

HIV in Queensland

2018



Queensland
Government

HIV in Queensland 2018

Published by the State of Queensland (Queensland Health), February 2020



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Queensland Health) **2020**

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Communicable Diseases Branch, Department of Health, GPO Box 48, Brisbane QLD 4001, email EPI@health.qld.gov.au, phone 3328 9728.

An electronic version of this document is available at <http://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/resources/default.asp>

Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

Contents

Notification data.....	2
HIV notifications in Queensland.....	3
New diagnoses of HIV by sex, age-group and Indigenous status	4
New diagnoses of HIV by sex and risk exposure	7
Region of Birth.....	8
Recently acquired infection.....	9
Hospital and health service at time of diagnosis	11

Figures

Figure 1: Annual notification rates (per 100,000 population per year) for new diagnoses of HIV in Queensland and Australia, 1 January 1984 to 31 December 2018	3
Figure 2: Annual notification rates (per 100,000 population per year) for new diagnoses of HIV in Queensland, by Indigenous status and sex, 1 January 2014 to 31 December 2018	5
Figure 3: Number and percentage of new HIV notifications in Queensland by CD4+ cell count category at diagnosis, 1 January 2014 to 31 December 2018	6
Figure 4: Median CD4+ cell count at diagnosis for new HIV diagnoses in Queensland by sex, 1 January 2014 to 31 December 2018	6
Figure 5: Percentage of new Queensland HIV diagnoses by region of birth, 1 January 2014 to 31 December 2018.....	8
Figure 6: Number and percentage of new HIV notifications in Queensland by recently acquired infection status, 1 January 2014 to 31 December 2018	9

Tables

Table 1: Number and rate (per 100,000 population per year) of HIV notifications in Queensland, by place of first diagnosis, 1 January 2014 to 31 December 2018	3
Table 2: Number and percentage of new HIV diagnoses in Queensland by sex, age-group and Indigenous status, 1 January 2014 to 31 December 2018	4
Table 3: Number and percentage of new HIV diagnoses in Queensland by sex and risk exposure, 1 January 2014 to 31 December 2018.....	7
Table 4: Number and percentage of recently acquired HIV infections in Queensland, by sex and risk exposure, 1 January 2014 to 31 December 2018	10
Table 5: Number and rate (per 100,000 population per year) of new HIV diagnoses in Queensland by Hospital and Health Service (HHS) at diagnosis, 1 January 2014 to 31 December 2018.....	11

Introduction

Infection with the human immunodeficiency virus (HIV) has been notifiable in Queensland, and Australia, since 1984. It is estimated that there were approximately 5,500 (within a range of 4,800 and 6,200) people living with HIV in Queensland at the end of 2017, based on a national HIV prevalence rate of 0.14% (range 0.12% to 0.16%) among people aged 15 years or over.¹ Notification data were extracted from the Notifiable Conditions System (NoCS) of the Communicable Diseases Branch, Department of Health on 15 October 2019.

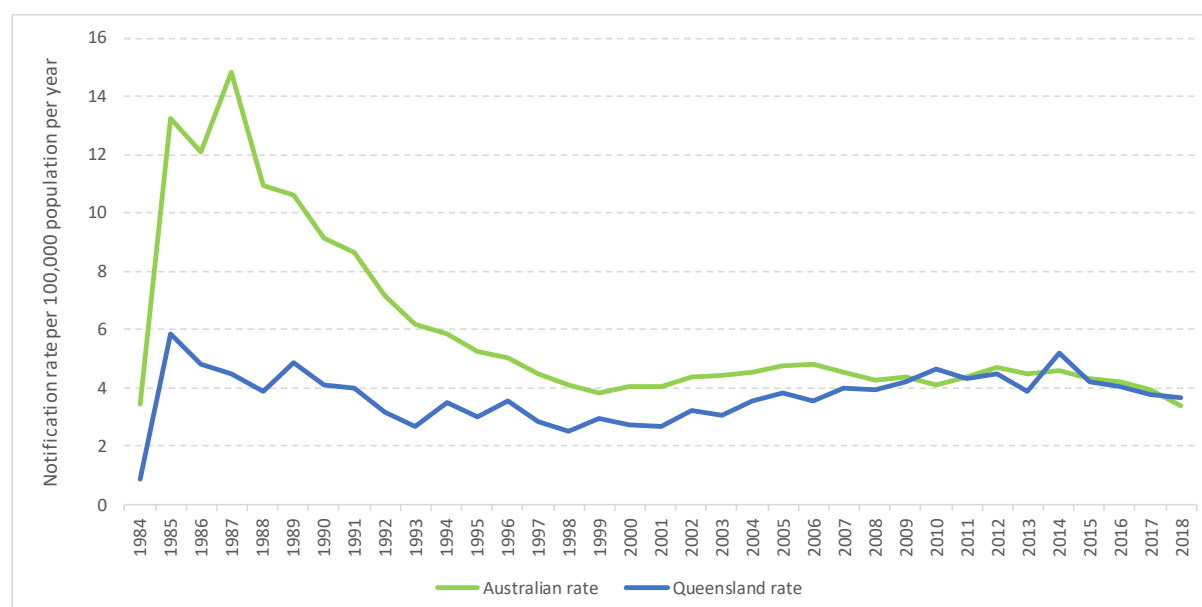
HIV notifications in Queensland

Table 1: Number and rate (per 100,000 population per year) of HIV notifications in Queensland, by place of first diagnosis, 1 January 2014 to 31 December 2018

Place of first diagnosis		2014	2015	2016	2017	2014-2017 average	2018
First diagnosed in Queensland (new diagnoses)		245	201	195	185	206.5	180
	Rate	5.2	4.2	4.0	3.8	4.3	3.7
First diagnosed in other Australian states/territories		53	78	71	85	71.8	66
	Rate	1.1	1.6	1.5	1.7	1.5	1.3
First diagnosed overseas		68	61	91	81	75.3	82
	Rate	1.4	1.3	1.9	1.6	1.6	1.7

- There were 180 new diagnoses of HIV notified in Queensland in 2018, a 13% decrease compared with the previous four-year average (206.5 cases). The notification rate of new diagnoses of HIV in 2018 (3.7/100,000/year) was lower than the previous four-year average (4.3/100,000/year).
- The number of notifications of HIV in Queensland initially diagnosed in other Australian states/territories was lower in 2018 (66 cases) than the previous four-year average (71.8 cases).
- The number of notifications of HIV in Queensland initially diagnosed overseas was higher in 2018 (82 cases) and the previous four-year average (75.3 cases).

Figure 1: Annual notification rates (per 100,000 population per year) for new diagnoses of HIV in Queensland and Australia^{1, 2}, 1 January 1984 to 31 December 2018



¹ Kirby Institute. HIV in Australia: annual surveillance short report 2018. Kirby Institute, University of NSW. 2018

² Kirby Institute. National HIV Quarterly Report. <https://kirby.unsw.edu.au/report/national-hiv-quarterly-report>

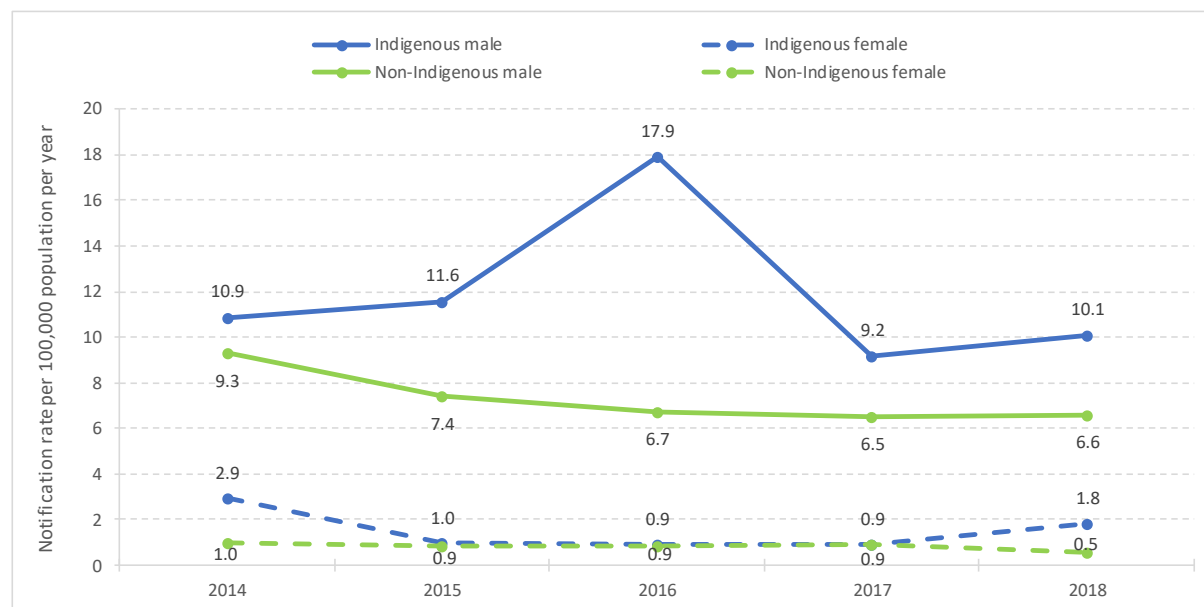
New diagnoses of HIV in Queensland by sex, age-group and Indigenous status

Table 2: Number and percentage of new HIV diagnoses in Queensland by sex, age-group and Indigenous status, 1 January 2014 to 31 December 2018

Characteristic		2014	2015	2016	2017	2014–2017 average	2018
Sex							
Male		220	180	174	162	184.0	165
	%	89.8	89.6	89.2	87.6	89.1	91.7
Female		25	21	21	23	22.5	15
	%	10.2	10.4	10.8	12.4	10.9	8.3
Age group (years)							
00-09		1	1	3	0	1.3	1
	%	0.4	0.5	1.5	0.0	0.6	0.6
10-19		5	4	0	3	3.0	3
	%	2.0	2.0	0.0	1.6	1.5	1.7
20-29		66	55	58	58	59.3	64
	%	26.9	27.4	29.7	31.4	28.7	35.6
30-39		72	49	47	46	53.5	45
	%	29.4	24.4	24.1	24.9	25.9	25.0
40-49		50	47	36	35	42.0	31
	%	20.4	23.4	18.5	18.9	20.3	17.2
50-59		29	29	34	33	31.3	23
	%	11.8	14.4	17.4	17.8	15.1	12.8
60+		22	16	17	10	16.3	13
	%	9.0	8.0	8.7	5.4	7.9	7.2
Indigenous Status							
Indigenous		14	13	20	11	14.5	13
	%	5.7	6.5	10.3	5.9	7.0	7.2
Non-Indigenous		231	188	175	174	192.0	167
	%	94.3	93.5	89.7	94.1	93.0	92.8
Total		245	201	195	185	206.5	180
	%	100.0	100.0	100.0	100.0	100.0	100.0

- Of the 180 new HIV diagnoses in 2018, 92% (165) were men, and 78% were aged 20 to 49 years.
- In 2018 there were 13 new HIV cases in Aboriginal and Torres Strait Islander people (11 males and 2 females), comparable with the previous four-year average (14.5 cases – 13.0 males and 1.5 females).

Figure 2: Annual notification rates (per 100,000 population per year) for new diagnoses of HIV in Queensland, by Indigenous status and sex, 1 January 2014 to 31 December 2018

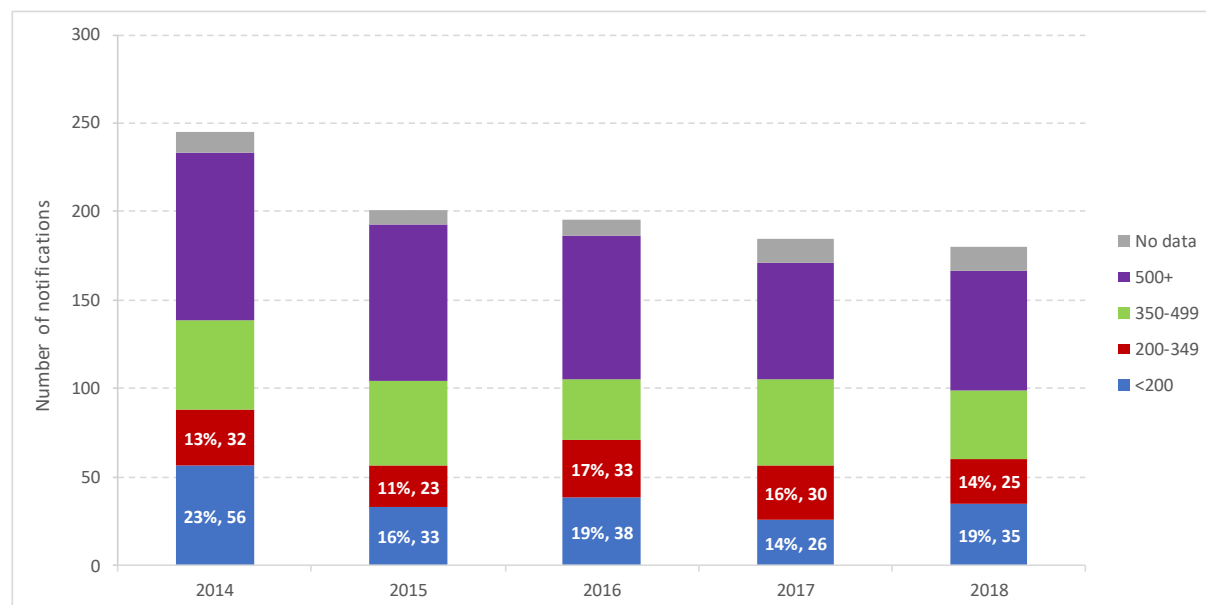


- In 2018, Aboriginal and Torres Strait Islander males had the highest notification rate of new HIV diagnoses (10.1/100,000/year), followed by non-Indigenous males (6.6/100,000/year), Aboriginal and Torres Strait Islander females (1.8/100,000/year), and non-Indigenous females (0.5/100,000/year).
- There was an increase in notification rates of new HIV diagnoses among Aboriginal and Torres Strait Islander males from 2014 to 2016, followed by a decrease in 2017 and 2018.
- A downward trend in new HIV notification rates was observed in non-Indigenous males during the reporting period.
- New HIV notification rates remained relatively stable in both Aboriginal and Torres Strait Islander and non-Indigenous females during the period 2014–2018.

CD4+ cell count at diagnosis

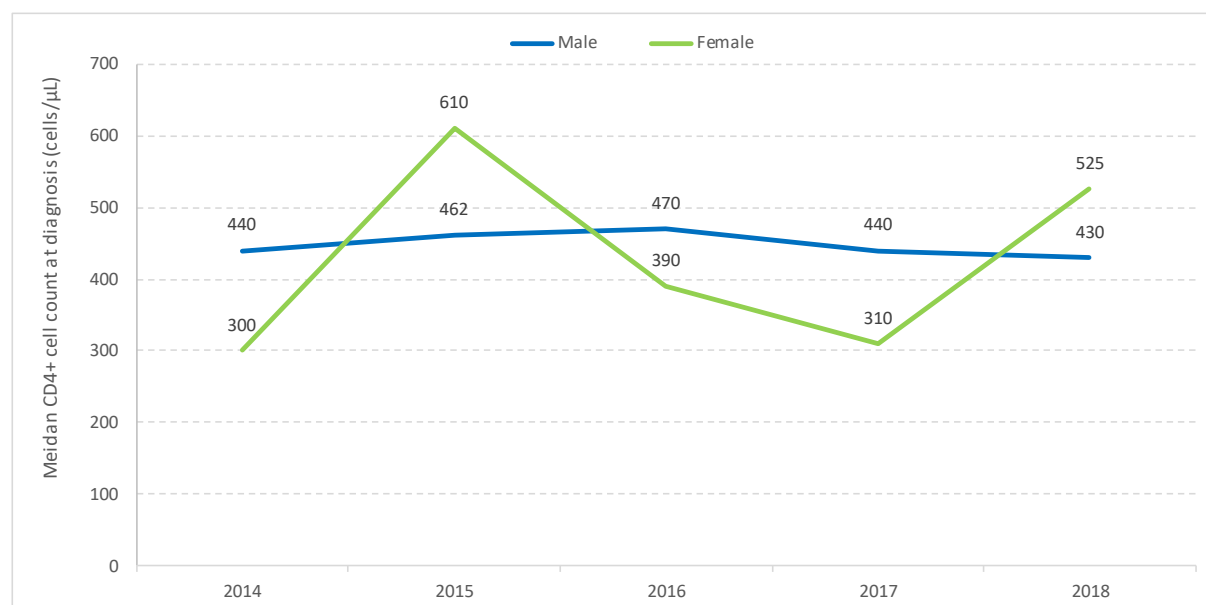
Late HIV diagnosis is defined as newly diagnosed HIV with a CD4+ cell count less than 350 cells/ μ L, and advanced HIV is defined as newly diagnosed HIV with a CD4+ cell count less than 200 cells/ μ L.

Figure 3: Number and percentage of new HIV notifications in Queensland by CD4+ cell count category at diagnosis, 1 January 2014 to 31 December 2018



- In 2018 late/advanced HIV diagnoses accounted for 33% of new diagnoses, similar to the previous four-year average (33%).

Figure 4: Median CD4+ cell count at diagnosis for new HIV diagnoses in Queensland by sex, 1 January 2014 to 31 December 2018



- The median CD4+ cell counts in males were relatively stable in the period 2014–2018, ranging from 430 to 470 cells/ μ L.
- The median CD4+ cell counts in females fluctuated in the reporting period, with the lowest median CD4+ cell count reported in 2017 (310 cells/ μ L).

New diagnoses of HIV by sex and risk exposure

Table 3: Number and percentage of new HIV diagnoses in Queensland by sex and risk exposure, 1 January 2014 to 31 December 2018

Risk exposure		2014	2015	2016	2017	2014–2017 average	2018
Males		220	180	174	162	184.0	165
	%	89.8	89.6	89.2	87.6	89.1	91.7
Men who have sex with men*		165	136	129	122	138.0	108
	%	67.3	67.7	66.2	65.9	66.8	60.0
Men who have sex with men* and injecting drug use		11	10	8	11	10.0	18
	%	4.5	5.0	4.1	5.9	4.8	10.0
Heterosexual (subtotal)		21	22	24	26	23.3	28
	%	8.6	10.9	12.3	14.1	11.3	15.6
<i>Person/partner from a high prevalence country#</i>		16	14	18	22	17.5	15
	%	6.5	7.0	9.2	11.9	8.5	8.3
<i>Partner who is an injecting drug user</i>		1	3	0	0	1.0	1
	%	0.4	1.5	0.0	0.0	0.5	0.6
<i>Partner's risk not further specified</i>		4	5	6	4	4.8	12
	%	1.6	2.5	3.1	2.2	2.3	6.7
Injecting drug use‡		7	3	2	1	3.3	2
	%	2.9	1.5	1.0	0.5	1.6	1.1
Maternal transmission		0	0	2	0	0.5	0
	%	0.0	0.0	1.0	0.0	0.2	0.0
Not reported/unknown		16	9	9	2	9.0	9
	%	6.5	4.5	4.6	1.1	4.4	5.0
Females		25	21	21	23	22.5	15
	%	10.2	10.4	10.8	12.4	10.9	8.3
Heterosexual (subtotal)		20	19	20	22	20.3	13
	%	8.2	9.5	10.3	11.9	9.8	7.2
<i>Person/partner from a high prevalence country#</i>		9	10	6	7	8.0	1
	%	3.7	5.0	3.1	3.8	3.9	0.6
<i>Partner who is an injecting drug user</i>		0	1	0	2	0.8	1
	%	0.0	0.5	0.0	1.1	0.4	0.6
<i>Male partner who has sex with men</i>		3	2	2	2	2.3	1
	%	1.2	1.0	1.0	1.1	1.1	0.6
<i>Partner's risk not further specified</i>		8	6	12	11	9.3	10
	%	3.3	3.0	6.2	5.9	4.5	5.6
Injecting drug use		3	1	0	0	1.0	0
	%	1.2	0.5	0.0	0.0	0.5	0.0
Maternal transmission		0	1	1	0	0.5	1
	%	0.0	0.5	0.5	0.0	0.2	0.6
Not reported/unknown		2	0	0	1	0.8	1
	%	0.8	0.0	0.0	0.5	0.4	0.6
Total		245	201	195	185	206.5	180
	%	100.0	100.0	100.0	100.0	100.0	100.0

* Also includes men who have sex with both men and women.

High prevalence countries defined as those with an estimated HIV prevalence of more than 1%. UNAIDS website: <http://aidsinfo.unaids.org/>

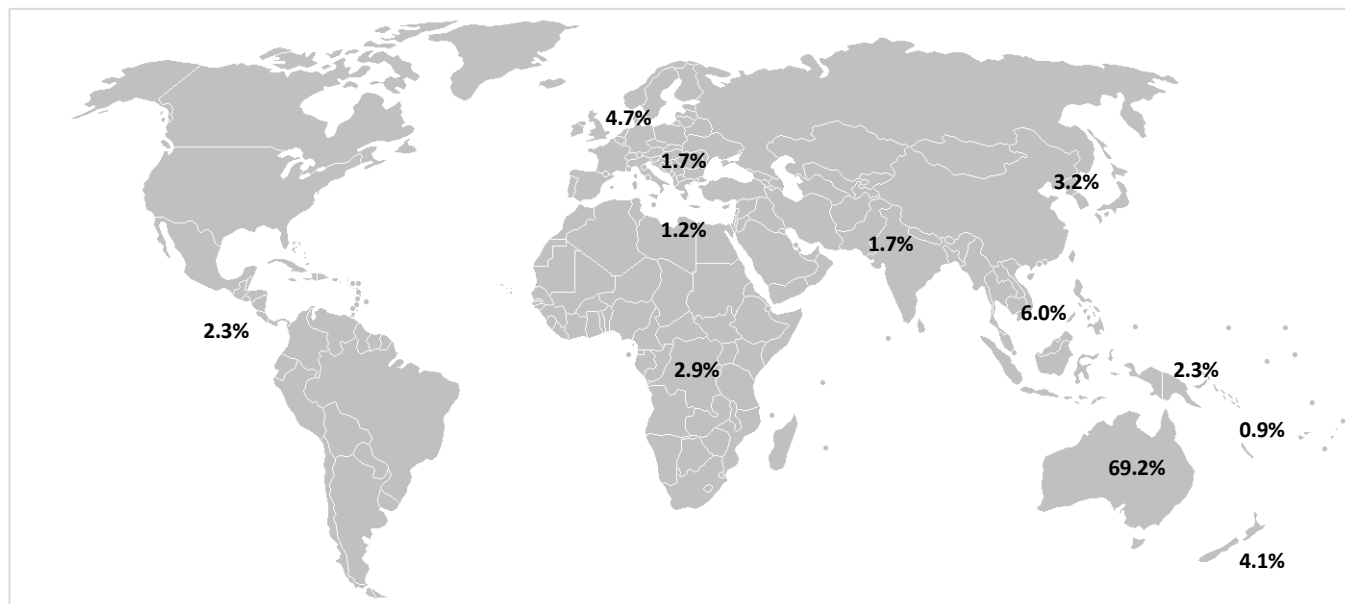
‡ Excludes men who have sex with men.

- The profile of risk exposure among newly diagnosed HIV cases is similar during the period 2014–2018, with transmission primarily occurring among men who have sex with men.
- In 2018, 60% of new HIV diagnoses were reported among men who have sex with men, 10% were attributed to men who have sex with men and injecting drug use, 23% to heterosexual sex, 1% to injecting drug use alone.

- Of 71 new HIV cases notified in Aboriginal and Torres Strait Islander people during the period 2014–2018, 46 (65%) were among men who have sex with men, 8 (11%) attributed to men who have sex with men and injecting drug use, 9 (13%) to heterosexual sex, and 4 (6%) to injecting drug use.

Region of Birth

Figure 5: Percentage of new Queensland HIV diagnoses by region of birth, 1 January 2014 to 31 December 2018



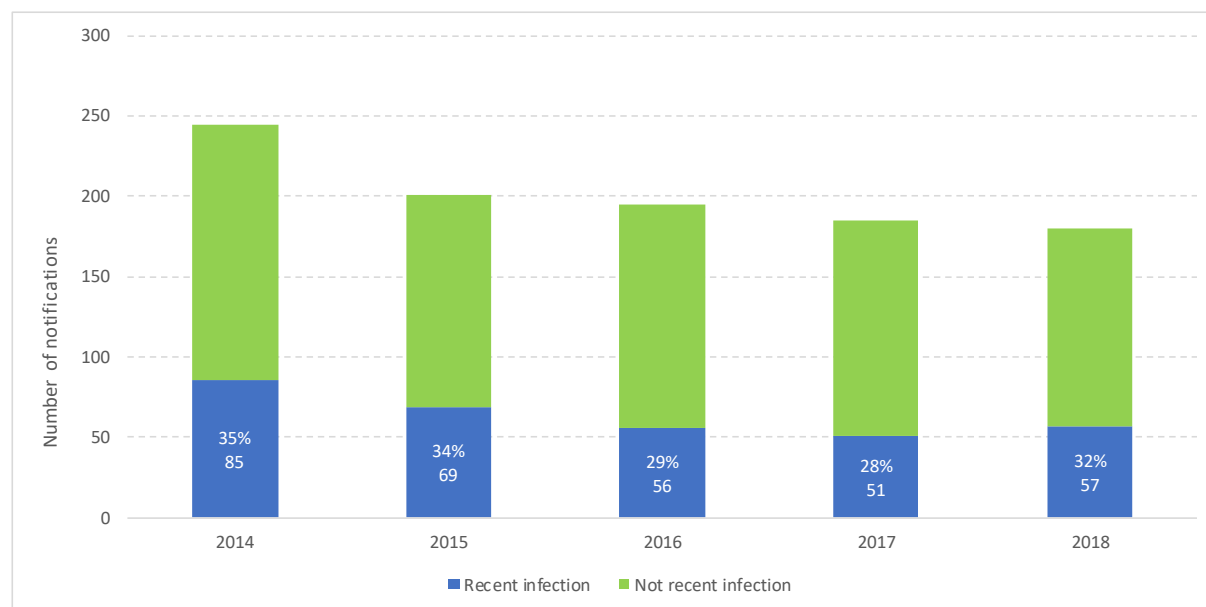
(Map template from https://commons.wikimedia.org/wiki/Maps_of_the_world#/media/File:BlankMap-World-v2.png)

- The majority of people newly diagnosed with HIV in Queensland during the period 2014–2018 were born in Australia (69.2%), with 6% born in South-East Asia (e.g. Malaysia, Philippines, Indonesia), 4.7% born in North-West Europe (e.g. United Kingdom, Germany), 4.1% born in New Zealand, and 2.9% born in Sub-Saharan Africa (e.g. South Africa, Zimbabwe).

Recently acquired infection

A recently acquired HIV infection is a new notification defined as having either a negative or indeterminate HIV antibody test in the previous 12 months or a clinically diagnosed primary HIV infection (seroconversion illness).

Figure 6: Number and percentage of new HIV notifications in Queensland by recently acquired infection status, 1 January 2014 to 31 December 2018



- In 2018, 57 (32%) of all new HIV diagnoses were recently acquired infections, similar to the four-year average (32%).
- Of these 57 recently acquired HIV cases, 4 (7%) were Aboriginal and Torres Strait Islander people, and 50 (88%) were aged 20 to 49 years.

Table 4: Number and percentage of recently acquired HIV infections in Queensland, by sex and risk exposure, 1 January 2014 to 31 December 2018

Risk exposure		2014	2015	2016	2017	2014–2017 average	2018
Males		81	63	50	48	60.5	51
	%	95.3	91.3	89.3	94.1	92.7	89.5
Men who have sex with men*		67	54	41	42	51.0	38
	%	78.8	78.3	73.2	82.4	78.2	66.7
Men who have sex with men* and injecting drug use		3	3	1	3	2.5	4
	%	3.5	4.3	1.8	5.9	3.8	7.0
Heterosexual (subtotal)		8	4	7	3	5.5	8
	%	9.4	5.8	12.5	5.9	8.4	14.0
Person/partner from a high prevalence country#		4	3	6	3	4.0	5
	%	4.7	4.3	10.7	5.9	6.1	8.8
Partner who is an injecting drug user		1	1	0	0	0.5	0
	%	1.2	1.4	0.0	0.0	0.8	0.0
Partner's risk not further specified		3	0	1	0	1.0	3
		3.5	0.0	1.8	0.0	1.5	5.3
Injecting drug use‡		0	1	0	0	0.3	0
	%	0.0	1.4	0.0	0.0	0.4	0.0
Not reported/unknown		3	1	1	0	1.3	1
	%	3.5	1.4	1.8	0.0	1.9	1.8
Females		4	6	6	3	4.8	6
	%	4.7	8.7	10.7	5.9	7.3	10.5
Heterosexual (subtotal)		3	6	6	3	4.5	5
	%	3.5	8.7	10.7	5.9	6.9	8.8
Partner from a high prevalence country#		2	2	1	0	1.3	0
	%	2.4	2.9	1.8	0.0	1.9	0.0
Male partner who has sex with men		0	1	1	0	0.5	1
	%	0.0	1.4	1.8	0.0	0.8	1.8
Partner's risk not further specified		1	3	4	3	2.8	4
		1.2	4.3	7.1	5.9	4.2	7.0
Maternal transmission		0	0	0	0	0.0	1
	%	0.0	0.0	0.0	0.0	0.0	1.8
Not reported/unknown		1	0	0	0	0.3	0
	%	1.2	0.0	0.0	0.0	0.4	0.0
Total		85	69	56	51	65.3	57
	%	100.0	100.0	100.0	100.0	100.0	100.0

* Also includes men who have sex with both men and women.

High prevalence countries defined as those with an estimated HIV prevalence of more than 1 per cent. UNAIDS website: <http://aidsinfo.unaids.org/>

‡ Excludes men who have sex with men

- The majority (67%) of the recently acquired infections in 2018 were in men who have sex with men, lower than the four-year average (78%).
- Twenty-three per cent of the recently acquired infections in 2018 were attributed to heterosexual sex, higher than the four-year average of 15%.

Hospital and Health Service at time of diagnosis

Table 5: Number and rate (per 100,000 population per year) of new HIV diagnoses in Queensland by Hospital and Health Service (HHS) at diagnosis, 1 January 2014 to 31 December 2018

HHS		2014	2015	2016	2017	2014–2017 average	2018
Torres and Cape		2	0	0	4	1.5	4
	Rate	7.8	0.0	0.0	14.9	5.7	14.9
North West		1	4	0	0	1.3	4
	Rate	3.3	13.5	0.0	0.0	4.3	14.2
Cairns and Hinterland		17	18	27	14	19.0	16
	Rate	6.8	7.2	10.7	5.5	7.5	6.3
Townsville		7	8	4	3	5.5	6
	Rate	2.9	3.3	1.7	1.2	2.3	2.5
Mackay		3	3	6	2	3.5	2
	Rate	1.7	1.7	3.5	1.2	2.0	1.2
Central West		1	0	1	0	0.5	1
	Rate	8.5	0.0	9.3	0.0	4.5	9.5
Central Queensland		7	4	5	2	4.5	3
	Rate	3.2	1.8	2.3	0.9	2.0	1.4
Wide Bay		8	4	6	2	5.0	4
	Rate	3.8	1.9	2.8	0.9	2.3	1.9
South West		0	0	0	1	0.3	0
	Rate	0.0	0.0	0.0	4.1	1.0	0.0
Darling Downs		8	11	6	5	7.5	7
	Rate	2.9	4.0	2.1	1.8	2.7	2.5
Sunshine Coast		9	7	7	7	7.5	6
	Rate	2.3	1.8	1.7	1.7	1.9	1.4*
Metro North		75	60	57	54	61.5	41
	Rate	7.9	6.2	5.8	5.4	6.3	4.1
Metro South		77	43	37	48	51.3	50
	Rate	7.1	3.9	3.3	4.2	4.6	4.4
West Moreton		5	8	8	10	7.8	12
	Rate	1.9	2.9	2.9	3.5	2.8	4.2
Gold Coast		25	31	31	33	30.0	24
	Rate	4.4	5.4	5.2	5.4	5.1	4.0
Queensland		245	201	195	185	206.5	180
	Rate	5.2	4.2	4.0	3.8	4.3	3.7

* Indicating that the HHS specific notification rate in 2018 is statistically significantly lower than the overall Queensland rate in 2018.

- In 2018, the largest number of new diagnoses of HIV were from Metro South HHS (50 cases, 28% of the Queensland total), followed by Metro North HHS (41 cases, 23%), Gold Coast HHS (24 cases, 13%), and Cairns and Hinterland HHS (16 cases, 9%).
- The number of new diagnoses of HIV continued to decrease in Metro North HHS, from 54 cases in 2017 to 41 cases in 2018.
- The number of new diagnoses of HIV remained stable in Metro South HHS, with 48 cases in 2017 and 50 cases in 2018.
- New diagnoses of HIV were sporadic in Central West HHS (3 cases in the five-year period) and South West HHS (1 case in the five-year period).
- In 2018, HHS specific notification rates of new HIV diagnoses had no statistically significant difference from the overall Queensland rate (3.7/100,000/year), except for Sunshine Coast HHS where a lower notification rate was reported.

Department of Health

HIV in Queensland 2018

www.health.qld.gov.au