

HIV in Queensland

2015

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

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HIV in Queensland

Infection with the human immunodeficiency virus (HIV) has been notifiable in Queensland, and Australia, since 1984. The statistics presented in this report are for the period 1 January 2010 to 31 December 2015. The notification data were extracted from the Notifiable Conditions System (NoCS) of the Communicable Disease Branch, Department of Health on 18 August 2016.

Please note that all numbers are provisional and subject to change as a result of ongoing case investigations.

In 2015, there were 340 new notifications of HIV in Queensland with 203 being new diagnoses. The remaining 137 were previously diagnosed either overseas or in another Australian state or territory.

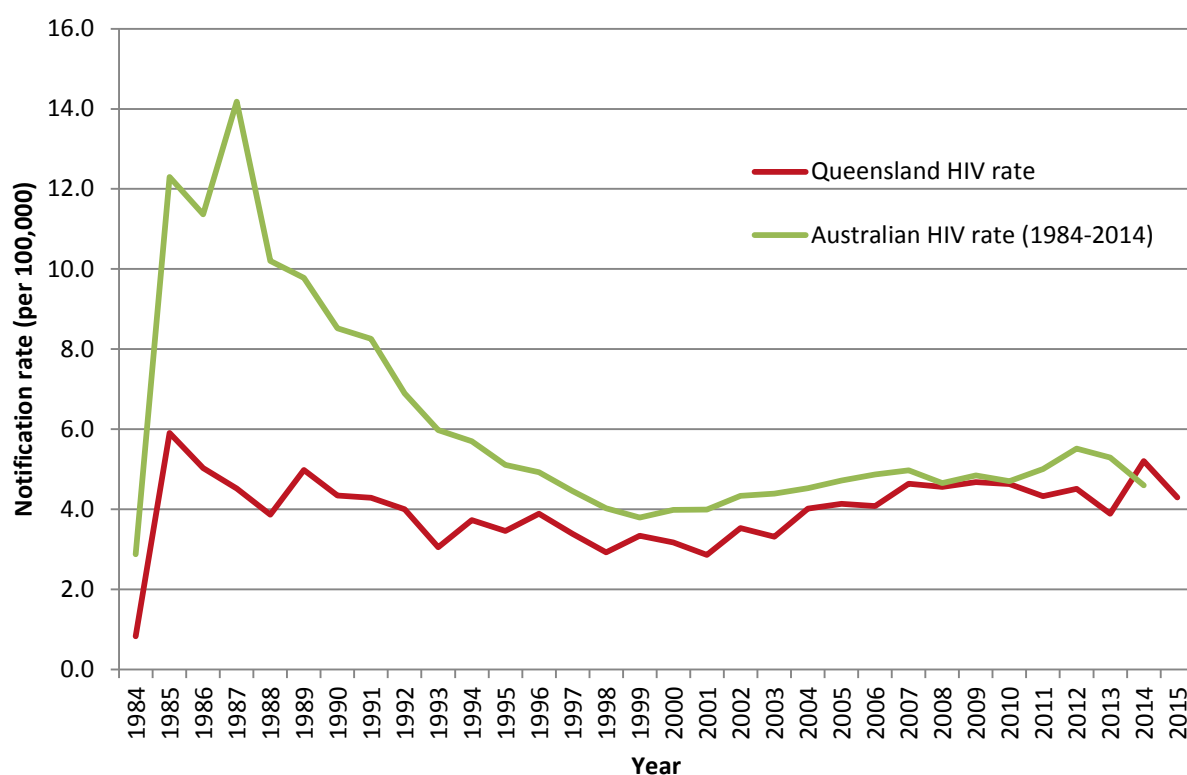


Figure 1: Annual notification rates (per 100,000 population per year) for newly diagnosed HIV in Queensland* and Australia#, 1 January 1984 to 31 December 2015

* Excludes those first diagnosed overseas or in another Australian state/territory

Source: "HIV, Viral Hepatitis and Sexually Transmissible Infections in Australia: Annual Surveillance Report", Kirby Institute, University of NSW. 2015

Rates calculated using Population by Age and Sex, Regions of Australia [Released Aug 31, 2013] (Australian Bureau of Statistics cat. no. 3235.0) and Australian historical Population Statistics, Population by sex, states and territories, 30 June, 1901 onwards (Australian Bureau of Statistics cat. No. 3105.0.65.001)

New Diagnoses of HIV

Table 1: Number and rate (per 100,000 population per year) of new diagnoses of HIV in Queensland, 1 January 2011 to 31 December 2015

		2011	2012	2013	2014	2015
New diagnoses in Queensland*	Rate	194 4.3	206 4.5	181 3.9	245 5.2	203 4.3
First diagnosed overseas	Rate	30 0.7	56 1.2	60 1.3	65 1.4	54 1.2

*Excluding those first diagnosed overseas or in another Australian state/territory

- There were 203 new diagnoses of HIV in Queensland in 2015, a 17 per cent decrease on the previous year and two per cent decrease on the previous four-year average.
- In 2015 there was a 17 per cent decrease in the number of notifications of HIV initially diagnosed overseas and now resident in Queensland compared with the previous year, and a two per cent increase when compared to the previous four-year average.

HIV 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 2011 to 31 December 2015

		2011	2012	2013	2014	2011-2014^	2015
Sex							
Male	%	173 89.2	189 91.7	164 90.6	221 90.2	186.8 90.4	182 89.7
Female	%	21 10.8	17 8.3	17 9.4	24 9.8	19.8 9.6	21 10.3
Age-group							
00-09	%	1 0.5	0 0.0	2 1.1	1 0.4	1 0.5	1 0.5
10-19	%	7 3.6	1 0.5	5 2.8	5 2.0	4.5 2.2	6 3.0
20-29	%	46 23.7	66 32.0	43 23.8	65 26.5	55 26.6	55 27.1
30-39	%	52 26.8	55 26.7	45 24.9	72 29.4	56 27.1	49 24.1
40-49	%	52 26.8	37 18	44 24.3	51 20.8	46 22.3	47 23.2
50-59	%	26 13.4	28 13.6	23 12.7	29 11.8	26.5 12.8	29 14.3
60+	%	10 5.2	19 9.2	19 10.5	22 9.0	17.5 8.5	16 7.9
Indigenous Status							
Indigenous	%	8 4.1	15 7.3	9 5.0	14 5.7	11.5 5.6	13 6.4
Non-Indigenous	%	186 95.9	191 92.7	172 95.0	231 94.3	195 94.4	190 93.6
Total	%	194 100.0	206 100.0	181 100.0	245 100.0	206.5 100.0	203 100.0

^ Four-year average

- Of the 203 new HIV diagnoses in 2015, approximately 90 per cent (182) were men. More than 70 per cent of individuals with newly diagnosed HIV were aged 20 to 49 years.
- In 2015 there was a slight decrease in the number of Aboriginal and Torres Strait Islander new diagnoses (13) compared to the previous year (14) but still greater than the four-year mean (11.5).

CD4+ cell count at diagnosis

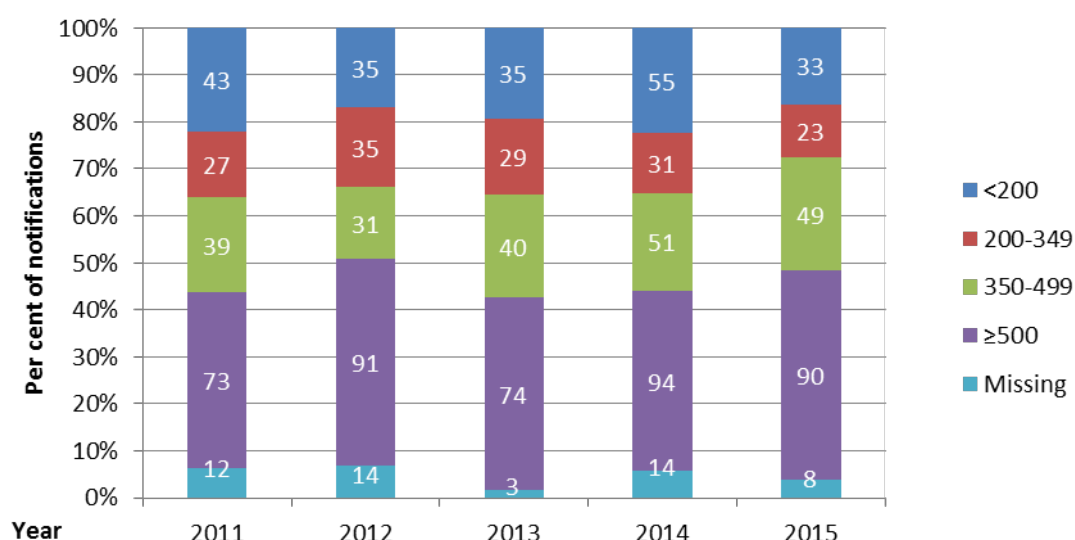


Figure 2: Number and percentage of new HIV notifications in Queensland by CD4+ cell count category at diagnosis, 1 January 2011 to 31 December 2015

- In 2015 there were fewer late diagnoses than previous years, with 28% of new Queensland HIV diagnoses having a CD4+ count less than 350 cell/ μ L at diagnosis.

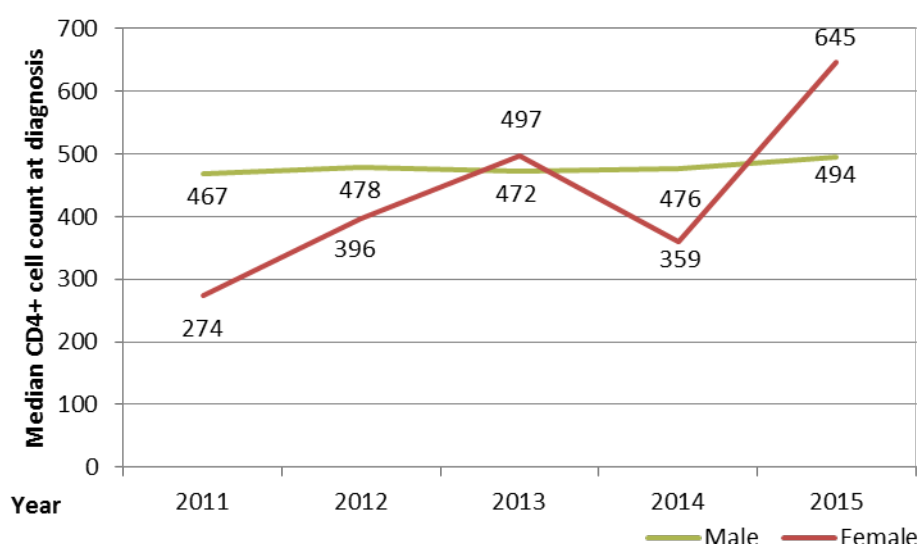


Figure 3: Median CD4+ cell count at new diagnosis of HIV by sex in Queensland, 1 January 2011 to 31 December 2015

- The median CD4+ cell counts at diagnosis in females have fluctuated in recent years but show a more than two-fold increase from 2011 to 2015; the median CD4+ cell counts in males have remained relatively stable.

HIV by sex and risk exposure

Table 3: Number and percentage of new HIV diagnoses in Queensland by sex and risk exposure, 1 January 2011 to 31 December 2015

		2011	2012	2013	2014	2011-2014 [^]	2015
Males	%	173 89.2	189 91.7	164 90.6	221 90.2	186.8 90.4	182 89.7
Men who have sex with men/bisexual	%	123 63.4	138 67.0	112 61.9	165 67.3	134.5 65.1	136 67.0
Men who have sex with men/bisexual and injecting drug use	%	15 7.7	13 6.3	13 7.2	11 4.5	13 6.3	9 4.4
Heterosexual	%	23 11.9	21 10.2	24 13.3	23 9.4	22.8 11.0	22 10.8
<i>Person/partner with origin from a high prevalence country[#]</i>	%	19 9.8	17 8.3	22 12.2	22 9.0	20 9.7	17 8.4
<i>Partner with/at risk of infection[†]</i>	%	4 2.1	4 1.9	2 1.1	1 0.4	2.8 1.3	5 2.5
Injecting drug use [*]	%	3 1.5	4 1.9	2 1.1	7 2.9	4 1.9	4 2.0
Maternal transmission	%	0 0.0	0 0.0	1 0.6	0 0.0	0.3 0.1	2 1.0
Not reported/unknown	%	9 4.6	13 6.3	12 6.6	15 6.1	12.3 5.9	9 4.4
Females	%	21 10.8	17 8.3	17 9.4	24 9.8	19.8 9.6	21 10.3
Heterosexual	%	19 9.8	15 7.3	14 7.7	18 7.3	16.5 8.0	19 9.4
<i>Person/partner with origin from a high prevalence country[#]</i>	%	8 4.1	6 2.9	9 5.0	10 4.1	8.3 4.0	10 4.9
<i>Partner with/at risk of infection[†]</i>	%	11 5.7	9 4.4	5 2.8	8 3.3	8.3 4.0	9 4.4
Injecting drug use	%	1 0.5	0 0.0	0 0.0	3 1.2	1 0.5	1 0.5
Maternal transmission	%	1 0.5	0 0.0	1 0.6	0 0.0	0.5 0.2	1 0.5
Not reported/unknown	%	0 0.0	2 1.0	2 1.1	3 1.2	1.8 0.8	0 0.0
Total	%	194 100.0	206 100.0	181 100.0	245 100.0	206.5 100.0	203 100.0

[^]Four-year average

^{*}Excludes men who have sex with men

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

[†]Partner with/at risk of infection includes: bisexual, injecting drug use, other risks not determined

- The number of new diagnoses in men decreased 18 per cent from 221 in 2014 to 182 in 2015, which was reflected in the 18 per cent decrease in new diagnoses in men who reported having sex with men and/or were bisexual.
- The proportion of total new diagnoses in males and females in 2015 was comparable to the four-year average proportion.
- New HIV diagnoses in females fluctuated slightly, with the main risk exposures being sexual partners either from high prevalence countries or at risk of infection from other sources.

Region of Birth



Figure 4: Percentage of new Queensland HIV diagnoses by region of birth in the period 1 January 2011 to 31 December 2015 (map template accessed 12 June 2015, www.rb.com/site/rkbr/templates/worldmaps/)

- The majority of people diagnosed with HIV in Queensland from 1 January 2011 to 31 December 2015 were born in Australia (71 per cent), with five per cent born in North-West Europe (e.g., United Kingdom, France, Germany, Netherlands, Sweden) and four per cent born in Sub-Saharan Africa (e.g., South Africa, Zimbabwe, Sudan, Malawi, Somalia, Uganda, Zambia).

Recently acquired infection

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

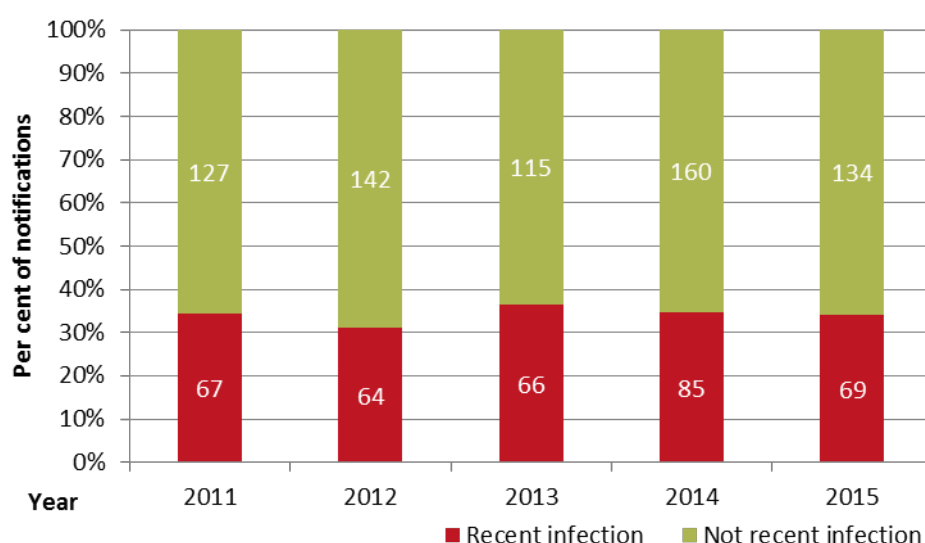


Figure 5: Percentage of new HIV notifications in Queensland by recently acquired infection status, 1 January 2011 to 31 December 2015

- In 2015, 69 (34 per cent) of all new HIV diagnoses were recently acquired infections, compared to 85 (36 per cent) in 2014. While the number of recently acquired infections diagnosed decreased, the proportion of notifications classified as newly acquired remained stable.

Table 4: Number and percentage of recently acquired HIV infection diagnoses in Queensland, by sex and risk factor, 1 January 2011 to 31 December 2015

		2011	2012	2013	2014	2011-2014 [^]	2015
Males	%	62 92.5	60 93.8	59 89.4	81 95.3	65.5 92.9	63 91.3
Men who have sex with men/bisexual	%	47 70.1	50 78.1	50 75.8	67 78.8	53.5 75.9	54 78.3
Men who have sex with men/bisexual and injecting drug use	%	4 6.0	4 6.3	5 7.6	3 3.5	4 5.7	2 2.9
Heterosexual	%	9 13.4	3 4.7	3 4.5	8 9.4	5.8 8.2	4 5.8
<i>Partner from high prevalence country[#]</i>	%	7 10.4	3 4.7	3 4.5	7 8.2	5 7.1	3 4.3
<i>Partner with/at risk of infection[‡]</i>	%	2 3.0	0 0.0	0 0.0	1 1.2	0.8 1.1	1 1.4
Injecting drug use*	%	0 0.0	1 1.6	0 0.0	0 0.0	0.3 0.4	2 2.9
Not reported/unknown	%	2 3.0	2 3.1	1 1.5	3 3.5	2 2.8	1 1.4
Females	%	5 7.5	4 6.3	7 10.6	4 4.7	5 7.1	6 8.7
Heterosexual	%	5 7.5	4 6.3	6 9.1	2 2.4	4.3 6.0	6 8.7
<i>Partner from high prevalence country[#]</i>	%	0 0.0	1 1.6	2 3.0	2 2.4	1.3 1.8	2 2.9
<i>Partner with/at risk of infection[‡]</i>	%	5 7.5	3 4.7	4 6.1	0 0.0	3 4.3	4 5.8
Injecting drug use	%	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0
Maternal transmission	%	0 0.0	0 0.0	1 1.5	0 0.0	0.3 0.4	0 0.0
Not reported/unknown	%	0 0.0	0 0.0	0 0.0	1 1.2	0.3 0.4	0 0.0
Total recently acquired infection	%	67 100.0	64 100.0	66 100.0	85 100.0	70.5 100.0	69 100.0

[^]Four-year average

*Excludes men who have sex with men

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

[‡]Partner with/at risk of infection includes: bisexual, injecting drug use, other not determined

- There have been slight fluctuations of newly acquired infections in the previous five years. In 2015, males accounted for 91.3 per cent, a slight decrease from 95.3 per cent in 2014.
- The majority of the recently acquired infections in 2015 were in men who have sex with men or bisexual men.

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 2011 to 31 December 2015

HHS		2011	2012	2013	2014	2011-2014 [^]	2015
Cairns and Hinterland	Rate	12 5.1	20 8.3	15 6.1	17 6.9	16 6.6	18 7.3
Central Queensland	Rate	3 1.4	2 0.9	6 2.7	7 3.1	4.5 2.0	4 1.8
Central West	Rate	0 0.0	0 0.0	0 0.0	1 8.0	0.3 2.0	0 0.0
Darling Downs	Rate	8 3.0	7 2.6	3 1.1	8 2.9	6.5 2.4	11 4.0
Gold Coast	Rate	26 4.9	24 4.4	19 3.4	25 4.5	23.5 4.3	31 5.5
Mackay	Rate	3 1.7	4 2.3	3 1.7	3 1.6	3.3 1.8	3 1.6
Metro North	Rate	73 8.2	68 7.5	61 6.6	75 8.0	69.3 7.6	60 6.4
Metro South	Rate	43 4.2	51 4.8	47 4.4	77 7.1	54.5 5.1	45 4.1
North West	Rate	2 6.3	2 6.2	1 3.1	1 3.1	1.5 4.6	4 12.3
South West	Rate	1 3.8	0 0.0	0 0.0	0 0.0	0.3 0.9	0 0.0
Sunshine Coast	Rate	6 1.6	8 2.2	3 0.8	9 2.3	6.5 1.7	7 1.8
Torres and Cape	Rate	0 0.0	0 0.0	0 0.0	2 7.8	0.5 2.0	0 0.0
Townsville	Rate	6 2.6	5 2.1	7 2.9	7 2.9	6.3 2.6	8 3.3
West Moreton	Rate	9 3.7	5 2.0	12 4.7	5 1.9	7.8 3.1	8 3.0
Wide Bay	Rate	2 1.0	10 4.8	4 1.9	8 3.8	6 2.9	4 1.9
Queensland	Rate	194 4.3	206 4.5	181 3.9	245 5.2	206.5 4.5	203 4.3

[^]Four-year average

- Notification rates of new diagnoses increased in 2015 in six HHSs (Cairns and Hinterland HHS, Darling Downs HHS, Gold Coast HHS, North West HHS, Townsville HHS, and West Moreton HHS), compared to the notification rates in 2014.
- Of the remaining nine HHSs, the rates decreased in seven (Central Queensland HHS, Central West HHS, Metro North HHS, Metro South HHS, Sunshine Coast HHS, Torres and Cape HHS and Wide Bay HHS) and remained stable in two (Mackay HHS and South West HHS).
- In 2015, North West HHS had the highest rate of new diagnoses with 12.3 per 100,000 population per year, an increase from 3.1 per 100,000 per year in 2014.
- Metro North had the highest number of new diagnoses in 2015 (60), a decrease from 75 notifications in 2014; the notification rate decreased from 8.0 per 100,000 population per year in 2014 to 6.4 per 100,000 population per year in 2015. This was also a decrease on the four-year average of 7.6 per 100,000 population per year.

