

Syphilis Epidemiology and Surveillance

Summary

Syphilis remains a significant public health issue in Australia. Although notifications have stabilised since their 2023 peak, rates remain historically high, with growing impacts among women, Aboriginal and Torres Strait Islander peoples, and gay, bisexual and other men who have sex with men. Australia's surveillance system provides a strong foundation for understanding these trends; however, opportunities remain to strengthen surveillance through a national syphilis register, nationally consistent data collection, and improved access to testing data.

A national priority

Syphilis notifications have increased substantially over the past decade across multiple populations and jurisdictions in Australia. Infectious syphilis diagnoses (defined as infections of less than two years' duration) peaked in 2023 with 6,565 cases, and while notifications declined slightly in 2024 and 2025, they have remained at concerning high levels (Figure 1) (1, 2). Syphilis was declared a Communicable Disease Incident of National Significance (CDINS) by the Chief Medical Officer on 6 August 2025, recognising that the epidemic has extended beyond a routine outbreak and requires sustained national coordination and system-level responses (3).

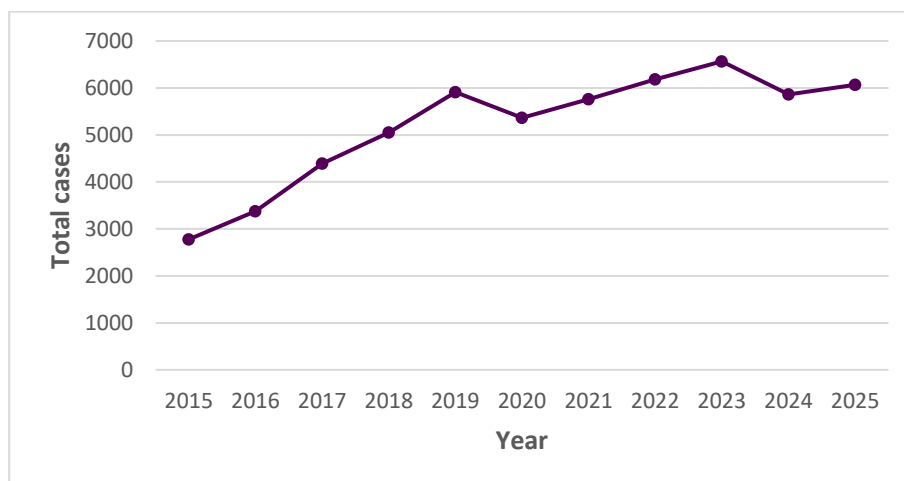


Figure 1: Total syphilis cases each year from 2015 – 2025.

Source: Australian National Notifiable Diseases Surveillance System.

Key Epidemiological Trends

Current surveillance data highlights several important trends:

Overall trends

- Notifications peaked in 2023 but remain historically high at almost 6,000 cases annually.
- Approximately 79% of notifications occur among males and 75% among people living in major cities.

- The majority of notifications continue to occur among gay, bisexual and other men who have sex with men (GBMSM).

Emerging population trends

- Notification rates among women have increased approximately four-fold between 2015 and 2024, representing the largest increase observed in any population.
- Despite some stabilisation over the past four years, rates remain more than 5 times higher among Aboriginal and Torres Strait Islander peoples. Approximately 50% of all congenital syphilis cases and deaths between 2015-2024 have been in Aboriginal and Torres Strait Islander peoples.
- Incidence rates are substantially higher for gay and bisexual men with HIV compared to gay and bisexual men without HIV, although this gap has reduced in recent years.

Geographic and international trends

- The Northern Territory continues to record the highest rates nationally.
- Despite traditionally low case numbers, Tasmania has experienced a notable increase in recent years.
- Similar increases are being observed internationally, including in the United Kingdom, New Zealand and Canada.

The importance of surveillance

Accurate interpretation of syphilis epidemiology depends on the availability of comprehensive, timely and high-quality surveillance data. Surveillance provides the evidence base for understanding syphilis trends, identifying emerging populations at risk and where best to strategically direct resources for prevention, treatment and care (4). Surveillance is also critical for monitoring progress, evaluating interventions, and informing the targeting and tailoring of health promotion activities.

Syphilis surveillance in Australia

Strengths

- ***Syphilis is notifiable in Australia*** – confirmed and probable cases are reported through the National Notifiable Diseases Surveillance System (NNDSS). This provides a national mechanism for identifying and monitoring trends and outbreaks and informing public health responses (5).
- ***Notification data coverage is high*** – only 6% of notifications contain missing data, providing a more complete picture of syphilis epidemiology than is available for many other notifiable diseases.
- ***Successful jurisdictional initiatives*** – Queensland has established the Queensland Syphilis Surveillance Service (QSSS), a state-wide database that records syphilis diagnoses, pathology results and treatment history. This supports more accurate surveillance, improves continuity of care and assists clinicians with diagnosis and follow-up (6).

Gaps

- ***No national syphilis register*** – Australia does not have a national syphilis register that records testing history and treatment information connected to diagnoses across jurisdictions. This limits clinicians' access to previous syphilis histories, making it more difficult to interpret test results, support continuity of care and manage highly mobile populations.
- ***Inconsistent data collection*** – Surveillance data collection is not nationally consistent. Key information, including sexual exposure, HIV status, pregnancy status and injecting drug use are not systematically

collected or reported across all jurisdictions. This limits the ability to undertake detailed epidemiological analysis and develop targeted responses for populations most affected by syphilis.

- **Limited access to negative testing data** – Negative testing data is not routinely collected or accessible at a national level. As a result, it is difficult to assess testing coverage, interpret notification trends and identify gaps in testing uptake. While some negative testing data is available in specific settings, such as the ACCHO sector, it is not systematically captured across the broader health system.

Recommendations

To strengthen surveillance and support a more effective syphilis response, we recommend the following:

1. Establish a National Syphilis Register

- support timely clinical decision-making
- enable cross-jurisdictional follow-up
- improve contact tracing

2. Strengthen Surveillance and Data Systems

- standardise national data collection
- improve access to real-time and negative testing data
- support disaggregation of data for priority populations

References

1. UNSW Kirby Institute. Syphilis. Accessed July 17, 2026. <https://www.data.kirby.unsw.edu.au/syphilis>
2. Australian Centre for Disease Control. National Notifiable Diseases Surveillance System. Accessed July 17, 2026. <https://nindss.health.gov.au/pbi-dashboard/>
3. Australian Government Department of Health and Aged Care. Chief Medical Officer's statement declaring syphilis a Communicable Disease Incident of National Significance. Published August 7, 2025. Accessed July 17, 2026. <https://www.health.gov.au/news/cmo-statement-syphilis-cdins>
4. World Health Organization. Strategic Information for Sexually Transmitted Infections. Accessed July 17, 2026. <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/stis/strategic-information>
5. Australian Centre for Disease Control. National Notifiable Diseases Surveillance System (NNDSS). Published May 12, 2026. Accessed July 17, 2026. <https://www.cdc.gov.au/diseases/surveillance-systems-and-networks/national-notifiable-diseases-surveillance-system-nndss>
6. Queensland Health. Syphilis. Published online. Published November 11, 2025. Accessed July 17, 2026. <https://www.health.qld.gov.au/disease-control/conditions/syphilis>