

Notifications of Sexually Transmissible Infections in Tasmania

2012 to 2016

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Notes

Data from previous reports should not be relied upon. Use the most up to date report when citing data.

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Summary and Key Issues

Table 1: Notifications of sexually transmissible diseases in Tasmanian residents, by disease and year, 1 January 2012 to 31 December 2016.

Disease	2012	2013	2014	2015	2016	Total
Chlamydia	1781	1538	1776	1666	1682	8443
Gonococcal Infection	35	69	65	56	82	307
Syphilis (infectious and unspecified)	24	30	32	29	21	136
Congenital Syphilis	0	0	0	0	0	0
Donovanosis	0	0	0	0	0	0
Lymphogranuloma venereum (LGV)	0	0	1	0	0	1
Total	1840	1637	1874	1751	1785	8887

- In this reporting period, chlamydia accounted for more than 95 per cent of all STIs notified in Tasmania.
- In Tasmania, notification rates of chlamydia have remained steady over the past 5 years.
- Notifications and rates of chlamydia infection in the 15 to 24 year age group have been consistently high.
- There was a significant increase (46 per cent) in gonococcal notifications from 2015 to 2016.
- Males aged 15 to 34 years had the highest gonococcal notification rates.
- In 2016, 61 per cent of the total gonococcal notifications were in men who reported sexual contact with the same sex only.
- In 2016, there were 21 notifications of syphilis, of which five were infectious syphilis. This was much lower than the five year average of 13.8 notifications of infectious syphilis per year.
- Notifications of gonococcal infection and syphilis were not restricted to young adults, with 89 (19 per cent) notifications in persons aged 45 years and above. In this age group males were more commonly notified than females.
- There were no notifications of congenital syphilis or donovanosis in Tasmania in this period.

Chlamydia

There were 8 443 notifications of chlamydia in the reporting period, with 1 682 in 2016. Chlamydia is the most notified STI in Tasmania, with an average of more than 1 500 notifications per year. From 2012 to 2016, the majority of notifications of chlamydia in Tasmania were in females (65 per cent).

Enhanced data on chlamydia infection has not been collected for 2015 onwards. Historically, the most common sexual exposure for both males and females was with the opposite sex only.

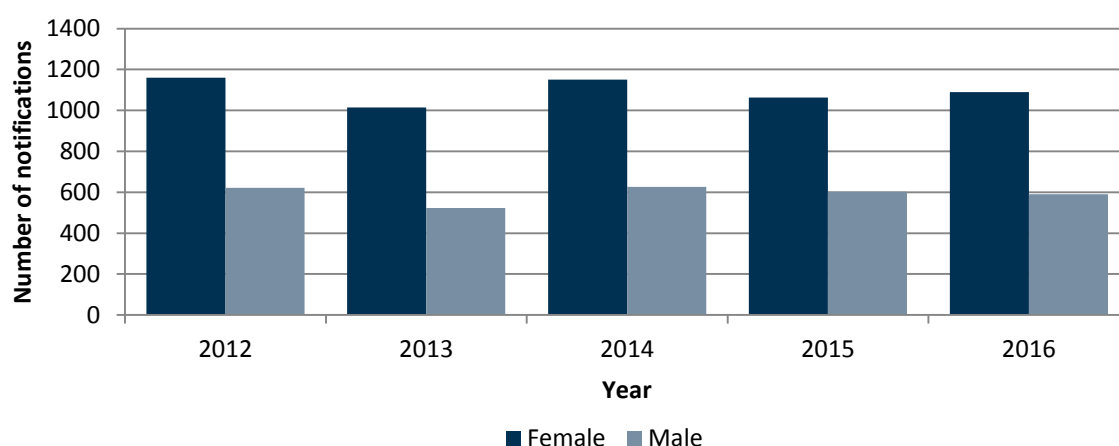


Figure 1: Notifications of chlamydia in Tasmania, 1 January 2012 to 31 December 2016

Overall notification rates of chlamydia have remained stable with minor variations across regions over the previous five years. The 2016 notification rate was 368 per 100 000, slightly higher than the national average of 312 per 100 000 (1). The Southern region of Tasmania consistently reported higher notification rates, with the exception of 2016 when the North had the highest rate with 390 per 100 000.

Table 2: Notification rates (per 100 000) of chlamydia in Tasmania by region, 1 January 2012 to 31 December 2016

Region	2012	2013	2014	2015	2016
North	393	279	317	359	390
North-West	355	352	348	361	340
South	415	371	455	372	372

The highest notification rate for both sexes was in the 15 to 24 year age group. In this age group the notification rate was far higher in females (2 560 per 100 000) than males (985 per 100 000). While much lower than the younger age group, notification rates increased in females aged 25 to 34, from 576 in 2012 to 743 per 100 000 in 2016.

Table 3: Notification rates (per 100 000) of chlamydia in Tasmania by sex and age group, 1 January 2012 to 31 December 2016

	2012	2013	2014	2015	2016
Female					
<15	65	62	91	39	49
15-24	2947	2541	2842	2547	2560
25-34	576	581	601	664	743
35-44	90	79	128	145	157
45-54	19	8	38	33	28
55-64	0	3	6	8	0
65-74	0	0	4	0	0
Female Total	452	394	445	410	420
Male					
<15	6	0	6	0	0
15-24	1204	1056	1178	1100	985
25-34	503	420	509	514	594
35-44	102	95	106	155	172
45-54	33	28	91	63	49
55-64	38	3	29	17	22
65-74	12	0	4	11	14
Male Total	243	205	244	234	229
Total	396	341	393	367	368

Gonococcal Infection

There were 82 notifications of gonococcal infection in 2016, an increase from 56 in 2015. Notifications of gonococcal infection have increased over the last five years in Tasmania, with a consistently higher number of notifications in males. Males were six times more likely to be notified than females.

Table 4: Notifications of gonococcal infection in Tasmania, by year and sex, 1 January 2012 to 31 December 2016

Sex	2012	2013	2014	2015	2016	Total
Female	6	7	9	9	11	42
Male	29	62	56	47	71	265
Total	35	69	65	56	82	307

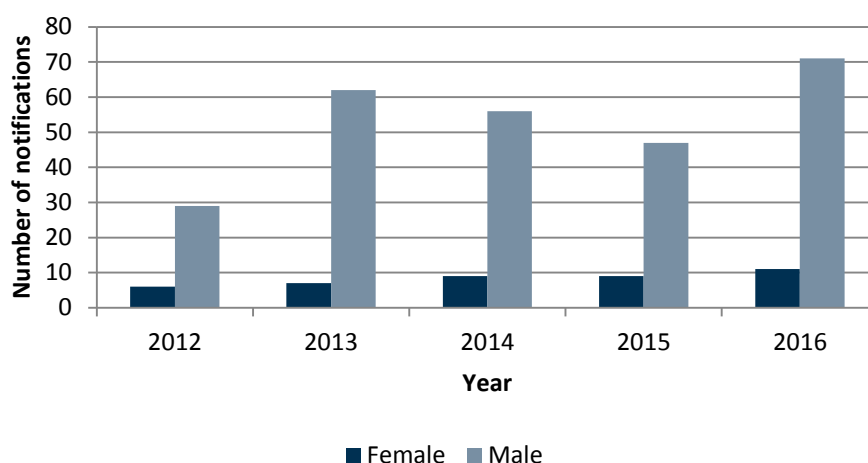


Figure 2: Notifications of gonococcal infection in Tasmania by year and sex, 1 January 2012 to 31 December 2016

Notification rates in males in the 15 to 34 year age group have been consistently higher than females. The overall notification rate of gonococcal infection in Tasmania in 2016 was 18 per 100 000 compared to the national notification rate in 2016 of 97 per 100 000 (1).

Table 5: Notification rates (per 100 000) of gonococcal infection in Tasmanians by sex and age group, 1 January 2012 to 31 December 2016

	2012	2013	2014	2015	2016
Female					
15-24	6	19	19	10	13
25-34	3	3	7	17	20
35-44	3	0	3	0	0
45-54	0	0	0	3	3
55-64	6	0	0	0	0
Female Total	3	3	4	4	5
Male					
15-24	29	65	47	44	88
25-34	37	65	76	51	89
35-44	12	38	35	33	24
45-54	3	17	8	14	9
55-64	9	9	9	6	11
65-74	0	0	4	0	0
75-84	0	0	0	0	7
Male Total	13	28	25	21	31
Total	8	15	14	12	18

In the previous five years, females were most likely to report sexual contact with the opposite sex only (90 per cent) while males were most likely to report sexual contact with the same sex only (66 per cent).

Table 6: Notifications of gonococcal infection in Tasmania by sex and sexual exposure, 1 January 2012 to 31 December 2016

	2012	2013	2014	2015	2016	Total n (%)
Female						
Persons of both sexes	0	0	0	1	0	1 (2)
Persons of opposite sex only	5	7	8	8	10	38 (90)
Persons of same sex only	0	0	0	0	1	1 (2)
Sexual exposure unknown	1	0	1	0	0	2 (5)
Female Total	6	7	9	9	11	42
Male						
Persons of both sexes	2	4	1	1	2	10 (4)
Persons of opposite sex only	10	12	14	9	16	61 (23)
Persons of same sex only	11	44	38	34	48	175 (66)
Sexual exposure unknown	6	2	3	3	4	18 (7)
No sexual contact	0	0	0	0	1	1 (<1)
Male Total	29	62	56	47	71	265
Total	35	69	65	56	82	307

The majority of both males and female had a single site of infection. The most common site for both males (44 per cent) and females (83 per cent) was urogenital. Other sites of infection were more common in males than females with a number of infections in pharynx/throat only (22 per cent) and rectum only (17 per cent). Multiple sites of infection were reported in 44 males (17 per cent) and three females (7 per cent), though this may be a reflection of testing practices.

Table 7: Notifications of gonococcal infection in Tasmania by site/s of infection, sex and year, 1 January 2012 to 31 December 2016

	2012	2013	2014	2015	2016	Total n (% by sex)
Female						
Urogenital	6	5	9	8	7	35 (83)
Urogenital and pharynx/throat	-	1	-	-	1	2 (5)
Urogenital and other	-	-	-	-	1	1 (3)
Pharynx/throat only	-	1	-	1	2	4 (9)
Female Total	6	7	9	9	11	42
Male						
Urogenital	19	23	28	21	26	117 (44)
Urogenital and pharynx/throat	-	2	3	2	2	9 (3)
Urogenital and rectum	1	4	2	3	3	13 (5)
Urogenital and rectum and pharynx/throat	2	2	1	1	-	6 (2)
Pharynx/throat only	5	13	8	10	23	59 (22)
Rectum	1	12	11	10	11	45 (17)
Rectum and pharynx/throat and other	1	6	3	-	6	16 (6)
Male Total	29	62	56	47	71	265
Total	35	69	65	56	82	307

*Other sites of infection were not specifically reported

With the exception of 2014, notification rates of gonococcal infection in males were highest in the North of the state. The notification rates for females were more variable as the notification numbers were low.

Table 8: Notification rates (per 100 000) of gonococcal infection by sex, region and year, 1 January 2012 to 31 December 2016*

Region	2012	2013	2014	2015	2016
Females					
North	3	8	3	3	6
North-West	6	0	4	0	4
South	1	2	3	6	4
Males					
North	19	35	19	30	41
North-West	8	20	4	16	12
South	11	27	37	18	34

*To calculate rates only persons aged 10+ were used in the denominator data

Syphilis

There were 136 notifications of syphilis in 2012 to 2016, 68 infectious syphilis and 68 of unknown duration. There was a decrease in notifications of infectious syphilis in 2016, with only five cases notified, compared to the previous five year average of 13.8 notifications. There were no notifications of congenital syphilis in the previous five years.

Table 9: Number of notifications of syphilis per 100 000 in Tasmania by syphilis classification, year of diagnosis and sex, 1 January 2012 to 31 December 2016

Sex and syphilis classification		2012	2013	2014	2015	2016
Female	Syphilis-infectious	1	1	2	0	1
	Syphilis-unknown duration	5	2	4	4	5
Male	Syphilis-infectious	13	19	12	15	4
	Syphilis-unknown duration	5	8	14	10	11

Syphilis was most commonly notified in males in the 25 to 34 age group (33 per cent), with those aged from 15 to 44 years accounting for 76 per cent of all notifications in males. There was a decrease in notifications across all age groups in 2016. Females reported sexual exposure with the opposite sex only (100 per cent), while males reported this in 13 per cent of notifications. The most common sexual exposure in males was with same sex only (73 per cent).

The notification rate of infectious syphilis in Tasmania is consistently lower than the Australian rate. In 2016, this was 1.1 per 100 000 in Tasmania, compared to the Australian national notification rate of 14.2 per 100 000.

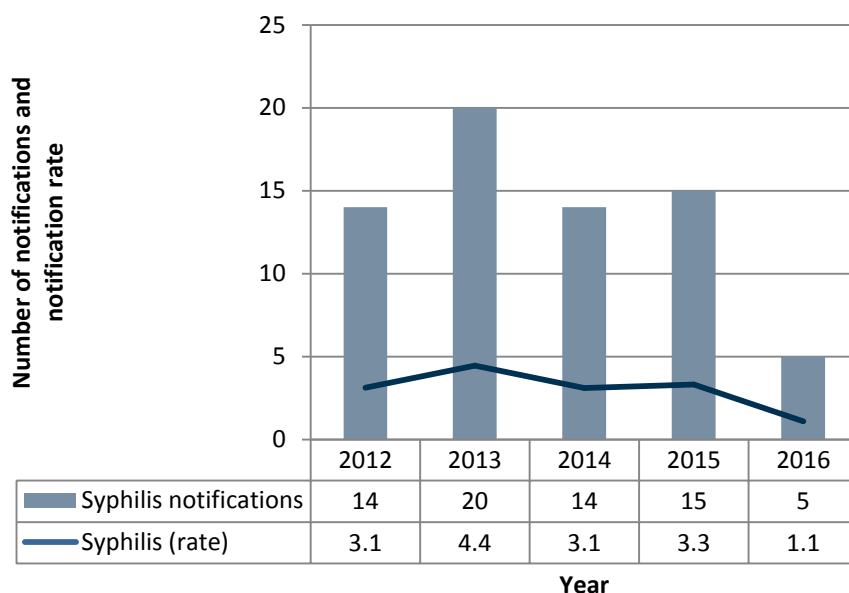


Figure 3: Notifications and notification rates (per 100 000) of infectious syphilis per 100 000 by year of diagnosis, 1 January 2012 to 31 December 2016

Table 10: Characteristics of infectious syphilis notifications cases by sex, 1 January 2012 to 31 December 2016

	Female					Female total n (%)	Male					Male total n (%)	Total n (%)
	2012	2013	2014	2015	2016		2012	2013	2014	2015	2016		
Age Group													
15-24	-	-	-	-	-	-	2	6	1	3	1	13 (21)	13 (19)
25-34	-		1	-	-	1 (20)	5	5	5	5	1	21 (33)	22 (32)
35-44	1	-	-	-	-	1 (20)	3	4	2	4	1	14 (22)	15 (22)
45-54	-	1	1	-	-	2 (40)	1	3	3	1	-	8 (13)	10 (15)
55-64	-	-	-	-	1	1 (20)	2	1	-	2	1	6 (9)	7 (10)
65-74	-	-	-	-	-	-	-	-	1	-	-	1 (2)	1 (1)
Sexual exposure													
Both sexes	-	-	-	-	-	-	3	1	2	-	1	7 (11)	7 (10)
Opposite sex only	1	1	2	-	1	5 (100)	2	2	2	1	1	8 (13)	13 (19)
Same sex only	-	-	-	-	-	-	8	14	8	14	2	46 (73)	46 (68)
Unknown/not reported	-	-	-	-	-	-	-	2	-	-	-	2 (3)	2 (3)

Other sexually transmissible infections

Cases of congenital syphilis and donovanosis are nationally notifiable sexually transmissible infections. From 2012 to 2016, there were no notifications of either in Tasmania.

Lymphogranuloma venereum (LGV) is notifiable in Tasmania, though not nationally notifiable. There was one notification of LGV in 2014 in a male in the 25 to 29 age group.

Glossary

Rate – A rate is a measure of the number of times an event occurs in a specific population over a certain period of time. The number of notifications tells us how many people were reported with a certain disease, without any information on the number of people that were in the group at risk of getting that disease.

Rates allow for a more accurate comparison between groups where the numbers of people in different groups varies, such as between age groups. In this report, notification rates were calculated by dividing the number of notifications in a group by the total number of people in that group then multiplying by 100 000 to provide the rate of notifications per 100 000 people in that defined group.

Tasmanian regions – For the purpose of reporting Tasmania is divided into three regions, the Southern, Northern and North-West regions. These are defined by Australian Bureau of Statistics Statistical Areas Level 4.

Syphilis (infectious) – Cases with evidence of infection within the previous two years including primary, secondary and early latent infections (see the [national case definition](#)).

Syphilis (unknown duration) – Cases with a duration of infection more than two years or where time of infection cannot be determined from evidence available (see the [national case definition](#)).

Explanatory Notes

In Tasmania, legislation requires laboratories and clinicians to notify Public Health Services (PHS) of cases of certain diseases, including some sexually transmissible infections (STIs). Cases of STIs are most commonly notified through laboratories, following a positive test result. PHS then follows up all cases of notified STIs, except chlamydia, to collect data on exposures and risk factors.

For this report, notifications of STIs were extracted from the Tasmanian Notifiable Diseases Database (TNDD) on 16 February 2017 by diagnosis date. Only confirmed and probable cases that meet the national reporting requirements were included. The exception to this is Lymphogranuloma venereum (LGV) which is notifiable in Tasmania, but not reported nationally. Case definitions for these diseases are available on the [Australian national notifiable diseases and case definitions webpage](#). Notification numbers may differ from those reported nationally as a different method is used to derive the diagnosis date and the TNDD is a live database and data are subject to change.

Population data from the Australian Bureau of Statistics (ABS) were used to calculate notification rates. To calculate 2016 notification rates, 2015 population data were used as no data by age group and sex were available on the ABS website for 2016. To calculate notification rates, only population data of persons aged 10 years and older were used as denominator data.

References

1. National Notifiable Diseases Surveillance System. In. <http://www9.health.gov.au/cda/source/cda-index.cfm>: Department of Health; 2017.