

Communicable Diseases Weekly Report

Week 15, 9 April to 15 April and Week 16, 16 April to 22 April 2023

In this report we provide information regarding syphilis and a summary of notifiable conditions activity in NSW over the reporting periods Week 15, 9 April to 15 April 2023 and Week 16, 16 April to 22 April 2023.

For surveillance data on COVID-19 and influenza please see the latest [NSW Respiratory Surveillance Report](#).

For up-to-date information regarding the Japanese encephalitis outbreak and the NSW response, please visit the [NSW Health Japanese encephalitis page](#).

Information on notifiable conditions is available at the NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Syphilis

Syphilis is caused by the bacterium *Treponema pallidum*. It is transmitted primarily via unprotected vaginal, anal or oral sex, and also from mother to baby during pregnancy or at delivery. Condoms are partially effective in preventing sexual transmission. Syphilis is usually treated with penicillin injections, with the number of injections required varying on the stage of infection. Follow-up blood tests are required to check that the treatment has worked.

Untreated syphilis typically progresses in stages. Primary syphilis is characterised by the presence of a chancre, usually a painless ulcer that develops at the site of infection 10–90 days after exposure and which usually heals spontaneously. Depending on its site on the body, the chancre may go unnoticed. This stage is followed by secondary syphilis which involves non-specific symptoms such as fever, malaise, headache, rash, and enlarged lymph nodes. The symptoms of secondary syphilis resolve by themselves, usually after several weeks. The disease then enters a long latent phase during which there are no symptoms. Latency can be life-long; however, a minority of untreated cases develop tertiary syphilis. Tertiary syphilis may involve the brain, nerves, eyes, heart, blood vessels, spinal cord, liver, bones, and joints and can be fatal. Neurological symptoms resulting from infection of the central nervous system can occur at any stage. Syphilis is most infectious during the primary and secondary stages. Notifications of 'infectious syphilis' are defined as less than two years duration and includes primary, secondary and early latent infection, while notifications of 'syphilis of greater than two years or unknown duration' encompass the remaining notifications.

There were 1,940 infectious syphilis notifications and 850 notifications of syphilis greater than two years or unknown duration in NSW residents in 2022 (Figure 1a). The infectious syphilis notification rate reached the pre-pandemic 2019 peak at 23.7 notifications per 100,000 population (Figure 1b).

The infectious syphilis rate was over 9-fold higher in males than in females in 2022, with 43 notifications per 100,000 population in males compared to 4.6 notifications per 100,000 population in females (Figure 2). Whilst the infectious syphilis notification rate is substantially lower in females there have been concerning increases in females over the past five years and in NSW the rate in 2022 was the highest recorded to date. Similar increases in female infectious syphilis rates have been noted [nationally](#).

Transmission of syphilis in NSW is mainly associated with male-to-male sex. However, over the past five years the proportion of male infectious syphilis cases reporting female only sexual exposures has shifted, indicating increases in syphilis transmission among the heterosexual population. In

2022, 14% of male infectious syphilis notifications reported heterosexual sexual exposure in comparison to 7% in 2015. The increases in infectious syphilis in heterosexual males has been noted state-wide, but particularly in regional and remote areas of NSW.

Figure 1. Number of syphilis notifications and infectious syphilis notification rate per 100,000 population, NSW, 2012–2022

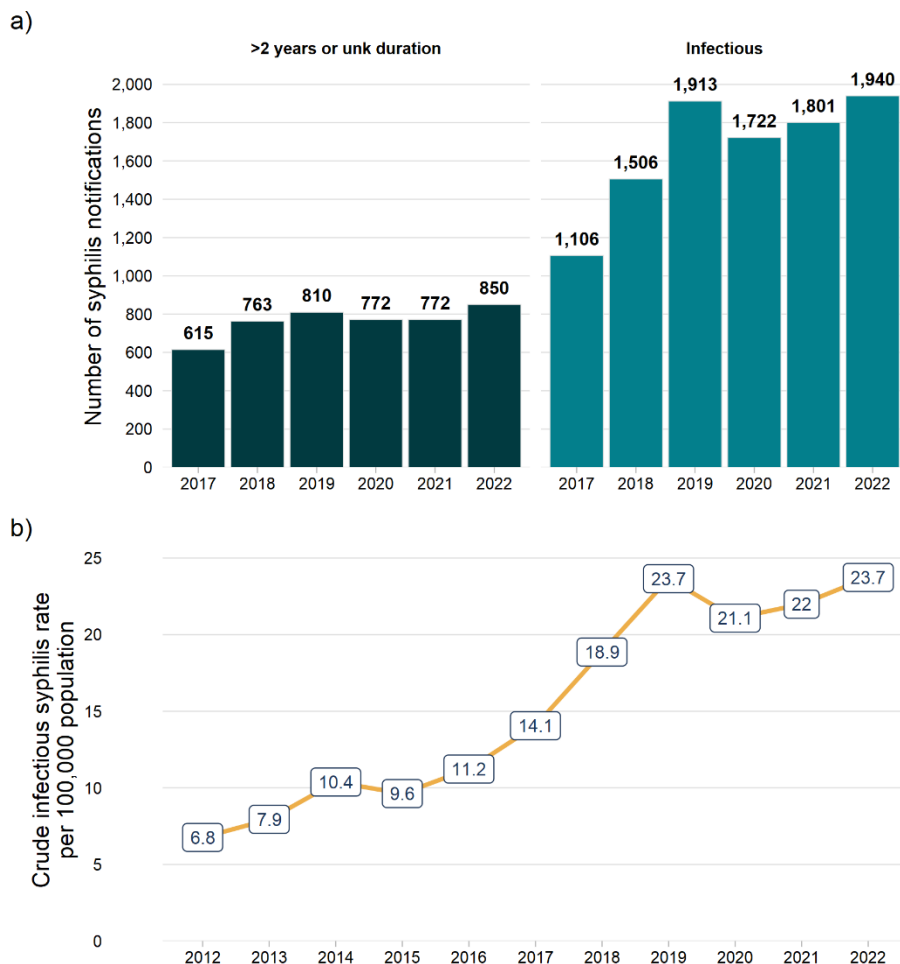
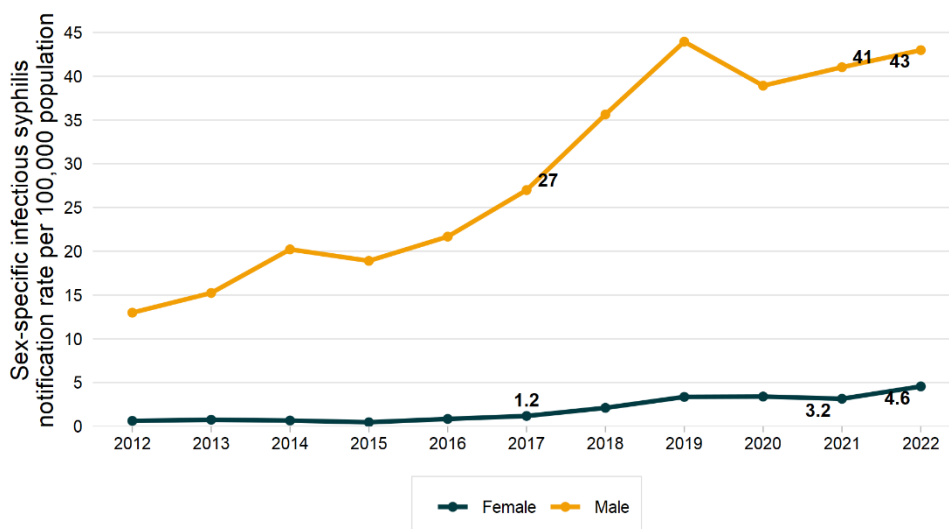


Figure 2. Sex-specific infectious syphilis notification rate, NSW, 2012–2022



Most female infectious syphilis notifications are in women of reproductive age (15–44 years), a key population of concern due to the high risk of mother-to-child transmission of syphilis. The number of infectious syphilis notifications in this group has continued to increase and has been associated with increases in congenital syphilis. In 2022 there were three cases of congenital syphilis and one case in the first quarter of 2023 in NSW residents.

Congenital syphilis can cause stillbirth, neonatal death, preterm delivery or low birth weight, and severe congenital abnormalities. Although the risk to the baby is highest if the mother has or acquires infectious syphilis during pregnancy, non-infectious syphilis (i.e. late latent syphilis with no clinical signs or symptoms) also leads to adverse birth outcomes in about 20% of cases.

Continued increases in congenital syphilis emphasise the need for all pregnant women to receive early antenatal care that includes syphilis screening, and the importance that pregnant women with syphilis, their sexual partners, and their babies to be managed promptly and comprehensively. [In 2022, NSW expanded antenatal screening](#) to recommend that all pregnant women are screened for syphilis at least twice during pregnancy (at their first antenatal visit and again at 26–28 weeks gestation). All pregnant women who have received minimal or no antenatal care, or are at risk of missing an appointment should be opportunistically screened at any health service to which they present, regardless of gestation.

Further information:

- NSW Health [syphilis factsheet](#).
- The [syphilis section](#) of the Australian STI Management Guidelines.
- [Safety Information alert](#): Increased universal screening for syphilis infection in pregnancy

Summary of notifiable conditions activity in NSW

The following tables summarise notifiable conditions activity over the reporting period alongside reports received in the previous week, year to date and in previous years (Table 1 & Table 2).

Table 1. NSW Notifiable conditions from 9 April – 15 April 2023, by date received*

		Weekly		Year to date					Full Year			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	192	159	3631	3546	4132	3576	3678	13347	13015	11052	12071
	Cryptosporidiosis	13	11	188	130	215	329	333	463	444	548	669
	Giardiasis	40	47	735	393	604	898	1376	1410	1585	1986	3420
	Haemolytic Uremic Syndrome	1	0	2	1	0	1	1	6	0	2	4
	Hepatitis A	1	2	28	4	0	18	30	37	8	19	61
	Listeriosis	1	1	10	6	6	6	2	33	22	20	16
	Rotavirus	38	29	977	111	97	306	196	1803	356	500	1777
	Salmonellosis	61	43	1155	1197	1344	1500	1474	2967	3100	2885	3552
	Shigellosis	10	9	271	70	28	347	262	460	60	494	867
STEC/VTEC	3	3	54	41	42	37	24	144	126	115	79	
Other Diseases	Invasive Group A Streptococcus	9	12	188	0	-	-	-	144	-	-	-
Respiratory Diseases	Influenza	1161	1079	8335	1073	19	7158	9101	116315	125	7481	116402
	Legionellosis	5	3	72	77	74	48	62	272	215	171	154
	Respiratory syncytial virus (RSV)	1684	1622	9796	1	-	-	-	5669	-	-	-
	Tuberculosis	11	11	171	126	171	146	161	530	559	625	589
Sexually Transmissible Infections	Chlamydia	458	546	9256	7063	8728	9254	9635	25856	25298	27214	32466
	Gonorrhoea	163	222	3550	2726	2736	3332	3491	10227	7625	9878	11684
Vaccine Preventable Diseases	Mumps	1	0	9	1	3	44	18	25	6	56	59
	Pertussis	1	1	30	13	11	1149	1887	81	44	1400	6387
	Pneumococcal Disease (Invasive)	10	12	111	65	100	117	104	533	386	342	686
	Tetanus	1	1	3	0	0	0	1	0	0	0	1
Vector Borne Diseases	Dengue	2	10	97	10	1	73	137	169	4	78	460
	Malaria	2	0	34	7	2	15	19	42	8	25	73
	Ross River	5	8	161	428	343	214	223	725	661	1990	596
Zoonotic Diseases	Q fever	3	0	46	71	71	70	106	197	209	212	249

Table 2. NSW Notifiable conditions from 16 April – 22 April 2023, by date received*

		Weekly		Year to date					Full Year			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	240	192	3861	3698	4451	3664	3896	13347	13015	11052	12071
	Cryptosporidiosis	11	13	200	136	228	337	345	463	444	548	669
	Giardiasis	45	40	778	409	650	915	1451	1410	1585	1986	3420
	Hepatitis A	1	1	29	5	0	18	31	37	8	19	61
	Hepatitis E	1	0	4	1	1	12	7	8	1	15	24
	Listeriosis	2	1	12	11	6	6	2	33	22	20	16
	Paratyphoid	1	0	21	4	0	15	29	12	1	17	39
	Rotavirus	43	38	1015	120	102	306	219	1803	356	500	1777
	STEC/VTEC	5	3	59	44	46	39	26	144	126	115	79
	Salmonellosis	67	62	1225	1270	1381	1532	1543	2967	3100	2885	3552
	Shigellosis	21	10	293	76	29	348	273	460	60	494	867
Typhoid	1	0	39	11	0	30	33	47	2	37	64	
Other	Invasive Group A Streptococcus	20	9	208	-	-	-	-	144	-	-	-
Respiratory Diseases	Influenza	1095	1161	9455	1736	20	7169	9804	116315	125	7481	116402
	Legionellosis	2	6	78	87	77	49	64	273	216	171	154
	Respiratory syncytial virus (RSV)	1570	1688	11460	1	-	-	-	5669	-	-	-
	Tuberculosis	12	11	183	136	185	160	173	530	559	625	589
Sexually Transmissible Infections	Chlamydia	640	460	9921	7497	9471	9528	10177	25856	25298	27214	32466
	Gonorrhoea	266	165	3836	2912	2999	3452	3707	10227	7625	9878	11684
Vaccine Preventable Diseases	Mumps	1	1	10	1	3	44	20	26	6	56	59
	Pertussis	4	1	35	13	14	1175	1987	81	44	1400	6387
	Pneumococcal Disease	16	10	129	71	106	117	121	533	386	342	686
Vector Borne Diseases	Barmah Forest	5	0	47	32	46	51	25	89	111	271	63
	Dengue	3	2	101	11	1	74	146	169	4	78	460
	Flavivirus - other & unspecified	1	0	1	1	0	1	0	1	0	1	0
	Malaria	1	2	35	7	2	15	21	42	8	25	73
	Ross River	4	5	165	432	374	303	239	725	661	1990	596
Zoonotic Diseases	Q fever	1	3	47	72	77	72	109	197	209	212	249

* Notes on Table 1 and Table 2: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- Surveillance data on COVID-19 can be found in the [NSW Respiratory Surveillance Report](#).
- Data cells represent the number of case reports received by NSW public health units and recorded on the NSW Notifiable Conditions Information Management System (NCIMS) in the relevant period (i.e. by report date).
- Note that [notifiable disease data](#) available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.
- Cases involving interstate residents are not included.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the [Infectious Diseases Data](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.