

# Victorian Prevention, Epidemiology & Surveillance

## Sexually Transmissible Infections

### Key trends for 2016

**Table 1: Notified cases of blood borne viruses and sexually transmissible infections by year for the period 2007 to 2016 \***

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Chlamydia	11,205	12,375	13,902	16,542	19,239	20,248	19,590	19,996	NA	NA
Gonorrhoea	1007	922	1480	1758	1863	2436	2981	3273	4864	6263
Infectious syphilis	422	381	391	291	321	467	654	631	948	1125

NA= Not available (It is expected chlamydia data will be available for reporting before the end of 2017)

\* Numbers in this table or any surveillance data related reports are subject to change as a result of ongoing case follow-up and data quality.

#### Gonorrhoea

- Gonorrhoea cases reported in 2016 are the highest annual record since 1991.
- Rate of infection in females doubled in 2016.
- Rate of infection in Aboriginal and Torres Strait Islander population is twice that of non- Aboriginal and Torres Strait Islander population.

#### Infectious syphilis

- Syphilis cases reported in 2016 are the highest annual record since 1991. More than 100 fold increase since 2000.
- A fourfold increase in females in 2016 compared to 2015.
- Rate of infection in Aboriginal and Torres Strait Islander population is three times non- Aboriginal and Torres Strait Islander population.

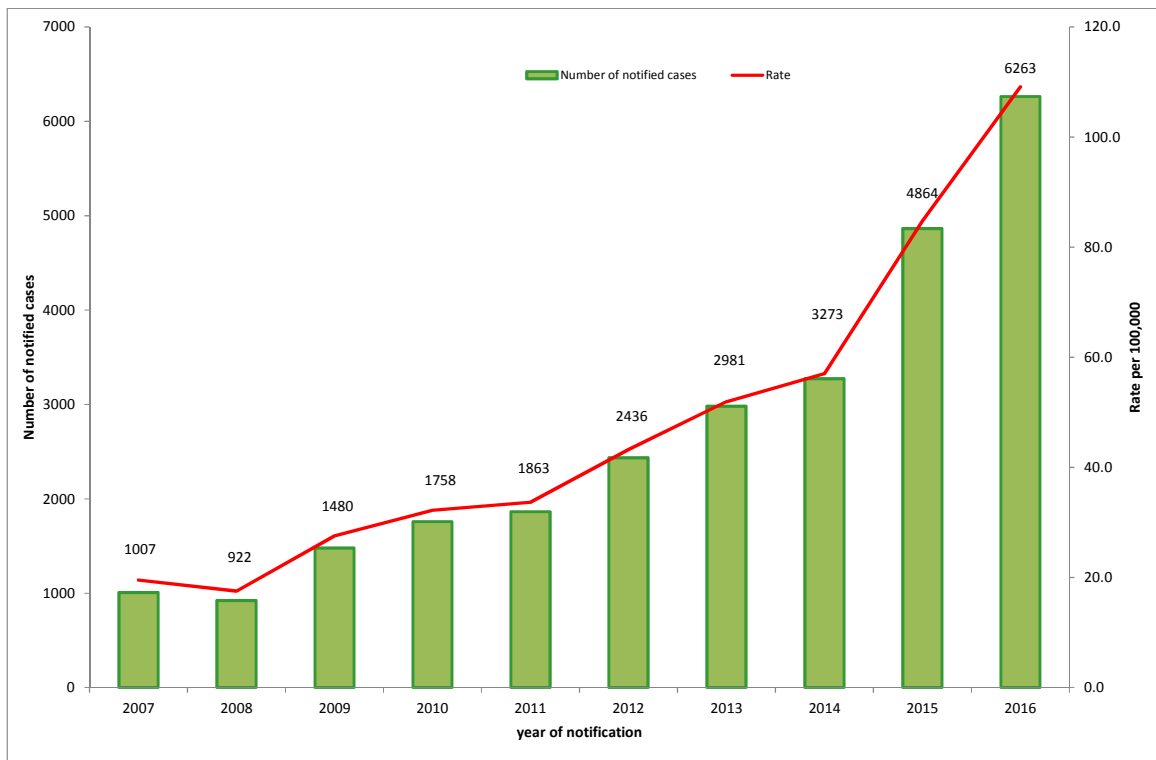
# Chlamydia

Notification data on chlamydia is not available for reporting from 2015 to-date. The department has implemented a project obtaining chlamydia notification data in a semi-electronic format so that it can be imported into the notifiable infectious disease database directly, thereby saving resources on the manual data entry. It is estimated that data on chlamydia will be available for reporting before the end of 2017.

# Gonorrhoea

Following a fluctuation in case notifications, the number of cases and rate of gonococcal infection have been increasing in Victoria and across all Australian jurisdictions since 2009. In 2016 there were 6,263 gonorrhoea cases (a rate of 109 cases per 100,000 population) compared to 4,864 gonorrhoea cases (a rate of 85 cases per 100,000 population) in 2015, representing a 29 per cent increase. The number of cases reported in 2016 is the highest annual record since it became notifiable in 1991 (Figure 6).

**Figure 1: Number of notified cases and rate (per 100,000 population) of gonorrhoea by year, Victoria, 2007–2016**



Eighty per cent of the cases notified in 2016 were males (age range: 0–82 years, Median age: 30 years) and the modal age group for males was 25 to 29 years (n=1,252, 25 per cent).

Nineteen per cent of the total cases (n=1229) were females, giving a population rate of 42 cases per 100,000 compared to 27 cases per 100,000 in 2015 indicating that the rate of infection in females has doubled in 2016. The age range of females in 2016 was 0–73 years, median age of 26 years and the modal age group was 20 to 24 years (n=243, 28 per cent).

Postcode of residence at the time of diagnosis indicates that 69 per cent (n=4,321) of the cases reported were residents of metropolitan regions, eight per cent were from rural regions of Victoria and postcode of residence was unknown for 23 per cent of the total cases.

Country of birth data was available for 58 per cent of the total cases (n= 3,603). Of these, 73 per cent (n=2,617) were Australian born and 27 per cent were overseas born (n=986).

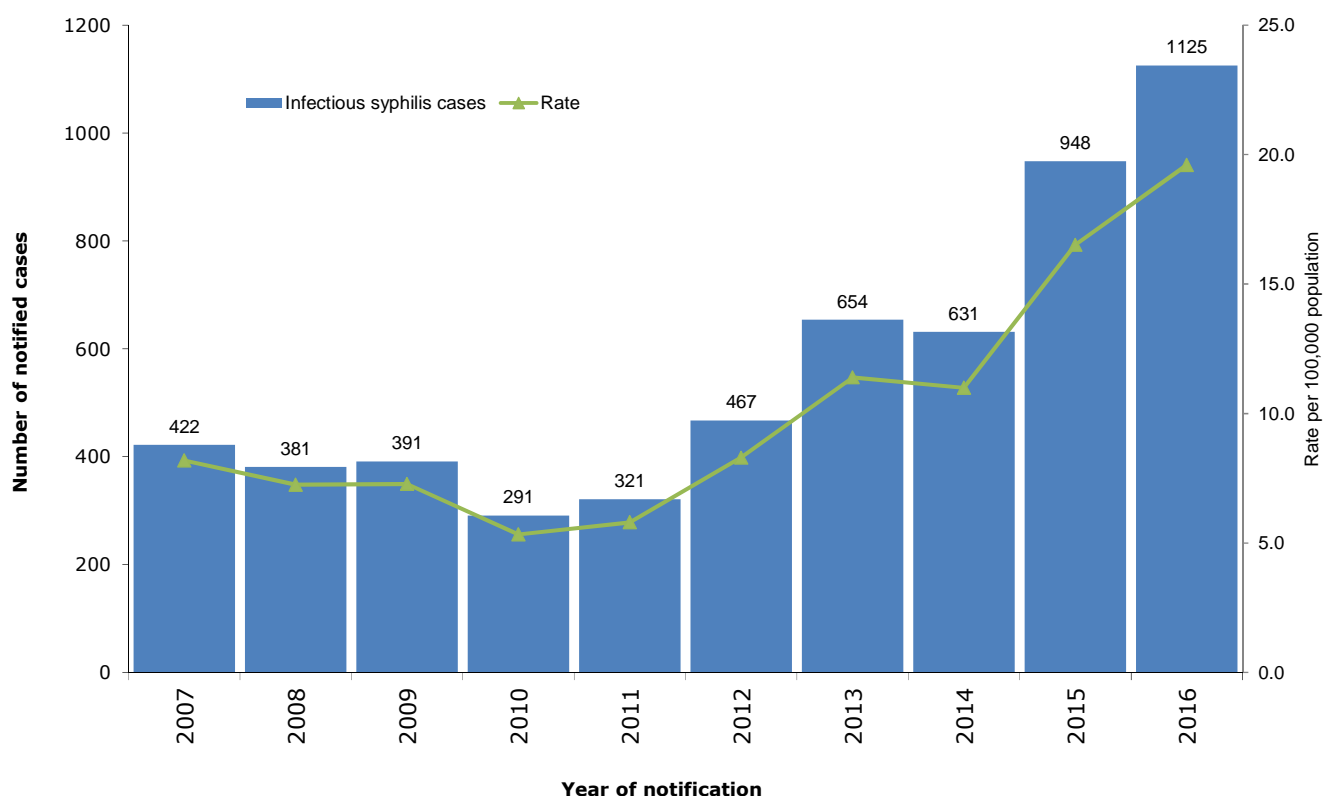
Aboriginal and Torres Strait Islander status was reported for 58 per cent of the cases (n=3,612), with 50 cases reported as being of Aboriginal and/or Torres Strait Islander origin, a rate of 106 cases per 100,000 Aboriginal and Torres Strait Islander population. The rate of infection in Aboriginal and Torres Strait Islander population in 2016 was twice the rate in the non- Aboriginal and Torres Strait Islander population.

Risk factor data collected indicates that gonorrhoea cases occur predominantly among men who have sex with men (MSM) with 82 per cent reported as MSM in 2016; this is similar to previous years. Type of sexual partner and place of infection data shows that the majority acquired their infection through a casual sexual contact (n=1,838, 88%) and locally in Victoria (n=1668, 80%).

## Infectious syphilis (infections acquired in the last 2 years)

A total of 1,125 cases of infectious syphilis were notified in 2016 compared to 948 cases in 2015 representing a 19 per cent increase (Figure 7). This was the highest annual record reported in Victoria since syphilis became notifiable in 1991. The number of infectious syphilis cases has increased significantly over the years with a more than 100 fold increase compared to 2000 (n=9).

**Figure 2: Notified cases of infectious syphilis, by year, Victoria, 2007–2016**



Ninety-one per cent (n=1,021) of the cases notified in 2016 were male, similar to the 94 per cent in 2015. The age range of the cases was 17–81 years, median age of 34 years and the modal age group was 25 to 34 years (n=392, 38 per cent).

Nine per cent of the total cases (n=99) were females (age range: 15–56 years, Median age: 30 years) and the modal age group for females was 20 to 29 years (n=37, 37 per cent). In 2016, the number of cases in females represents an overall population rate of 6.8 cases per 100,000 compared to 1.7 cases per 100,000 in 2015, representing a fourfold increase in 2016.

Postcode of residence at the time of diagnosis indicates that 78 per cent (n=882) of the infectious syphilis cases were residents of metropolitan regions, six per cent were from the rural regions of Victoria and for the remaining 15 per cent of the cases, post code of residence was unknown.

Sixty-one per cent of the infectious syphilis cases (n=690) were Australian-born, five per cent (n=58) were overseas born and country of birth was not reported for the remaining 17 per cent (n=178).

Aboriginal and Torres Strait Islander status was reported for 84 per cent of the cases (n=945) with 23 cases (2% of the total) reported as being of Aboriginal and/or Torres Strait Islander origin. In 2016, the rate of infectious syphilis in the Aboriginal and Torres Strait Islander population is three times the rate of infection in the non- Aboriginal and Torres Strait Islander population.

Risk factor data collected indicates that infectious syphilis cases occur predominantly among MSM with 78 per cent reported as MSM and this trend has been consistent in the last 10 years. Of the cases with enhanced surveillance data available, 28 per cent (n=280) were among people living with HIV; a reduction compared to 2015 (39%). This reduction could be due to the delay in collecting enhanced surveillance data that occurred for cases notified in 2016. Of the cases reported in people living with HIV, 90 per cent (n=270) were among MSM.

Infections were most common in the 20–39 year age group in HIV negative MSM (n=311, 71%) whereas infections were most common in the 30–49 year age group in HIV positive MSM (n=163, 65%). The median age of MSM and non-MSM in 2016 was 38 years and 31 years respectively and this was similar to 2015.

Twenty-nine per cent of the total cases reported were syphilis re-infections (n=293) and this is similar to the proportion seen in 2015. Of the cases reported with a syphilis re-infection, 49 per cent were HIV positive MSM (n=144).

Type of sexual partner and place of infection data shows that the majority acquired their infection through a casual sexual contact (n=746, 74%) and locally in Victoria (n=826, 82%).

## Prevention Response

The Department of Health and Human Services works in partnership with a range of community-based organisations and key affected populations to ensure that sexually transmissible infection (STI) prevention approaches are appropriate and effective.

Prevention focused safe sex campaigns, including safe sex advertisements, are a core component of activities within Department's funded agencies. These activities target young people, gay men and MSM, people from migrant and refugee backgrounds, and Aboriginal and Torres Strait Islander Victorians. Key sector funded agencies working to promote prevention, testing, treatment and elimination of stigma and discrimination messages include Family Planning Victoria, Centre for Excellence in Rural Sexual Health (CERSH), Victorian Cytology , Ilbjerri Theatre Company, Multicultural Health and Support Service (MHSS), The Burnet Institute and the University of Melbourne.

## Sexually Transmissible Infections Working Group

The Victorian Government is committed to reducing rates of STIs which are a significant public health concern for Victorian communities. Untreated infections can have significant short and long-term health impacts and may result in social and economic costs to the Victorian health system. In early 2017, a Sexually Transmissible Infections Working Group was formed to develop a Sexually Transmissible Infections Work Plan for Victoria. The work plan will focus on chlamydia among young people (aged 15-29) and syphilis and gonorrhoea among gay and bisexual men, in accordance with sustained increases in Victorian notifications, disease burden and their role in facilitating the

transmission of HIV. A draft STI work plan has been developed to guide actions in the short to medium term (6-18 months) as well as canvass long-term priorities (over 18 months).

## Protection Response<sup>i</sup>

- Chlamydia, syphilis and gonorrhoea infections are Group C Diseases that must be notified in writing within five days of diagnosis.
- Preventative measures include education about safe sex practices, including use of condoms and early detection of infection by testing of people at risk
- Sexual partners of individuals with chlamydial infection and gonorrhoea should be examined and investigated then treated empirically.
- Sexual contacts of individuals with syphilis infections should be identified. The extent of contact tracing depends on the clinical stage of infection.
- Contact tracing assistance can be provided by the Department's partner notification officers.

### *Gonorrhoea Enhanced Surveillance Project*

A 12-month enhanced surveillance gonorrhoea project commenced in January 2017 to collect additional risk factor and mode of transmission information to guide and improve the public health response to the increase in gonococcal infections in Victoria. The Department has developed internal response and surveillance procedures for antimicrobial resistant gonorrhoea, and is in the process of consulting with external stakeholders to develop a Victorian response plan.

### *Chief Health Officer Advisory*

There have been three Chief Health Officer advisories regarding rising rates of STIs in Victoria. Firstly, in December 2016, a health advisory regarding increases in syphilis and gonorrhoea in men who have sex with men. This was revised in June 2017 to reflect concerns regarding antimicrobial resistance to gonorrhoea and recommendations for testing. Thirdly, in June 2017, an advisory regarding increased antibiotic resistance for Shigellosis in Victoria, with particular priority populations including men who have sex with men and travellers from overseas. The Sexual Health and Viral Hepatitis team is working with the Health Protection Branch to ensure that messages for priority populations are supported and disseminated through key funded agencies.

## Lead Department or Agency

- Sexual Health and Viral Hepatitis Section
- Health Protection Branch

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<sup>i</sup> <http://ideas.health.vic.gov.au/bluebook.asp>