

HIV in Queensland

2014

HIV in Queensland

Published by the State of Queensland (Queensland Health), July 2015



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) **2015**

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 Disease Unit, Department of Health, GPO Box 48, Brisbane QLD 4001, email EPI@health.qld.gov.au , phone 07 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

HIV in Queensland	1
New diagnoses of HIV	2
HIV by sex, age-group and Indigenous status.....	2
CD4+ cell count at diagnosis	3
Region of Birth.....	5
Recently acquired infection.....	5
Hospital and health service at time of diagnosis	7

Figures

Figure 1 - Annual notification rates (per 100,000 population) for newly diagnosed HIV (includes those first diagnosed overseas) in Queensland and Australia, 1 January 1984 to 31 December 2014.....1

Figure 2 - Percentage of new HIV notifications in Queensland by CD4+ cell count category at diagnosis, 1 January 2010 to 31 December 2014.....3

Figure 3 - Median CD4+ cell count at new diagnosis of HIV in Queensland, 1 January 2010 to 31 December 2014.....3

Figure 4 - Percentage of new Queensland HIV diagnoses by region of birth in the period 1 January 2010 to 31 December 2014. (*map accessed 12 June 2015, www.rb.com/site/rkbr/templates/worldmaps/*).....5

Figure 5 - Percentage of new HIV notifications in Queensland by recently acquired infection status, 1 January 2010 to 31 December 2014.....5

Tables

Table 1 - Number and rate per 100,000 population of new diagnoses of HIV in Queensland, 1 January 2010 to 31 December 2014.....2

Table 2 - Number and percentage of new HIV diagnoses in Queensland by sex, age-group and Indigenous status, 1 January 2010 to 31 December 2014.....2

Table 3 - Number and percentage of new HIV diagnoses in Queensland by sex and risk exposure, 1 January 2010 to 31 December 2014.....4

Table 4 - Number and percentage of Queensland recently acquired HIV infection diagnoses, by sex and risk factor, 1 January 2010 to 31 December 2014.....6

Table 5 - Number and rate (per 100,000 population) of new HIV diagnoses in Queensland by Hospital and Health Service (HHS) at diagnosis, 1 January 2010 to 31 December 2014.....7

HIV in Queensland

The human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) have been notifiable in Queensland, and Australia, since 1984. The statistics presented in this report are for the period 1 January 2010 to 31 December 2014. The notification data were extracted from the Notifiable Conditions System (NOCS) of the Communicable Disease Unit, Department of Health on 11 June 2015.

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

In 2014, there were 365 new notifications of HIV in Queensland with 245 being new diagnoses. The remaining 120 were previously diagnosed either overseas or in another Australian state or territory.

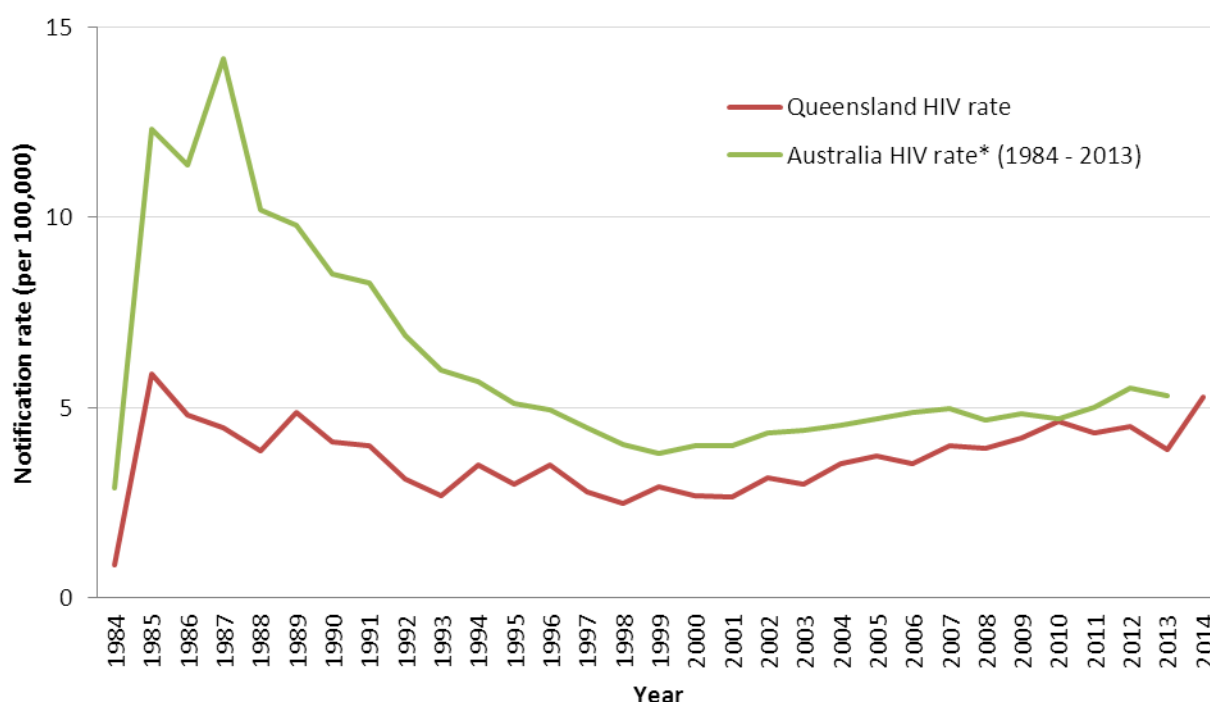


Figure 1: Annual notification rates (per 100,000 population) for newly diagnosed HIV (excludes those first diagnosed overseas) in Queensland and Australia, 1 January 1984 to 31 December 2014*

*Source: "HIV, Viral Hepatitis and Sexually Transmissible Infections in Australia: Annual Surveillance Report", Kirby Institute, University of NSW. 2014

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 of new diagnoses of HIV in Queensland, 1 January 2010 to 31 December 2014*

		2010	2011	2012	2013	2014
New diagnoses in Queensland	rate	204 4.6	194 4.3	206 4.5	181 3.9	245 5.3
First diagnosed overseas	rate	36 0.8	29 0.7	55 1.2	59 1.3	62 1.3

*Excluding those first diagnosed in another Australian state or territory

- There were 245 new diagnoses of HIV in Queensland in 2014, a 36 per cent increase on the previous year and 26 per cent increase on the previous four-year average.
- In 2014 there was a five per cent increase in the number of notifications of HIV initially diagnosed overseas and now resident in Queensland compared with the previous year, and a 39 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 2010 to 31 December 2014

		2010	2011	2012	2013	2010-2013 [^]	2014
Sex							
Male	%	174 85.3	173 89.2	189 91.7	164 90.6	175 89.2	222 90.6
Female	%	30 14.7	21 10.8	17 8.3	17 9.4	21.3 10.8	23 9.3
Age-group							
00-09	%	0 0	1 0.5	0 0	2 1.1	0.8 0.4	1 0.4
10-19	%	7 3.4	7 3.6	1 0.5	5 2.8	5 2.5	5 2.0
20-29	%	51 25.0	46 23.7	66 32.0	43 23.8	51.5 26.2	65 26.8
30-39	%	62 30.4	52 26.8	55 26.7	45 24.9	53.5 27.3	72 29.3
40-49	%	54 26.5	52 26.8	37 18	44 24.3	46.8 23.8	51 20.7
50-59	%	19 9.3	26 13.4	28 13.6	23 12.7	24 12.2	29 11.8
60+	%	11 5.4	10 5.2	19 9.2	19 10.5	14.8 7.5	22 8.9
Indigenous Status							
Indigenous	%	7 3.4	8 4.1	15 7.3	9 5.0	9.8 5.0	14 5.7
Non-Indigenous	%	197 96.6	185 95.4	191 92.7	172 95.0	186.3 94.9	231 93.9
Total	%	204 100	194* 100	206 100	181 100	196.5 100	245 100

* Total includes one Indigenous status not-reported

[^] Four-year average 2010-2013

- Of the 245 new HIV diagnoses in 2014, more than 90 per cent (222) were men. More than 75 per cent of individuals with newly diagnosed HIV were aged 20 to 49 years.
- In 2014 there was an increase in the number of Aboriginal and Torres Strait Islander new diagnoses (14) compared to both the previous year (9) and four-year mean (9.8).

CD4+ cell count at diagnosis

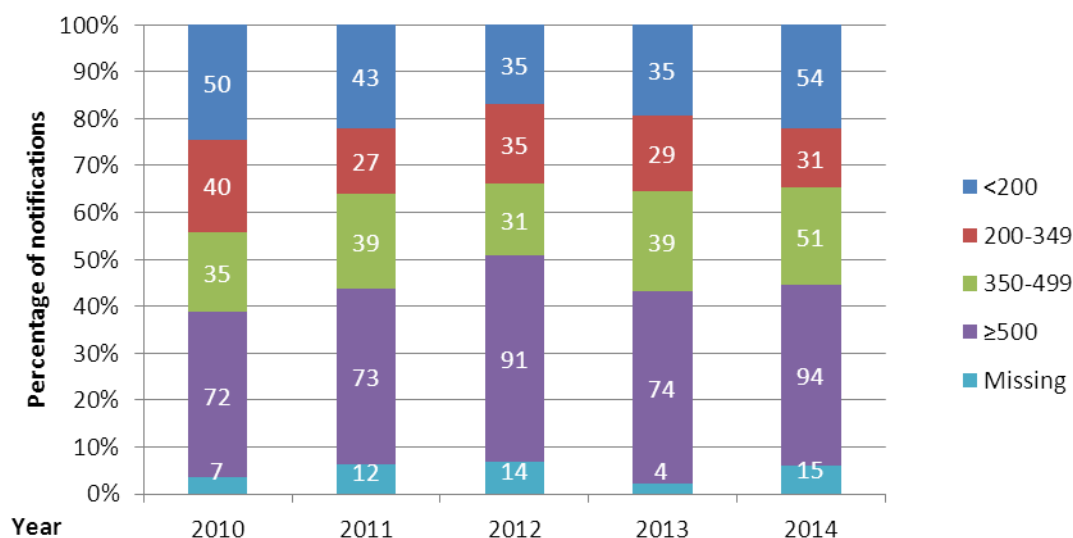


Figure 2: Percentage of new HIV notifications in Queensland by CD4+ cell count category at diagnosis, 1 January 2010 to 31 December 2014

- There has been no change in the proportion of late diagnoses with approximately one third of new Queensland HIV diagnoses in 2014 having a CD4+ count less than 350 cell/ μ L at diagnosis.

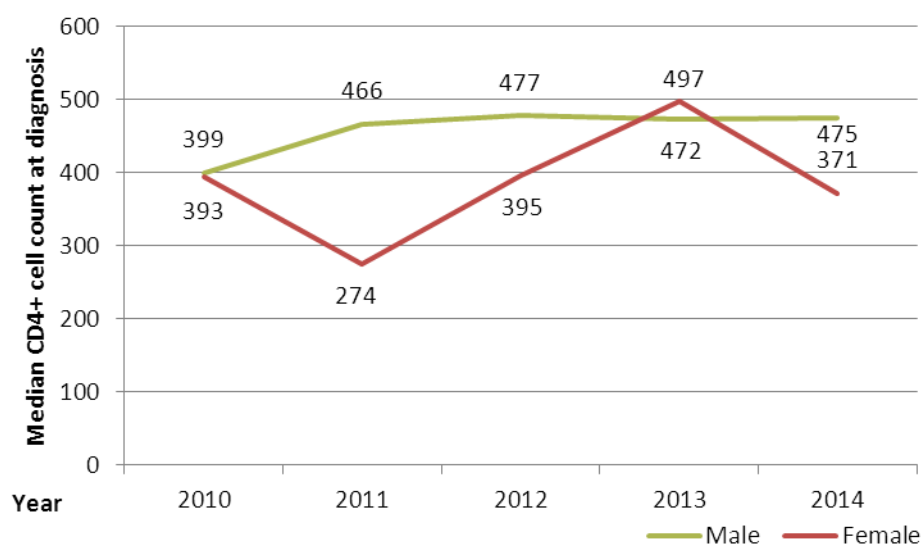


Figure 3: Median CD4+ cell count at new diagnosis of HIV in Queensland, 1 January 2010 to 31 December 2014

- In 2014 the median CD4+ cell count on diagnosis in females was 25% less than in 2013, while males have remained relatively stable since 2011.

HIV by sex and risk exposure

Table 3: Number and percentage of new HIV diagnoses in Queensland by sex and risk exposure, 1 January 2010 to 31 December 2014

		2010	2011	2012	2013	2010-2013 [^]	2014
Males	%	174 85.3	173 89.2	189 91.7	164 90.6	175 89.2	222 90.6
Men who have sex with men/bisexual	%	126 61.8	123 63.4	138 67.0	112 61.9	125.0 63.6	165 67.3
Men who have sex with men/bisexual and injecting drug use	%	6 2.9	15 7.7	13 6.3	13 7.2	11.8 6.0	11 4.5
Heterosexual	%	25 12.3	23 11.9	21 10.2	24 13.3	23.3 11.8	24 9.8
<i>Person/partner with origin from a high prevalence country[#]</i>	%	25 12.3	19 9.8	17 8.3	22 12.2	20.8 10.6	23 9.3
<i>Partner with/at risk of infection[‡]</i>	%	0 0	4 2.1	4 1.9	2 1.1	2.5 1.3	1 0.4
Injecting drug use*	%	5 2.5	3 1.5	4 1.9	2 1.1	3.5 1.8	6 2.4
Maternal	%	1 0.5	0 0	0 0	1 0.6	0.5 0.3	0 0
Not reported/unknown	%	11 5.4	9 4.6	13 6.3	12 6.6	11.3 5.7	16 6.5
Females	%	30 14.7	21 10.8	17 8.3	17 9.4	21.3 10.8	23 9.3
Heterosexual	%	25 12.3	18 9.3	15 7.3	14 7.7	18.0 9.2	18 7.3
<i>Person/partner with origin from a high prevalence country[#]</i>	%	23 11.3	8 4.1	6 2.9	9 5	11.5 5.9	9 3.7
<i>Partner with/at risk of infection[‡]</i>	%	2 1.0	10 5.2	9 4.4	5 2.8	6.5 3.3	9 3.7
Injecting drug use	%	3 1.5	1 0.5	0 0	0 0	1.0 0.5	3 1.2
Maternal	%	0 0	1 0.5	0 0	1 0.6	0.5 0.3	0 0
Not reported/unknown	%	2 1.0	1 0.5	2 1.0	2 1.1	1.8 0.9	2 0.8
Total	%	204 100	194 100	206 100	181 100	196 100	245 100

[^] Four-year average

* Excludes men who have sex with men

[#] High prevalence countries defined as those with an estimated number of adults aged 15 to 24 years living with HIV greater than 1 per cent. UNAIDS website <http://www.unaids.org/en/>

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

- The number of new diagnoses in men increased 36 per cent from 164 in 2013 to 222 in 2014. There was also a 48 per cent increase in new diagnoses in men who reported having sex with men and/or were bisexual, though the proportion of total new diagnoses was comparable to the four-year average proportion.
- New diagnoses of HIV in females remained steady, 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 2010 to 31 December 2014 (map accessed 12 June 2015, www.rb.com/site/rkbr/templates/worldmaps/)

- The majority of people diagnosed with HIV in Queensland from 1 January 2010 to 31 December 2014 were born in Australia (69 per cent), with 6 per cent born in North-West Europe (e.g., United Kingdom, France, Germany, Netherlands) and 5 per cent born in Sub-Saharan Africa (e.g., Ghana, Liberia, Sierra Leone, South Africa, Zambia, Zimbabwe).

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.

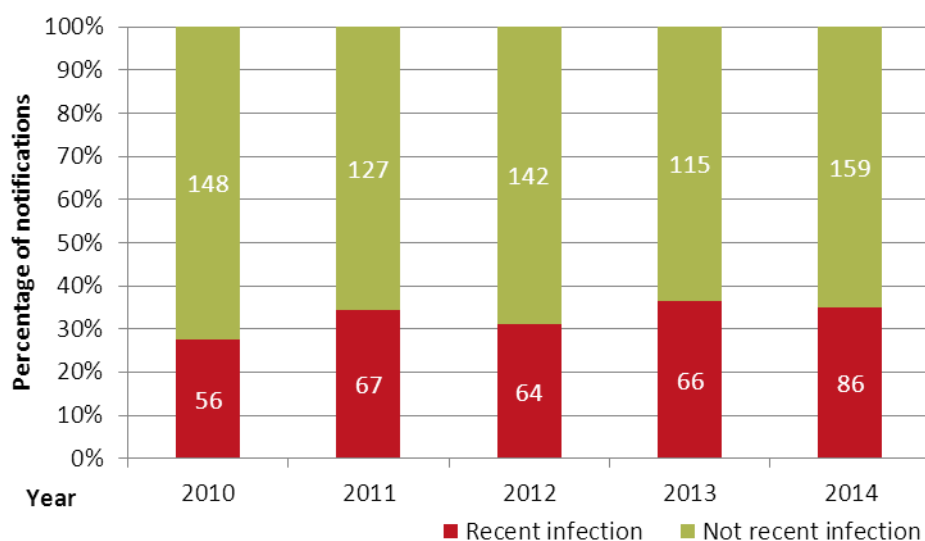


Figure 5: Percentage of new HIV notifications in Queensland by recently acquired infection status, 1 January 2010 to 31 December 2014

- In 2014, 86 (35 per cent) of all new HIV diagnoses were recently acquired infections, compared to 66 (36 per cent) in 2013. While the number of recently acquired infections diagnosed increased, 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 2010 to 31 December 2014

		2010	2011	2012	2013	2010-2013 [^]	2014
Males	%	52 92.9	62 92.5	60 93.8	59 89.4	58.3 92.1	82 95.3
Men who have sex with men/bisexual	%	49 87.5	47 70.1	50 78.1	50 75.8	49 77.5	68 79.1
Men who have sex with men/bisexual and injecting drug use	%	1 1.8	4 6.0	4 6.3	5 7.6	3.5 5.5	3 3.5
Heterosexual	%	2 3.6	9 13.4	3 4.7	3 4.5	4.3 6.7	8 9.3
<i>Partner from high prevalence country[#]</i>	%	2 3.6	7 10.4	3 4.7	3 4.5	3.8 5.9	7 8.1
<i>Partner with/at risk of infection[‡]</i>	%	0 0	2 3.0	0 0	0 0	0.5 0.8	1 1.2
Injecting drug use*	%	0 0	0 0	1 1.6	0 0	0.3 0.4	0 0
Not reported/unknown	%	0 0	2 3.0	2 3.1	1 1.5	1.3 2.0	3 3.5
Females	%	4 7.1	5 7.5	4 6.3	7 10.6	5 7.9	4 4.7
Heterosexual	%	3 5.4	5 7.5	4 6.3	6 9.1	4.5 7.1	3 3.5
<i>Partner from high prevalence country[#]</i>	%	3 5.4	0 0	1 1.6	2 3.0	1.5 2.4	2 2.3
<i>Partner with/at risk of infection[‡]</i>	%	0 0	5 7.5	3 4.7	4 6.1	3 4.7	1 1.2
Injecting drug use	%	1 1.8	0 0	0 0	0 0	0.3 0.4	0 0
Maternal	%	0 0	0 0	0 0	1 1.5	0.3 0.4	0 0
Not reported/unknown	%	0 0	0 0	0 0	0 0	0 0	1 1.2
Total recently acquired infection	%	56 100	67 100	64 100	66 100	63.3 100	86 100

[^] Four-year average

* Excludes men who have sex with men

[#] High prevalence countries defined as those with an estimated number of adults aged 15 to 24 years living with HIV greater than 1 per cent. UNAIDS website <http://www.unaids.org/en/>

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

- Males accounted for 95.3 per cent of all newly acquired infections, an increase from 89.4 in 2013.
- More than three-quarters of the recently acquired infections in 2014 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) of new HIV diagnoses in Queensland by Hospital and Health Service (HHS) at diagnosis, 1 January 2010 to 31 December 2014

		2010	2011	2012	2013	2010-2013 [^]	2014
Cairns and Hinterland	Rate	18 7.6	12 5.0	20 8.3	15 6.1	16.3 6.8	17 6.9
Central Queensland	Rate	8 3.9	3 1.4	2 0.9	6 2.7	4.8 2.2	7 3.1
Central West	Rate	0 0	0 0	0 0	0 0	0 0	1 8.0
Darling Downs	Rate	5 1.9	8 3.0	7 2.6	3 1.1	5.8 2.1	8 2.9
Gold Coast	Rate	22 4.2	26 4.9	24 4.4	19 3.4	22.8 4.3	25 4.5
Mackay	Rate	1 0.6	3 1.7	4 2.3	3 1.7	2.8 1.6	3 1.7
Metro North	Rate	58 6.6	73 8.2	68 7.5	61 6.6	65 7.2	75 8.1
Metro South	Rate	65 6.4	43 4.2	51 4.8	47 4.4	51.5 4.9	77 7.2
North West	Rate	0 0	2 6.3	2 6.2	1 3.1	1.25 3.9	1 3.1
South West	Rate	0 0	1 3.8	0 0	0 0	0.3 0.9	0 0
Sunshine Coast	Rate	13 3.6	6 1.6	8 2.2	3 0.8	7.5 2.0	9 2.4
Torres and Cape	Rate	0 0	0 0	0 0	0 0	0 0	2 7.9
Townsville	Rate	4 1.8	6 2.6	5 2.1	7 2.9	5.5 2.4	7 2.9
West Moreton	Rate	7 3.0	9 3.7	5 2.0	12 4.7	8.3 3.3	5 1.9
Wide Bay	Rate	3 1.5	2 1.0	10 4.8	4 1.9	4.8 2.3	8 3.8
Queensland	Rate	204 4.6	194 4.3	206 4.5	181 3.9	196.3 4.3	245 5.3

[^] Four-year average

- Notification rates of new diagnoses increased in 11 of the 15 Hospital and Health Services in 2014 compared to the notification rates in 2013. This is consistent with the state wide increase in the number of new notifications and the notification rate, from 181 (3.9 per 100,000 population) in 2013 to 245 (5.3 per 100,000 population) in 2014.
- Of the remaining four HHSs, three had rates the same as 2013 and one had a decrease (West Moreton HHS saw the rate of new diagnosis decrease from 4.7 per 100,000 population to 1.9 per 100,000 population).
- Metro North had the highest rate of new diagnoses with 8.1 per 100,000 population, an increase from 6.6 per 100,000 in 2013.
- Metro South had the highest number of new diagnoses in 2014 and the notification rate increased from 4.4 per 100,000 population in 2013 to 7.2 per 100,000 population in 2014. This is also an increase on the four-year average of 4.9 per 100,000 population.

