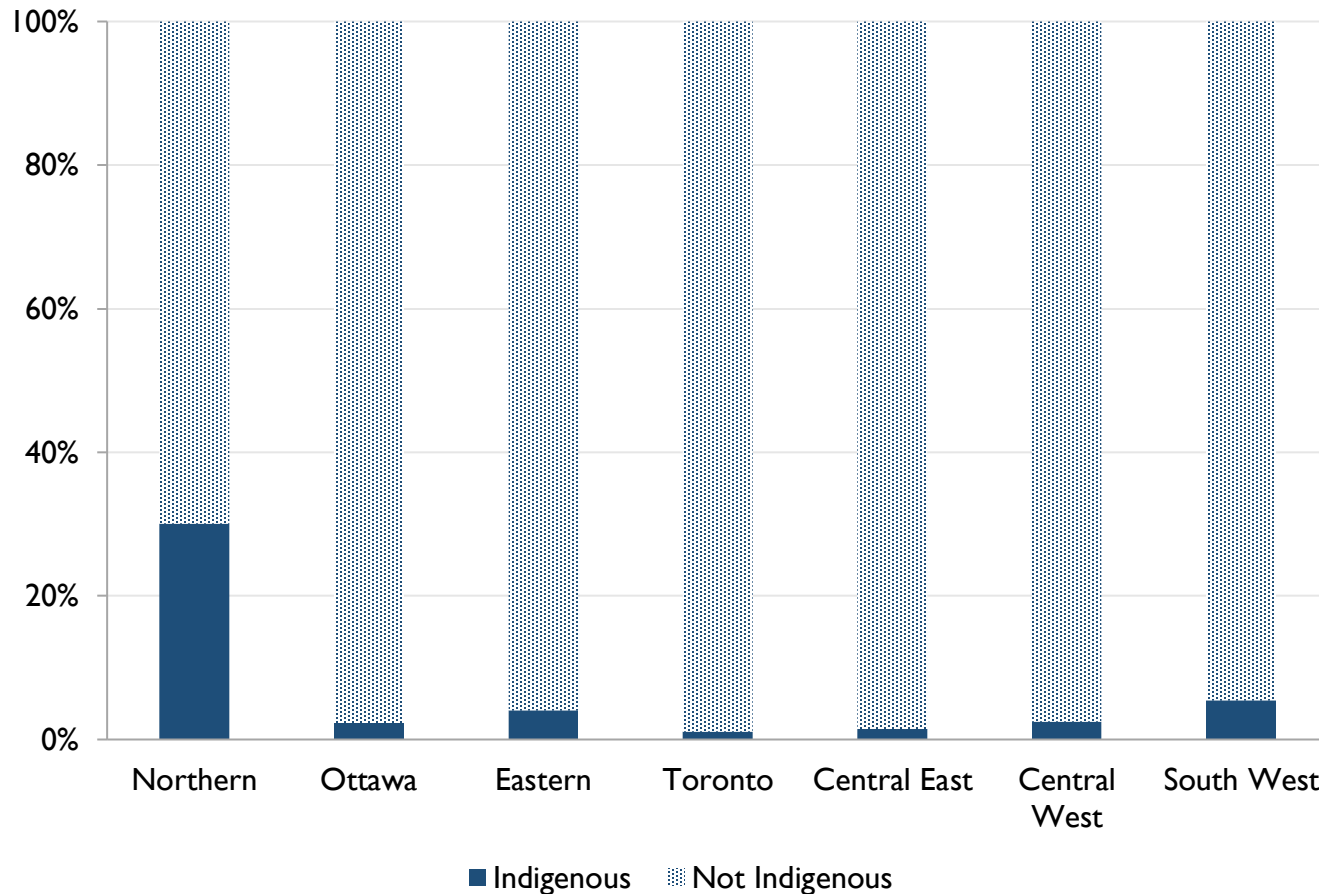


Snapshot

The percent of new HIV diagnoses who were PWID within each health region ranged from 49.5% in the Northern health region to 5.5% in Toronto.

Notes: Data provided by Public Health Ontario Laboratory. PWID= Persons who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses) and where individuals could be assigned to at least one priority population.. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. See [Table 7.1](#) for underlying data.

Figure 7.4 Percent new HIV diagnoses in Indigenous of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)

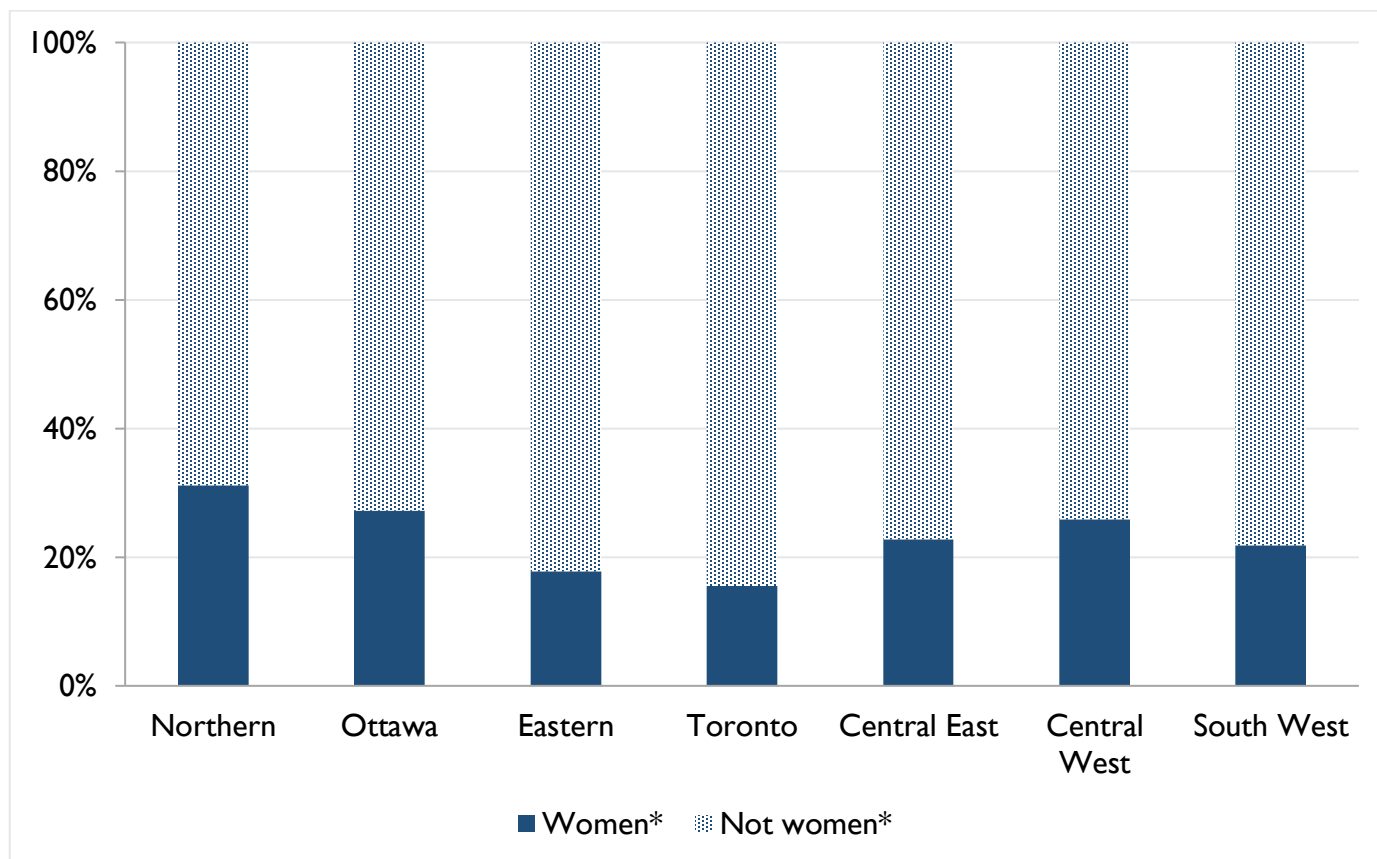


Snapshot

The percent of new HIV diagnoses who were Indigenous of all new HIV diagnoses within each health region ranged from 30.1% in the Northern health region to 1.1% in Toronto.

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses) and where individuals could be assigned to at least one priority population.. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. See [Table 7.1](#) for underlying data.

Figure 7.5 Percent new HIV diagnoses in women* of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)



Snapshot

The percent of new HIV diagnoses who were women* of all new HIV diagnoses within each health region ranged from 31.2% in the Northern health region to 15.5% in Toronto.

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses) and where individuals could be assigned to at least one priority population. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Please see [here](#) for more details about health regions. See [Table 7.1](#) for underlying data. Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

Definitions

Anonymous HIV testing

A type of non-nominal HIV diagnostic testing where no identifying information on the individual being tested is collected on the test requisition form. The lack of identifying information means that it is not possible to link anonymous HIV-positive diagnostic tests to viral load tests within the HIV Datamart.

Coded HIV testing

A type of non-nominal HIV diagnostic testing where a code, instead of the name of the individual being tested, is collected on the test requisition form. The lack of identifying information means that it is not possible to link coded HIV-positive diagnostic tests to viral load tests within the HIV Datamart.

Health regions

Groupings of public health units that have historically been used in HIV epidemiology and surveillance reports. There are seven health regions: Northern, Ottawa, Eastern, Toronto, Central East, Central West and Southwest. See technical notes for more information on these groupings and boundaries.

HIV Datamart

All data in this report is stored in the HIV Datamart, an integrated data platform composed of Public Health Ontario Laboratory's diagnostic and viral load testing databases. Within the Datamart, diagnostic and viral load test records are linked together for the same person (however, linkage is not possible for anonymous and coded HIV-positive diagnostic tests).

HIV-positive diagnostic test

Defined as a blood sample that has initially tested reactive on a screening test (either at the laboratory or on a point-of-care / rapid test), and has been confirmed as HIV-positive by a separate test (Western Blot, p24 antigen confirmatory test, or polymerase chain reaction for children <18 months). HIV-positive diagnostic tests in the HIV Datamart includes all people who were diagnosed with HIV. That is, people who test HIV-positive for the first time in Ontario (never tested HIV-positive out-of-province), as well as people who were diagnosed HIV-positive elsewhere and moved to Ontario and tested again ('out-of-province' diagnoses).

Integrated Public Health Information System (iPHIS)

iPHIS is an electronic, web-based system used by public health units (PHUs) for case-management and reporting to the Ontario Ministry of Health and Long-term Care on diseases of public health significance, including HIV. It is the main source of data used by PHUs and Public Health Ontario to produce reportable disease surveillance reports. iPHIS includes information elicited during public health follow up of HIV cases. iPHIS data are not used in this report.

Laboratory Enhancement Program (LEP)

When a person receives a new HIV diagnosis in Ontario, a Laboratory Enhancement Program (LEP) form is sent to the health care provider who ordered the test in order to collect further information on the person who tested HIV-positive. This includes information collected on the original test requisition (e.g. risk factors), as well as additional information. Since 2009, the LEP form has collected information on race/ethnicity and country of birth.

New HIV diagnosis

‘New HIV diagnoses’ includes all individuals receiving a confirmed HIV-positive diagnosis in Ontario. This includes individuals who have previously tested positive for HIV outside of Ontario, but does not include individuals who have previously tested positive for HIV in Ontario.

A reactive rapid/point-of-care test result (i.e. suggestive of an HIV-positive result) must be confirmed through laboratory testing to be counted as a new HIV diagnosis. Individuals with a previous record of an HIV-positive test *within* Ontario are excluded to prevent double-counting. The LEP is used to remove tests which cannot be linked by identifying information on the requisition form, but are indicated as a repeat test. This will remove many additional duplicates, but if repeat test information is missing or unknown, or a patient tests HIV-positive more than once through non-nominal testing, duplicate tests will still remain.

Individuals diagnosed with HIV for the first time *outside* of Ontario, but who subsequently moved to the province and tested again, are included in the ‘new HIV diagnosis’ analyses but excluded in the ‘out-of-province’ analyses. This means that migration can potentially influence trends in new diagnoses in Ontario. However, it’s still important to report on ‘new HIV diagnoses’ as all new diagnoses affect planning and policies to support care for people living with HIV.

Nominal HIV testing

A type of HIV diagnostic testing where the test requisition form contains the name of the individual being tested. Nominal HIV tests can be linked to viral load tests in the HIV Datamart using patient identifiers.

Non-nominal HIV testing

A type of HIV diagnostic testing where the test requisition form does not contain the name of the individual being tested. There are two types of non-nominal testing in Ontario: anonymous and coded. The lack of identifying information means that it is not possible to link non-nominal HIV-positive diagnostic tests to previous diagnostic tests and viral load tests within the HIV Datamart.

‘Out-of-Province’ HIV diagnoses

HIV diagnoses with a history of a previous HIV-positive diagnosis *outside* Ontario (i.e. ‘out-of-province’ diagnoses). These individuals were initially diagnosed (and likely infected) outside of the province, and then moved to Ontario and were tested again.

Priority Population

Populations outlined as priorities for HIV programming in Ontario's response to HIV, including gay, bisexual and other men who have sex with men, including trans men; African, Caribbean and Black communities; Indigenous peoples; people who inject drugs; and women*. Information from the test requisition and LEP forms are used to assign a new HIV diagnosis (i.e. HIV-positive test) to a priority population, where applicable. Unlike the categories traditionally used to describe new diagnoses (known as exposure categories), these priority populations are not mutually exclusive. That means that an HIV diagnosis can be assigned to more than one priority population (if applicable) – an approach which better represents Ontario's HIV epidemic. To be assigned any priority population, race/ethnicity or country of birth had to be known.

Test requisition form

A form filled out by a health care provider along with each [HIV diagnostic test](#). The HIV diagnostic test requisition form collects information on the age, sex and HIV risk factors of the person getting tested. As of 2018, the HIV test requisition form also collects information on race/ethnicity, country of birth, transgender identity and PrEP status. Note, race/ethnicity and country of birth information has been collected on the Laboratory Enhancement Program (LEP) form since 2009.

Women*

Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

Abbreviations

ACB = African Caribbean and Black

GBMSM = Gay, bisexual and other men who have sex with men

LEP = Laboratory Enhancement Program

OHESI = Ontario HIV Epidemiology and Surveillance Initiative

PHOL = Public Health Ontario Laboratory

PWID = People who use injection drugs

Appendices

I. Technical Notes

When a person living with HIV retests and receives a second or multiple additional positive test results, measures are in place to prevent the second or multiple tests from being counted as a new HIV diagnosis. The information on the HIV test requisition form is entered in the laboratory information system and is matched to previous tests in the PHO HIV Datamart using the name and health card number of the patient. When the name or OHIP number has changed, or a person tests anonymously or using a coded test, it is not possible to link that test to other test results. For example, an individual who initially tested HIV-positive through anonymous testing, and then later received a nominal HIV-positive test when entering care, would be inadvertently counted as two separate new diagnoses.

Since its introduction in 1999, the Laboratory Enhancement Program (LEP) has collected information to supplement what is collected on the HIV test requisition for those individuals newly diagnosed with HIV, including HIV testing history. When the test history is completed, it is not necessary to link the test back to previous results. A test indicating a previous HIV-positive diagnosis in Ontario can be directly removed as a duplicate test. For the analyses in this report, these duplicates with known test history have been removed.

Also, using the LEP it is possible to examine people living with HIV who are new to care in Ontario, but likely infected elsewhere, referred to as 'out-of-province' diagnoses. These individuals indicated a previous HIV-positive test result in a jurisdiction outside of Ontario. Some figures in this report show a comparison of new HIV-positive diagnoses (including 'out-of-province' diagnoses) and then excluding the 'out-of-province' diagnoses. Approximately 50% of new HIV diagnoses in Ontario have both 1) an LEP questionnaire returned, and 2) the HIV testing history section of the questionnaire completed to be able to determine a duplicate diagnosis or an 'out-of-province' diagnosis. Therefore, both the ascertainment of repeated testing (within Ontario) and 'out-of-province' diagnoses are likely underestimated.

The continued refinement of surveillance data means that historical numbers will be updated in OHESI reports. Therefore, previous releases of surveillance numbers no longer represent the most accurate representation, and the most recent report should always be cited.

Limitations to HIV testing and new HIV diagnoses

Information about risk factors and demographics are only available when test forms are filled out completely and correctly. HIV test requisitions are not filled out completely for all new HIV diagnoses. However, approximately 24% of LEP forms are not returned by 3 months and in total approximately 25% of LEP forms in 2017 were not returned. After combining information from both forms, exposure category information is missing for approximately 25% of new HIV diagnoses in 2017. As ethnicity was only collected on the LEP and not the HIV test requisition up until 2018, there is a higher rate of ethnicity information that is missing; approximately 32% of new HIV diagnoses in 2017. The missing information means that some HIV tests and new HIV diagnoses cannot be assigned to priority populations. It is unknown whether some categories or populations may be more likely to be missing information, which could potentially bias the proportions. Also, provider practices may vary for filling out the requisition and

LEP forms, also leading to biases. For example, some providers may ask about ethnicity or risk factors, while others may not ask or make assumptions. The time it takes for LEP forms to be returned can result in reporting delays.

Data on transgender individuals has not been collected in a consistent manner over time. For this reason, transgender individuals are not included in any of the HIV diagnosis numbers or rates when stratified by sex. As data collection becomes more consistent with capturing transgender identity, future reports will incorporate this information.

2. Priority Populations

New HIV diagnoses are assigned (if appropriate) to one or more of the priority populations outlined in Ontario's Provincial HIV/AIDS Strategy. These populations are not mutually exclusive, and new HIV diagnoses can be classified as belonging to more than one population. Of individuals able to be assigned a race/ethnicity or country of birth in 2017 (a prerequisite to be assigned a priority population), assignment into at least one priority population was known for approximately 92% of new HIV diagnoses. Approximately 30% of HIV diagnoses belonged to two or more priority populations at one time.

Assignment to these populations is based on information from the HIV test requisition forms and LEP forms, as follows:

- Gay, bisexual and other men who have sex with men (including trans men) (GBMSM): MSM or MSM-PWID exposure category
- People who inject drugs (PWID): PWID or MSM-PWID exposure category
- Indigenous men and women: First nations or Inuit or Métis ethnicities
- African, Caribbean, and other Black individuals (ACB): born in an African or Caribbean HIV-endemic country and/or Black ethnicity
- Women* (including Cis and Trans women): All diagnoses with female sex.

Information on HIV diagnoses by priority population is only available from 2009 onwards, as this is when race/ethnicity and country of birth were added to the LEP form. The HIV test requisition underwent revision in 2018 to collect information on race/ethnicity and country of birth, and improve the documentation of trans men and trans women within HIV diagnosis data. These revisions will allow us to better characterize priority populations for both negative and positive tests. The high amount of missing information for new diagnoses (approximately 37% on ethnicity and approximately 25% on exposure category between 2008 to 2017) means that information on priority population is missing for many diagnoses. Therefore, it may be more valid to focus on trends over time rather than the actual numbers or proportions.

3. Statistical Methods

Rates are a measure of how frequently an event occurs in a defined population over a specified period of time. Because rates take into account the size of the population (denominator) over a specific time period and place, rates are helpful for comparing disease frequency among different groups or across different locations. For example, if we were to only look at the numbers of HIV diagnoses in each health region, Central East would have the second highest number of HIV diagnoses. However, after taking into account the size of the health regions, Ottawa, not Central East, has the second highest rate of HIV diagnoses when comparing health regions. The rates of new HIV diagnoses per 100,000 people were calculated using population estimates from Statistics Canada.

Population estimates for sex and age can be found from Statistics Canada: Table 051-0001: Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual. Population estimates for health regions by sex can be found from Statistics Canada: Table 17-10-0086-01: Estimates of population (2011 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2017 boundaries) and peer groups, annual. All Statistics Canada estimates were accessed 04/09/2018.

In some figures (4.4-4.6, 5.1-5.3, 6.5-6.7), six years worth of data (2012 to 2017) are reported by combining two years. Diagnoses are combined over two-year periods to describe trends by priority population, race/ethnicity and health regions. This is done to reduce the effects of year-to-year variation (which can be particularly influential for populations with a small number of diagnoses) and more clearly present trends over time.

4. iPHIS vs. PHOL Data

For new HIV diagnoses, OHESI uses laboratory data on HIV-positive diagnostic tests from PHOL along with information documented by ordering providers on test requisition forms and from the LEP.

OHESI **does not** use information from the integrated Public Health Information System (iPHIS). iPHIS is an electronic, web-based system used by PHUs for case-management and reporting to the Ontario Ministry of Health and Long-term Care (MOHTLC) on diseases of public health significance, including HIV. It is the main source of data used by Public Health Ontario (PHO) to produce reportable disease surveillance reports. iPHIS includes information elicited during public health follow up of HIV cases.

The number of HIV diagnoses in iPHIS does not correspond to the number of new HIV diagnoses in PHOL HIV surveillance. Potential sources of discrepancy include:

- Additional exclusion within iPHIS of repeated HIV-positive tests based on information elicited during PHU follow-up, whereas this may not be possible in PHOL data due to lack of identifying information to link tests (e.g. when an HIV-positive individual initially tests anonymously and then nominally).
- Collection of risk factor and demographics differ between iPHIS and PHOL data and may result in different characterization of the diagnosed population.
- iPHIS does not include HIV diagnoses that arise from testing non-Ontario residents (e.g., Quebec residents testing in Ontario are included in provincial totals in PHOL HIV surveillance).
- iPHIS includes diagnoses who have moved to Ontario, been reported to the local PHU as an HIV case, but who have not received a HIV diagnostic lab test in Ontario.
- iPHIS may include more complete information on an individual's address (obtained during public health follow up) than lab data (which is solely based on what is documented on the test requisition form), and this may influence the PHU (and hence health regions) to which an HIV case is assigned.
- Data entry errors within iPHIS that result in cases being misclassified and not captured in final counts.
- Cases may be assigned to different dates in PHOL and iPHIS data (e.g., date of confirmed diagnosis vs. date of report to PHU). Therefore, case counts based on calendar year may differ.

5. Geographic Regions

Individuals who receive an HIV diagnostic test are assigned to a geographic region based on their residence or, if unknown, the address of the ordering provider. Approximately 30% of diagnoses are missing information on address of residence in 2017 and assigned based on provider address.

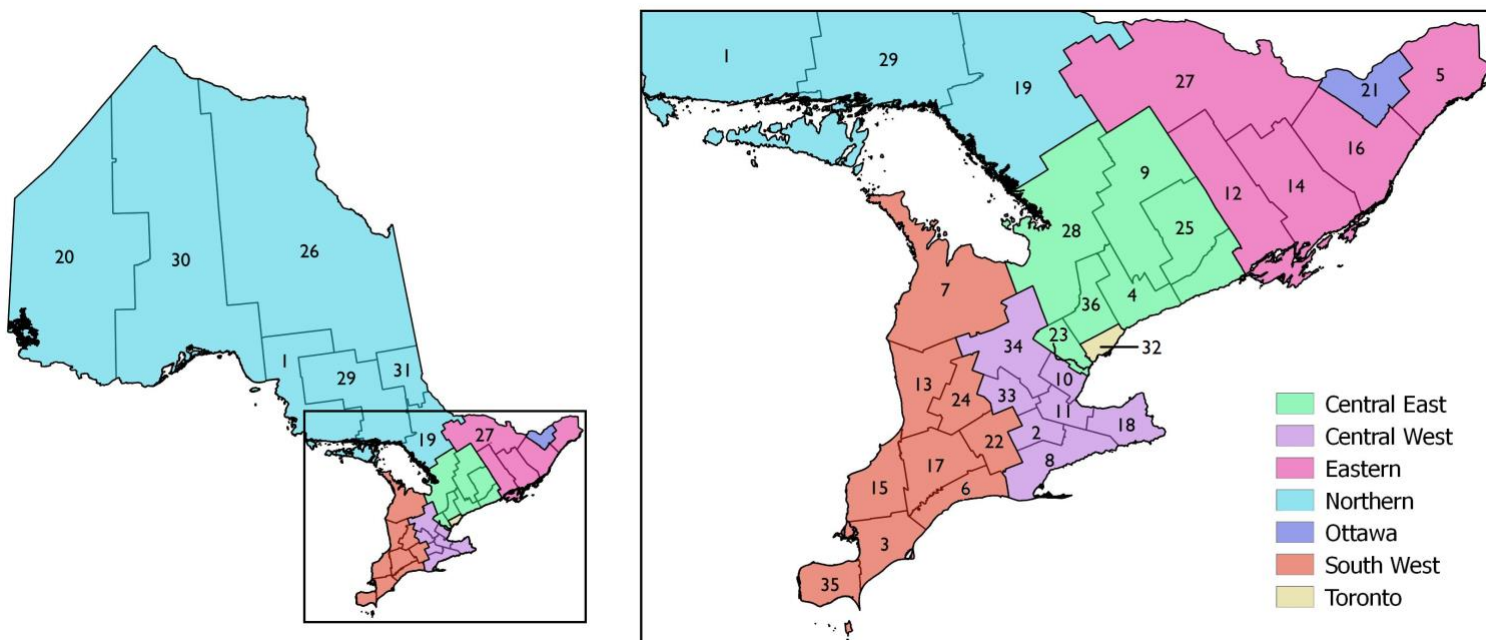
Ontario can be divided geographically by health region or public health units (PHU). These are defined below:

- Health regions – Groupings of PHUs that have historically been used in HIV epidemiology and surveillance reports. See the following page for health region breakdowns.
- Public health unit – A health agency that provides health promotion and disease prevention programs. In 2017, the year in which this report refers to, there were 36 PHUs in Ontario and each had its own unique geographical boundary.

Health Regions

Health regions are groupings of Public health units and their boundaries (see figure below).

Figure. Geographic map of health region and public health unit boundaries in 2017.



Public health units (map legend)

- | | | | |
|-------------------------------------|---|---------------------------|--------------------------------|
| 1. Algoma | 11. Hamilton | 19. North Bay Parry Sound | 30. Thunder Bay |
| 2. Brant | 12. Hastings and Prince Edward Counties | 20. Northwestern | 31. Timiskaming |
| 3. Chatham-Kent | 13. Huron | 21. Ottawa | 32. Toronto |
| 4. Durham | 14. Kingston, Frontenac, Lennox & Addington | 22. Oxford | 33. Waterloo |
| 5. Eastern Ontario | 15. Lambton | 23. Peel | 34. Wellington-Dufferin-Guelph |
| 6. Elgin-St. Thomas | 16. Leeds, Grenville and Lanark | 24. Perth | 35. Windsor-Essex |
| 7. Grey Bruce | 17. Middlesex-London | 25. Peterborough | 36. York |
| 8. Haldimand-Norfolk | 18. Niagara | 26. Porcupine | |
| 9. Haliburton, Kawartha, Pine Ridge | | 27. Renfrew | |
| 10. Halton | | 28. Simcoe Muskoka | |
| | | 29. Sudbury | |

Note: Map created using Statistics Canada boundary files

Groupings of public health units for each health region

Toronto health region

- Toronto

Ottawa health region

- Ottawa

Northern health region

- Algoma
- North Bay Parry Sound
- Northwestern
- Porcupine
- Sudbury
- Thunder Bay
- Timiskaming

Eastern health region

- Eastern Ontario
- Hastings and Prince Edward Counties
- Kingston, Frontenac, Lennox & Addington
- Leeds, Grenville and Lanark
- Renfrew

Central East health region

- Durham
- Haliburton, Kawartha, Pine Ridge
- Peel
- Peterborough
- Simcoe Muskoka
- York

Central West health region

- Brant
- Haldimand-Norfolk
- Halton
- Hamilton
- Niagara
- Waterloo
- Wellington-Dufferin-Guelph

South West health region

- Grey Bruce
- Elgin-St. Thomas
- Huron
- Chatham-Kent
- Lambton
- Middlesex-London
- Oxford
- Perth
- Windsor-Essex

6. Tables

Overall

Table I.1 Number and rate of new HIV diagnoses per 100,000 people, Ontario, 2008 to 2017

Year	Number of new HIV diagnoses	Number of new HIV diagnoses (excluding 'out-of-province')	Ontario Population (all ages)	Rate of new HIV diagnoses per 100,000 population	Rate of new HIV diagnoses per 100,000 population (excluding 'out-of-province')
2008	1,066	1,038	12,882,625	8.3	8.1
2009	947	907	12,997,687	7.3	7.0
2010	974	939	13,135,063	7.4	7.1
2011	970	935	13,263,544	7.3	7.0
2012	844	784	13,413,702	6.3	5.8
2013	784	747	13,555,754	5.8	5.5
2014	820	778	13,680,425	6.0	5.7
2015	822	771	13,789,597	6.0	5.6
2016	875	816	13,976,320	6.3	5.8
2017	916	797	14,193,384	6.5	5.6

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018.

By sex

Table 2.1 Number and rate of new HIV diagnoses per 100,000, males, Ontario, 2008 to 2017

Year	Number of new HIV diagnoses	Number of new HIV diagnoses (excluding 'out-of-province')	Ontario Population (all ages)	Rate of new HIV diagnoses per 100,000 population	Rate of new HIV diagnoses per 100,000 population (excluding 'out-of-province')	% of new diagnoses who were male	% of new diagnoses who were male (excluding 'out-of-province')
2008	804	788	6,341,504	12.7	12.4	75.8%	76.4%
2009	729	700	6,389,905	11.4	11.0	77.6%	77.9%
2010	778	748	6,452,783	12.1	11.6	81.1%	81.0%
2011	753	733	6,513,580	11.6	11.3	78.8%	79.7%
2012	655	622	6,591,394	9.9	9.4	78.1%	79.8%
2013	649	625	6,658,710	9.7	9.4	83.4%	84.3%
2014	647	618	6,719,723	9.6	9.2	79.5%	80.1%
2015	659	624	6,773,184	9.7	9.2	80.5%	81.3%
2016	691	649	6,868,640	10.1	9.4	79.7%	80.3%
2017	717	641	6,980,810	10.3	9.2	78.6%	80.8%

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. Diagnoses with unknown sex excluded (less than 1% of diagnoses).

Table 2.2 Number and rate of new HIV diagnoses per 100,000, females, Ontario, 2008 to 2017

Year	Number of new HIV diagnoses	Number of new HIV diagnoses (excluding 'out-of-province')	Ontario Population (all ages)	Rate of new HIV diagnoses per 100,000 population	Rate of new HIV diagnoses per 100,000 population (excluding 'out-of-province')	% of new diagnoses who were female	% of new diagnoses who were female (excluding 'out-of-province')
2008	256	244	6,541,121	3.9	3.7	24.2%	23.6%
2009	210	199	6,607,782	3.2	3.0	22.4%	22.1%
2010	181	176	6,682,280	2.7	2.6	18.9%	19.0%
2011	202	187	6,749,964	3.0	2.8	21.2%	20.3%
2012	184	157	6,822,308	2.7	2.3	21.9%	20.2%
2013	129	116	6,897,044	1.9	1.7	16.6%	15.7%
2014	167	154	6,960,702	2.4	2.2	20.5%	19.9%
2015	160	144	7,016,413	2.3	2.1	19.5%	18.8%
2016	176	159	7,107,680	2.5	2.2	20.3%	19.7%
2017	195	152	7,212,574	2.7	2.1	21.4%	19.2%

Notes: Data provided by Public Health Ontario Laboratory. See technical notes for definitions. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018. Diagnoses with unknown sex excluded (less than 1% of diagnoses).

By age

Table 3.1 Number, percent and rate of new HIV diagnoses per 100,000 people, by age, Ontario, 2017

Age	Overall - new HIV diagnoses				Overall - excluding 'out-of-province' diagnoses			
	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of new HIV diagnoses per 100,000 population	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of new HIV diagnoses per 100,000 population
<15	8	0.9%	2,229,217	0.4	8	1.0%	2,229,217	0.4
15-19	18	2.0%	835,465	2.2	17	2.1%	835,465	2.0
20-24	86	9.4%	1,012,586	8.5	81	10.2%	1,012,586	8.0
25-29	151	16.5%	1,013,929	14.9	138	17.3%	1,013,929	13.6
30-34	147	16.0%	968,906	15.2	129	16.2%	968,906	13.3
35-39	131	14.3%	926,913	14.1	111	13.9%	926,913	12.0
40-44	110	12.0%	905,679	12.1	89	11.2%	905,679	9.8
45-49	85	9.3%	949,264	9.0	74	9.3%	949,264	7.8
50-54	75	8.2%	1,053,440	7.1	64	8.0%	1,053,440	6.1
55-59	48	5.2%	1,036,290	4.6	41	5.1%	1,036,290	4.0
60-64	27	2.9%	891,943	3.0	21	2.6%	891,943	2.4
65-69	13	1.4%	752,449	1.7	11	1.4%	752,449	1.5
70+	16	1.7%	1,617,303	1.0	12	1.5%	1,617,303	0.7
Unknown	1	0.1%			1	0.1%		
Total	916		14,193,384		797		14,193,384	

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown sex and age excluded (less than 1% of diagnoses). Rates calculated using Statistics Canada population estimates, accessed 04/09/2018.

Table 3.2 Number, percent and rate of new HIV diagnoses per 100,000 people, by age, males, Ontario, 2017

Age	Males - new HIV diagnoses				Males - excluding 'out-of-province' diagnoses			
	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of all HIV diagnoses per 100,000 population	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of new HIV diagnoses per 100,000 population
<15	4	0.6%	1,142,807	0.4	4	0.6%	1,142,807	3.5
15-19	11	1.5%	430,990	2.6	10	1.6%	430,990	23.2
20-24	70	9.8%	522,745	13.4	66	10.3%	522,745	126.3
25-29	126	17.6%	505,669	24.9	117	18.3%	505,669	231.4
30-34	121	16.9%	474,675	25.5	107	16.7%	474,675	225.4
35-39	95	13.2%	452,791	21.0	84	13.1%	452,791	185.5
40-44	83	11.6%	443,184	18.7	71	11.1%	443,184	160.2
45-49	67	9.3%	468,165	14.3	62	9.7%	468,165	132.4
50-54	60	8.4%	525,241	11.4	49	7.6%	525,241	93.3
55-59	37	5.2%	513,032	7.2	35	5.5%	513,032	68.2
60-64	20	2.8%	433,282	4.6	18	2.8%	433,282	41.5
65-69	10	1.4%	360,625	2.8	9	1.4%	360,625	25.0
70+	12	1.7%	707,604	1.7	8	1.2%	707,604	11.3
Unknown	1	0.1%			1	0.2%		
Total	717		6,980,810		641		6,980,810	

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown sex and age excluded (less than 1% of diagnoses). Rates calculated using Statistics Canada population estimates, accessed 04/09/2018.

Table 3.3 Number, percent and rate of new HIV diagnoses per 100,000 people, by age, females, Ontario, 2017

Age	Females - new HIV diagnoses				Females - excluding 'out-of-province' diagnoses			
	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of new HIV diagnoses per 100,000 population	Number of new HIV diagnoses	Percent of new HIV diagnoses	Ontario Population	Rate of new HIV diagnoses per 100,000 population
<15	2	1.0%	1,086,410	0.2	2	1.3%	1,086,410	1.8
15-19	7	3.6%	404,475	1.7	7	4.6%	404,475	17.3
20-24	16	8.2%	489,841	3.3	15	9.9%	489,841	30.6
25-29	25	12.8%	508,260	4.9	21	13.8%	508,260	41.3
30-34	25	12.8%	494,231	5.1	21	13.8%	494,231	42.5
35-39	35	17.9%	474,122	7.4	26	17.1%	474,122	54.8
40-44	27	13.8%	462,495	5.8	18	11.8%	462,495	38.9
45-49	18	9.2%	481,099	3.7	12	7.9%	481,099	24.9
50-54	15	7.7%	528,199	2.8	15	9.9%	528,199	28.4
55-59	11	5.6%	523,258	2.1	6	3.9%	523,258	11.5
60-64	7	3.6%	458,661	1.5	3	2.0%	458,661	6.5
65-69	3	1.5%	391,824	0.8	2	1.3%	391,824	5.1
70+	4	2.1%	909,699	0.4	4	2.6%	909,699	4.4
Unknown	0	0.0%			0	0.0%		
Total	195		7,212,574		152		7,212,574	

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses with unknown sex and age excluded (less than 1% of diagnoses). Rates calculated using Statistics Canada population estimates, accessed 04/09/2018.

Table 3.4 Median age of new HIV diagnoses, overall and by sex, Ontario, 2008 to 2017

Year	Overall		Male		Female	
	Median age of new HIV diagnoses	Median age of new HIV diagnoses (excluding 'out-of-province')	Median age of new HIV diagnoses	Median age of new HIV diagnoses (excluding 'out-of-province')	Median age of new HIV diagnoses	Median age of new HIV diagnoses (excluding 'out-of-province')
2008	37	37	38	38	35	35
2009	37	37	38	38	34	34
2010	38	38	39	39	34	34
2011	37	37	38	38	36	35
2012	36	37	37	37	35	35
2013	37	37	37	38	36	36
2014	35	35	35	35	38	37.5
2015	36	36	36	36	36	36.5
2016	37	37	37	36	37	37
2017	36	35	36	35	37	36

Notes: Data provided by Public Health Ontario Laboratory.

By priority population

Table 4.1 Percent of new HIV diagnoses by sex and priority population (where known), Ontario, 2017

	Gay, bisexual and other men who have sex with men	African, Caribbean and Black	People who use injection drugs	Indigenous	Women*
Overall					
New HIV diagnoses	60.1%	29.3%	10.6%	3.4%	21.4%
Excluding 'out-of-province' diagnoses	63.6%	24.2%	12.3%	3.9%	18.0%
Male					
New HIV diagnoses	76.7%	19.7%	9.9%	3.3%	-
Excluding 'out-of-province' diagnoses	77.8%	17.8%	10.9%	3.6%	-
Female					
New HIV diagnoses	-	64.7%	12.9%	3.7%	-
Excluding 'out-of-province' diagnoses	-	53.1%	18.8%	5.3%	-

Notes: Data provided by Public Health Ontario Laboratory. GBMSM=gay, bisexual and other men who have sex with men; ACB=African, Caribbean and Black; PWID=people who use injection drugs. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

Table 4.2 Percent of new HIV diagnoses by priority population (where known), Ontario, 2012 to 2017

	Gay, bisexual and other men who have sex with men	African, Caribbean and Black	People who use injection drugs	Indigenous	Women*
Overall					
2012-2013	63.0%	26.1%	9.3%	2.8%	19.2%
2014-2015	62.7%	24.7%	12.9%	2.1%	18.1%
2016-2017	59.7%	27.1%	12.0%	3.6%	20.7%
Males					
2012-2013	78.2%	16.4%	9.1%	3.0%	-
2014-2015	76.6%	18.2%	11.0%	1.4%	-
2016-2017	75.6%	19.7%	10.4%	2.8%	-
Females					
2012-2013	-	67.0%	10.6%	2.0%	100%
2014-2015	-	54.1%	20.9%	5.2%	100%
2016-2017	-	55.4%	18.2%	6.9%	100%

Notes: Data provided by Public Health Ontario Laboratory. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women.

By race / ethnicity

Table 5.1 Percent of new HIV diagnoses by race/ethnicity and sex, Ontario, 2012 to 2017

	White	Black	Indigenous	East / Southeast Asian	South Asian	Arab / West Asian	Latin American	Other
Overall								
2012-2013	51.2%	25.4%	2.6%	6.1%	4.6%	1.4%	6.7%	2.0%
2014-2015	51.3%	23.3%	1.8%	7.2%	3.7%	2.9%	7.1%	2.7%
2016-2017	45.5%	25.8%	3.2%	8.2%	3.9%	3.1%	8.1%	2.2%
Males								
2012-2013	57.3%	16.0%	2.7%	7.4%	4.8%	1.7%	7.8%	2.3%
2014-2015	55.4%	17.4%	1.0%	8.3%	3.9%	3.1%	7.9%	3.1%
2016-2017	49.8%	18.4%	2.3%	9.7%	4.4%	3.4%	9.8%	2.2%
Females								
2012-2013	24.8%	66.3%	2.0%	0.5%	4.0%	0.0%	2.0%	0.5%
2014-2015	32.3%	50.5%	5.2%	2.1%	3.1%	2.1%	3.6%	1.0%
2016-2017	29.1%	54.3%	6.5%	2.4%	2.0%	2.0%	1.6%	2.0%

Notes: Data provided by Public Health Ontario Laboratory. Diagnoses where race/ethnicity was unknown were excluded (approximately 34% of diagnoses).

By health region

Table 6.1 Number and rate of new HIV diagnoses per 100,000 people, by health region and sex, Ontario, 2017

New HIV diagnoses									
	Total			Males			Females		
	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people
Northern	21	795,652	2.6	16	395,337	4.0	5	400,315	1.2
Ottawa	77	994,837	7.7	50	487,147	10.3	26	507,690	5.1
Eastern	19	855,359	2.2	16	423,362	3.8	3	431,997	0.7
Toronto	496	2,929,885	16.9	410	1,426,359	28.7	84	1,503,526	5.6
Central East	120	4,245,954	2.8	86	2,092,698	4.1	34	2,153,256	1.6
Central West	87	2,726,819	3.2	61	1,344,846	4.5	25	1,381,973	1.8
South West	86	1,644,878	5.2	71	811,061	8.8	15	833,817	1.8

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018

Table 6.1 Continued Number and rate of new HIV diagnoses per 100,000 people, by health region and sex, Ontario, 2017

Excluding 'out-of-province' diagnoses									
	Total			Males			Females		
	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people
Northern	19	795,652	2.4	15	395,337	3.8	4	400,315	1.0
Ottawa	67	994,837	6.7	45	487,147	9.2	21	507,690	4.1
Eastern	16	855,359	1.9	13	423,362	3.1	3	431,997	0.7
Toronto	434	2,929,885	14.8	367	1,426,359	25.7	65	1,503,526	4.3
Central East	103	4,245,954	2.4	78	2,092,698	3.7	25	2,153,256	1.2
Central West	73	2,726,819	2.7	54	1,344,846	4.0	18	1,381,973	1.3
South West	75	1,644,878	4.6	62	811,061	7.6	13	833,817	1.6

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018

Table 6.2 Number and rate of new HIV diagnoses per 100,000 people, by health region and sex, Ontario, 2012 to 2017

	Overall			Males		Females			
	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people
Northern									
2012-2013	33	1,609,565	2.1	26	798,620	3.3	7	810,945	0.9
2014-2015	53	1,599,180	3.3	30	793,591	3.8	23	805,589	2.9
2016-2017	42	1,591,750	2.6	31	790,599	3.9	11	801,151	1.4
Ottawa									
2012-2013	157	1,860,568	8.4	113	909,714	12.4	43	950,854	4.5
2014-2015	146	1,903,414	7.7	107	930,798	11.5	38	972,616	3.9
2016-2017	162	1,968,398	8.2	107	963,504	11.1	54	1,004,894	5.4
Eastern									
2012-2013	35	1,684,463	2.1	30	832,792	3.6	5	851,671	0.6
2014-2015	33	1,690,107	2.0	24	835,627	2.9	9	854,480	1.1
2016-2017	45	1,705,065	2.6	38	843,657	4.5	7	861,408	0.8
Toronto									
2012-2013	934	5,521,639	16.9	776	2,677,415	29.0	153	2,844,224	5.4
2014-2015	879	5,632,179	15.6	740	2,732,136	27.1	133	2,900,043	4.6
2016-2017	923	5,801,030	15.9	780	2,821,380	27.6	138	2,979,650	4.6

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018.

Table 6.2 Continued Number and rate of new HIV diagnoses per 100,000 people, by health region and sex, Ontario, 2012 to 2017

	Overall			Males		Females			
	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people	Number of new HIV diagnoses	Health region population	Rate of new HIV diagnoses per 100,000 people
Central East									
2012-2013	164	7,925,652	2.1	115	3,910,367	2.9	47	4,015,285	1.2
2014-2015	210	8,155,271	2.6	166	4,019,265	4.1	43	4,136,006	1.0
2016-2017	217	8,419,366	2.6	161	4,149,364	3.9	53	4,270,002	1.2
Central West									
2012-2013	140	5,170,074	2.7	115	2,545,190	4.5	23	2,624,884	0.9
2014-2015	155	5,270,487	2.9	111	2,595,280	4.3	44	2,675,207	1.6
2016-2017	194	5,411,904	3.6	136	2,667,998	5.1	56	2,743,906	2.0
South West									
2012-2013	138	3,197,495	4.3	109	1,576,006	6.9	29	1,621,489	1.8
2014-2015	143	3,219,384	4.4	111	1,586,210	7.0	32	1,633,174	2.0
2016-2017	186	3,272,191	5.7	139	1,612,948	8.6	46	1,659,243	2.8

Notes: Data provided by Public Health Ontario Laboratory. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider. Rates calculated using Statistics Canada population estimates for all ages, accessed 04/09/2018.

By health region and priority population

Table 7.1 Percent new HIV diagnoses by priority population of all new HIV diagnoses within health regions, Ontario, 2012 to 2017 (combined)

	Northern	Ottawa	Eastern	Toronto	Central East	Central West	South West
Gay, bisexual and other men who have sex with men	28.0%	51.1%	61.6%	71.8%	50.5%	47.4%	42.8%
African, Caribbean and Black	8.6%	41.3%	6.8%	26.8%	30.4%	26.5%	14.2%
People who use injection drugs	49.5%	10.6%	15.1%	5.5%	7.2%	12.3%	35.7%
Indigenous	30.1%	2.3%	4.1%	1.1%	1.4%	2.5%	5.4%
Women*	31.2%	27.3%	17.8%	15.5%	22.7%	25.9%	21.8%

Notes: Data provided by Public Health Ontario Laboratory. Percentages based on a subset of diagnoses where race/ethnicity and/or country of birth were known (approximately 65-70% of diagnoses). Women* includes Cis and Trans women, including ACB, PWID, Indigenous women, and other women who face systemic and social inequities, are more likely to be exposed to HIV through a sexual or drug using partner. Data is shown for all Cis and Trans women. Health regions are groupings of Public Health Units. Diagnoses were assigned to a health region based on their address of residence or, if unknown, the address of the ordering provider