



UNSW
Kirby Institute

**HIV, viral hepatitis
and sexually transmissible
infections in Australia
Annual surveillance
report 2025**



**Sexually
Transmissible
Infections**



UNSW
SYDNEY

HIV, viral hepatitis and sexually transmissible infections in Australia

Annual surveillance report 2025

Kirby Institute, UNSW Sydney

Prepared by:

Jonathan King
Jisoo Amy Kwon
Richard Gray
Hamish McManus
Skye McGregor

Other contributors:

- Australian Government Department of Health, Disability and Ageing
- State/territory health departments
- Brynley Hull, Aditi Dey, National Centre for Immunisation Research and Surveillance
- Gladymar Perez Chacon, Hamish McManus, Cassandra Bull, Ela Naruka, Jackie Thomas, Behzad Hajarzadeh, Htein Linn Aung, Heather Valerio, Gregory Dore, Lisa Maher, Bradley Mathers, Sue Heard, Curtis Chan, Kathy Petoumenos, Nicholas Medland, The Kirby Institute, UNSW Sydney
- Anh Nguyen, Jennifer MacLachlan, Nicole Romero, Benjamin Cowie, WHO Collaborating Centre for Viral Hepatitis, Victorian Infectious Diseases Reference Laboratory, The Doherty Institute
- Anna Wilkinson, Jason Asselin, Michael Traeger, Mark Stoové, Margaret Hellard, Burnet Institute
- Wing-Yee Lo, Australia and New Zealand Liver and Intestinal Transplant Registry
- Timothy Broady, Centre for Social Research in Health, UNSW Sydney
- Monica Lahra, WHO Collaborating Centre for STI and AMR Microbiology, NSW Health Pathology
- John Didlick, Hepatitis Australia

in collaboration with networks in surveillance for HIV, viral hepatitis and sexually transmissible infections

The Kirby Institute, UNSW Sydney is funded by the Australian Department of Health, Disability and Ageing and is affiliated with the Faculty of Medicine, UNSW Sydney. The Surveillance and Evaluation Research Program at the Kirby Institute, UNSW Sydney is responsible for the public health monitoring and evaluation of patterns of transmission of bloodborne viral and sexually transmissible infections in Australia.

© Kirby Institute, UNSW Sydney 2025

ISSN 2206-1630 (Online)

This publication and associated data are available at internet address kirby.unsw.edu.au

Suggested citation:

King, J., Kwon J., Gray, R., McManus H., & McGregor, S., 2025, HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2025, The Kirby Institute, UNSW Sydney, Sydney, Australia.

Design il Razzo, Email: admin@ilrazzo.com.au

Kirby Institute UNSW Sydney NSW 2052

Telephone: 02 9385 0900 (International +61 2 9385 0900)

Email: info@kirby.unsw.edu.au

Sexually transmissible infections

We recognise communities and individuals impacted by and at risk of HIV, hepatitis B, hepatitis C, and sexually transmissible infections. These people and communities are crucial stakeholders in the work we do, with invaluable contributions and lived experiences. We acknowledge and affirm their crucial role in the development of this report, and public health surveillance more broadly. This report aims to ensure that ongoing and emerging public health threats and inequities are apparent, and that high quality data are available to inform appropriate public health responses to address these issues. We also acknowledge the ongoing negative impacts stigma and societal discrimination play in perpetuating inequity, and support principles of empowerment, community ownership, and partnership.

The years for comparison in this report are for the 10-year period from 2015 to 2024. Many indicators in the report were affected by the COVID-19-related impacts on travel and access to health care, particularly testing and treatment. These impacts are acknowledged in figures and text throughout the report.

We acknowledge the late Dr Nicholas Medland for his significant contribution to HIV and STI surveillance and research in Australia and throughout the region. He generously provided his time and expertise whenever asked, and his commitment to public health will have a lasting impact. We pay tribute to his memory and legacy. Vale Nick.

Table of Contents

Sexually transmissible infections	1
1 Summary data	4
Syphilis	4
Infectious syphilis notifications	4
Testing	4
Incidence	4
Diagnosis and care cascade	4
Chlamydia	5
Chlamydia notifications	5
Testing	5
Incidence	5
Diagnosis and care cascade	5
Gonorrhoea	6
Gonorrhoea notifications	6
Testing	6
Incidence	6
Other sexually transmissible infections	6
2 Interpretation	7
3 Infectious Syphilis	8
3.1 Infectious syphilis notifications	8
3.2 Congenital syphilis	15
3.3 Syphilis testing	16
3.4 Infectious syphilis incidence	20
3.5 Syphilis diagnosis and care cascade	21
4 Chlamydia	22
4.1 Chlamydia notifications	22
4.2 Chlamydia testing	26
Medicare-rebated chlamydia tests	26
4.3 Chlamydia incidence	28
4.4 Chlamydia diagnosis and care cascade	29
5 Gonorrhoea	30
5.1 Gonorrhoea notifications	30
5.2 Gonorrhoea testing	35
Medicare-rebated gonorrhoea tests	35
5.3 Gonorrhoea incidence	36
5.4 Antimicrobial resistance	37
6 Human papillomavirus infection	38
7 Donovanosis	42
References	43

Tables List

Table 1	Characteristics of syphilis notifications, 2015 – 2024	9
Table 2	Characteristics of chlamydia notifications, 2015 – 2024	22
Table 3	Characteristics of gonorrhoea notifications, 2015 – 2024	31

Figures List

Figure 1	Infectious syphilis notification rate per 100 000 population by sex, 2015 – 2024	10
Figure 2	Infectious syphilis notification rate per 100 000 women aged 15-44 years, 2015 – 2024	11
Figure 3	Infectious syphilis notification rate per 100 000 population by state/territory, 2015 – 2024	12
Figure 4	Infectious syphilis notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2015 – 2024	13
Figure 5	Infectious syphilis notification rate per 100 000 population among Aboriginal and Torres Strait Islander peoples by state/territory, 2015 – 2024	14
Figure 6	Congenital syphilis rate per 100 000 live births by Aboriginal and Torres Strait Islander status, 2015 – 2024	15
Figure 7	Number of deaths attributed to congenital syphilis by Aboriginal and Torres Strait Islander status, 2015 – 2024	16
Figure 8	Average number of syphilis tests per year among gay and bisexual men by HIV status, 2015 – 2024	17
Figure 9	Gay and bisexual men reporting comprehensive STI testing in the 12 months prior to the survey, 2015 – 2024	18
Figure 10	Repeat comprehensive STI screen within 13 months of a test among gay and bisexual men by HIV-status and women reporting sex work, 2015 – 2024	19
Figure 11	Infectious syphilis incidence in sexual health clinic attendees by select population, 2015 – 2024	20
Figure 12	The syphilis diagnosis and care cascade in gay and bisexual men, 2020 – 2024	21
Figure 13	Chlamydia notification rate per 100 000 population by sex, 2015 – 2024	23
Figure 14	Chlamydia notification rate per 100 000 population by state/territory, 2015 – 2024	24
Figure 15	Chlamydia notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2020 – 2024	25
Figure 16	Number of Medicare-rebated chlamydia tests among people aged 15 to 34 years by sex, 2015 – 2024	26
Figure 17	Number of chlamydia notifications per 100 Medicare-rebated chlamydia tests among people aged 15 to 34 years by sex, 2015 – 2024	27
Figure 18	Chlamydia incidence in sexual health clinic attendees by select population, 2015 – 2024	28
Figure 19	The chlamydia diagnosis and care cascade among women aged 15–29 years, 2020 – 2024	29
Figure 20	Gonorrhoea notification rate per 100 000 population by sex, 2015 – 2024	32
Figure 21	Gonorrhoea notification rate per 100 000 population by state/territory, 2015 – 2024	33
Figure 22	Gonorrhoea notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2020 – 2024	34
Figure 23	Number of gonorrhoea notifications per 100 Medicare-rebated gonorrhoea tests by sex, 2015 – 2024	35
Figure 24	Gonorrhoea incidence in sexual health clinic attendees by population, 2015 – 2024	36
Figure 25	Proportion of gonococcal isolates tested at the Australian Gonococcal Surveillance Programme with decreased susceptibility to ceftriaxone, 2015 – 2024	37
Figure 26	Proportion of heterosexual men diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024	39
Figure 27	Proportion of women diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024	40
Figure 28	Proportion of gay and bisexual men diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024	41

1 Summary data

Syphilis

Infectious syphilis notifications

- In 2024 there were 5866 infectious syphilis notifications (infections of less than two years' duration) in Australia. The majority (4655, 79%) of these notifications were among males.
- Between 2015 and 2024, the infectious syphilis notification rate increased by 85% from 11.9 to 22.1 per 100 000. In this period, the infectious syphilis notification rate increased by 64% among males and by 267% among females.
- The national infectious syphilis notification rate in 2024 was more than three times as high among males (35.1 per 100 000) than among females (9.2 per 100 000), with variability across specific geographic regions and jurisdictions.
- In 2024, infectious syphilis notification rates were highest among people aged 30 to 34 years (54.1 per 100 000), 25 to 29 years (48.1 per 100 000), and 35 to 39 years (46.2 per 100 000).
- The notification rate among Aboriginal and Torres Strait Islander peoples in 2024 was more than five times as high as among non-Indigenous people (100.7 per 100 000, compared to 18.9 per 100 000).
- There were 10 congenital syphilis cases in 2024, three among Aboriginal and Torres Strait Islander peoples and six among non-Indigenous people. In 2024, the congenital syphilis notification rate among Aboriginal and Torres Strait Islander peoples was more than three times as high as among non-Indigenous people (12.1 and 3.2 per 100 000 live births, respectively).
- Of the 103 congenital syphilis cases notified between 2015 and 2024, 34 cases resulted in the death of the infant (including stillbirth). Of these, 20 deaths occurred among Aboriginal and Torres Strait Islander infants, twelve occurred among non-Indigenous infants, and two deaths occurred among infants for whom Aboriginal and Torres Strait Islander status was not reported.

Testing

- Results from the GBQ+ Community Periodic Surveys show that comprehensive STI testing, defined as at least four samples from separate body sites, in the past 12 months among participating gay and bisexual men increased from 44% in 2015 to 52% in 2024.
- In 2024, among gay and bisexual men attending sexual health clinics in ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance), 52% had a repeat comprehensive STI screen (defined as includes chlamydia and gonorrhoea testing at any anatomical site, syphilis, and HIV testing among HIV-negative men) within 13 months of a previous comprehensive STI screen, an increase from 44% in 2015.

Incidence

- In 2024, the incidence of infectious syphilis among HIV-positive gay and bisexual men and HIV-negative gay and bisexual men attending sexual health clinics in ACCESS was 5.5 and 3.4 new infections per 100 person-years, respectively. Between 2015 and 2024, infectious syphilis incidence declined by 52% among HIV-positive gay and bisexual men from 11.6 to 5.5 new infections per 100 person-years. Among HIV-negative gay and bisexual men, infectious syphilis incidence fluctuated in the same period.
- Between 2015 and 2024, the incidence of infectious syphilis among women engaging in sex work attending sexual health clinics in the ACCESS network remained low (0.2 per 100 person-years in 2024).

Diagnosis and care cascade

- In 2024, there were an estimated 5390 new infectious syphilis infections among gay and bisexual men. Of those, 3490 (65%) were diagnosed, an estimated 3040 (87%) received treatment, and of those treated, 1690 (56%) had a retest between six weeks and six months after diagnosis. Note, these estimates represent men attending sexual health clinics and may not be generalisable to the broader priority population of gay and bisexual men.

Chlamydia

Chlamydia notifications

- In 2024, chlamydia was the most frequently notified sexually transmissible infection (STI) in Australia, with a total of 101 742 notifications. Around half (52 436, 52%) were among people aged 20 to 29 years. Half of notifications occurred among males (50 986 notifications, 50%).
- The chlamydia notification rate fluctuated between 2015 and 2024 and was 384.9 per 100 000 in 2024. Similar trends were seen among both males and females and in 2024 the chlamydia notification rate was 391.0 per 100 000 females and 383.4 per 100 000 males.
- Between 2015 and 2025, chlamydia notification rates among those aged 15 to 19 years declined by 29% from 1188.8 to 849.6 per 100 000. Conversely, notification rates among those aged 40 to 49 years and those aged over 50 years increased in the same period (by 63% and 58%, respectively).
- The chlamydia notification rate among Aboriginal and Torres Strait Islander peoples is based on data from five jurisdictions (New South Wales, the Northern Territory, Queensland, South Australia, and Western Australia), where Aboriginal and Torres Strait Islander status was ≥50% complete each of the five years (2020 – 2024).
- The chlamydia notification rate among Aboriginal and Torres Strait Islander peoples fluctuated between 2020 and 2024 (950.6 per 100 000 in 2024). In 2024, the chlamydia notification rate among Aboriginal and Torres Strait Islander peoples was more than twice as high as among non-Indigenous people (950.6 vs 369.4 per 100 000).

Testing

- The number of Medicare-rebated chlamydia tests in Australia among those aged 15 to 34 years fluctuated between 2015 and 2024, with 894 320 tests in 2024.
- The amount of testing in a population can influence notification trends. In 2024, the number of chlamydia notifications per 100 Medicare-rebated chlamydia tests was 11.3, up from 10.2 in 2015.

Incidence

- In 2024, among men attending sexual health clinics in the ACCESS network, chlamydia incidence among HIV-positive gay and bisexual men (35.2 new infections per 100 person-years) was higher than among HIV-negative gay and bisexual men (24.6 per 100 person-years).
- In 2023, the chlamydia incidence among HIV-negative gay and bisexual men remained stable compared with a 45% increase in HIV-positive gay and bisexual men since 2015.
- Among women reporting sex work attending sexual health clinics in the ACCESS network, chlamydia incidence increased by 57% between 2015 and 2024 (from 9.0 to 14.1 per 100 person-years).

Diagnosis and care cascade

- In 2024, there were an estimated 107 540 new chlamydia infections in women aged 15–29 years. Of those, 39 650 (37%) were diagnosed, an estimated 39 650 (91%) received treatment, and 11 790 (25%) had a retest between six weeks and six months after diagnosis.

Gonorrhoea

Gonorrhoea notifications

- In 2024 there were 44 210 gonorrhoea notifications in Australia, with over two-thirds of all notifications in males (32 036, 72%).
- Between 2015 and 2024 there was a 211% increase in the gonorrhoea notification rate (from 78.8 to 166.7 per 100 000). Similar trends were observed among males and females. The gonorrhoea notification rate has been higher among males than females in each year since 2015 and was 241.5 per 100 000 males and 92.5 per 100 000 females in 2024.
- The gonorrhoea notification rate among Aboriginal and Torres Strait Islander peoples is based on data from seven jurisdictions (the Australian Capital Territory, New South Wales, the Northern Territory, Queensland, South Australia, Tasmania, and Western Australia) where Aboriginal and Torres Strait Islander status was ≥50% complete for each of the five years (2020 – 2024).
- The gonorrhoea notification rate among Aboriginal and Torres Strait Islander peoples in 2024 was almost four times as high as among non-Indigenous people (576.6 per 100 000 and 145.8 per 100 000, respectively).

Testing

- Between 2015 and 2024, the number of gonorrhoea notifications per 100 Medicare-rebated gonorrhoea tests among those aged 15 to 34 years increased by 126% (from 2.2 to 4.9), with increases in both males (115%) and females (142%). These data suggest that the increases observed in notifications cannot be fully explained by more testing.

Incidence

- In 2024, among men attending sexual health clinics in the ACCESS network, the gonorrhoea incidence rate among HIV-positive gay and bisexual men (35.8 per 100 person-years) was higher than among HIV-negative gay and bisexual men (26.9 new infections per 100 person-years).
- Among women reporting sex work attending sexual health clinics in the ACCESS network, the incidence of gonorrhoea increased by 145%, from 4.4 per 100 person-years in 2015, to 10.8 per 100 person-years in 2024.

Other sexually transmissible infections

- The proportion of heterosexual men under 21 years of age attending clinics in the Genital Warts Surveillance Network and diagnosed with genital warts at first visit declined from 11% in 2006 to 0.0% in 2024. In the same period, among men aged 21 to 24 years there was also a decline in the proportion who were diagnosed with genital warts at first visit from 17% in 2006 to 1% in 2024.
- Among women aged under 21 years attending clinics in the Genital Warts Surveillance Network, the proportion diagnosed with genital warts at first visit declined from 12% in 2006 to 0% in 2024 while among women aged 21 to 24 years the proportion diagnosed with genital warts at first visit declines from 14% in 2006 to 1% in 2024.
- Among gay and bisexual men aged under 21 years at first visit to a clinic in the Genital Warts Surveillance Network, the proportion diagnosed with genital warts declined from 7% in 2006 to 1% in 2024. In this period, among gay and bisexual men aged 21-24 years this proportion declined from 10% to 1%.

2 Interpretation

In 2024, there were increases in new chlamydia, gonorrhoea, and infectious syphilis diagnoses, highlighting the need for greater testing coverage and for testing to be routinely offered to sexually active people. Increased efforts to support partner notification and treatment of sexual partners are also needed to reduce the incidence of STIs.

Based on the interpretation of the ratio of diagnoses by sex, gonorrhoea, and infectious syphilis were diagnosed more frequently in the past five years among gay, bisexual and other men who have sex with men. Explanations for this trend among men who have sex with men include changing sexual behaviours, more comprehensive screening - partially related to HIV prevention strategies, greater availability and awareness of STI prevention. Efforts to improve health promotion, testing and treatment among men who have sex with men need to be further enhanced. Furthermore, it should be acknowledged that sexual identity is not in itself a risk factor, and it is important not to conflate this with inherent risk.

Among women reporting sex work, syphilis incidence remained low. In contrast, gonorrhoea and chlamydia incidence increased among women reporting sex work, with gonorrhoea incidence more than doubling since 2015. Stigma, limited access to appropriate health care, and discrimination experienced by women reporting sex work, as well as gay, bisexual, and other men who have sex with men, are often at the core of poor health outcomes for these communities.

Gonorrhoea and infectious syphilis diagnosis rates among women in urban areas are increasing markedly. Congenital syphilis diagnoses have also risen, with many cases resulting in infant deaths. These trends underscore the need for well-promoted, accessible, and culturally appropriate testing services and prevention options specifically for women in these settings.

The number of Medicare-rebated tests for chlamydia and gonorrhoea among both men and women remains below the numbers reported before the start of the COVID-19 pandemic. This trend highlights the need for health promotion, enhanced testing, and partner notifications.

Among Aboriginal and Torres Strait Islander peoples in 2024, STI diagnosis rates remain much higher than among non-Indigenous people, with infectious syphilis rates more than five times as high, gonorrhoea rates four times as high, and chlamydia rates twice as high. The increases in infectious syphilis among young Aboriginal and Torres Strait Islander peoples in regional and remote areas, along with a considerable increase in the number of congenital syphilis cases, emphasise the need to enhance culturally appropriate and co-designed health promotion, testing and treatment strategies.

Sexually transmissible infections

3 Infectious Syphilis

See page 4 for summary.

3.1 Infectious syphilis notifications

There were 5866 infectious syphilis notifications (infections of less than two years' duration) in Australia in 2024. In 2024, 4655 (79%) infectious syphilis notifications were among males, 3003 (51%) were among people aged 25 to 39 years, and 4381 (75%) were among people residing in major cities. Also in 2024, 989 (17%) notifications were among Aboriginal and Torres Strait Islander peoples, 4549 (78%) were among non-Indigenous people and 328 (6%) notifications did not have Aboriginal and Torres Strait Islander status reported (Table 1).

In 2024, around half (53%) of notifications of infectious syphilis among Aboriginal and Torres Strait Islander peoples were male compared with the majority (85%) among non-Indigenous people, suggesting greater transmission attributed to male-to-male sex among non-Indigenous people. See *Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2024* for further details ⁽¹⁾.

Table 1 Characteristics of syphilis notifications, 2015 – 2024

Characteristic	Year of diagnosis									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total cases	2779	3375	4392	5049	5911	5362	5758	6181	6565	5866
Gender										
Female	287	413	655	736	969	958	1038	1083	1337	1202
Male	2491	2957	3728	4302	4928	4390	4706	5078	5223	4655
Not reported	1	5	9	11	14	14	14	20	5	9
Age group										
0–14	17	17	24	9	33	19	16	13	16	26
15–19	145	176	242	224	301	288	265	210	227	185
20–24	408	427	568	678	707	618	617	645	719	589
25–29	463	611	814	929	1086	945	992	1086	1130	967
30–34	438	540	726	822	1054	969	1147	1201	1242	1110
35–39	317	433	543	663	814	772	884	960	975	926
40+	991	1171	1475	1724	1916	1751	1837	2066	2256	2063
Median age at diagnosis										
Female	25	26	27	28	27	28	28	29	30	31
Male	35	35	34	35	35	35	35	35	35	36
Overall	34	34	33	34	33	34	34	34	34	35
Remoteness										
Major cities	1854	2395	3193	3803	4477	4065	4397	4753	4977	4381
Regional	365	515	711	676	706	677	618	769	921	907
Remote	259	280	364	438	568	489	572	463	468	410
Not reported	301	185	124	132	160	131	171	196	199	168
Aboriginal and Torres Strait Islander status										
Aboriginal and/or Torres Strait Islander	468	556	811	820	1056	931	1000	1015	1060	989
Non-Indigenous	2151	2613	3419	4091	4633	4232	4474	4644	5116	4549
Not reported	160	206	162	138	222	199	284	522	389	328
Congenital syphilis										
Aboriginal and/or Torres Strait Islander	2	1	5	4	1	8	9	9	13	3
Non-Indigenous	2	1	3	4	3	9	6	5	7	6
Not reported	0	0	0	0	0	0	0	1	0	1
Overall	4	2	8	8	4	17	15	15	20	10
State/Territory										
ACT	14	13	33	54	66	56	39	40	32	62
NSW	740	873	1100	1504	1940	1747	1822	1991	2079	1803
NT	206	231	322	350	342	270	214	217	227	284
QLD	574	684	1080	1125	1132	997	1062	1094	1385	1461
SA	123	86	161	202	162	133	250	290	324	225
TAS	15	6	12	9	9	10	10	32	69	37
VIC	944	1145	1361	1373	1688	1429	1515	1713	1753	1398
WA	163	337	323	432	572	720	846	804	696	596

Source: Australian National Notifiable Diseases Surveillance System.

Between 2015 and 2024, the infectious syphilis notification rate increased by 86% from 11.9 to 22.1 per 100 000. Similar trends were seen among both males and females. Notification rates have remained higher among males than females for every year since 2015, and in 2024, rates were 35.1 and 9.2 per 100 000, respectively (Figure 1).

Figure 1 Infectious syphilis notification rate per 100 000 population by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.



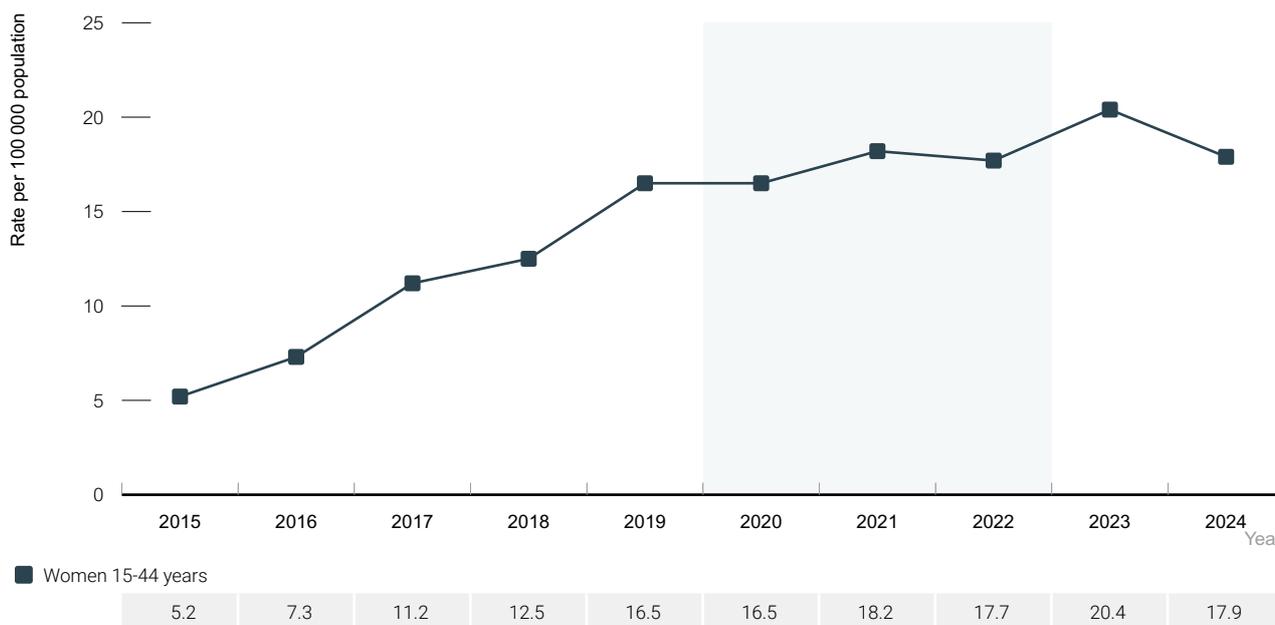
What does this mean?

Infectious syphilis diagnosis rates increased considerably between 2015 and 2024. Each year in this period, men were diagnosed with infectious syphilis more often than women, with variations by region and jurisdiction.

In 2024, infectious syphilis notification rates were highest among people aged 30 to 34 years (54.1 per 100 000), 25 to 29 years (48.1 per 100 000), and 20 to 24 years (39.6 per 100 000). Among males in 2024, the notification rates of infectious syphilis were highest in those aged 30 to 34 years (87.7 per 100 000), 25 to 29 years (72.5 per 100 000) and 35 to 39 years (76.3 per 100 000). For females, notification rates were highest among those aged 25 to 29 years (22.9 per 100 000), 20 to 24 years (22.1 per 100 000), and 30 to 34 years (20.8 per 100 000).

Monitoring infectious syphilis among women of reproductive age is critical because it helps identify risks for congenital syphilis, informs antenatal care responses, and guides targeted public-health prevention efforts. Among women aged 15 to 44 years, the infectious syphilis notification rate more than tripled from 5.2 to 17.9 per 100 000 (Figure 2). Further breakdowns of infectious syphilis notification rates by age and sex can be found on the [Kirby Institute data site](#).

Figure 2 Infectious syphilis notification rate per 100 000 women aged 15-44 years, 2015 – 2024

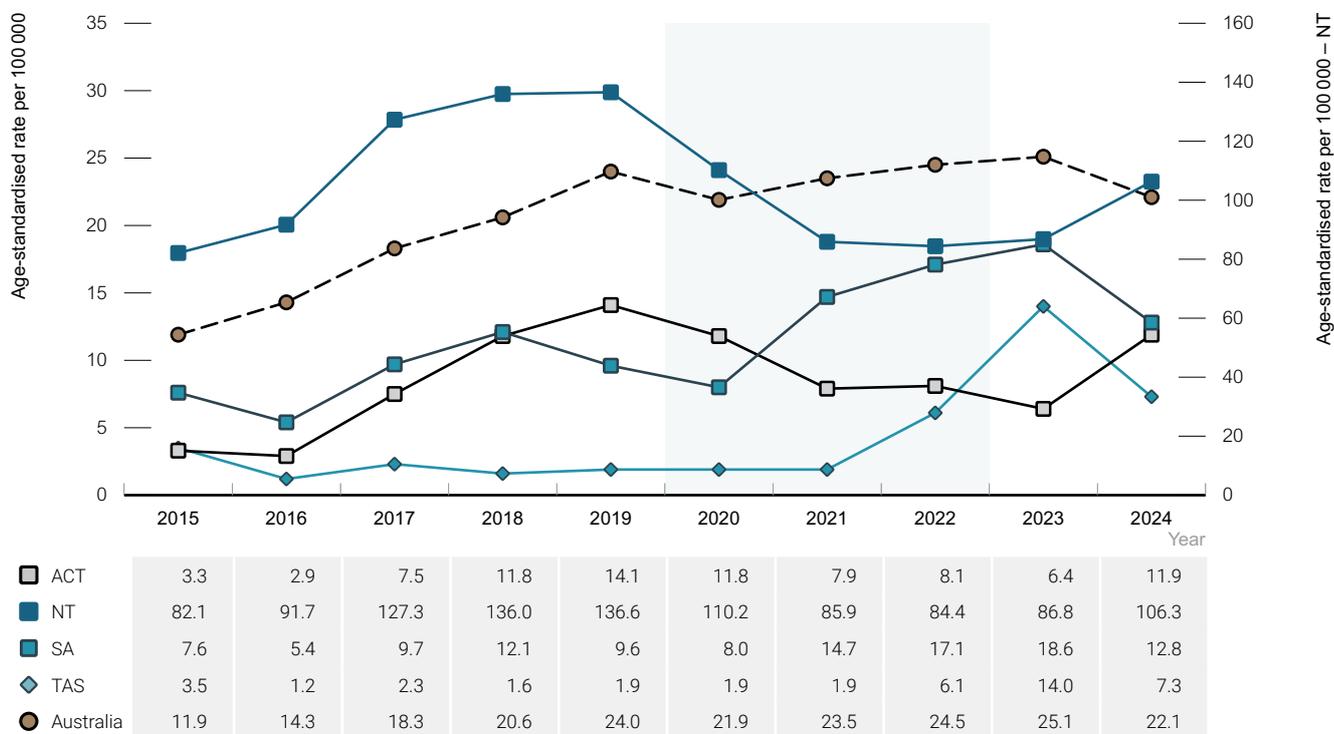
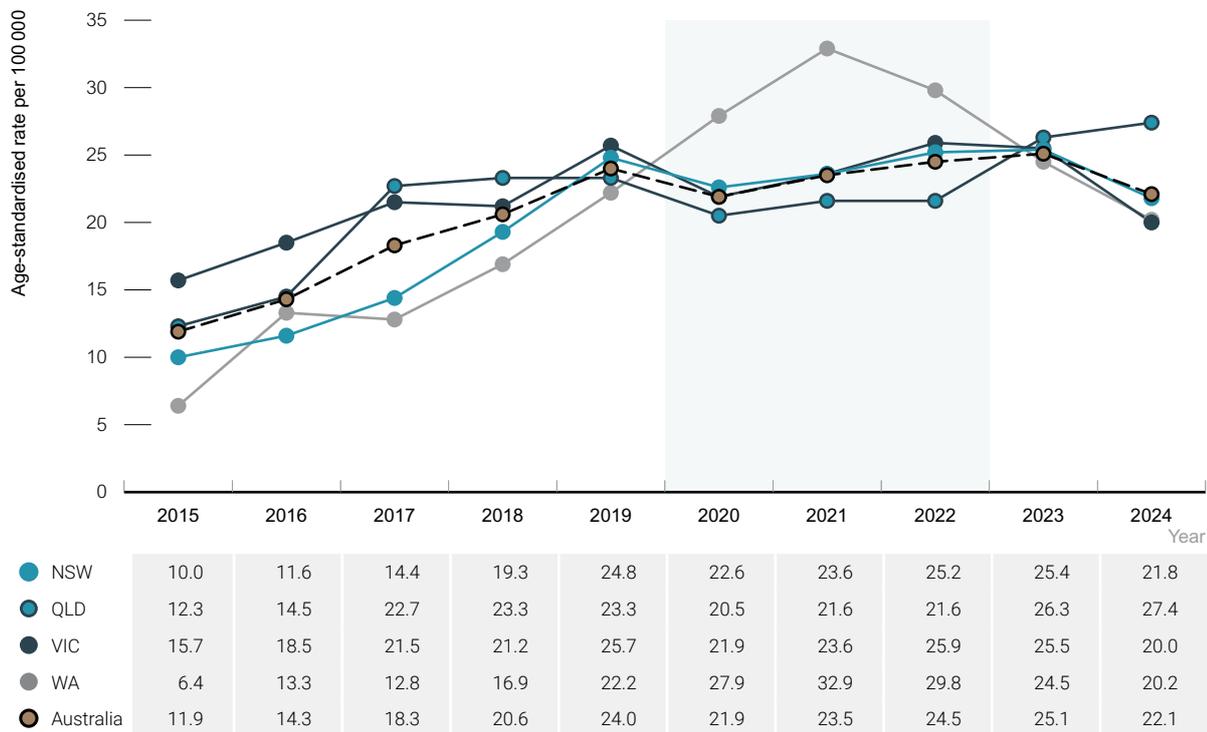


Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.

By state and territory in 2024, infectious syphilis notification rates were highest in the Northern Territory (106.3 per 100 000) and Queensland (27.4 per 100 000) (Figure 3).

Figure 3 Infectious syphilis notification rate per 100 000 population by state/territory, 2015 – 2024



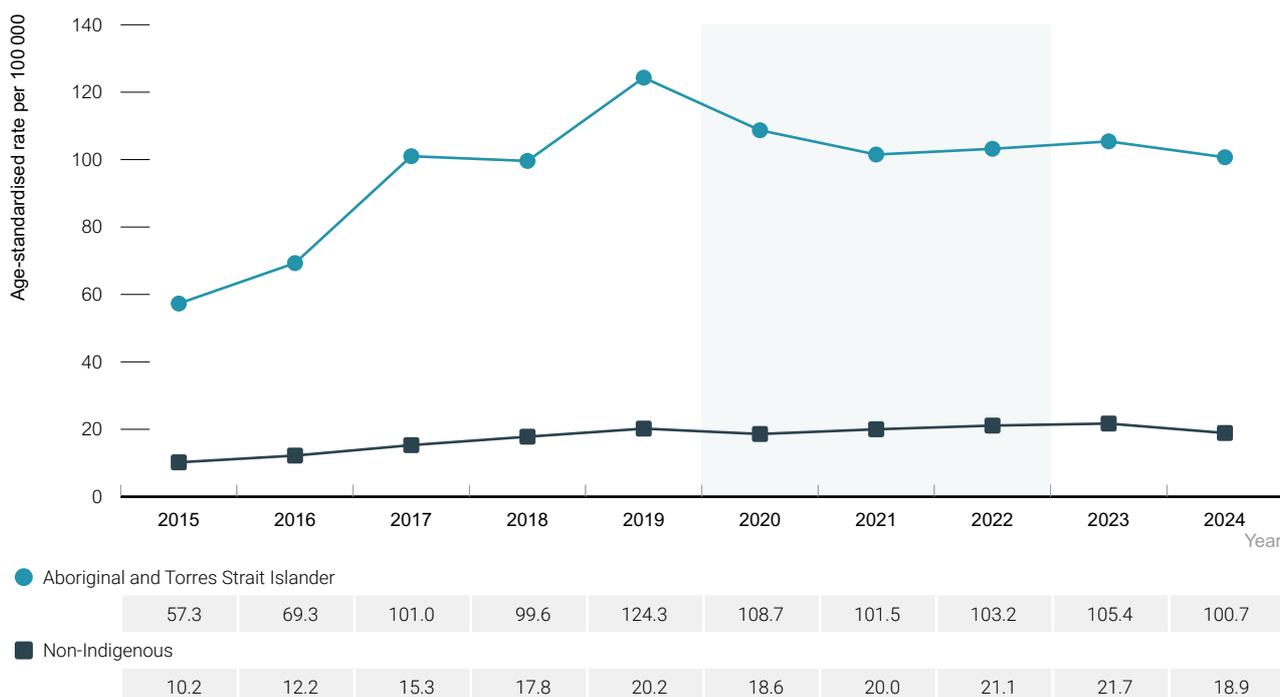
Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.

Between 2015 and 2024, the infectious syphilis notification rate among Aboriginal and Torres Strait Islander peoples increased by 76% from 57.3 to 100.7 per 100 000. In 2024, the infectious syphilis notification rate among Aboriginal and Torres Strait Islander peoples was more than five times as high as among non-Indigenous people at 18.9 per 100 000 (Figure 4).

A larger than expected increase in the number of people identifying as Aboriginal and/or Torres Strait Islander was reported in the 2021 census. This increase influenced the Australian Bureau of Statistics' population projections for Aboriginal and Torres Strait Islander peoples and means that trends before and after 2021 should be interpreted with caution. See *Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2025* for further details ⁽¹⁾.

Figure 4 Infectious syphilis notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2015 – 2024



Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Includes all jurisdictions, as Aboriginal and Torres Strait Islander status was reported for ≥50% of notifications for each year.

Source: Australian National Notifiable Diseases Surveillance System. Includes all jurisdictions, as Aboriginal and Torres Strait Islander status was reported for

?

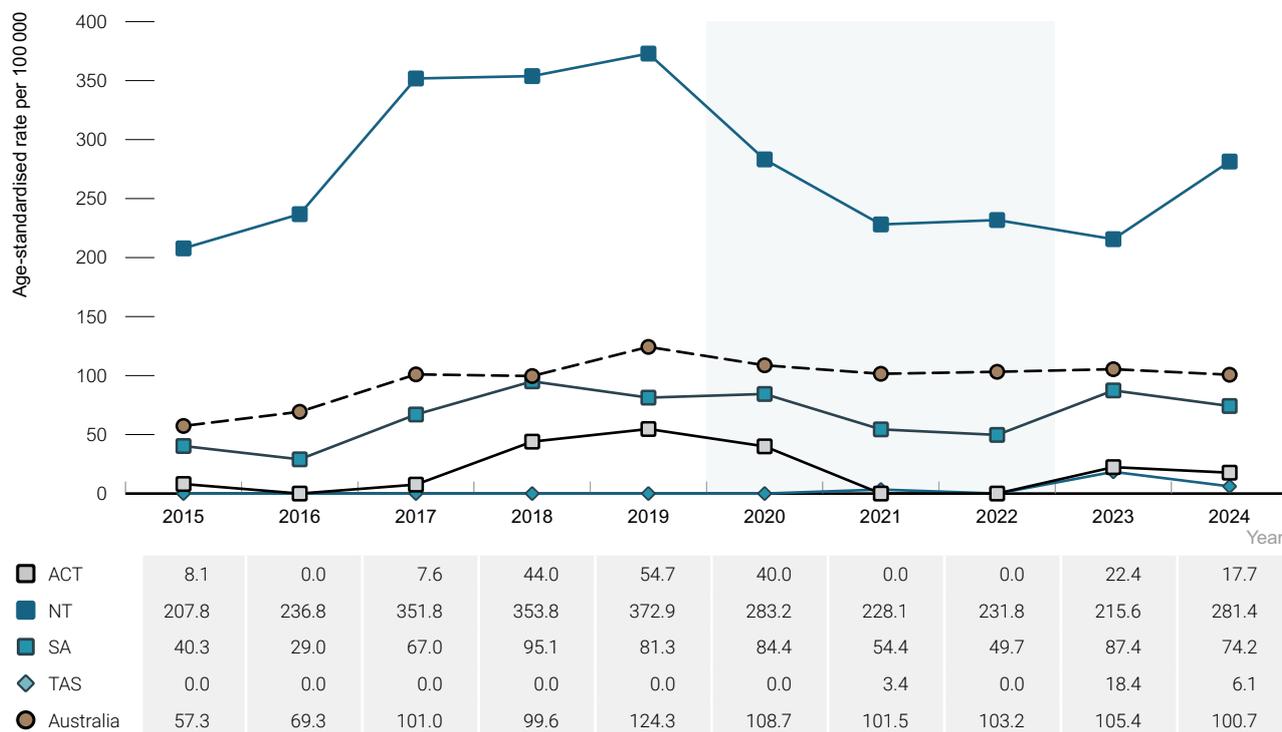
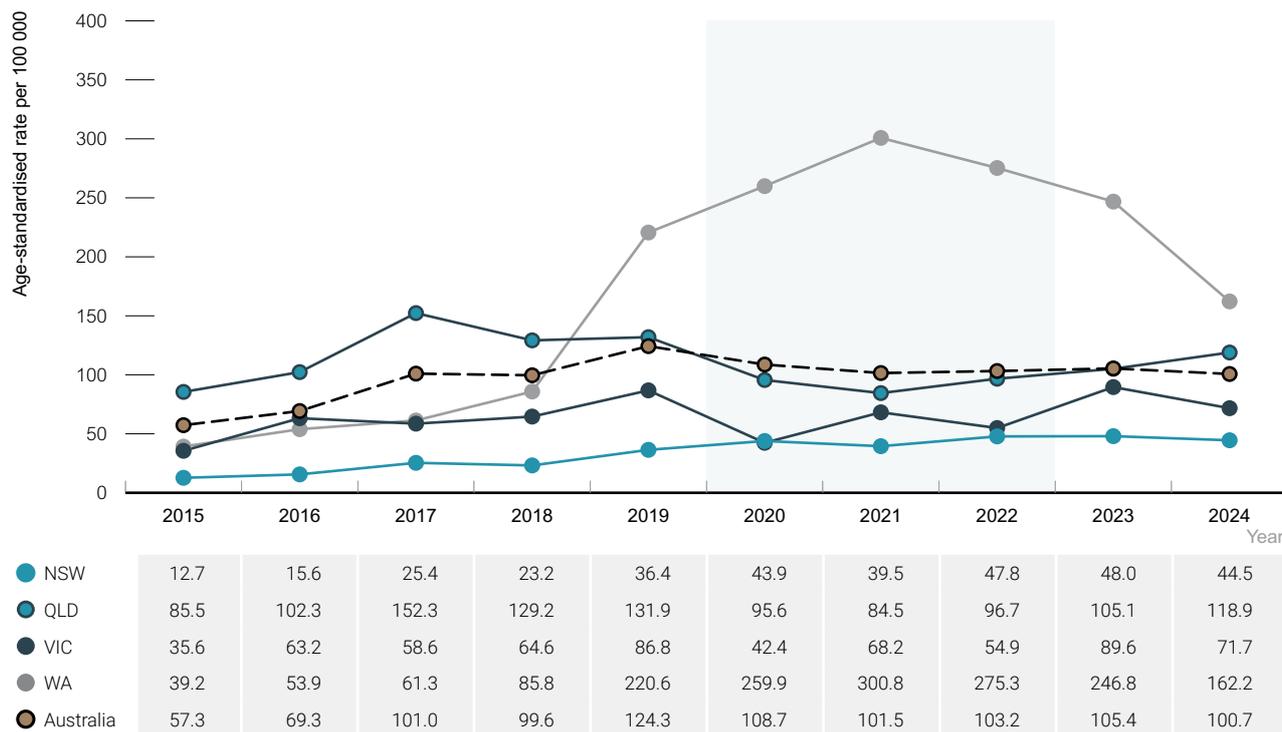
What does this mean?

Between 2020 and 2024, infectious syphilis diagnosis rates among Aboriginal and Torres Strait Islander peoples remained at least five as high as among non-Indigenous people.

In 2024, 12% of infectious syphilis notifications among Aboriginal and Torres Strait Islander peoples were among people aged 15 to 19 years, compared to 4% among non-Indigenous people.

Since 2015, infectious syphilis notification rates among Aboriginal and Torres Strait Islander peoples have increased in every state and territory. In 2024, infectious syphilis notification rates among Aboriginal and Torres Strait Islander peoples were highest in the Northern Territory (281.4 per 100 000) (Figure 5).

Figure 5 Infectious syphilis notification rate per 100 000 population among Aboriginal and Torres Strait Islander peoples by state/territory, 2015 – 2024



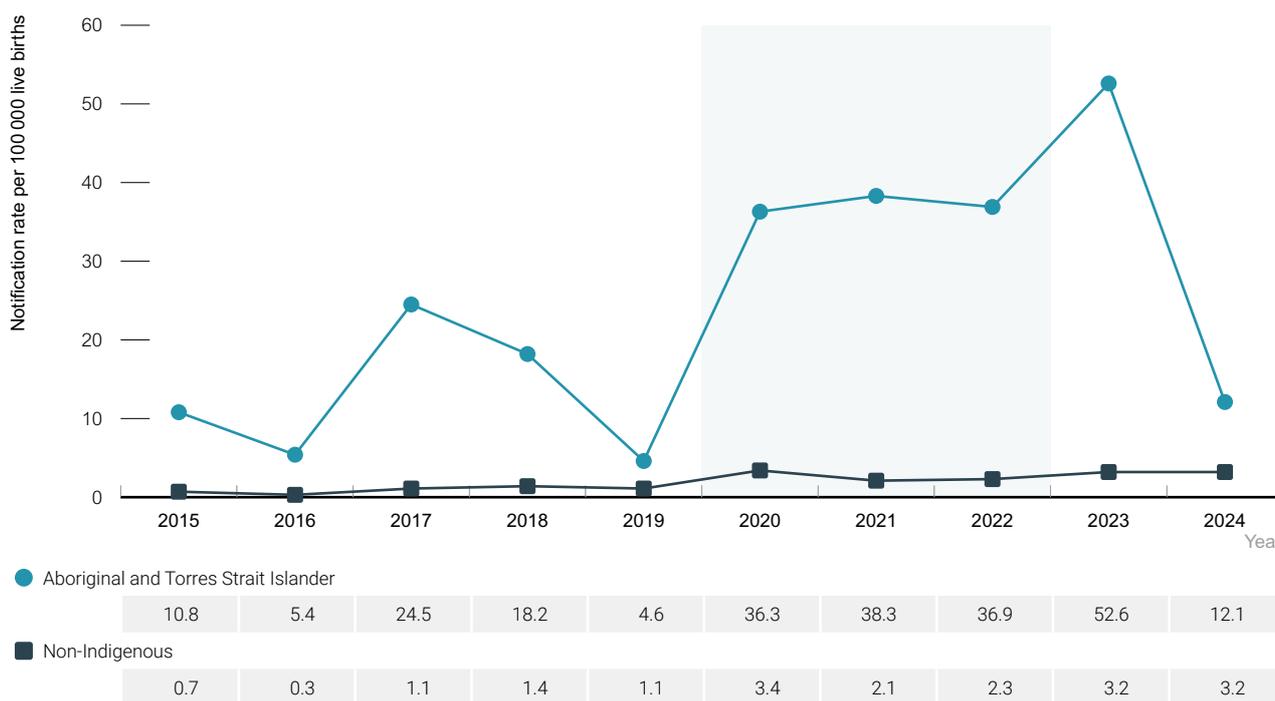
Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Includes all jurisdictions, as Aboriginal and Torres Strait Islander status was reported for ≥50% of notifications for each year.

Source: Australian National Notifiable Diseases Surveillance System.

3.2 Congenital syphilis

Between 2015 and 2024 there were 103 cases of congenital syphilis notified in Australia. Of those, 55 (53%) were among Aboriginal and Torres Strait Islander peoples. Of the 10 congenital syphilis cases notified in 2024, three were among Aboriginal and Torres Strait Islander infants and six were among non-Indigenous infants (Table 1). There was one congenital syphilis case for who Aboriginal and Torres Strait Islander status was not reported. In 2024, the congenital syphilis notification rate among Aboriginal and Torres Strait Islander infants was 12.1 per 100 000 live births, which is below the target of 50 per 100 000 live births, set by the World Health Organization as part of guidance for the elimination of vertical transmission of HIV and syphilis ⁽²⁾. In 2024, the congenital syphilis notification rate among Aboriginal and Torres Strait Islander infants was more than three times as high as among non-Indigenous infants (3.2 per 100 000) (Figure 6).

Figure 6 Congenital syphilis rate per 100 000 live births by Aboriginal and Torres Strait Islander status^a, 2015 – 2024



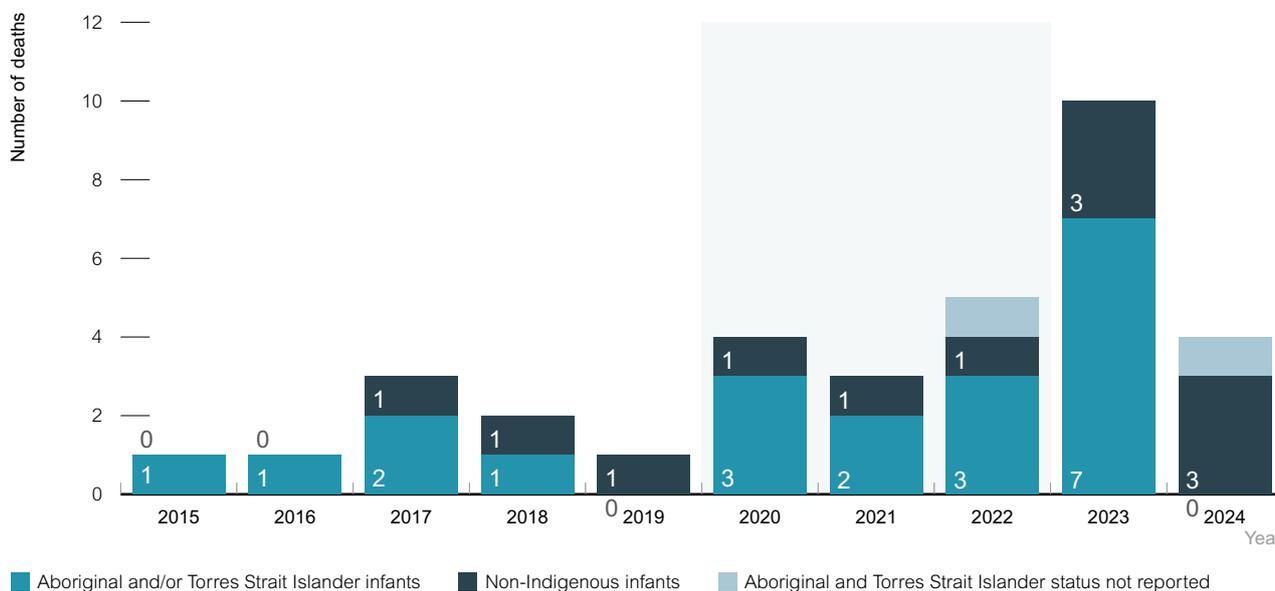
Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

a Non-Indigenous includes notifications where Aboriginal and Torres Strait Islander status was not reported.

Source: Australian National Notifiable Diseases Surveillance System.

Of the 103 congenital syphilis cases notified between 2015 and 2024, 34 cases resulted in the death of the infant (including stillbirth). Of these, 20 deaths occurred among Aboriginal and Torres Strait Islander infants, twelve occurred among non-Indigenous infants, and two deaths occurred among infants for whom Aboriginal and Torres Strait Islander status was not reported (Figure 6). See *Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2025* for further details ⁽¹⁾.

Figure 7 Number of deaths attributed to congenital syphilis by Aboriginal and Torres Strait Islander status, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.

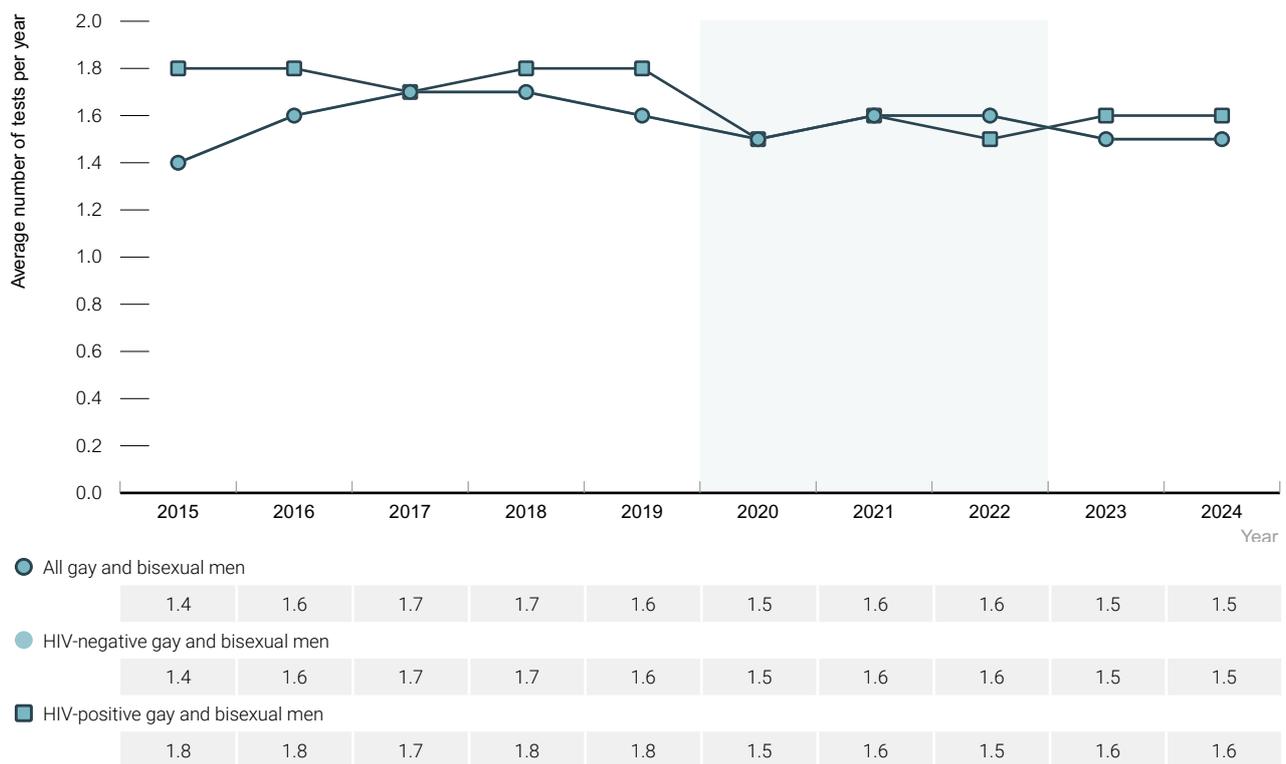
3.3 Syphilis testing

Clinical guidelines recommend at least annual STI testing for all sexually active gay and bisexual men, increasing to every three months for men with higher risk behaviour, and at each monitoring visit for HIV-positive gay and bisexual men ⁽³⁾.

For other sexually active people aged 15 to 29 years, annual opportunistic syphilis testing is recommended, with more frequent testing recommended in areas of high prevalence ⁽³⁾. Repeat syphilis testing is also recommended as part of routine antenatal screening, at the first antenatal visit, early in the third trimester (28–32 weeks), and at the time of birth. Guidelines may vary by local area, particularly in areas with a declared outbreak.

The number of syphilis tests per year among gay and bisexual men can give an indication of adherence to recommendations in the clinical guidelines ⁽³⁾. The average number of syphilis tests per year among gay and bisexual men attending sexual health clinics and high-caseload general practice clinics in ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance) fluctuated between 2015 and 2024 and was 1.5 tests per year in 2024 (Figure 8). Among HIV-positive gay and bisexual men, the average number of syphilis tests declined from 1.8 tests per year in 2015 to 1.6 tests per year in 2024. Among HIV-negative gay and bisexual men in the same period, the average number of syphilis tests fluctuated and was 1.5 tests per year in 2024.

Figure 8 Average number of syphilis tests per year among gay and bisexual men by HIV status, 2015 – 2024

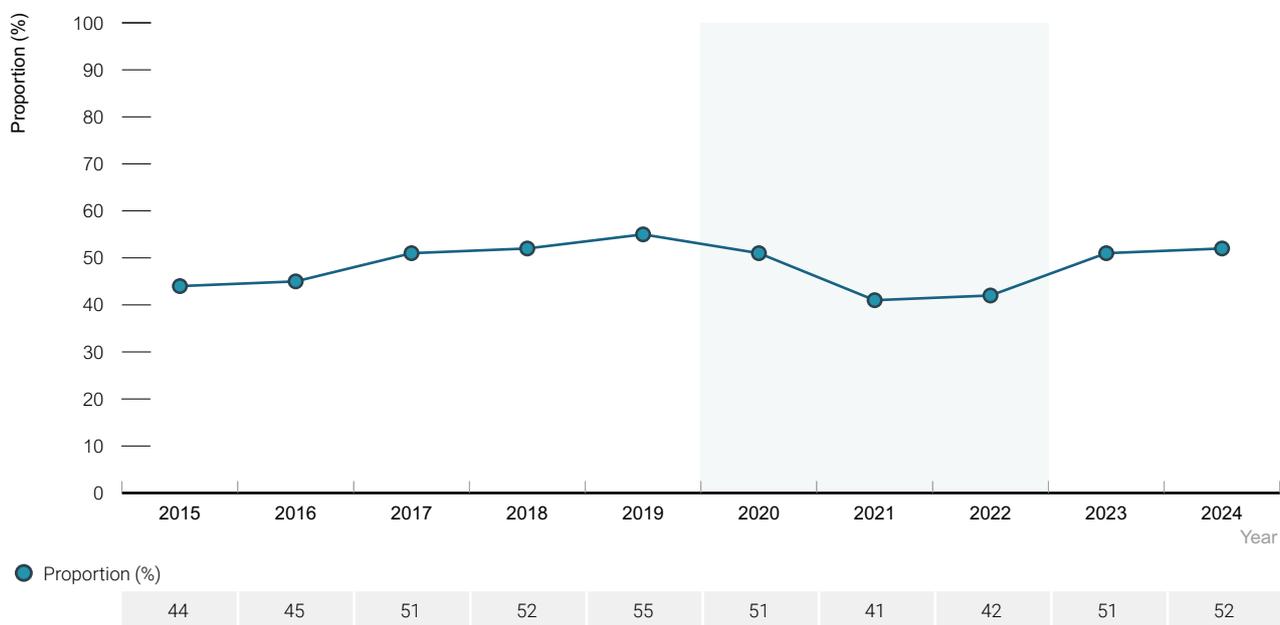


Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance).

In 2024, the GBQ+ Community Periodic Surveys reported that 52% of participating gay and bisexual men completed comprehensive STI testing (defined as at least four samples collected from separate body sites) in the 12 months prior to the survey. This proportion fluctuated between 41% and 55% over the reporting period (Figure 9). For more information, see [Annual reports of trends in behaviour](#) ⁽⁴⁾.

Figure 9 Gay and bisexual men reporting comprehensive STI testing in the 12 months prior to the survey, 2015 – 2024



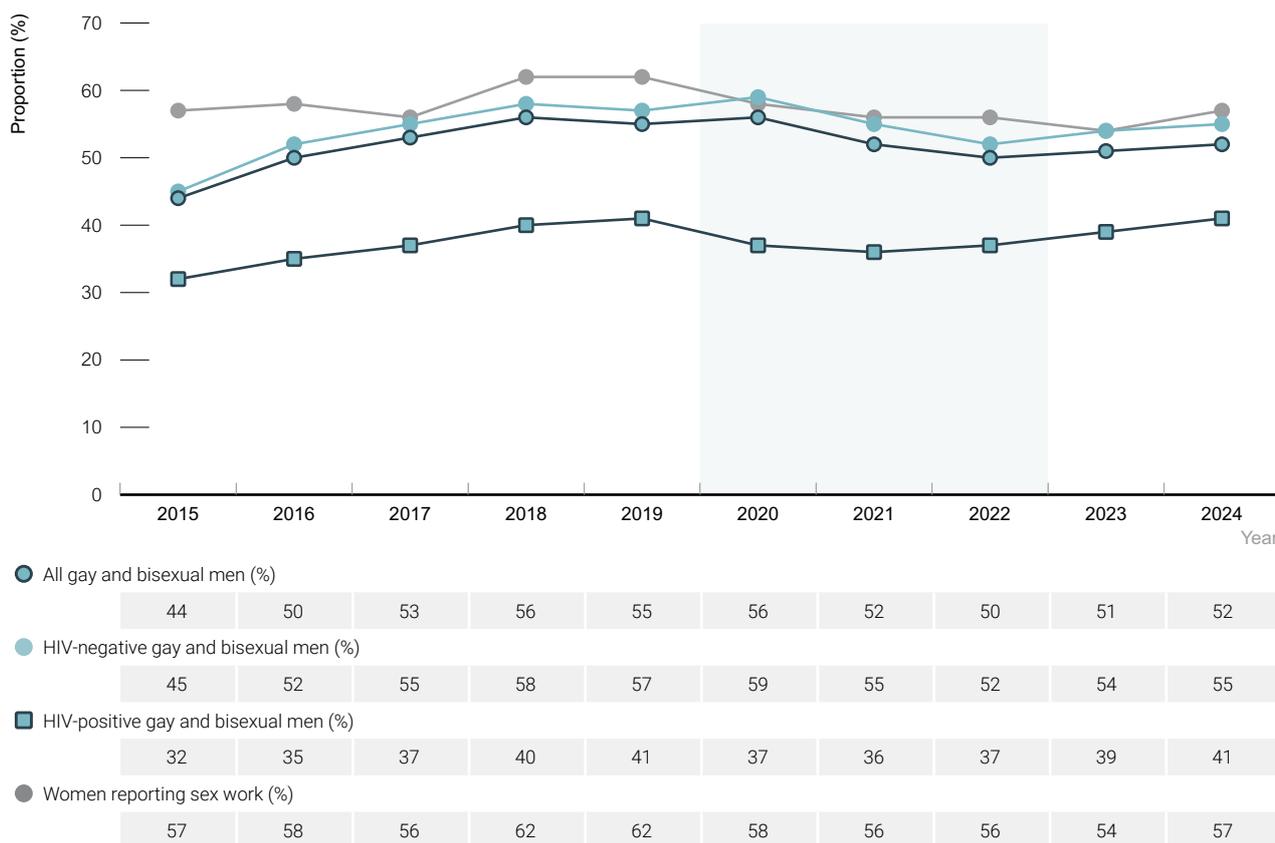
Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Comprehensive testing is defined as the collection of samples of at least four of the following: anal swab, throat swab, penile swab, urine, blood, among men tested for STI in the previous 12 months.

Source: GBQ+ Community Periodic Surveys.

Repeat comprehensive testing

In 2024, among gay and bisexual men attending sexual health clinics in ACCESS, 52% had a repeat comprehensive STI screen (defined as chlamydia and gonorrhoea testing on any anatomical site, syphilis testing and HIV testing among HIV-negative men) within 13 months of a previous comprehensive screen, an increase from 44% in 2015 (Figure 10). Trends over time in the proportion with repeat comprehensive STI screening was similar between HIV-positive and HIV-negative gay and bisexual men between 2015 and 2024. Among women reporting sex work attending sexual health clinics in ACCESS, the proportion who had a repeat comprehensive STI screen fluctuated and was 57% in 2024 (Figure 10).

Figure 10 Repeat comprehensive STI screen within 13 months of a test among gay and bisexual men by HIV-status and women reporting sex work, 2015 – 2024



Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Repeat screening pertains to prospective 13-month period. A comprehensive screen is defined as a test for chlamydia and gonorrhoea (any anatomical site), syphilis and HIV (among HIV-negative men).

Source: ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance).

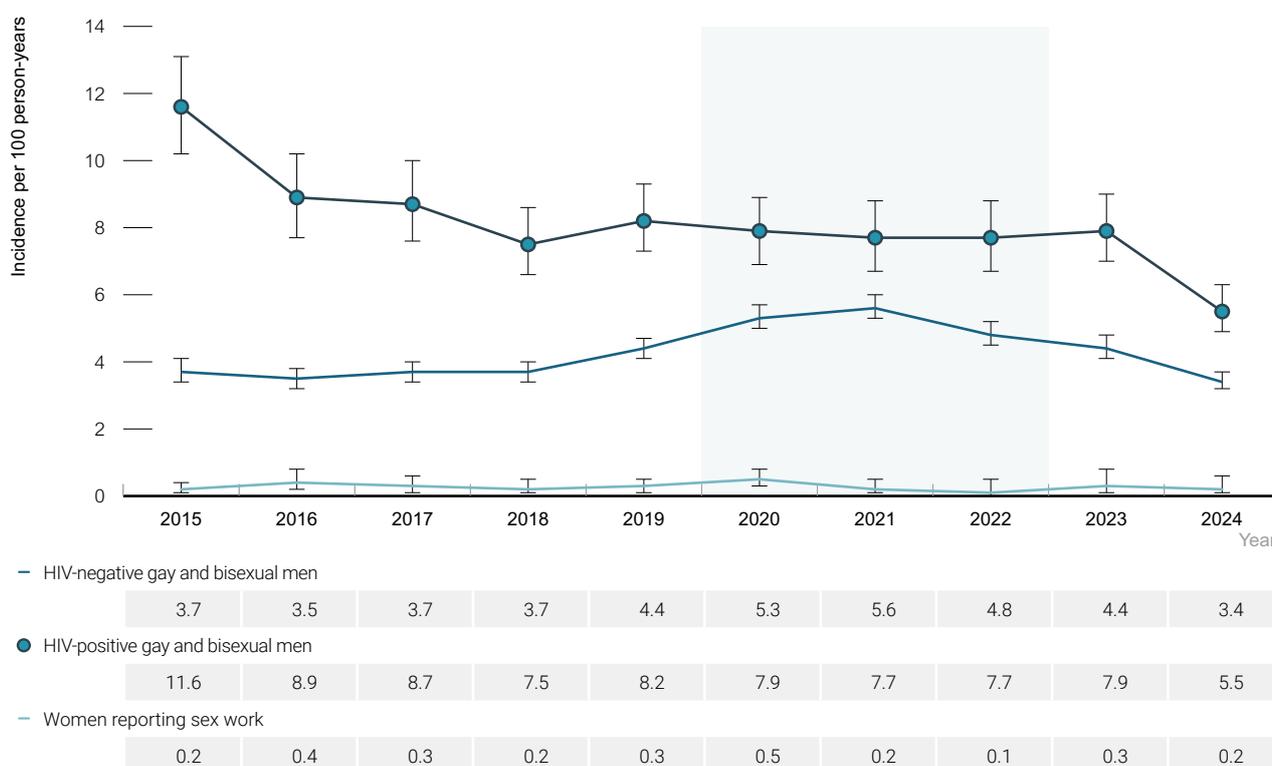
3.4 Infectious syphilis incidence

Infectious syphilis incidence is an important indicator of new transmissions, reflecting the impact of current prevention programs, whereas prevalence reflects the burden of disease. Infectious syphilis incidence is calculated by dividing the number of incident infections (negative test followed by a syphilis diagnosis) among people undergoing repeat syphilis testing at sexual health services by the person's time at risk (determined by the time between repeat syphilis tests) ⁽⁵⁾. These incidence estimates represent people attending sexual health clinics and may not be generalisable to broader priority populations.

In 2024, the incidence of infectious syphilis among HIV-positive gay and bisexual men attending sexual health clinics was 5.5 new infections per 100 person-years, compared with 3.4 per 100 person-years among HIV-negative gay and bisexual men. Between 2015 and 2024, infectious syphilis incidence fluctuated among HIV-negative and HIV-positive gay and bisexual men (Figure 11). Also, caution should be taken with interpreting between-year trends as confidence intervals overlap, indicating between-year differences are not statistically significant.

In 2024, the infectious syphilis incidence rate among women reporting sex work was 0.2 per 100 person-years, fluctuating since 0.2 per 100 person-years in 2015 (Figure 11). Small numbers of women reporting sex work included in incidence calculations mean that this trend should be interpreted with caution.

Figure 11 Infectious syphilis incidence in sexual health clinic attendees by select population, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance).

3.5 Syphilis diagnosis and care cascade

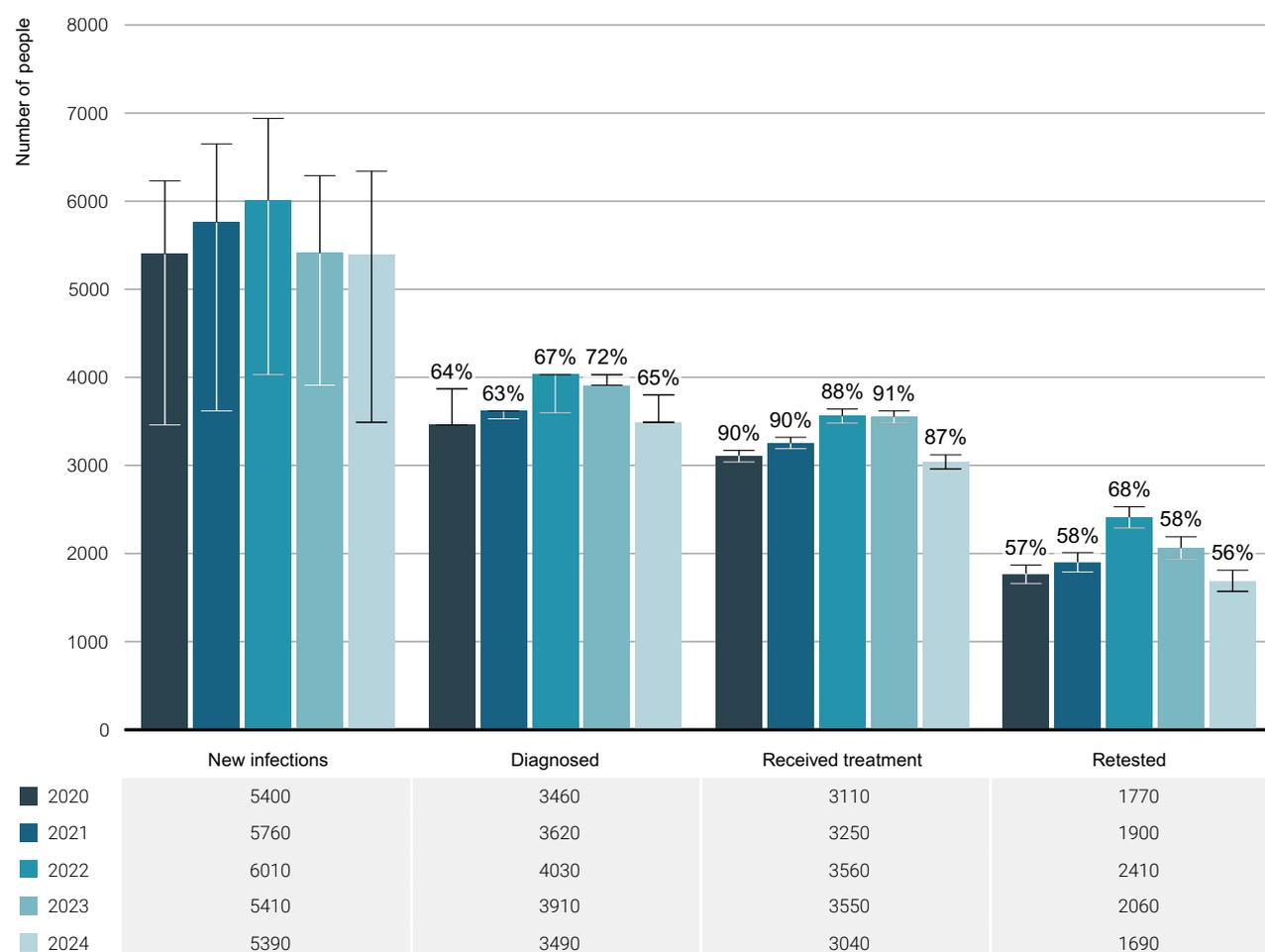
This report includes the syphilis diagnosis and care cascade for gay and bisexual men, which estimates the number of gay and bisexual men with infectious syphilis infections in Australia, and the number and proportion who were diagnosed, received treatment, and had a retest at around three months after treatment, as recommended in clinical guidelines ⁽³⁾.

These estimates are used to support improvement in the delivery of services to gay and bisexual men infected with syphilis across the entire continuum of care—from diagnosis of infection and uptake of treatment to retesting. As infectious syphilis is concentrated largely among urban gay and bisexual men and in young people living in remote Aboriginal and Torres Strait Island communities, these populations are the focus of the cascades. Additional data are needed to prepare an infectious syphilis cascade for young people living in remote Aboriginal and Torres Strait Island communities, which will be explored in future reports.

Using available data and accounting for uncertainties, the proportions of gay and bisexual men in each stage of the cascade in Australia were estimated. Methods and the associated uncertainties are described in detail in the [Methodology](#). The cascade focuses on gay and bisexual men, as guidelines recommend regular testing in this group and a significant proportion of infectious syphilis notifications occur in this group.

In 2024, there were an estimated 5390 new syphilis infections among gay and bisexual men, similar to 5400 new infections in 2020. Of new infections in 2024, an estimated 65% (3490) were diagnosed. Of those diagnosed in 2024, 87% (3040) received treatment. Of those who received treatment in 2024, only 56% (1690) had a retest between six weeks and six months after diagnosis, down from 57% (1770) in 2020 (Figure 12).

Figure 12 The syphilis diagnosis and care cascade in gay and bisexual men, 2020 – 2024



Source: See [Methodology](#) for further details of mathematical modelling used to generate estimates.

4 Chlamydia

See page 5 for summary.

4.1 Chlamydia notifications

Chlamydia (*Chlamydia trachomatis* infection) remains the most frequently notified STI in Australia with 101 742 notifications reported in 2024. Of these, equal proportions were diagnosed among females and males (50 986, 50% and 50 250, 50% respectively), and around half (52 436, 52%) were among people aged 20 to 29 years. Just under three quarters (73 786, 73%) were among people residing in major cities (Table 2). Of all chlamydia notifications reported in 2024, 9885 (10%) were among Aboriginal and Torres Strait Islander peoples, 48 751 (48%) were among non-Indigenous people, and 43 106 (42%) were among people for whom Aboriginal and Torres Strait Islander status was not reported. See [Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2024](#) for further details ⁽¹⁾.

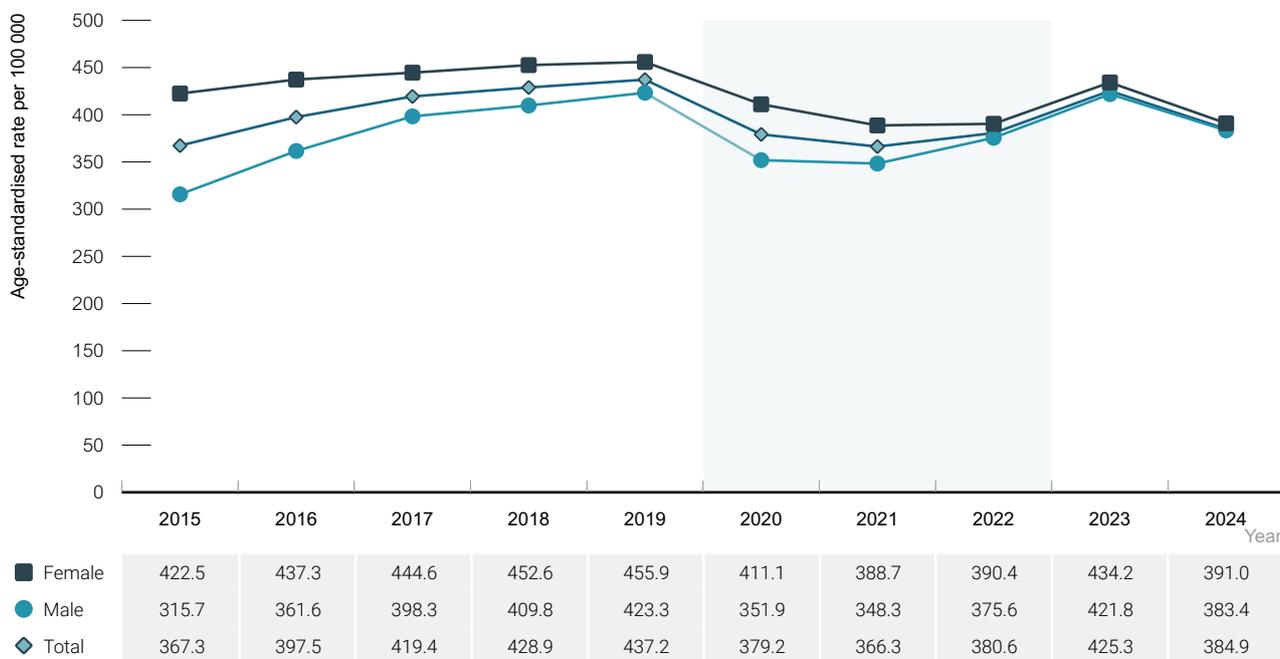
Table 2 Characteristics of chlamydia notifications, 2015 – 2024

Characteristic	Year of diagnosis									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total cases	86 396	94 725	101 208	104 848	107 382	91 485	87 390	94 376	110 031	101 742
Gender										
Female	48 716	51 086	52 527	54 022	54 539	48 160	44 845	46 856	54 467	50 250
Male	37 627	43 416	48 446	50 634	52 507	43 099	42 347	47 204	55 208	50 986
Not reported	53	223	235	192	336	226	198	316	356	506
Age group										
0–14	527	553	498	480	468	383	341	341	406	334
15–19	17 495	17 640	17 693	17 422	16 730	14 798	14 862	15 428	16 836	14 282
20–24	30 693	32 566	34 135	34 745	34 853	30 293	28 126	30 047	34 409	30 626
25–29	17 789	20 126	21 898	22 809	23 377	19 955	18 265	19 377	22 800	21 810
30–34	8 717	10 179	11 435	12 240	13 083	11 007	10 900	11 837	14 166	13 657
35–39	4 246	5 209	5 865	6 774	7 557	6 341	6 238	7 045	8 515	8 381
40+	6 929	8 452	9 684	10 378	11 313	8 708	8 656	10 301	12 897	12 651
Not reported	0	0	0	0	1	0	2	0	2	1
Median age at diagnosis										
Female	22	22	22	23	23	23	23	23	23	23
Male	25	26	26	27	27	27	27	28	28	28
Overall	23	24	24	24	25	25	25	25	25	26
Remoteness										
Major cities	59 520	66 437	72 881	75 783	77 272	66 366	62 825	67 772	79 459	73 786
Regional	20 948	21 720	21 652	22 171	22 355	19 754	19 706	20 957	23 148	20 856
Remote	4 242	4 271	4 114	4 401	4 311	3 859	3 895	4 141	5 044	4 763
Not reported	1 686	2 297	2 561	2 493	3 444	1 506	964	1 506	2 380	2 337
Aboriginal and Torres Strait Islander status										
Aboriginal and/or Torres Strait Islander	7 951	8 233	8 467	8 793	8 855	8 253	8 481	8 960	10 364	9 885
Non-Indigenous	39 020	42 833	47 244	48 428	52 753	48 273	49 391	50 178	54 381	48 751
Not reported	39 425	43 659	45 497	47 627	45 774	34 959	29 518	35 238	45 286	43 106
State/Territory										
ACT	1 266	1 362	1 462	1 577	1 639	1 443	1 338	1 454	1 550	1 269
NSW	22 548	25 976	28 943	31 057	32 604	27 074	25 088	25 834	31 401	29 023
NT	2 737	2 630	2 667	2 780	3 056	2 692	2 654	2 590	3 057	2 964
QLD	21 185	22 915	23 942	23 810	24 292	22 523	22 903	23 361	26 170	24 090
SA	5 384	5 487	5 915	6 267	6 430	5 645	5 507	5 617	6 416	5 753
TAS	1 665	1 688	1 584	1 563	1 533	1 291	1 452	1 653	1 743	1 442
VIC	20 441	22 856	25 198	26 273	26 269	20 033	17 506	22 820	26 752	24 461
WA	11 170	11 811	11 497	11 521	11 559	10 784	10 942	11 047	12 942	12 740

Source: Australian National Notifiable Diseases Surveillance System.

The chlamydia notification rate fluctuated between 2015 and 2024 and was 384.9 per 100 000 in 2024. Similar trends were seen among both males and females (Figure 13). The chlamydia notification rate was higher among females than males every year from 2015 to 2024 however the difference between males and females reduced towards the end of this period. In 2024 the chlamydia notification rate was 391.0 per 100 000 females and 383.4 per 100 000 males. The decline in the notification rate between 2019 and 2022 was likely due to a decrease in testing rates related to the COVID-19 pandemic and may not be reflective of the trend in new chlamydia infections.

Figure 13 Chlamydia notification rate per 100 000 population by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.



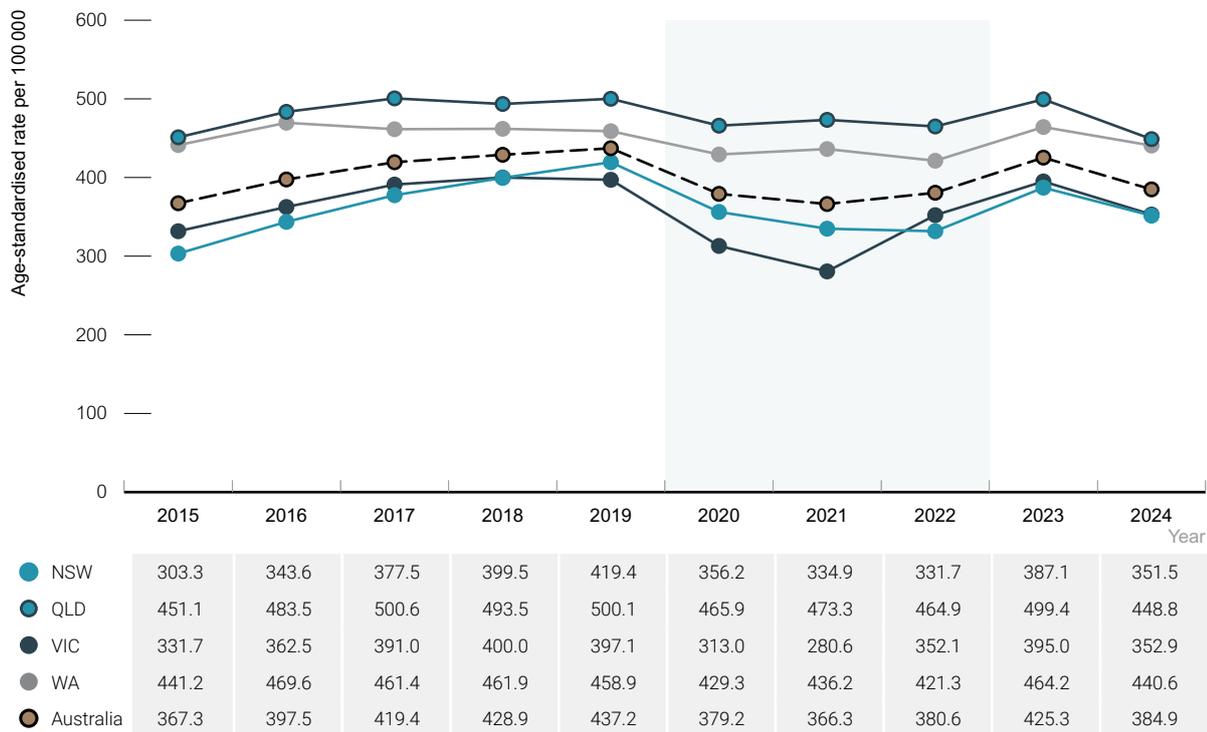
What does this mean?

Among women, chlamydia diagnosis rates in 2024 are about the same as they were in 2015. Among men, diagnosis rates have increased since 2015. The drop in rates between 2019 and 2021 probably relate to the COVID-19 pandemic.

The trends in chlamydia notification rates varied by age group. Between 2015 and 2024, among those aged 15 to 19 years the chlamydia notification rate declined by 29% from 1188 to 849 per 100 000. Conversely, notification rates among those aged 30 to 39 years and 40 to 49 years increased in the same period (41% and 63%, respectively). Among those aged 20 to 29 years, the chlamydia notification rate fluctuated and was 1377 per 100 000 in 2024. Similar patterns were seen among males and females. Breakdowns of chlamydia notification rates by age and sex can be found on the [Kirby Institute data site](#).

By state and territory, in 2024, the chlamydia notification rate was highest in the Northern Territory, at 1071.7 per 100 000. The chlamydia notification rate fluctuated between 2015 and 2024 in every state and territory (Figure 14).

Figure 14 Chlamydia notification rate per 100 000 population by state/territory, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.

The chlamydia notification rate among Aboriginal and Torres Strait Islander peoples is based on data from five jurisdictions (New South Wales, the Northern Territory, Queensland, South Australia, and Western Australia), where Aboriginal and Torres Strait Islander status was $\geq 50\%$ complete each of the past five years (2020 – 2024).

The chlamydia notification rate among Aboriginal and Torres Strait Islander peoples fluctuated between 2020 and 2024 and was 950.6 per 100 000 in 2024. In 2024, the chlamydia notification rate among Aboriginal and Torres Strait Islander peoples was more than twice as high as among non-Indigenous people (950.6 vs 369.4 per 100 000) (Figure 15). A larger than expected increase in the number of people identifying as Aboriginal and/or Torres Strait Islander was reported in the 2021 census. This increase influenced the Australian Bureau of Statistics' population projections for Aboriginal and Torres Strait Islander people and means that trends before and after 2021 should be interpreted with caution. See *Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2025* for further details ⁽¹⁾.

Figure 15 Chlamydia notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2020 – 2024



Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Includes jurisdictions in which Aboriginal and Torres Strait Islander status was reported for $\geq 50\%$ of notifications for each year (Australian Capital Territory, New South Wales, Northern Territory, South Australia, Queensland, and Western Australia).

Source: Australian National Notifiable Diseases Surveillance System.



What does this mean?

Between 2020 and 2024, chlamydia diagnosis rates among Aboriginal and Torres Strait Islander peoples remained at least twice as high as among non-Indigenous people.

4.2 Chlamydia testing

Clinical guidelines recommend the opportunistic offer of chlamydia screening to all young people (15 to 29 years of age) at least annually, including offering self-collected samples when appropriate, and regular testing for women reporting sex work. Annual testing is recommended for sexually active gay and bisexual men and testing every three months for higher risk men based on behavioural criteria and those taking pre-exposure prophylaxis (PrEP) ⁽³⁾. Chlamydia testing data are included in this report from a number of sources including Medicare, and a sample of sexual health clinics and high-caseload general practice clinics.

Medicare-rebated chlamydia tests

Between 2015 and 2019, the number of Medicare-rebated chlamydia tests among those aged 15 to 34 years increased by 26%, from 846 714 in 2015, to 1 064 795 in 2019, with increases among both men (38% increase) and women (21% increase) (Figure 16). Between 2019 and 2024, the number of tests declined by 16%, with a greater decline in the number of tests seen among men (21%) than women (14%). The decline in the number of chlamydia tests was likely related to the challenges accessing healthcare because of the COVID-19 pandemic. Declines in testing also likely influenced the decline in notification rates seen between 2019 and 2022. It is important to note that these tests capture Medicare-rebated tests and that testing conducted in government hospitals and sexual health services are usually not included. Therefore, the numbers given here underestimate all chlamydia tests conducted in Australia. Also, women may be offered more chlamydia tests opportunistically (e.g., during cervical screening or contraceptive appointments) so comparisons of trends by gender should be interpreted with caution.

Figure 16 Number of Medicare-rebated chlamydia tests among people aged 15 to 34 years by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Medicare.



What does this mean?

Every year between 2015 and 2024, women obtained more than twice the number of Medicare-rebated chlamydia tests than men. Over this time, the number of tests fluctuated among men and women.

It is important to consider trends in chlamydia notifications in the context of patterns of testing, as changes in notification rates can be an indication of changes in testing, changes in incidence, or both. In 2024, the number of chlamydia notifications per 100 Medicare-rebated chlamydia tests among those aged 15 to 34 years was 11.3. By sex, the number of chlamydia notifications per 100 Medicare-rebated chlamydia tests was 20.4 for males and 7.8 for females (Figure 17). Males had a higher number of notifications per 100 tests than females each year from 2015 to 2024. Further breakdowns by age and sex are available on the [Kirby Institute data site](#).

Figure 17 Number of chlamydia notifications per 100 Medicare-rebated chlamydia tests among people aged 15 to 34 years by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Medicare; National Notifiable Diseases Surveillance System.



What does this mean?

For every year between 2015 and 2024, on average, men were diagnosed more than twice as often as women for each chlamydia test undertaken.

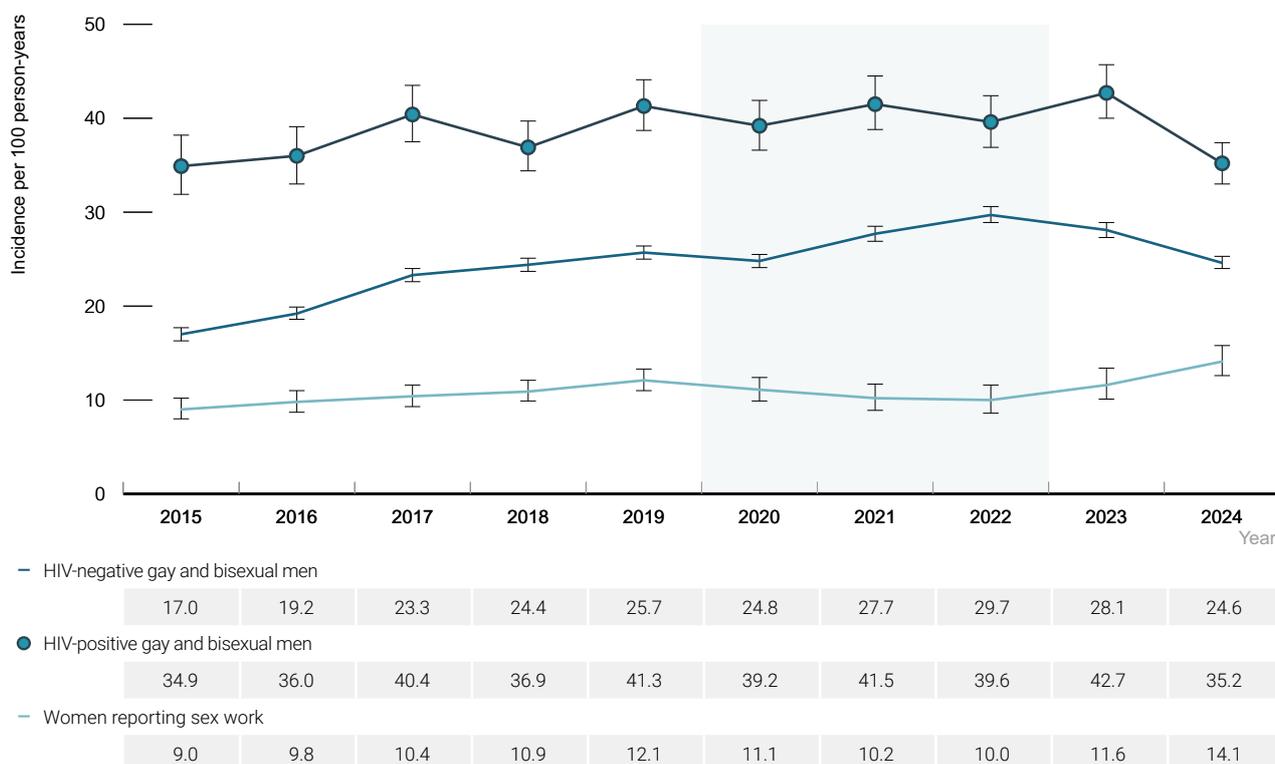
4.3 Chlamydia incidence

Chlamydia incidence is an important indicator of new transmissions and can reflect the impact of prevention programs, whereas prevalence reflects the burden of disease. Chlamydia incidence is available from ACCESS^(6,7) the World Health Organization and governments around the world have established elimination targets and associated timelines. To monitor progress toward such targets, enhanced systems of data collection are required. This paper describes the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance (ACCESS and is calculated by dividing the number of incident infections (negative test followed by a positive test) by the person's time at risk (determined by the time between repeat chlamydia tests)⁽⁵⁾. These incidence estimates represent populations attending sexual health clinics and may not be generalisable to broader priority populations.

In 2024, chlamydia incidence among HIV-positive gay and bisexual men was 35.2 new infections per 100 person-years, which was higher than among HIV-negative gay and bisexual men (24.6 per 100 person-years). There was a 45% increase in HIV-negative gay and bisexual men since 2015 (from 17.0 per 100 person-years) (Figure 18). Among women reporting sex work, chlamydia incidence increased by 57% between 2015 and 2024 (from 9.0 to 14.1 per 100 person-years) (Figure 18).

Caution should be taken with interpretation as some confidence intervals overlap, indicating that these between-year differences are not statistically significant. Same year differences in incidence estimates between reports are likely due to variations in ACCESS clinics included in the analysis, depending on data availability.

Figure 18 Chlamydia incidence in sexual health clinic attendees by select population, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance).

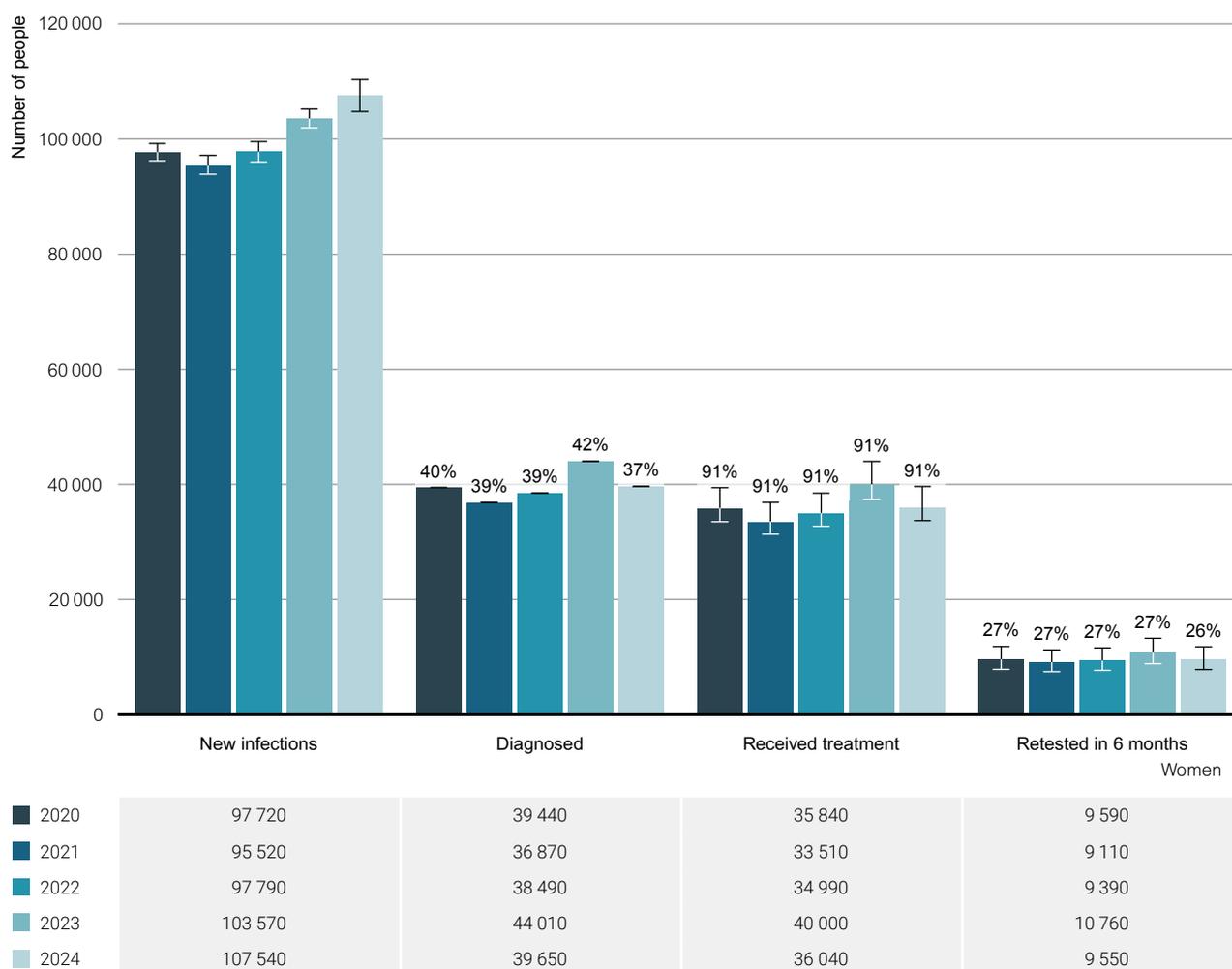
4.4 Chlamydia diagnosis and care cascade

This report includes the chlamydia diagnosis and care ‘cascade’ for women aged 15–29 years, which estimates the number and proportion of women with new chlamydia infections in Australia, and the number and proportion who were notified, received treatment and had a retest at three months post-treatment, as recommended in clinical guidelines ⁽³⁾.

These estimates are used to support the improvement of delivery of services to people with chlamydia across the entire continuum of care—from diagnosis of infection, uptake of treatment, and management (retesting). Using available data and accounting for uncertainties, the proportions of women in each stage of the cascade in Australia were estimated. Methods and the associated uncertainties are described in detail in the [Methodology](#). The approach was informed by recommendations from a national stakeholder reference group (see [Acknowledgements](#)). The cascade focuses on women aged 15–29 years, as guidelines recommend annual testing in this group and most chlamydia diagnoses occur in this age group.

In 2024, there were an estimated 107 540 new chlamydia infections in women aged 15–29 years, including reinfections, up from 97 720 infections in 2020. Of new infections in 2024, 39 650 (27%) were diagnosed, an estimated 36 040 (91%) received treatment, and 9550 (26%) had a retest between six weeks and six months after diagnosis (Figure 19). The greatest gaps in the cascade were therefore at the diagnosis and retesting steps. Similar gaps were observed between 2020 and 2024.

Figure 19 The chlamydia diagnosis and care cascade among women aged 15–29 years, 2020 – 2024



Source: See [Methodology](#) for further details of mathematical modelling used to generate estimates.

5 Gonorrhoea

See page 6 for summary.

5.1 Gonorrhoea notifications

There were 44 210 gonorrhoea (*Neisseria gonorrhoeae*) notifications in Australia in 2024, a 140% increase from 18 456 notifications in 2015. In 2024, 72% of notifications were among males (32 036 notifications), 79% were among people residing in major cities (34 744 notifications), and 39% (17 353 notifications) were among people aged 20 to 29 years (Table 3).

Of the 44 210 notifications in 2024, 5934 (13%) were among Aboriginal and Torres Strait Islander peoples, 29 622 (67%) were among non-Indigenous people, and there were a further 8654 (20%) notifications for whom Aboriginal and Torres Strait Islander status was not reported. The ratio of male to female notifications among Aboriginal and Torres Strait Islander peoples in 2024 was 0.9:1 compared with 3.3:1 among non-Indigenous people suggesting greater transmission attributed to male-to-male sex among non-Indigenous people. In 2024, a fifth (20%) of gonorrhoea notifications among Aboriginal and Torres Strait Islander peoples were among people aged 15 to 19 years, compared to 5% among non-Indigenous people aged 15 to 19 years. See [Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: annual surveillance report 2025](#) for further detail ⁽¹⁾.

Table 3 Characteristics of gonorrhoea notifications, 2015 – 2024

Characteristic	Year of diagnosis									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total cases	18 456	23 850	28 352	30 837	34 742	29 818	26 611	33 168	40 341	44 210
Gender										
Female	4 744	6 496	7 292	8 097	9 421	8 942	8 101	9 621	12 298	11 989
Male	13 683	17 306	21 003	22 650	25 210	20 783	18 432	23 395	27 880	32 036
Not reported	29	48	57	90	111	93	78	152	163	185
Age group										
0–14	272	303	202	202	203	180	165	172	248	150
15–19	2 010	2 385	2 585	2 425	2 524	2 375	2 175	2 739	3 462	2 986
20–24	4 113	4 969	5 959	5 940	6 374	5 349	4 647	6 284	8 272	7 789
25–29	4 054	5 320	6 395	6 876	7 878	6 599	5 724	6 868	8 460	9 029
30–34	2 804	3 869	4 743	5 456	6 345	5 578	4 964	5 902	7 111	8 324
35–39	1 743	2 407	3 019	3 604	4 301	3 854	3 404	4 303	4 817	6 115
40+	3 460	4 597	5 449	6 334	7 116	5 882	5 532	6 900	7 971	9 817
Not reported	0	0	0	0	1	1	0	0	0	0
Median age at diagnosis										
Female	24	25	25	26	26	26.5	26	25	25	26
Male	29	30	30	31	31	31	31	32	31	32
Overall	28	28	29	29	30	30	30	30	29	31
Remoteness										
Major cities	12 966	17 763	20 995	22 814	26 263	22 795	19 968	25 245	30 431	34 744
Regional	2 050	2 505	3 063	3 313	3 849	3 723	3 404	3 964	5 146	5 091
Remote	2 717	2 789	2 692	3 054	2 387	2 473	2 734	3 090	3 516	3 087
Not reported	723	793	1 602	1 656	2 243	827	505	869	1 248	1 288
Aboriginal and Torres Strait Islander status										
Aboriginal and/or Torres Strait Islander	3 711	3 954	4 363	4 867	4 296	4 610	4 811	5 285	6 093	5 934
Non-Indigenous	10 392	14 084	18 418	20 083	22 748	19 304	16 317	20 357	27 672	29 622
Not reported	4 353	5 812	5 571	5 887	7 698	5 904	5 483	7 526	6 576	8 654
State/Territory										
ACT	141	200	250	328	332	284	329	368	486	469
NSW	5 400	6 977	9 195	10 529	11 671	9 830	7 593	10 294	12 456	13 967
NT	1 829	1 769	1 755	2 130	1 348	1 367	1 684	2 085	2 493	2 303
QLD	3 032	4 033	5 078	4 908	5 980	6 355	5 402	5 887	7 550	8 315
SA	794	1 110	1 271	1 290	2 094	1 660	1 441	1 790	2 268	2 443
TAS	57	83	117	149	158	150	185	258	367	326
VIC	4 895	6 317	7 342	8 086	9 233	6 593	7 060	9 184	9 991	11 198
WA	2 308	3 361	3 344	3 417	3 926	3 579	2 917	3 302	4 730	5 189

Source: Australian National Notifiable Diseases Surveillance System.

Between 2015 and 2024 there was a 111% increase in the gonorrhoea notification rate (from 78.8 to 166.7 per 100 000) (Figure 20). A decline in the notification rate between 2019 and 2021 is likely in part due to a decrease in testing rates related to the COVID-19 pandemic and many not reflect the trend in new gonorrhoea infections. Similar trends were observed among males and females. The gonorrhoea notification rate has been higher among males than females in each year since 2015 and in 2024 was 241.5 per 100 000 among males and 92.5 per 100 000 among females.

Figure 20 Gonorrhoea notification rate per 100 000 population by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.



What does this mean?

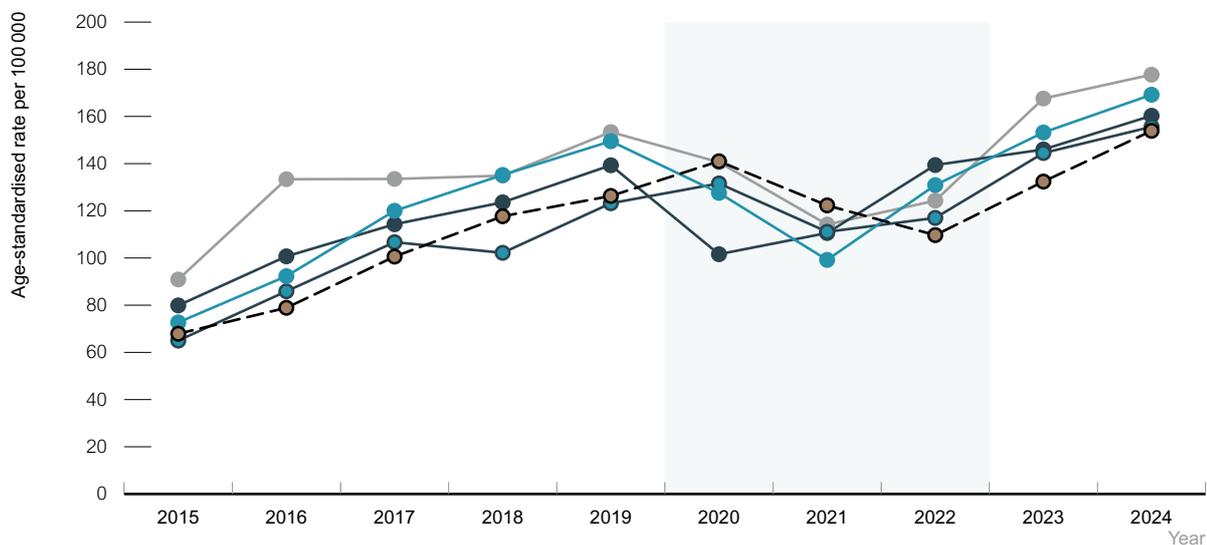
Apart from over the peak of the COVID-19 pandemic, gonorrhoea diagnosis rates increased steadily between 2015 and 2024. Each year in this period, men were diagnosed with gonorrhoea more often than women.

Between 2015 and 2024 the gonorrhoea notification rate increased for all age groups aged 14 years and older, with the largest increases among those aged 35 to 39 years (178% increase). In 2024, the highest notification rates were among those aged 25 to 29 years (449.1 per 100 000), 20 to 24 years (433.0 per 100 000), and 30 to 34 years (405.7 per 100 000). Similar trends were seen among males and females.

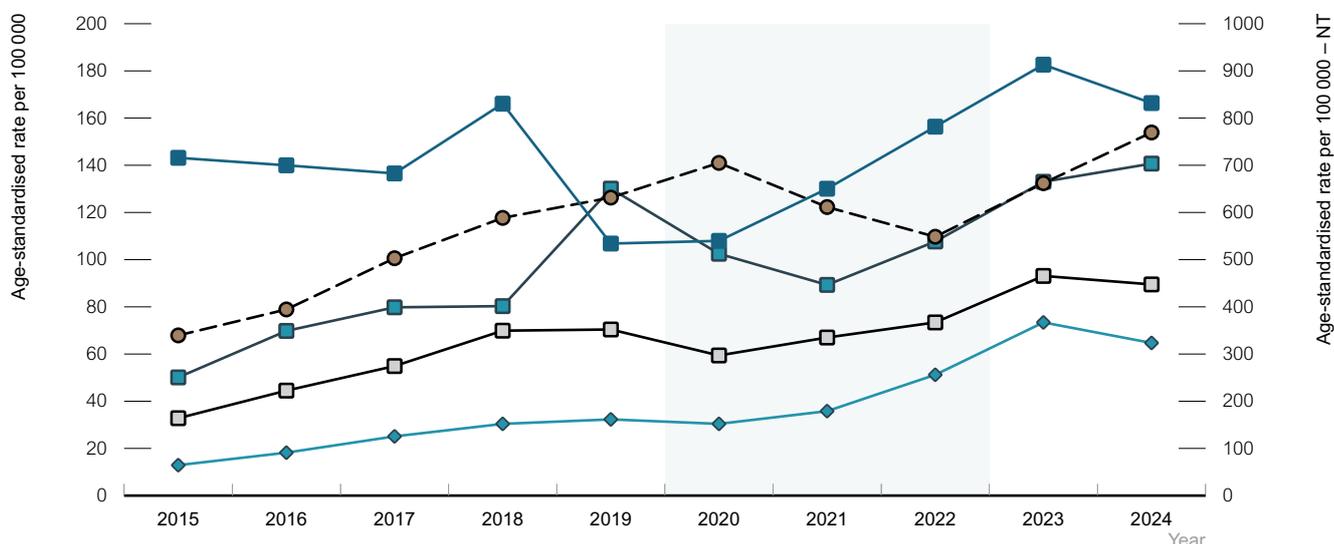
Among males in 2024, the highest notification rates were among those aged 30 to 34 years (653.9 per 100 000), 25 to 29 years (633.6 per 100 000), and 35 to 39 years (506.0 per 100 000). Among females in 2024, the highest notification rates were among those aged 20 to 24 years (370.1 per 100 000), 25 to 29 years (259.0 per 100 000), and 15 to 19 years (208.5 per 100 000). For full notifications data by age, please see the [Kirby Institute data site](#).

By state and territory, the gonorrhoea notification rate was highest every year from 2015 to 2024 in the Northern Territory and was 831.8 per 100 000 in 2024. Between 2015 and 2024, gonorrhoea notification rates increased in every state and territory with the largest increases recorded in Tasmania (403% increase), the Australian Capital Territory (173% increase), and South Australia (181% increase) (Figure 21).

Figure 21 Gonorrhoea notification rate per 100 000 population by state/territory, 2015 – 2024



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
NSW	72.7	92.3	120.0	135.2	149.5	127.6	99.2	130.9	153.2	169.2
QLD	65.0	85.9	106.7	102.2	123.2	131.6	111.1	117.0	144.5	155.6
VIC	79.9	100.7	114.3	123.6	139.3	101.6	110.6	139.4	146.0	160.3
WA	90.9	133.4	133.5	134.9	153.4	140.6	114.2	124.3	167.6	177.7
Australia	67.9	78.9	100.6	117.7	126.3	141.0	122.3	109.7	132.4	153.9



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ACT	32.8	44.5	54.9	69.9	70.4	59.4	67.0	73.4	93.1	89.5
NT	715.8	699.9	682.7	830.5	534.1	539.8	650.3	781.8	913.2	831.8
SA	50.1	69.8	79.8	80.3	130.1	102.5	89.3	107.7	133.0	140.7
TAS	12.9	18.2	25.1	30.4	32.3	30.4	35.8	51.2	73.4	64.7
Australia	67.9	78.9	100.6	117.7	126.3	141.0	122.3	109.7	132.4	153.9

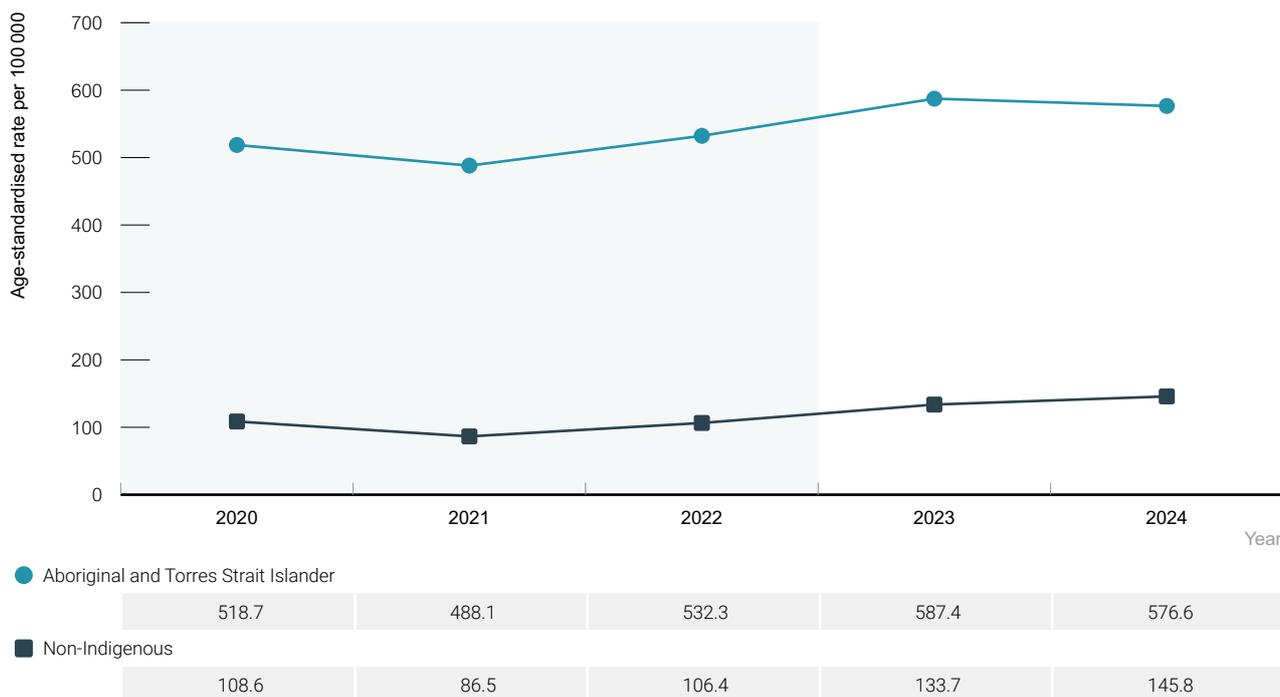
Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System.

The gonorrhoea notification rate among Aboriginal and Torres Strait Islander peoples is based on data from seven jurisdictions (the Australian Capital Territory, New South Wales, the Northern Territory, Queensland, South Australia, Tasmania, and Western Australia), where Aboriginal and Torres Strait Islander status was $\geq 50\%$ complete each of the past five years (2020 – 2024).

Between 2020 and 2024, the gonorrhoea notification rate among Aboriginal and Torres Strait Islander peoples increased by 11% from 518.7 to 576.6 per 100 000. In the same period, the notification rate among non-Indigenous people increased by 34% from 108.6 to 145.8 per 100. In 2024 the notification rate among Aboriginal and Torres Strait Islander peoples was almost four times as high as among non-Indigenous people (Figure 22).

Figure 22 Gonorrhoea notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2020 – 2024



Notes: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022. Includes jurisdictions in which Aboriginal and Torres Strait Islander status was reported for $\geq 50\%$ of notifications for each year (Australian Capital Territory, New South Wales, Northern Territory, South Australia, Queensland, Tasmania, and Western Australia).

Source: Australian National Notifiable Diseases Surveillance System.



What does this mean?

Between 2020 and 2024, gonorrhoea diagnosis rates among Aboriginal and Torres Strait Islander peoples remained around five times as high as among non-Indigenous people.

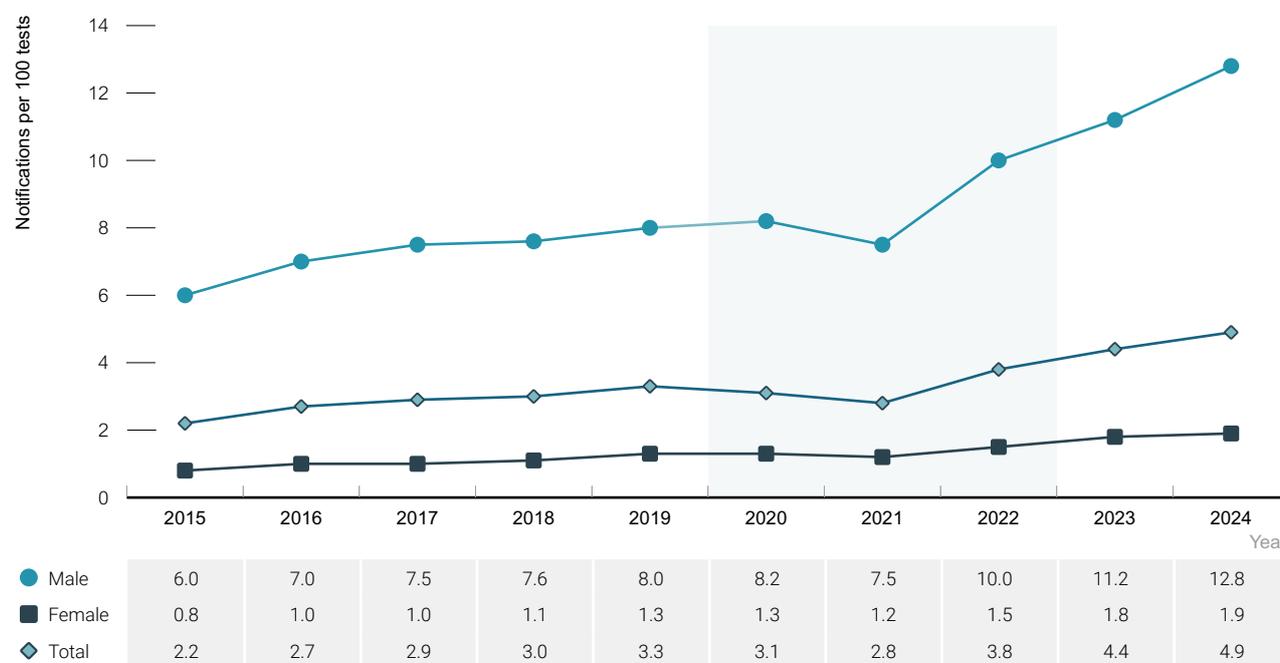
5.2 Gonorrhoea testing

Clinical guidelines recommend the opportunistic offer of gonorrhoea screening to all young people (15 to 29 years of age) at least annually, including offering self-collected samples when appropriate, and regular testing for women reporting sex work. Annual testing is recommended for sexually active gay and bisexual men and testing every three months for higher risk men based on behavioural criteria and those taking PrEP⁽⁸⁾. Gonorrhoea testing data are included in this report from a number of sources including Medicare, sexual health clinics and high-caseload general practice clinics.

Medicare-rebated gonorrhoea tests

Between 2015 and 2024, the number of gonorrhoea notifications per 100 Medicare-rebated gonorrhoea tests among people aged 15 to 34 increased by 126% from 2.2 to 4.9, with increases in both males (115%) and females (142%). The number of gonorrhoea notifications per 100 Medicare-rebated gonorrhoea tests has been higher in males than females in each of the years since 2015 (12.8 vs 1.9 in 2024). These data suggest that the increases in notifications between 2015 and 2024 cannot be fully explained by more testing (See Gonorrhoea notifications, pp 30). Please note that women may be offered more chlamydia tests opportunistically (e.g., during cervical screening or contraceptive appointments) so comparisons of trends by gender should be interpreted with caution.

Figure 23 Number of gonorrhoea notifications per 100 Medicare-rebated gonorrhoea tests by sex, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: Australian National Notifiable Diseases Surveillance System; Medicare.

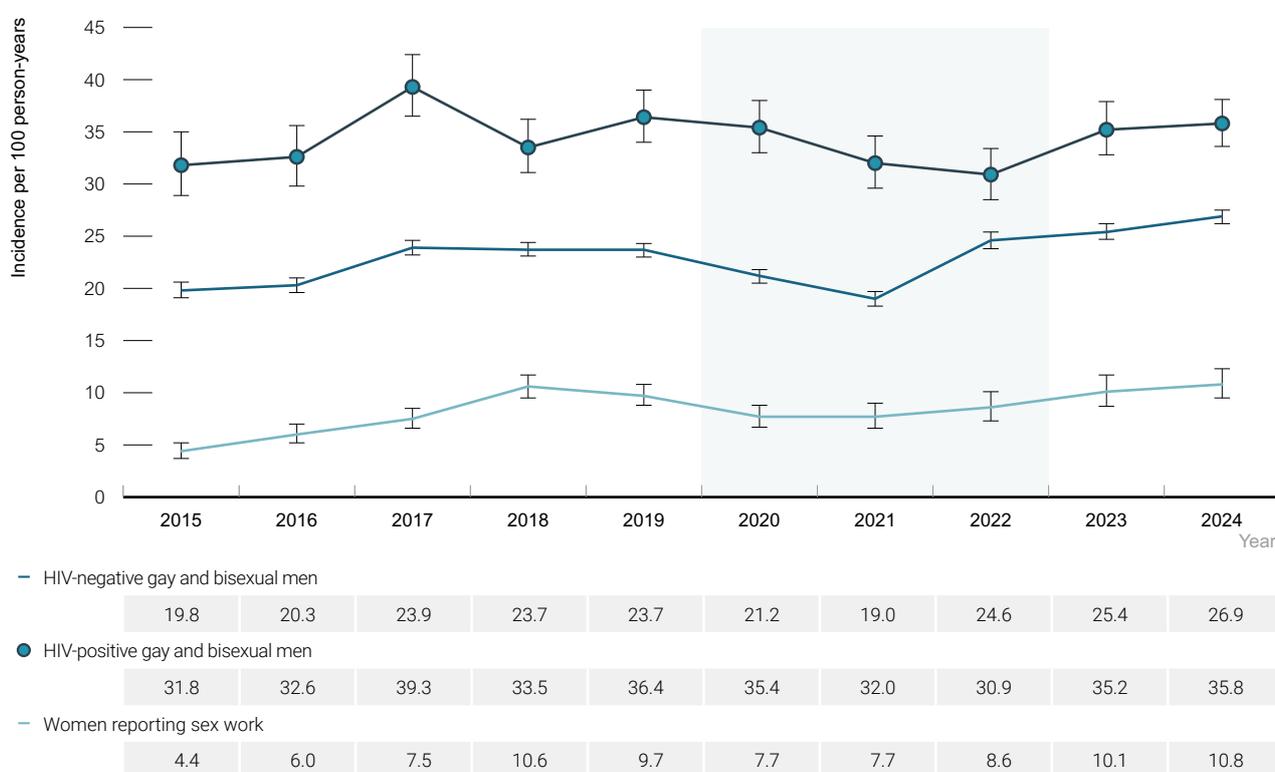
5.3 Gonorrhoea incidence

Gonorrhoea incidence is an important indicator of new transmissions, reflecting the impact of current prevention programs, whereas prevalence reflects the burden of disease. Gonorrhoea incidence is available from ACCESS and is calculated by dividing the number of incident infections (negative test followed by a positive test) among people undergoing repeat gonorrhoea testing at sexual health services by the person's time at risk (determined by the time between repeat gonorrhoea tests) ⁽⁵⁾. These incidence estimates represent populations attending sexual health clinics and may not be generalisable to broader priority populations.

In 2024, gonorrhoea incidence was 35.8 new infections per 100 person-years among HIV-positive gay and bisexual men, 33% higher compared with HIV-negative gay and bisexual men (26.9 per 100 person-years). Between 2015 and 2024, gonorrhoea incidence steadily increased among HIV-negative gay and bisexual men (35% increase) compared with a smaller increase among HIV-positive gay and bisexual men (12% increase) (Figure 24).

Among women reporting sex work, gonorrhoea incidence more than doubled from 4.4 per 100 person-years in 2015 to 10.8 per 100 person-years in 2024 (Figure 24). Caution should be taken with interpretation as confidence intervals overlap between some years, indicating that between-year differences are not statistically significant.

Figure 24 Gonorrhoea incidence in sexual health clinic attendees by population, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance).

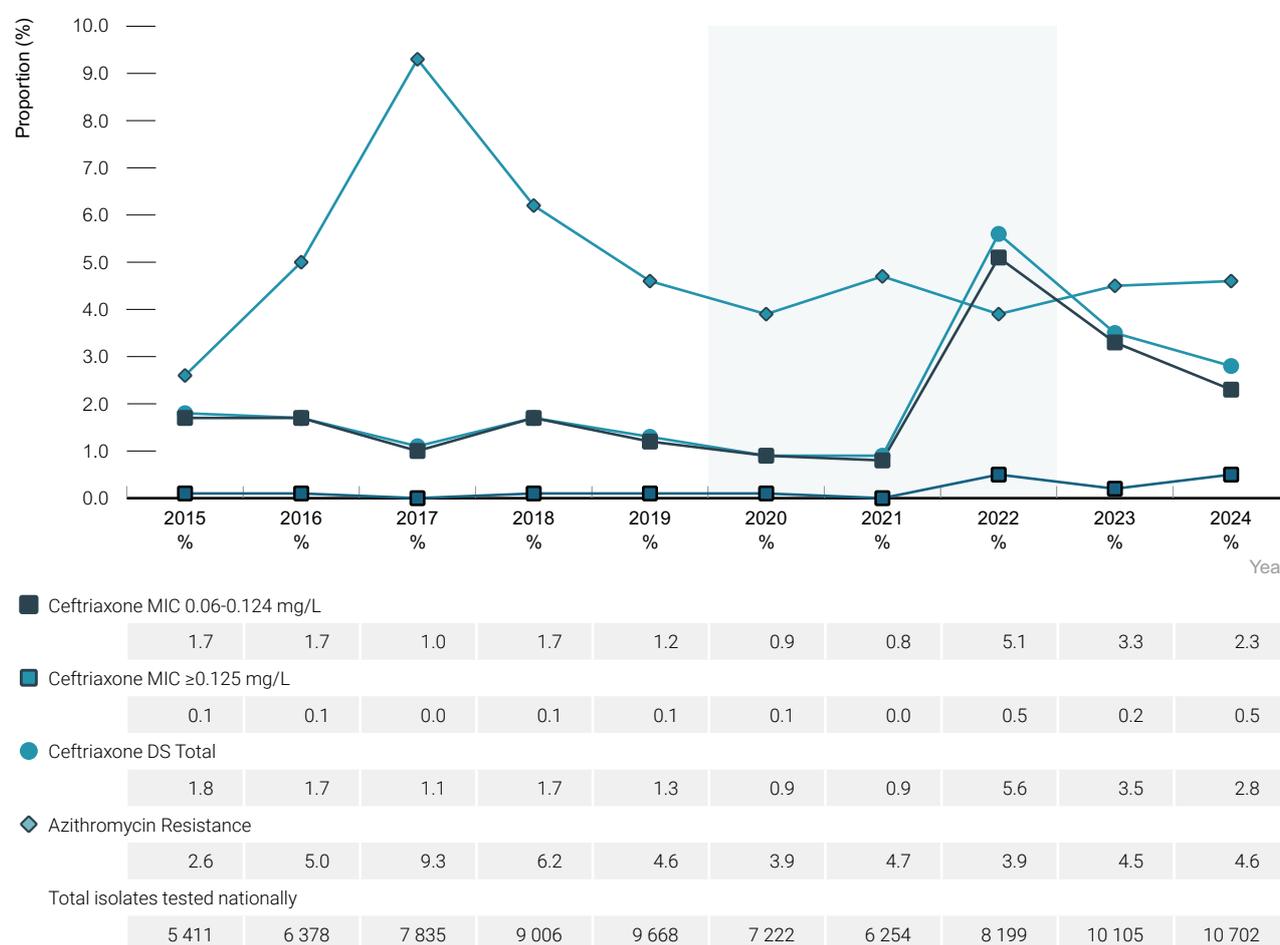
5.4 Antimicrobial resistance

Since 1981, the Australian Gonococcal Surveillance Programme has monitored antimicrobial resistance in clinical isolates of *N. gonorrhoeae* in all states and territories. Ceftriaxone in combination with azithromycin is currently the recommended treatment for gonorrhoea in most places in Australia (except for some areas in northern and central Australia where amoxicillin and azithromycin are used).

The World Health Organization recommends a reporting threshold for the decreased susceptibility to ceftriaxone (ceftriaxone minimum inhibitory concentration) as ≥ 0.125 mg. Between 2015 and 2024, the proportion of gonococcal isolates tested with a decreased ceftriaxone susceptibility (≥ 0.125 mg) remained low, and was 0.5% in 2024 (Figure 25).

In Australia, gonococcal isolates with ceftriaxone minimum inhibitory concentration values of ≥ 0.06 mg/L have been reported since 2001. Between 2015 and 2021, the proportion of gonococcal isolates tested for antimicrobial resistance with decreased susceptibility to ceftriaxone (≥ 0.06 mg/L), declined from 1.7% in 2015 to 0.8% in 2021. Between 2021 and 2024, this proportion increased to 2.3%, predominantly due to the rapid expansion of the *N. gonorrhoeae* clone, ST7827, in New South Wales ⁽⁹⁾.

Figure 25 Proportion of gonococcal isolates tested at the Australian Gonococcal Surveillance Programme with decreased susceptibility to ceftriaxone, 2015 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Abbreviations: MIC = minimum inhibitory concentration; DS = decreased susceptibility.

Source: Australian Gonococcal Surveillance Programme Annual Report, 2024, Monica M Lahra, Siobhan M Hurley, Sebastiaan J van Hal and Tiffany R Hogan for the National Neisseria Network, Australia, CDI in press.

6 Human papillomavirus infection

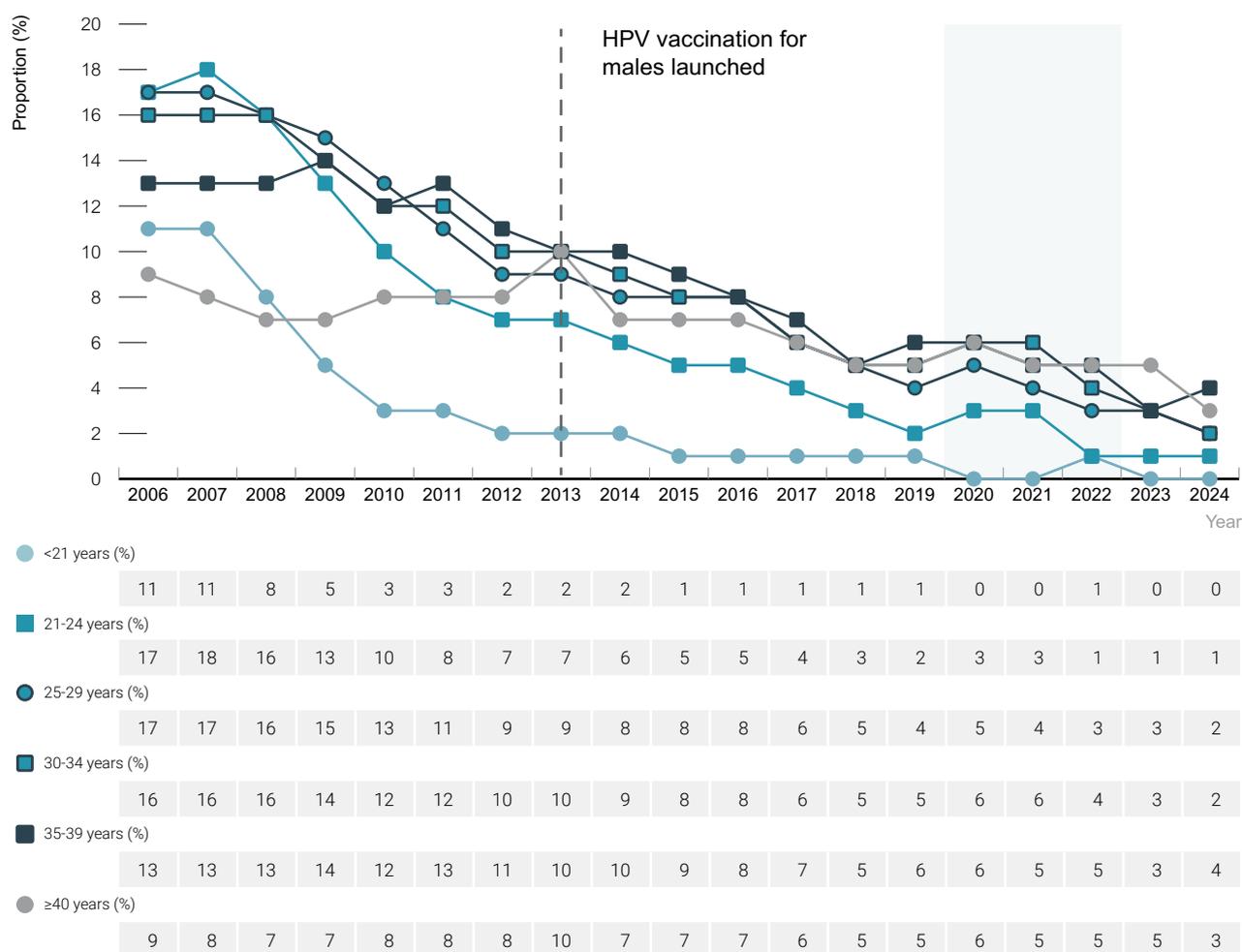
In Australia all girls aged 12 to 13 years have been routinely offered at least two doses of human papilloma virus (HPV) vaccination since 2007, as have boys of the same age since 2013. The Genital Warts Surveillance Network is a sentinel surveillance system that includes over 50 sexual health clinics across Australia and provides evaluation of the population-level effects of the Australian vaccination program. The network also monitors epidemiological trends of genital wart diagnoses by routinely collected de-identified data on demographics and sexual behaviours associated with genital wart clinical diagnoses from patient management systems.

Information available from sexual health clinics included in the Genital Warts Surveillance Network has shown a considerable reduction in the proportion of heterosexual men under 21 years of age diagnosed with genital warts at first visit, from 11% in 2006 to 0.0% in 2024. In the same period, among men aged 21 to 24 years there was also a decline in the proportion who were diagnosed with genital warts at first visit from 17% in 2006 to 1% in 2024 (Figure 26).

Similarly, among women aged under 21 years, the proportion diagnosed with genital warts at first visit declined from 12% in 2006 to 0% in 2024 while among women aged 21 to 24 years the proportion diagnosed with genital warts at first visit declines from 14% in 2006 to 1% in 2024 (Figure 27).

The proportion of genital warts diagnoses among gay and bisexual men aged under 21 years at first visit declined from 7% in 2006 to 1% in 2024. In this period, among gay and bisexual men aged 21-24 years this proportion declined from 10% to 1% (Figure 28).

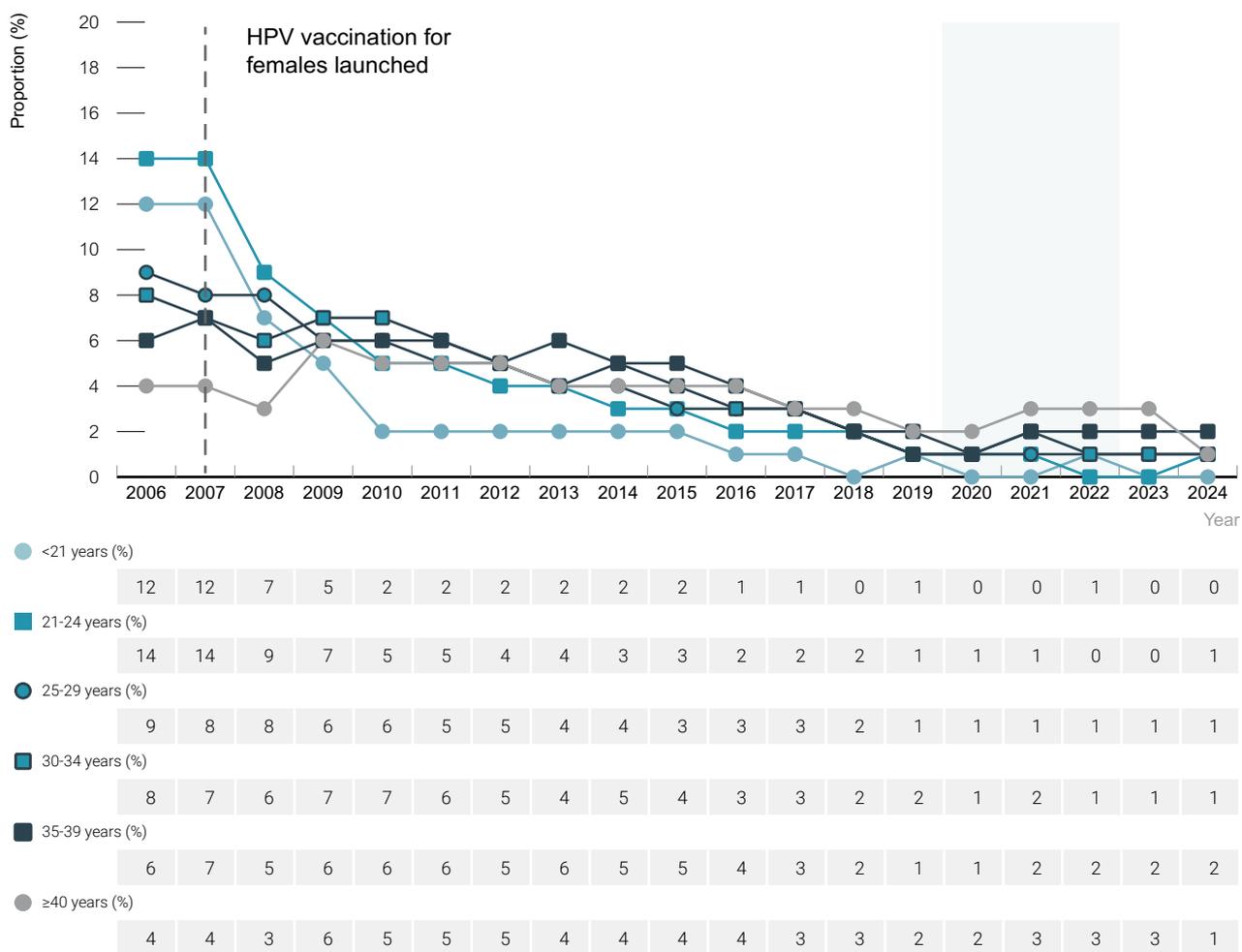
Figure 26 Proportion of heterosexual men diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: National Human Papillomavirus (HPV) Surveillance and Monitoring Report.

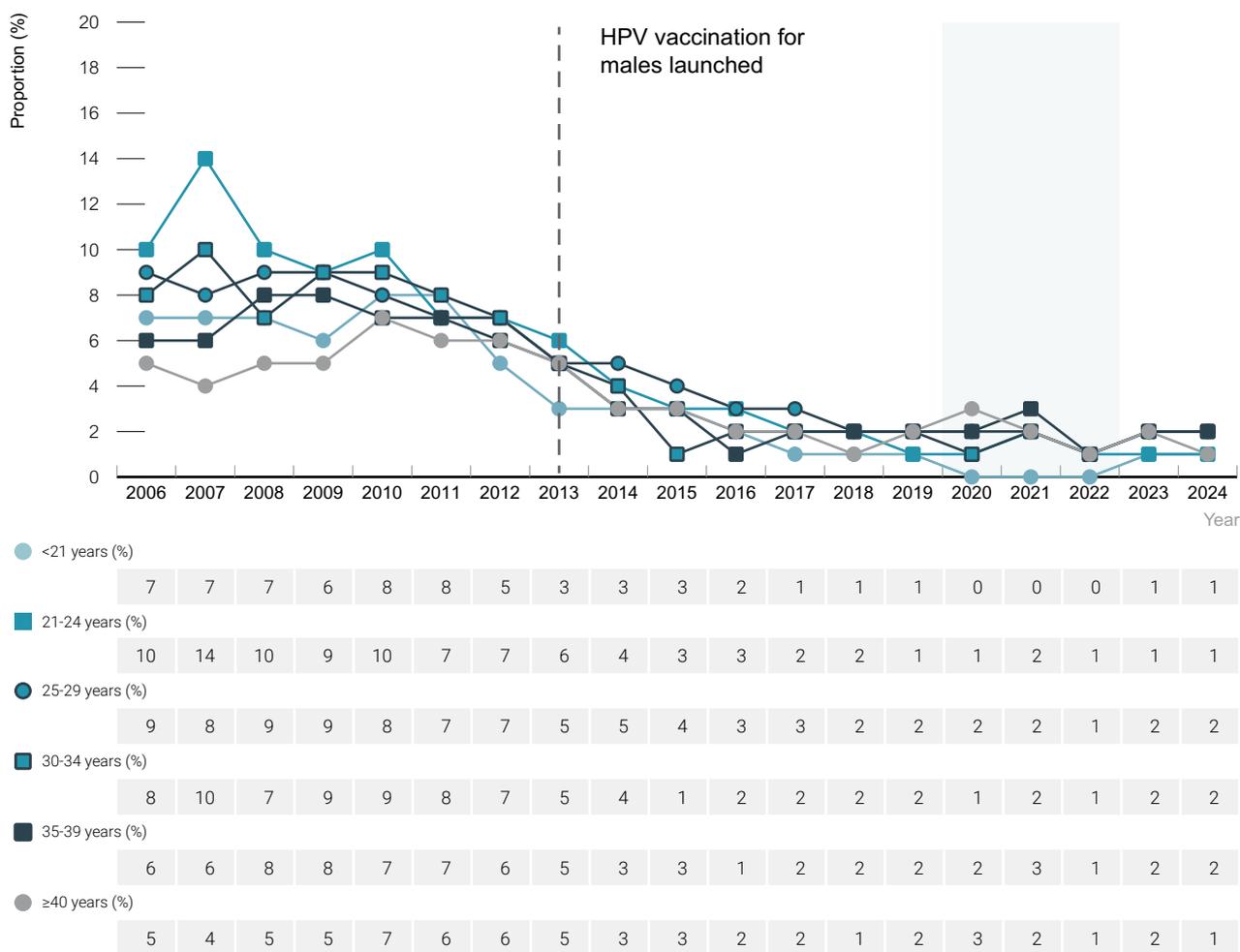
Figure 27 Proportion of women diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: National Human Papillomavirus (HPV) Surveillance and Monitoring Report.

Figure 28 Proportion of gay and bisexual men diagnosed with genital warts at first visit at sexual health clinics by age group, 2006 – 2024



Note: The shaded section of the chart indicates the years most affected by the COVID-19 pandemic, 2020 – 2022.

Source: National Human Papillomavirus (HPV) Surveillance and Monitoring Report.

7 Donovanosis

Australia is on track to eliminate donovanosis, which was once a regularly diagnosed STI among remote Aboriginal communities. Since 2015 there has been no cases notified.

References

1. Naruka E, Miller A, Thomas J, McGregor S, Monaghan R. Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people Annual Surveillance Report 2025. Sydney, Australia: Kirby Institute, UNSW Sydney; 2025.
2. World Health Organization. GLOBAL GUIDANCE ON CRITERIA AND PROCESSES FOR VALIDATION : Elimination of Mother-to-Child Transmission of HIV and Syphilis. Geneva, Switzerland: World Health Organization; 2018.
3. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM). Australian STI management guidelines for use in primary care [Internet]. 2021 [cited 2022 Oct 5]. Available from: <https://sti.guidelines.org.au/>
4. Broady, T., Rance J, Brener L, Caruana, T., Treloar C, Holt M, et al. Annual Report of Trends in Behaviour 2025: Viral hepatitis, HIV, STIs and sexual health in Australia. Sydney: Centre for Social Research in Health, UNSW Sydney; 2025.
5. Callander D, McManus H, Guy R, Hellard M, O'Connor CC, Fairley CK, et al. Rising Chlamydia and Gonorrhoea Incidence and Associated Risk Factors Among Female Sex Workers in Australia: A Retrospective Cohort Study. *Sex Transm Dis.* 2018 Mar;45(3):199–206.
6. Callander D, Moreira C, El-Hayek C, Asselin J, van Gemert C, Watchirs Smith L, et al. Monitoring the Control of Sexually Transmissible Infections and Blood-Borne Viruses: Protocol for the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance (ACCESS). *JMIR Res Protoc.* 2018 Nov 20;7(11):e11028.
7. Ampt FH, El Hayek C, Agius PA, Bowring AL, Bartnik N, VAN Gemert C, et al. Anorectal swabs as a marker of male-to-male sexual exposure in STI surveillance systems. *Epidemiol Infect.* 2017 Sept;145(12):2530–5.
8. STIs in Gay Men Action Group. Australian sexually transmitted infection & HIV testing guidelines 2019 for asymptomatic men who have sex with men. Sydney: STIGMA; 2019.
9. Lahra MM, Van Hal S, Hogan TR. Australian Gonococcal Surveillance Program, 1 July to 30 September 2023. *Commun Dis Intell (2018).* 2024 Mar 28;48.

